

ANNOTATED MINUTES

*Tuesday, September 20, 1994 - 10:00 AM
Multnomah County Courthouse, Room 602
1021 SW Fourth, Portland*

BOARD BRIEFING

B-1 Nehemiah Program Update. Presented by Jaki Walker and Michael Trower.

**JAKI WALKER, MICHAEL TROWER AND STEPHEN
KELLY PRESENTATION AND RESPONSE TO BOARD
QUESTIONS.**

*Thursday, September 22, 1994 - 9:30 AM
Multnomah County Courthouse, Room 602
1021 SW Fourth, Portland*

REGULAR MEETING

Chair Beverly Stein convened the meeting at 9:32 a.m., with Vice-Chair Tanya Collier, Commissioners Sharron Kelley, Gary Hansen and Dan Saltzman present.

PUBLIC COMMENT

R-22 Opportunity for Public Comment on Non-Agenda Matters. Testimony Limited to Three Minutes Per Person.

**PAVEL GOBERMAN TESTIMONY CONCERNING HIS
HEALTH AND FITNESS BUSINESS.**

CONSENT CALENDAR

**UPON MOTION OF COMMISSIONER KELLEY,
SECONDED BY COMMISSIONER HANSEN, THE
CONSENT CALENDAR (ITEMS C-1 THROUGH C-15) WAS
UNANIMOUSLY APPROVED.**

NON-DEPARTMENTAL

*C-1 In the Matter of the Reappointments of Connie Ryba and Patti Strand to the
ANIMAL CONTROL ADVISORY COMMITTEE*

*C-2 In the Matter of the Appointment of Calvin J. Smith to the DEFERRED
COMPENSATION COMMITTEE*

- C-3 *In the Matter of the Appointment of David A. Jones to the MULTNOMAH COUNCIL ON CHEMICAL DEPENDENCY*
- C-4 *In the Matter of the Appointment of Jack Pessia to the MULTNOMAH COUNTY CITIZEN INVOLVEMENT COMMITTEE*
- C-5 *In the Matter of the Reappointments of Gretchen Kafoury, Vera Katz, Sharron Kelley, Charles Moose, Carole Murdock and Gene Ross to the MULTNOMAH COUNTY COMMUNITY ACTION COMMISSION*
- C-6 *In the Matter of the Appointments of Joe Anderson, Louis Hall, Gerri Peck, Mabel Ramsthal and Harvey Rice to the PORTLAND/MULTNOMAH COMMISSION ON AGING*
- C-7 *In the Matter of the Reappointments of Elsie Hastings, Marian Keyser and Jim Nelson to the PORTLAND/MULTNOMAH COMMISSION ON AGING*
- C-8 *In the Matter of the Appointment of Lisa Nisenfeld to the PRIVATE INDUSTRY COUNCIL BOARD OF DIRECTORS*

DEPARTMENT OF COMMUNITY CORRECTIONS

- C-9 *Ratification of Intergovernmental Agreement Contract 900395 Between the City of Portland and Multnomah County, Providing Partial Funding of Domestic Violence Diversion Program, for the Period July 1, 1994 through June 30, 1995*

DEPARTMENT OF HEALTH

- C-10 *Ratification of Intergovernmental Agreement Contract 200865 Between the Office of Medical Assistance Programs and Multnomah County, Providing Continued Multi-Care Dental Participation in the Oregon Health Plan, for the Period October 1, 1994 through September 30, 1995*
- C-11 *Ratification of Intergovernmental Agreement Contract 200895 Between the Office of Medical Assistance Programs and Multnomah County, Providing Continued Care Oregon Participation in the Oregon Health Plan, for the Period October 1, 1994 through September 30, 1995*

SHERIFF'S OFFICE

- C-12 *Request for Authorization to Transfer Found/Unclaimed or Unidentified Property (List 94-1) to the Sheriff's Office Pursuant to Multnomah County Code 7.70*

NON-DEPARTMENTAL

- C-13 *In the Matter of the Appointments of Bob Boileau, Marjorie Booton, George Collier, Michael Dana, Robert Godel, Mavis Holt, Bonnie Morris, Jolinda Osborne, Sharon Owen, Paul Porch, Mark Ruhland, Dorothy Smith, Ken Snyder and Cathy Van Zyl to the ADVISORY COMMITTEE ON DESIGN AND CONSTRUCTION OF THE MIDLAND LIBRARY*

DEPARTMENT OF HEALTH

- C-14 *Ratification of Intergovernmental Agreement Contract 200665 Between Multnomah County and Portland Public Schools, Providing Foreign Language Interpretation Services for Multnomah County Early Intervention and Early Childhood Special Education Agencies, Upon Execution through June 30, 1995*
- C-15 *Ratification of Intergovernmental Agreement Contract 200735 Between the Oregon Department of Human Resources and Multnomah County, Allowing Potential Department Clients to Apply for Oregon Health Plan Services at County Sites, for the Period October 1, 1994 through September 30, 1995*

REGULAR AGENDA

NON-DEPARTMENTAL

- R-1 *PROCLAMATION in the Matter of Proclaiming the Week of October 10 - October 14, 1994 as MINORITY ENTERPRISE DEVELOPMENT WEEK*

COMMISSIONER COLLIER MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-1. GRACE GALLEGOS PRESENTATION. PROCLAMATION READ. PROCLAMATION 94-172 UNANIMOUSLY APPROVED.

- R-2 *PROCLAMATION in the Matter of Proclaiming the Month of October, 1994 to be DISABILITY EMPLOYMENT AWARENESS MONTH in Multnomah County, Oregon*

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-2. CHARU MANCHANDA PRESENTATION. PROCLAMATION READ. PROCLAMATION 94-173 UNANIMOUSLY APPROVED.

- R-3 *RESOLUTION in the Matter of Including Certain Design Elements in the Reconstruction of the Central Library*

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER COLLIER SECONDED, APPROVAL OF R-3. COMMISSIONER SALTZMAN EXPLANATION.

COMMISSIONER COLLIER MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF THE FOLLOWING AMENDMENTS: AMENDMENT TO BE IT RESOLVED ON PAGE 1: DELETING SEPTEMBER 15, 1994 DATE AND ADDING "PUBLIC DISPLAYS, EXHIBITS, AND INTERACTIVE VIDEO KIOSKS"; AMENDMENT ADDING TWO ADDITIONAL BE IT FURTHER RESOLVES TO THE TOP OF PAGE 2; AND AMENDMENT TO FINAL BE IT FURTHER RESOLVED ON PAGE 2: ADDING WORD "SCHEMATIC" AND DELETING "PRIOR TO THE APPROVAL OF FINAL CONTRACT DOCUMENTS." BOARD DISCUSSION. UPON MOTION OF COMMISSIONER COLLIER, SECONDED BY COMMISSIONER KELLEY, IT WAS UNANIMOUSLY APPROVED THAT AN AMENDMENT ADDING "BE IT FURTHER RESOLVED THAT THE LIBRARY BOARD SHALL RECOMMEND TO THE BOARD OF COUNTY COMMISSIONERS CRITERIA FOR ADVERTISING AT THE LIBRARY" BE INSERTED AS THE SECOND BE IT FURTHER RESOLVED ON PAGE 2. COMMISSIONER COLLIER AMENDMENTS UNANIMOUSLY APPROVED. RESOLUTION 94-174 UNANIMOUSLY APPROVED, AS AMENDED.

- R-4** *RESOLUTION in the Matter of Creating a Greenspaces Review Committee and Establishing a Greenspace Screen for Evaluating Properties Available for Transfer to Governmental and Non-Profit Agencies*

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER HANSEN SECONDED, APPROVAL OF R-4. COMMISSIONER SALTZMAN EXPLANATION. BOARD DISCUSSION. RESOLUTION 94-175 UNANIMOUSLY APPROVED.

- R-5** *In the Matter of the Appointments of Nancy Chase, Jim Sjulín, Les Wilkins, Valerie Lantz, Katherine Burk, Wes Risher, Leslie Pohl-Kosbau, Jim Desmond and Michael Carlson to the GREENSPACES REVIEW COMMITTEE*

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER COLLIER SECONDED, APPROVAL OF R-5. COMMISSIONER SALTZMAN EXPLANATION. APPOINTMENTS UNANIMOUSLY APPROVED.

SHERIFF'S OFFICE

- R-6** *Ratification of Intergovernmental Agreement Contract 800445 Between Multnomah County and Metro, Wherein the Sheriff's Office will Provide a Full-*

time Supervised Inmate Work Crew Dedicated to Performing Debris Removal at Illegal Dump Sites within Metro's Jurisdiction and Authority, for the Period Upon Execution through June 30, 1995

COMMISSIONER HANSEN MOVED AND COMMISSIONER COLLIER SECONDED, APPROVAL OF R-6. LARRY AAB EXPLANATION AND RESPONSE TO BOARD QUESTIONS. JOHN DuBAY RESPONSE TO BOARD QUESTIONS. AGREEMENT UNANIMOUSLY APPROVED.

DEPARTMENT OF COMMUNITY CORRECTIONS

- R-7 *Ratification of Intergovernmental Agreement Contract 900405 Between Multnomah County and the City of Portland, to Implement a Portland Multi-Agency DUII Enforcement Project, through a Grant with the Oregon Department of Transportation, for the Period April 1, 1994 through September 30, 1994***

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-7. GRANT NELSON AND JOANNE FULLER EXPLANATION AND RESPONSE TO BOARD QUESTIONS AND DISCUSSION. BOARD BRIEFING REGARDING ISSUES INCLUDING INCARCERATION OF CHRONIC DUII OFFENDERS AND ITS IMPACT ON MATRIX RELEASE TO BE SCHEDULED WITH SHERIFF, PORTLAND POLICE, COMMUNITY CORRECTIONS AND DISTRICT ATTORNEY WITHIN THE NEXT FEW MONTHS. AGREEMENT UNANIMOUSLY APPROVED.

- R-8 *Budget Modification DCC 1 Requesting Authorization to Increase the Department of Community Corrections Budget by \$43,806 and the Community and Family Services Budget by \$11,403, in Support of the Portland Multi-Agency DUII Enforcement Project, through a Grant with the Oregon Department of Transportation***

COMMISSIONER KELLEY MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF R-8. MS. FULLER EXPLANATION. BUDGET MODIFICATION UNANIMOUSLY APPROVED.

COMMUNITY AND FAMILY SERVICES DIVISION

- R-9 *Request for Approval of a Notice of Intent to Respond to the State's Request for Proposals to Participate in the Oregon Health Plan 25% Medicaid Demonstration Project for Mental Health Services, Effective January 1, 1995, for CareOregon Members***

COMMISSIONER HANSEN MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-9. ELLEEN DECK EXPLANATION AND RESPONSE TO BOARD QUESTIONS. NOTICE OF INTENT UNANIMOUSLY APPROVED.

DEPARTMENT OF ENVIRONMENTAL SERVICES

- R-10 PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Requests for Transfers of Tax Foreclosed Properties to Multnomah County for Road Related Uses**

COMMISSIONER COLLIER MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF R-10. RICHARD PAYNE EXPLANATION AND RESPONSE TO BOARD QUESTIONS. ORDER 94-176 UNANIMOUSLY APPROVED.

- R-11 PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Requests for Transfers of Tax Foreclosed Properties to City of Portland for Park and Open Space Uses**

COMMISSIONER COLLIER MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF R-11. PORTLAND PARKS AND RECREATION PROPERTY MANAGER SUSAN HATHAWAY-MARXER PRESENTATION IN SUPPORT OF TRANSFER. DAVID MEDFORD TESTIMONY IN OPPOSITION TO TRANSFER OF THE WHITWOOD COURT/NW SHEPARD STREET PARCEL ADJACENT TO HIS PROPERTY, ADVISING IT IS LANDLOCKED AND INAPPROPRIATE FOR PUBLIC PARK USE. VALERIE AND MIKE MANNING TESTIMONY IN OPPOSITION TO TRANSFER OF THE WHITWOOD COURT LOT 1, BLOCK 26 PARCEL ADJACENT TO THEIR PROPERTY, ADVISING IT HAS BEEN USED AS A DUMP SITE AND IS INAPPROPRIATE FOR PUBLIC PARK USE. MR. DuBAY RESPONSE TO BOARD QUESTIONS REGARDING STATUTORY REQUIREMENTS PERTAINING TO TRANSFER OF PROPERTY FOR PUBLIC PURPOSES.

R-11 was tabled at 10:55 a.m. in order to consider time certain item R-20 and recommenced at 10:56 a.m.

MR. DuBAY AND MS. HATHAWAY-MARXER RESPONSE TO BOARD QUESTIONS AND DISCUSSION REGARDING DEED AND ZONING RESTRICTIONS. FOLLOWING BOARD DISCUSSION, MS. HATHAWAY-MARXER ADVISED THE CITY WOULD AGREE TO POSTPONE

TAKING THE TWO PARCELS IN ORDER TO DISCUSS THEIR DISPOSITION WITH THE NEIGHBORS AND COUNTY COUNSEL. UPON MOTION OF COMMISSIONER COLLIER, SECONDED BY COMMISSIONER SALTZMAN, IT WAS UNANIMOUSLY APPROVED THAT THE TWO WHITWOOD COURT PARCELS BE REMOVED FROM THE CITY OF PORTLAND TRANSFER LIST FOR FURTHER DISCUSSION AND FOR BOARD RECOMMENDATION AS TO THEIR DISPOSITION. ORDER 94-177 UNANIMOUSLY APPROVED, AS AMENDED.

DISTRICT ATTORNEY'S OFFICE

- R-20 *Request for Approval of a Notice of Intent to Submit a Child Abuse Multi-Disciplinary Intervention Plan to the State Children's Services Division to Apply for a Funding Grant in the Amount of \$426,414***

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-20. MICHAEL SCHRUNK EXPLANATION. NOTICE OF INTENT UNANIMOUSLY APPROVED.

AUDITOR'S OFFICE

- R-21 *Budget Modification NOND 1 Requesting Authorization to Transfer \$75,000 from General Fund Contingency to the Auditor's Office to Cover the Cost of Consultants to Perform an Independent Operational Analysis of the Multnomah County Sheriff's Office Pursuant to Resolution 94-113***

COMMISSIONER HANSEN MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF R-21. GARY BLACKMER EXPLANATION. BUDGET MODIFICATION UNANIMOUSLY APPROVED.

DEPARTMENT OF ENVIRONMENTAL SERVICES

- R-12 *PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Requests for Transfers of Tax Foreclosed Properties to City of Gresham for Park and Open Space Uses***

COMMISSIONER KELLEY MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF R-12. CITY OF GRESHAM PROPERTY ACQUISITION SPECIALIST LES WILKINS PRESENTATION IN SUPPORT OF TRANSFER AND RESPONSE TO BOARD QUESTIONS. ORDER 94-178 UNANIMOUSLY APPROVED.

- R-13 *PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Request for Transfer of Tax Foreclosed Property to City of Fairview for Park and Open Space Uses*

COMMISSIONER COLLIER MOVED AND COMMISSIONER HANSEN SECONDED, APPROVAL OF R-13. CITY OF FAIRVIEW PLANNER JOHN PETTIS PRESENTATION IN SUPPORT OF TRANSFER. ORDER 94-179 UNANIMOUSLY APPROVED.

- R-14 *PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Requests for Transfers of Tax Foreclosed Properties to the Housing Authority of Portland for Low Income Housing Development*

COMMISSIONER COLLIER MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-14. MR. PAYNE ADVISED THE HOUSING AUTHORITY OF PORTLAND HAS REQUESTED THAT A PARCEL BE REMOVED FROM THE TRANSFER LIST. JEANETTE SANDER FROM HAP EXPLAINED IT WAS FELT THAT PARCEL IS INAPPROPRIATE FOR DEVELOPMENT AT THIS TIME BECAUSE IT IS CENTERED IN THE MIDDLE OF OTHER OPEN SPACE, IS ZONED R-1, AND PROVIDES AN OPPORTUNITY TO DEVELOP THE WHOLE AREA PER THE NEIGHBORHOOD PLAN. MR. PAYNE RESPONSE TO BOARD QUESTION. MS. SANDER ADVISED IT IS HOPED THE NON-PROFIT ROSE COMMUNITY DEVELOPMENT ASSOCIATION WILL REQUEST THE PROPERTY. COMMISSIONERS COLLIER AND KELLEY AMENDED THEIR MOTION AND SECOND TO EXCLUDE THE LENTS PARCEL FROM THE TRANSFER LIST. ORDER 94-180 UNANIMOUSLY APPROVED, AS AMENDED.

- R-15 *PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Requests for Transfers of Tax Foreclosed Properties to Portland Development Commission for Low Income Housing Development*

COMMISSIONER SALTZMAN MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-15. PORTLAND DEVELOPMENT COMMISSION DIRECTOR OF HOUSING NEIL HUNTER PRESENTATION IN SUPPORT OF TRANSFER, FUTURE PROPERTY TRANSFER NEEDS, AND RESPONSE TO BOARD QUESTIONS. MR. HUNTER TO DISCUSS PROPOSED PDC/NECDC TRADE WITH MR. DuBAY. ORDER 94-181 UNANIMOUSLY APPROVED.

- R-16 *PUBLIC HEARING and Consideration of an ORDER in the Matter of Approving Requests for Transfers of Tax Foreclosed Properties to Northeast Community Development Corporation for Low Income Housing Development*

COMMISSIONER COLLIER MOVED AND COMMISSIONER HANSEN SECONDED, APPROVAL OF R-16. NORTHEAST COMMUNITY DEVELOPMENT CORPORATION DEVELOPMENT DIRECTOR MICHAEL TROWER PRESENTATION IN SUPPORT OF TRANSFER. GABRIEL BERG TESTIMONY IN OPPOSITION TO TRANSFERS. COMMISSIONER HANSEN EXPLANATION OF COUNTY COMMITMENT TO NEHEMIAH PROGRAM. ORDER 94-182 UNANIMOUSLY APPROVED.

PUBLIC CONTRACT REVIEW BOARD

(Recess as the Board of County Commissioners and convene as the Public Contract Review Board)

- R-19 *ORDER in the Matter of an Exemption from Formal Competitive Bid Process to Contract with Selectron, Inc. for Card Key Access System*

COMMISSIONER KELLEY MOVED AND COMMISSIONER HANSEN SECONDED, APPROVAL OF R-19. JIM EMERSON EXPLANATION AND RESPONSE TO BOARD QUESTIONS AND DISCUSSION. CHAIR STAFF TO WORK WITH PURCHASING TO ESTABLISH APPROPRIATE METHOD FOR NOTIFYING BOARD OF EMERGENCY EXEMPTIONS. ORDER 94-183 UNANIMOUSLY APPROVED.

(Recess as the Public Contract Review Board and reconvene as the Board of County Commissioners)

COMMUNITY AND FAMILY SERVICES DIVISION

- R-23 *Ratification of Intergovernmental Agreement Contract 103505 Between Clackamas County and Multnomah County, Providing Rental Assistance to Eligible Clackamas County Households Accessed through the Emergency Services Clearinghouse Operated by Multnomah County, for the Period July 1, 1994 through September 30, 1994*

COMMISSIONER KELLEY MOVED AND COMMISSIONER SALTZMAN SECONDED, APPROVAL OF R-23. JOHN PEARSON EXPLANATION. AGREEMENT UNANIMOUSLY APPROVED.

DEPARTMENT OF ENVIRONMENTAL SERVICES

- R-24 *Budget Modification DES 2 Requesting Reclassification of an Office Assistant II Position in the Tax Title Unit of Assessment and Taxation, to a Foreclosed Property Coordinator*

COMMISSIONER COLLIER MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF R-24. BETSY WILLIAMS EXPLANATION. BUDGET MODIFICATION UNANIMOUSLY APPROVED.

- R-17 C 1-94a *Second Reading and Possible Adoption of a Proposed ORDINANCE Amending the Comprehensive Framework Plan Volume I Findings to Include the West Hills Reconciliation Report, as Revised by the Board, in Partial Fulfillment of Periodic Review Work Program Tasks for Statewide Planning Goal 5 Resources in the West Hills*

PROPOSED ORDINANCE READ BY TITLE ONLY. COPIES AVAILABLE. COMMISSIONER SALTZMAN MOVED AND COMMISSIONER KELLEY SECONDED, APPROVAL OF THE SECOND READING AND ADOPTION. SCOTT PEMBLE EXPLANATION. DONNA MATRAZZO AND ARNOLD ROCHLIN TESTIMONY IN SUPPORT OF BOARD ACTION. MR. ROCHLIN SUBMITTED REBUTTAL TESTIMONY TO DAN MCKENZIE LETTER OF SEPTEMBER 18, 1994 CONCERNING FISH POPULATION IN THOMPSON CREEK AND THOMPSON FORK. ORDINANCE 797 UNANIMOUSLY APPROVED.

- R-18 C 2-94a *Second Reading and Possible Adoption of a Proposed ORDINANCE Amending the Comprehensive Framework Plan Volume I Findings to Include the Howard Canyon Reconciliation Report, as Revised by the Board, in Partial Fulfillment of Periodic Review Work Program Tasks for Statewide Planning Goal 5 Resources in the Howard Canyon Area*

PROPOSED ORDINANCE READ BY TITLE ONLY. COPIES AVAILABLE. COMMISSIONER COLLIER MOVED AND COMMISSIONER HANSEN SECONDED, APPROVAL OF THE SECOND READING AND ADOPTION. MR. PEMBLE RESPONSE TO ISSUES ADDRESSED BY MR. HRIBERNICK ON SEPTEMBER 13, ADVISING DIVISION RECOMMENDS NO CHANGE TO SANDY RIVER ISSUE; DOES NOT AGREE WITH MR. HRIBERNICK'S DISCUSSION CONCERNING NEED TO CHANGE IMPACT AREA; DOES AGREE THERE SHOULD BE SOME CLARIFICATION OF LANGUAGE TO CLARIFY THE COUNTY'S INTENT WITH RESPECT TO IMPACT

AREA; AGREES WITH INCLUDING REFERENCE TO NON-EXEMPT ACTIVITY. TRANSPORTATION DIVISION STAFF CHUCK HENLEY PRESENTATION CONCERNING THE SCOPE OF THE REQUIRED STUDY AND THE COST OF THE TRAFFIC MANAGEMENT PLAN. SUSAN FRY AND PAUL HRIBERNICK TESTIMONY AND RESPONSE TO BOARD QUESTIONS AND DISCUSSION OF OPERATING HOURS. MR. PEMBLE SUGGESTIONS IN RESPONSE TO BOARD QUESTIONS. BOARD COMMENTS AND DISCUSSION.

Vice-Chair Collier left at 12:10 p.m.

UPON MOTION OF COMMISSIONER KELLEY, SECONDED BY COMMISSIONER SALTZMAN, AN AMENDMENT TO IV.C.2.d.(iii)&(iv) OF THE RECONCILIATION REPORT ADJUSTING THE FUTURE OVERLAY ZONING DISTRICT AROUND THE EXTRACTION AREA WAS UNANIMOUSLY APPROVED. UPON MOTION OF COMMISSIONER KELLEY, SECONDED BY COMMISSIONER HANSEN, AN AMENDMENT ADDING "NON-EXEMPT" TO THE LAST SENTENCE OF IV.C.2.d.(v) OF THE RECONCILIATION REPORT WAS UNANIMOUSLY APPROVED. BOARD DISCUSSION. MS. FRY COMMENTS. AT CHAIR STEIN'S SUGGESTION AND UPON MOTION OF COMMISSIONER SALTZMAN, SECONDED BY COMMISSIONER HANSEN, AN AMENDMENT TO IV.C.2.d.(xiii) OF THE RECONCILIATION REPORT SETTING OPERATING HOURS AT 8:30 AM TO 5:00 PM MONDAY THROUGH FRIDAY; 8:00 AM TO 1:00 PM SATURDAYS, WITH NO CRUSHING ALLOWED; AND 7:00 AM TO 4:00 PM MONDAY THROUGH FRIDAY DURING SUMMER WHEN SCHOOL IS NOT IN SESSION, WAS UNANIMOUSLY APPROVED. ORDINANCE 798 UNANIMOUSLY APPROVED, AS AMENDED.

There being no further business, the meeting was adjourned at 12:20 p.m.

**OFFICE OF THE BOARD CLERK
for MULTNOMAH COUNTY, OREGON**


Deborah L. Bogstad

#1
PLEASE PRINT LEGIBLY!

MEETING DATE

9/22/94

NAME

DONNA MATRAZZO

ADDRESS

19300 NW SAUVIE ISLAND RD
STREET

CITY

PORTLAND OR 97231

ZIP CODE

I WISH TO SPEAK ON AGENDA ITEM

R-17 West
C1-942 Hills

SUPPORT

✓

OPPOSE

SUBMIT TO BOARD CLERK

#2

PLEASE PRINT LEGIBLY!

MEETING DATE

9/22/94

NAME

Arnold Rocklin

ADDRESS

P.O. Box 83645

STREET

Portland, OR 97283

CITY

ZIP CODE

I WISH TO SPEAK ON AGENDA ITEM #

R-17

SUPPORT

☒ With concerns

OPPOSE

SUBMIT TO BOARD CLERK

SEP 22 1994

MEETING DATE: September 13, 1994 R-17

AGENDA NO: P-4

(Above Space for Board Clerk's Use ONLY)

AGENDA PLACEMENT FORM

SUBJECT: C 1-94a First Reading - West Hills Reconciliation Report

BOARD BRIEFING Date Requested: _____

Amount of Time Needed: _____

REGULAR MEETING: Date Requested: September 13, 1994

Amount of Time Needed: 30 Minutes

DEPARTMENT: DES **DIVISION:** Planning

CONTACT: R. Scott Pemble **TELEPHONE #:** 3182
BLDG/ROOM #: 412/103

PERSON(S) MAKING PRESENTATION: Planning Staff

ACTION REQUESTED:

☐ INFORMATIONAL ONLY ☐ POLICY DIRECTION ☐ APPROVAL ☐ OTHER

SUMMARY (Statement of rationale for action requested, personnel and fiscal/budgetary impacts, if applicable):

C 1-94a Adopt an Ordinance amending the Multnomah County Comprehensive Framework Plan, Volume I, to include the West Hills Reconciliation Report

First Reading

SIGNATURES REQUIRED:

ELECTED OFFICIAL: _____

OR

DEPARTMENT MANAGER: *[Signature]* Betsy Willis

ALL ACCOMPANYING DOCUMENTS MUST HAVE REQUIRED SIGNATURES

Any Questions: Call the Office of the Board Clerk 248-3277/248-5222

0516C/63

6/93

BOARD OF
COUNTY COMMISSIONERS
1994 SEP -8 AM 10:47
MULTNOMAH COUNTY
OREGON

ORDINANCE FACT SHEET

Ordinance Title: Adoption of West Hills Reconciliation Report

Give a brief statement of the purpose of the ordinance (include the rationale for adoption of ordinance, description of persons benefited, other alternatives explored):

This ordinance will amend the Multnomah County Comprehensive Plan, Volume 1 Findings to include the West Hills Reconciliation Report, in partial fulfillment of Periodic Review Remand Order requirements. The Remand Order required the county to complete the Statewide Planning Goal 5 process for wildlife habitat, scenic views, streams and mineral and aggregate resources in the West Hills. The persons benefited will be the public in general.

What other local jurisdictions in the metropolitan area have enacted similar legislation?

Every county and city in the state is subject to compliance with Statewide Planning Goal 5. The City of Portland has a number of Environmental zones to protect Goal 5 resources within city limits.

What has been the experience in other areas with this type of legislation?

Additional regulations governing development in order to provide environmental protections.

What is the fiscal impact, if any?

There will be no fiscal impact from adoption of the Reconciliation Report, although subsequent permit requirements as part of the protection program will generate additional staff workload to process applications.

SIGNATURES

Person Filling Out Form: _____

Planning & Budget Division (if fiscal impact): _____

Department Manager/Elected Official: Ed Betty Willis



MULTNOMAH COUNTY OREGON

DEPARTMENT OF ENVIRONMENTAL SERVICES
DIVISION OF PLANNING
AND DEVELOPMENT
2115 S.E. MORRISON STREET
PORTLAND, OREGON 97214
(503) 248-3043

BOARD OF COUNTY COMMISSIONERS
BEVERLY STEIN • CHAIR OF THE BOARD
DAN SALTZMAN • DISTRICT 1 COMMISSIONER
GARY HANSEN • DISTRICT 2 COMMISSIONER
TANYA COLLIER • DISTRICT 3 COMMISSIONER
SHARRON KELLEY • DISTRICT 4 COMMISSIONER

BOARD REVISIONS WEST HILLS RECONCILIATION REPORT

Attached are the revisions to the West Hills Reconciliation that were a result of the August 9, 1994 Board decision to designate wildlife habitat, streams and scenic views as "3-C" and the Angell Brother's aggregate site as "3-B" pursuant to Goal 5 Periodic Review Remand Order requirements. These revisions have been incorporated into the September, 1994 West Hills Reconciliation Report (Exhibit A), but are printed separately here in order to facilitate review.

mately 75 houses might be built on RR zoned land. This combined potential is about half the number of existing houses in the study area. The actual number of new houses that are built will likely be less than 175, taking into consideration that approximately 2000 acres of land is in large tracts owned by commercial timber companies and is unlikely to be divided and fully developed. Analysis of Exhibit Maps 1 and 2 shows that much of the potential buildable land is in "not-seen" areas. Existing vegetation would serve to screen many other potential building sites. Though the number of potential new houses that would be visible from key viewing areas is limited, some houses would be visible and would conflict with protection of scenic attributes in several ways. The location and design of a house may cause it to protrude above a ridgeline, making it visible against the skyline. Light colors and reflective materials such as metal roofs and windows cause buildings to be more visible because of the contrast with the surrounding darker vegetation. Driveways to building sites have the potential to be visually apparent based on their length and the amount of grading, cutting or filling that must be done to meet road grade and width requirements for emergency vehicle access. Most residences are also surrounded by lawns or other cleared areas. Such clearings would be visible from key viewing areas because of the contrast with the predominantly forested vegetation pattern. A house located in the center of a cleared area also has more visual prominence than if it were sited within the trees.

Mining: The Angell Brothers mine is an existing conflicting use. 114 acres of the site has been designated "3-C" and has received Conditional Use approval to be mined. The remaining 283 acres has been designated "1-C", significant because evidence has been provided that the quality and quantity of rock material is significant (ESEE work and determination of the appropriate level of protection is on-going). Another quarry, currently inactive, is located near Rocky Point Road. This site is owned by ODOT and was used for Highway 30 road work in the 1970s. A third quarry, Hidden Valley, is located directly north of Angell Brothers. The rock resource at that site appears to have been depleted and the quarry was converted to a landfill. The potential remains for these, as well as other as yet unidentified sites, to be mined in the future, which could conflict with preservation of scenic attributes.

Mining requires removal of vegetation, changes the landform to a series of benches with intervening cliffs, and the exposed rock faces may create visible intrusions on the forested hillside. The location of a proposed mine and the number of places from which it could be viewed, the proposed size of the disturbed area, as well as the amount of screening vegetation and topography, affects the degree of visual conflict. ~~Mining activities, like logging, can be considered temporary, and~~ While reclamation is required, ~~many people, however,~~ have questioned the ability of reclaimed land to support forest growth and ~~whether the ability of~~ the reclaimed landform will to blend in with the surrounding topography (reference file PR 7-92, Angell Brothers Goal 5 analysis). The Angell Brother's quarry creates additional conflicts because of its location directly opposite the Sauvie Island Bridge, the sole road access to the island. The large number of visitors to the island are thus impacted by the visual intrusion of the quarry.

industry, and various other community service and conditional uses which could be allowed by zoning.

4. The ESEE analysis shows that the benefits of protecting the scenic area are ~~mostly aesthetic in nature, and~~ **primarily social and environmental**. In general, the **economic and social** impacts of not allowing a conflicting use are more severe than allowing the conflicting use in a limited manner. This leads to the conclusion that ~~preservation of scenic qualities can be managed in a manner that allows conflicting uses under specific conditions.~~ **most uses should not be prohibited, but should be allowed in a limited manner, with implementation of specific conditions to protect scenic values. In the case of the Angell Brother's quarry, however, impacts to the scenic landscape would be more more severe due to the quarry size and location opposite the Sauvie Island bridge, which makes the site visible to the large number of people visiting the island.**

~~However, this~~ **These** conclusions must be examined in light of the **conclusions reached concerning the** other Goal 5 resources within the scenic area - wildlife habitat, streams and water resources, and the Angell Brothers mineral and aggregate resource site. Chapter VI, 'Conflict Resolution and Protection Program for West Hills Goal 5 Resources' will analyze the relative importance of each of these Goal 5 resources in relation to each other, as well as resolving conflicts between conflicting uses identified in Chapters I through V.

b. Synopsis of ESEE consequences

Impacts if Forestry is not allowed

Economic: Loss of jobs, taxes, and revenue from sales

Social: End to resource-based lifestyle/heritage for some families

Environmental: Older, less productive forest, possibility of disease and infestation

Energy: Possibility of greater energy expenditure to import wood products

Goal 4: County cannot prohibit forest practices

Impacts if Forestry is allowed in a limited manner

Economic: Possible loss of some jobs, taxes, and revenue from sales

Social: No impacts

Environmental: No impacts

Energy: No impacts

Goal 4: County cannot limit or regulate forest practices

Impacts if Forestry is allowed fully

Economic: Loss of indirect benefits related to quality of life

Social: Loss of aesthetic enjoyment

Environmental: Less protection of fish and wildlife habitat, water and air quality

Energy: No impact

uses. This data is important in addressing impact areas and conflicting uses.

The Goal 5 analysis is designed to meet the requirements of the Goal 5 Administrative Rule (OAR Chapter 660, Division 16). The report will address impact areas, conflicting uses, and the economic, social, environmental, and energy (ESEE) consequences of conflicting uses. Each component of the analysis is organized by county study area.

2. DESCRIPTION OF RESOURCE

This report discusses significant streams in ten sub-regions of the West Hills Rural Area. Most of the streams drain eastward to Multnomah Channel; some, such as Jackson and Rock Creeks, drain westward to the Tualatin River. The sub-regions lie generally between U.S. Highway 30 and the Multnomah/Washington County line in west Multnomah County. A map of the sites is contained within the Technical Appendix relating to significance at the back of this report.

The significant streams discussed in this Resource Analysis Report are shown in Table 1.

The rationale for determining that these streams are significant is contained within the attached Appendix relating to significance at the back of this report.

3. IMPACT AREAS

The impact area for this study is the riparian zone along each stream. The riparian zone influences the quality and health of the stream and varies in width. It is affected by adjacent slope and the size of the vegetation along the stream. Generally, wider riparian zones have steep slopes with large trees, which shade the stream and contribute woody debris to the stream channel.

For streams that flow through or contribute water to public parks, publicly-owned natural areas, or to recreation areas used by the public, the impact area includes the downstream park, natural area, or recreational facility.

Each stream is examined in terms of the number of properties abutting the stream and the zoning of the adjacent properties. The property/land use data provided is based on County study area maps.

Streams in the West Hills Rural Area are listed by sub-region in Table 2. Streams listed met the County's significance criteria.

The impact area (width of riparian corridor) and the land use adjacent to streams within each sub-region are discussed in Table 3. The uses were noted by field survey teams during the inventory process.

are hit by vehicles.

Allowing mining will result in temporary adverse stream impacts including rerouting and stream channel destruction. Reclamation would include stream channel restorations. ~~Considering environmental compliance issues, regulated by the Oregon Department of Geology and Mineral Industries and the Oregon Department of Environmental Quality, environmental impacts outside the site during quarry operations can be minimized.~~

Allowing mining of the Angell Brothers sit could also have significant impacts on the Burlington Bottoms wetland. Portland hydrologist Jon Rhodes provided testimony (September 1992) in response to the proposed Angell Brothers quarry expansion that outlined the likely impacts on the North Angell Brothers Stream and its downstream environs. Mr. Rhodes asserted that the proposed expansion would increase streamflow, erosion, and downstream sedimentation into Burlington Bottoms and that these increases would probably be extremely significant. As a worst case, enough sediment could be transported into Burlington Bottoms so that it would become filled and would no longer function as a wetland.

In testimony given in response to this Remand Order, a representative of the Oregon Department of Environmental Quality (DEQ) stated that controlling storm runoff problems from quarries is "an art, not a science." While DEQ works with quarry operators, they apparently cannot guarantee compliance with DEQ water quality standards within a short period of time. Significant amounts of reosive runoff may flow into the high quality Burlington Bottoms wetlands before the operator and DEQ can resolve any problems.

MATRIX KEY:

ENV 1: Negative environmental impacts result from the loss of wildlife habitat when riparian vegetation is removed or destroyed.

ENV 2: Negative environmental impacts result from deterioration in water quality due to increased run-off, turbidity, water temperature, and pollutants.

ENV 3: Negative environmental impacts result from increased disturbance or mortality of wildlife, or by limiting the mobility of wildlife.

iv. Energy Consequence of Allowing Conflicting Uses

Energy consequence of allowing conflicting uses are less clear than other impacts. When streams are used for small hydro-electric or mill purposes a negative impact may occur if the flow of the stream is interrupted. Jackson creek has a small water wheel which provides power for adjacent property

least four properties in the surrounding area, "...vibrations...were significantly below the accepted particle velocity limit..." as determined by the US Bureau of Mines and other State and Federal agencies. The letter indicates that, "As an example of the level of vibrations produced from the shots at the quarry, we recorded higher vibrations from trains going through the tunnel than we did from a shot." That tunnel is located on property adjacent to the northeast of this resource site. Therefore, only adjacent properties, at most, need be included in the impact area to consider blast impact issues.

Location specific dust problems were raised as an issue in the Bellant Letter. Ms. Bellant resides at Bridgeview Moorage located in Multnomah Channel adjacent to Tax Lot '11', Section 28, T2N, R1W. That moorage is approximately 800 feet from this resource site. All properties within 800 of the resource site should be included in the impact area to consider dust issues.

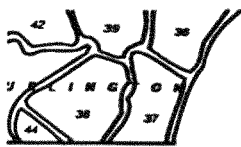
Increased mine truck traffic on US Highway 30 has been identified as a concern relative to any expanded activity at this site (Linnton Letter).

The structural cross section of US Highway 30 is designed to accommodate truck traffic. This includes the type of traffic that is generated by the quarry. Therefore, the estimated maximum of 250 truck trips per day (estimated by applicant's submittal in PR 7-92) will not adversely effect the normal life cycle of the structural cross section of the roadway.

The "1992 Oregon Department of Transportation Traffic Volume Tables" indicate the section of Highway 30 north of the Sauvie Island Bridge has an average daily trip (ADT) count of 16,000, and the portion south of the bridge 20,000 ADT. Using those 1992 tables, ODOT staff computed the peak hour peak direction traffic volume at 1,200 vehicles. Given the four travel lanes with center left configuration, ODOT staff estimates the 1992 Level of Service to be "B". Consequently, Highway 30 has sufficient capacity to accommodate increased truck volume in the vicinity of the Sauvie Island Bridge.

Since ODOT indicates that US Highway 30 has sufficient capacity and structural capability to safely handle the traffic generated by the quarry operation, traffic on Highway 30 will not be considered a conflicting use.

An impact area of 1,200 feet from the perimeter of the resource site would also include resource areas of all of the potentially conflicting Goal 5 resources. The site itself is within the West Hills Scenic Area, the West Hills Wildlife Habitat Area, and the Water Resource and Wetland Sites. Burlington Bottoms is immediately to the northeast of the site across US Highway 30. Burlington Bottoms is one of the state's largest remaining wapato wetlands and a designated '3-C' Goal 5 resource. Therefore, an impact area including this resource site plus that area 1,200 feet in all directions from the perimeter of this resource site and including Burlington Bottoms (tax lot '7', Sec. 17; tax lots '1', '2' and '4', Sec. 20; and, tax lot '15', Sec. 28, all in T2N, R1W) is selected since it will include all known conflict issues (see Map on next page).



20

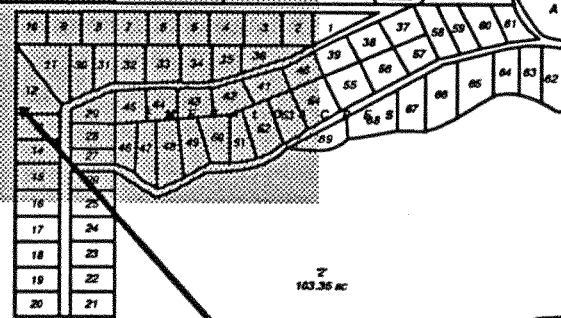
Angell Brothers Resource Site & Impact Area

Impact Area

Existing Quarry

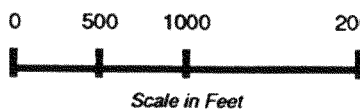
Resource Site

28



Impact Area

33



Scale in Feet

2. CONFLICTING USES

The Goal 5 Rule requires identification of conflicting uses. A conflicting use is one which, if allowed, could adversely affect a Goal 5 resource site. Identifying conflicting uses is primarily done by examining uses authorized by zoning districts within the impact area.

a. Zoning Districts and Resources Within the Impact Area

The majority of the property within the impact area (the resource site plus a 1,200 foot perimeter area) is zoned Commercial Forest Use (CFU). Exceptions to this include that area 2,200 feet north of the Sauvie Island Bridge, east of US Highway 30 and west of Multnomah Channel which is designated Multiple Use Agriculture (MUA-20), and an area on the westerly edge of Sauvie Island in the vicinity of the Sauvie Island Bridge which is designated Exclusive Farm Use (EFU). There is a small portion of one lot (Tax Lots '27' & '56', Section 28, T2N, R1W, 2.00 acres) to the south of the easternmost tip of the site designated Rural Residential (RR) within the impact area.

The Multiple Use Agriculture portion of the impact area is within the Rafton/Burlington Bottoms which is a recognized Goal 5 resource and designated "3-C". It is in the ownership of the Bonneville Power Administration and serves as a wetland mitigation area for which a management plan is being developed. That plan calls for the area to be maintained in a natural state, with no development of any kind allowed. Since there is no development potential within that portion of the impact area designated MUA-20, MUA-20 uses other than the conservation use will be excluded from the following analysis of conflicting uses allowed by zoning district. The conservation use is considered in discussions of the Rafton/Burlington Bottoms.

The Rural Residential lot is developed with a single family residence located 150 feet outside of the impact area. The portion of the lot within the impact area consists mainly of Bonneville Power Administration right-of-way. Since the lot is committed to residential use and no development is allowed within the BPA right-of-way, there is no other category of use that could be made of that portion of the lot within the impact area. Rural Residential uses, therefore, will not be considered in the conflict analysis.

Also, the Exclusive Farm Use area will not be considered in this analysis since the portion of the impact area designated EFU consists entirely of property developed with a portion of the dike which protects Sauvie Island. With the exception of occasional grazing, no use is allowed of the dike.

There are two overlay zoning districts within the impact area, the Willamette River Greenway (WRG) and Flood Hazard (FF) & (FW). With the exception of the FW overlay which limits uses allowed by the base zone, those overlay districts do not identify allowed uses, rather, they place design restrictions on uses allowed by the base zone. Therefore, they will not be considered in the conflicting use analysis.

There are three other Goal 5 resources which have been identified within the impact

II. Economic Effect on Conflicting Uses if Development of the Resource is Allowed

• Residential Uses

Mining would have an effect of reducing construction and maintenance costs for residential development within the impact area due to reduced hauling costs. Each hour of hauling aggregate material adds at least \$4.60 to the cost per ton of material [1990 ODOT letter to DLCD (see Appendix)]. There is no documented evidence in the record regarding the effect of mining on property values.

• Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

Any mining operation would be conducted within environmental control standards insuring compliance with air and water quality standards, and possible permit conditions to conserve soil resources and provide for wildlife and fishery resources. Satisfaction of those standards and conditions would have no economic impact on conservation uses within the impact area.

• Forest operations or forest practices on the resource site

The Board has previously found that the 283 acre proposed expansion area is capable of producing timber resources worth over six million dollars. That potential would be lost on mined portions of the site until they were reclaimed for forestry purposes if mining occurred. Testimony at previous hearings has questioned the viability of reclamation for commercial forestry purposes.

• West Hills Scenic Area, Wildlife Habitat Area, and Water Resource and Wetland Sites

~~There are no quantifiable measures of economic impact of mineral extraction operations on scenic resources. A possible impact is a reduction of the value of the conservation easements that exist in the surrounding area.~~

• West Hills Wildlife Habitat Area

~~There are no quantifiable measures of economic impact of mineral extraction operations on wildlife resources. A possible impact is a reduction of the value of the conservation easements that exist in the surrounding area.~~

• Water Resource and Wetland Sites

~~There would be no adverse economic impact of a mineral extraction operation at this site on water and wetland sites since the operation would have to be conducted in accordance with DEQ standards that are intended to minimize conflicts with the recognized 3C resource of the Rafton/Burlington Bottoms. Available informa-~~

~~tion indicates that the significant stream on the site has no economic value (SBI/Shapiro, 1994).~~

The economic impacts of loss of wildlife habitat, scenic resources and streams and wetlands directly impact our quality of life. The protection of significant natural resources has direct economic benefits that contribute substantially to our quality of life. Quality of life is an important consideration for business recruitment and retention. Forest Park, one of the nation's unique urban parks, is an amenity which enhances livability in Multnomah County which in turns attracts and supports a healthy and viable business community. Multnomah County's wildlife and natural resources (Forest Park, Sauvie Island, Columbia Gorge) are key elements in the state and region's tourism industry.

b. Social Effects

i. Social Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- Residential Uses

The addition of approximately eight new residences in the impact area would increase the potential for complaints regarding noise, dust, vibration, etc.; thereby, potentially limiting the extent of an expanded mining operation (Final Order PR 7-92 § 22).

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

There have been no adverse social impacts on mining identified that would result with respect to conservation activities on properties in the impact area.

- Forest operations or forest practices on the resource site

Use of the site solely for forestry purposes would prevent mining. The social impact of that would be the conscious elimination of the production of one construction material in favor of the production of another.

- West Hills Scenic Area

Prohibition of mining to preserve the scenic resource would have the social impact of limiting the availability of a needed construction material.

- West Hills Wildlife Habitat Area

Preservation of the site for wildlife habitat would prevent mining expansion. That would also have the social effect of limiting the availability of a needed construc-

tion material.

- **Water Resource and Wetland Sites**

Any mining expansion would have to be conducted in a manner that minimizes impact on the "3C" Rafton/Burlington Bottoms. The impact on North Angell Brothers Creek would be considered a limitation on an expanded operation since it has been found to contribute to the park/recreation facility of Burlington Bottoms. Middle Angell Brothers Creek has been found not to contribute flow to Burlington Bottoms.

ii. **Social Effect on Conflicting Uses if Development of the Resource is Allowed**

- **Residential Uses**

Increased mining would not prevent additional residential uses on legal Lots of Record within the impact area. Mining, crushing, and trucking could add to the noise and dust experienced by residents within the impact area.

- **Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources**

There are several conservation easements within the impact area intended to maintain natural habitat areas in the West Hills. Their utility would be diminished by mining activities. Also, mining would fragment the "peninsula" of open space that connects Forest Park with the forests of the coast (Final Order PR 7-92 § 20 and 21).

- **Forest operations or forest practices on the resource site**

Use of the site solely for mining purposes would prevent its immediate use for forestry purposes. Reclamation could allow for its future utilization for forestry. The social impact of that would be the conscious acceptance of the short-term production of one construction material versus the long-term production of another.

- **West Hills Scenic Area, Habitat Area, and Water Resource and Wetland Sites**

~~Mining requires removal of vegetation, changes the landform, and the exposed rock face creates a highly visible intrusion on the forested hillside. The size of the disturbed area, as well as the amount of screening, vegetation and topography, affects the degree of visual conflict.~~

- ~~**West Hills Wildlife Habitat Area**~~

~~It has been indicated that there would be social impacts of expanded mining on wildlife habitat, but they were not identified (Final Order PR 7-92 § 19).~~

• ~~Water Resource and Wetland Sites~~

~~It has been indicated that there would be social impacts of expanded mining on wetland resources, but they were not identified (Final Order PR 7-92 § 19).~~

The West Hills have a psychological value to people, being perceived as an integral and important part of the forested landscape linking Forest Park to the Coast Range; contributing to the image of a natural area with wildlife habitat on the outskirts of Portland; and providing a scenic backdrop to visitors and residents of Sauvie Island. Loss of these significant natural resources will have a social public impact if the educational and recreational opportunities are eroded.

c. Environmental Effects

i. Environmental Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

• Residential Uses

The only identified environmental effect of residential uses on the aggregate resource is the required compliance with environmental control standards which regulate impact on residential uses.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

Mining conducted in compliance with environmental control standards would have no identified effect on conservation activities on properties within the impact area.

- Forest operations or forest practices on the resource site

Use of the site solely for forestry purposes would prevent mining. That would result in no environmental effect on the aggregate resource.

- West Hills Scenic Area

Total preservation of the site for scenic purposes would prevent mining.

- West Hills Wildlife Habitat Area

Mining within an existing contiguous half-mile band of forest habitat between the existing quarry and McNamee Road would reduce that minimum width necessary to prevent isolation of Forest Park wildlife from the forests of the Coast Range (Final Order PR 7-92 § 25). Expansion of the mining activity within that area would not be allowed if the wildlife habitat is fully allowed.

- Water Resource and Wetland Sites

The Rafton/Burlington Bottoms is a "3C" resource site. Mining must be conducted in a manner that minimizes any environmental impacts on that resource. The significant stream on the site has been found to have wildlife habitat in the upper portions of the watershed. Total preservation of that habitat would prevent mining adjacent to those streams; thereby, limiting the extent of mining expansion.

ii. Environmental Effect on Conflicting Uses if Development of the Resource is Allowed

- Residential Uses

Expanded development of the mineral resource could result in increased noise, dust and vibration. Such development, however, would have to be conducted in compliance with environmental control standards. Compliance with those standards could still result in complaints, but would have no adverse environmental impact on residential uses.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

An expanded mining operation would have no identified environmental conflict with conservation activities on properties in the impact area.

- Forest operations or forest practices on the resource site

It has previously been found that allowing mining would have a devastating environmental consequence on the site's forest habitat (Final Order PR 7-92 § 24). Use of the site solely for mining purposes would prevent its immediate use for forestry purposes. Reclamation would allow for its future utilization for forestry. The Board has indicated that they are not convinced that attempts to reclaim the site would succeed in enabling the forest habitat to function again (Final Order PR 7-92 § 24). An inability to reclaim the site as a functioning forest habitat would be an adverse environmental effect on the forest resource of the site.

- West Hills Scenic Area, Wildlife Habitat Area, and Water Resource and Wetland Sites

~~Expanded mining would reduce the scenic environment of the West Hills to a degree proportionate with the size of the exposed face with respect to that of the total seen area from any key viewing area.~~

- ~~West Hills Wildlife Habitat Area~~

~~Expansion of mining activity within an existing contiguous half-mile band of forest~~

~~habitat between the existing quarry and McNamee Road would reduce that minimum width necessary to prevent isolation of Forest Park wildlife from the forests of the Coast Range (Final Order PR 7-92 § 25).~~

• ~~Water Resource and Wetland Sites~~

~~There would be minimal environmental effect on the Rafton/Burlington Bottoms by an expanded mining activity since any expansion would have to be conducted under environmental control measures that balance conflicts with that identified wetland resource. The effect on the significant stream would be the possible elimination of wildlife habitat and a reduction of water quality due to loss of riparian vegetation.~~

There would be a direct loss of wildlife habitat in West Hills. Loss of prime wildlife habitat in the West Hills means obstruction of a vital connecting link between Forest Park and the thousands of acres of wildlife in the Coast Range.

There could be significant degradation to Burlington Bottoms, a mitigation project for wildlife habitat already lost to dam construction. It is one of the state's largest remaining wapato wetlands and the 3rd highest ranking wildlife habitat of all Goal 5 wetlands in Multnomah County.

Mining would result in permanent changes to the landform, scarring the scenic backdrop to Sauvie Island, resulting in a loss of significant aesthetic qualities.

Runoff from mining would cause a significant reduction in water resources and water quality.

d. Energy Effects

i. Energy Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

• Residential Uses

There is no identified energy effect on the aggregate resource if residences are fully allowed.

• Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

There is no identified energy effect on the aggregate resource if conservation practices are fully allowed within the impact area.

• Forest operations or forest practices on the resource site

requirement of reclamation.

- West Hills Scenic Area, Wildlife Habitat Area, and Water Resource and Wetland Sites

~~There is no identified energy effect on the West Hills Scenic Area if expansion of the mining activity is allowed.~~

There would be an increased energy cost for individuals to drive further to other recreation sites.

- ~~West Hills Wildlife Habitat Area~~

There would be no identified energy effect on West Hills Wildlife Habitat Area if expansion of the mining activity is allowed.

- ~~Water Resource and Wetland Sites~~

There would be no energy effect on water resource and wetland sites within the impact area if expansion of the mining activity is allowed.

e. Other Applicable Statewide Planning Goals

The following additional Statewide Planning Goals have been found to apply to the ESEE analysis of the Angell Brothers resource site (Final Order PR 7-92 § 16, 26, 27, 28 and 29).

i. Goal 4-Forest Lands

The Forest Goal and Rule designate mining and processing of mineral and aggregate resources as locationally dependent uses. Such uses may be allowed when it is found that:

- The proposed use will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands;
- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel; and
- A written statement recorded with the deed or written contract with the county or its equivalent is obtained from the land owner which recognizes the rights of adjacent and nearby land owners to conduct forest operations consistent with the Forest Practices Act and Rules for uses authorized in OAR 660-06-025(4)(e), (l), (r), (s) and (v).

There is no indication that expanded mining at this site would force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands. Several properties surrounding the existing operation are used for primary resource production without recorded adverse impact. An expanded operation should similarly have no impact. Also, there is no indication that an expanded mining operation would increase fire hazard or the costs and risks associated with fire suppression.

The third Rule criteria is not applicable to aggregate resources. It applies only to parks and campgrounds, reservoirs and water impoundments, home occupations, health hardship mobile homes, and temporarily occupied accommodations for fishing.

ii. Goal 6—Air, Water and Land Resources

Goal 6 requires "All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules or standards." The existing operation is not in full compliance with all applicable state and federal regulations, ~~but measures are being taken to achieve compliance, however, the Board is not been convinced that current technology will achieve compliance. Any expansion would be required to be in full compliance with these regulations.~~

iii. Goal 7—Areas Subject to Natural Disasters and Hazards

Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards." The majority of this resource site has been identified as having slope hazard potential (Shannon & Wilson, 1978) and the conduct of a mining operation is defined in the Statewide Planning Goals as a development. The existing operation is conducted in compliance with all applicable mine safety regulations. Any expansion would also be required to comply with those safety regulations.

iv. Goal 15—Willamette River Greenway

While none of the resource site is within the Willamette River Greenway, that portion of the impact area east of US Highway 30 is within the Greenway. An expanded operation should be conducted in a manner that conserves the scenic quality of lands within the Greenway.

Energy: No energy expended for mineral production at this site, but probable transfer of energy expenditure to an alternative site; less energy expended for forestry than mining

iv. West Hills Scenic Area

Consequences if West Hills Scenic Area is not allowed

Economic: No operational expenses for buffering, screening or phasing

Social: Loss of aesthetic enjoyment

Environmental: Loss of the scenic environment

Energy: ~~No identified impact~~ Increased energy cost for individuals to drive further to other recreation sites.

Consequences if West Hills Scenic Area is allowed in a limited manner

Economic: Increased operational expenses for buffering, screening and phasing

Social: Increased availability of aggregate material

Environmental: Modification of this portion of the viewshed over time

Energy: Increased energy expenditure for buffering, screening and phasing

Consequences if West Hills Scenic Area is allowed fully

Economic: Loss of the value of the aggregate material

Social: Retention of aesthetic enjoyment; limitation of the availability of aggregate material

Environmental: Retention of existing natural environment

Energy: No energy expended for mineral production at this site, but probable transfer of energy expenditure to an alternative site

v. West Hills Wildlife Habitat Area

Consequences if West Hills Wildlife Habitat Area is not allowed

Economic: Full utilization of the aggregate resource, reduction in quality of life

Social: Loss of educational and recreational activities

Environmental: Loss of habitat area; isolation of Forest Park species

Energy: None identified.

Consequences if West Hills Wildlife Habitat Area is allowed in a limited manner

Economic: Increased operational expenses resulting from reclamation; reduction of supply due to limitation of expansion areas

Social: Continued wildlife migration; provision of a necessary construction material

Environmental: Retention of habitat area necessary for migration and modifica-

include the entire 283 acres, *then* the "peninsula" would narrow to a few hundred yards. Such a narrow "neck" of forested land would be inadequate to provide the continuous forest cover needed to sustain wildlife large populations of diverse wildlife. (See *A Study of Forest Wildlife Habitat in the West Hills*.) The only alternative for wildlife needing continuous forest cover would be to jog westward, across McNamee Road and an associated "secondary habitat" area, which has been degraded by rural residential development and clearing for agricultural purposes.²⁰

While there has been some information presented by Oregon Department of Fish & Wildlife that the quarry *could* be reclaimed to provide wildlife habitat after quarry operations are completed, there has been no convincing evidence presented that such reclamation is indeed feasible-- quarrying involves significant landform modification as opposed to forest practices. The quarrying activities, although temporary, would have a much longer impact than logging would. A long-term disruption to the contiguous wildlife habitat area/ecosystem would logically have less chance of regeneration through reclamation -- after many decades of isolation. Forest Park may be unreclaimable as wildlife habitat due to the spread of non-native plant and animal species and other human impacts.

On the other hand, *if* the quarry were located further to the north, where the forest land peninsula is about three miles wide, it would not have the same constricting effect on forested habitat.²¹

iv. Energy Consequences

There are no significant identified energy consequences of allowing conflicting uses in place of wildlife habitat in the West Hills.

b. Consequences of Protecting Wildlife Habitat on Conflicting Uses

i. Residential Uses

- Economic Consequences

Ideally, to minimize adverse impacts on wildlife habitat, no additional rural residential development would be permitted in the West Hills. However, this would have major adverse economic consequences for property owners. Table 6, below, describes the existing and potential number of rural residences that may be sited in each of the West Hills subareas.

The value of a rural residential lot in the West Hills Rural Area varies according to a number of factors, including proximity to Portland, views (1-5 mountain views), buildability (slopes, access, availability, on-site sewage disposal, water, *etc.*), and whether the property (and surrounding properties) are forested or clear cut.

Energy: Increased energy consumption in transporting material and building infrastructure

Consequences if Mining is allowed in a limited manner

Economic: Regulatory burden, taxes, and revenue from sales; possible loss of long-term supply and increased cost

Social: Reduced property rights, reduced local sources; possible increased impacts on other communities; less availability of needed construction material

Environmental: More stringent buffering and reclamation requirements

Energy: Some increase in energy use for transporting materials to market; less use of concrete

Consequences to Scenic Resources if Mining is allowed fully

Economic: Loss of indirect benefits related to quality of life

Social: Loss of aesthetic enjoyment

Environmental: Less protection of fish and wildlife habitat, water and air quality

Energy: ~~No impact~~ Increased energy cost for individuals to drive further to other recreation sites

Consequences to Streams if Mining is allowed fully

Economic: Insignificant

Social: Insignificant

Environmental: Loss of riparian vegetation, deterioration of water quality

Energy: Insignificant

Consequences to Wildlife Habitat Area if Mining is allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism

Social: Loss of educational and passive recreation opportunities

Environmental: Numerous negative impacts from habitat loss and diminishment

Energy: Insignificant

DISCUSSION: Mining is a conflicting use that potentially could occur at many locations throughout the West Hills. The Angell Brothers site, however, is the only location in the West Hills that has been identified as being a significant mineral and aggregate site. The discussion of mining use conflicts with other identified significant Goal 5 resources, then, will be limited to the Angell Brothers resource site.

Scenic: The scenic resource analysis indicates that mining, ~~like logging, temporarily~~ affects the scenic qualities of the West Hills through removal of the vegetative cover and modification of the landform that comprise a portion of the scenic resource. It has not been demonstrated that there are acceptable reclamation techniques available to ensure maintenance, or restoration of scenic values after mining. And the location of the Angell Brother's quarry, directly opposite the Sauvie Island bridge, impacts the large number of visitors to the island. The analysis indicates, however, that it is possible to ~~maintain the scenic qualities of the West Hills Scenic Area if mining is allowed in a limit-~~

~~ed manner. A protection program for the mineral resource should include restrictions that would only allow mining expansion in a manner that minimized impacts on the scenic resource both during and after extraction.~~

Streams and Wetlands: The North Angell Brothers Creek has been found to be a significant stream because of its ~~minor~~ contribution of water to the Rafton/Burlington Bottoms, its provision of "essential" connections exist between fish and wildlife habitat areas on high quality upstream and low quality downstream portions of the stream, and its canopy cover and riparian vegetation which has a positive impact on water quality.

~~The significance of this stream, however, is minor compared with other streams in the West Hills which meet more of the criteria for significance found in the Multnomah County Comprehensive Plan. The contribution of water from this stream to Burlington Bottoms has been found to be minor compared to other water sources such as Multnomah Channel. Only the upper portion of the watershed, a small portion of which is on the Angell Brothers quarry site, is of high quality and is critical to maintaining a minimum one-half mile width of undisturbed forest habitat for the maintenance of wildlife (see discussion under "Wildlife Habitat" below). The areas where canopy cover improves water quality also lie for the most part in the upper reaches of the watershed which are not proposed for mining. Therefore, the mineral and aggregate resource on the Angell Brothers site clearly has greater weight than the stream resource.~~

The Rafton/Burlington Bottoms and the East bank of Multnomah Channel are significant "3-C" resource areas that must continue to be protected by limiting conflicting uses, of which mining is one. Water quantity and quality flowing into Burlington Bottoms from the Angell Brothers quarry site from the "Angell Brothers North" stream should must be maintained by the quarry operator pursuant to standards set by the Oregon Department of Environmental Quality. Based on the evidence presented, current technology is not sufficient to ensure maintenance of those standards as a result of quarry expansion. This site has been acquired by the Bonneville Power Administration as partial mitigation for wildlife habitat lost due to construction of the federal hydropower system. Any degradation of Burlington Bottoms will thus reduce the wildlife habitat value of this publicly paid for wetland. Multnomah County has an important responsibility to see that degradation to such a regionally important wetland does not take place.

Wildlife Habitat: The wildlife habitat analysis indicates that a forest habitat would not be re-established on a mined area for at least 10 years following reclamation. That would have the long-term impact of destroying the vital connection between Forest Park and large tracts of forest land to the north and west. The analysis indicates that a minimum half-mile wide undisturbed forested habitat is necessary at any given location to allow animals to travel and seek cover in dense forests, and to compensate for edge effects that diminish wildlife habitat where forest meet clear cuts, agricultural land, roads, rural residential development, and mining operations.

The wildlife study has identified three areas of secondary wildlife habitat along McNamee Road within one-half mile of the Angell Brothers resource site. One site is

south of the resource site, and the other two are to the west. Any mining expansion should preserve the minimum forest habitat of the surrounding area with respect to those secondary habitat areas.

CONCLUSION: The above discussion indicates that mining is a use that may occur only if conflicts with the scenic, streams and wetlands, and wildlife habitat resources can be balanced mitigated. The above analysis indicates that balance is not possible. The protection of scenic, wildlife and stream resources outweighs the protection of the aggregate resource. The irreversible negative impacts to the other resources which would result from any expansion of mining are far more important than the limited benefits to be gained by such expansion. ~~Any new or expanded mining operation in the West Hills should only be allowed under a program that balances conflicts with other Goal 5 resources and all impacted uses.~~

~~Expansion of the Angell Brothers quarry site into the watershed of the significant "North Angell Brothers" stream should be allowed. The proposed quarry operation should not be allowed in higher quality upstream sections of the creek, because these areas are needed to protect a minimum one-half mile contiguous wildlife habitat area. Therefore, mining would occur only on the lower quality downstream portions of the creek.~~

~~Quarry expansion should be allowed only outside of a continuous one-half mile wide primary forested habitat area located between the quarry on the northeast and secondary cleared habitat areas along McNamee Road to the southwest. This will result in allowing the quarry to expand only to the northern (approximately 1/2) portion of their 283-acre proposed expansion site. Such a solution is a proper "balance" of the competing resources, which allows some protection for both.~~

C. RESOURCE PROTECTION

1. SCENIC VIEWS OF THE WEST HILLS

a. Designated Level of Protection

The identification of conflicting uses in Chapter II showed that forestry activities, residential use, community service and conditional uses, and mining could all conflict with preservation of the scenic qualities of the West Hills if the use or structure would be visible from a key viewing area. The subsequent ESEE analysis and conflict resolution led to the conclusion that forestry activities should be allowed fully, expansion of the Angell Brother's quarry should not be allowed, and ~~but the~~ other conflicting uses should be limited in manner through the use of siting, design and screening requirements. The exception would be uses within Burlington, which would be allowed fully since the area is already developed to an extent that it no longer has the same scenic appearance as the rest of the West Hills scenic resource area and is only visible from the Highway 30 key viewing area. Scenic views of the West Hills should be designated "3-C".

b. Uses Which Will Be Allowed Fully (subject to other code requirements)

Agriculture

Forestry

Uses and structures in Burlington

Any other use or structure which would not be visible from a key viewing area

c. Uses Which Will Be Allowed Conditionally (also subject to other code requirements)

Residences

Mining, excluding Angell Brothers

Any use or structure which is visible from a key viewing area, unless in Burlington

d. Uses Not Allowed

Expansion of the Angell Brother's aggregate site

e. Program to Achieve the Goal

The Comprehensive Framework Plan must be amended to include Scenic Views of the West Hills as a significant scenic resource. An overlay zone should be applied to the resource area, and standards to protect the scenic resource need to be incorporated into the zoning code. In addition, tax incentives or other methods of encouraging conservation easements to protect scenic values should be explored.

The attributes of the scenic resource which contribute to its significance are the existing landform, the vegetation pattern which provides a blanket of various shades of green along with colorful fall foliage, and the overall intactness and lack of development to disrupt the overall forested appearance. Zoning code standards should be developed which will allow uses but preserve scenic attributes. Applicability of standards should be based on the degree of visual impact the development would have, as seen from key viewing areas. The degree of impact would be determined after consideration of the size of the developed area that would be visible, the distance from the development to key viewing areas, the number of key viewing areas that could see the development, and the linear distance the development could be seen from key viewing corridors such as Highway 30. Development should be exempted from complying with the standards if it would not be visible from a key viewing area because of existing topographic features. In addition, the Burlington area should be exempted because it is already developed and is visible only from Highway 30, as discussed in the previous section. Standards for protection of the scenic resource should include:

- New development should be visually subordinate - it should not noticeably contrast with the surrounding landscape as seen from a key viewing area. Development that is visually subordinate may be partially visible, but should not be visually dominant in relation to the surroundings.
- Development should be sited on portions of the property which utilize existing topography and vegetation to minimize visibility from key viewing areas.

- New development that does not require an alteration to the landform should be sited to retain the existing topography and reduce necessary grading to the maximum extent practicable.
- Existing vegetation that screens the development should be retained wherever possible.
- New vegetation should be planted to provide additional screening when any portion of new development will be visible from a key viewing area. Such trees should be primarily coniferous to provide winter screening, and species native to the West Hills such as Doug fir, grand fir, alder or white oak.
- The exterior color of structures should be natural or dark earthtone colors that blend with the forested landscape.
- Reflective building materials should not be allowed.
- Exterior lighting should be sited, hooded, or shielded so that it is not visible from key viewing areas.
- Structure height should remain below the surrounding forest canopy level.
- The silhouette of structures should remain below the skyline.
- Activities that require alterations to the landform, such as mining, should be staged so that the land area disturbed at any one time remains visually subordinate as seen from key viewing areas.
- Landform altering activities should show, prior to approval, that after reclamation the resulting landform and vegetation will be similar to and not contrast with the surrounding landscape as seen from key viewing areas.

2. SIGNIFICANT STREAMS

a. Designated Level of Protection

The designated level of protection for the Significant Streams in the West Hills area is 3.C. -- Limit Conflicting Uses.

b. Conflicting Uses to be allowed fully

Forestry/timber (however, see discussion under 2.e. below)
Farm Use (however, see discussion under 2.e. below)

c. Conflicting Uses to be allowed conditionally

Community Service/Commercial Uses
Wood Processing(limited, sawmills, etc.)
Wholesale/retail for farm/forest products
Playgrounds, Churches, Schools
Parks/Golf Courses
Dog Kennels
Aircraft Landing Area
Cottage Industries
Rural Service/Commercial
Other Community Service Uses
Transportation/Public Improvements
Residential Uses
Single-family Residential
Farm/Forest Worker Housing
Mining/Geothermal Uses

d. Conflicting Uses not allowed

None

e. Program to achieve the goal

Residential, Community Service/Commercial, and Transportation/Public Facilities

Standards for protection of stream resources should consider erosion control, native vegetation maintenance and enhancement, and fish and wildlife maintenance and enhancement for any of the conflicting uses proposed for development within the riparian zone which are designated above as uses to be allowed conditionally. This protection can best be accomplished through placement of an "overlay" zone similar in concept to the Significant Environmental Concern (SEC)-Streams overlay currently within the Multnomah County Zoning Ordinance.

The riparian zone for the West Hills has been generally measured as part of the stream survey conducted by SRI/Shapiro. The area where the SEC overlay zone should be placed is within the riparian area, defined as follows in the SRI/Shapiro Report:

"A riparian area is comprised of an aquatic ecosystem and associated upland area. Water in the aquatic system influences upland vegetation and microclimate. Upland areas affect the aquatic ecosystem by providing thermal regulation, biomass, and structure."

Since measurement of the riparian zone was very generalized in the Streams study, provisions should be made for an applicant under the SEC provisions to provide evidence as to a more precise boundary of the riparian zone on the property which meets the above-listed definition.

Specific protection measures for streams which will be used with the SEC overlay zone provisions include the following:

- Maximum provision of landscaped area, scenic and aesthetic enhancement, open space, or vegetation between any use and a stream.
- Preservation of agricultural and forest land adjacent to streams for farm and forest use.
- Building, structure, or use located so as to best preserve and protect the riparian zone area
- Minimum conflict between recreational uses and the riparian zone area
- Protection of public safety and private property from vandalism and trespass to the maximum extent practicable considering environmental values of the riparian zone
- Protection and enhancement of opportunities for fish and wildlife to live in and travel through the riparian zone
- Protection and enhancement of natural vegetation along streams
- Retention of areas of annual flooding and wetlands in their natural state
- Limit development to portions of a site located away from steep slopes, soils, and other unstable geological conditions
- Protection of areas within and adjacent to the riparian zone from erosion
- Regulation of construction practices and schedules in order to minimize erosion into streams from water runoff and soil erosion
- Minimization of impervious surface area in order to reduce pollution of stream waters
- Provide for a minimum setback from the ordinary high water mark of each stream which will protect the stream's resources.
- ~~Limit expansion of the Angell Brothers quarry site to the lower quality downstream portions of the significant "North Angell Brothers" stream.~~
- ~~Water quantity and quality flowing into Burlington Bottoms should be maintained by the quarry operator pursuant to standards set by the Oregon Department of Environmental Quality.~~

- : Do not allow expansion of the Angell Brothers quarry site any further into the watershed of the "North Angell Brothers" stream than is currently approved.

As discussed earlier, agricultural and forestry activities adjacent to streams can have significant negative environmental consequences. While Multnomah County cannot (forestry on forest lands) or should not (forestry on "exception" lands, agriculture) institute zoning regulation of these uses, the County must work to ameliorate and if possible eliminate the conflicts between these uses and significant streams. As regards forestry, the County should monitor the Oregon Department of Forestry's effective enforcement of the State Forest Practices Act, and work with the Department of Forestry to adopt and implement standards which may more effectively protect significant streams. As regards Agriculture, the County should work with the West Multnomah Soil and Water Conservation District to adopt and properly fund a program of education and assistance to farmers in order to better protect significant streams from the negative impacts of some agricultural practices such as livestock damage to streams, misuse of fertilizers and pesticides, and cultivation adjacent to streams which negatively impacts fish & wildlife habitat and water quality.

3. ANGELL BROTHERS AGGREGATE

- Designated Level of Protection: ~~There are portions of the Angell Brothers resource site where mining can not occur without destroying an identified Goal 5 resource. That resource is the wildlife habitat area within one half mile of the secondary wildlife habitat areas along McNamee Road. Therefore, the portions of this resource site within one half mile of these habitat areas should be designated 3-B. The remainder of the site can be mined with minimal impact on the identified conflicting uses and other Goal 5 resources. That area should be designated 3-C. The 114 acre currently approved for mining should remain a "3-C" designation, and the remainder of the resource site is designated "3-B". There will be no limitation of uses beyond those of the underlying zones within the "3-B" area. The following use limitations apply within the "3-C" area:~~

- Uses Fully Allowed – The following uses should be allowed fully in the impact area:

Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

Exploration for mineral and aggregate resources as defined in ORS Chapter 517

Widening of roads within existing rights-of-way in conformance with the transportation element of acknowledged comprehensive plans including public road and highway projects as described in ORS 215.213(1)(m) through (p) and ORS 215.283(1)(k) through (n)

Exploration for and production of geothermal, gas, oil, and other associated hydrocarbons, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the well head

Mining and processing of oil, gas, or other subsurface resources as defined in ORS Chapter 520, and not otherwise permitted under OAR 660-06-025(3)(m) (e.g.,

compressors, separators and storage serving multiple wells), and mining and processing of aggregate and mineral resources as defined in ORS Chapter 517

Temporary asphalt and concrete batch plants as accessory uses to specific highway projects

Public road and highway projects as described in ORS 215.(1),(2)(q) through (s), 215.213(10), 215.283(2)(p) through (r) and 215.283(3)

Forest operations or forest practices including, but not limited to, reforestation of forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash (on properties within the impact area other than the site itself)

Temporary on-site structures which are auxiliary to and used during the term of a particular forest operation (on properties within the impact area other than the site itself)

Physical alterations to the land auxiliary to forest practices including, but not limited to, those made for purposes of exploration, mining, commercial gravel extraction and processing, landfills, dams, reservoirs, road construction or recreational facilities (on properties within the impact area other than the site itself)

Farm use as defined in ORS 215.203

Local distribution lines (e.g., electric, telephone, natural gas) and accessory equipment (e.g., electric distribution transformers, poles, meter cabinets, terminal boxes, pedestals), or equipment which provides service hookups, including water service hookups

New electric transmission lines with right of way widths of up to 100 feet as specified in ORS 772.210. New distribution lines (e.g., gas, oil, geothermal) with rights-of-way 50 feet or less in width

Temporary portable facility for the primary processing of forest products

Towers and fire stations for forest fire protection

Water intake facilities, canals and distribution lines for farm irrigation and ponds

Uninhabitable structures accessory to fish and wildlife enhancement

Permanent facility for the primary processing of forest products

Permanent logging equipment repair and storage

Log scaling and weigh stations

Disposal site for solid waste that has been ordered established by the Environmental Quality Commission under ORS 459.049, together with the equipment, facilities or buildings necessary for its operation

Disposal site for solid waste approved by the governing body of a city or county or both and for which the Oregon Department of Environmental Quality has granted a permit under ORS 459.245, together with equipment, facilities or buildings necessary for its operation

Television, microwave and radio communication facilities and transmission towers

Fire stations for rural fire protection

Utility facilities for the purpose of generating power

Aids to navigation and aviation

Cemeteries

- Uses Conditionally Allowed – The following uses should be conditionally in the impact area:

Forestland dwellings

Alteration, restoration or replacement of a lawfully established dwelling

A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

- Uses Not Allowed – The following uses should not be allowed in the impact area:

Destination resorts reviewed and approved pursuant to ORS 197.435 to ORS 197.465 and Goal 8

Residential on the resource site

Temporary forest labor camps

Caretaker residences for public parks and fish hatcheries

Private seasonal accommodations for fee hunting operations

Private accommodations for fishing occupied on a temporary basis

Water intake facilities, related treatment facilities, pumping stations, and distribution lines

Reservoirs and water impoundments

Forest management research and experimentation facilities accessory to forest operations

Private hunting and fishing operations without any lodging accommodations

Parks and campgrounds

b. Program to Achieve the Goal

Multnomah County needs to amend its Comprehensive Framework Plan to identify the 114 acre area approved for mining as "3-C" with a surrounding 1,200' impact area, that ~~portion of the Angell Brothers mineral resource site within one-half mile of the secondary wildlife habitat areas along McNamee Road as 3-B and the remainder of the site as 3-C "3-B". The county also needs to adopt a modified impact area for the resource site and develop zoning restrictions for uses within that area. That impact area would be reduced from that identified in Chapter IV through the elimination of that portion of the site designated 3-B. Comprehensive Framework Plan Policy 16-B and the Zoning Code must be amended to include items required by the Land Conservation and Development Commission.~~

~~The amendment of Comprehensive Framework Plan Policy 16-B must include quarry development conditions specific to the Angell Brothers mineral and aggregate resource site. These conditions should include:~~

- ~~• Minimization of the area the mined at any given time to reduce visual impact;~~

- ~~Demonstration that reclaimed areas are capable of supporting forest vegetation;~~
- ~~Simultaneous reclamation along with mining to minimize non-vegetated areas and to provide a maximum amount of regenerating wildlife habitat;~~
- ~~Screening of the operating face from significant views as much as practicable through such techniques as landscaping, berming and maintenance of intervening topography;~~
- ~~A final slope configuration that blends with the topography of the surrounding area;~~
- ~~Compliance with all applicable DEQ and DOGAMI regulations to minimize any on and off-site water quality impacts and provide for soil and slope stability on mined areas; and~~
- ~~Prohibition of mining within one-half mile of the secondary wildlife habitat areas along McNamee Road.~~
- ~~Middle Angell Brothers stream shall be proven to be in conformance with DEQ water quality standards prior to any mine expansion beyond the existing approved boundary.~~
- ~~A condition of any mine expansion beyond the existing approved boundary shall be a verification that DEQ water quality standards are continually satisfied. Water quality studies shall be periodically required. The studies shall be by an independent consultant and paid for by the mine operator. The mine operator and the Planning Director shall agree on the cost and scope of the studies and the Planning Director shall select the consultant.~~

4. WILDLIFE

a. Designated Level of Protection

The designated level of protection for the Significant Wildlife Habitat in the West Hills area is 3.C. -- Limit Conflicting Uses.

b. Conflicting Uses to be allowed fully

Forestry/timber
Farm Use

c. Conflicting Uses to be allowed conditionally

Community Service/Conditional Uses

- Wood Processing(limited, sawmills, etc.)
- Wholesale/retail for farm/forest products
- Campgrounds
- Cemeteries
- Fire Stations
- Water infrastructure facilities
- Utility facilities
- Parks
- Landfills
- Hunting & Fishing lodges
- Logging equipment repair and storage
- Aircraft landing areas
- Schools
- Churches
- Golf Courses
- Road widening requiring additional right-of-way or building removal
- Farm-related commercial activities
- Dog Kennels
- Group Care Facility
- Cottage Industries
- Rural Service/Commercial
- Tourist Commercial
- Other Community Service Uses
- Residential Uses
 - Single-family Residential
 - Farm/Forest Worker Housing
- Mining/Geothermal Uses

d. Conflicting Uses not allowed

None

e. Program to achieve the goal

Residential and Community Service/Conditional Uses

Standards for protection of wildlife habitat should consider various measures to ensure the maintenance and enhancement of the designated primary habitat areas as homes for various species of wildlife. Differing standards are necessary for protection of primary, secondary, and impacted wildlife habitat areas. Implementation of these standards as regards residential and community service/conditional uses should be accomplished through use of a Significant Environmental Concern (SEC) overlay zone for wildlife habitat protection.

Specific protection measures for primary wildlife habitat areas include the following:

- Where a parcel to be developed contains both primary and secondary, or primary and impacted wildlife habitat areas, development activities should be limited to the secondary or impacted areas to the maximum extent feasible.
- Fencing should be prohibited along roadways, thus reducing barriers to wildlife movement. Design standards for fences outside of the "cultivated" area discussed below should be adopted which ensure that fences do not block passage for a wide range of wildlife species.
- The "cultivated" area (*i.e.*, lawns and gardens) of residential lots in the primary habitat areas should be limited to one acre (consistent with fire safety standards), leaving the remaining land in the parcel in native vegetation, to be altered only in conjunction with approved forest management practices. This cultivated area should be designed to minimize the edge effect along roads.
- Similarly, the cleared area for community service and conditional uses should be limited to the minimum size necessary for the use, and should under no circumstances exceed two acres (consistent with fire safety standards).
- Certain introduced vegetation should be prohibited (*e.g.*, English Ivy, Vinca, and other invasive species), even in cultivated areas.
- Erosion control standards should be adopted where there will be prolonged exposure of soils, or excavation, associated with residential development.
- Development along significant streams should be regulated as proposed in the discussion of streams.

Specific protection measures for secondary and impacted wildlife habitat areas should include the following:

- Where a parcel to be developed contains both secondary and impacted wildlife habitat areas, development activities should be limited to the impacted areas to the maximum extent feasible.
- Fencing should be prohibited along roadways, thus reducing barriers to wildlife movement. Design standards for fences outside of the "cultivated" area discussed below should be adopted which ensure that fences do not block passage for a wide range of wildlife species.
- New development activities should be located on existing cleared areas of the site to the maximum extent feasible. Existing forested areas should be maintained consistent with approved forest management practices.
- Certain introduced vegetation should be prohibited (*e.g.*, English Ivy, Vinca, and other invasive species), even in cultivated areas.

- Erosion control standards should be adopted where there will be prolonged exposure of soils, or excavation, associated with residential development.
- Development along significant streams should be regulated as proposed in the discussion of streams.

In addition, it should be noted that the existing Commercial Forest Use Designation and Zoning District provides significant protection for wildlife habitat because of its severe limitations on new residential and non-forest practices type development. This protection is in part based upon state land use law, which is controversial and subject to change by legislative action in the future. Consequently, it is recommended that the Comprehensive Framework Plan include a policy for the West Hills Wildlife Forested Habitat Area which states that, should state law regarding forest lands change so as to allow more intensive non-forestry related uses on such lands, that Multnomah County would require a minimum parcel size of 38 acres (similar to the old Multiple Use Forest Zone) for new subdivision parcels in the areas within the significant wildlife habitat area designated as Commercial Forest Use lands.

~~Protection measures for the Angell Brothers aggregate site include prohibiting mining on the southern half of the site in order to provide a continuous one-half mile wide primary forested habitat area located between the quarry on the northeast and secondary cleared habitat areas along McNamee Road to the southwest. This will result in allowing the quarry to expand only to the northern (approximately 1/2) portion of their 283 acre proposed expansion site. Additional protection measures include the following:~~

- ~~• Establish a forested buffer area to allow for entry to the habitat area at the eastern end of the quarry boundary. This buffer area is most appropriately located using the "South Angell Brothers" stream drainage, where quarry expansion would not be allowed anyway in order to maintain the minimum one-half mile wide contiguous habitat area.~~
- ~~• Any reclamation plan for the site should be reviewed by Oregon Department of Fish and Wildlife and the County to accommodate mining needs and maximize wildlife benefits and use.~~
- ~~• An on-going research and monitoring program is recommended to monitor wildlife use changes during quarry activity and after reclamation of the site.~~

5. SUMMARY

~~The West Hills Scenic, Wildlife, Streams and Wetland (except as noted below), and that portion of the Angell Brothers site more than one-half mile from secondary wildlife habitat areas should be designated "3-C". That portion of the Angell Brothers site within one-half mile of secondary wildlife habitat areas and that portion of the "north Angell Brothers"~~

~~stream within the mineral resource site should be designated "3-B". The scenic area, stream riparian areas and wildlife habitat areas~~ should be designated "3-C" and the aggregate resource ~~"3-B"~~. This will provide a level of protection that recognizes and protects the attributes that make each resource significant, ~~while preventing the economic and social consequences that would occur if conflicting uses were prohibited.~~

The scenic area, stream riparian areas and wildlife habitat areas should be protected through implementation of the Significant Environmental Concern (SEC) overlay zone. Specific standards to govern new development have been outlined in the previous section. These standards will be drafted into code language and reviewed by the Planning Commission and Board of County Commissioners beginning in August. The standards in many cases provide overlapping protection to the significant resources. For example, the standard to limit the size of the area cleared of native vegetation around a house also protects scenic qualities because the break in the forest cover will be limited.

~~Protection and utilization of the Angell Brother's aggregate site will be accomplished through zoning restrictions for uses within the impact area and Comprehensive Plan amendments detailing operating standards. This would allow expansion of mining within the "3-C" area, provided that the mining plan can be found to meet certain standards designed to protect the other significant resources such as compliance with DEQ and DOGAMI regulation regarding water quality, screening requirements, and demonstration that reclaimed areas are capable of supporting forest vegetation.~~

These ~~"3-C"~~ and ~~"3-B"~~ designations and proposed protection standards provide overall protection to all four of the significant resources in the West Hills. This program complies with Statewide Planning Goal 5.



MULTNOMAH COUNTY OREGON

DEPARTMENT OF ENVIRONMENTAL SERVICES
DIVISION OF PLANNING
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BOARD OF COUNTY COMMISSIONERS
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TANYA COLLIER • DISTRICT 3 COMMISSIONER
SHARRON KELLEY • DISTRICT 4 COMMISSIONER

September 13, 1994

To: Board of County Commissioners

From: Planning Staff

Re: MINOR CHANGES TO CHAPTER VI OF THE WEST HILLS RECONCILIATION REPORT AND CORRECTION OF MINOR INCONSISTENCIES BETWEEN THE WEST HILLS RECONCILIATION REPORT (EXHIBIT "A") AND BOARD REVISIONS WEST HILLS RECONCILIATION REPORT

Attached are minor modifications to parts of Chapter VI intended to clarify the Board's action of August 9, 1994 on the West Hills Reconciliation Report and correct minor inconsistencies between the two documents provided.

MINOR MODIFICATIONS

p. VI-17

c. Uses Which Will Be Allowed Conditionally (also subject to other code requirements)

Residences

Mining, excluding expansion of Angell Brothers beyond the existing approved mining area.
Any use or structure which is visible from a key viewing area, unless in Burlington

p. VI-19

c. Conflicting Uses to be allowed conditionally

Community Service/Commercial Uses

- Wood Processing (limited, sawmills, etc.)
- Wholesale/retail for farm/forest products
- Playgrounds, Churches, Schools
- Parks/Golf Courses
- Dog Kennels
- Aircraft Landing Area
- Cottage Industries
- Rural Service/Commercial

Other Community Service Uses
Transportation/Public Improvements
Residential Uses
Single-family Residential
Farm/Forest Worker Housing
Mining, excluding expansion of Angell Brothers beyond the existing approved mining area./Geothermal Uses

p. VI-24

c. Conflicting Uses to be allowed conditionally

Community Service/Conditional Uses
Wood Processing(limited, sawmills, etc.)
Wholesale/retail for farm/forest products
Campgrounds
Cemeteries
Fire Stations
Water infrastructure facilities
Utility facilities
Parks
Landfills
Hunting & Fishing lodges
Logging equipment repair and storage
Aircraft landing areas
Schools
Churches
Golf Courses
Road widening requiring additional right-of-way or building removal
Farm-related commercial activities
Dog Kennels
Group Care Facility
Cottage Industries
Rural Service/Commercial
Tourist Commercial
Other Community Service Uses
Residential Uses
Single-family Residential
Farm/Forest Worker Housing
Mining, excluding expansion of Angell Brothers beyond the existing approved mining area./Geothermal Uses

p. VI-26

5. SUMMARY

The scenic area, stream riparian areas, the 114 acre area of the Angell Brothers site approved for mining, and wildlife habitat areas ~~should be~~ are designated "3-C" and the ~~aggregate resource~~ Angell Brothers expansion area "3-B". This will provide a level of protection that recognizes and protects the attributes that make each resource significant.

The scenic area, stream riparian areas and wildlife habitat areas ~~should~~ shall be protected through implementation of the Significant Environmental Concern (SEC) overlay zone. Specific standards to govern new development have been outlined in the previous section. These standards will be drafted into code language and reviewed by the Planning Commission and Board of County Commissioners beginning in August. The standards in many cases provide overlapping protection to the significant resources. For example, the standard to limit the size of the area cleared of native vegetation around a house also protects scenic qualities because the break in the forest cover will be limited.

These designations and proposed protection standards provide overall protection to all four of the significant resources in the West Hills. This program complies with Statewide Planning Goal 5.

MINOR INCONSISTENCIES

p. VI-17

An inconsistency exists in the Scenic Views Section regarding uses allowed conditionally and uses not permitted. This inconsistency is resolved by the first modification (p. VI-17) listed above on the first page.

p. VI-21

The third paragraph in the blue-bound Reconciliation Report, relating to water quantity and quality of Burlington Bottoms vs. mining operations, should be deleted as is shown in the Board Revisions document.

Richard Duff
14400 NW Old Germantown Rd
Portland, OR 97231

Board of County Commissioners
c/o Planning Division
2115 S. E. Morrison
Portland, OR 97214

Attention: Scott Pemble

C 1-94a

Dear Board Members:

September 16, 1994

I applaud your attempts to protect and conserve the natural areas of the West Hills. This is a difficult task with many ramifications upon those living in the region.

Having read through the West Hills Reconciliation Report of May 23, 1994 it appears that you are unable to protect the forest lands and the timber within the West Hills. The language applies to those lands zoned Commercial Forest Use and states that no unit of local government shall prohibit, limit, or regulate forest practices on forestlands outside the urban growth boundary. I do not know exactly how much land this entails but it covers a good portion of the West Hills. Considering this fact, I question how much of the scenic views, wildlife habitat, streams, and other natural resources you are truly protecting.

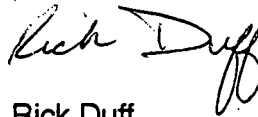
The language within the proposed code amendments is vague in many cases and is open to broad and restrictive interpretations. These restrictions effect small land owners in onerous ways. The few private individuals who spoke at the Planning Commissions public hearing held September 12, identified just a few of the ambiguities in the proposed code amendments. Others I spoke with at this hearing didn't know or understand how these proposed changes would effect them.

As various governmental agencies continue to put into effect stringent and perhaps abusive regulations that restrict private land owners from the freedom to use their land, these owners will seek to gain economic benefit from the land any way they can. In this case it is easier for land owners with CFU zoned land outside the urban growth boundary to clear cut and sell the timber from their property than to apply for other uses of their property. Clear cutting is so much easier and less costly than dealing with these new regulations being proposed to "save and protect the natural resources of the West Hills". I am aware of realtors currently selling land in this area to timber companies who's intention is to clear cut and then parcel lots at some future date. They can afford to acquire and land bank these small parcels of land for future

economic benefit. Small land owners would be less inclined to clear cut and develop their lands if they are able to live on and enjoy their property without undue restrictions. Is clear cutting what you want to encourage outside the urban growth boundary?

I urge you to carefully reconsider if the changes being proposed will actually accomplish your purposes. I think you are pushing small land owners to take actions with their lands that they would not normally take. This is done by imposing upon them many of the proposed code amendments being considered to the Multnomah County Zoning Code.

Respectfully,

A handwritten signature in cursive script that reads "Rick Duff". The signature is written in dark ink and is positioned above the printed name.

Rick Duff

RECEIVED
SEP 19 1994

Multnomah County
Zoning Division

September 18, 1994

Scott Pemble
Planning Director
Multnomah County
Planning Department
2115 SE Morrison St.
Portland OR 97214

RECEIVED
SEP 19 1994

C 10-94

Subject: West Hills Reconciliation Report

Multnomah County
Zoning Division

Scott:

I would like to register my opposition to the adoption of the West Hills Reconciliation Report. In general I feel there has been insufficient notification of affected landowners on the consequences of the adoption of this report. Also, many of the affected landowners have not been made aware of the dates and times of the public hearings when this report is being discussed.

I believe there has been an error in renaming the main stem of Balch Creek as including the Thompson Fork. The Balch Creek study conducted by the city of Portland identified the main stem of Balch Creek as following up Cornell Road towards Skyline Blvd. The Reconciliation Report identifies the main stem as following up Thompson Road. By naming the Thompson Fork as the main stem, the Reconciliation Report has taken a short cut, by allowing the Thompson Fork to be identified as a "significant stream" without conducting a sufficient study on the upper portion of this tributary.

Furthermore there is evidence in the public files of SEC 6-91a that the fish population in Thompson Fork has been manipulated, and that fish have been planted in the Thompson Fork.

The Oregon Department of Forestry (ODF) is responsible for classifying state waterways. Streams identified as "significant" for fish population and habitat are classified as "Class 1" streams. The official ODF maps indicate that the Thompson Fork is not a "Class 1" stream.

The Oregon Department of Fish and Wildlife (ODFW) assists ODF in classifying streams. ODFW has conducted at least three surveys of Thompson Fork. The most recent survey was conducted in October of 1992. After that survey, ODFW indicated that they would recommend that only the first 800 feet or so of the Thompson Fork (up to the Miller property)

should be "Class 1", and that the remainder of Thompson Fork should remain "Class 2". (Memo from ODFW attached).

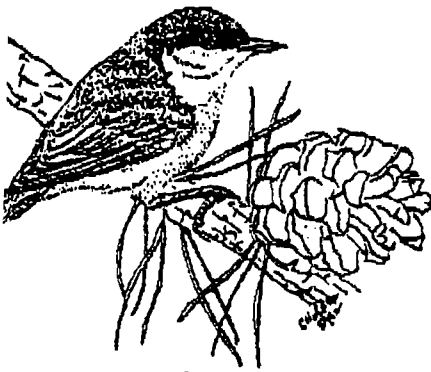
The rating system identified in the West Hills Reconciliation report appears arbitrary and insufficient for identifying the "significance" of the streams. I have been unable to find an "ESEE" study on the impact of adopting the Thompson Fork and other streams as "significant". The consequences of requiring SEC permits for the riparian area of the "significant" streams is substantial, and the affected property owners will be impacted greatly.

I am in favor of protecting the streams, however I am aware of the difficulty of obtaining an SEC permit, and I believe that streams that are borderline "significant" should not be subject to such strict criteria.

Regards,

A handwritten signature in cursive script that reads "Dan McKenzie". The signature is written in dark ink and is positioned above the typed name and address.

Dan McKenzie
6125 NW Thompson Rd
Portland OR 97210



OREGON DEPT. OF FISH AND WILDLIFE
17330 S.E. EVELYN ST.
CLACKAMAS, OR 97015
FAX NO. 657-2050 TELEPHONE NO. 657-2000

DATE: 12-8-92 PAGES TO FOLLOW: 2

TO: Al Burns FROM: Jay Massey

SUBJECT: Balch Creek - Fish Sampling

COMMENTS: We transferred the data to the sheet you are familiar with.

I will be making a recommendation to State Forestry regarding stream class for the Thompson Fork of Balch Creek in the near future.

I will be recommending that the Thompson Fork be changed to a Class I stream from the mouth (confluence with Balch Creek) upstream to the culvert on Miller's property. Also, I will recommend that the Thompson Fork above the culvert on Miller's property, including the stream section on McKenzie's, Property, remain a Class II stream.

September 22, 1994

Arnold Rochlin
P.O. Box 83645
Portland, Or 97283

Multnomah County Board of Commissioners
Hearing on West Hills Reconciliation Report

This is in reply to written testimony from Dan McKenzie, received by the Board on September 19, 1994. He objects to identification of the Thompson Fork of Balch Creek as a significant resource. Sometimes the Board must decide who to believe.

Mr. McKenzie says, page 1, third paragraph: **"Furthermore, there is evidence in the public files of SEC 6-91a that the fish population in Thompson Fork has been manipulated, and that the fish have been planted in the Thompson fork."** The SEC file that he refers to is the county record in the first of two LUBA cases that he lost.

The remark is a distortion of the facts.

The origin is a 1992 report of fish biologist, Janet Burcham, of Fishman Environmental Services, who surveyed the Thompson Fork in the vicinity of McKenzie's property. It is at pages 299-301 of the LUBA record, and a copy of the relevant first page is attached. In the first paragraph, she said: **"A population of cutthroat trout is known to inhabit Balch Creek. Rainbow trout may also have been introduced into Balch Creek from stocking, and their descendents may have hybridized with the cutthroat trout."**

McKenzie's attorney accomplished the first level of distortion in his written testimony to this Board on September 29, 1992. Page 161 of the LUBA record, is attached. At statement #58, he said: **"The [Burcham] study indicated that the trout may have been planted in this portion of the creek ..."**

That is the "evidence in the public files" which McKenzie describes as showing manipulation of fish data.



Fishman Environmental Services

434 NW Sixth Avenue • Suite 304

Portland, OR 97209-3600

503-224-0333

September 21, 1992



Preston, Thorgrimson,
Shidler, Gates and Ellis
3200 U.S. Bancorp Tower
111 S.W. Fifth Ave.
Portland, OR 97204-3688
ATTN: Dan Kearns

Dear Dan:

At your request, Fishman Environmental Services evaluated the Thompson Fork of Balch Creek for the presence of fish and fish habitat and the potential effects to the stream upon removal of a culvert. A population of cutthroat trout is known to inhabit Balch Creek. Rainbow trout may also have been introduced into Balch Creek from stocking and their descendants may have hybridized with the cutthroat trout. The following report is based on observations made by the author on September 20, 1992, during a survey from the pool below the culvert at Cornell Road to about one-half miles upstream and includes recommendations regarding removal of a culvert. Commentary on the letter dated August 10, 1992, by staff of CH2M Hill regarding the fish habitat of a limited stretch of Thompson Fork is also provided. The following report includes professional opinions and judgments based on data collected and incidental observations. I am a fish biologist employed by Fishman Environmental Services. I have a B.S. and M.S. in Fisheries Sciences. I worked several years for the Oregon Dept. of Fish and Wildlife and the U.S. Forest Service in identifying salmonids and evaluating fish habitat. Presently, I conduct natural resource evaluations and impact assessments of aquatic and terrestrial habitats for Fishman Environmental Services.

The pool just below the culvert under Cornell Road is about 10 ft. by 4 ft. and 2 ft. deep. Two trout about 7 in. long were observed in this pool. One was obviously a cutthroat. The culvert under Cornell Road is about 3 ft. in diameter, and the lower edge of the culvert was within one foot of the pool surface. The property immediately upstream of the Cornell Road culvert that includes Thompson Fork and the original floodplain on the west bank is owned by the City of Portland. This property was an old homesite dating back to the 1930's. The stream channel was walked from the point farthest downstream that was still accessible through the blackberry bushes upstream for about 300 feet. The Thompson Fork channel appears to have been ditched and straightened during the early period (approximately 50 years ago) of the homesite. The stream is confined between rock walls about 3.5 ft. high for about 300 ft. of its length. Pools, riffles, and runs have become reestablished within the rock walled section. The channel averaged about 2.5 ft. wide throughout the site. The water level is extremely low at this time of year after several years of drought. Two trout about 4 in. long were observed in a pool upstream of Cornell Road that was approximately 8 ft. long and 8 in. deep at maximum depth. Two more trout about 2.5 in. and 4 in. long were observed in a pool further upstream that was about 12 ft. long and 5 in. deep at maximum depth. These four trout were too small and escaped to cover to quickly for me to determine whether they were cutthroat or rainbow hybrids. Other small pools alternated with riffles and runs for the entire length of stream surveyed.

E x

FAX: (503) 224-1851

Rec'd @ BCC
Hearing
9/22/92
(299)

*Submitted by attorney for Dan McKenzie
To Board of Commissioners 9/29/92*

57. Gary Kish has admitted he is not a biologist, and neither is he a fish expert. His report cannot be considered expert testimony. His oral testimony at the hearing indicated the fish barrier downstream from my property prohibited fish passage.
58. The lower segment of the Thompson Branch studied by Janet Burcham on Sunday, 9/21/92 was a couple hundred feet downstream from the McKenzie culvert. ODFW and CH2M Hill have determined there is a barrier to fish migration between this study area and the McKenzie property. Also the creek has been dry for a couple months less than 100 yards upstream from the McKenzie property. The study found less than five fish over a stretch of 500 feet on the Thompson Tributary. The study indicated that trout may have been planted in this portion of the creek and it was not determined whether the fish found in the study were planted or native, rainbow or cutthroat trout. Janet Burcham did not comment on the barrier between the study area where fish were found, and the McKenzie property. Burcham editorializes on the effects of bank erosion on an area that she did not study. ODFW has stated in their 3/18/92 letter that the effects of the culvert installation were short term and not cumulative.
59. The conclusion does not take into account the fish barrier downstream from the McKenzie property.
60. This opinion is contrary to the joint determination of Oregon Department of Forestry and Oregon Department of Fish and Wildlife for the entire 1/2 mile section of Thompson Tributary.
64. The SEC does not apply to the lower 1/2 mile of Thompson Tributary and the applicants property is not located on a Class I stream section.
65. The hearings officer did not make a determination on the applicability of the SEC zone.
66. See notes #5 and #6.
67. See note #9.
68. The hearings officer correctly found that a proposed amendment to the SEC did not require an amendment to the CUP. This decision was not appealed by the opponents.
69. The opponents have misinterpreted MCC 11.15.8240(E). None of the four items in this code were violated. Also see notes #5 and #6.
70. A hearing was required under MCC 11.15.6414 and not under MCC 11.15.8240(E).
71. The opponents have veered away from the HOD. Also see notes #5 and #6.
76. The opponents have already received their hearing.
77. The director's decision had incorrectly required the SEC overlay. The director now asserts that the SEC zone does not apply.

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON
ORDINANCE NO. 797

An Ordinance amending the Comprehensive Framework Plan Volume 1 Findings to include the West Hills Reconciliation Report, as revised by the Board, in partial fulfillment of Periodic Review Work Program tasks for Statewide Planning Goal 5 resources in the West Hills.

Multnomah County Ordains as follows:

Section I. Findings.

(A). Periodic Review Remand Order 93-RA-876 required Multnomah County to complete additional work related to Statewide Planning Goal 5 resources in the West Hills.

(B). On March 9, 1994, the Land Conservation and Development Commission approved the county's Work Program (WKPROG - 0038) which indicated work tasks that must be completed to fulfill the requirements of the Remand Order.

(C). In accordance with WKPROG - 0038, staff conducted an analysis of resources in the West Hills and recommended that wildlife habitat, scenic views, streams and the Angell Brother's aggregate site be designated as significant Goal 5 resources and the appropriate level of protection for each resource is "3-C" (allow conflicting uses in a limited manner that will give some protection to the resource). This analysis and recommendation were incorporated into the West Hills Reconciliation Report.

1 (D). Notice and the opportunity for public comment were provided at several steps dur-
2 ing the analysis and writing of the West Hills Reconciliation Report. A review and comment
3 period on significance reports was provided from March 11 - March 21, 1994 and March 28 -
4 April 5, 1994; on resource analysis reports from April 11 - April 25, 1994; and on the complet-
5 ed Reconciliation Report from May 23 until June 20, 1994. The West Hills Rural Area Plan
6 Citizen's Advisory Committee considered the issues at several meetings.

7
8 (E). A joint public hearing with the Planning Commission and Board of County Com-
9 missioners was conducted on June 13, 1994, to consider oral and written testimony on the West
10 Hills Reconciliation Report.

11
12 (F). The Planning Commission, after deliberation on June 21 and June 27, 1994 recom-
13 mended that the West Hills Reconciliation Report with Addenda and Errata be adopted by the
14 Board of County Commissioners.

15
16 (G). On July 26, 1994, the Board conducted a *de novo* public hearing on appeal of the
17 Planning Commission recommendation. After deliberation on August 9, 1994, the Board mod-
18 ified the Planning Commission recommendation and the West Hills Reconciliation Report by
19 designating the Angell Brother's aggregate site "3-B" (allow conflicting uses fully without pro-
20 tecting the resource) because of the impacts mining would have on wildlife habitat, scenic
21 views, streams, and the Burlington Bottoms wetlands.

22
23 (H). The West Hills Reconciliation Report, attached hereto as Exhibit A, has been
24 revised to reflect the reasons for the Board's decision.

25

26

Section II. Amendments

Multnomah County Comprehensive Framework Plan Volume 1 Findings is hereby amended to include the West Hills Reconciliation Report, as revised by the Board, attached hereto as Exhibit A.

ADOPTED THIS 22nd day of September, 1994, being the date of its 2nd reading before the Board of County Commissioners of Multnomah County.



By Beverly Stein
Beverly Stein, County Chair
MULTNOMAH COUNTY, OREGON

REVIEWED: John DuBay
John DuBay, Deputy County Counsel
of Multnomah County, Oregon



EXHIBIT "A"

West Hills
Reconciliation Report
(September, 1994)

Amendment to Multnomah County
Comprehensive Framework Plan
Volume One: FINDINGS

Prepared by:
Multnomah County
Planning Division

TABLE OF CONTENTS

I. INTRODUCTION	I-1
II. SCENIC VIEWS of the WEST HILLS	II-1
A. Significance Determination	II-4
B. Resource Analysis	II-8
C. Appendix	II-22
III. STREAM RESOURCES	III-1
A. Significance Determination	III-3
B. Resource Analysis	III-9
C. Appendix	III-44
IV. ANGELL BROTHER'S AGGREGATE SITE	IV-1
A. Significance Determination	IV-3
B. Resource Analysis	IV-7
C. Appendix	IV-33
V. WILDLIFE HABITAT	V-1
A. Significance Determination	V-3
B. Resource Analysis	V-18
C. Appendix	V-66
VI. CONFLICT RESOLUTION and PROTECTION	VI-1
A. Introduction	VI-3
B. Conflict Resolution	VI-4
C. Resource Protection	VI-17

CHAPTER I

INTRODUCTION

ORS 197.628 requires cities and counties to review their comprehensive plans and land use regulations periodically and make changes necessary to keep plans and regulations up-to-date and in compliance with the statewide planning goals. If plans are found to be out-dated or not in compliance with statewide planning goals, local governments must adopt findings and enact measures to make their plan and regulations current.

On October 30, 1980, the Land Conservation and Development Commission acknowledged the Multnomah County Comprehensive Framework Plan and land use regulations to be in compliance with the statewide planning goals. Approximately seven years later, on August 27, 1987, the Department of Land Conservation and Development (DLCD) notified the county of requirements under the periodic review and initiated a periodic review process with the county. On February 22, 1989, Multnomah County submitted its proposed periodic review order to the DLCD, and the department subsequently directed the county to complete additional work on two aggregate sites. The additional work was completed and conveyed to the DLCD on June 27, 1990.

The Land Conservation and Development Commission on April 23, 1993 determined additional Goal 5 work needed to be completed on several aggregate sites, streams and West Hills wildlife and scenic views (Remand Order 93-RA-876). This Remand Order required Multnomah County to complete work by October 29, 1993. Several extensions have been granted by the Land Conservation and Development Commission, in part because additional work on streams needed to be completed which had not been anticipated in the Remand Order.

The revised work program requires Multnomah County to complete a Goal 5 planning process that concludes with the adoption of "Reconciliation Reports" and protection measures which resolve (reconcile) stream, wildlife, scenic views and mineral/aggregate resource issues. Two "Reconciliation Reports" have been prepared, one for the West Hills rural area and the other for the east rural county area in the vicinity of Howard Canyon. The "West Hills Reconciliation Report" and the "Howard Canyon Area Reconciliation Report" focus on different Goal 5 issues.

Four Goal 5 resource issues exist in the rural West Hills of the county and two Goal 5 resource issues are analyzed in the Howard Canyon area. West Hills Goal 5 resource issues which are analyzed include wildlife, scenic views, streams and the Angell Brothers aggregate site. In the Howard Canyon area, three streams within the Howard Canyon drainage and the Howard Canyon aggregate site are the subject of the Reconciliation Report.

In general, the Reconciliation Reports record the County's effort to complete the Goal 5 process as outlined in OAR 660-16-000. The rule requires local governments to analyze the significance of Goal 5 resources, and, if deemed significant (designated "1-C"), determine the appropriate level of protection ("3-A", "3-B", and "3-C") and provide protection strategies. The process includes a number of steps intended to provide the basis for establishing a rationale for deciding which resources should be protected and what types of protection are required.

Specifically, the Goal 5 process begins with the local government determining significance based on an analysis of location, quality, and quantity. The local government is required to use the best available information to make determinations throughout the Goal 5 process. If the resource is deemed "significant" it is designated "1-C" and the process continues. Conversely, the process is concluded if the resource is determined to not be significant and designated "1-A". Significant resources must then be analyzed to determine the appropriate level of protection when compared to other resources and conflicting uses. This analysis compares the **E**conomic, **S**ocial, **E**nvironmental, and **E**nergy consequences of protecting the entire resource as compared to allowing conflicts to exist. This analysis is commonly referred to as the ESEE analysis. The last step in the Goal 5 process is the determination of the level of protection based on the rationale provided by the the ESEE analysis. At this final step, local governments are required to identify the "uses" that will be allowed on the resource site and vicinity, and explain programs deemed necessary to protect the resource.

The "Reconciliation Report" is organized in a manner that follows the Goal 5 process. The report consists of two major parts: "Resource" chapters for each Goal 5 resource under review (*i.e.*, streams, scenic view, wildlife, mineral/aggregate), followed by the "Conflict Resolution and Protection Program" chapter. Each "resource" chapter is broken down into three subsections. Subsection "A" explains the "significance" determination and includes a discussion of "location", "quantity", and "quality". Subsection "B" contains the ESEE analysis, including a description and rationale for the "Impact Area" and a listing and description of conflicting uses. Subsection "C" contains the appendixes, which include technical background information.

The last chapter of the "Reconciliation Report" is the "Conflict Resolution and Protection Program". This chapter reconciles conflicts between each Goal 5 resource and other uses and/or other Goal 5 resources. The chapter also reaches conclusions concerning the appropriate level of protection and suggests specific protection strategies. Subsection "B" discusses previously identified ESEE consequences for each conflicting use and reconciles any differences to reach conclusions concerning whether conflicting uses should be allowed. Subsection "C", "Resource Protection", determines the level of protection and dis-

cusses a protection program for each of the Goal 5 resources.

During the preparation of this report, numerous opportunities for public review and comment were provided. Determinations of significance for mineral & aggregate resources (both Angell Brothers and Howard Canyon), scenic views, and wildlife habitat were distributed for public review and comment from March 11 through March 21, 1994. All of these determinations of significance were reaffirmations of previous decisions made by the Multnomah County Board of Commissioners (Howard Canyon quarry - 1990, Angell Brothers quarry - 1992, scenic views and wildlife habitat - 1993). Determinations of significance for West Hills streams in the vicinity of the Angell Brothers quarry and Howard Canyon streams were distributed for public review and comment from March 28 through April 5, 1994. Determination of significance for the remainder of West Hills streams was distributed for public review and comment from April 28 through May 11, 1994.

A review and comment period for all of the resource analysis sections (conflicting uses, impact area, ESEE analysis) except for West Hills streams outside of the Angell Brothers quarry area was provided from April 11 through April 25, 1994. The resource analysis section for the remainder of the West Hills streams was available for public review and comment from April 28 through May 11, 1994.

A draft of this "Reconciliation Report" was completed by the Multnomah County Division of Planning on May 23, 1994. This draft was the subject of three weeks of public review, culminating in a joint public hearing of the Multnomah County Planning Commission and Board of Commissioners on June 13, 1994. Additional written comment was received until June 20, 1994. On June 21, 1994, the Multnomah County Planning Commission deliberated upon the draft "Reconciliation Report" and approved it with minor changes. This approval was appealed by two parties to the Board of Commissioners, which then held a public hearing on the draft "Reconciliation Report" on July 26, 1994. On August 9, 1994, the Board of Commissioners made a tentative decision to approve the "Reconciliation Report" with amendments, and directed Planning Division staff to return on September 13, 1994 with a revised final "Reconciliation Report." On September 13, 1994, the Board of Commissioners adopted an ordinance approving the final "Reconciliation Report," which had its second reading on September 22, 1994.

The "Reconciliation Report" is considered an amendment to the Multnomah Comprehensive Framework Plan. The "Reconciliation Reports" include both findings and policy recommendations. Policy recommendations will be incorporated into the Comprehensive Framework Plan by separate actions by the Multnomah County Planning Commission and Board of County Commissioners pursuant to the Multnomah County Code and state statutes. Also, some subsequent Planning Commission and Board actions may be required to implement the full set of strategies outlined in the protection programs.

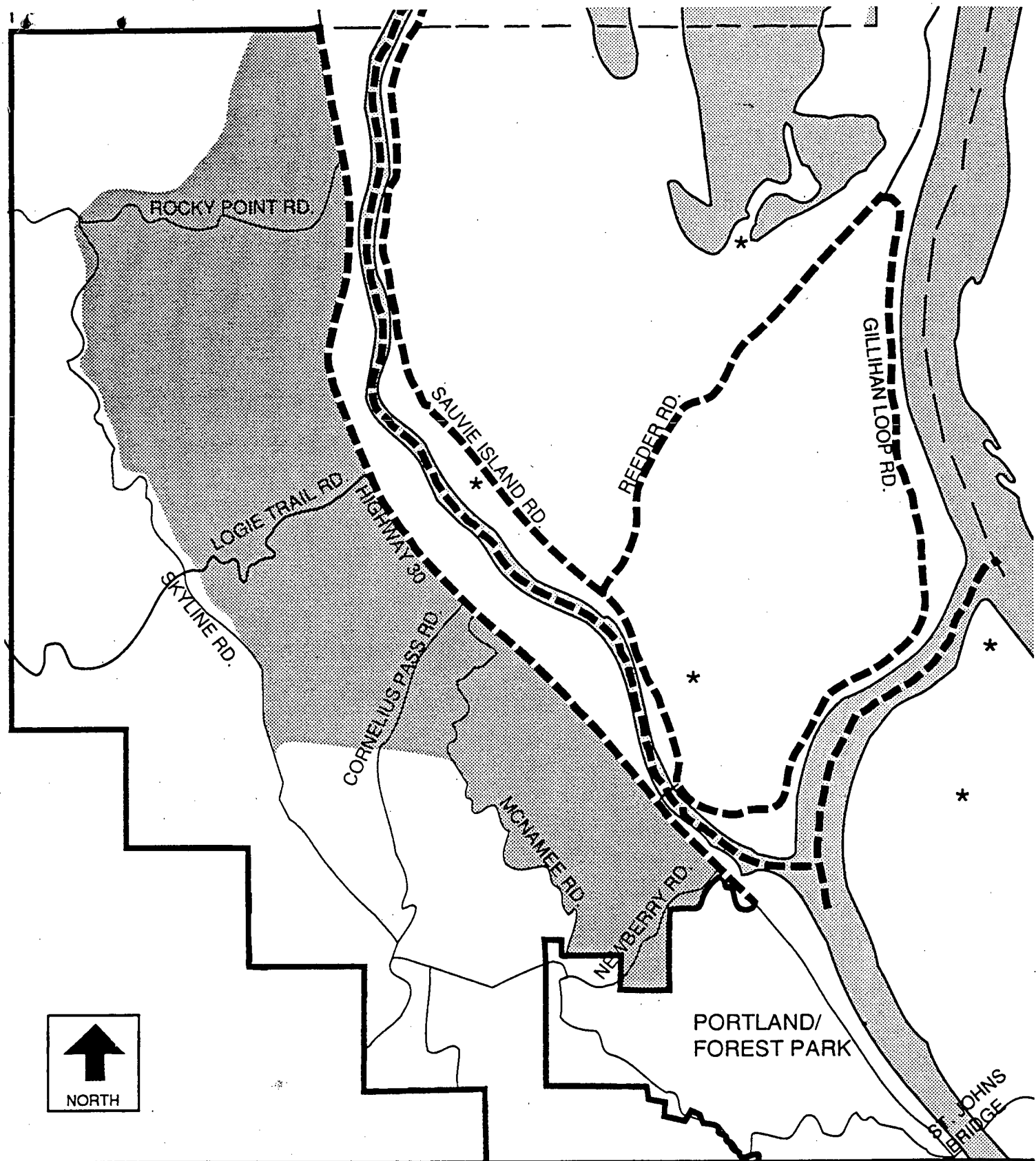
The "Reconciliation Report" is intended to satisfy in part the requirements of the Land Conservation and Development Commission's Remand Order 93-RA-876 and satisfies all other statewide goal requirements of the county's work program approved by the Commission, WKPROG - 0038.

CHAPTER II

SCENIC VIEWS of the
WEST HILLS

TABLE OF CONTENTS

	<u>page</u>
A. SIGNIFICANCE DETERMINATION	
1. Background	II-4
2. Location	II-4
3. Quantity	II-4
4. Quality	II-5
a. Quality criteria	II-5
b. Analysis of West Hills Scenic Qualities	II-6
c. Comparison to other Scenic Areas	II-7
d. Quality Summary	II-7
5. Significance Conclusions	II-7
 B. RESOURCE ANALYSIS	
1. Impact Area	II-8
2. Conflicting Uses	II-8
a. Viewing Parameters	II-8
b. Visible Areas	II-10
c. Uses Allowed by Zoning	II-10
3. ESEE Analysis	II-12
a. Impacts on the Scenic Resource	II-13
b. Impacts on Forestry	II-14
c. Impacts on Residential Uses	II-15
d. Impacts on Mining	II-16
e. Impacts on Community Service and Conditional Uses	II-17
4. Resource Analysis Summary	II-18
a. General Conclusions	II-18
b. Synopsis of ESEE Consequences	II-19
References	II-21
 C. APPENDICES	
1. Public Comment and Responses	II-22
 MAPS, TABLES AND DIAGRAMS	
Map 1. Scenic Resources Study Area	II-3
Diagram 1. Observer Positions	II-9
Diagram 2. Observer Position and Development	II-9
Table 1. Size and percent of Scenic Areas in county	II-5



WEST HILLS SCENIC RESOURCES STUDY AREA



STUDY AREA



KEY VIEWING AREA



KEY VIEWING CORRIDOR

A. SIGNIFICANCE DETERMINATION

1. BACKGROUND

"Scenic views of the West Hills" were designated a "1-B" (insufficient information to determine significance) resource in the Periodic Review Order reviewed by the Land Conservation and Development Commission on April 23, 1993. In Remand Order 93-RA-876 the Commission required the county to complete this Goal 5 work.

Goal 5 requires consideration of the location, quality and quantity of a resource, and analysis of whether a scenic area is "outstanding", pursuant to OAR 660-16-000. This item was considered at public hearings before the Planning Commission and Board of County Commissioners (Board) last year, and the Board determined that the east face of the West Hills are a significant scenic resource (Board Resolution 93-371).

2. LOCATION:

The scenic area consists of the northeast face of the West Hills (Tualatin Mountains), extending from the ridgeline (roughly corresponding to Skyline Boulevard) northeast to Highway 30. The Portland City Limits are the southern boundary, and the Columbia County line is the northern boundary (see attached map, page 4).

3. QUANTITY:

Only land outside the Urban Growth Boundary (UGB) has been considered in this analysis. While scenic views exist in urban areas, their focus is usually on the city or on distant mountains. Natural appearing scenic landscapes, such as the West Hills, are almost exclusively located in non-urban areas. Total non-urban area of the county is approximately 252 square miles.

Large areas of Multnomah County have already been designated as scenic resources. This includes the Columbia River Gorge National Scenic Area (NSA), the Sandy River Gorge, which is a designated state and federal scenic waterway, and the Willamette River Greenway. The following table compares the sizes of these scenic areas with the West Hills study area.

TABLE 1.
SCENIC RESOURCES IN MULTNOMAH COUNTY
SIZE AND PERCENT OF NON-URBAN AREA

<u>SCENIC AREA</u>	<u>SIZE IN SQ. MILES</u>	<u>PERCENT OF NON-URBAN AREA</u>
Columbia Gorge NSA	52	21
Sandy River	3	1
Willamette River Greenway	<u>10</u>	<u>4</u>
TOTAL	65	26
West Hills	20	8

QUANTITY SUMMARY:

While just over 1/4 of the non-urban area of Multnomah County has already been recognized and protected because of scenic value, the majority of these scenic resources are in the eastern portion of the county. The Willamette River Greenway, in the western portion of the county, is only 4 percent of total non-urban land. This lack of other scenic resources in western Multnomah County adds significance to the West Hills. In addition, the quantity of other scenic resources should not be a penalizing factor in considering whether the West Hills are significant.

4. QUALITY:

a. Quality Criteria

Determining whether a site has significant scenic qualities is a subjective decision, based on individual ideas of beauty and enjoyment. A view some find beautiful may be uninteresting to others. However, certain attributes, or qualities which make a scenic view interesting, have been identified and used to classify scenic importance. Methods used by the US Dept. of Transportation, the US Forest Service, the Columbia River Gorge Commission and the City of Portland to determine scenic significance were reviewed. There was a great deal of similarity in criteria used by the different agencies. The following list is a combination of these criteria, which can be used to both describe and compare the scenic value of the West Hills with the scenic value of the other identified scenic resources.

Variety: A variety of visual features like landforms, waterforms, rock formations, and/or vegetation patterns are included in the kind of landscape that people find most visually appealing and interesting. May include the expectation of more information to be extracted from the view with additional time spent looking at it, or the potential for more information when the viewpoint is changed. Includes distinctive or vivid visual patterns or dominant striking landmarks.

Intactness: The visual integrity of the landscape, or the degree of human modification that has occurred within the landscape. Major modifications may still rank high as long as the modifications fit into the context of the view.

Unity/Coherence: A view that appears to be part of a larger or extended landscape, exhibiting an internal unity that extends beyond the setting to imply continuity with other settings. The visual coherence and compositional harmony of the landscape. If the landscape is made up of different parts or patterns, they will appear to be linked forming one cohesive view. Transitions within the view will be harmonious and/or be expressed as patterns.

Viewing area importance/Accessibility: Viewed frequently and/or viewed by many people. Areas seen from well-travelled roads or places with high public use are more important than similar landscapes seen from less visited viewing areas. Ease of access, proximity. Viewing areas must be accessible to the public, and in the case of roads must have safe places to stop and enjoy the views.

b. Analysis of West Hills Scenic Qualities

Variety: The West Hills landform consists of the front of the Tualatin Mountains, a series of gentle mountains ranging in height from approximately 900' to 1500'. Various canyons bisect the face of the Hills, adding variety to the landform. Vegetation on the Hills is a mixture of coniferous and deciduous forest. Logging activity has created variety in the vegetation pattern, with different ages of regrowth appearing as different textures and shades of green. The Vine Maple and other early-succession species provide color variety in recently logged areas, especially in the fall.

Intactness: When viewed from a distance, such as from Gillihan Loop Road or the Sauvie Island Wildlife Refuge, the West Hills appear to be a velvety green background. While the results of logging are visible in places, this is a temporary activity and regrowth will occur. There is little housing or other development visible on the majority of the hillsides. Foreground views from along Highway 30 are limited in duration and vary as to intactness due to the interspersed highly developed areas such as Burlington and south of Scappoose.

Unity/Coherence: The West Hills exhibit unity and coherence, being part of a forested ridge which extends in both directions beyond the study area, from the urban area of Portland to the Coast Range and beyond.

Viewing area Importance/Accessibility: While there are no developed public viewpoints, many places on Sauvie Island offer views of the West Hills, such as the Sauvie Island Wildlife Refuge, Bybee-Howell House, Virginia Lakes, and various roads on the Island, which are popular bicycle routes. The West Hills provide background scenery from these locations. The West Hills can also be viewed by recreational users of the

Multnomah Channel and Willamette River, and travellers along Highway 30 can obtain more limited glimpses and views. Reliable information is not available as to the actual numbers of visitors to any of these viewing areas or the importance of the West Hills scenery to their trip enjoyment. The proximity and easy accessibility to the large urban population of Portland also adds value to the scenic landscape.

c. Comparison to other scenic areas

The West Hills cannot be fairly compared to the other recognized scenic areas in the county. The Columbia River Gorge is a national scenic area, of such outstanding value and importance that any other scenery pales in comparison. The Sandy River and Willamette River Greenway are recognized on a state level. The Columbia River Gorge and Sandy River are also a different landscape character type than the West Hills. The intent of Goal 5 is to recognize resources that are important to the county, but which may not be significant if considered at a state or national level. The West Hills are significant when viewed alone.

d. Quality Summary

The West Hills exhibit unity and coherence, being part of a mountain Greenway extending from Portland to the Coast Range. The hills are an integral part of the scenic framework of Sauvie Island, the Multnomah Channel and the Willamette River, and provide an outstanding contrast between the developed urban areas of Portland and the natural beauty of the forested hills. Views of the Hills provide valuable scenery to travelers along Highway 30 and the roads on Sauvie Island.

5. SIGNIFICANCE CONCLUSIONS:

- a. The location of the West Hills study area has been identified in this report and on the attached map.
- b. Analysis of the quantity of scenic resources in the county shows that while 26 percent of the non-urban area of the county has significant scenic value, scenic resources are not abundant in the western part of the county. Additionally, the Board found that relative abundance of scenic resources should not be a penalizing factor in considering the significance of the West Hills.
- c. Analysis of the quality of the West Hills scenery, based on a compilation of criteria used in other studies to determine quality of scenic views, shows that the West Hills exhibit variety, as evidenced by the landform which consists of a combination of hillside and ridge bisected by numerous canyons, and the vegetation pattern, which provides a blanket of various shades of green along with colorful fall foliage; intactness, or lack of development to disrupt the overall forested appearance; unity and coherence, since the

West Hills are part of the mountain chain extending from Portland to the Coast Range; easy accessibility and proximity to Portland, a major population center; and provide a valuable scenic view from many areas on and near Sauvie Island, including Highway 30, the Multnomah Channel, the Willamette River, Kelly Point Park, Smith and Bybee Lakes, Bybee-Howell House, Sauvie Island Wildlife Refuge, Virginia Lakes, and the roads around Sauvie Island.

- d. Based on this consideration of the location, quantity and quality of the West Hills scenic landscape, the West Hills scenic resource is outstanding, and has been designated as a significant scenic resource (Board Resolution 93-371).

B. RESOURCE ANALYSIS

1. IMPACT AREA:

OAR 660-16-000 (2) requires identification of an impact area, where uses could occur that might adversely affect the scenic values of the West Hills. The potential impact area, in this case, is anyplace between a key viewing area and the face of the Hills. This includes the Multnomah Channel, the land between Highway 30 and the Channel, most of Sauvie Island, and certain areas near St. Johns within the Portland city limits. Construction of any large or tall structure in these areas could block portions of the view from a key viewing area. The county has no jurisdiction to limit development within the Portland city limits. The remainder of the potential impact area consists of predominantly agricultural zoning. Consequently, development that would block views is extremely unlikely. In addition, the vast extent of the West Hills landscape, combined with the large number of viewing areas, would still provide multiple opportunities for unobstructed views. Consequently, there will be no significant impacts to views of the West Hills from uses which may be established between the key viewing areas and the face of the hills. The ESEE analysis need only consider the significant resource area itself.

2. CONFLICTING USES:

a. Viewing Parameters

A number of places that provide views of the West Hills (also referred to as key viewing areas) were identified in the significance determination. All of these viewing areas place the viewer in an Observer below (also called Observer Inferior) position (see Diagram 1) because they are essentially looking up at the landscape. Some effects of the Observer below position are that visual blockage will occur because vegetative screening and topography hide certain features or surfaces (see Diagram 2). This is important for two reasons. First, it may be unnecessary to place any restrictions on development in areas that cannot be seen from identified key viewing areas. Second, it shows that screening may be a means of mitigating impacts to the scenic quality of the West Hills.

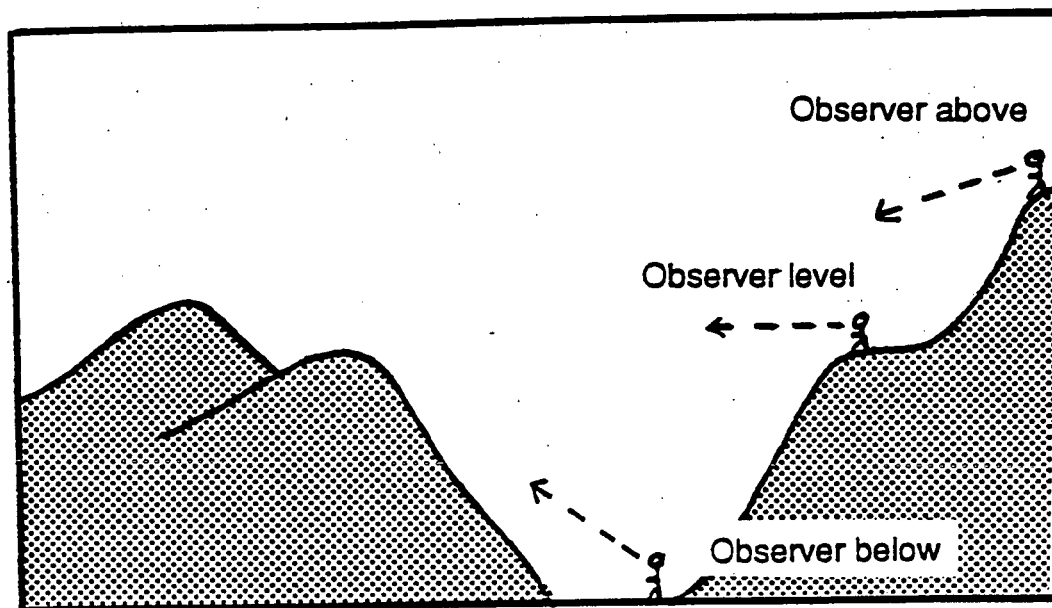


Diagram 1. Observer Positions¹

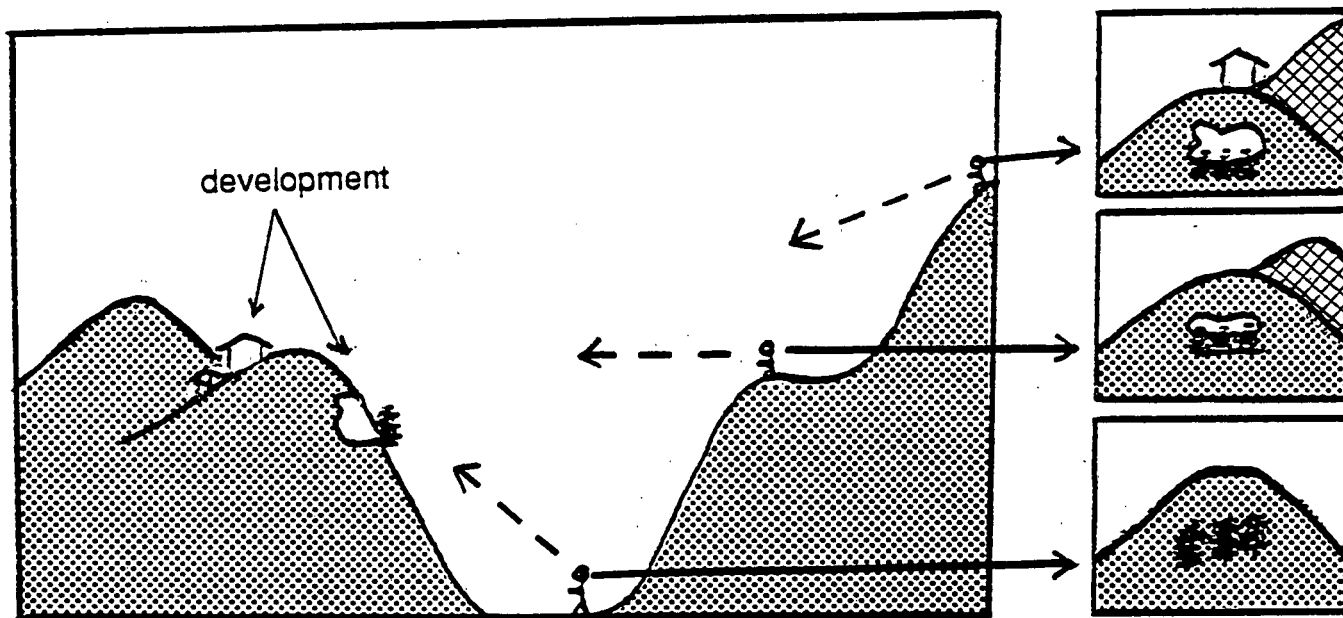


Diagram 2. Observer Position and Effect on Development

Observer position affects what can be seen. A screen or visual barrier will affect the view of development in the hills from the Observer below position. ²

Views of the scenic resource vary according to the distance between the viewer and the resource. Views from Highway 30 and the Multnomah Channel are foreground views (seen from up to 1/2 mile away), where leaves, trunks and branches of individual trees are discernible. Views from Sauvie Island are middle ground views (1/2 to 5 miles distance), where details of individual trees are not visible but they provide a textured appearance to the forest. Views from the Columbia River and Washington see the West Hills as a background, where contours of treetops cannot be perceived and only major topographical features such as valleys and crests are visible. The effect of viewer distance relates to whether development is visible from a key viewing area. No definitive information could be found relating the size of an object or developed area to the distance from which it becomes visible, or at what size or percentage of the total area seen the development becomes obtrusive and disrupts the scenic quality of the view. However, it is logical to assume that almost any development will be visible from foreground views, while a larger area must be disturbed to be visible from middle or background views.

A third viewing parameter relates to the time span during which a specific view can be seen from key viewing corridors - Highway 30 in particular but also Sauvie Island Roads. It may not be important to protect views that are seen for only a few seconds from a passing car.

b. Visible Areas

The Observer Inferior position, along with the landform of the West Hills creates a number of areas that cannot be seen from any of the key viewing areas. "Not seen" areas include not only the back side of hills and ridges but also many of the intersecting canyons like McCarthy Creek / Cornelius Pass Road. A combination of analysis of topography, visual observation and mathematical computation were used to produce a "Seen Areas" map (Exhibit Map 2). The Seen Areas map is based solely on topography, and does not include areas blocked from view by vegetation, since vegetation can be changed or removed. The map illustrates which areas can be seen, and which areas are not visible. Because uses or structures built in "Not Seen" areas would not be visible from key viewing areas, there are no conflicting uses in these areas and no restrictions should be placed on development.

c. Uses Allowed by Zoning

The West Hills significant scenic area contains approximately 8500 acres. The majority of the study area, approximately 94 percent, is zoned for Commercial Forest Use (CFU). The remainder is zoned Rural Residential (RR), with about 20 acres in Burlington zoned Rural Center (RC). Uses which may be allowed in these zoning districts which could conflict with protection of scenic attributes include:

Forestry: The primary use allowed in the CFU zone is forestry, including logging, road building, removal of slash and reforestation, often with a single species rather than mixed species and vegetation types. Each of these forestry activities can conflict with

the existing scenic values of the West Hills, interrupting or causing changes to the overall forested appearance of the landscape.

Residential Use: Residential use is allowed in the RR and RC districts, and may be approved in the CFU district. Based on one house per parcel, including all potential new lots created through division of larger properties, there is the potential for around 100 new houses in the CFU zoned portion of the scenic area. An additional approximately 75 houses might be built on RR zoned land. This combined potential is about half the number of existing houses in the study area. The actual number of new houses that are built will likely be less than 175, taking into consideration that approximately 2000 acres of land is in large tracts owned by commercial timber companies and is unlikely to be divided and fully developed. Analysis of Exhibit Maps 1 and 2 shows that much of the potential buildable land is in "not-seen" areas. Existing vegetation would serve to screen many other potential building sites. Though the number of potential new houses that would be visible from key viewing areas is limited, some houses would be visible and would conflict with protection of scenic attributes in several ways. The location and design of a house may cause it to protrude above a ridgeline, making it visible against the skyline. Light colors and reflective materials such as metal roofs and windows cause buildings to be more visible because of the contrast with the surrounding darker vegetation. Driveways to building sites have the potential to be visually apparent based on their length and the amount of grading, cutting or filling that must be done to meet road grade and width requirements for emergency vehicle access. Most residences are also surrounded by lawns or other cleared areas. Such clearings would be visible from key viewing areas because of the contrast with the predominantly forested vegetation pattern. A house located in the center of a cleared area also has more visual prominence than if it were sited within the trees.

Mining: The Angell Brothers mine is an existing conflicting use. 114 acres of the site has been designated "3-C" and has received Conditional Use approval to be mined. The remaining 283 acres has been designated "1-C", significant because evidence has been provided that the quality and quantity of rock material is significant (ESEE work and determination of the appropriate level of protection is on-going). Another quarry, currently inactive, is located near Rocky Point Road. This site is owned by ODOT and was used for Highway 30 road work in the 1970s. A third quarry, Hidden Valley, is located directly north of Angell Brothers. The rock resource at that site appears to have been depleted and the quarry was converted to a landfill. The potential remains for these, as well as other as yet unidentified sites, to be mined in the future, which could conflict with preservation of scenic attributes.

Mining requires removal of vegetation, changes the landform to a series of benches with intervening cliffs, and the exposed rock faces may create visible intrusions on the forested hillside. The location of a proposed mine and the number of places from which it could be viewed, the proposed size of the disturbed area, as well as the amount of screening vegetation and topography, affects the degree of visual conflict. While reclamation is required, many people have questioned the ability of reclaimed land to support forest growth and the ability of the reclaimed landform to blend in with the surrounding topography (reference file PR 7-92, Angell Brothers Goal 5 analysis). The

Angell Brother's quarry creates additional conflicts because of its location directly opposite the Sauvie Island Bridge, the sole road access to the island. The large number of visitors to the island are thus impacted by the visual intrusion of the quarry.

Community Service and Conditional Uses: Rural service and tourist commercial uses such as local stores, offices, repair services, restaurants, gas stations, motels, and similar uses may be approved as conditional uses in the RR and RC districts. Community service uses such as transmission towers and solid waste facilities, and conditional uses such as forest or agricultural products processing industries and logging equipment repair could also be approved in all three zoning districts. Several businesses currently exist in Burlington and at the north end of the county just outside Scappoose. While some of the potential community service and conditional uses are unlikely to occur, and others are unlikely to conflict with protection of scenic values, consideration must still be given as to whether the ESEE impacts would be so great that the uses should be prohibited or regulated through the use of standards which would protect scenic qualities. The conflicts created by these miscellaneous uses would be the result of removal of vegetation, possible changes to landform, structure height, size, color and reflectivity.

Agriculture: Agricultural uses and buildings are allowed in all three zones within the West Hills. Conversion of large areas from forest to agriculture would create a patchwork appearance and detract from the integrity and unity of the forested hillsides. Analysis of soils in the study area, however, shows that very little of the area is made up of agricultural soils (SCS Class I - IV). Only a small area near the ridge along McNamee Road, and some land along Highway 30 in the Holbrook / Burlington area qualify as agricultural soils. Air photos show that much of this area is already cleared and in small-scale agricultural use, or is residentially developed. Steep slopes and soils with a much higher productivity for timber production will discourage further conversion of forested lands to agricultural use. Consequently, since agricultural use is unlikely to increase, it will not be considered a conflicting use.

3. ESEE ANALYSIS:

The economic, social, environmental and energy (ESEE) impacts that a conflicting use would have on the scenic landscape of the West Hills, and the impacts that preservation of scenic qualities would have on conflicting uses, forms the basis of the analysis which will be used to determine which conflicting uses should continue to be allowed, which should not be allowed, and which should be allowed only under specific conditions. The impacts of a conflicting use vary depending upon if the use would be prohibited entirely or if restrictions or design standards are placed on the development in order to lessen the impact of the use on scenic attributes. Consequently, the ESEE impacts of both prohibition and the use of design standards will be considered. The following analysis will first examine the impacts on scenic qualities if conflicting uses are allowed fully, then examine the impacts on each identified conflicting use if the West Hills are protected for their scenic value. Since the impact to scenic quality will be similar, regardless of the specific conflicting use, the ESEE analysis of impacts on the scenic resource will be a combined analysis of all conflicting uses.

a. Impacts on the Scenic Attributes of the West Hills if Conflicting Uses are Allowed

Economic Consequences: There is no known way to place an economic value on scenic quality:

"The value of a mineral deposit or of a standing tree (as a lumber source) is typically determined by its price in some appropriate market....Esthetic resources, however, have not traditionally been part of the market system, and it has proven very difficult, if not impossible, to evaluate them in the same manner as market or commodity resources." ³

Consequently, there is no quantifiable way to measure economic impacts to scenic attributes if conflicting uses are allowed. There are few direct economic benefits of preserving the scenery of the West Hills - there are no businesses which depend solely upon the views to bring in customers. People would not stop going to Sauvie Island or driving Highway 30 if the scenic value of the Hills was lessened. However, scenic protection may provide some less direct economic benefits related to the quality of life in the county, which is an attraction to new business, conventions, and tourism.⁴ These indirect economic benefits could be lessened if conflicting uses cause impacts to the scenic attributes.

Social Consequences: The West Hills provide aesthetic enjoyment to residents of the county and region. The scenic backdrop adds enjoyment to recreational activities on Sauvie Island and surrounding waterways. While the ability to pursue these recreational activities would not end if conflicting uses are allowed, the degree of enjoyment might be lessened. The West Hills also have a psychological value to some people, being perceived as an integral and important part of the forested landscape linking Forest Park to the Coast Range, and contributing to the image of a natural area on the outskirts of the city. Degradation of scenic qualities caused by a conflicting use would have a social/public impact if the degradation occurred over a large enough area to lessen the recreational enjoyment or psychological value currently provided by the landscape.

Environmental Consequences: Preservation of the natural features of the West Hills - the forests and undeveloped expanses - has environmental benefits to wildlife, water and air quality, streams and fish habitat. Several studies have been done showing the importance of the West Hills as a wildlife corridor allowing movement of animals between Forest Park and the Coast Range (Lev, Fugate and Sharpe, "A Study of Forest Wildlife Habitat in the West Hills; Houle, "Wild About the City"). There are several Class I streams within the study area, which benefit from retention of surrounding natural vegetation. Conflicting uses which remove vegetation or alter the topography that forms the scenic landscape also have an environmental impact on fish and wildlife habitat. Much of the study area is also subject to erosion hazards. Retention of natural vegetation decreases the potential for erosion related problems, landslides and runoff.

Energy Consequences: An increase in the number of residences, industry and businesses in the West Hills would result in an increase in energy use caused by additional transportation trip generation to and from the area.

b. Impacts on Forestry if the Scenic Resource is Protected

Economic Consequences: Almost the entire West Hills area contains soils which are highly productive for timber production, capable of producing well over 100 cubic feet of Douglas Fir timber per year. The forest resources are worth millions of dollars, providing jobs, taxes, and revenue from the sale of raw logs and lumber products. Restrictions on logging in order to protect scenic attributes would cause substantial economic losses.

Social Consequences: The timber industry and associated "timber town" lifestyle provides social links to a way of life important to many people in the state. The heritage of harvesting forest resources psychologically ties many families to the region. Restrictions on logging would impact these families.

Environmental Consequences: Logging is seldom considered to be environmentally beneficial. Management practices involving clear-cutting, slash burning, herbicide and pesticide application, and replanting with mono-species are all damaging to the natural environment. However, the Oregon Forest Practices Act (FPA) includes provisions to provide environmental protections, requires buffers along streams, and requires replanting of logged areas. The FPA Rule also contains provisions limiting logging within a 150 foot visual corridor adjacent to scenic highways, including Highway 30. Logging can be considered a temporary activity, with regrowth beginning within a few years. The textural and color variety provided by logged areas at different stages of regrowth even adds to the scenic quality of the West Hills. Environmental impacts if logging were curtailed in order to protect scenic qualities would be an older, less productive forest with a greater possibility of disease and insect infestation.

Energy Consequences: Curtailed logging would result in a decrease in energy used by logging operations and the transportation of logs to mills or shipping facilities. On a much larger scale, if curtailment of logging led to a shortage of lumber products for construction needs in the region, greater amounts of energy would be required to transport lumber from out-of-state or foreign markets or less energy efficient building materials might be required.

Statewide Planning Goals: Goal 4, Forest Lands, aims to conserve forest lands and protect the state's forest economy. Forest operations, practices and auxiliary uses are subject only to such regulation of uses as are found in ORS 527.722, which states that

"no unit of local government shall adopt any rules, regulations or ordinances or take any other actions that prohibit, limit, regulate, subject to approval or in any other way affect forest practices on forestlands located outside of an acknowledged urban growth boundary."

Consequently, regardless of any impacts forest practices may have on scenic qualities, the county cannot place restrictions on forest practices.

c. Impacts of Residential Uses if the Scenic Resource is Protected

Economic Consequences: There would be an economic impact to property owners in the West Hills if residential development is prohibited, since the purchase price and tax assessment of a lot is often based on the supposition that a residence will be allowed on the property. Prohibition of residential development would also lessen potential tax revenue to the county - forested parcels normally receive special tax deferrals, while residences are assessed at full value.

Regulations on location and/or design of houses in order to make them less visible from key viewing areas would have minimal economic impact on building costs. Potential value may be lessened on some view properties if a house is not allowed to be located in a position that provides the best views from the property.

Social Consequences: Rural residences are sought by many people for their privacy and natural values. Many people also feel they are better able to manage their property if they live on-site. Prohibition of development would prevent these social benefits. Another important social impact is the property rights issue. Prohibition of residential development in order to preserve scenic qualities would be considered by many to be a "taking" of private property for public benefit.

Allowing residential development but placing regulations on siting, screening and design in order to lessen the visual impact of the house would have a much less serious social impact.

Environmental Consequences: Residential use often causes environmental problems by destroying or interrupting wildlife habitat, causing erosion, runoff or drainage problems, introducing non-native plant species, and increasing fire hazards in forested areas. Often the most suitable building site on a property is near a ridgetop because it is the most level area, is the most suitable for a septic drainfield, and has the least slope hazard. This is also the area where a house is likely to be most visible if it is silhouetted against the skyline.

Siting standards which require building on less visible areas of a property could increase environmental impacts caused by erosion and drainage problems. Screening requirements in order to protect the forested appearance of the Hills could contribute to environmental impacts in the event of a fire. For instance, the existing CFU code requires fire safety perimeters around dwellings to help prevent the spread of fire. These cleared areas may conflict with the desire to screen housing from key viewing areas.

Energy Consequences: Energy impacts related to transportation would be lessened if residential development were prohibited, because fewer trips would be made to and from shopping and employment.

Statewide Planning Goals: Goal 10, Housing, focuses on providing appropriate housing types to meet needs within urban growth boundaries. It indicates that ordinances and incentives should be used to increase population densities in urban areas rather than rural areas like the West Hills.

d. Impacts on Mining if the Scenic Resource is Protected

Economic Consequences: Mining provides economic benefits through jobs, tax revenue, and sale of rock resources. The rock material at the Angell Brother's Quarry is estimated to be worth \$42 million, and the site provides a direct payroll of about \$500,000, employing an average of 12 people, as well as an indirect payroll from others who work directly for customers of Angell Brothers.⁵ The Angell Brother's quarry and other potential mining sites in the West Hills have the additional economic benefit of being located relatively close to areas of development, since transportation costs can result in up to 50 percent of the total consumer price of aggregate, increasing costs for homes, roads, sewers, and other construction projects.⁶ Major projects, such as roads, benefit from having a rock source nearby. For instance, the ODOT quarry adjacent to Highway 30, near Rocky Point Road, provided the rock material for a project to realign and widen Highway 30 in the 1970s. Prohibition of mining activities in order to protect scenic resources would impact the cost of such projects.

Enactment of regulations or standards which would allow mining under specific conditions that are designed to protect scenic quality may cause some increased economic cost to the operator by limiting the size of the working face, requiring earlier reclamation, additional screening, etc.

Social Consequences: Mineral and aggregate resources are necessary for construction of streets, sewers and buildings. On the average, approximately 15 tons of aggregate materials are used annually for every person in the state.⁷ Rock and aggregate supplies are limited and diminishing. Consequently, mining in the West Hills provides a social benefit by providing a needed supply of rock and aggregate material for private and public construction projects in the county and region. Prohibition of mining would have a social impact by removing access to a local source of a needed construction material.

Restrictions or standards which allow mining under conditions that also protect scenic values could cause a decreased availability of aggregate resources.

Environmental Consequences: Mining activities require removal of vegetation and top soil and result in changes to the landform. Mining operations are regulated by the Department of Environmental Quality (DEQ), which requires screening, buffering and compliance with environmental standards, and the Oregon Department of Geology and Mineral Industries (DOGAMI), which regulates reclamation and issues permits. Additional environmental concerns are addressed through the existing county conditional use permitting process. Prohibition of mining will simply transfer environmental impacts to another site, since mineral and aggregate resources are a necessary construction material. Prohibition, however, will not have an environmental impact on the

ability to use the rock resource at a later date - the resources would still be available for future extraction.

The environmental impacts on a mining operation if standards are enacted in order to preserve scenic qualities might include a loss of mineable area due to increased buffer or screening requirements, size limits on the exposed mining area, or more stringent reclamation requirements.

Energy Consequences: Energy used for transportation of rock material is a major consideration and factor in the cost of material. In 1987, the Portland area accounted for 35 percent of the State's annual aggregate demand.⁸ Mineral and aggregate sources close to Portland result in less energy used for transportation. Prohibition of mining in the West Hills would have an energy impact by causing increased energy use to transport materials from more distant quarries to the Portland area.

Standards or restrictions on mining to protect scenic quality would have minimal energy impact to the mining operation.

Statewide Planning Goals: Mineral and aggregate resources are a Goal 5 resource. All Goal 5 significant resources must be given the same relative weight in the conflict resolution process. The county must attempt to protect all significant resources for their intended purposes. To date, the Hidden Valley quarry (now depleted and converted to another use) and the Angell Brothers site have been determined to be significant under the Goal 5 process. There is insufficient information to determine the significance of the ODOT quarry or other potential mineral and aggregate sites in the West Hills. Resources not yet determined to be significant need not be given special protection under Goal 5. Prohibition of mining would not comply with the purpose and intent of Goal 5, but standards and regulations to limit the impacts of mining on scenic qualities would conform with the Goal.

e. Impacts on Community Service and Conditional Uses if the Scenic Resource is Protected

Economic Consequences: Prohibition of business and industrial uses would prevent the creation of new jobs, income and taxes. However, the potential number of such uses is likely very small because of the rural nature of the area and the lack of utilities and other services. Since conditional use or community service use approval is required, there would be no effect on current property values if the uses were prohibited, since the assessed value is based on the existing rural zoning rather than these potential uses.

The likely location for new commercial and service businesses is along Highway 30, which would allow a business to profit from exposure to traffic. Regulations, such as screening, that would attempt to make the buildings less visible in order to protect scenery could have a negative economic impact on the business by limiting the "free advertising" provided by Highway frontage. The use of standards to mitigate the visibility of the would cause minimal economic impact.

Social Consequences: Community service uses are generally based on public need for services or facilities. Businesses that serve the local community provide a social benefit by providing needed goods and services in close proximity to area residents and, in the case of the Burlington area, contributing to a sense of community identity. Prohibition of these uses would have a social impact by causing area residents to drive to Portland or Scappoose for employment, shopping and services. Standards to regulate the visibility of the use would have little social impact.

Environmental Consequences: A few of the possible other uses, such as structures for protection of water, soil, open space, forest and wildlife resources, would have environmental benefits that would be lost if the use were prohibited. These environmental benefits might also improve scenic qualities. Environmental impacts to other uses would center around effects from locating the buildings on portions of a property that may be less suitable for development.

Energy Consequences: The purpose of many rural businesses and community service uses is to provide services to local residents. If these services are not available locally, energy used in travel increases. New business and industry would also provide local employment, decreasing transportation energy use.

Statewide Planning Goals: Goal 9, Economic Development, calls for adequate opportunities for a variety of economic activities in the state. The opportunity for local businesses and industries that process local resources and serve local residents should be provided.

4. RESOURCE ANALYSIS SUMMARY:

a. General Conclusions

1. The position of viewers of the West Hills, which is below the landscape, along with intervening topography cause many areas to not be visible from identified key viewing areas. Such areas, scattered throughout the scenic area, should be examined on a case by case basis when a development proposal is made. If either the property or the proposed development will not be visible from any key viewing area, no restrictions should be placed on the proposed use.
2. The size of a proposed development, the number and distance of key viewing areas that would see the development, and the length of time the development would be seen from a key viewing corridor, should be considered when determining whether the development is appropriate or what design and/or locational criteria should be applied.
3. The amount of new development that could occur in the scenic area is limited due to the large lot size and other restrictions on uses in the CFU zone, which occurs on 94 percent of the scenic area. Uses that would conflict with preservation of scenic qualities include forestry, residential development, mining, commercial business and

industry, and various other community service and conditional uses which could be allowed by zoning.

4. The ESEE analysis shows that the benefits of protecting the scenic area are primarily social and environmental. In general, the economic and social impacts of not allowing a conflicting use are more severe than allowing the conflicting use in a limited manner. This leads to the conclusion that most uses should not be prohibited, but should be allowed in a limited manner, with implementation of specific conditions to protect scenic values. In the case of the Angell Brothers quarry, however, impacts to the scenic landscape would be more severe due to the quarry size and location opposite the Sauvie Island bridge, which makes the site visible to the large number of people visiting the island.

These conclusions must be examined in light of the conclusions reached concerning the other Goal 5 resources within the scenic area - wildlife habitat, streams and water resources, and the Angell Brothers mineral and aggregate resource site. Chapter VI, 'Conflict Resolution and Protection Program for West Hills Goal 5 Resources' will analyze the relative importance of each of these Goal 5 resources in relation to each other, as well as resolving conflicts between conflicting uses identified in Chapters I through V.

b. Synopsis of ESEE consequences

Impacts if Forestry is not allowed

Economic: Loss of jobs, taxes, and revenue from sales
Social: End to resource-based lifestyle/heritage for some families
Environmental: Older, less productive forest, possibility of disease and infestation
Energy: Possibility of greater energy expenditure to import wood products
Goal 4: County cannot prohibit forest practices

Impacts if Forestry is allowed in a limited manner

Economic: Possible loss of some jobs, taxes, and revenue from sales
Social: No impacts
Environmental: No impacts
Energy: No impacts
Goal 4: County cannot limit or regulate forest practices

Impacts if Forestry is allowed fully

Economic: Loss of indirect benefits related to quality of life
Social: Loss of aesthetic enjoyment
Environmental: Less protection of fish and wildlife habitat, water and air quality
Energy: No impact

Impacts if Residential Uses are not allowed

Economic: Lower property value, less tax revenue
Social: Loss to persons wishing to live on property, "takings" issue
Environmental: No impacts
Energy: No impacts

Impacts if Residential Uses are allowed in a limited manner

Economic: Possible partial loss of value if siting standards restrict views from property
Social: Additional layer of approvals needed prior to building
Environmental: Possible increase in erosion, drainage problems and fire hazards
Energy: No impacts

Impacts if Residential Uses are allowed fully

Economic: Loss of indirect benefits related to quality of life
Social: Loss of aesthetic enjoyment
Environmental: Less protection of fish and wildlife habitat, water and air quality
Energy: No impact

Impacts if Mining is not allowed

Economic: Loss of jobs, taxes, and revenue from sales; increased costs to consumers
Social: Loss of needed construction material
Environmental: No impacts
Energy: Increased transportation to import aggregate materials
Goal 5: Would require "3-B" designation of significant aggregate sites

Impacts if Mining is allowed in a limited manner

Economic: Possible loss of some jobs, taxes, and revenue from sales
Social: Less availability of needed construction material
Environmental: More stringent buffering and reclamation requirements
Energy: Some increase in transportation to import aggregate
Goal 5: Would require "3-C" designation of significant aggregate sites

Impacts if Mining is allowed fully

Economic: Loss of indirect benefits related to quality of life
Social: Loss of aesthetic enjoyment
Environmental: Less protection of fish and wildlife habitat, water and air quality
Energy: No impact

Impacts if Community Service and Conditional Uses are not allowed

Economic: No new jobs/income/taxes
Social: No new providers of local goods and services
Environmental: Insignificant
Energy: Continuing energy used for transportation to obtain goods, services, and employment outside area

Goal 9: Decreased opportunity for local economic development

Impacts if Community Service and Conditional Uses are allowed in a limited manner

Economic: No impacts

Social: No impacts

Environmental: Possible impacts related to siting

Energy: No impacts

Goal 9: Compatible with Goal

Impacts if Community Service and Conditional Uses are allowed fully

Economic: Loss of indirect benefits related to quality of life

Social: Loss of aesthetic enjoyment

Environmental: Less protection of fish and wildlife habitat, water and air quality

Energy: No impact

REFERENCES

1. Forest Landscape Description and Inventories, R. Burton Litton, Jr. USDA Forest Service Research Paper, PSW - 49, 1968.
2. U.S. Forest Service, National Forest Landscape Management, Volume 1, USDA Agricultural Handbook No. 434.
3. "Assessment of Esthetic Resources", Terry C. Daniel and Ervin H. Zube, in Assessing Amenity Resource Values, USDA General Technical Report, RM - 68, 1979.
4. Letter from Gretchen Kafoury, City of Portland Commissioner, regarding Angell Brothers expansion (CU 14-92), dated September 1, 1992.
5. Letter from Frank Parisi, regarding Angell Brothers expansion (file CU 14-92), dated October 12, 1992.
6. Multnomah County Comprehensive Framework Plan, Volume I (1989 Supplement). page 21.
7. OCAPA Handbook for Applying Goal 5 to Aggregate Resources, page 21.
8. Multnomah County Comprehensive Framework Plan, Volume I (1989 Supplement). page 21.

CHAPTER III

STREAM RESOURCES

TABLE OF CONTENTS

	<u>page</u>
A. SIGNIFICANCE DETERMINATION	
1. Background.....	III-3
2. Location	III-5
3. Quantity.....	III-5
4. Quality.....	III-7
5. Conclusion	III-9
 B. RESOURCE ANALYSIS	
1. Introduction.....	III-9
2. Description of Resource	III-10
3. Impact Areas.....	III-10
4. Conflicting Use Analysis	III-17
5. ESEE Analysis	III-25
6. Summary.....	III-40
 C. APPENDIX	
Appendix A – Technical Appendix	III-44
Appendix B – Sample Wildlife Habitat Assessment Form	III-136
 MAPS	
Maps of the Significant Streams	III-138

A. SIGNIFICANCE DETERMINATION

1. BACKGROUND

Multnomah County's Periodic Review Order was reviewed by the Land Conservation & Development Commission on April 23, 1993 (Remand Order 93-RA-876). Among the actions of the Commission was a finding that the Multnomah County Comprehensive Plan and land use regulations for significant streams do not comply with Goal 5 of the Oregon Statewide Planning Program and Oregon Administrative Rules (OAR) 660, Division 16, which implements the Statewide Planning Program. The Remand Order stated that the County must amend the comprehensive plan to map or identify significant streams.

To complete this work, the County must conduct an inventory of streams in order to determine which are significant. The procedure for determining significance is stated in OAR 660-16-000 (1) through (5). The rule directs the local government to determine whether there is sufficient information on the location, quality, and quantity of the resource at a particular site. The County has determined that the most efficient way to complete this work for the entire County is to conduct stream inventories concurrently with the Rural Area Planning Program, by which rural area plans will be adopted for the entire rural Multnomah County between now and 1998. Currently, the County is completing a rural area plan for the West Hills so a stream inventory is being conducted for this area.

This significance report is the second of two documents completed to date which discuss significance of streams in Multnomah County per the Remand Order. The first of these documents, Multnomah County Ordinance # 784, amends the Multnomah County Comprehensive Plan to provide specific criteria for judging the significance of streams, and adopts a map of streams which have already been determined to be significant pursuant to the criteria.

This significance report covers all of the West Hills Rural Area. This report includes profiles of the following streams:

GILKISON ROAD SUBAREA

Jackson Creek
Joy Creek
Jones Creek
"Rocky Point" Creek
Scappoose Creek

WILDWOOD-MCKAY SUBAREA

E. Fork McKay Creek
North Jackson Creek

"Wildwood" Creek
"North Wildwood" Creek
"Middle Wildwood" Creek
"South Wildwood" Creek

HOLBROOK-LOGIE SUBAREA

"North Rainbow" Creek
"South Rainbow" Creek
"Holbrook" Creek

UPPER ROCK CREEK SUBAREA

South Jackson Creek
Rock Creek (North Main Stem)

FOLKENBERG SUBAREA

McCarthy Creek

MCNAMEE-HARBORTON SUBAREA

"Burlington" Creek
"North Angell Bros." Creek
"Middle Angell Bros." Creek
"South Angell Bros." Creek
"Newberry" Creek
Miller Creek

CORNELIUS PASS SUBAREA

Rock Creek (Middle Main Stem)

GERMANTOWN SUBAREA

Rock Creek (South Main Stem)

BONNY SLOPE SUBAREA

North Bronson Creek
South Bronson Creek

BALCH CREEK SUBAREA

Balch Creek
Saltzman Creek

Maps of all inventoried streams are located at the back of the technical report.

2. LOCATION

The streams surveyed in this report are located within the West Hills Rural Area of Multnomah County. This area, currently subject to the preparation of a rural area plan by Multnomah County, consists of approximately 19,500 acres located in the northwest portion of Multnomah County, north and west of the City of Portland. A map of the West Hills is attached to the back of the technical report. The West Hills is characterized by a central "spine" known as the Tualatin Mountains, which runs parallel to Multnomah Channel to the west. Streams to the east of this "spine" flow into Multnomah Channel through severely steep terrain, while streams to the west are part of the Tualatin River basin and flow through moderately steep terrain.

3. QUANTITY

For a measurement of quantity, the length and drainage area of these streams is summarized in the following table:

TABLE A: MEASUREMENT OF QUANTITY

MCNAMEE-HARBORTON SUBAREA	LENGTH	DRAINAGE AREA
"BURLINGTON" CREEK	1.0 MI.	375 acres
"ANGELL BROS. NORTH" CREEK	0.9 MI.	350 acres
"ANGELL BROS. MIDDLE" CREEK	1.2 MI.	360 acres
"ANGELL BROS. SOUTH" CREEK	0.8 MI.	205 acres
"NEWBERRY" CREEK	1.2 MI.	470 acres
MILLER CREEK(portion in Mult. Co.)	0.3 MI.	200 acres
GILKISON ROAD SUBAREA		
JACKSON CREEK(portion in Mult. Co.)	3.3 MI.	900 acres
JOY CREEK(portion in Mult. Co.)	2.0 MI.	400 acres
JONES CREEK(portion in Mult. Co.)	1.6 MI.	705 acres
"ROCKY POINT" CREEK	1.0 MI.	445 acres
SCAPPOOSE CREEK(portion in Mult. Co.)	2.4 MI.	545 acres

WILDWOOD-MCKAY SUBAREA	LENGTH	DRAINAGE
EAST FORK MCKAY CREEK	1.8 MI.	735 acres
N. JACKSON CREEK(portion in Mult. Co.)	2.6 MI.	780 acres
WILDWOOD CREEK-MAIN STEM	0.2 MI.	90 acres
NORTH WILDWOOD CREEK	3.4 MI.	1,015 acres
MIDDLE WILDWOOD CREEK	2.0 MI.	645 acres
SOUTH WILDWOOD CREEK	2.7 MI.	600 acres
HOLBROOK-LOGIE SUBAREA		
NORTH "RAINBOW" CREEK	2.0 MI.	775 acres
SOUTH "RAINBOW" CREEK	1.8 MI.	510 acres
"HOLBROOK" CREEK	2.0 MI.	360 acres
UPPER ROCK CREEK AREA		
S. JACKSON CREEK(portion in Mult. Co.)	0.8 MI.	120 acres
NORTHERN REACH -- ROCK CREEK	5.4 MI.	2,190 acres
FOLKENBERG AREA		
MCCARTHY CREEK	7.5 MI.	2,100 acres
CORNELIUS PASS AREA		
MIDDLE REACH -- ROCK CREEK	3.0 MI.	1,260 acres
GERMANTOWN ROAD AREA		
SOUTH REACH -- ROCK CREEK	7.4 MI.	1,780 acres
BONNY SLOPE AREA		
N. BRONSON CREEK(portion in Mult. Co.)	1.0 MI.	210 acres
S. BRONSON CREEK(portion in Mult. Co.)	1.4 MI.	395 acres
BALCH CREEK AREA		
BALCH CREEK(portion in Mult.Co.)	2.8 MI.	700 acres
SALTZMAN CREEK(portion in Mult. Co.)	0.7 MI.	195 acres
TOTAL FOR WEST HILLS STREAMS	64.2 MILES	19,425 acres

This list is a compilation of all streams mapped on USGS 2000 scale maps of the West Hills Rural Area.

Precise comparisons with stream mileages and drainage areas for other areas of Multnomah County cannot be made due to lack of data on these areas. Following is a general description of stream resource quantity for other areas of Multnomah County.

a. Sauvie Island

Sauvie Island is approximately 26 square miles (16,600 acres) in size. Since the island is virtually flat, waterways on the island are of a much different nature than those of the West Hills, being best characterized as drainage ways for runoff from adjacent agricultural lands and as sloughs and wetlands.

b. Eastern Multnomah County Non-Urban Areas

Eastern Multnomah County Non-Urban areas are about 196 square miles (126,000 acres) in size. They contain a multitude of stream resources, including the Sandy River and its numerous tributaries (most notably the Bull Run River) and various streams which flow into the Columbia River in the Columbia Gorge. While the totality of these stream resources have not been specifically quantified, they are clearly more numerous in terms of both stream miles and drainage area than those of the West Hills.

Individually, none of the West Hills rural area streams is significant in terms of quantity when compared not only with the remainder of Multnomah County but also with the remainder of the West Hills rural area. As a whole, the West Hills quantity of streams is much less than that of Eastern Multnomah County. However, these two areas are not directly comparable, since they occupy opposite sides of Multnomah County and have quite different physical features and geographical contexts. When taken as a whole, the body of streams in the West Hills rural area is significant in terms of quantity.

4. QUALITY

The quality of the West Hills rural area streams is measured by the five criteria adopted by Multnomah County as part of Ordinance 784 discussed above and contained within Policy 1 6-G of the Multnomah County Comprehensive Framework Plan. These criteria, and the measurements used to judge these criteria, are discussed extensively in the Technical Appendix to this report.

Based upon the inventory of streams conducted by SRI/Shapiro and contained in the Appendix, all but three of the streams inventoried meet at least one of the criteria for significance stated in Policy 1 6-G of the Multnomah County Comprehensive Plan. The three streams which did not meet any of the criteria are the "Angell Bros. South", "Angell Brothers Middle," and "Newberry" Streams.

In terms of quality relative to other streams in the West Hills, the following table summarizes each West Hills Stream and ranks it according to quality with the other streams surveyed. The measurement used is number of Comprehensive Framework Plan criteria met by the stream (five criteria).

TABLE B -- STREAMS QUALITY RANKING

STREAM	CRITERIA MET
Rock Creek - North Reach	5
Rock Creek - Middle Reach	5
Rock Creek - South Reach	5
Balch Creek	5
South "Wildwood" Creek	4
Miller Creek	4
Jackson Creek	3
Joy Creek	3
Jones Creek	3
"Rocky Point" Creek	3
Scappoose Creek	3
North "Wildwood" Creek	3
Middle "Wildwood" Creek	3
South "Rainbow" Creek	3
North Bronson Creek	3
South Bronson Creek	3
"North Angell Bros." Creek	3
East Fork McKay Creek	2
North Jackson Creek	2
"Wildwood" Creek - Main Stem	2
North "Rainbow" Creek	2
"Holbrook" Creek	2
South Jackson Creek	2
McCarthy Creek	2
Saltzman Creek	1
"Burlington" Creek	1
"South Angell Bros." Creek	0
"Newberry" Creek	0
"Middle Angell Bros." Creek	0

As with quantity, Multnomah County has yet obtained very limited information on the relative quality of the West Hills streams vs. other streams in Multnomah County. The following information relative to other areas of Multnomah County is available:

a. Sauvie Island

Sauvie Island contains numerous protected water resources. However, these resources are not directly comparable to the West Hills streams in that they are slow-moving drainages and sloughs on the island's flat terrain.

b. East Multnomah County Rural Area

The Eastern Multnomah County rural area contains numerous significant and high-quality water resources. These include the Sandy River, which is a protected water resource under the Multnomah County Comprehensive Framework Plan. This portion of the County contains a significantly greater number of Class I streams as determined by the Oregon Department of Forestry. Numerous streams in the Columbia Gorge are of high quality due to the undeveloped nature of the area. Streams within the Mt. Hood National Forest, such as the Bull Run River, are also of high quality. Although no comprehensive quantification of East Multnomah County rural area streams has been completed, these streams are undoubtedly of a higher overall quality than the West Hills rural area streams. However, these two areas are not directly comparable, since they occupy opposite sides of Multnomah County and have quite different physical features and geographical contexts.

5. CONCLUSION

All of the West Hills rural area streams inventoried, with three exceptions (see below) are significant streams based upon the above description of location, quantity, and quality and are designated "I-C".

"Angell Bros. Middle" Creek, "Angell Bros. South" Creek and "and "Newberry" Creek are not significant streams based upon the above description of location, quantity, and quality and are designated "I-A".

B. RESOURCE ANALYSIS

1. INTRODUCTION

The analysis of significant streams is an element of the broader analysis of water resources as required by Goal 5. The stream analysis is focused on stream channels and the riparian zone along stream channels. This analysis does not directly address associated wetlands or the watershed outside the riparian zone. It is recognized that other Goal 5 studies including the Wildlife Habitat analysis and the analysis of Scenic Resources will address resource protection on a broad scale and will discuss impacts similar to those that will affect the watershed as a whole.

As part of the Goal 5 process, streams were inventoried to determine location, quantity, and quality. The qualitative aspect of each stream was examined using a modified "streamwalk" methodology and a wildlife habitat assessment process. Field inventory data sheets were prepared for two-tenths mile segments. The "streamwalk" data forms included the collection of information related to the stream channel, streambank stability, the width of the riparian corridor, streamside vegetation, stream conditions, and adjacent land use. The wildlife habitat assessment forms addressed habitat in terms of the presence of water, food, and cover. The inventory was valuable in assessing the significance of each stream. It was also valuable in providing information on riparian zone width, wetlands, and adjacent uses. This data is important in addressing impact areas and conflicting uses.

The Goal 5 analysis is designed to meet the requirements of the Goal 5 Administrative Rule (OAR Chapter 660, Division 16). The report will address impact areas, conflicting uses, and the economic, social, environmental, and energy (ESEE) consequences of conflicting uses. Each component of the analysis is organized by county study area.

2. DESCRIPTION OF RESOURCE

This report discusses significant streams in ten sub-regions of the West Hills Rural Area. Most of the streams drain eastward to Multnomah Channel; some, such as Jackson and Rock Creeks, drain westward to the Tualatin River. The sub-regions lie generally between U.S. Highway 30 and the Multnomah/Washington County line in west Multnomah County. A map of the sites is contained within the Technical Appendix relating to significance at the back of this report.

The significant streams discussed in this Resource Analysis Report are shown in Table 1.

The rationale for determining that these streams are significant is contained within the attached Appendix relating to significance at the back of this report.

3. IMPACT AREAS

The impact area for this study is the riparian zone along each stream. The riparian zone influences the quality and health of the stream and varies in width. It is affected by adjacent slope and the size of the vegetation along the stream. Generally, wider riparian zones have steep slopes with large trees, which shade the stream and contribute woody debris to the stream channel.

For streams that flow through or contribute water to public parks, publicly-owned natural areas, or to recreation areas used by the public, the impact area includes the downstream park, natural area, or recreational facility.

Each stream is examined in terms of the number of properties abutting the stream and the zoning of the adjacent properties. The property/land use data provided is based on County study area maps.

Streams in the West Hills Rural Area are listed by sub-region in Table 2. Streams listed met the County's significance criteria.

The impact area (width of riparian corridor) and the land use adjacent to streams within each sub-region are discussed in Table 3. The uses were noted by field survey teams during the inventory process.

TABLE 1. Significant Streams

Stream	Length		Drainage Area (acres*)
	(feet)	(miles)	
GILKINSON ROAD AREA			
Jackson Creek	17,424	3.3	900
Joy Creek	12,280	2.3	400
Jones Creek	8,450	1.6	705
Rocky Point Creek	5,280	1.0	445
Scappoose Creek	12,660	2.4	545
WILDWOOD - MCKAY AREA			
East Fork McKay Creek	9,500	1.8	735
North Jackson Creek	13,730	2.6	780
Wildwood Creek	1,000	0.2	90
North Wildwood Creek	17,950	3.4	990
Middle Wildwood Creek	10,630	2.0	580
South Wildwood Creek	14,050	2.7	600
HOLBROOK - LOGIE AREA			
North Rainbow Creek	10,570	2.0	775
South Rainbow Creek	9,390	1.8	510
Holbrook Creek	10,560	2.0	360
UPPER ROCK CREEK AREA			
South Jackson Creek	4,220	0.8	120
North Rock Creek	28,510	5.4	2,190
FOLKENBERG AREA			
McCarthy Creek	39,490	7.5	2,100
CORNELIUS PASS AREA			
Middle Rock Creek	15,590	3.0	1,260
GERMANTOWN AREA			
South Rock Creek	39,010	7.4	1,780
BONNY SLOPE AREA			
North Bronson Creek	5,280	6.0	210
South Bronson Creek	7,390	1.4	395
BALCH CREEK AREA			
Balch Creek	14,100	2.8	700
Saltzman Creek	3,696	0.7	195

*Note: Acreage within individual study areas.

TABLE 1 CONTD.

Stream	Length		Drainage Area (acres)
	(feet)	(miles)	
MCNAMEE-HARBORTON AREA			
Burlington Creek	5,400	1.0	375
North Angell Brothers Creek	4,500	0.9	350
Miller Creek	1,700**	0.3	200***

** within Multnomah County jurisdiction, 10,204 feet total and 408 acre watershed for portion in County and City of Portland

TABLE 2. Land Use Data

Stream	No. of Adj. Properties	Zoning*				
		EFU	CFU	MUA	RR	R10
GILKINSON ROAD AREA						
Jackson Creek	14		12		2	
Joy Creek	25		17		8	
Jones Creek	14		14			
Rocky Point Creek	5		5			
Scappoose Creek	7		7			
WILDWOOD – MCKAY AREA						
East Fork McKay Creek	4		4			
North Jackson Creek	6		6			
Wildwood Creek	2		2			
North Wildwood Creek	8		8			
Middle Wildwood Creek	5		5			
South Wildwood Creek	14		14			
HOLBROOK – LOGIE AREA						
North Rainbow Creek	13		13			
South Rainbow Creek	12		4		8	
Holbrook Creek	12		11		1	
UPPER ROCK CREEK AREA						
South Jackson Creek	3		3			
North Rock Creek	65		59		6	
FOLKENBERG AREA						
McCarthy Creek	76		31		45	
CORNELIUS PASS AREA						
Middle Rock Creek	29	11	9	1	8	
GERMANTOWN AREA						
South Rock Creek	62	19	17	6	20	
BONNY SLOPE AREA						
North Bronson Creek	7		2		5	
South Bronson Creek	22				22	
BALCH CREEK AREA						
Balch Creek	34		32			2
Saltzman Creek	6		3		3	

***Note:**

EFU = Exclusive Farm Use

CFU = Commercial Forestry Use

MUA = Multiple Use Agriculture

RR = Rural Residential

R10 = Single Family Residential

TABLE 2 CONTD.

Stream	No. of Adj. Properties	Zoning				
		EFU	CFU	MUA	RR	R10
MCNAMEE-HARBORTON AREA						
Burlington Creek	8		8			
North Angell Brothers Creek	4		4			
Miller Creek	7		5		2	

TABLE 3. Impact Area and Adjacent Land Uses

Stream	Riparian Zone		Adjacent Land Uses:				
	Average Width	Range	Logging	Agriculture	Residential	Community Service (Recreation, Commercial)	Roads
GILKINSON ROAD AREA							
Jackson Creek	132	30-400	X	X	X		X
Joy Creek	86	50-150	X	X	X		X
Jones Creek	206	120-300	X		X		X
Rocky Point Creek	200	100-300	X				X
Scappoose Creek	198	40-400	X				X
WILDWOOD-MCKAY AREA							
East Fork McKay Creek	199	40-400	X	X			X
North Jackson Creek	202	20-400	X	X			X
Wildwood Creek	N/A	N/A	X			X	X
North Wildwood Creek	94	30-200	X				X
Middle Wildwood Creek	134	20-400	X				X
South Wildwood Creek	98	40-275	X		X		X
HOLBROOK-LOGIE AREA							
North Rainbow Creek	137	40-300	X		X		X
South Rainbow Creek	55	5-150	X		X		X
Holbrook Creek	157	30-300	X	X	X		X
UPPER ROCK CREEK AREA							
South Jackson Creek	350	300-400	X	X	X		X
North Rock Creek	194	100-400	X	X	X	X	X
FOLKENBERG AREA							
McCarthy Creek	119	20-300	X	X	X	X	X
CORNELIUS PASS AREA							
Middle Rock Creek	134	110-155		X	X		X
GERMANTOWN AREA							
South Rock Creek	69	10-300		X	X		X
BONNY SLOPE AREA							
North Bronson Creek	119	80-150	X	X	X		X
South Bronson Creek	94	40-200		X	X		X
BALCH CREEK AREA							
Balch Creek	98	10-160			X	X	X
Saltzman Creek	N/A	N/A			X		X

KEY:



= Clearly Impacting Stream



= Use Present

N/A

= No Access

TABLE 3 CONTD.

Stream	Riparian Zone		Adjacent Land Uses				
	Avg. Width	Range	Logging	Agri-culture	Residen-tial	Comm. Service	Roads
MCNAMEE-HARBORTON AREA							
Burlington Creek	96	40-300	X		X		X
North Angell Brothers Creek	78	55-150	X				X
Miller Creek	142	90-200	X	X	X		X

4. CONFLICTING USE ANALYSIS

a. Planned Uses

Conflicting uses include those uses that conflict or interfere with the protection of the significant streams. To identify conflicting uses, the uses permitted under the zoning ordinance and comprehensive plan were examined. In addition, other known conflicts are noted.

The analysis is based primarily on uses outlined in the zoning ordinance. The zoning districts that affect the relevant sites include the following:

- Exclusive Farm Use - EFU
- Commercial Forestry Use - CFU
- Multiple Use Agriculture - MUA
- Rural Residential - RR
- Urban Residential - R10

Uses that represent potential conflicts with streams include any use that results in the removal of vegetation along the riparian zone. The removal of vegetation and trees will reduce shade along the stream, eliminate wildlife cover, and decrease the amount of woody debris that enters the stream channel. When this occurs, the stream will fail to provide economic, social and environmental benefits. When healthy, streams and the associated riparian zone provide water for domestic use and irrigation, fish and wildlife habitat, and flood storage capacity. A stream on which the riparian zone has been eliminated or severely damaged poses a threat by the increased amount of run-off and turbidity and by the increased potential for flooding.

The generic uses permitted in each zone are described in Table 4.

b. Conflicting Use impacts

For purposes of further analysis, uses are grouped into general categories. The categories and a brief discussion of the nature of the conflicts follow.

- i. Forestry Use - Forestry uses have significant conflicts with stream resources. The standard process of clear cutting increases run-off and turbidity in the streams. This results in a reduction in water quality and a loss of fish habitat. Logging roads that cross streams result in extensive stream damage. Field teams conducting the stream survey in the west hills noted numerous instances where logging roads and clear cutting had significantly damaged the streams. Wood processing facilities and whole/retail sales of forest products will result in the increase in stormwater run-off from impervious surfaces. Housing in connection with forest use may be located near streams and have impacts similar to those listed below under residential use. Forestry use includes the following uses permitted under the zoning ordinance: forestry/timber; wood processing (limited); wood processing (sawmills, etc.); forest

TABLE 4. Use By Zoning District

Use	Zoning*				
	EFU	CFU	MUA	RR	R10
Forestry/Timber	P	P	P	P	NP
Wood Processing (limited)	CU	P/C	CU	NP	NP
Farm Use: Crops/livestock	P	P	P	P	P/C
Resource Conservation	P	P	P	P	P
Single Family Residential: Use on > 80 acres	P/C	CU	P	P	P
Single Family Residential: Use on < 80 acres in conjunction with a Farm/Forest Use	P/C	CU	P	P	P
Two-Family Dwelling	NP	NP	NP	NP	P/C
Farm/Forest Worker Housing	CU	NP	P/C	P/C	NP
Wholesale/Retail for Farm/Forest Products	CU	NP	CU	P/C	NP
Play Grounds, Churches and Schools	CU	NP	CU	CU	CU
Parks/Golf Course	CU	CU	CU	CU	CU
Other Community Service Uses	CU	CU	CU	CU	CU
Mining/Geothermal	CU	CU	CU	CU	NP
Agricultural Processing	NP	NP	CU	CU	NP
Wood Processing (sawmills, etc.)	CU	CU	CU	NP	NP
Fowl, Feed Lot, Swine, Fur Farming	P	CU	CU	CU	NP
Dog Kennels	CU	NP	CU	CU	NP
Aircraft Landing Area	CU	CU	NP	NP	NP
Single Family Residential Use (Non Farm/Forest)	CU	CU	P	P	P
Home Occupations	CU	P	P	P	P
Planned Developments	NP	NP	CU	CU	NP
Cottage Industries	NP	NP	CU	CU	NP
Rural Service/Commercial	NP	NP	CU	CU	NP

***Note:**

EFU = Exclusive Farm Use
CFU = Commercial Forestry Use
MUA = Multiple Use Agriculture

RR = Rural Residential
R10 = Single Family Residential

KEY: P = Permitted
P/C = Permitted with Conditions
CU = Conditional Use
NP = Not Permitted

worker housing; single family residential in conjunction with a forest use wholesale/retail for forest products.

- ii. **Agricultural Use** - Agricultural use conflicts with stream resources in a variety of ways. Agricultural chemicals, including pesticides and fertilizers, may enter the stream and destroy or alter wildlife habitat. Farm livestock may graze near and enter the stream thereby destroying riparian vegetation and depositing excrement, which can affect water quality. Riparian vegetation may be removed to maximize cultivated area. Agricultural processing, housing, and wholesale/retail use will result in the increase of stormwater run-off from impervious surfaces. Housing will also have impacts similar to those listed below under residential use. Agricultural use includes the following uses permitted under the zoning ordinance: farm use crops/livestock; agricultural processing; fowl, feed lot, and swine for farming; farm worker housing; single family residential housing in conjunction with a farm use; wholesale/retail for farm products.
- iii. **Residential Use** - Streams provide an amenity for a residential dwelling. According to Rick Walker, a residential appraiser with Palmer Groth and Pietka, a stream will generally increase the value of any nearby dwelling. For this reason, pressure exists for new dwellings to be located near streams. Riparian vegetation may need to be removed to site the dwelling near the stream. Often residents living along streams clear the native vegetation adjacent to the stream and install lawn up to the stream bank, which results in a significant loss of habitat. Residential development adjacent to the stream increases impervious surface, which can result in increased run-off to the stream. Residential use includes the following uses permitted under the zoning ordinance: single family residential on > 80 acres; two family dwellings; single family residential (non farm/forest); home occupations; and planned developments.
- iv. **Community Service Use/Commercial Use** - Community service and commercial uses conflict with streams due to the potential for increased storm water run-off from structures and parking areas. The increase in storm water run-off from hard surfaces will increase the rate of flow and result in erosion and a deterioration of water quality. Parks or recreation facilities, including golf courses, may result in the removal of vegetation along the stream and the use of pesticides and fertilizer. Community service/commercial uses include the following uses from the zoning ordinance: play grounds, churches, schools; parks; other community service uses; dog kennels; cottage industries; and rural service/commercial.
- v. **Mining** - Aggregate mining is a potential conflict for stream in the study areas. Aggregate mining will result in alteration of the land contours and the diversion of the stream. Until full restoration of the stream following the mining operation, the stream resource will be impacted. The time period of this impact will vary depending on the restoration plans filed with the Department of Geology and Mineral Industries (DOGAMI). Following restoration the stream may return to health, but it will no longer follow the original natural stream bed. Aggregate mining operations located away from the channel can have water quality impacts related to siltation and

increased turbidity from mine run-off. Mining uses include the following uses from the zoning ordinance: mining/geothermal.

For the proposed 283 acre expansion area at the existing Angell Brothers quarry, studies have been conducted to evaluate quantity and quality of the mineral aggregate resource. The location of the proposed expansion is adjacent to and contiguous with a 113 acre parcel which is currently operating. The site geology and potential as a mineral and aggregate resource was evaluated by Schlicker and Associates in 1989. Schlicker's work characterized the site through field and office mapping, two borings, eight seismic refraction profile lines, and laboratory tests on materials from the adjacent active quarry. Schlicker and Associates concluded that the proposed expansion area comprised a high quality aggregate resource and estimated that about 220 million cubic yards of aggregate was available, considering buffers and reclamation plans. In 1994, as part of the County's ESEE analysis, Squier Associates were hired as independent consulting geologists to review and verify information regarding quantity and quality of the resource. Squier Associates concluded that although the investigation at the Angell Brothers site could not be considered comprehensive or exhaustive, it was, in their opinion, prudent for the purposes intended.

Based upon Squier's review of available data and experience in Multnomah County, it was concluded that the Angell Brothers quarry contains a substantial aggregate resource. Considering the geological setting of the site, the potential exists for similar aggregate resource development at other locations along the east flank of the West Hills.

- vi. Transportation/Public Improvements - Transportation systems create conflicts with streams. Fill is often necessary to cross a stream. Culverts generally increase erosion. Field teams found that private logging roads have severe impacts on streams in the West Hills. Public improvements, such as utility extensions, can result in alteration and conflict of streams. No planned public improvements were identified.
- vii. Other Uses - Aircraft landing areas are not likely to locate in this area due to topography constraints. If a landing area were to be sited, it would most likely be located away from a stream channel due to slope and vegetation constraints.

Resource conservation is a permitted use and does not present a conflict with the stream resource.

c. Conflicting Use By Study Area

Conflicting uses are examined by study area and stream. Known conflicts are described based on field observations.

i. Gilkison Road Area

- Jackson Creek: This watershed is affected by logging, a road crossing, and a concrete dam and wooden water wheel in the upper reaches of the mainstem, prior to its confluence with the west and east tributaries. The west tributary is affected by a road crossing and agricultural activity, while the east tributary is affected by road crossings and logging activity. The east and west tributaries flow into the mainstem approximately 3,000 feet north of Gilkison Road. Jackson Creek flows out of the study area, eventually crossing under U.S. Highway 30.
- Joy Creek: This watershed is affected by logging activity and rural residential development in the upper reaches of the north tributary, and by logging activity and a road crossing in the upper reaches of the south tributary. The mainstem of Joy Creek, below the confluence of the north and south tributaries, is affected by a road crossing and agricultural activity. Joy Creek flows under U.S. Highway 30, then into Multnomah Channel.
- Jones Creek: This watershed is affected by past logging activity along much of its length. Jones Creek flows under U.S. Highway 30 through a culvert, then flows into Multnomah Channel.
- Rocky Point Creek: This watershed is affected by past logging activity along much of its length. A road crossing is located on its lower reach. The creek crosses under U.S. Highway 30 through a culvert, then into Multnomah Channel.
- Scappoose Creek: This watershed is affected by past logging activity along both the west and east tributaries, as well as much of the mainstem. Scappoose Creek flows out of the study area approximately 4,000 feet north of the confluence of the east and west tributaries.

ii. Wildwood-McKay Area

- East Fork McKay Creek: This watershed is affected by logging activity along much of its length within the study area. This stream is the largest observed at the point at which it crosses the County line. East Fork McKay Creek flows west out of the study area into Washington County.
- North Jackson Creek: This watershed is affected by past logging activity along much of its length, including the north and south tributaries. North Jackson Creek flows west out of the study area into Washington County, joining with South Jackson Creek (see description under Upper Rock Creek study area) west of the study area boundary.
- Wildwood Creek: The mainstem of wildwood creek flows through Wildwood Golf Course. Three major tributaries, including North, Middle, and South Wildwood Creeks, combine to form the relatively short mainstem. After flowing through the golf course, this part of the creek flows under U.S. Highway 30 and into Multnomah Channel, east of the study area.

- North Wildwood Creek: This part of the watershed is affected by past logging activity, and road crossings along the north and south tributaries. The mainstem of North Wildwood Creek, which is a short segment, is affected by a road crossing and bordered by a meadow. This creek joins with Middle and South Wildwood Creeks prior to flowing through the Wildwood Golf Course as the creek mainstem.
- Middle Wildwood Creek: This part of the watershed is affected by past logging activity and road crossings along the north and south tributaries, as well as the mainstem. The creek joins with North and South Wildwood Creeks prior to flowing through the Wildwood Golf Course as the creek mainstem.
- South Wildwood Creek: This part of the watershed is affected by past logging activity and road crossings along the north and south tributaries; the north tributary also is affected by rural residential development. The mainstem of South Wildwood Creek is affected by a road crossing. The creek joins with North and Middle Wildwood Creeks prior to flowing through the Wildwood Golf Course as the creek mainstem.

iii. Holbrook-Logie Area

- North Rainbow Creek: This watershed is affected by past logging activity in the upper reaches of the north and south tributaries, as well as by a road crossing on the south tributary. The mainstem is affected by past logging activity, and a road crossing. North Rainbow Creek flows into "Rainbow" lake, then joins South Rainbow Creek east of U.S. Highway 30 prior to flowing into Multnomah Channel.
- South Rainbow Creek: This watershed is affected by past logging activity in the upper reaches of the north and south tributaries, and by rural residential development along the mainstem. South Rainbow Creek joins North Rainbow Creek east of U.S. Highway 30 prior to flowing into Multnomah Channel.
- Holbrook Creek: This watershed is affected by logging in its upper reach, a house and associated orchard along the stream, as well as a road crossing in its middle reach, and what appears to be a pump station in its lower reach. Holbrook Creek flows under U.S. Highway 30 through a culvert, then flows into Multnomah Channel.

iv. Upper Rock Creek Area

- South Jackson Creek: This watershed is affected by a road crossing and agricultural activity along its upper reach, which is within the study area. South Jackson Creek eventually joins with North Jackson Creek west of the study area boundary, then flows south toward Jackson Falls.
- North Rock Creek: This watershed is affected by a dam and agricultural activity

(pasture) in the upper reaches of the mainstem, and a road crossing below Tributary I (Rock Creek Road). Tributary I is affected by logging activity, while Tributary II is affected by rural residential development and past logging activity. The north mainstem of Rock Creek flows into the middle mainstem (described under the Cornelius Pass Area, below), and eventually Washington County and Rock Creek Park. This park is used for the Green City Data Project, a high school educational program.

v. Folkenberg Area

- McCarthy Creek: This watershed is affected by logging and a railroad crossing in its upper reaches; rural residential development and associated clearing, and a mill and past timber production in its middle reaches; and past logging activity in its lower reaches. Tributary I is affected by rural residential development and a road crossing, rural residential development and road crossings affect Tributary II, and Tributary III is affected by logging and road crossings. Logging and a road crossing affect Tributary IV. McCarthy Creek crosses under U.S. Highway 30, then flows into Multnomah Channel.

vi. Cornelius Pass Area

- Middle Rock Creek: This watershed is affected by Rock Creek Road, which parallels the middle mainstem of Rock Creek on its east side. Tributary III is affected by agricultural activity (pasture), road crossings, and a railroad crossing. Tributary IV is affected by agricultural activity (pasture), rural residential development, and road crossings; while Tributary V is affected by rural residential development, agricultural use (pasture), and a road crossing. The middle mainstem of Rock Creek joins the south mainstem south of the Cornelius Pass Area boundary, forming the mainstem of Rock Creek. Rock Creek eventually flows into Washington County and Rock Creek Park, which is used for educational purposes (Green City Data Project)

vii. Germantown Area

- South Rock Creek: This part of the Rock Creek Watershed is affected primarily by rural residential development, agricultural use (pasture), and road crossings. The south mainstem of the creek flows west to join the middle mainstem, west of the study area boundary. Rock Creek eventually flows into Washington County and Rock Creek Park, which is used for educational purposes (Green City Data Project).

viii. Bonny Slope Area

- North Bronson Creek: This watershed is affected by logging activity and road crossings along most of its length. North Bronson Creek joins South Bronson Creek west of the study area boundary; Bronson Creek mainstem flows southwest

toward Beaverton.

- South Bronson Creek: This watershed is affected by a road crossing rural residential activity in its upper reach, and agricultural use (pasture) and logging along its lower reach, prior to its confluence with North Bronson Creek. The two streams join west of the study area boundary, forming the mainstem of the creek.

ix. Balch Creek Area

- Balch Creek: This watershed is affected primarily by rural residential development and road crossings. Tributary III of the creek flows through the Audubon Society's Collins Sanctuary, and much of the creek is within Forest Park. Balch Creek flows under U.S. Highway 30 and eventually into the Willamette River, east of the study area boundary.
- Saltzman Creek: This watershed is located within Forest Park and is not affected by past logging or rural residential activity. It flows under U.S. Highway 30 and eventually into Multnomah Channel, east of the study area boundary.

x. McNamee-Harborton Area

- Burlington Creek: This watershed has undergone extensive logging. Significant amounts of riparian vegetation along this creek have been removed. Water quality is significantly diminished by the logging and the removal of vegetation along this creek. Impacts of logging potentially extend beyond the creek since the creek flows into the Burlington Bottoms wetlands. It should be noted that the recently acquired (by METRO) 38-acre "old grove" site is within this watershed but not located along the main stem of the creek. It is located along a tributary to the south of the main stem.
- North Angell Brothers Creek: This watershed has undergone extensive logging. Significant amounts of riparian vegetation along this creek has been removed. Water quality is significantly diminished by the logging and the removal of vegetation along this creek. Impacts of logging potentially extend beyond the creek since the creek flows into the Burlington Bottoms wetlands. This creek would be impacted by expansion of the existing Angell Brothers aggregate operation.
- Miller Creek: Most of this watershed is preserved within the City of Portland's Forest Park; however the remainder has undergone extensive logging and significant amounts of riparian vegetation along this creek has been removed. This creek is also affected by grazing along its banks. Miller Creek has been found by the City of Portland to contain populations of coho salmon, cutthroat trout, and steelhead trout. These populations are threatened by the aforementioned activities.

5. ESEE ANALYSIS

The ESEE consequences analysis includes a general discussion of impacts by conflicting use category. The initial section examines impacts on the stream if the conflicting uses are allowed. The second section addresses impacts on the conflicting uses if the stream is protected. Each section includes a listing of impacts that are keyed to matrices that specifically tie the impacts to each stream. The matrices are organized by County study area.

a. ESEE Consequences of Allowing Conflicting Uses - Impacts on Streams

i. Economic Consequences of Allowing Conflicting Uses

Negative economic impacts result from conflicting uses which lower water quality and reduce the usefulness of water withdrawn from the stream. The reduction of water quality has a direct economic impact on those properties and streams where water rights exist for domestic and irrigation purposes. If water quality is lowered to a point that water is no longer useful, alternative sources will need to be identified. An economic consequence is noted only in those instances where water rights exist along the stream. Conflicting uses that have the potential of lowering water quality include uses which increase run-off, erosion, turbidity, and pollutants.

A negative economic consequence also will result if water quantity is reduced or increased due to stream or riparian alteration. Streamside vegetation has the effect of moderating the flow and transport of water through the drainage. Removal of vegetation increases the rate of runoff and reduces water storage capacity. This results in higher peak flows and lower flows during drought periods.

Development of paved parking areas or roadways associated with transportation facilities, community service commercial uses, and residential uses will generally increase the rate of run-off and increase the potential for erosion unless storm water detention facilities are planned in conjunction with the improvement. Detention facilities or special designs are generally addressed on a case by case basis depending on the scale of the proposed development or improvement.

Forestry practices that result in clear cut areas near a stream will have the effect of increasing run-off, turbidity, and water temperature, thus lowering water quality and storage capacity. Logging roads and yarding disrupt the terrain and result in increased erosion. Field observation indicates that vegetation buffers in the West Hills are inconsistent and sometimes destroyed by roads and yarding.

Agricultural use adjacent to streams also may have the effect of lowering water quality due to uncontrolled use of fertilizers and pesticides. Livestock with access to stream banks have negative effects on the streams. Impacts included run-off due to overgrazing, increased turbidity from trampled streamside vegetation, and increased pollutants from animal excrement.

MATRIX KEY:

ECON 1: Negative economic impacts result from reduced water quality for domestic or irrigation use due to increased run-off, erosion, turbidity, water temperature, or pollutants.

ECON 2: Negative economic impacts result from changes in water quantity that can affect availability for domestic or irrigation use due to loss of storage capacity and increased run-off.

ii. Social Consequences of Allowing Conflicting Uses

Conflicting uses adjacent to a stream may have a social impact if removal of riparian vegetation has occurred and there has been a significant loss of wildlife habitat. The social impact results in the loss of opportunities for nature study and recreational activities if vegetation and wildlife habitat are removed. Streams that flow through public parks or publicly-accessed recreation facilities have the greatest potential to be negatively affected in this manner.

Rock Creek flows through Rock Creek Park in Washington County. This park is used by the Green City Data Project for educational programs.

Social consequences also result from impacts on the aesthetic quality of a stream if riparian vegetation is removed and a stream is degraded. This has an overall impact on the livability of the area.

Portions of Miller Creek flow through Forest Park. Burlington Creek and North Angell Brothers Creek flow into Burlington Bottoms, a protected publicly-owned wetland habitat which is being studied for its passive recreational potential. If conflicting uses along these creeks result in the diminishment of water quality and connecting habitat, the loss of wildlife habitat will have a negative social benefit.

In the case of Burlington Creek and North Angell Brothers Creek, impacts to Burlington Bottoms may be minimized if the quality of water that is discharged to the area is maintained. Burlington Creek is primarily impacted by logging activity and little is being done to maintain water quality downstream. In the case of North Angell Brothers Creek, expansion of aggregate mining into this watershed threatens water quality. Depending on the design and monitoring of the mining operation, DEQ and DOGAMI requirements can be satisfied and the quality of water discharged to the Burlington Bottoms area can be maintained.

The removal of riparian vegetation also will reduce water storage capacity and increase the rate of run-off. This has the potential of increasing the capacity for flooding, especially where wetlands are associated with the stream. For those streams with wetlands, negative social consequences may occur if vegetation is removed and the wetlands flood storage capacity is reduced.

MATRIX KEY

SOC 1: Negative social impacts result from the loss of educational and recreational opportunities associated with wildlife habitat and riparian vegetation.

SOC 2: Negative social impacts result from the loss of flood storage capacity and increases in the rate of run-off.

SOC 3: Negative social impacts result from a loss in aesthetic quality and livability.

iii. Environmental Consequences of Allowing Conflicting Uses

Environmental consequences of allowing conflicting uses vary by the type of conflicting use. As noted above, forestry practices that include clear cut areas result in increased run-off, turbidity, water temperature, and sedimentation. The removal of vegetation reduces food and cover for wildlife. The loss of wildlife habitat directly impacts wildlife diversity. During the stream inventory, field teams observed a wide range of wildlife from amphibians and rodents to elk and eagles. As one would expect, clear cut areas contained less habitat and less wildlife.

Consequences of agricultural use include water quality and wildlife habitat impacts. Agricultural use adjacent to the stream may result in damage to the stream through the use of chemical pesticides and fertilizers. Livestock along a stream will negatively impact the water quality by trampling streamside vegetation, overgrazing, and through the deposition of animal excrement. Removal of streamside vegetation either by livestock or to increase cultivated area will reduce wildlife cover and habitat. Pastures where streams are not fenced have the greatest potential for negative impact.

Residential, community service, and commercial uses negatively impact the environmental quality of streams. The primary impact is the loss of wildlife habitat that results from nearby human activity. For example, it is rare when elk wander into residentially developed areas. Domestic animals are a major source of conflict with wildlife and often drive animals from their natural habitat. New residential dwellings often include residential lawns which replace riparian vegetation along streams and the wildlife cover that it provides. As noted previously, parking areas associated with community service or commercial uses may increase run-off. These areas may also result in water quality deterioration due to oils and materials that are washed into the streams and drainageways.

Transportation and public improvements have negative environmental consequences. Road that cross streams often are culverted. Culverts increase the rate of flow and result in a narrowing of the stream channel. Culverts and roads also create a barrier for wildlife migration. Roads also result in wildlife mortality when animals

are hit by vehicles.

Allowing mining will result in temporary adverse stream impacts including rerouting and stream channel destruction. Reclamation would include stream channel restorations. ~~Considering environmental compliance issues, regulated by the Oregon Department of Geology and Mineral Industries and the Oregon Department of Environmental Quality, environmental impacts outside the site during quarry operations can be minimized.~~

Allowing mining of the Angell Brothers sit could also have significant impacts on the Burlington Bottoms wetland. Portland hydrologist Jon Rhodes provided testimony (September 1992) in response to the proposed Angell Brothers quarry expansion that outlined the likely impacts on the North Angell Brothers Stream and its downstream environs. Mr. Rhodes asserted that the proposed expansion would increase streamflow, erosion, and downstream sedimentation into Burlington Bottoms and that these increases would probably be extremely significant. As a worst case, enough sediment could be transported into Burlington Bottoms so that it would become filled and would no longer function as a wetland.)

In testimony given in response to this Remand Order, a representative of the Oregon Department of Environmental Quality (DEQ) stated that controlling storm runoff problems from quarries is "an art, not a science." While DEQ works with quarry operators, they apparently cannot guarantee compliance with DEQ water quality standards within a short period of time. Significant amounts of reosive runoff may flow into the high quality Burlington Bottoms wetlands before the operator and DEQ can resolve any problems.

MATRIX KEY:

ENV 1: Negative environmental impacts result from the loss of wildlife habitat when riparian vegetation is removed or destroyed.

ENV 2: Negative environmental impacts result from deterioration in water quality due to increased run-off, turbidity, water temperature, and pollutants.

ENV 3: Negative environmental impacts result from increased disturbance or mortality of wildlife, or by limiting the mobility of wildlife.

iv. Energy Consequence of Allowing Conflicting Uses

Energy consequence of allowing conflicting uses are less clear than other impacts. When streams are used for small hydro-electric or mill purposes a negative impact may occur if the flow of the stream is interrupted. Jackson creek has a small water wheel which provides power for adjacent property

TABLE 5.

ESEE CONSEQUENCES
Allowing Conflicting Uses – Impacts on Streams

Stream	Impacts by Conflicting Use Category					
	Forestry	Agriculture	Residential	Community Service	Mining	Transport./ Public Imp.
	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3
GILKINSON ROAD AREA						
Jackson Creek	X(G)	X(G)	X(G)	(G)	(G)	X(G)
Joy Creek	X(D)	X(D)	X(D)	(D)	(D)	X(D)
Jones Creek	X(F)	(F)	X(F)	(F)	(F)	X(F)
Rocky Point Creek	X(F)	(F)	(F)	(F)	(F)	X(F)
Scappoose Creek	X(F)	(F)	(F)	(F)	(F)	X(F)
WILDWOOD-MCKAY AREA						
East Fork McKay Creek	X(B)	X(B)	(B)	(B)	(B)	X(B)
North Jackson Creek	X(B)	X(B)	(B)	(B)	(B)	X(B)
Wildwood Creek	X			X		X
North Wildwood Creek	X(B)	(B)	(B)	(B)	(B)	X(B)
Middle Wildwood Creek	X(B)	(B)	(B)	(B)	(B)	X(B)
South Wildwood Creek	X(F)	(F)	X(F)	(F)	(F)	X(F)
HOLBROOK-LOGIE AREA						
North Rainbow Creek	X(B)	(B)	X(B)	(B)	(B)	X(B)
South Rainbow Creek	X(F)	(F)	X(F)	(F)	(F)	X(F)
Holbrook Creek	X(B)	X(B)	X(B)	(B)	(B)	X(B)
UPPER ROCK CREEK AREA						
South Jackson Creek	X	X	X			X
North Rock Creek	X(E)	X(E)	X(E)	X(E)	(E)	X(E)
FOLKENBERG AREA						
McCarthy Creek	X	X	X	X		X
CORNELIUS PASS AREA						
Middle Rock Creek	(A)	X(A)	X(A)	(A)	(A)	X(A)
GERMANTOWN AREA						
South Rock Creek	(C)	X(C)	X(C)	(C)	(C)	X(C)
BONNY SLOPE AREA						
North Bronson Creek	X	X	X			X
South Bronson Creek	(B)	X(B)	X(B)	(B)	(B)	X(B)
BALCH CREEK AREA						
Balch Creek	(A)	(A)	X(A)	X(A)	(A)	X(A)
Saltzman Creek	(A)	(A)	X(A)	X(A)	(A)	X(A)

KEY:

X

= Clear Impact-Use existing

X

= Minor Impact-Use existing

= Potential Impact-Use may be allowed under zoning

TABLE 5 CONTD.

Stream	FORESTRY	AGRICULTURE	RESIDENTIAL	COMM. SERV.	MINING	TRANS./ PUB. IMPROVMTS.
	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3	ENV 1,2,3 ECON 1 SOC 3

MCNAMEE-HARBORTON AREA

BURLINGTON CREEK	X(A)		X			X(A)
NORTH ANGELL BROS. CREEK	X(A)				(A)	X(A)
MILLER CREEK	X(F)	X(D)	X			X(D)

TABLE 5. ESEE CONSEQUENCES
Allowing Conflicting Uses - Impacts on Streams
(continued)

KEY:

- ECON 1: Reduced water quality for domestic or irrigation use.
- ECON 2: Reduced or increased water quantity for domestic or irrigation use.
- SOC 1: Loss of educational and recreational opportunities associated with the loss of wildlife habitat.
- SOC 2: Loss of flood storage capacity.
- SOC 3: Negative social impacts result from affecting or changing the way of life of families involved in natural resource based activities and industries.
- ENV 1: Loss of wildlife habitat when riparian vegetation is removed or destroyed.
- ENV 2: Deterioration of water quality.
- ENV 3: Increased disturbance or mortality of wildlife, or limitation in the mobility of wildlife.
- ENRGY 1: Decreased water flow for energy use.

ADDITIONAL IMPACTS:

Impacts common to all categories and streams are listed at the top of Table Impacts which are dependent on the presence of unique attributes of individual streams are coded below:

- SOC 1: (A)
- SOC 2: (B)
- SOC 1,2: (C)
- ECON 2: (D)
- SOC 1,2 and ECON 2: (E)
- SOC 2 and ECON 2: (F)
- SOC 2 and ECON 2 and ENRGY 1: (G)

MATRIX KEY

ENERGY 1: Negative energy impacts result from decreased water flow.

v. Summary of ESEE Consequences - Impacts on Streams

A summary of ESEE consequences describing impacts on streams is included in Table 5. The table lists ESEE impacts by stream and conflicting use category. Use categories are listed on the horizontal axis with the impact categories that apply generally to each stream. Streams are listed on the vertical axis. The matrix includes a letter code which further identified impacts which are dependent on the presence of unique attributes of individual streams. The matrix also provides information on whether the impacts exist presently, and whether they are potential impacts which could occur based on the uses permitted by the zoning ordinance.

b. ESEE Consequences of Prohibiting Conflicting Uses - Impacts on Uses

i. Economic Consequences of Prohibiting Conflicting Uses

Prohibiting natural resource based activities, including forestry, agriculture and mining, can result in substantial economic impacts by causing loss in jobs, preventing creation of new jobs, reducing tax revenues, and reducing revenues from the sale of raw materials or finished products.

The economic value of a resource-based operation is increased when it is located relatively close to markets or potential consumers, since the cost of transporting the raw materials is reduced. For example, construction projects benefit from having timber supply nearby and the cost of such projects can increase when nearby timber harvesting and processing is prohibited.

Similarly, prohibiting transportation or other public improvements projects, particularly utility projects, can increase the cost of providing a service to consumers. For example, if development of a electric substation is not allowed, it may cost more to provide electricity to residents in the county or region, because the power must be obtained from a more distant source or purchased from another utility with excess supply.

Prohibiting residential development to protect streams can negatively affect the value (purchase price and tax assessment) of a lot, thus affecting the property owner. A reduction in value can affect the potential tax revenue to the county.

With any use, the economic costs of carrying on an activity (whether extraction, construction, or residential development) can increase when regulations or standards are enacted to specify conditions under which the activity can occur. For example, regulations that specify the size of required buffer along a stream, or the type of harvesting that can occur can increase the economic cost to the operator of carrying on the timber harvesting operation.

MATRIX KEY:

ECON 1: Negative economic impacts result from lost jobs, reduced tax revenues, or reduced revenue from the sale of goods and services.

ECON 2: Negative economic impacts result from increased cost of transporting raw materials to markets or consumers, and providing services.

ECON 3: Negative economic impacts result from decreased property value (for residential uses).

ECON 4: Negative economic impacts result from regulations and standards that specify conditions under which an activity or use can occur.

ECON 5: Negative economic impacts result from increased cost due to practices or construction techniques.

ii. Social Consequences of Prohibiting Conflicting Uses

Prohibiting natural resource based activities, such as forestry, agriculture and mining, can affect property owners who depend on revenue from the activity as an income source. Reduced income from prohibiting these activities can affect the way of life of families that may have carried on the operation (e.g., timber production, farming, or mining) for several generations. These families, who have a heritage of being involved with these activities, would consider a change in their way of life a negative social impact. In regard to quarry operations, once resources are depleted, social impacts result from attendant relocation or dislocation of employees.

Another social impact of prohibiting resource based activities is reducing or eliminating access to a local source of a needed material. For example, mining provides a social benefit by providing a needed supply of wood and wood products for construction projects in the county and region. This social benefit would be negatively affected by prohibiting harvesting because access to these materials would become more difficult. In addition, longer haul distances increase traffic loads with resultant social impacts.

Prohibiting certain uses can affect the amenities available to local residents, whether these are natural or man-made. For example, residential lots located along a stream often are sought by buyers, since the stream is considered a positive natural amenity. Not allowing residential development on lots with stream access would prevent this social benefit. Similarly, community services and commercial facilities provide a social benefit to local residents by providing needed goods and services near where they live and work. Prohibiting these uses would negatively affect this social benefit by causing residents to drive further to obtain the goods and services.

MATRIX KEY:

SOC 1: Negative social impacts result from reduced income (from natural resource based activities).

SOC 2: Negative social impacts result from affecting or changing the way of life of families involved in natural resource based activities and industries.

SOC 3: Negative social impacts result from reduced or eliminated access to local sources of needed materials.

SOC 4: Negative social impacts result from reduced availability of amenities (both natural and man-made).

iii. Environmental Consequences of Prohibiting Conflicting Uses

Not allowing uses that involve construction of buildings or public improvements can result in the use occurring elsewhere. Transfer of the use to a new location can result in the same or even greater environmental impacts on site, depending on the natural features of the new site, its location, and the type of development or activity that is proposed. It is possible that the new site would require more infrastructure or improvements to service, thus resulting in greater impacts from construction of roads, utilities, and services.

MATRIX KEY:

ENV 1: Negative environmental impacts result from transferring development (and associated impacts) from a site where a conflicting use is prohibited to one where it is allowed.

iv. Energy Consequences of Prohibiting Conflicting Uses

One energy consequence of prohibiting natural resource based uses is increased use of energy for transporting raw materials to markets and consumers. For example, it requires less energy to transport logs from a harvesting site near a mill than from a site farther away. Similarly, transporting rock and aggregate materials to Portland from more distant locations requires more energy than from a source within the county.

Prohibiting resource based uses can result in a shortage of goods and services, such as lumber or produce, for construction or processing. Particularly with lumber and forestry products, limited availability can result in use of alternative, less energy-efficient building materials.

Prohibiting residential uses and development of community services and commercial areas can result in greater distances between local residents and the places where they work and purchase goods and services. If community services or commercial amenities are located farther from residents, they must drive greater distances to obtain these goods and services. Increased travel results in increased use of energy for transportation.

Greater distances between raw materials and processing, products and markets, and consumers and goods and services, can result in additional energy expenditure to construct needed roads, transportation facilities (such as transit centers), and infrastructure that may not be necessary if conflicting uses were allowed to occur.

MATRIX KEY:

ENERGY 1: Negative energy impacts result from increased use of energy for transporting raw materials to markets and consumers.

ENERGY 2: Negative energy impacts result from shortage of goods and services, such as lumber or produce, for construction or processing.

ENERGY 3: Negative energy impacts result from greater distances between local residents and the places where they work and purchase goods and services.

ENERGY 4: Negative energy impacts result from increased energy expenditure to construct additional roads, transportation facilities, and infrastructure to accommodate greater distance between products and consumers.

v. Summary of ESEE Consequences - Impacts on Conflicting Uses

A summary of ESEE consequences describing impacts on conflicting uses is included in Table 6. The table lists ESEE impacts by stream and conflicting use category. Use categories are listed on the horizontal axis with the impact categories that apply to each use. Streams are listed on the vertical axis. The matrix identifies the consequences that are possible based on existing uses which are currently impacting the stream. Potential consequences are noted where the use is not currently present.

c. Other Applicable Statewide Planning Goals

OAR 660-16-005(2) states: "The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process." The following additional Statewide Planning Goals apply to this ESEE analysis:

i. Goal 3 - Agricultural Lands

Goal 3 applies to those lands designated and zoned for Exclusive Farm Use. Por-

TABLE 6.

ESEE CONSEQUENCES
Prohibiting Conflicting Uses – Impacts on Conflicting Uses

Stream	Forestry	Agriculture	Residential	Community Service	Mining	Transport./ Public Imp.
	SOC 1,2,3 ECON 1,2,4 ENRGY 1,2,4	SOC 1,2,3 ECON 1,2,4 ENRGY 1,2,4	SOC 4 ECON 3,4,5 ENRGY 3,4 ENV 1	SOC 4 ENV 1 ECON 4,5 ENRGY 3,4	SOC 1,2,3 ECON 1,2,4,5 ENRGY 1,2,4 ENV 1	SOC ECON 2,4,5 ENRGY 4 ENV 1
GILKINSON ROAD AREA						
Jackson Creek	X	X	X			X
Joy Creek	X	X	X			X
Jones Creek	X		X			X
Rocky Point Creek	X					X
Scappoose Creek	X					X
WILDWOOD-MCKAY AREA						
East Fork McKay Creek	X	X				X
North Jackson Creek	X	X				X
Wildwood Creek	X			X		X
North Wildwood Creek	X					X
Middle Wildwood Creek	X					X
South Wildwood Creek	X		X			X
HOLBROOK-LOGIE AREA						
North Rainbow Creek	X		X			X
South Rainbow Creek	X		X			X
Holbrook Creek	X	X	X			X
UPPER ROCK CREEK AREA						
South Jackson Creek	X	X	X			X
North Rock Creek	X	X	X	X		X
FOLKENBERG AREA						
McCarthy Creek	X	X	X	X		X
CORNELIUS PASS AREA						
Middle Rock Creek		X	X			X
GERMANTOWN AREA						
South Rock Creek		X	X			X
BONNY SLOPE AREA						
North Bronson Creek	X	X	X			X
South Bronson Creek		X	X			X
BALCH CREEK AREA						
Balch Creek			X	X		X
Saltzman Creek	X		X	X		X

KEY:

= Consequences possible—Use exists and clearly impacts stream



= Consequences Possible—Use is present near stream and has a minor impact.



= Potential Consequences—Uses not currently present near stream

TABLE 6 CONTD.

Stream	FORESTRY	AGRICULTURE	RESIDENTIAL	COMM. SERV.	MINING	TRANS / PUB. IMPROVMTS.
	SOC 1,2,3 ECON 1,2,4 ENRG 1,2,4	SOC 1,2,3 ECON 1,2,4 ENRG 1,2,4	SOC 4 ECON 3,4,5 ENRG 3,4 ENV 1	SOC 4 ENV 1 ECON 4,5 ENRG 3,4	SOC 1,2,3 EC 1,2,4,5 ENRG 1,2,4 ENV 1	ECON 2,4,5 ENRG 4 ENV 1.
MCNAMEE-HARBORTON AREA						
BURLINGTON CREEK	X		X			X
NORTH ANGELL BROS. CREEK	X				X	X
MILLER CREEK	X	X	X			X

TABLE 6. ESEE CONSEQUENCES
Prohibiting Conflicting Uses - Impacts on Conflicting Uses
(continued)

KEY:

ECON 1:	Lost jobs, reduced tax revenues, and reduced revenue from the sale of goods and services.
ECON 2:	Increased cost of transporting raw materials to markets or consumers, and providing services.
ECON 3:	Decreased property value (for residential uses).
ECON 4:	Increased cost resulting from regulations and standards that specify conditions under which an activity or use can occur.
ECON 5:	Increased cost due to changes in customary practices or construction techniques.
SOC 1:	Reduced income (from natural resource based activities) and possible "taking" of private property for public benefit.
SOC 2:	Affecting or changing the way of life of families involved in natural resource based activities and industries.
SOC 3:	Reduced or eliminated access to local sources of needed materials.
SOC 4:	Reduced availability of amenities (both natural and man-made).
ENV 1:	Transferring development (and associated impacts) from a site where a conflicting use is prohibited to one where it is allowed.
ENRGY 1:	Increased use of energy for transporting raw materials to markets and consumers.
ENRGY 2:	Shortage of goods and services, such as lumber or produce, for construction or processing.
ENRGY 3:	Greater distances between local residents and the places where they work and purchase goods and services.
ENRGY 4:	Increased energy expenditure to construct additional roads, transportation facilities, and infrastructure to accommodate greater distance between products and consumers.
Note:	For forestry, community service, and mining uses, the listed impacts represent potential for the impact to result. For Agriculture, Residential, and Transportation/Public Improvement uses, the listed impacts represent actual impacts that are currently occurring along the creek.

tions of the streams in the West Hills Rural Area run through lands designated and zoned for Exclusive Farm Use. This designation is intended to preserve and maintain agricultural lands. Limitations of agricultural uses in order to protect streams would result in a direct conflict between implementation of Goal 4 and Goal 5 of the Statewide Planning Program.

ii. Goal 4 - Forest Land

Goal 4 applies to those lands zoned Commercial Forest Use. Portions of the streams in the West Hills Rural Area run through lands designated and zoned as Commercial Forest Use lands. Forest operations, practices, and auxiliary uses are subject only to such regulation of uses as are found in ORS 527.722, which states that "no unit of local government shall adopt any rules, regulations, or ordinances or take any other actions that prohibit, limit, regulate, subject to approval or in any other way affect forest practices on forestlands located outside of an acknowledged urban growth boundary." Consequently, regardless of impacts forest practices may have on significant streams, the County cannot place restrictions on forest practices in areas designated and zoned as Commercial Forest Use lands.

iii. Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources

Direction from the Department of Land Conservation and Development staff, as part of the Remand Order, requires that only those Goal 5 resources that have been inventoried and determined to be significant are appropriate to be included within the ESEE analysis. Of the three other identified significant Goal 5 resources in the West Hills (Scenic Views and Sites, Mineral & Aggregate Resources, Fish & Wildlife Habitat) only Mineral & Aggregate Resources have been deemed to be a use which conflicts with streams.

iv. Goal 6 - Air, Water, and Land Resources Quality

Goal 6 requires that, "All waste and process discharges from future development, when combined with such discharges...shall not (1) exceed the carrying capacity of such resources, considering long range needs; (2) degrade such resources; or (3) threaten the availability of such resources."

All of the impacts posed by various uses upon streams have a bearing on the water quality of such streams. To the extent that these conflicts can be resolved in a manner which preserves or enhances the existing water quality of these significant streams, such resolution would be in conformance with the requirements of Goal 6.

In addition, Clean Water Act requirements may affect proposed conflicting uses. As noted, Goal 6 requires that all waste and process discharges from future development, combined with those from existing development, not threaten to violate or violate state or federal environmental quality statutes.

v. Goal 7 - Areas Subject to Natural Disasters and Hazards

Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards." Pursuant to this Goal, the Multnomah County Comprehensive Framework Plan has identified areas of Natural Hazards in the West Hills which are the result of steep slopes, unstable geological and soil conditions, erosion potential and stream flooding.

Many of the impacts posed by various uses upon streams have a bearing on the capacity of these streams to instigate flooding and siltation problems to downstream areas. To the extent that these conflicts can be resolved in a manner which minimizes the flood and siltation hazard potential of streams, they would be in conformance with the requirements of Goal 7.

vi. Goal 9 - Economic Development

Goal 9 calls for adequate opportunities for a variety of economic activities in the state. Opportunities for local businesses and industries that process local resources and serve local residents may be limited because of their conflicts with significant streams.

vii. Goal 10 - Housing

Goal 10 focuses on providing housing types to meet needs within urban growth boundaries. It indicates that ordinances and incentives should be used to increase population densities in urban areas rather than rural areas such as the West Hills significant streams sites.

6. SUMMARY

- a. The consequences of not protecting significant streams are primarily environmental in nature, while the consequences of prohibiting or limiting conflicting uses in order to preserve significant streams are primarily economic, social, and energy in nature.

b. Synopsis of Consequences

Consequences if Forestry is not allowed:

Economic: Lost jobs, reduced tax revenues, increased transport costs, regulatory burden

Social: Reduced property rights, end of "timber" lifestyle, no more local sources

Environmental: Insignificant

Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Forestry is allowed in a limited manner:

Economic: Regulatory burden, potential for some lost jobs, tax revenues
Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources
Environmental: Insignificant
Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Forestry is fully allowed:

Economic: Reduced water quality for use, change in water quantity for use
Social: Loss of flood storage capacity
Environmental: Loss of riparian vegetation, reduced water quality
Energy: Decreased water flow for energy use

Consequences if Agriculture is not allowed:

Economic: Lost jobs, reduced tax revenues, increased transport costs, regulatory burden
Social: Reduced property rights, end of farm lifestyle, no more local sources
Environmental: Transferring environmental impacts to another site
Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Agriculture is allowed in a limited manner:

Economic: Regulatory burden, potential for some lost jobs, tax revenues
Social: Reduced property rights, impact on farm lifestyle, reduced local sources
Environmental: Transfer of some environmental impacts to another site
Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Agriculture is fully allowed:

Economic: Reduced water quality for use, change in water quantity for use
Social: Insignificant
Environmental: Loss of riparian vegetation, reduced water quality, greater wildlife disturbance
Energy: Decreased water flow for energy use

Consequences if Residential Use is not allowed:

Economic: Decreased property value
Social: Reduced availability of amenities
Environmental: Insignificant
Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Residential Use is limited:

Economic: Regulatory burden, changes in customary practices
Social: Reduced availability of amenities
Environmental: Insignificant
Energy: Insignificant

Consequences if Residential Use is fully allowed:

Economic: Insignificant

Social: Insignificant

Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife

Energy: Decreased water flow for energy use

Consequences if Community Service Uses are not allowed:

Economic: Regulatory burden, changes in customary practices

Social: Reduced availability of amenities

Environmental: Transferring environmental impacts to another site

Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Community Service Uses are limited:

Economic: Regulatory burden, changes in customary practices

Social: Reduced availability of amenities

Environmental: Transferring environmental impacts to another site

Energy: Insignificant

Consequences if Community Service Uses are fully allowed:

Economic: Insignificant

Social: Insignificant

Environmental: Deterioration of water quality, increased disturbance of wildlife

Energy: Decreased water flow for energy use

Consequences if Mining is not allowed:

Economic: Lost jobs, reduced tax revenues, increased transport costs, regulatory burden

Social: Reduced property rights, end of "timber" lifestyle, no more local sources

Environmental: Insignificant

Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Mining is allowed in a limited manner:

Economic: Regulatory burden, potential for some lost jobs, tax revenues

Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources

Environmental: Insignificant

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Mining is fully allowed:

Economic: Insignificant

Social: Insignificant

Environmental: Loss of riparian vegetation, deterioration of water quality

Energy: Insignificant

Consequences if Transportation/Public Improvements are not allowed:

Economic: Increased cost of material transport, regulatory burden, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are allowed in a limited manner:

Economic: Increased cost of material transport, regulatory burden, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are fully allowed:

Economic: Insignificant

Social: Loss of education & recreation associated with wildlife habitat

Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife

Energy: Decreased water flow for energy use

APPENDIX A

TECHNICAL APPENDIX

INVENTORY/SIGNIFICANCE ANALYSIS

INTRODUCTION

Inventories have been completed for streams in nine sub-regions of the West Hills Rural Area. The inventory profiles address location, quality, and quantity consistent with Statewide Planning Goal 5 requirements. The inventory is part of the Multnomah County Significant Streams study. Stream profiles are mapped and organized by study area. Maps indicate which stream reaches were inventoried.

Stream profile sheets include the location and the length of stream inventoried. The profiles provide information on economic use based on water rights data. The profiles address educational, recreational, and public safety issues. Natural resource values are addressed in terms of Stream Class, threatened and endangered species information, wildlife habitat assessment information and riparian vegetation. A qualitative description of each stream is also provided.

The significance criteria is addressed in a matrix format. If any one of the criteria is satisfied, the stream is considered significant and a Goal 5 analysis is conducted. If the stream does not meet the criteria, an ESEE analysis under Goal 5 is not prepared and no further action is required or appropriate under Goal 5. These streams are not included on the Plan Inventory for Goal 5 purposes.

The significance analysis is conducted on a stream by stream basis. Because a stream's tributaries contribute to the health, quality, and significance of the whole stream, individual tributaries are examined collectively. Field data was collected along individual stream segments but the data has been consolidated for purposes of this evaluation. The limitations of this process are that data is averaged and segments of exceptionally high quality or exceptionally low quality may be over looked. The advantage of this process is that streams are examined as a whole and are not fractured into small segments that may include highly conflicting data. It should be noted that water seasonality is based on USGS mapping. In areas with a deciduous overstory component, "summer canopy" cover has been estimated.

SIGNIFICANCE CRITERIA

Policy 16-G sets forth the criteria for determining significance of water resources and wetlands. The methodology followed for use of the criteria is described below.

A. Economic Value

Strategy A of Policy 16-G states that sites should be designated significant "if any use of the water resource can be shown to be feasible for use in significantly increasing a specified economic activity or function or substantially increasing the economic value of the land through which the waters flow".

To assess economic significance, surface water rights for properties along the streams were analyzed. A list of surface water rights was obtained from the Oregon Water Resources Department. The list of relevant permits is included as part of the stream profile. The rate or quantity of water being diverted and the use of the water is noted. All uses, including domestic use, are assumed to provide an economic benefit to the user.

B. Recreation Value

Strategy B of Policy 16-G states that a water resource should be designated significant if:

1. The resource lies within the boundaries of public park or recreation facility and the resource is an integral part of the facility's recreational activities; or
2. The resource contributes water to a park or recreation facility and diversion or degradation of the resource would significantly diminish the recreational value of the resource.

Park and recreation facilities along stream segments and downstream were documented. The role of the water resource in regard to the recreational activity was noted. For example, boating or fishing activities are water based and diversion and degradation of the water resource would clearly diminish the recreational quality of the resource.

C. Educational Value

Strategy C of Policy 16-G states that water resources should be designated significant if they have been identified as being ecologically or scientifically significant by the Oregon Natural Heritage Program or if the resource is used for public educational purposes.

Sue Vrilakas, botanist and data manager for the Oregon Natural Heritage Program conducted a data system search of the West Hills Rural Area for rare, threatened, and endangered plant and animal species. The search, completed on February 22, 1994, identified 34 records in the general vicinity but only four records were within the watersheds for the streams being studied. The existence of the significant sites is noted on the inventory profile sheets but detailed locations are not provided due to the confidential nature of the data.

Ron Klein of the Metro Greenspaces program was contacted regarding public educational activities. Ron provided information on streams that have been used for classes offered by the Portland Audubon Society and for public and private school classes sponsored through the Green City Data grants program.

D. Public Safety

Policy 16-G includes strategy D which states that sites and resources should be designated significant in the following cases:

1. The water resource is within the Watershed Management Unit of an existing or proposed municipal water source; or
2. The water resource is part of the groundwater area for a municipal water supply; or
3. The water resource and surrounding lands are flood storage areas which if altered would increase the frequency or height of floods downstream.

Strategy D also addresses water quality in terms of the significance of the riparian vegetation associated with the water resource.

To document water source information, the cities of Portland, Beaverton, Hillsboro, and Scappoose were contacted. Staff at each city indicated that the study area streams were not part of the respective municipal water supply systems.

In regard to flood storage, field inventories documented whether wetlands were associated with the streams. The number of wetlands and the approximate size of wetlands were noted. Depending on the size of the wetland and the form of the stream channel, wetlands may provide water storage capacity that will reduce the intensity of a storm event. When streams and wetlands provide this function, a determination of significance was made.

In regard to water quality and riparian vegetation, the width of the riparian corridor was documented in the field and canopy cover was noted. The inventory profiles provide the average maximum width of the corridor. If 75% of the stream length had canopy cover that was less than 25%, the riparian vegetation was determined to be insignificant and have little positive influence on water quality. If greater canopy cover was provided, the riparian area was considered significant. If field surveyors were unable to inventory at least two-thirds of the length of a stream within the county, the relationship of riparian vegetation and water quality could not be established with confidence. For this reason, if a stream appears to meet the canopy cover criteria, it is considered significant only if more than two-thirds of the stream was inventoried.

E. Natural Area Value

Strategy E of Policy 16-G addresses the natural area value of the resource. Sites are considered significant if they are designated Class 1 by the Oregon Department of Forestry, if the area is the habitat of a threatened or endangered species or if a Wildlife

Habitat Assessment form has been completed and the site scored 45 or more points. A site may also be considered significant if it scores between 35-44 and it provides an essential connection between or enhances adjoining higher rated areas.

As part of the inventory Class 1 waters were documented and noted on inventory forms. If any portion of the stream within the County is designated Class 1, the stream was considered significant. If field surveyors were unable to inventory at least two-thirds of the length of a stream within the county, the relationship of riparian vegetation and water quality could not be established with confidence. For this reason, if a stream appears to meet the canopy cover criteria, it is considered significant only if more than two-thirds of the stream was inventoried.

As noted under Educational Value, above, the Oregon Natural Heritage Program data base was searched for rare, threatened and endangered plant and animal species. Inventory forms identify whether sites were identified. Due to the confidential nature of the data, details are not provided.

Wildlife Habitat Assessment forms were completed for segments along each stream at two-tenths of a mile intervals. The data is summarized in a table following each of the profile forms. Streams averaging 45 points and above were considered significant resources. Sites with WHA scores between 35-44 points were designated significant if they function as "essential connections or demonstrably enhance higher rated adjacent areas." The scope of this study was limited to the stream channel area and only addresses connections and enhancement within a given stream channel. Connections or enhancement to upslope areas were not considered.

For the purposes of this report, a riparian area is comprised of an aquatic ecosystem and associated upland area. Water in the aquatic ecosystem influences upland vegetation and microclimate. Upland areas affect the aquatic ecosystem by providing thermal regulation, biomass, and structure.

SIGNIFICANCE MATRIX – Study Area:

Gilkinson Road

CRITERIA:	STREAMS:				
	Jackson	Joy	Jones	Rocky Point	Scappoose
ECONOMIC:					
Water Rights Permits	Y	Y	Y	Y	Y
RECREATION:					
Within Park/Rec. Facility	N	N	N	N	N
Contributes water to Park/Rec. Facility	N	N	N	N	N
EDUCATION:					
Designated significant by the Oregon Natural Heritage Program	N	N	N	N	N
Used for public education	N	N	N	N	N
PUBLIC SAFETY:					
Within Watershed Management Unit	N	N	N	N	N
Groundwater Recharge for Municipal Supply	N	N	N	N	N
Flood Storage Function	Y	N	Y	Y	Y
Riparian Zone Water Quality Benefits	Y	Y	Y	Y	Y
NATURAL AREA VALUE:					
Designated Class 1	N	Y	N	N	N
Habitat of an Endangered or Threatened Species	N	N	N	N	Y
Wildlife Habitat Assessment Score					
If > 44 points – considered significant	Y	Y	Y	N	Y
If 35–44 points, essential connections are provided	N/A	N/A	N/A	Y	N/A
CONCLUSION:					
Significant	Y	Y	Y	Y	Y

Key:	
Y – Yes	N/A – Not Applied
N – No	I – Incomplete

SIGNIFICANCE MATRIX

The Significance Matrix summarizes the findings and research documented on the profile sheets. The matrix is designed so that a yes - no answer is provided when the county significance criteria are satisfied. The conclusion is based on whether the threshold for significance has been met.

SIGNIFICANCE MATRIX – Study Area: Holbrook – Logie

CRITERIA:	STREAMS:		
	North Rainbow	South Rainbow	Holbrook
ECONOMIC:			
Water Rights Permits	N	Y	N
RECREATION:			
Within Park/Rec. Facility	N	N	N
Contributes water to Park/Rec. Facility	N	N	N
EDUCATION:			
Designated significant by the Oregon Natural Heritage Program	N	N	N
Used for public education	N	N	N
PUBLIC SAFETY:			
Within Watershed Management Unit	N	N	N
Groundwater Recharge for Municipal Supply	N	N	N
Flood Storage Function	Y	Y	Y
Riparian Zone Water Quality Benefits	Y	Y	Y
NATURAL AREA VALUE:			
Designated Class 1	N	Y	N
Habitat of an Endangered or Threatened Species	N	N	N
Wildlife Habitat Assessment Score			
If > 44 points – considered significant	Y	Y	N
If 35–44 points, essential connections are provided	N/A	N/A	Y
CONCLUSION:			
Significant	Y	Y	Y

Key:	
Y – Yes	N/A – Not Applied
N – No	I – Incomplete

SIGNIFICANCE MATRIX – Study Area: Wildwood–McKay

CRITERIA:	STREAMS:					
	E. Fork McKay	North Jackson	Wildwood	North Wildwood	Middle Wildwood	South Wildwood
ECONOMIC:						
Water Rights Permits	N	N	N	N	N	Y
RECREATION:						
Within Park/Rec. Facility	N	N	Y	N	N	N
Contributes water to Park/Rec. Facility	N	N	N	Y	Y	Y
EDUCATION:						
Designated significant by the Oregon Natural Heritage Program	N	N	N	N	N	N
Used for public education	N	N	N	N	N	N
PUBLIC SAFETY:						
Within Watershed Management Unit	N	N	N	N	N	N
Groundwater Recharge for Municipal Supply	N	N	N	N	N	N
Flood Storage Function	Y	Y	N	Y	Y	Y
Riparian Zone Water Quality Benefits	Y	Y	N/A	Y	Y	N/A
NATURAL AREA VALUE:						
Designated Class 1	Y	N	Y	Y	Y	Y
Habitat of an Endangered or Threatened Species	N	N	N	Y	N	N
Wildlife Habitat Assessment Score						
If > 44 points – considered significant	Y	N	I	Y	N	N
If 35–44 points, essential connections are provided	N/A	Y	I	N/A	Y	Y
CONCLUSION:						
Significant	Y	Y	Y	Y	Y	Y

Key:	
Y – Yes	I – Incomplete
N – No	N/A – Not Applied

SIGNIFICANCE MATRIX – Study Area: Folkenburg

CRITERIA:		STREAMS:
		McCarthy
ECONOMIC:		
Water Rights Permits		N
RECREATION:		
Within Park/Rec. Facility		N
Contributes water to Park/Rec. Facility		N
EDUCATION:		
Designated significant by the Oregon Natural Heritage Program		N
Used for public education		N
PUBLIC SAFETY:		
Within Watershed Management Unit		N
Groundwater Recharge for Municipal Supply		N
Flood Storage Function		N
Riparian Zone Water Quality Benefits		Y
NATURAL AREA VALUE:		
Designated Class 1		Y
Habitat of an Endangered or Threatened Species		N
Wildlife Habitat Assessment Score		
If > 44 points – considered significant		N
If 35 – 44 points, essential connections are provided		Y
CONCLUSION:		
Significant		Y

Key:
Y – Yes
N – No

SIGNIFICANCE MATRIX – Study Area: Upper Rock Creek

CRITERIA:	STREAMS:	
	South Jackson	Rock (North Main Stem)
ECONOMIC:		
Water Rights Permits	N	Y
RECREATION:		
Within Park/Rec. Facility	N	N
Contributes water to Park/Rec. Facility	N	Y
EDUCATION:		
Designated significant by the Oregon Natural Heritage Program	N	N
Used for public education	N	Y
PUBLIC SAFETY:		
Within Watershed Management Unit	N	N
Groundwater Recharge for Municipal Supply	N	N
Flood Storage Function	N	Y
Riparian Zone Water Quality Benefits	Y	Y
NATURAL AREA VALUE:		
Designated Class 1	N	Y
Habitat of an Endangered or Threatened Species	N	N
Wildlife Habitat Assessment Score		
If > 44 points – considered significant	Y	Y
If 35–44 points, essential connections are provided	N/A	N/A
CONCLUSION:		
Significant	Y	Y

Key:
Y – Yes
N – No

N/A – Not Applied

SIGNIFICANCE MATRIX – Study Area: Cornelius Pass

CRITERIA:	STREAMS:
	Rock (Middle Main Stem)
ECONOMIC:	
Water Rights Permits	Y
RECREATION:	
Within Park/Rec. Facility	N
Contributes water to Park/Rec. Facility	Y
EDUCATION:	
Designated significant by the Oregon Natural Heritage Program	N
Used for public education	Y
PUBLIC SAFETY:	
Within Watershed Management Unit	N
Groundwater Recharge for Municipal Supply	N
Flood Storage Function	N
Riparian Zone Water Quality Benefits	Y
NATURAL AREA VALUE:	
Designated Class 1	Y
Habitat of an Endangered or Threatened Species	N
Wildlife Habitat Assessment Score	
If > 44 points – considered significant	Y
If 35 – 44 points, essential connections are provided	N/A
CONCLUSION:	
Significant	Y

Key:	
Y – Yes	N/A – Not Applied
N – No	

SIGNIFICANCE MATRIX – Study Area: McNamee Harborton

CRITERIA:	STREAMS:					
	Burlington	North Angell Bros.	Middle Angell Bros.	South Angell Bros.	Newberry	Miller
ECONOMIC:						
Water Rights Permits	N	N	N	N	N	Y
RECREATION:						
Within Park/Rec. Facility	N	N	N	N	N	N
Contributes water to Park/Rec. Facility	Y	Y	N	N	N	
EDUCATION:						
Designated significant by the Oregon Natural Heritage Program	N	N	N	N	N	N
Used for public education	N	N	N	N	N	N
PUBLIC SAFETY:						
Within Watershed Management Unit	N	N	N	N	N	N
Groundwater Recharge for Municipal Supply	N	N	N	N	N	N
Flood Storage Function	N	N	N	N	N	
Riparian Zone Water Quality Benefits	N	Y	N/A	N	N/A	
NATURAL AREA VALUE:						
Designated Class 1	N	N	N	N	N	N
Habitat of an Endangered or Threatened Species	N	N	N	N	N	N
Wildlife Habitat Assessment Score						
If > 44 points – considered significant	N	N	N	N	N	Y
If 35 – 44 points, essential connections are provided	N	Y	N	N	N	–
CONCLUSION: Significant	Y	Y	N	N	N	Y

Key:	
Y – Yes	I – Incomplete
N – No	NA – Not Applied

SIGNIFICANCE MATRIX – Study Area:

Bonny Slope

CRITERIA:	STREAMS:	
	North Bronson	South Bronson
ECONOMIC:		
Water Rights Permits	Y	Y
RECREATION:		
Within Park/Rec. Facility	N	N
Contributes water to Park/Rec. Facility	N	N
EDUCATION:		
Designated significant by the Oregon Natural Heritage Program	N	N
Used for public education	N	N
PUBLIC SAFETY:		
Within Watershed Management Unit	N	N
Groundwater Recharge for Municipal Supply	N	N
Flood Storage Function	N	Y
Riparian Zone Water Quality Benefits	Y	Y
NATURAL AREA VALUE:		
Designated Class 1	N	N
Habitat of an Endangered or Threatened Species	N	N
Wildlife Habitat Assessment Score		
If > 44 points – considered significant	Y	N
If 35–44 points, essential connections are provided	N/A	Y
CONCLUSION:		
Significant	Y	Y

Key:

Y – Yes

N/A – Not Applied

N – No

SIGNIFICANCE MATRIX – Study Area:

Germantown

CRITERIA:	STREAM:
	Rock (South Main Stem)
ECONOMIC:	
Water Rights Permits	Y
RECREATION:	
Within Park/Rec. Facility	N
Contributes water to Park/Rec. Facility	Y
EDUCATION:	
Designated significant by the Oregon Natural Heritage Program	N
Used for public education	Y
PUBLIC SAFETY:	
Within Watershed Management Unit	N
Groundwater Recharge for Municipal Supply	N
Flood Storage Function	Y
Riparian Zone Water Quality Benefits	N/A
NATURAL AREA VALUE:	
Designated Class 1	Y
Habitat of an Endangered or Threatened Species	N
Wildlife Habitat Assessment Score	
If > 44 points – considered significant	Y
If 35–44 points, essential connections are provided	N/A
CONCLUSION:	
Significant	Y

Key:

Y – Yes

N/A – Not Applied

N – No

SIGNIFICANCE MATRIX – Study Area:

Balch Creek

CRITERIA:	STREAMS:	
	Balch	Saltzman
ECONOMIC:		
Water Rights Permits	Y	N
RECREATION:		
Within Park/Rec. Facility	Y	Y
Contributes water to Park/Rec. Facility	N	N
EDUCATION:		
Designated significant by the Oregon Natural Heritage Program	N	N
Used for public education	Y	N
PUBLIC SAFETY:		
Within Watershed Management Unit	N	N
Groundwater Recharge for Municipal Supply	N	N
Flood Storage Function	N	I
Riparian Zone Water Quality Benefits	Y	I
NATURAL AREA VALUE:		
Designated Class 1		N
Habitat of an Endangered or Threatened Species	N	N
Wildlife Habitat Assessment Score		
If > 44 points – considered significant	Y	I
If 35–44 points, essential connections are provided	N/A	I
CONCLUSION:		
Significant	Y	Y

Key:

Y – Yes	I – Incomplete
N – No	N/A – Not Applied

Gilkison Road Area

JACKSON CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Gilkison Road Area

Length Inventoried: 17,424 ft (3.3 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 17,424 ft (3.3 miles)

Area of Watershed in Multnomah County: 900 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Jackson		95%		5%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

Jackson Creek - Main Stem

The stream originates in a small stand of mature conifer with scattered deciduous trees. The west bank of the stream has been harvested but some alder and small conifer were left in the riparian area and upslope. Five hundred feet downstream, both sides of the creek have been recently harvested for approximately 1,200 feet. No vegetation is left in the riparian corridor. Two dirt skid roads cross the stream and run adjacent to it. In the middle section of the stream a dozer or skidder was driven down the stream with the blade down shoving debris and dirt into the stream channel and creating a cut bank that contributes an even greater amount of sediment to the stream than the roads and other harvest activity. The next 1,400 feet of stream flow through land managed by the Bureau of Land Management. Alder is dominant in the immediate stream channel but the upslope areas are dominated by mature Douglas fir, western hemlock, and western red cedar. The stand structure is starting to diversify with some fallen trees creating areas for sapling regeneration. The shrub layer density is low to moderate and composed of salmonberry, vine maple, and occasional huckleberry. Slopes in this area are 45 degrees or more. The stream flows down a steep gradient (20+ degrees) and into a 100 foot by 150 foot wetland area dominated by red alder with more conifer upslope. The shrub layer here is more diverse with elderberry and Oregon grape. The stream continues downstream through a

mixed deciduous stand to crossing with Gilkison Road. Snags are common in this upper section; some trees have a pileated woodpecker foraging holes. Several Pacific yew also were observed.

North of Gilkison Road, the stream flows through a steep draw (side slopes 65-70 degrees) with a flat 10-15 foot wide floodplain. A concrete dam and old wooden water wheel are located 100 feet downstream from Gilkison Road. The shrub layer is moderately dense and diverse including huckleberry, salal, salmonberry, vine maple, western wahoo, and Oregon grape. Historic logging removed most conifer from the riparian area and regeneration in some areas is not well established. The banks have failed in several areas. North of the powerline crossing further downstream, the floodplain widens to 200 - 300 feet. Alder is the dominant overstory and salmonberry and vine maple dominate the understory. The mainstem converges with the east and west tributaries here and flows out of the County.

The stream is of moderate size, varying from 3-6 feet wide and 8-12 inches deep. Gravel and sediment are the most common substrate in the higher reaches with cobbles and boulders becoming more common downstream. The stream is 90% riffle/run and 10% pools. Pools tend to be localized with long stretches of riffle/run between occurrences.

Jackson Creek - West Fork

The stream originates from a small, 20-foot by 30-foot pond in a mature conifer stand and flows down a narrow, steep draw with 45 degree side slopes. The conifer overstory is made up of Douglas fir, western hemlock, and western red cedar, frequently 28 inches or greater in diameter. Downstream 1,500 feet, the stream channel widens and flattens out as it enters a 20-year-old Douglas fir plantation. Young alder dominates the stream bottom. A road crosses the stream and parallels it on the east bank. Severe erosion is occurring along its entire length. As the stream approaches the powerline crossing, the alder overstory becomes larger and big-leaf maple becomes more common. At 3,000 feet from the origin a road crosses the stream and the culvert is high enough from the stream (by 4-5 feet) to be a barrier to fish passage. The stream enters a stand dominated by large red alder and big-leaf maple with occasional red cedar ranging in size from saplings to 30 inches in diameter. The shrub layer of vine maple, snowberry, huckleberry, and salmonberry, is dense. The stream bottom widens out to 100 - 200 feet across. The stream enters a fenced pasture where the stream channel is overgrown by Himalayan blackberry. It joins the mainstem 200 feet after entering the pasture.

The stream is three feet wide and one foot deep at its confluence with the main stem. The substrate is dominated by clay and sediment with some gravel and cobbles. The stream is 10% pools and 90% riffle/run.

Jackson Creek - East Fork

The stream originates from a small narrow pond in the center of an extensively-managed stand of mixed conifer/deciduous trees. A buffer (25-30-foot) of young alder and occasional conifer was left around the stream. The stream flows under three gravel/dirt roads, with only the middle road having a visible culvert. Above the first road, the stream meanders and is more wetland than stream in character. Below the third road the stream enters a forested, steep draw with the powerline corridor 50 feet upslope to the east and a gravel road to the west. The stream passes under Gilkison Road and into an area that has been recently clearcut. There is house on the west bank and another upslope to the west. Large amounts of logging debris are in and around the stream. Four hundred feet downstream from Gilkison the stream enters a stand of 10-14-inch Douglas fir regeneration. The stream is ponded behind a logging road with the culvert removed. The pond is approximately 40 feet by 50 feet and appears to be quite deep. A large sediment deposit "plain" is at the head of the stream. After the road crossing, the road parallels the stream on the west bank for a short distance and has experienced a major failure. The floodplain widens downstream to 50-75 feet and is dominated by red alder. Several small wetlands are adjacent to the stream. Conifers become more prevalent upstream. The stream joins the mainstem approximately 3,000 feet from Gilkison Road.

The stream is three feet wide and averages six inches deep at it's confluence. The substrate is almost entirely clay and sediment with occasional cobble/boulder and gravel. The stream is virtually 100% riffle/run.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S37402	NWSE 26 3N 2W	Livestock	.0050 CFS
S37402	NWSE 26 3N 2W	Irrigation	.0200 CFS
S26316	NWSE 26 3N 2W	Domestic	.0100 CFS
S51319	SWSW 26 3N 2W	Domestic	.0050 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 132

Range of Width: 30-400

Benefit to Water Quality: The current moderately high level of canopy closure and width of riparian corridor should have a positive influence on water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 53

Range of scores: 35-76

Essential Connections: N/A

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Jackson Creek (Main Stem)	1	4	3	2	2	3	2	3	2	2	2	1	2	3	2	33
Jackson Creek (Main Stem)	2	4	3	0	2	1	1	1	0	0	0	0	1	3	0	16
Jackson Creek (Main Stem)	3	8	6	4	2	4	6	2	5	5	3	4	4	3	4	60
Jackson Creek (Main Stem)	4	8	6	4	4	4	4	2	3	4	2	2	3	4	2	52
Jackson Creek (Main Stem)	5	8	6	4	2	4	3	2	5	4	2	3	2	2	0	47
Jackson Creek (Main Stem)	6	4	3	6	2	6	3	2	4	6	3	1	2	1	0	43
Jackson Creek (Main Stem)	7	4	3	6	2	6	4	2	4	6	3	2	4	3	0	49
Jackson Creek (Main Stem)	8	4	3	6	2	4	4	2	4	4	3	3	4	3	0	46
Jackson Creek (Main Stem)	9	4	3	6	2	4	6	2	4	2	2	4	4	3	0	46
AVERAGES		5.3	4.0	4.2	2.2	4.0	3.7	2.0	3.4	3.7	2.2	2.2	2.9	2.8	0.9	43.6

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Jackson Creek (Main Stem)	1	75	75		X		
Jackson Creek (Main Stem)	2	15	15	X			
Jackson Creek (Main Stem)	3	100	100			X	
Jackson Creek (Main Stem)	4	100	100				X
Jackson Creek (Main Stem)	5	60	60			X	
Jackson Creek (Main Stem)	6	30	60				X
Jackson Creek (Main Stem)	7	40	50				X
Jackson Creek (Main Stem)	8	80	60			X	
Jackson Creek (Main Stem)	9	100	80				X
AVERAGES		66.7	66.7	11%	11%	33%	44%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Jackson Creek Trib. I (West)	1	4	3	8	4	6	4	3	8	6	4	4	4	3	2	63
Jackson Creek Trib. I (West)	2	4	3	8	2	3	2	2	2	2	2	1	2	2	0	35
Jackson Creek Trib. I (West)	3	4	3	8	2	3	2	2	2	2	2	1	2	2	0	35
Jackson Creek Trib. I (West)	4	4	3	8	2	6	6	2	4	4	2	2	2	3	0	48
AVERAGES		4.0	3.0	8.0	2.5	4.5	3.5	2.3	4.0	3.5	2.5	2.0	2.5	2.5	0.5	45.3

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Jackson Creek Trib. I (West)	1	200	200			X	
Jackson Creek Trib. I (West)	2	20	20	X			
Jackson Creek Trib. I (West)	3	60	60				X
Jackson Creek Trib. I (West)	4	50	50			X	
AVERAGES		82.5	82.5	25%	0%	50%	25%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:							TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N						
Jackson Creek Trib. II (East)	1	4	4	5	4	3	3	3	2	3	4	3	1	2	3	0	41				
Jackson Creek Trib. II (East)	2	4	3	2	2	4	3	2	5	5	3	0	1	2	0	36					
Jackson Creek Trib. II (East)	3	4	3	6	4	4	5	2	6	5	3	1	4	3	2	52					
Jackson Creek Trib. II (East)	4	4	3	6	4	4	6	2	4	4	2	3	4	3	2	51					
AVERAGES		4.0	3.3	4.8	3.5	3.8	4.3	2.0	4.5	4.5	2.8	1.3	2.8	2.8	1.0	45.0					

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Jackson Creek Trib. II (East)	1	40	40	X			
Jackson Creek Trib. II (East)	2	20	15	X			
Jackson Creek Trib. II (East)	3	20	20			X	
Jackson Creek Trib. II (East)	4	15	20				X
AVERAGES		23.8	23.8	50%	0%	25%	25%

*Width of riparian corridor in feet (in segment) looking downstream.

JOY CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Gilkison Road Area

Length Inventoried: 10,540 ft (2.0 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 12,280 ft (2.3 miles)

Area of Watershed in Multnomah County: 400 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Joy		80%		20%	

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

Joy Creek - Mainstem and North Tributary

The stream originates southeast of Gilkison Road. The south side of the stream has been clear cut and the west upper bank has been converted to houses and fields. A 30-50-foot buffer of mixed overstory has been left. The density of the buffer is variable. One thousand feet downstream, the north side has been clearcut and the south side is mixed deciduous/conifer dominated by red alder. The north side becomes a 12-14-inch Douglas fir plantation. Vegetation on the south side remains the same with the addition of occasional 24-28-inch Douglas fir. The stream then enters a clearcut area. The first 200 feet have no buffer. Downstream, a thin sparse buffer dominated by a few large Douglas fir with red alder and big-leaf maple filling in the understory is present. Upslope 1,000 feet to the south is a 10-15-year-old Douglas fir plantation. The south tributary joins in this area. An old road is on the north bank. The stream bottom is 20-30 feet wide and flat in this area. The stream continues under the powerlines to a fence. No access permission was granted for beyond the fence. What follows is a visual assessment from the fence line and aerial photo interpretation. The stream flows through a pasture with dense salmonberry in the stream corridor. Upstream to the north is a mature Douglas fir stand with open understory. The south bank is primarily red alder and western red cedar.

Downstream the overstory becomes more deciduous. There is a wetland/pond area just before the stream crosses under U.S. Highway 30.

The stream is approximately three feet wide and 6-12 inches deep below the confluence of the two tributaries. The substrate is primarily gravel with sand and clay in the bottom sections; it becomes more sand/silt/mud in the upper reaches of the north tributary. The stream is predominately riffle/run (90+ %) with few pools.

Joy Creek - South Tributary

The stream originates in a clearcut, crosses a dirt road with log bunker type culvert, and enters a dense Douglas fir plantation (4-10 inches). The stream is deeply incised with no floodplain. Red alder is common in the first 10-20 feet upslope from the stream. Old logging debris is common in the stream. The shrub layer is dense and comprised of salmonberry, Himalayan blackberry, and elderberry. The stream remains in the plantation for approximately 2,500 feet and then enters an open stand of alder with a sparse shrub layer. The narrow stream channel opens up into a 50-75-foot-wide flood plain. The stream crosses under a road 500 feet further downstream and enters a shallow draw with 10-30-foot flat bottom. The side slopes are 45 degrees. The slope tops are either clearcut or in plantations. The slopes and the bottom are forested in red alder with some large Douglas fir. The stream flows another 1,000 feet down the draw on a moderate gradient, then joins the north tributary to form the mainstem.

The stream is three feet wide and 6-18 inches deep near the confluence. The substrate is predominately clay with some sand and boulder/cobble component. The stream is 10% pools and 90% riffle/run. Most pools are concentrated in the lower sections.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S27915	NWSE 26 3N 2W	Domestic	.0050 CFS
S31305	NESW 26 3N 2W	Domestic	.0050 CFS
S23139	NWNE 25 3N 2W	Domestic (Inc. Lawn & Garden)	.0100 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

SRI/SHAPIRO Project #79352
Joy Creek Profile

May 13, 1994

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: 86 ft

Range of Width: 50-150 ft

Benefit to Water Quality: The moderate level of overall canopy closure and width of the riparian area should mitigate for the head water areas where there are thin riparian corridors and low to moderate canopy cover and should have a positive influence on overall water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 24%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 46

Range of scores: 39-56

Essential Connections: N/A

SRI/SHAPIRO Project #7935258
Joy Creek Profile

May 13, 1994

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
Joy Creek Trib. I (North)	1	4	3	4	2	3	3	2	4	3	3	1	2	5	2	41		
Joy Creek Trib. I (North)	2	4	3	6	2	4	3	2	4	4	3	2	2	4	2	45		
Joy Creek Trib. I (North)	3	4	3	6	2	4	5	3	5	4	2	1	3	4	0	46		
Joy Creek Trib. I (North)	4	8	6	1	2	4	6	2	2	4	3	0	2	4	0	44		
AVERAGES		5.0	3.8	4.3	2.0	3.8	4.3	2.3	3.8	3.8	2.8	1.0	2.3	4.3	1.0	44.0		

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Joy Creek Trib. I (North)	1	25	25		X		
Joy Creek Trib. I (North)	2	50	75			X	
Joy Creek Trib. I (North)	3	100	50				X
Joy Creek Trib. I (North)	4	50	50		X		
AVERAGES		56.3	50.0	0%	50%	25%	25%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Joy Creek (Main Stem)	1	8	6	4	2	5	6	3	6	4	3	1	2	6	0	56
AVERAGES		8.0	6.0	4.0	2.0	5.0	6.0	3.0	6.0	4.0	3.0	1.0	2.0	6.0	0.0	56.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Joy Creek (Main Stem)	1	30	75		X		
AVERAGES		30.0	75.0	0%	100%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N				
Joy Creek Trib. II (South)	1	4		3	6	2	4	4	2	6	4	2	1	3	4	0	45		
Joy Creek Trib. II (South)	2	4	3	8	2	6	7	2	6	4	2	2	4	6	0	56			
Joy Creek Trib. II (South)	3	4	3	8	2	6	6	2	2	2	2	2	4	4	0	47			
Joy Creek Trib. II (South)	4	4	3	8	2	3	2	2	2	2	1	4	2	4	2	0	39		
Joy Creek Trib. II (South)	5	4	3	8	2	4	2	2	2	2	4	1	4	4	0	42			
AVERAGES		4.0	3.0	7.6	2.0	4.2	4.6	2.0	3.6	2.6	2.8	1.6	3.8	4.0	0.0	45.8			

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor:		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Joy Creek Trib. II (South)	1	40	40			X	
Joy Creek Trib. II (South)	2	30	30			X	
Joy Creek Trib. II (South)	3	25	25			X	
Joy Creek Trib. II (South)	4	40	40			X	
Joy Creek Trib. II (South)	5	30	30			X	
AVERAGES		33.0	33.0	0%	0%	100%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

JONES CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Gilkison Road Area

Length Inventoried: 8,450 ft (1.6 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 8,450 ft (1.6 miles)

Area of Watershed in Multnomah County: 705 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Jones		100%			

Key:

EFU: Exclusive Farm Use
 CFU: Commercial Forestry Use
 MUA: Multiple Use Agriculture
 RR: Rural Residential
 R10: Urban Residential

Stream Description:

Jones Creek originates in a pole-sized Douglas fir stand. The stream continues in the stand for approximately 2,700 feet where it enters an conifer stand comprised of 30-40-inch Douglas fir and western hemlock. The understory is very sparse. The understory of huckleberry, vine maple, and salmonberry is of low density. The stream is in a narrow draw with steep side slopes (60-70 degrees). The stand continues for approximately 1,500 feet, then enters a pole-sized second growth Douglas fir stand, with red alder in the stream bottom. The stream then enters a young Douglas fir plantation and becomes more incised and channelized. Salmonberry and vine maple are dense within the riparian area. The overstory is sparse red alder and big-leaf maple. The stream runs into a small pond with associated wetlands behind a powerline access road. Downstream from the road, the stream becomes moderate to high gradient in a steep-sided draw. The stream bottom is flat and averages 10 feet wide. The overstory is mixed conifer/deciduous trees. The shrub layer is of low density. The stream flows under U.S. Highway 30 through a culvert.

The stream is three to five feet wide and averages one to three feet in depth at U.S. Highway 30. The substrate is dominated by boulders and cobbles in the lower sections; gravel and sediment are more common in the upper reaches. In some areas the stream is cut down to bedrock. The stream is 25% pools and 75% riffle/run.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S19204	NESW 25 3N 2W	Power	.0100 CFS
S19204	NESW 25 3N 2W	Domestic	.0100 CFS
S42119	NENW 36 3N 2W	Domestic	.0100 CFS
		(Inc. Lawn & Garden)	
S6145	NWSE 25 3N 2W	Irrigation & Domestic	.1800 CFS
S6663	NWSE 25 3N 2W	Irrigation & Domestic	.1000 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 206 ft

Range of Width: 102-300 ft

Benefit to Water Quality: The current moderate level of canopy cover and width of riparian corridor should have a positive influence of water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 24%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 47

Range of scores: 41-58

Essential Connections: N/A

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:						TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N					
Jones Creek	1	8	6	4	2	4	3	2	5	6	2	1	3	2	0	48				
Jones Creek	2	4	3	6	4	4	6	2	3	2	1	1	4	2	2	44				
Jones Creek	3	4	3	6	2	4	4	2	4	4	2	2	2	2	0	41				
Jones Creek	4	4	3	6	2	4	3	2	5	4	3	2	2	2	0	42				
Jones Creek	5	4	3	6	2	4	5	3	6	6	3	4	4	3	5	58				
Jones Creek	6	4	3	6	2	4	5	3	4	4	3	3	4	4	3	52				
Jones Creek	7	4	3	6	2	4	4	3	4	4	3	3	4	3	0	47				
Jones Creek	8	4	3	6	2	4	4	3	4	4	3	3	4	3	0	47				
AVERAGES		4.5	3.4	5.8	2.3	4.0	4.3	2.5	4.4	4.3	2.5	2.4	3.4	2.6	1.3	47.4				

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Jones Creek	1	50	80		X		
Jones Creek	2	100	100	X			
Jones Creek	3	100	100		X		
Jones Creek	4	60	60			X	
Jones Creek	5	150	150			X	
Jones Creek	6	150	150		X		
Jones Creek	7	100	100			X	
Jones Creek	8	100	100			X	
AVERAGES		101.3	105.0	13%	38%	50%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

ROCKY POINT CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Gilkison Road Area

Length Inventoried: 5,280 ft (1.0 mile)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 5,280 ft (1.0 mile)

Area of Watershed in Multnomah County: 445 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Rocky Point		100%			

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

Rocky Point Creek

Rocky Point Creek flows through pole-sized conifer stands with red alder and big-leaf maple in the riparian area for the first 3,000 feet. Pileated woodpecker foraging holes and Pacific yew were observed in the upper sections. There also are abundant wetlands adjacent to the stream. The stream enters an area where the upslopes on the south side are in 10 -15 year old plantations with low stocking levels. The riparian buffer is 30-50 feet wide. The overstory is sparse and dominated by red-alder, big-leaf maple, and remnant western red cedar. The understory is dense salmonberry, Himalayan blackberry and vine maple. The stream flows through a culvert under an old road, then off the cutbank for U.S. Highway 30 into a culvert.

The stream is approximately five feet wide at the lower end and averages 19 inches deep. The substrate is dominated by boulders and gravel and in some areas is cut to bedrock. The stream is 40% pool and 60% riffle/run.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S39051	SESW 36 2N 2W	Domestic	.0050

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 200 ft

Range of Width: 100-300 ft

Benefit to Water Quality: The current moderately low level of canopy cover should maintain the current level of water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 43

Range of scores: 41-45

Essential Connections: The downstream segments with lower WHA scores provide potential travel corridors for movement to the upstream areas with higher WHA scores.

III-62

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N				
Rocky Point Creek	1	4	3	4	2	5	6	2	2	2	2	1	3	3	2	41			
Rocky Point Creek	2	4	3	3	2	6	4	2	1	2	2	1	3	3	4	40			
Rocky Point Creek	3	4	3	8	4	3	2	2	3	3	3	2	2	2	4	45			
Rocky Point Creek	4	4	3	8	4	4	3	2	4	4	3	2	2	2	0	45			
Rocky Point Creek	5	4	3	8	2	4	3	2	4	4	3	2	2	2	0	43			
AVERAGES		4.0	3.0	6.2	2.8	4.4	3.6	2.0	2.8	3.0	2.6	1.6	2.4	2.4	2.0	42.8			

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rocky Point Creek	1	50	50	X			
Rocky Point Creek	2	75	75		X		
Rocky Point Creek	3	150	150			X	
Rocky Point Creek	4	150	75		X		
Rocky Point Creek	5	150	75		X		
AVERAGES		115.0	85.0	20%	60%	20%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

SCAPPOOSE CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Gilkison Road Area

Length Inventoried: 12,660 ft (2.4 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 12,660 ft (2.4 miles)

Area of Watershed in Multnomah County: 545 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Scappoose		100%			

Key:

EFU: Exclusive Farm Use
 CFU: Commercial Forestry Use
 MUA: Multiple Use Agriculture
 RR: Rural Residential
 R10: Urban Residential

Stream Description:

Scappoose Creek - Main Stem

The main stem is in a 40-50-year-old Douglas fir plantation with alder dominant in the stream channel area. A large wetland complex associated with the stream begins approximately 500 feet from the confluence. At approximately 3,000 feet from the confluence, the east side has been clearcut for 700 feet. A 50-foot buffer was left. The stream leaves the County at approximately 4,000 feet.

The stream is six feet wide and one to three feet deep where it leaves the county. The stream bed is composed mostly of cobbles with gravel and boulders. The stream is 75% riffle/run and 25% pool.

Scappoose Creek - East Fork

The first 4,000 feet of the stream have been harvest at varying times and little to no regeneration of overstory has occurred. The stream enters an approximately 40-year-old Douglas fir plantation then enters an old-growth stand on Bureau of Land Management property. The overstory is composed of approximately three-foot-diameter Douglas fir, western hemlock, and western red cedar. Pacific yew

also is present. The stream leaves the old-growth section and enters a 40-50-year old Douglas fir plantation where it joins the west fork to form the main stem in this section.

The stream is two feet wide and one foot deep at the confluence. The substrate is predominately sand and gravel, with boulders more common in the lower section.

Scappoose Creek - West Fork

The stream flows through 40-50-year old and second growth Douglas fir stands for it's entire length. It is in a steep draw with moderate gradient.

The stream is approximately two feet wide and six inches deep at the confluence. The substrate is cobble/gravel with more clay sediment in the upper reaches. The stream is almost entirely riffle with occasional (<10%) pools.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S9234	NWNE 34 3N 2W	Irrigation & Domestic	.1500 CFS
S9234	NWNE 34 3N 2W	Aesthetic	.1500 CFS
S9234	NWNE 34 3N 2W	Fish	.1500 CFS
S12421	SWSE 27 3N 2W	Domestic	.0100 CFS
S12421	SWSE 27 3N 2W	Power	.0500 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 198 ft

Range of Width: 40-400 ft

Benefit to Water Quality: The current moderate to high level of canopy cover and width of riparian area along the majority of the stream should have a positive influence on water quality and mitigate for the lack of canopy along most of Tributary I

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: Bald eagles, Haliaeetus leucocephalus are present in the Scappoose Creek Area ONHP 2/22/94.

Wildlife Habitat Assessment - see attached table

Average score: 48

Range of scores: 24-60

Essential Connections: N/A

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Scappoose Creek (Main Stem)	1	8	6	7	4	4	3	2	6	4	3	2	3	3	0	55
Scappoose Creek (Main Stem)	2	8	6	8	4	4	3	2	7	7	2	2	2	5	0	60
Scappoose Creek (Main Stem)	3	8	6	7	4	3	4	2	7	4	3	3	3	5	0	59
Scappoose Creek (Main Stem)	4	8	6	7	3	3	3	2	7	4	2	3	1	5	2	56
AVERAGES		8.0	6.0	7.3	3.8	3.5	3.3	2.0	6.8	4.8	2.5	2.5	2.3	4.5	0.5	57.5

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Scappoose Creek (Main Stem)	1	200	200				X
Scappoose Creek (Main Stem)	2	200	50				X
Scappoose Creek (Main Stem)	3	150	50				X
Scappoose Creek (Main Stem)	4	100	150				X
AVERAGES		162.5	112.5	0%	0%	0%	100%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Scappoose Creek Trib. I (East)	1	4	3	7	4	3	3	2	6	6	2	3	3	4	0	50
Scappoose Creek Trib. I (East)	2	4	3	1	2	2	2	2	2	2	2	2	0	0	0	24
Scappoose Creek Trib. I (East)	3	7	5	3	2	3	3	2	3	3	2	2	0	1	0	36
Scappoose Creek Trib. I (East)	4	7	5	3	2	4	3	2	3	3	2	2	0	1	0	37
Scappoose Creek Trib. I (East)	5	4	3	8	2	4	3	2	8	6	3	3	3	1	0	50
Scappoose Creek Trib. I (East)	6	4	3	7	2	4	4	2	7	4	3	3	4	2	5	54
AVERAGES		5.0	3.7	4.8	2.3	3.3	3.0	2.0	4.8	4.0	2.3	2.5	1.7	1.5	0.8	41.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Scappoose Creek Trib. I (East)	1	75	75			X	
Scappoose Creek Trib. I (East)	2	20	20	X			
Scappoose Creek Trib. I (East)	3	20	20	X			
Scappoose Creek Trib. I (East)	4	20	20	X			
Scappoose Creek Trib. I (East)	5	150	150				X
Scappoose Creek Trib. I (East)	6	150	150				X
AVERAGES		72.5	72.5	50%	0%	17%	33%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Scappoose Creek Trib. II (West)	1	4	3	7	2	3	3	2	4	4	2	3	4	2	1	44
Scappoose Creek Trib. II (West)	2	4	3	7	2	3	3	2	4	4	3	3	4	3	5	50
AVERAGES		4.0	3.0	7.0	2.0	3.0	3.0	2.0	4.0	4.0	2.5	3.0	4.0	2.5	3.0	47.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Scappoose Creek Trib. II (West)	1	100	100			X	
Scappoose Creek Trib. II (West)	2	100	100			X	
AVERAGES		100.0	100.0	0%	0%	100%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

Wildwood-McKay Area

EAST FORK MCKAY CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Wildwood-McKay Area

Length Inventoried: 9,500 FT (1.8 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County
(excludes extensions out of County): 9,500 ft (1.8 miles)

Area of Watershed in Multnomah County: 735 acres

Abutting Land Use Designations (percent of study area stream length):

Creek R10	EFU	CFU	MUA	RR
East Fork McKay		100%		

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

The stream originates southwest of Dixie Mountain below Rocky Point Road. The west side of the stream has been clearcut and the east side is mature conifer stand. The stream area is dominated by a dense shrub layer of elderberry, willow, and salmonberry. Downstream there is a large wetland area. Both sides of the stream have been clearcut in this location. The shrub layer remains dense. At approximately 2,100 feet from the origin, the stream enters a closed canopy mixed conifer/deciduous stand with an open understory. The stream enters an area approximately 4,000 feet from the origin where some clearcutting has occurred on both sides of the stream. Patches of primarily deciduous overstory remain. The shrub layer becomes dense again. At approximately 9,000 feet, another wetland/pond complex, is associated with the stream. Many of these wetland areas surrounded by scrub/shrub type vegetation are a result of beaver dams. Conifer snags are moderately abundant along the stream; several showed signs of pileated woodpecker foraging. Elk and deer sign also were common.

The stream is the largest observed at the point it crosses the Multnomah County/Washington County line. It is approximately 20 feet wide and six feet deep at that point, although it is very slow moving. The substrate is predominantly clay/mud with some gravel and cobble in the middle sections. The stream is 90% pools in the lower reaches and 90% riffle/run in the upper reaches.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 199 ft

Range of Width: 40-400 ft

Benefit to Water Quality: The current moderate level of canopy closure and width of the riparian corridor should have a positive influence on water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 18%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 56

Range of scores: 41-82

Essential Connections: N/A

SRI/SHAPIRO Project #7935258
East Fork McKay Creek Profile

May 13, 1994

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:						TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N					
East Fork McKay Creek	1	4	3	7	2	4	4	2	5	2	1	2	3	2	0	41				
East Fork McKay Creek	2	4	3	4	4	4	4	2	6	5	2	2	4	6	2	52				
East Fork McKay Creek	3	6	6	6	2	4	5	3	3	5	2	4	4	3	0	53				
East Fork McKay Creek	4	6	6	4	2	5	8	3	4	5	2	4	4	3	2	58				
East Fork McKay Creek	5	8	6	7	2	3	4	2	3	3	2	0	4	2	1	47				
East Fork McKay Creek	6	8	6	7	2	3	3	2	3	2	1	0	4	1	0	42				
East Fork McKay Creek	7	8	6	8	2	3	4	2	3	4	2	1	4	2	0	49				
East Fork McKay Creek	8	8	6	8	6	8	8	2	6	8	2	4	4	6	4	80				
East Fork McKay Creek	9	8	6	8	8	8	8	2	6	8	2	4	4	6	4	82				
AVERAGES		6.7	5.3	6.6	3.3	4.7	5.3	2.2	4.3	4.7	1.8	2.3	3.9	3.4	1.4	56.0				

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:	75-100%
		Left (ft)	Right (ft)		
East Fork McKay Creek	1	80	10		
East Fork McKay Creek	2	20	20	X	
East Fork McKay Creek	3	100	100		X
East Fork McKay Creek	4	130	130	X	
East Fork McKay Creek	5	100	100	X	
East Fork McKay Creek	6	20	20	X	
East Fork McKay Creek	7	80	80	X	
East Fork McKay Creek	8	200	200	X	
East Fork McKay Creek	9	200	200	X	
AVERAGES		103.3	95.6	22%	11%

*Width of riparian corridor in feet (in segment) looking downstream.

NORTH JACKSON CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Wildwood-McKay Area

Length Inventoried: 13,730 ft (2.6 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 13,730 (2.6 miles)

Area of Watershed in Multnomah County: 780 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
North Jackson		100%			

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

Jackson Creek - Main Stem

The description of the stream starts from the confluence of it's two tributaries. The east side of the stream has been recently clearcut. The west side is a mixed-age conifer/deciduous stand. A small wetland is located near the confluence of the tributaries. A beaver dam (recent) is located where the stream leaves the County. Cutthroat trout were observed all along the stream.

The stream is approximately 12 feet wide and ranges between one and four feet deep where it leaves the County. The substrate is primarily gravel/cobble/boulder with some silt/sediment deposits. The stream is approximately 70% riffle/run and 30% pool.

Jackson Creek - North Tributary 1A

The stream originates in a young deciduous stand with sparse understory. It then flows into a clear-cut area where small wetlands are associated with the stream. The clear-cut appears to be approximately two years old. The shrub layer is becoming re-established. Downstream approximately 3,000 feet the stream enters a mixed conifer/deciduous stand. It flows through the

stand for approximately another 3000 feet before the confluence. Cutthroat trout were seen in this lower section. Elk and deer sign were also seen all along the stream.

The stream is three feet wide and 6-24 inches deep at the confluence. The substrate is predominantly silt/sand at the confluence, gravel/cobble in the middle sections, and silt/clay at the headwaters. The stream is 90% riffle/run and 10% pool.

Jackson Creek - South Tributary 1B

The stream originates in a clear-cut and continues for most of its length in clearcuts or young regeneration plantations. Coarse woody debris from past logging is common in the stream area.

The stream is often deeply incised. It is only one foot wide at the confluence and 6 - 12 inches deep. The stream bottom is predominantly silt and clay. It is 95% riffle/run and 5% pools.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 202 ft

Range of Width: 20-400 ft

Benefit to Water Quality: The current level of canopy closure and width of the riparian corridor should mitigate for the lack of canopy along sections of the tributaries and have a positive influence on overall stream water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 35

Range of scores: 13-72

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Jackson Creek (Main Stem; Trib. I)	1	8	6	6	4	6	6	2	6	6	2	3	3	5	2	65
North Jackson Creek (Main Stem; Trib. I)	2	8	6	4	2	6	6	1	3	4	2	3	3	3	2	53
North Jackson Creek (Main Stem; Trib. I)	3	8	6	2	2	3	3	2	2	2	2	2	2	2	2	40
AVERAGES		8.0	6.0	4.0	2.7	5.0	5.0	1.7	3.7	4.0	2.0	2.7	2.7	3.3	2.0	52.7

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Jackson Creek (Main Stem; Trib. I)	1	20	200			X	
North Jackson Creek (Main Stem; Trib. I)	2	200	200			X	
North Jackson Creek (Main Stem; Trib. I)	3	100	100			X	
AVERAGES		106.7	166.7	0%	0%	100%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Jackson Creek Trib. IA (North)	1	6	6	8	2	5	5	2	5	5	2	4	4	5	0	59
North Jackson Creek Trib. IA (North)	2	6	6	8	2	6	8	3	8	8	3	4	4	6	0	72
North Jackson Creek Trib. IA (North)	3	6	6	0	2	1	1	1	0	0	0	0	0	0	0	17
North Jackson Creek Trib. IA (North)	4	4	3	0	2	2	2	2	0	0	0	0	0	0	0	15
North Jackson Creek Trib. IA (North)	5	4	3	1	3	2	2	1	0	0	0	0	0	0	0	16
North Jackson Creek Trib. IA (North)	6	4	3	2	2	2	2	1	1	2	2	2	2	0	0	25
AVERAGES		5.0	4.5	3.2	2.2	3.0	3.3	1.7	2.3	2.5	1.2	1.7	1.7	1.8	0.0	34.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Jackson Creek Trib. IA (North)	1	150	150				X
North Jackson Creek Trib. IA (North)	2	200	200				X
North Jackson Creek Trib. IA (North)	3	200	200			X	
North Jackson Creek Trib. IA (North)	4	10	10	X			
North Jackson Creek Trib. IA (North)	5	10	10	X			
North Jackson Creek Trib. IA (North)	6	100	100				X
AVERAGES		111.7	111.7	33%	0%	17%	50%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N				
North Jackson Creek Trib. IB (South)	1	4	3	4	2	3	3	2	4	3	2	1	1	1	0	33			
North Jackson Creek Trib. IB (South)	2	4	3	4	2	4	3	2	3	3	2	1	1	1	0	33			
North Jackson Creek Trib. IB (South)	3	4	3	0	2	1	1	0	1	1	0	0	0	0	0	13			
North Jackson Creek Trib. IB (South)	4	4	3	1	2	1	1	0	1	1	0	0	0	0	0	14			
AVERAGES		4.0	3.0	2.3	2.0	2.3	2.0	1.0	2.3	2.0	1.0	0.5	0.5	0.5	0.0	23.3			

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:		
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%
North Jackson Creek Trib. IB (South)	1	150	75			X
North Jackson Creek Trib. IB (South)	2	150	50			X
North Jackson Creek Trib. IB (South)	3	10	10	X		
North Jackson Creek Trib. IB (South)	4	10	10	X		
AVERAGES		80.0	36.3	50%	0%	50%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDWOOD CREEK (Main Stem)
Stream Profile

GENERAL INFORMATION

Location Study Area: Wildwood-McKay Area

Length Inventoried: 1,000 ft (0.2 mile)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 1,000 ft (0.2 mile)

Area of Watershed in Multnomah County: 90 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Wildwood (mainstem)		100%			

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

Wildwood Creek is comprised of a short main stem and three forks, each of which have two major tributaries. The main stem flows through Wildwood Golf Course. Access permission to this area was denied. Aerial photo's and indirect observation indicate that most of the stream within the developed golf course has been altered or affected by the golf course. Vegetation on the south side of the stream is intact in some areas. The north side has been converted to maintain fairways to within 10 feet of the stream channel. While this area has been disturbed by human activity, regular human presence is seasonal and diurnal. The forage provided by the golf course and associated creek may be used by opportunistic species at times when human activity is limited. A black-tailed deer was seen leaving the golf course in the early morning.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: This part of the creek flows through Wildwood Golf Course. The creek contributes to the aesthetic character of the golf course. The water hazards associated with the stream are an important aspect in the play of the golf course, providing a water hazard on each hole in the course.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Not surveyed

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: Not surveyed

Range of Width: Not surveyed

Benefit to Water Quality: Aerial photos indicate canopy cover and riparian buffer are insufficient to provide benefit to water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: Not surveyed

Range of scores: Not surveyed

SRI/SHAPIRO Project #7935258
Wildwood Creek (Main Stem) Prof.

May 13, 1994

NORTH WILDWOOD CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Wildwood-McKay Area

Length Inventoried: 17,950 ft (3.4 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 17,950 ft (3.4 miles)

Area of Watershed in Multnomah County: 1,015 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
North Wildwood		100%			

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

North Wildwood Creek - Main Stem

The main stem of the north fork flows through a meadow 100 - 300 feet wide before flowing into a culvert and entering the golf course. The main stem is approximately 1,200 feet long. At one time this area had at least a sparse overstory of red alder. Most of the overstory has been removed, and only occasional alder has been left in the stream area. The remaining vegetation is primarily reed canary grass, Himalayan blackberry, and salmonberry. The stream is crossed by a dirt road with no culvert that exhibits evidence of recent use. Gravel roads parallel the stream on both sides at the meadow's edge. An old beaver dam is present but has been breached. Fish (unknown species) were seen, and elk and deer tracks are abundant.

The stream is 8-10 feet wide and one-two feet deep where it enters the golf course. It's substrate is an even mix of cobble/gravel/sand and sediment with some boulders forming pools. The stream is 55% riffle/run and 45% pools.

North Wildwood Creek - Tributary IIA

The stream originates from a two-three acre beaver pond surrounded by 18-24-inch Douglas fir/western hemlock stand. The stream flows out of the pond and into a steep, narrow draw. The south bank is mixed stand dominated by 20-24-inch Douglas fir and the north is a 20-year-old Douglas fir plantation. The stream crosses under a road through a culvert approximately 1,500 feet from the origin. A small wetland is located just west of the road. East of the road the stream flows through areas harvested at various times. The south side is a four-five-year-old Douglas fir plantation and the north side is a 10-15-year-old plantation. The overstory is minimal and primarily red alder. The shrub layer is dense, with salmonberry, devils club and young red alder. Active beaver dams were observed approximately 1,500 feet from the road crossing. The stream continues to flow through a narrow draw with steep side slopes (45 degrees) and enters an area where a 50-foot buffer has been left on both sides of the stream. The shrub layer is dense salmonberry, vine maple, and occasional Himalayan blackberry thickets. Two Pacific yew trees were observed in this area. At approximately 7,500 feet from the origin the stream bottom widens to 30 feet and the buffer appears to be much wider due to older plantations upslope. The last 600 feet of the stream before the confluence is deeply incised (five-seven feet deep and four-six feet across). Overstory in this area is minimal, but the shrub layer remains dense. Six sub-adult bald eagles were seen in the upper reaches of this stream. Nineteen elk also were observed as were 15-20 waterfowl and numerous deer tracks. Several snags with pileated woodpecker foraging holes also were seen. Fish (unknown species) were seen in the lower reaches.

The stream is approximately five feet wide and one-two feet deep at the confluence. The substrate is predominantly cobble/gravel/boulder, with some sand and clay. Large amounts of sediment have been trapped behind the beaver dams. The stream is 80% riffle/run and 20% pool.

North Wildwood Creek - Tributary IIB

The stream originates from several small drainages in a mixed stand dominated by second growth conifers (14-18 inches). The shrub layer is moderate and composed of salmonberry, vine maple, huckleberry, and Oregon grape. Approximately 3,100 feet downstream, the stream crosses a road and enters a clearcut area. Sparse to moderate regeneration is 5-10-year-old Douglas fir. Immediately to the southeast of the crossing there is a 50 x 30 foot wetland area. The stream channel is dominated by a dense shrub layer of salmonberry and Himalayan blackberry. A 25-foot buffer of red alder/big-leaf maple overstory begins lower on the stream. Beaver dams are common throughout these lower reaches to the confluence, where the stream crosses under a road through a culvert.

The stream is two-three feet wide and one-two feet deep near the confluence. The substrate is predominantly gravel and cobble, with large amounts of sediment trapped by the beaver dams. The stream is approximately 35% pool and 65% riffle run. Most of the pools are also due to the beaver dams.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: The creek contributed water to the main stem of Wildwood Creek. Wildwood Creek flows through the Wildwood Golf Course. The water hazards associated with the stream are an important aspect in the play of the golf course, providing a water hazard on each hole in the course.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 94 ft

Range of Width: 30-200 ft

Benefit to Water Quality: The current low to moderately low canopy cover and moderately narrow riparian corridor should maintain current levels of water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 22%

Threatened and Endangered Species data: Six sub-adult bald eagles, *Haliaeetus leucocephalus* were observed in close association with the stream (03/27/94).

Wildlife Habitat Assessment - see attached table

Average score: 53

Range of scores: 42-80

Essential Connections: N

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Wildwood Creek (Trib. II)	1	8	6	2	2	6	3	2	1	2	2	1	2	4	1	42
AVERAGES		8.0	6.0	2.0	2.0	6.0	3.0	2.0	1.0	2.0	2.0	1.0	2.0	4.0	1.0	42.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Wildwood Creek (Trib. II)	1	150	50	X			
AVERAGES		150.0	50.0	100%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Wildwood Creek Trib. IIA (North)	1	8	6	8	2	7	6	3	7	6	3	3	3	6	0	68
North Wildwood Creek Trib. IIA (North)	2	8	6	8	2	6	6	3	6	5	3	1	4	5	0	63
North Wildwood Creek Trib. IIA (North)	3	8	6	7	4	4	6	2	3	4	2	1	4	3	0	54
North Wildwood Creek Trib. IIA (North)	4	4	3	6	2	4	6	2	3	3	2	1	4	3	2	45
North Wildwood Creek Trib. IIA (North)	5	4	3	6	2	4	6	2	3	3	2	1	4	3	2	45
North Wildwood Creek Trib. IIA (North)	6	4	3	4	2	8	6	3	7	7	3	3	4	4	0	58
North Wildwood Creek Trib. IIA (North)	7	4	3	4	4	4	4	2	2	3	3	1	3	4	1	42
North Wildwood Creek Trib. IIA (North)	8	4	3	8	8	4	4	2	7	7	3	3	3	5	0	61
North Wildwood Creek Trib. IIA (North)	9	8	3	8	4	8	6	4	8	7	4	4	4	6	6	80
AVERAGES		5.8	4.0	6.6	3.3	5.4	5.6	2.6	5.1	5.0	2.8	2.0	3.7	4.3	1.2	57.3

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Wildwood Creek Trib. IIA (North)	1	75	50			X	
North Wildwood Creek Trib. IIA (North)	2	50	30		X		
North Wildwood Creek Trib. IIA (North)	3	25	25	X			
North Wildwood Creek Trib. IIA (North)	4	25	25	X			
North Wildwood Creek Trib. IIA (North)	5	25	25	X			
North Wildwood Creek Trib. IIA (North)	6	85	90			X	
North Wildwood Creek Trib. IIA (North)	7	20	10	X			
North Wildwood Creek Trib. IIA (North)	8	20	75	X			
North Wildwood Creek Trib. IIA (North)	9	100	100				X
AVERAGES		47.2	47.8	56%	11%	22%	11%

*Width of riparian corridor in feet (in segment) looking downstream

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Wildwood Creek Trib. IIB (South)	1	8	6	6	4	3	6	2	2	2	2	0	3	2	0	46
North Wildwood Creek Trib. IIB (South)	2	8	6	6	2	3	6	2	2	2	2	0	3	1	0	43
North Wildwood Creek Trib. IIB (South)	3	8	6	6	4	3	6	2	2	2	2	0	3	1	0	45
North Wildwood Creek Trib. IIB (South)	4	8	6	4	8	3	5	2	1	2	2	0	3	2	0	46
North Wildwood Creek Trib. IIB (South)	5	4	3	6	2	6	4	3	6	6	3	3	3	3	0	52
North Wildwood Creek Trib. IIB (South)	6	4	3	6	2	6	4	3	6	6	3	3	3	3	0	52
North Wildwood Creek Trib. IIB (South)	7	4	3	6	2	6	4	3	6	6	3	3	3	3	0	52
AVERAGES		6.3	4.7	5.7	3.4	4.3	5.0	2.4	3.6	3.7	2.4	1.3	3.0	2.1	0.0	48.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:		
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%
North Wildwood Creek Trib. IIB (South)	1	20	20	X		
North Wildwood Creek Trib. IIB (South)	2	20	20	X		
North Wildwood Creek Trib. IIB (South)	3	20	20	X		
North Wildwood Creek Trib. IIB (South)	4	20	20	X		
North Wildwood Creek Trib. IIB (South)	5	65	65		X	
North Wildwood Creek Trib. IIB (South)	6	65	65		X	
North Wildwood Creek Trib. IIB (South)	7	65	65		X	
AVERAGES		39.3	39.3	57%	43%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MIDDLE WILDWOOD CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Wildwood-McKay Area

Length Inventoried: 10,630 ft (2.0 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 10,630 ft (2.0 miles)

Area of Watershed in Multnomah County: 645 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Middle Wildwood		100%			

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

Middle Wildwood Creek - Main Stem

Approximately 1,000 feet of the stream are within the golf course and were not surveyed. The description is from the confluence of the two tributaries downstream. The area on both sides of the confluence has been clearcut and replanted on both sides. The regeneration (Douglas fir) appears to be 5-10 years old and has a moderate stocking level. Some overstory of red alder has been left in the stream channel although it is sparse. The shrub layer varies in density and is comprised of salmonberry, elderberry, vine maple, and Himalayan blackberry. The south slope is steep, often greater than 45 degrees and a large slump has occurred approximately 500 feet from the confluence. Two thousand feet from the confluence, just east of the powerlines, there is a wetland/pond area created by a beaver dam. The stream then enters a mixed conifer/deciduous stand, the stream becomes sinuous and the floodplain widens to 200 feet. The shrub layer is similar. The stream flows into the stand for 1,000 feet then enters the golf course.

The stream is six feet wide and 6-24 inches deep near the golf course. It's substrate is a mix of silt, sand, gravel, cobbles and occasional boulders. It is approximately 15% pools and 85% riffle/run.

Middle Wildwood Creek - North Tributary

The stream originates from several small drainages in a mixed stand dominated by mature Douglas fir with occasional red alder and big-leaf maple. The shrub layer is salmonberry, huckleberry, vine maple, and Indian plum. The stream crosses under a gravel road and enters a harvested area. The south side was harvested within one year of this report and the north is a five-year-old Douglas fir plantation. Just north of the culvert and east of the road there is 50 by 100-foot wetland surrounded by big-leaf maple, red alder and occasional Douglas fir.

The stream banks are steep, the south is 85-90 degrees and the north side is 75 degrees. The south side has experienced multiple bank failures. The resulting debris torrents often cover the stream channel.

The stream is two feet wide and one foot deep at the confluence. The substrate, where it is visible, is dominated by gravel with some cobble, boulders and silt. Sediment is especially evident in the lower sections.

Middle Wildwood Creek - South Tributary IB

The stream originates from several small drainages in a mixed stand of moderate-size big-leaf maple, Douglas fir, and western red cedar with a sparse understory of huckleberry, and salmonberry. The stream then crosses under a road and enters a recent clearcut. The stream moves through the clear cut for approximately 1,400 feet, then crosses a road and enters a steep-sided draw with 45 degree slopes. The stream bottom is 10 feet wide. A thin buffer (30 feet) has been left. The buffer is primarily red alder with elderberry, salmonberry and Himalayan blackberry in the understory. Upslope is plantation to the south and a road to the north.

The stream is four feet wide and six inches deep at the confluence. The substrate is dominated by cobbles where visible. The stream is 95% riffle/run and 5% pool.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: The creek contributes water to the main stem of Wildwood Creek. Wildwood Creek flows through the Wildwood Golf Course. The water hazards associated with the stream are an important aspect in the play of the golf course, providing a water hazard on each hole in the course.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 134 ft

Range of Width: 20-400 ft

Benefit to Water Quality: The low to moderately low level of canopy cover and relatively narrow riparian corridor are not sufficient to mitigate for the lack of canopy cover and narrow riparian buffer along the middle reaches of the stream. The canopy is sufficient to maintain the current water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 28%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 42

Range of scores: 12-57

Essential Connections: The middle segments with lower WHA scores provide potential travel corridors for movement and dispersal to the areas upstream and downstream with higher WHA scores.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Middle Wildwood Creek (Trib. I)	1	8	6	2	4	4	5	2	2	2	2	1	3	2	0	43
Middle Wildwood Creek (Trib. I)	2	8	6	8	2	4	6	2	5	4	2	2	2	3	0	54
AVERAGES		8.0	6.0	5.0	3.0	4.0	5.5	2.0	3.5	3.0	2.0	1.5	2.5	2.5	0.0	48.5

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Middle Wildwood Creek (Trib. I)	1	40	40			X	
Middle Wildwood Creek (Trib. I)	2	200	200				X
AVERAGES		120.0	120.0	0%	0%	50%	50%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Middle Wildwood Creek Trib. IA (North)	1	4	3	0	4	1	1	2	0	0	0	0	4	1	0	20
Middle Wildwood Creek Trib. IA (North)	2	4	3	6	2	8	4	3	6	6	3	3	4	3	2	57
Middle Wildwood Creek Trib. IA (North)	3	4	3	6	2	7	4	3	6	6	3	3	4	4	0	55
Middle Wildwood Creek Trib. IA (North)	4	4	3	6	2	6	4	3	6	6	3	4	4	3	0	54
AVERAGES		4.0	3.0	4.5	2.5	5.5	3.3	2.8	4.5	4.5	2.3	2.5	4.0	2.8	0.5	46.5

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Middle Wildwood Creek Trib. IA (North)	1	10	10	X			
Middle Wildwood Creek Trib. IA (North)	2	70	65		X		
Middle Wildwood Creek Trib. IA (North)	3	70	80		X		
Middle Wildwood Creek Trib. IA (North)	4	80	80			X	
AVERAGES		57.5	58.8	25%	50%	25%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
Middle Wildwood Creek Trib. IB (South)	1	4	3	4	2	3	7	2	2	2	2	0	3	3	0	37		
Middle Wildwood Creek Trib. IB (South)	2	4	3	4	2	4	5	2	2	1	2	1	3	2	0	35		
Middle Wildwood Creek Trib. IB (South)	3	4	3	0	2	0	0	0	0	0	0	0	0	3	0	12		
Middle Wildwood Creek Trib. IB (South)	4	4	3	5	2	4	3	2	6	6	3	4	4	2	0	45		
AVERAGES		4.0	3.0	3.3	2.0	2.8	3.8	1.5	2.5	2.3	1.8	1.3	3.3	1.8	0.0	33.0		

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Middle Wildwood Creek Trib. IB (South)	1	25	25		X		
Middle Wildwood Creek Trib. IB (South)	2	10	10	X			
Middle Wildwood Creek Trib. IB (South)	3	10	10	X			
Middle Wildwood Creek Trib. IB (South)	4	200	100			X	
AVERAGES		61.3	36.3	50%	25%	25%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

SOUTH WILDWOOD CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Wildwood-McKay Area

Length Inventoried: 9,506 ft (1.8 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 14,050 ft (2.7 miles)

Area of Watershed in Multnomah County: 600 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
South Wildwood		100%			

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

South Wildwood Creek - Main Stem

Access below the powerlines was denied. The stream is in a deep valley with moderate side slopes of 15-30 degrees. The flood plain is 20-30 feet wide. The overstory is red alder, big-leaf maple, western red cedar, Douglas fir, and western hemlock. The shrub layer is moderately dense salmonberry, vine maple, rose, and occasional huckleberry. Several small wetlands were observed adjacent to the stream. A dirt road crosses the stream and runs up the stream bed for 20-30 feet before heading up the north slope.

The stream is 6-10 feet wide and averages six inches deep. The substrate is cobble/boulder with gravel and silt common. The stream is 95% riffle/run and 5% pools.

The stream is three feet wide at the confluence and six inches deep. The substrate is gravel/cobble sand with some boulders and silt. The stream is 95% riffle/run and 5% pools

South Wildwood Creek - South Tributary IIIB

This stream also originates in a clear cut area that has been replanted in the last 10 years. The shrub layer is dominated by dense salmonberry and Himalayan blackberry. The stream crosses a road at 3,000 feet from the headwaters. It then enters a mixed stand of red alder, big-leaf maple, western red cedar, Douglas fir, and western hemlock. The shrub layer is dense salmonberry, vine maple, rose, and occasional huckleberry. The banks are often 50+ degrees. The channel is incised to bedrock in several places.

The stream is three feet wide and six inches deep at the confluence. The substrate is cobble/boulder with gravel and silt common and occasional bedrock in the lower reaches. The stream is 95% riffle/run and 5% pools.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S37398	SESW 12 2N 2W	Domestic (Inc. Lawn & Garden)	.0100CFS
S11017	SESW 12 2N 2W	Domestic (Inc. Lawn & Garden)	.0500 CFS
S44813	SWSE 11 2N 2W	Irrigation	.0090 CFS
S44813	SWSE 11 2N 2W	Domestic	.0050 CFS
S44737	SWSE 11 2N 2W	Domestic	.0050 CFS
S44737	SWSE 11 2N 2W	Irrigation	.0060 CFS
S44814	SWSE 11 2N 2W	Domestic	.0050 CFS
S44814	SWSE 11 2N 2W	Irrigation	.0050 CFS
S39317	SESW 12 2N 2W	Domestic	.0100 CFS
S39317	SESW 12 2N 2W	Irrigation	.0500 CFS

RECREATION

Park/Recreational Facility: The creek contributed water to the main stem of Wildwood Creek. Wildwood Creek flows through the Wildwood Golf Course. The middle segments with lower WHA scores provide potential travel corridors for movement and dispersal to the areas upstream and downstream with higher WHA scores.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

SRI/SHAPIRO Project #7935258
South Wildwood Creek Profile

May 13, 1994

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage:

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 98 ft

Range of Width: 40-275 ft

Benefit to Water Quality: The low level of canopy cover and narrow or non-existent riparian buffer on the stream length surveyed is not sufficient to maintain water quality and will have a negative effect on overall water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 39%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 37

Range of scores: 28-61

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

SRI/SHAPIRO Project #7935258
South Wildwood Creek Profile

May 13, 1994

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
South Wildwood Creek (Trib. III)	1	8	6	6	4	7	4	2	6	4	3	2	4	5	0	61
AVERAGES		8.0	6.0	6.0	4.0	7.0	4.0	2.0	6.0	4.0	3.0	2.0	4.0	5.0	0.0	61.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
South Wildwood Creek (Trib. III)	1	75	75				X
AVERAGES		75.0	75.0	0%	0%	0%	100%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
South Wildwood Creek Trib. IIIA (North)	1	4	3	3	2	2	4	2	1	1	2	0	3	1	0	28
South Wildwood Creek Trib. IIIA (North)	2	4	3	3	2	2	4	2	1	1	2	0	3	1	0	28
South Wildwood Creek Trib. IIIA (North)	3	4	3	4	2	3	5	2	2	1	2	0	3	1	0	32
South Wildwood Creek Trib. IIIA (North)	4	4	3	2	2	3	5	2	2	2	2	0	3	1	0	31
South Wildwood Creek Trib. IIIA (North)	5	4	3	4	2	6	4	2	7	4	3	2	2	5	0	48
AVERAGES		4.0	3.0	3.2	2.0	3.2	4.4	2.0	2.6	1.8	2.2	0.4	2.8	1.8	0.0	33.4

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
South Wildwood Creek Trib. IIIA (North)	1	20	20	X			
South Wildwood Creek Trib. IIIA (North)	2	20	20	X			
South Wildwood Creek Trib. IIIA (North)	3	20	20	X			
South Wildwood Creek Trib. IIIA (North)	4	20	20	X			
South Wildwood Creek Trib. IIIA (North)	5	200	75		X		
AVERAGES		56.0	31.0	80%	20%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
South Wildwood Creek Trib. IIIB (South)	1	4	3	7	2	6	4	2	7	4	3	3	4	5	0	54
South Wildwood Creek Trib. IIIB (South)	2	4	3	4	2	3	6	2	1	1	2	0	1	0	0	29
South Wildwood Creek Trib. IIIB (South)	3	4	3	4	2	3	6	2	1	1	2	0	2	0	0	30
South Wildwood Creek Trib. IIIB (South)	4	4	3	3	2	3	4	2	1	1	2	0	3	0	0	28
AVERAGES		4.0	3.0	4.5	2.0	3.8	5.0	2.0	2.5	1.8	2.3	0.8	2.5	1.3	0.0	35.3

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
South Wildwood Creek Trib. IIIB (South)	1	200	75		X		
South Wildwood Creek Trib. IIIB (South)	2	20	20	X			
South Wildwood Creek Trib. IIIB (South)	3	20	20	X			
South Wildwood Creek Trib. IIIB (South)	4	20	20	X			
AVERAGES		65.0	33.8	75%	25%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

NORTH RAINBOW CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Holbrook-Logie

Length Inventoried: 10,570 ft (2.0 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 10,570 ft (2.0 miles)

Area of Watershed in Multnomah County: 775 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
North Rainbow		100%			

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

North Rainbow Creek

Access was denied to the lower portion of North Rainbow Creek. Approximately 6,000 feet from U.S. Highway 30, it branches into north and south forks (Tributary I and Tributary II, respectively).

Main Stem

This part of the stream is from the confluence of the tributaries downstream. The stream flows through a clear cut with most of the overstory removed. The shrub layer is very dense salmonberry and Himalayan blackberry. Approximately 500 feet below the confluence, the stream flows under powerlines. The access road has been washed out at the culvert. The stream enters a mixed stand of red alder (8-12 inches) and western red cedar (20-30 inches). Canopy cover is highly variable. Near the middle of the main stem all overstory has been removed and the stream becomes very sinuous. The shrub layer becomes dense salmonberry and young alder in a 300-400-foot-wide floodplain. The

stream then enters a forest wetland area with an overstory of red-alder (12-24 inches), big-leaf maple (10-16 inches), and western red cedar (12-16 inches). Understory is salmonberry, vine maple, and elderberry. The ground cover is piggy back plant, skunk cabbage, nettle, reed-canary grass and cattails. The wetland area is approximately 1,000 feet long and 300 feet wide. Its east edge abuts Rainbow Lake. Access was denied to the lake area. The creek is primarily against the toe of the south slope.

The stream is low gradient in the lower sections below the confluence. The substrate is primarily silt with occasional areas of gravel/cobbles. Very few pools are present. Water temperature is 9.5 degrees Celsius.

North Fork (Tributary I)

This stream originates from several drainages downslope from the intersection of Skyline Boulevard and Logie Trail. The drainages collect and form the mainstem. Most of the area has been clear cut at some time in the past. Two houses are located to the west and southwest. The stream passes through a thin sparse buffer (300-foot-wide slope distance, 45-60 degree slope) of mixed conifer/deciduous stand. Overstory is red alder, Douglas fir, western red cedar, and western hemlock. Understory is made up of patches of very dense salmonberry and Himalayan blackberry with sword fern and Oregon grape upslope. Downstream the buffer thins and in places is lost. The shrub layer remains dense. A Pacific giant salamander was seen 200 feet upstream from the powerlines.

South Fork (Tributary II)

Access was denied to the stream above Logie Trail. East of Logie Trail, the overstory has been removed and is not yet re-established. The shrub layer is salmonberry, elderberry, and Himalayan blackberry, and is very dense. At approximately 1,500 feet from Logie Trail, a gravel road with culvert crosses the stream. It continues for 1,500 feet to the confluence.

The stream is fairly constrained and the flood plain channel is usually less than 10-15 feet wide. Stream substrate is predominantly cobble with areas of silt/sediment. It is almost entirely riffle/run. Stream temperature was 9.5 degrees Celsius.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: None

SRI/SHAPIRO Project #7935258
North Rainbow Creek Profile

May 13, 1994

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 137 ft

Range of Width: 40-300 ft

Benefit to Water Quality: The moderate level of canopy cover on the mainstem will help mitigate any water temperature increases caused by the lack of canopy cover along the tributaries.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 47

Range of scores: 35-72

Essential Connections: N/A

SRI/SHAPIRO Project #7935258
North Rainbow Creek Profile

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: HOLBROOK-LOGIE

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Rainbow Creek (Main Stem)	1	8	6	8	8	6	6	2	6	4	2	3	3	6	4	72
North Rainbow Creek (Main Stem)	2	8	6	8	4	4	8	2	1	2	2	2	2	4	0	53
North Rainbow Creek (Main Stem)	3	8	6	8	2	4	8	2	1	2	2	2	2	3	0	50
North Rainbow Creek (Main Stem)	4	8	6	8	2	6	4	2	5	5	3	3	2	4	3	61
North Rainbow Creek (Main Stem)	5	8	6	8	2	4	4	2	3	2	2	3	3	3	1	51
North Rainbow Creek (Main Stem)	6	4	3	8	2	3	6	2	2	2	2	1	4	2	1	42
AVERAGES		7.3	5.5	8.0	3.3	4.5	6.0	2.0	3.0	2.8	2.2	2.3	2.7	3.7	1.5	54.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Rainbow Creek (Main Stem)	1	200	100		X		
North Rainbow Creek (Main Stem)	2	150	150			X	
North Rainbow Creek (Main Stem)	3	60	60		X		
North Rainbow Creek (Main Stem)	4	100	150				X
North Rainbow Creek (Main Stem)	5	100	100			X	
North Rainbow Creek (Main Stem)	6	20	20	X			
AVERAGES		105.0	96.7	17%	33%	33%	17%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Rainbow Creek Trib. I (North)	1	4	3	6	2	3	5	2	2	2	3	1	1	1	0	35
AVERAGES		4.0	3.0	6.0	2.0	3.0	5.0	2.0	2.0	2.0	3.0	1.0	1.0	1.0	0.0	35.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Rainbow Creek Trib. I (North)	1	20	20	X			
AVERAGES		20.0	20.0	100%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
North Rainbow Creek Trib. II (South)	1	4	3	6	2	4	6	2	2	2	2	0	1	3	0	37
North Rainbow Creek Trib. II (South)	2	4	3	6	2	4	6	2	2	2	2	0	1	1	0	35
North Rainbow Creek Trib. II (South)	3	4	3	6	2	4	6	2	2	2	2	0	1	2	0	36
AVERAGES		4.0	3.0	6.0	2.0	4.0	6.0	2.0	2.0	2.0	2.0	0.0	1.0	2.0	0.0	36.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
North Rainbow Creek Trib. II (South)	1	20	20	X			
North Rainbow Creek Trib. II (South)	2	20	20	X			
North Rainbow Creek Trib. II (South)	3	20	20	X			
AVERAGES		20.0	20.0	100%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

SOUTH RAINBOW CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Holbrook-Logie

Length Inventoried: 8,450 ft (1.6 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 9,390 ft (1.8 miles)

Area of Watershed in Multnomah County: 510 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
South Rainbow		60%		40%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

South Rainbow Creek-Main Stem

Access was denied to the lower portion of South Rainbow Creek. At approximately 2,000 feet upslope from where U.S. Highway 30 crosses the stream it branches into north and south forks (Tributary I and Tributary II, respectively).

The main stem of South Rainbow Creek is low gradient with wide floodplain/bottom. The overstory is mixed deciduous/conifer with good canopy closure (50%). Dominant overstory tree is red alder and the dominant shrub is salmonberry. Pileated woodpecker foraging holes were observed. Small wetlands adjacent to the stream are common. Stream substrate is predominantly gravel and silt with some cobble and sand. Riffles and pools appear in about equal proportions.

South Fork (Tributary II)

The headwaters originate in a 50-year-old second growth mixed conifer/deciduous stand dominated in the stream channel by red alder with scattered Douglas fir, western hemlock, and western red cedar. The understory is dominated by salmonberry. Old logging roads are evident upslope. Downstream

approximately 1,000 feet the southeast side of the stream has been clear-cut three-five years prior to this survey. A 50-foot-wide buffer was left. The northwest side of the stream is similar to the upstream stand. Powerlines cross the stream approximately 4,000 feet west of U.S. Highway 30. A roadfill over a 36 inches culvert has been eroded but has not completely failed. Down stream from the powerlines, the stream enters a mixed conifer/deciduous stand similar to the headwaters area. A red-legged frog was seen here.

The upper portion of the stream is bounded by steep slopes with a narrow floodplain to more gentle slopes with 130-foot-wide floodplain. The stream is primarily riffle/run with more pools towards the confluence. Substrate is predominantly gravel and sand.

North Fork (Tributary I)

The headwaters of the north fork originate in a 5-10-year-old clear-cut, replanting success appears poor. Red alder has become established in the stream channel area and is the predominate overstory vegetation. The understory is elderberry, salmonberry, sword fern, and waterleaf. The stream crosses under powerlines and enters a 30-50-year-old mixed deciduous/conifer stand, overstory is primarily red alder and big-leaf maple, with western hemlock and Douglas fir. Understory is salmonberry, elderberry, and Himalayan blackberry. Downstream just prior to the confluence, wetlands are adjacent to the stream channel.

The upper reaches of the stream are constrained by steep slopes. As the stream proceeds east the floodplain widens. The substrate is a cobble, gravel, sand, and silt mix with gravel most prevalent. The stream is primarily riffle/run with few pools.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S12744	NWNW 18 2N 1W	Fish	.9500 CFS
S20782	NWNW 18 2N 1W	Irrigation	.0100 CFS
S12290	NWNW 18 2N 1W	Wildlife	1.000 CFS
S49479	SWNW 18 2N 1W	Domestic (Inc. Non-Commercial)	.0100 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 55 ft

Range of Width: 5-150 ft

Benefit to Water Quality: The current moderately high level of canopy cover but narrow riparian corridor should maintain water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 53%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 50

Range of scores: 37-59

Essential Connections: N/A

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: HOLBROOK-LOGIE

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:								TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N							
South Rainbow Creek (Main Stem)	1	8	6	6	5	4	4	2	6	4	2	4	3	2	2	58						
AVERAGES		8.0	6.0	6.0	5.0	4.0	4.0	2.0	6.0	4.0	2.0	4.0	3.0	2.0	2.0	58.0						

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:		
		Left (ft)	Right (ft)	0-25%	25-50%	50-75% 75-100%
South Rainbow Creek (Main Stem)	1	75	75			X
AVERAGES		75.0	75.0	0%	0%	100%

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
South Rainbow Creek Trib. I (North)	1	6	4	7	4	4	4	2	6	5	2	4	4	4	0	56
South Rainbow Creek Trib. I (North)	2	5	3	6	3	4	4	2	4	4	2	4	3	3	0	47
South Rainbow Creek Trib. I (North)	3	4	2	6	3	4	4	2	4	4	2	4	2	3	0	44
South Rainbow Creek Trib. I (North)	4	4	2	7	2	4	4	2	4	4	2	4	4	4	2	49
AVERAGES		4.8	2.8	6.5	3.0	4.0	4.0	2.0	4.5	4.3	2.0	4.0	3.3	3.5	0.5	49.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
South Rainbow Creek Trib. I (North)	1	50	40			X	
South Rainbow Creek Trib. I (North)	2	30	10			X	
South Rainbow Creek Trib. I (North)	3	5	4			X	
South Rainbow Creek Trib. I (North)	4	30	30		X		
AVERAGES		28.8	21.0	0%	25%	75%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
South Rainbow Creek Trib. II (South)	1	8	6	7	5	4	4	2	4	5	2	4	4	4	0	59
South Rainbow Creek Trib. II (South)	2	5	3	8	2	4	4	3	3	4	4	3	4	4	0	51
South Rainbow Creek Trib. II (South)	3	4	2	2	2	4	7	2	3	4	2	2	1	2	0	37
AVERAGES		5.7	3.7	5.7	3.0	4.0	5.0	2.3	3.3	4.3	2.7	3.0	3.0	3.3	0.0	49.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
South Rainbow Creek Trib. II (South)	1	40	30				X
South Rainbow Creek Trib. II (South)	2	5	10			X	
South Rainbow Creek Trib. II (South)	3	3	2	X			
AVERAGES		16.0	14.0	33%	0%	33%	33%

*Width of riparian corridor in feet (in segment) looking downstream.

HOLBROOK CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Holbrook-Logie Area

Length Inventoried: 10,560 ft (2.0 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 10,560 ft (2.0 miles)

Area of Watershed in Multnomah County: 360 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Holbrook		95%		5%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

The stream's headwaters, immediately east of Skyline Boulevard, have been clearcut. No overstory remains. Small-diameter slash is abundant throughout the stream channel. A shrub layer of young red alder, salmonberry, salal, and snowberry is establishing itself. The area has been replanted with Douglas fir seedlings, however, the stocking levels appear low. Ground cover is made up of various grasses, swordfern, and trailing blackberry. The stream flows through the clear cut for approximately one-half mile where it enters a mixed deciduous/conifer stand. A road is on the south bank, approximately 50 feet upslope. The road leads to a house on the southeast edge of the clearcut, 300 feet upslope from the stream. The overstory directly in the stream channel is predominately red alder with occasional big-leaf maple, western red cedar, and Douglas fir. Downstream the western red cedar become more prevalent and larger (20-28 inches). The north side of the stream is a Douglas fir plantation (8-18 inches). The shrub layer is very diverse and moderate in density. It is made up of salmberry, snowberry, elderberry, huckleberry and vine maple. Ground cover is Oregon grape, sword fern, trailing blackberry, and trillium.

Approximately 2,000 feet downstream from the edge of the clear cut the stream flows through a culvert under a new rock road. Portions of the stream channel and upslope areas to the north have been cleared and a young fruit orchard planted. The stream becomes deeply incised (six-seven feet) for 200-300 feet. The surrounding vegetation is primarily red alder with salmonberry/elderberry

understory. The stream then widens out into a wide floodplain with associated wetlands. What appears to be a pump station was being constructed on the south bank.

The stream reenters a mixed deciduous/conifer stand after 1,000 feet. The overstory and understory is similar in composition to the upstream stand; however, the trees are generally larger (alder 20 inches, and conifers 20-24 inches) and salmonberry is the most prevalent shrub. There are also patches of dense Himalayan blackberry.

As the stream approaches U.S. Highway 30 it enters a wetland area 75 feet by 150 feet. Several alder snags with pileated woodpecker foraging holes and a red-legged frog where seen here.

Morphology is varied throughout the streams length, from a deeply-incised channel with silt/clay substrate to a wide shallow flow with gravel/boulder substrate. The stream is almost entirely riffle/run with only occasional pools. The stream flows under U.S. Highway 30 through a culvert.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 157 ft

Range of Width: 30-300 ft

Benefit to Water Quality: The current moderate to high level of canopy cover and the moderate width of riparian corridor should mitigate for any water temperature increases caused by the lack of canopy in the head waters area and have a positive influence on the overall water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 43

Range of scores: 23-58

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: HOLBROOK-LOGIE

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:							TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
Holbrook Creek	1	4	3	7	4	4	6	2	4	3	2	3	3	3	4			52
Holbrook Creek	2	4	3	7	4	6	6	3	6	6	3	4	3	3	0			58
Holbrook Creek	3	4	3	6	2	5	4	3	6	6	3	4	3	3	0			52
Holbrook Creek	4	4	3	6	2	4	4	2	4	4	2	4	4	3	0			46
Holbrook Creek	5	4	3	6	2	4	4	2	5	4	2	3	4	3	0			46
Holbrook Creek	6	4	3	3	4	4	4	2	3	3	2	1	1	4	0			38
Holbrook Creek	7	4	3	5	2	5	4	2	5	4	2	2	1	3	0			42
Holbrook Creek	8	4	3	6	2	7	6	2	4	4	3	2	2	3	0			48
Holbrook Creek	9	4	3	2	2	2	2	2	1	1	2	0	3	2	0			26
Holbrook Creek	10	4	3	2	2	2	1	2	1	1	2	0	3	0	0			23
AVERAGES		4.0	3.0	5.0	2.6	4.3	4.1	2.2	3.9	3.6	2.3	2.3	2.7	2.7	0.4			43.1

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor* Left (ft)	Right (ft)	Extent of Overhead Canopy:			
				0-25%	25-50%	50-75%	75-100%
Holbrook Creek	1	150	75			X	
Holbrook Creek	2	75	100				X
Holbrook Creek	3	100	75				X
Holbrook Creek	4	75	75			X	
Holbrook Creek	5	150	75				X
Holbrook Creek	6	150	150			X	
Holbrook Creek	7	75	75			X	
Holbrook Creek	8	75	30			X	
Holbrook Creek	9	15	15	X			
Holbrook Creek	10	15	15	X			
AVERAGES		88.0	68.5	20%	0%	50%	30%

*Width of riparian corridor in feet (in segment) looking downstream.

SOUTH JACKSON CREEK Stream Profile

Upper Rock Creek Area

GENERAL INFORMATION

Location Study Area: Upper Rock Creek Area

Length Inventoried: 4,220 ft (0.8 mile)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 4,220 ft (0.8 mile)

Area of Watershed in Multnomah County: 120 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
South Jackson		100%			

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

South Jackson Creek

South Jackson originates southwest of the intersection of Johnson and Beck Roads. The upper reaches flow through a mixed conifer/deciduous forest with occasional large conifers (> 28 inches) and abundant conifer snags, some with pileated woodpecker foraging holes. Coarse woody debris is abundant in the stream area. At approximately 2,000 feet from the origin, a dirt road crosses the stream over a stone culvert. The road shows recent use. A pasture is adjacent to the stream at approximately 2,200 feet, a 30-foot buffer has been maintained. Understory becomes sparse and overstory is primarily deciduous with occasional conifers. A one-half-acre pond (constructed) was observed approximately 3,300 feet from the start. The area around the pond is not well vegetated but west toward the county line the riparian vegetation density increases. Evidence of frequent deer use was common along the entire stream reach.

The stream is small (< 3 feet wide and 1 foot in depth) and has low flows. The higher reaches are intermittent even in the winter months, although the channel is well defined. The stream is low gradient, and side slopes are shallow. The stream bed is mostly clay and sediment until just prior to the County line where boulders become predominant. The stream is predominantly riffle/run with only 5% pool. Stream temperature averages 8.0 degrees Celsius.

ECONOMIC

DWR Water Rights Data: none

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: 350 ft

Range of Width: 300-400 ft

Benefit to Water Quality: The current high level of canopy cover and large riparian width will positively influence water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey

Wildlife Habitat Assessment - see attached table

Average score: 53

Range of scores: 38-70

Essential Connections: N/A

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
South Jackson Creek	1	4	3	8	2	8	8	3	8	7	3	4	4	6	2	70		
South Jackson Creek	2	4	3	8	2	6	6	3	7	6	3	2	1	5	0	56		
South Jackson Creek	3	4	3	5	2	4	4	2	2	3	2	2	1	4	0	38		
South Jackson Creek	4	4	3	5	4	6	6	2	4	4	2	2	2	4	0	48		
AVERAGES		4.0	3.0	6.5	2.5	6.0	6.0	2.5	5.3	5.0	2.5	2.5	2.0	4.8	0.5	53.0		

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
South Jackson Creek	1	200	200				X
South Jackson Creek	2	200	200				X
South Jackson Creek	3	100	200			X	
South Jackson Creek	4	100	200			X	
AVERAGES		150.0	200.0	0%	0%	50%	50%

*Width of riparian corridor in feet (in segment) looking downstream.

NORTH ROCK CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Upper Rock Creek Area

Length Inventoried: 28,510 feet (5.4 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 28,510 feet (5.4 miles)

Area of Watershed in Multnomah County: 2,190 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
North Rock		95%		5%	

Key:

EFU: Exclusive Farm Use
 CFU: Commercial Forestry Use
 MUA: Multiple Use Agriculture
 RR: Rural Residential
 R10: Urban Residential

Stream Description:

North Rock Creek

North Rock Creek originates southeast of the intersection of Johnson and Beck roads. The overstory around the stream is dominated by young deciduous trees with mature conifers upslope. Further downstream the riparian overstory is comprised of old growth conifers interspersed in a stand of large big-leaf maple and red alder. Two thousand feet downstream, the stream is bounded by a pasture for approximately 300 feet. The stream then re-enters a mixed conifer/deciduous stand and continues in it to the County line.

The stream is shallow (ave. 6 inches) and relatively wide for it's low flow. It is a low gradient stream for most of the surveyed length. The channel varies between deeply-incised and shallow. The stream bed is predominantly silt/clay with some gravel/cobble/boulder in the lower reaches. It is 95% riffle/run with 5% pool. Stream temperatures averages 8.0 degrees Celsius

Another segment of the mainstem begins at the County line below a dam (unsure of operator or purpose). The stream runs through pastures and fields for its first 3,000 feet. The overstory in many places has been removed and understory is sparse to nonexistent. Some areas in the upper reaches have a deciduous overstory with interspersed conifer. The stream crosses under Rock Creek Road at approximately 1,000 feet through a culvert. Rock Creek Road bounds the creek on the east side and often constrains the floodplain. In some areas livestock have access to the stream. At approximately 3,000 feet the stream enters a young, primarily deciduous forest with good understory. This continues to County line.

The stream is wide (6-10 feet) and relatively shallow (3-12 inches). It is low gradient and primarily riffle/run with occasional pools. Substrate is cobble/gravel/sand/clay-silt with sand and silt predominating in the upper reaches and cobble/gravel more prevalent in the lower reaches.

Rock Creek Tributary I

The description of this stream begins from confluence of Tributary IA and IB. The confluence is in an area that was harvested approximately 10 years ago. The overstory is predominantly 20-foot-tall red alder saplings. Himalayan blackberry and salmonberry dominate the shrub layer. A small wetland is located near the stream. One thousand feet below the confluence, the stream enters a mixed deciduous/conifer stand. The riparian area is dominated by red alder and maple with many saplings coming in. This stand continues until the stream joins the lake created by the dam on Rock Creek.

The stream is wide (six feet wide and approximately three inches deep) and of low gradient. Near the confluence it becomes narrower and more channelized. Large woody debris is abundant in the lower reaches and provides good habitat diversity. Pools are common and equal the percentage of riffle/run. In the lower reaches, the substrate is dominated by cobbles and gravel. In the harvest section silt and sand are predominant.

Rock Creek Tributary IA

The headwaters of the stream are south of the intersection of Skyline Boulevard and Johnson Road. The majority of the stream above Beck Road has been recently harvested. No riparian overstory was left. The shrub layer is dense, however, and provides shade to the stream. Beck Road crosses the stream through a five-foot concrete culvert. After the culvert, the stream enters a grassy field with an overstory/shrub layer dominated by Indian plum, red alder, and mature western red cedar. In this section several plastic and metal drums stamped "Waste AP" were observed in the stream channel. Approximately 500 feet downstream from Beck Road the stream enters a mixed conifer/deciduous stand. The stream leaves the stand and enters a young stand of red alder with a shrub layer dominated by Himalayan blackberry and salmonberry. The confluence with Tributary IB is in this area.

The stream is small (< three feet wide and only two-three inches deep in most areas). Coarse woody debris is common only in the middle sections. The substrate is dominated by sand with some areas having pockets of gravel. The majority of the stream is riffle/run with some small pools.

Rock Creek Tributary IB

The south side of the stream's headwaters have been harvested recently and no riparian overstory was left. Thick stands of young alder with salmonberry are common in the riparian area; conifers are more common upslope to the north. Further downstream, the north bank is clearcut and selective logging is ongoing on the south bank in a stand of mature conifer. Bank vegetation remains dense, particularly the shrub layer. Approximately 2,000 feet downstream from the headwaters the stream enters a mature conifer forested area with some large deciduous trees, Indian plum is the dominant shrub. The stream continues through the stand for 1,000 feet where it enters a clearcut approximately 10 years old. In another 1,000 feet it joins Tributary IA. Just prior to the confluence a small beaver pond was observed.

The stream is three-five feet in width and three-four inches deep. The middle forested sections have a good large woody debris component. The stream substrate is dominated by gravel and sand in the upper sections and by silt/sand/gravel in the lower. Pools and riffles are equally common, but riffles tend to be long.

Rock Creek - Tributary II

The stream originates south of the intersection of Skyline Boulevard and Elliot Road in a small forested wetland. Residences border the area but a buffer zone has been maintained. Overstory is mixed conifer/deciduous. The shrub layer is moderately dense. At approximately 1,000 feet the stream crosses Rock Creek Road. The area on both sides of the road is dominated by Himalayan blackberry and salmonberry with scattered conifer and deciduous trees. Houses are located upslope on both sides of the stream. Five hundred feet below Rock Creek Road, a logging operation was ongoing. A narrow buffer strip of tree has been left. Below the logging (approximately 700 feet) the stream enters a mature mixed deciduous/conifer forest with a second story of predominantly deciduous saplings. The shrub layer is Indian plum and salmonberry. Six hundred feet prior to its confluence with the main stem of Rock Creek, the stream channel is overgrown by Himalayan blackberry.

The stream is wide and shallow for most of its length (six feet deep and three-four inches deep). Abundant large woody debris and debris jams create numerous deep pools. Substrate is dominated by gravel with some cobble and silt.

ECONOMIC

DWR Water Rights Data (Permits for all of Rock Creek to include Middle and South Rock Creeks):

Permit Number	Location	Use	Rate/Quantity
S9254	NESE 23 2N 2W	Domestic (Inc. Stock)	.0100 CFS
S1260	SWNE 26 2N 2W	Livestock	1.1000 AFS
S20759	SWNE 26 2N 2W	Livestock	.0100 CFS
S37297	SWNW 26 2N 2W	Fish	.5000 CFS
S37297	SWNW 26 2N 2W	Recreation	.5000 CFS
S37847	SWNW 26 2N 2W	Recreation	.1000 CFS
S33476	NWSE 36 2N 2W	Fish	.0100 CFS

S16471	SESW 36 2N 2W	Domestic	.0100 CFS
S5469	NWNE 6 1N 1W	Irrigation	3.600 AF
S34283	NWNE 6 1N 1W	Irrigation	.5800 CFS
S35552	NWSW 6 1N 1W	Domestic	.0100 CFS
		(Inc. Lawn & Garden)	
S35552	NWSW 6 1N 1W	Livestock	.0050 CFS
S42187	NWNE 6 1N 1W	Irrigation	.0900 CFS
S29283	SESE 8 1N 1W	Livestock	.0000 CFS
S29284	SESE 8 1N 1W	Domestic	.0100 CFS
		(Inc. Stock)	
S29284	SESE 8 1N 1W	Livestock	.0100 CFS
S11285	SWSW 9 1N 1W	Domestic	.0500 CFS
		(Incl Lawn & Garden)	
S15070	SESW 9 1N 1W	Irrigation	.0100 CFS
S44557	SESW 9 1N 1W	Domestic	.0100 CFS
		(Inc. Non-Commercial)	
S43924	SESW 9 1N 1W	Domestic	.0050 CFS
S41182	NESE 9 1N 1W	Domestic	.0100 CFS
S41182	NESE 9 1N 1W	Livestock	.0200 CFS
S41182	NESE 9 1N 1W	Domestic	.0400 CFS
		(Inc. Livestock)	
S27148	NESE 9 1N 1W	Domestic	.0100 CFS
S42705	NENW 9 1N 1W	Domestic	.0100 CFS
		(Inc. Lawn & Garden)	
S12111	SENE 9 1N 1W	Domestic	.0100 CFS
S5283	SWNE 15 1N 1W	Livestock	.8000 AF

RECREATION

Park/Recreational Facility: Rock Creek flows to Rock Creek Park in Washington County along Highway 26. Rock Creek Park is a five acre park under the jurisdiction of the Tualatin Hills Parks and Recreation District. Approximately 2.5 acres of the park is in a natural state for passive recreation. A bark chip path has been provided along to the creek for access to the riparian area and wildlife observation.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: Rock Creek Park is used by the Green CCity Data Project for High School educational programs. The creek flows through Rock Creek Park in Washington County.

PUBLIC SAFETY

SRI/SHAPIRO Project #7935258
North Rock Creek Profile

May 13, 1994

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 194 ft

Range of Width: 100-400 ft

Benefit to Water Quality: The current moderately high level of canopy cover and large riparian width will have positive influence on water quality

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 28%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 54

Range of scores: 35-76

Essential Connections: N/A

SRI/SHAPIRO Project #7935258
North Rock Creek Profile

May 13, 1994

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek - North Main Stem	1	6	5	8	2	5	5	2	4	3	2	3	3	4	0	52
Rock Creek - North Main Stem	2	8	6	7	2	5	6	2	4	4	2	2	2	5	0	55
Rock Creek - North Main Stem	3	6	6	8	2	5	6	2	6	6	2	3	2	5	0	59
Rock Creek - North Main Stem	4	6	6	8	2	5	6	2	6	6	2	3	2	5	0	59
Rock Creek - North Main Stem	5	5	4	7	2	4	4	2	4	3	2	2	1	4	0	44
Rock Creek - North Main Stem	6	5	2	4	2	4	4	2	2	3	2	3	3	5	0	41
Rock Creek - North Main Stem	7	4	3	6	2	4	4	2	5	5	2	4	2	4	0	47
AVERAGES		5.7	4.6	6.9	2.0	4.6	5.0	2.0	4.4	4.3	2.0	2.9	2.1	4.6	0.0	51.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek - North Main Stem	1	100	100			X	
Rock Creek - North Main Stem	2	200	100			X	
Rock Creek - North Main Stem	3	200	200			X	
Rock Creek - North Main Stem	4	150	200			X	
Rock Creek - North Main Stem	5	100	100			X	
Rock Creek - North Main Stem	6	50	100			X	
Rock Creek - North Main Stem	7	75	75		X		
AVERAGES		125.0	125.0	0%	14%	86%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek - Middle Main Stem	1	8	6	8	2	2	2	2	4	4	2	3	1	3	0	47
Rock Creek - Middle Main Stem	2	8	6	8	4	3	3	2	2	2	2	3	1	4	0	48
Rock Creek - Middle Main Stem	3	8	6	8	3	5	5	2	5	4	2	3	1	4	0	56
Rock Creek - Middle Main Stem	4	8	6	8	2	7	7	3	5	6	3	4	2	5	0	66
AVERAGES		8.0	6.0	8.0	2.8	4.3	4.3	2.3	4.0	4.0	2.3	3.3	1.3	4.0	0.0	54.3

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek - Middle Main Stem	1	60	50	X			
Rock Creek - Middle Main Stem	2	50	50	X			
Rock Creek - Middle Main Stem	3	50	50	X			
Rock Creek - Middle Main Stem	4	75	30		X		
AVERAGES		58.8	45.0	75%	25%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: UPPER ROCK CREEK

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek - South Main Stem	1	8	6	4	2	6	6	3	6	6	3	0	1	6	0	57
AVERAGES		8.0	6.0	4.0	2.0	6.0	6.0	3.0	6.0	6.0	3.0	0.0	1.0	6.0	0.0	57.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek - South Main Stem	1	30	100			X	
AVERAGES		30.0	100.0	0%	0%	100%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: UPPER ROCK CREEK

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. I (North; Main Stem)	1	8	6	8	4	8	7	3	8	6	2	4	4	6	2	76
Rock Creek Trib. I (North; Main Stem)	2	8	6	8	3	8	8	4	7	7	3	4	4	6	0	76
Rock Creek Trib. I (North; Main Stem)	3	8	6	7	4	8	8	3	4	5	2	2	1	4	0	62
AVERAGES		8.0	6.0	7.7	3.7	8.0	7.7	3.3	6.3	6.0	2.3	3.3	3.0	5.3	0.7	71.3

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. I (North; Main Stem)	1	100	100			X	
Rock Creek Trib. I (North; Main Stem)	2	100	100			X	
Rock Creek Trib. I (North; Main Stem)	3	100	100		X		
AVERAGES		100.0	100.0	0%	33%	67%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. IB (South)	1	4	3	8	2	5	7	2	4	4	2	2	1	3	0	47
Rock Creek Trib. IB (South)	2	4	3	8	2	5	5	2	1	3	2	2	0	2	0	39
Rock Creek Trib. IB (South)	3	4	3	8	2	6	6	3	5	3	3	3	3	5	0	54
Rock Creek Trib. IB (South)	4	8	6	8	4	8	8	3	4	5	2	2	1	4	0	63
AVERAGES		5.0	3.8	8.0	2.5	6.0	6.5	2.5	3.5	3.8	2.3	2.3	1.3	3.5	0.0	50.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. IB (South)	1	75	100		X		
Rock Creek Trib. IB (South)	2	75	100		X		
Rock Creek Trib. IB (South)	3	100	100		X		
Rock Creek Trib. IB (South)	4	100	100		X		
AVERAGES		87.5	100.0	0%	100%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. IA (North)	1	8	6	6	4	6	6	2	3	3	2	2	1	3	0	52
Rock Creek Trib. IA (North)	2	8	6	8	2	4	4	2	4	4	2	3	2	2	0	51
Rock Creek Trib. IA (North)	3	8	6	6	4	6	6	2	3	3	2	2	1	3	0	52
Rock Creek Trib. IA (North)	4	8	6	8	2	4	4	2	5	5	2	3	1	3	0	53
Rock Creek Trib. IA (North)	5	4	3	8	2	6	4	2	2	1	2	0	2	3	0	39
Rock Creek Trib. IA (North)	6	4	3	8	2	6	4	2	2	1	2	0	3	3	0	40
AVERAGES		6.7	5.0	7.3	2.7	5.3	4.7	2.0	3.2	2.8	2.0	1.7	1.7	2.8	0.0	47.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. IA (North)	1	100	100		X		
Rock Creek Trib. IA (North)	2	100	100			X	
Rock Creek Trib. IA (North)	3	75	30		X		
Rock Creek Trib. IA (North)	4	100	100			X	
Rock Creek Trib. IA (North)	5	100	100				X
Rock Creek Trib. IA (North)	6	100	100				X
AVERAGES		95.8	88.3	0%	33%	33%	33%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib II (South)	1	8	6	6	2	6	6	2	4	4	2	2	1	3	0	52
Rock Creek Trib II (South)	2	8	6	8	2	6	6	2	7	6	2	4	3	4	0	64
Rock Creek Trib II (South)	3	8	6	8	2	6	6	3	7	7	3	4	4	5	0	69
Rock Creek Trib II (South)	4	8	6	8	2	7	7	3	7	7	3	4	4	5	0	71
Rock Creek Trib II (South)	5	8	6	4	2	6	6	2	6	6	2	2	2	0	0	52
Rock Creek Trib II (South)	6	8	6	2	2	3	3	2	3	3	2	2	1	2	0	39
Rock Creek Trib II (South)	7	4	3	6	3	3	3	2	2	2	2	2	1	2	0	35
AVERAGES		7.4	5.6	6.0	2.1	5.3	5.3	2.3	5.1	5.0	2.3	2.9	2.3	3.0	0.0	54.6

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib II (South)	1	100	100		X		
Rock Creek Trib II (South)	2	100	100		X		
Rock Creek Trib II (South)	3	100	100		X		
Rock Creek Trib II (South)	4	100	100		X		
Rock Creek Trib II (South)	5	100	100		X		
Rock Creek Trib II (South)	6	100	100		X		
Rock Creek Trib II (South)	7	100	100		X		
AVERAGES		100.0	100.0	0%	100%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MCCARTHY CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Folkenberg Area

Length Inventoried: 38,490 ft (7.3 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 39,490 ft (7.5 miles)

Area of Watershed in Multnomah County Study Area: 2,100 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
McCarthy		70%		30%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

McCarthy Creek-Main Stem

The headwaters of McCarthy Creek are south of McNamee road. The upper parts of the stream have been clearcut. The first 500 feet is in a five-year-old cut and the next 1,500 feet was harvested in the year prior to this report. The stream then enters a second growth stand (50-70 years old) just starting to achieve structural diversity. A gravel/rock road crosses the stream and has a 36-inch culvert. In some areas the upslope areas have been logged. Downstream where the stream begins to turn north the area becomes a patch work of clearcuts and forest stands. In most areas a thin buffer of riparian vegetation was left. The stream passes under railroad tracks through a rectangular concrete culvert approximately seven feet high by 12 feet wide. It then enters a stand of mature conifer (Douglas fir, western red cedar) and deciduous trees (big-leaf maple, red alder). The shrub layer is salmonberry, Indian plum, and Himalayan blackberry. As the stream proceeds north it flows into a residential area where houses and associated landscaping as well as clear cut areas are common down to the banks of the stream. Cornelius Pass Road often delineates the west bank. The floodplain/surrounding area is fairly flat although the stream is usually very channelized. A mill (unknown if it is active) is located along the stream and it's parking lot/loading yard constrain the stream into a narrow channel with no real floodplain. It continues to be bordered by Cornelius Pass and flows into a narrow canyon with a mixed deciduous/conifer overstory and moderately dense shrub layer of Indian plum and salmonberry.

Two thousand feet before the stream flows under U.S. Highway 30 the canyon widens out and the floodplain is often 100-200 feet or more across. The overstory becomes predominantly deciduous and scattered. Several small open areas are interspersed.

The lower portions of the stream are six-eight feet wide and frequently one-two feet deep; occasional pools are substantially deeper. Coarse woody debris is only occasional in the stream. The substrate is equally divided between cobbles, gravel, sand, and silt with occasional boulders forming pools. The stream is 90-95% riffle run.

McCarthy Creek Tributary I

The stream originates in a clearcut area east of Skyline Boulevard. After approximately 2,000 feet the stream enters a stand dominated by red alder and western red cedar. The understory is predominantly salmonberry and vine maple. Near the middle of the stream two houses and associated human activity have removed some of the riparian vegetation. Where Sheltered Nook Road is adjacent to the stream on the north side the overstory is predominantly deciduous and salmonberry is dense. Some garbage and other debris have been dumped into the stream channel. Sheltered Nook Road constrains the stream in the lower reaches.

The stream is two-four feet wide and rarely more than eight inches deep. It is predominantly riffle with only 25% pool. The substrate is predominantly silt with some cobbles and boulders and infrequent gravel.

McCarthy Creek Tributary II

The headwaters originate in a mixed deciduous/conifer stand dominated by red alder, (4-14 inches) with occasional Douglas fir (20 inches+) and rare western red cedar up to 40 inches. The shrub layer is salmonberry, vine maple, and huckleberry. Downstream the vegetation becomes more diverse with big-leaf maple (8-10 inches) and Oregon grape. A large slide on the north bank is located near the middle of the stream. Old roads, debris, trailers and other garbage are on the north bank. Himalayan blackberry begins to dominate the riparian shrub layer as the stream approaches Cornelius Pass. A red-legged frog was seen in the middle section of the stream.

The stream is two-three feet wide and six-eight inches deep. The substrate is predominantly gravel and silt with some cobble and sand component. There are 90% riffle/runs and 10% pool.

McCarthy Creek Tributary III

The stream originates in a sparse, primarily deciduous stand (red alder) with conifer upslope. Downstream the riparian vegetation becomes more diverse but is still fairly open. The overstory includes big-leaf maple, red alder, Douglas fir, western hemlock, and western red cedar. The shrub layer is dominated by salmonberry, elderberry, and huckleberry. In the lower reaches three alder

snags with pileated woodpecker foraging holes were seen and a red-legged frog observed. The conifer overstory in the last 800 feet of stream before Cornelius Pass had been removed recently.

The stream averages 12-18 inches wide and three-eight inches deep. Near Cornelius Pass it is incised three-four feet and disconnected from its flood plain, further upstream the channel becomes shallower, however, it is in a steep sided draw. The substrate is predominantly silt and cobbles with some gravel and boulder component. The stream is 70% riffle/run and 30% pools.

McCarthy Creek Tributary IV

The stream originates at the fill slope for McNamee Road in a stand of red alder, big-leaf maple, and western red cedar. A gravel road is on its west side. The stream flows through a narrow canyon with steep side slopes (45 degrees) for approximately 1,000 feet, then enters a recent clearcut and turns to the west. It then crosses a gravel road, a dense stand of young conifer (<12 inches) borders the stream on the north and a clear cut with 50-75-foot sparse buffer borders it on the south. The shrub layer is dense salmonberry and Himalayan blackberry. Further downstream, the north side becomes a mixed deciduous/conifer stand that has been partially cut. The stream then enters a primarily deciduous stand with conifers more prevalent upslope. The stream passes under a railroad bridge and continues downslope another 1,000 feet before it joins the mainstem.

The stream flows through a draw with 35 degree side slopes and 10-20-foot-wide floodplain. It is one-two feet wide and 6-12 inches deep. Logging debris is common in the stream. The substrate is predominantly gravel and cobbles. It is 60% riffle/run and 40% pool.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: 119 ft

Range of Width: 20-300 ft

Benefit to Water Quality: The current low level of canopy cover and narrow riparian corridor found along the majority of the mainstem will have a negative impact on water quality by allowing summer heating of the stream and causing increased peak flow levels. The current moderate/moderately high level of canopy cover and wide riparian areas associated with the tributaries will have a positive influence on individual tributary and overall stream water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 37%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 41 (n=35)

Range of scores: 23-52

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
McCarthy Creek (Main Stem)	1	8	6	3	2	2	6	2	3	4	2	1	1	3	0	43
McCarthy Creek (Main Stem)	2	8	6	5	4	4	2	2	4	4	2	2	1	5	0	49
McCarthy Creek (Main Stem)	3	8	6	4	2	4	3	2	4	4	2	1	1	3	0	44
McCarthy Creek (Main Stem)	4	8	6	4	2	4	2	2	4	4	2	1	1	2	0	42
McCarthy Creek (Main Stem)	5	8	6	3	2	4	2	2	4	4	2	1	1	2	0	41
McCarthy Creek (Main Stem)	6	8	6	1	2	4	1	2	1	1	2	0	0	2	0	30
McCarthy Creek (Main Stem)	7	8	6	0	2	4	2	2	1	2	2	0	0	3	0	32
McCarthy Creek (Main Stem)	8	8	6	0	2	4	1	2	1	1	2	0	0	1	0	28
McCarthy Creek (Main Stem)	9	8	6	1	2	4	1	2	1	2	2	0	0	1	0	30
McCarthy Creek (Main Stem)	10	8	6	4	2	4	4	2	4	4	3	2	2	4	0	49
McCarthy Creek (Main Stem)	11	8	6	8	3	4	3	2	6	5	3	4	1	4	0	57
McCarthy Creek (Main Stem)	12	8	6	2	3	3	3	2	5	3	1	2	0	3	0	41
McCarthy Creek (Main Stem)	13	8	6	6	3	3	3	2	5	4	2	2	0	2	0	46
McCarthy Creek (Main Stem)	14	8	6	6	3	3	3	2	5	4	2	2	0	1	0	45
McCarthy Creek (Main Stem)	15	8	6	6	3	3	3	2	5	4	2	2	1	2	0	47
McCarthy Creek (Main Stem)	16	8	6	8	3	4	3	2	4	4	4	1	3	2	0	52
McCarthy Creek (Main Stem)	17	6	4	1	2	2	3	2	1	1	1	1	0	1	0	25
McCarthy Creek (Main Stem)	18	4	3	1	2	2	3	2	2	3	2	2	0	1	0	27
AVERAGES		7.7	5.7	3.5	2.4	3.4	2.7	2.0	3.3	3.2	2.1	1.3	0.7	2.3	0.0	40.4

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
McCarthy Creek (Main Stem)	1	100	100	X			
McCarthy Creek (Main Stem)	2	100	100	X			
McCarthy Creek (Main Stem)	3	50	50	X			
McCarthy Creek (Main Stem)	4	50	50	X			
McCarthy Creek (Main Stem)	5	30	75	X			
McCarthy Creek (Main Stem)	6	40	75	X			
McCarthy Creek (Main Stem)	7	30	30	X			
McCarthy Creek (Main Stem)	8	60	30	X			
McCarthy Creek (Main Stem)	9	60	30	X			
McCarthy Creek (Main Stem)	10	75	65		X		
McCarthy Creek (Main Stem)	11	75	75		X		
McCarthy Creek (Main Stem)	12	100	100	X			
McCarthy Creek (Main Stem)	13	20	20	X			
McCarthy Creek (Main Stem)	14	25	80	X			
McCarthy Creek (Main Stem)	15	150	150			X	
McCarthy Creek (Main Stem)	16	75	75				X
McCarthy Creek (Main Stem)	17	25	20	X			
McCarthy Creek (Main Stem)	18	30	30	X			
AVERAGES		60.8	64.2	78%	11%	6%	6%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
McCarthy Creek Trib. I (North)	1	4	3	8	2	4	4	2	4	4	2	3	2	2	0	44
McCarthy Creek Trib. I (North)	2	4	3	7	3	4	4	2	5	5	3	3	2	3	0	48
McCarthy Creek Trib. I (North)	3	4	3	7	2	4	3	2	4	4	2	4	2	4	0	45
McCarthy Creek Trib. I (North)	4	4	3	7	2	4	4	2	5	5	2	4	4	3	0	49
McCarthy Creek Trib. I (North)	5	4	3	1	2	3	3	2	1	1	1	2	0	0	0	23
McCarthy Creek Trib. I (North)	6	4	3	4	2	3	3	2	4	3	2	2	0	3	0	35
AVERAGES		4.0	3.0	5.7	2.2	3.7	3.5	2.0	3.8	3.7	2.0	3.0	1.7	2.5	0.0	40.7

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
McCarthy Creek Trib. I (North)	1	50	50			X	
McCarthy Creek Trib. I (North)	2	40	40		X		
McCarthy Creek Trib. I (North)	3	100	100			X	
McCarthy Creek Trib. I (North)	4	100	100			X	
McCarthy Creek Trib. I (North)	5	10	10	X			
McCarthy Creek Trib. I (North)	6	50	50			X	
AVERAGES		58.3	58.3	17%	17%	67%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
McCarthy Creek Trib. II (Middle)	1	4	3	2	2	3	6	2	2	4	2	1	1	3	0	35
McCarthy Creek Trib. II (Middle)	2	4	3	4	2	4	4	2	3	2	2	1	1	3	2	37
McCarthy Creek Trib. II (Middle)	3	4	3	2	2	3	2	2	2	2	2	2	2	3	0	31
McCarthy Creek Trib. II (Middle)	4	4	3	4	2	4	3	2	3	4	2	2	4	3	0	40
AVERAGES		4.0	3.0	3.0	2.0	3.5	3.8	2.0	2.5	3.0	2.0	1.5	2.0	3.0	0.5	35.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
McCarthy Creek Trib. II (Middle)	1	35	30		X		
McCarthy Creek Trib. II (Middle)	2	30	30			X	
McCarthy Creek Trib. II (Middle)	3	50	50	X			
McCarthy Creek Trib. II (Middle)	4	50	50			X	
AVERAGES		41.3	40.0	25%	25%	50%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
McCarthy Creek Trib. III (Southwest)	1	4	3	4	2	3	6	2	4	6	3	1	1	3	4	46
McCarthy Creek Trib. III (Southwest)	2	4	3	6	2	5	6	3	6	6	3	2	3	3	0	52
McCarthy Creek Trib. III (Southwest)	3	4	3	4	2	4	4	3	4	4	2	2	3	3	0	42
AVERAGES		4.0	3.0	4.7	2.0	4.0	5.3	2.7	4.7	5.3	2.7	1.7	2.3	3.0	1.3	46.7

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
McCarthy Creek Trib. III (Southwest)	1	75	60		X		
McCarthy Creek Trib. III (Southwest)	2	75	75			X	
McCarthy Creek Trib. III (Southwest)	3	50	50			X	
AVERAGES		66.7	61.7	0%	33%	67%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
McCarthy Creek Trib. IV (Southeast)	1	4	3	8	2	3	3	2	4	3	2	2	2	2	0	40
McCarthy Creek Trib. IV (Southeast)	2	4	3	6	2	3	5	2	2	4	3	1	3	3	0	41
McCarthy Creek Trib. IV (Southeast)	3	4	3	8	2	3	5	2	2	4	3	1	3	3	0	43
McCarthy Creek Trib. IV (Southeast)	4	4	3	6	2	3	6	2	5	5	3	2	3	5	0	49
AVERAGES		4.0	3.0	7.0	2.0	3.0	4.8	2.0	3.3	4.0	2.8	1.5	2.8	3.3	0.0	43.3

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
McCarthy Creek Trib. IV (Southeast)	1	60	60			X	
McCarthy Creek Trib. IV (Southeast)	2	50	70	X			
McCarthy Creek Trib. IV (Southeast)	3	50	70	X			
McCarthy Creek Trib. IV (Southeast)	4	65	65		X		
AVERAGES		56.3	66.3	50%	25%	25%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

McNamee-Harborton Area

BURLINGTON CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: McNamee Harborton

Length Inventoried: 5,400 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 5,400 ft

Area of Watershed in Multnomah County: 375 acres

Abutting Land Use Designations (percent of study area stream length):

Rural Residential	Urban Residential R-20	Urban Residential R-10	Commercial Forest	Other
0%	0%	0%	100%	0%

Stream Description:

The headwaters of Burlington Creek have been partially cut and a canopy cover of approximately 30% remains. Overstory is comprised of Douglas fir, Western hemlock, and red alder, the understory is predominantly viney maple with occasional salmonberry. The stream crosses a skid trail and a road (culvert removed, banks planted with willow), both of which appear to be contributing sediment to the stream. Logging slash often covers the stream channel. At 700 feet from its origin the stream flows through a clear cut. No overstory remains in the riparian area, though some shrubs are present, predominantly viney maple with occasional elderberry and salmonberry. The stream then enters a mature conifer stand of Douglas fir and western hemlock (20-30 inch Dbh). Canopy closure is 65-70% and a well established understory. No snags were observed in this section and coarse woody debris was present in low amounts. The stream continues through the forested section for approximately 750 feet. It then passes through a culvert under a road and flows into another clear cut. No overstory remains. Shrub layer is often dense salmonberry and Himalayan blackberry. Logging slash often covers the stream channel. As the stream proceeds east the banks become steep, often in excess of 45 degrees. Numerous slope failures are evident and the stream has large sediment deposits. Just west of the powerline the stream flows through a 48 inch culvert under a road. The fill for the crossing is approximately 200 feet wide and 100 feet high. The stream passes under a train trestle and enters a wide, flat bottom area (approximately 100 feet by 300 feet). The overstory is predominantly red alder with a few small red cedar. The shrub layer is salmonberry and Himalayan blackberry. The stream becomes braided in this area with the main channel against the north slope. A house sits atop the north bank and a dirt road has been cut down the south. The stream then enters a culvert and flows under Highway 30.

The stream is 85% riffle and 15% pool. Its substrate is a combination of silt, sand, gravel, cobbles, boulders, with silt and cobbles being predominant. Evidence of recent scouring and sediment transport and deposit was observed. Bank failures were frequently observed and the upper two road crossings appeared to have substantial erosion. The channel is incised for most of its length. Water temperature was 8.5 degrees Celsius.

ECONOMIC

DWR Water Rights Data: No recorded permits as of 2/16/94

RECREATION

Park/Recreational Facility: None adjacent to stream. Stream discharges to Burlington Bottoms, a publicly-owned parcel managed by Oregon Department of Fish and Wildlife, purchased for wildlife mitigation by Bonneville Power Administration. The hydrology and hydraulics of Burlington Bottoms was the subject of an August 27, 1993 report by WH Pacific for the Oregon Department of Fish and Wildlife. The report examined hydrology of the 417 acre wildlife habitat mitigation site and the influence of streams and the relationship to the Columbia River. The watershed studied is approximately 900 acres in size. Streams studied as part of this analysis include, McCarthy Creek, Burlington Creek, North Angell Brothers Creek and Middle Angell Brothers Creek. Based on the WH Pacific report, McCarthy Creek and Middle Angell Brothers Creek do not contribute to flows to Burlington Bottoms. McCarthy flows directly to the Multnomah Channel and Middle Angell Brothers Creek has been diverted south through United Junction. Burlington Creek and North Angell Brothers Creek both drain into Burlington Bottoms.

The importance of Burlington Bottoms as a wetland resource would be compromised by any reduction in water quality of quantity, therefore, Burlington Creek is significant in terms of recreation values

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None recorded as of 2/2/94

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: One small wetland at lower end of stream at Highway 30.

Flood Storage Capacity: Limited to stream channel generally steeply incised with limited widening of channel.

Riparian Corridor: see attached table

Average Width: 96

Range of Width: 40-300

Benefit to Water Quality: Based on low canopy cover, the riparian corridor has little benefit to water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94

Wildlife Habitat Assessment: see attached table

Average score: 33.4 (n=5)

Range of scores: 24-57

Essential Connections: N/A

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N		
Burlington Creek	1	4	3	3	2	4	6	2	1	1	2	0	2	2	0	32	
Burlington Creek	2	4	3	0	2	3	3	1	1	2	1	0	4	0	0	24	
Burlington Creek	3	4	3	0	2	3	3	1	1	2	1	0	4	0	0	24	
Burlington Creek	4	4	3	7	2	7	5	2	8	6	4	2	3	4	0	57	
Burlington Creek	5	4	3	2	2	4	2	2	2	3	2	0	0	4	0	30	
AVERAGES		4.0	3.0	2.4	2.0	4.2	3.8	1.6	2.6	2.8	2.0	0.4	2.6	2.0	0.0	33.4	

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Burlington Creek	1	20	20	X			
Burlington Creek	2	30	30	X			
Burlington Creek	3	20	20	X			
Burlington Creek	4	150	150			X	
Burlington Creek	5	20	20	X			
AVERAGES		48	48	80%	0%	20%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

NORTH ANGELL BROS. CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: McNamee Harborton

Length Inventoried: 4,500 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 4,500 ft

Area of Watershed in Multnomah County: 350 acres

Abutting Land Use Designations (percent of study area stream length):

Rural Residential	Urban Residential R-20	Urban Residential R-10	Commercial Forest	Other
0%	0%	0%	100%	0%

Stream Description:

Its origin has been clear cut on the south side and a mixed conifer deciduous forest is on the North. It then flows into an area where both sides of the stream have been clear cut and only a few overstory trees remain; however in several areas buffer strips up to 100 feet wide have been maintained. The buffers are primarily red alder but some Douglas fir and western red cedar are also present. These buffers are very open and many of the conifers have been removed. Dense salmonberry and himalayan blackberry are in the stream channel. At 10's of a mile from the headwaters the stream goes under ground and flows under a road (culvert has been removed, re-surfaces and enters another mixed conifer/deciduous forest). Overstory is primarily red alder and big-leaf maple with western red cedar, western hemlock, and Douglas fir becoming more common upslope. The stream is joined by a second stream from the south and forms a delta of transported sediment and debris against the embankment of a powerline access road. Water is ponded in this area and drains sub-surface under and through a grated culvert that is 90% blocked by silt and debris. The stream remains sub-surface under fill associated with a Bonneville Power Association Line -- at the time of observation in early May, no water was flowing into the grated culvert. According to County Planning staff, the culvert's outlet is immediately east of the Burlington Northern's Cornelius pass railroad grade. At the time of observation in early May, water which was stained a rust color flowed out the culvert outlet -- the probable source of the additional water is underground drains associated with the Bonneville Power Association Line fill. This channel was overgrown with himalayan blackberry. The water then entered a culvert under the Cornelius Pass railroad grade, Highway 30, and the Astoria railroad grade and exited into Burlington Bottoms.

The stream is 70% riffle and 30% pool. Its substrate is a combination of silt, sand, gravel, cobbles, boulders, and bedrock. Evidence of recent scouring and sediment transport and deposit was observed. Several small debris torrents were also observed. The channel is incised for most of its length.

ECONOMIC

DWR Water Rights Data: No recorded permits as of 2/16/94

RECREATION

Park/Recreational Facility:

None adjacent to stream. Stream discharges to Burlington Bottoms, a publicly-owned parcel managed by Oregon Department of Fish and Wildlife, purchased for wildlife mitigation by Bonneville Power Administration. The hydrology and hydraulics of Burlington Bottoms was the subject of an August 27, 1993 report by WH Pacific for the Oregon Department of Fish and Wildlife. The report examined hydrology of the 417 acre wildlife habitat mitigation site and the influence of streams and the relationship to the Columbia River. The watershed studied is approximately 900 acres in size. Streams studied as part of this analysis include, McCarthy Creek, Burlington Creek, North Angell Brothers Creek and Middle Angell Brothers Creek. Based on the WH Pacific report, McCarthy Creek and Middle Angell Brothers Creek do not contribute to flows to Burlington Bottoms. McCarthy flows directly to the Multnomah Channel and Middle Angell Brothers Creek has been diverted south through United Junction. Burlington Creek and North Angell Brothers Creek both drain into Burlington Bottoms.

The importance of Burlington Bottoms as a wetland resource would be compromised by any reduction in water quality or quantity, therefore, Burlington Creek is significant in terms of recreation values.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: No recorded observations as of 2/22/94

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: None

Flood Storage Capacity: limited to stream channel and area immediately adjacent to channel

Riparian Corridor: see attached table

Average Width: 78

Range of Width: 55-150

Benefit to Water Quality: There exists sufficient canopy cover and woody debris in stream to improve water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94

Wildlife Habitat Assessment: see attached table

Average score: 41.5 (n=4)

Range of scores: 35-53

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

III-107

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
"Angell Brothers" – north	1	6	3	8	2	6	6	2	2	6	4	3	2	2	3	0	53	
"Angell Brothers" – north	2	4	3	3	2	4	7	2	4	4	1	1	3	4	0	42		
"Angell Brothers" – north	3	4	3	3	2	4	6	2	2	2	2	0	2	3	0	35		
"Angell Brothers" – north	4	4	3	4	2	4	6	2	2	2	2	2	0	2	3	0	36	
AVERAGES		4.5	3.0	4.5	2.0	4.5	6.3	2.0	3.5	3.0	2.0	0.8	2.3	3.3	0.0		41.5	

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Angell Brothers - north	1	75	75			X	
Angell Brothers - north	2	30	25		X		
Angell Brothers - north	3	40	20		X		
Angell Brothers - north	4	40	20		X		
AVERAGES		46	35	0%	75%	25%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MIDDLE ANGELL BROS. CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: McNamee Harborton

Length Inventoried: 2,000 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): ~ 6,000 ft

Area of Watershed in Multnomah County: 360 acres

Abutting Land Use Designations (percent of study area stream length):

Rural Residential	Urban Residential R-20	Urban Residential R-10	Commercial Forest	Other
0%	0%	0%	100%	0%

Stream Description:

The creek originates in a mixed conifer/deciduous forest from several small drainages. It consolidates into one channel and flows through the forested area for 2/10's of a mile when it enters a 3-5 year old clear-cut. The majority of the overstory in the riparian area was removed. Several red alder and big-leaf maple remain. Dense salmonberry and vine maple line the channel. Logging debris is common in the narrow floodplain and in the channel. At approximately 6/10's of a mile the stream enters another mixed conifer/deciduous forest. Activity at the Angell Brothers gravel pit prevented this section from being surveyed due to liability concerns. The stream leaves the forested area and flows off a vertical cut wall into a culvert below and is then transported via a culvert to a settling pond. It is again culverted and flows under Highway 30.

ECONOMIC

DWR Water Rights Data: No recorded permits as of 2/16/94

RECREATION

Park/Recreational Facility:

None adjacent to stream and according to a 1993 report this stream has been diverted south away from Burlington Bottoms. The hydrology and hydraulics of Burlington Bottoms was the subject of an August 27, 1993 report by WH Pacific for the Oregon Department of Fish and Wildlife. The report examined hydrology of the 417 acre wildlife habitat mitigation site and the influence of streams and the relationship to the Columbia River. The watershed studied is approximately 900 acres in size. Streams studied as part of this analysis include, McCarthy Creek, Burlington Creek, North Angell

Brothers Creek and Middle Angell Brothers Creek. Based on the WH Pacific report, McCarthy Creek and Middle Angell Brothers Creek do not contribute to flows to Burlington Bottoms. McCarthy flows directly to the Multnomah Channel and Middle Angell Brothers Creek has been diverted south through United Junction. Burlington Creek and North Angell Brothers Creek both drain into Burlington Bottoms.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: No recorded observations as of 2/22/94

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: None

Flood Storage Capacity: Limited to stream channel and area immediately adjacent to channel

Riparian Corridor: see attached table

Average Width: 80

Range of Width: 80-80

Benefit to Water Quality: Riparian vegetation remaining from clear cut appears insufficient to maintain the current water quality level.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: None recorded as of 2/22/94

Wildlife Habitat Assessment: see attached table

Average score: 37.5 (n=2)

Range of scores: 31-44

Essential Connections: N/A

SRI/SHAPIRO Project #7935258
Middle Angell Bros. Creek

May 13, 1994

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

McNamee Harborton

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:							TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N						
"Angell Brothers" - middle	1	4	3	2	2	4	5	2	2	1	2	0	2	2	0	31					
"Angell Brothers" - middle	2	4	3	4	2	4	4	3	4	4	3	3	3	3	0	44					
AVERAGES		4.0	3.0	3.0	2.0	4.0	4.5	2.5	3.0	2.5	2.5	1.5	2.5	2.5	0.0	37.5					

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:				
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%	
"Angell Brothers" - middle	1	40	40		X			
"Angell Brothers" - middle	2	40	40		X			
AVERAGES		40	40	0%	100%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

SOUTH ANGELL BROS. CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: McNamee Harborton

Length Inventoried: ~4,000 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): ~4,100 ft

Area of Watershed in Multnomah County: 205 acres

Abutting Land Use Designations (percent of study area stream length):

Rural Residential	Urban Residential R-20	Urban Residential R-10	Commercial Forest	Other
0%	0%	0%	100%	0%

Stream Description:

The headwaters and approximately 6/10's of a mile along the upper stream have been clear cut in the last 5 years. Logging slash and material from slope failures almost entirely cover the stream channel. Slopes in this area are 25-35 degrees. No overstory remains in the riparian area. Salmonberry, Himalayan blackberry, and trailing blackberry are the dominant vegetation. At approximately 4/10 of a mile from the headwaters a recent clear cut has no vegetation regeneration. At approximately 6/10 of a mile the stream flows into a mixed conifer/deciduous forested area. This area has not been recently disturbed and has a developing understory and groundcover layer. Canopy cover is approximately 45%. The stream crosses under the powerline corridor and then passes under a road through a culvert. The stream flows off a cliff at highway 30 and is culverted.

The stream is 95% riffle and 5% pool although direct observation in the upper section was difficult due to the amount of debris in and covering the channel. Stream bottom is primarily silt with some gravel, cobbles and boulders present, and subject to repeated flushing. Cobbles and gravel make up a larger part of the substrate in the lower reaches. The channel in the upper reaches is incised and undercutting the bank.

ECONOMIC

DWR Water Rights Data: No recorded permits as of 2/16/94

RECREATION

Park/Recreational Facility: None adjacent to stream or downstream

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: No recorded observations as of 2/22/94

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: None

Flood Storage Capacity: Limited to stream channel and adjacent steeply sloped banks.

Riparian Corridor: see attached table

Average Width: 52

Range of Width: 20-150

Benefit to Water Quality: Insufficient canopy cover and riparian width to positively influence water quality

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data:

Wildlife Habitat Assessment: see attached table

Average score: 24 (n=4)

Range of scores: 9-46

Essential Connections: N/A

SRI/SHAPIRO Project #7935258
South Angell Bros. Creek

May 13, 1994

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:				Cover:				Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N				
"Angell Brothers" – south	1	4	3	0	2	3	4	2	0	0	0	0	2	1	0	21			
"Angell Brothers" – south	2	4	3	0	2	3	4	2	0	0	0	0	2	1	0	21			
"Angell Brothers" – south	3	4	3	0	2	0	0	0	0	0	0	0	0	0	0	9			
"Angell Brothers" – south	4	4	3	5	2	4	5	2	6	6	2	2	2	3	0	46			
AVERAGES		4.0	3.0	1.3	2.0	2.5	3.3	1.5	1.5	1.5	0.5	0.5	1.5	1.3	0.0	24.3			

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Angell Brothers - south	1	10	10	X			
Angell Brothers - south	2	10	10	X			
Angell Brothers - south	3	10	10	X			
Angell Brothers - south	4	75	75		X		
AVERAGES		26	26	75%	0%	25%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

NEWBERRY CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: McNamee Harborton

Length Inventoried: 3,000 ft (The lower 3,000 feet of the creek was not surveyed due to lack of access permission)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 6,000 ft

Area of Watershed in Multnomah County: 470 acres

Abutting Land Use Designations (percent of study area stream length):

Rural Residential	Urban Residential R-20	Urban Residential R-10	Commercial Forest	Other
0%	0%	0%	100%	0%

Stream Description:

The headwaters of Newberry Creek were clear-cut approximately 10 years prior to this report. No overstory remains except for scattered red alder and western red cedar. The area was replanted and is low to moderately stocked with 7-8 year old Douglas fir saplings. Other vegetation includes small, 2-4 inch, clumps of big-leaf maple, 1-2 inch alder, Himalayan blackberry, trailing blackberry and various grasses. Coarse woody debris is scarce. Two roads cross the creek with intact culvert systems. At approximately 2000 feet from the headwalls is a new clear-cut (sometime in the two years prior to this report). Access permission for this section was denied. What follows is a visual estimation from upslope. No overstory remains, and re-growth of other vegetation has not occurred. Coarse woody debris is low to moderate. Occasional snags where left upslope, a pileated woodpecker was observed using one. The stream leaves the clear cut and flows through an second growth stand of medium saw timber (18-24 inches Dbh) composed of Douglas fir and Western hemlock. The lower 1000 feet of the stream also was not surveyed due to access restraints.

Several drainages combine to form the main channel. These small drainages have predominantly clay substrate and a narrow 1-2 foot wide channel 1-2 feet deep. At their confluence the channel is more defined although often covered with logging slash. Channel substrate has more gravel and occasional cobbles, however; several large deposits of silt were observed. The stream is almost 100% riffle/run.

ECONOMIC

DWR Water Rights Data: No recorded permits as of 2/16/94

RECREATION

Park/Recreational Facility: The stream does not flow through or into any park or recreational facility

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None recorded as of 2/22/94

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands / approximate size: None

Flood Storage Capacity: Limited to stream channel and area immediately adjacent to channel.

Riparian Corridor: see attached table

Average Width: 20 ft

Range of Width: 20 ft

Benefit to Water Quality: The lack of overhead canopy can cause increased stream temperature and peak flows which increase sediment flow into the stream.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94

Wildlife Habitat Assessment: see attached table

Average score: 28 (n=3)

Range of scores: 25-30

Essential Connections: None

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

McNamee Harborton

STUDY AREA:

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Newberry Creek	1	4	3	2	2	3	4	2	2	3	2	2	0	1	0	30
Newberry Creek	2	5	3	1	2	4	4	2	1	3	1	2	0	1	0	29
Newberry Creek	3	6	3	1	2	3	2	1	1	2	1	2	0	1	0	25
AVERAGES		5.0	3.0	1.3	2.0	3.3	3.3	1.7	1.3	2.7	1.3	2.0	0.0	1.0	0.0	28.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:				
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%	
Newberry Creek	1	20	20	X				
Newberry Creek	2	20	20	X				
Newberry Creek	3	20	20	X				
AVERAGES		20.0	20.0	100%	0%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MILLER CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: McNamee Harborton

Length Inventoried: 10,200 ft (includes portions of Forest Park)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 10,200 ft, but only 1700 feet are under county jurisdiction

Area of Watershed in Multnomah County: 408 acres, but only 200 acres are under County jurisdiction

Abutting Land Use Designations (percent of study area stream length):

Rural Residential	Urban Residential R-20	Urban Residential R-10	Commercial Forest	Other
10%	0%	0%	90%	0%

Stream Description:

Miller Creek runs adjacent to and through Forest Park. Only 1700 feet are under the jurisdiction of Multnomah County and include two reaches which are not contiguous. This made it impractical to survey only individual segments so the entire stream was surveyed. Habitat and stream morphology are similar throughout.

The headwaters of Miller creek are located just east and south of the Newberry road - Skyline drive intersection. The creek flows through a fenced pasture for the first 500 feet in a 10-20 foot deep canyon. The stream then flows into a mixed conifer/deciduous forest. Canopy closure is currently 30% (canopy cover would be significantly higher during full leaf-out) and species include western red cedar, Douglas fir, and red alder. The shrub layer is moderate and is made up of salmonberry and vine maple. As the stream flows east it is joined by several tributaries and the overstory composition changes to predominantly deciduous (red alder and big-leaf maple). The tree density varies from sparse to moderately dense. Conifers become more prevalent upslope to the south. The shrub layer becomes denser. At approximately 4000 feet the shrub layer has been cleared on the north bank. Coarse woody debris is relatively abundant in the stream channel but lacking upslope and no snags were observed.

The stream flows through a canyon of changing topography, in some areas it has a wide flat flood plain with braided side channels and in others it is a narrow steep walled gorge. The middle of the stream experienced multiple bank failures predominantly on the south side, some very recent and others several years old. The substrate is clay/silt at the headwaters and becomes gravel/cobble with boulders downstream. The stream is approximately 30% pool and 75% riffle. It flows under highway 30 through a square concrete tunnel.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S10604	SWNE 33 2N1W	Power (PW)	.2500 CFS
S1060	SWNE 33 2N1W	Domestic (DO)	.2500 CFS
S15929	NWNW 4 1N1W	Domestic (DI) (Inc. Lawn & Garden)	.0100 CFS

RECREATION

Park/Recreational Facility: The majority of the stream flows through Forest Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None recorded as of 2/22/94

Public Educational Use: None identified, but the stream flows through Forest Park, so educational opportunities are available for that portion.

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands / approximate size: Multiple small seeps.

Flood Storage Capacity: Flood storage is limited to stream channel and area immediately adjacent to the channel. The stream does have side channels in some areas that would store some quantity of main channel overflow.

Riparian Corridor: see attached table

Average Width: 142 ft

Range of Width: 90-200 ft

Benefit to Water Quality: There appears to be sufficient canopy cover and woody debris in the stream to maintain current water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94

Wildlife Habitat Assessment: see attached table

Average score: 51 (n=10)

Range of scores: 41-59

Essential Connections: N/A

SR/SHAPIRO Project #7935258
Miller Creek Profile

May 13, 1994

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

McNamee Harborton

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Miller Creek	1	8	6	8	3	4	4	2	5	4	4	4	3	4	0	59
Miller Creek	2	8	6	8	3	4	4	2	4	4	3	4	4	3	0	57
Miller Creek	3	8	6	8	4	4	4	2	4	4	2	3	4	2	0	55
Miller Creek	4	8	6	8	3	4	4	2	4	4	2	3	4	3	0	55
Miller Creek	5	8	6	8	3	4	4	2	4	4	2	3	4	3	0	55
Miller Creek	6	4	3	8	3	4	4	2	3	4	2	4	4	3	0	48
Miller Creek	7	4	3	8	3	4	4	2	4	4	2	4	4	3	0	49
Miller Creek	8	4	3	8	3	4	4	2	4	4	2	4	4	3	0	49
Miller Creek	9	4	3	8	2	4	4	2	3	3	3	2	2	3	0	43
Miller Creek	10	4	3	8	2	3	3	2	3	3	4	2	2	2	0	41
AVERAGES		6.0	4.5	8.0	2.9	3.9	3.9	2.0	3.8	3.8	2.6	3.3	3.5	2.9	0.0	51.1

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Miller Creek	1	75	100	X			
Miller Creek	2	70	75	X			
Miller Creek	3	50	70	X			
Miller Creek	4	75	75	X			
Miller Creek	5	50	60	X			
Miller Creek	6	50	40	X			
Miller Creek	7	65	50	X			
Miller Creek	8	65	50	X			
Miller Creek	9	100	100		X		
Miller Creek	10	100	100		X		
AVERAGES		70.0	72.0	80%	20%		

*Width of riparian corridor in feet (in segment) looking downstream.

Cornelius Pass Area

MIDDLE ROCK CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Cornelius Pass Area

Length Inventoried: 10,590 ft (2.1 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 15,590 ft (3.0 miles)

Area of Watershed in Multnomah County Study Area: 1,260 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Middle Rock	50%	30%	5%	15%	

Key:

EFU:	Exclusive Farm Use
CFU:	Commercial Forestry Use
MUA:	Multiple Use Agriculture
RR:	Rural Residential
R10:	Urban Residential

Stream Description:

Rock Creek Main Stem - South

The stream is constrained on the east by Rock Creek road. The stream runs in a shallow channel with a 20-50 foot flood plain for about half this segment then becomes more channelized. Houses are common and landscaping and the houses themselves all impact the stream and surrounding habitat. The overstory is mixed conifer/deciduous where it is intact. The west slope has been clear cut down to the toe of the slope (20-30 feet away from the stream) in the middle section. The south end of the segment to the county line runs through a grass field with no overstory.

The stream is 6-10 feet wide and varies in depth from 1 - 2 feet. It is 30% pool and 75% riffle/run. Substrate is predominantly gravel/cobble/boulder.

Rock Creek Tributary III

Tributary III originates at the base of skyline road and flows in a southwesterly direction. It is in moderately deep draw (30 - 40 degree side slopes) and the upper slopes have been cleared for pastures/fields. A vegetation buffer of 50-250 feet or more has been left on both sides of the stream. The overstory is mixed conifer/deciduous and is comprised of red alder (4-20 inches) big-leaf maple

(4-20 inches), Douglas fir (12-26 inches), and western red cedar (12-26 inches). The canopy cover is 30-50%. The shrub layer varies from very dense to sparse and is made up of salmonberry, Himalayan blackberry, vine maple, and Indian plum. The stream is crossed by three roads, the second has no culvert, and the upstream road has a large pond behind it. As the stream nears the County line it becomes deeply incised (six feet), then flows down a steep slope into a culvert under the railroad tracks out of the County.

The stream is usually small, one-two feet wide and between three and 12 inches deep, and of moderate gradient. The lower portion has a very diverse substrate including some bedrock but is dominated by gravel and sand/sediment. The upper reaches are primarily mud/clay/sediment with some gravel/cobble.

Rock Creek Tributary IV

Tributary IV begins as a drainage ditch south of the Brooks Road/Skyline Road intersection. The portion above Brooks Road recently had the vegetation around the channel (predominantly Himalayan blackberry) cleared and burned. There are fields to both sides. After it crosses Brooks Road, the stream has a mixed conifer deciduous stand to the south and a 25-foot buffer between it and a field upslope. The overstory is comprised of big-leaf maple (8-12 inches) red alder (10-18 inches) and Douglas fir (12-18 inches). The canopy cover is 30% or greater. The shrub layer is moderate to dense salmonberry, Himalayan blackberry, Indian plum, elderberry and occasional huckleberry. Cornelius Pass Road crosses the stream approximately 500 feet from Brooks Road. The overstory and shrub layer remain similar and there is another field to the north. At approximately 2,000 feet from Brooks Road the stream flows through a pasture with adjacent barns and two houses. Downstream the stream again enters a mixed conifer/deciduous stand. It crosses Rock Creek Road twice in 200 feet and leaves the County. There are three houses near the stream in this lower section.

The stream is small one-two feet across and three-eight inches deep on average. Substrate is dominated by cobbles and silt. The stream is 70% riffle/run and 30% pool.

Rock Creek Tributary IV

Much of the stream was not directly observed due to lack of access permission. However, much of the stream channel and vegetation can be observed from Kaiser Road. Within the County the stream flows through a draw with a thin buffer 100 -200 feet wide with sparse to moderate overstory. Overstory is primarily Douglas fir, red alder, and occasional black cottonwood. The shrub layer is elderberry, salmonberry, and in disturbed sites dense Himalayan blackberry. At least four houses are located on the north upper slope before the stream crosses Kaiser Road. In many places home construction, landscaping, and other human activity have removed or altered vegetation on the upper slopes. Just prior to the Kaiser Road crossing the stream flows through a pasture for approximately 500 feet. All overstory has been removed and only grasses and shrubs (Himalayan blackberry and elderberry) are present. The stream flows under Kaiser Road into a small stand (< eight acres) of 20-26-inch Douglas fir. A driveway crosses the stream with a culvert approximately 50 feet from Kaiser Road. The north and south sides of the stand are bounded by fields.

The stream is small, usually less than one foot wide and two-six inches deep. Where the stream crosses Kaiser Road it is reduced to a trickle (eight inches wide and two-three inches deep). Substrate in the higher reaches is predominantly clay with some boulders and cobbles. Lower down it appears

to become more diverse and contains some gravels, although sediment loading appears to be high. The stream is 25% pools and 75% riffle.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S9254	NESE 23 2N 2W	Domestic (Inc. Stock)	.0100 CFS
S1260	SWNE 26 2N 2W	Livestock	1.1000 AFS
S20759	SWNE 26 2N 2W	Livestock	.0100 CFS
S37297	SWNW 26 2N 2W	Fish	.5000 CFS
S37297	SWNW 26 2N 2W	Recreation	.5000 CFS
S37847	SWNW 26 2N 2W	Recreation	.1000 CFS
S33476	NWSE 36 2N 2W	Fish	.0100 CFS
S16471	SESW 36 2N 2W	Domestic	.0100 CFS
S5469	NWNE 6 1N 1W	Irrigation	3.600 AF
S34283	NWNE 6 1N 1W	Irrigation	.5800 CFS
S35552	NWSW 6 1N 1W	Domestic (Inc. Lawn & Garden)	.0100 CFS
S35552	NWSW 6 1N 1W	Livestock	.0050 CFS
S42187	NWNE 6 1N 1W	Irrigation	.0900 CFS
S29283	SESE 8 1N 1W	Livestock	.0000 CFS
S29284	SESE 8 1N 1W	Domestic (Inc. Stock)	.0100 CFS
S29284	SESE 8 1N 1W	Livestock	.0100 CFS
S11285	SWSW 9 1N 1W	Domestic (Incl Lawn & Garden)	.0500 CFS
S15070	SESW 9 1N 1W	Irrigation	.0100 CFS
S44557	SESW 9 1N 1W	Domestic (Inc. Non-Commercial)	.0100 CFS
S43924	SESW 9 1N 1W	Domestic	.0050 CFS
S41182	NESE 9 1N 1W	Domestic	.0100 CFS
S41182	NESE 9 1N 1W	Livestock	.0200 CFS
S41182	NESE 9 1N 1W	Domestic (Inc. Livestock)	.0400 CFS
S27148	NESE 9 1N 1W	Domestic	.0100 CFS
S42705	NENW 9 1N 1W	Domestic (Inc. Lawn & Garden)	.0100 CFS
S12111	SENE 9 1N 1W	Domestic	.0100 CFS
S5283	SWNE 15 1N 1W	Livestock	.8000 AF

III-116

RECREATION

Park/Recreational Facility: Rock Creek flows to Rock Creek Park in Washington County along Highway 26. Rock Creek Park is a five acre park under the jurisdiction of the Tualatin Hills Parks

and Recreation District. Approximately 2.5 acres of the park is in a natural state for passive recreation. A bark chip path has been provided along to the creek for access to the riparian area and wildlife observation.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: Rock Creek Park is used by the Green City Data project for high school educational programs. The Creek flows through Rock Creek Park in Washington County.

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: 134 ft

Range of Width: 110-155 ft

Benefit to Water Quality: The current moderate level of canopy closure and the width of the riparian corridor on the main stem and tributaries III and IV will mitigate for any increased stream temperature caused by the low level of canopy cover present along tributary V and have a positive influence on overall stream water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 27%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 49

II

Range of scores: 36-57

Essential Connections: N/A

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. III (North)	1	4	3	6	2	4	4	3	5	6	3	2	2	3	0	47
Rock Creek Trib. III (North)	2	4	3	6	4	6	4	2	6	6	3	2	2	3	0	51
Rock Creek Trib. III (North)	3	4	3	6	2	6	4	2	6	6	3	2	2	3	0	49
AVERAGES		4.0	3.0	6.0	2.7	5.3	4.0	2.3	5.7	6.0	3.0	2.0	2.0	3.0	0.0	49.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. III (North)	1	60	70		X		
Rock Creek Trib. III (North)	2	75	75		X		
Rock Creek Trib. III (North)	3	75	60		X		
AVERAGES		70.0	68.3	0%	100%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. IV (Middle)	1	4	3	6	2	8	6	2	6	6	3	2	2	6	0	56
Rock Creek Trib. IV (Middle)	2	4	3	8	2	6	4	3	6	6	3	2	2	4	2	55
Rock Creek Trib. IV (Middle)	3	4	3	6	2	6	4	2	4	4	3	1	1	4	0	44
AVERAGES		4.0	3.0	6.7	2.0	6.7	4.7	2.3	5.3	5.3	3.0	1.7	1.7	4.7	0.7	51.7

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. IV (Middle)	1	50	60	X			
Rock Creek Trib. IV (Middle)	2	80	75	X			
Rock Creek Trib. IV (Middle)	3	75	65	X			
AVERAGES		68.3	66.7	100%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. V (South)	1	4	3	2	2	6	2	2	4	4	3	0	1	3	0	36
AVERAGES		4.0	3.0	2.0	2.0	6.0	2.0	2.0	4.0	4.0	3.0	0.0	1.0	3.0	0.0	36.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. V (South)	1	60	65	X			
AVERAGES		60.0	65.0	100%	0%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

Germantown Area

SOUTH ROCK CREEK (Tributaries VI-VII) Stream Profile

GENERAL INFORMATION

Location Study Area: Germantown Area

Length Inventoried: 39,010 ft (7.4 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 39,010 ft (7.4 miles)

Area of Watershed in Multnomah County Study Area: 1,780 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
South Rock	55%	25%	5%	15%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

Much of Rock Creek in Germantown Road Area was not surveyed due to lack of access permission. What follows is extrapolation from aerial photo interpretation and individual site visits to varying lengths of streams.

Rock Creek Tributary VI

East of the Multnomah County/Washington County line the stream is low gradient and surrounding topography is relatively flat. The entire length of the stream has been impacted by past human activity and much of the land has been converted to pasture. The overstory is primarily deciduous, composed of red alder, ash, willow, and big-leaf maple. It is intermittent and often sparse, with a canopy cover of less than 25%. The shrub layer, where intact, is composed of the non-native Himalayan blackberry, rose, Indian plum, and salmonberry. A small wetland is located just east and south of where Kaiser Road crosses the stream. The stream continues east-west for approximately 200 feet then becomes north-south. Most of the stream length between Kaiser Road and Germantown Road has a virtually impenetrable buffer dominated by Himalayan blackberry 25 feet wide on both

sides. The stream crosses Germantown Road 1,050 feet from where it crosses Kaiser Road. North of Germantown Road the stream enters a mixed deciduous/conifer forest (from this point upstream no access permission was granted) and continues in the mixed stand to its headwaters. The stand is limited to the stream corridor and lower slopes, and is 400-1,000 feet wide in most places. Upslope areas often have been converted to pasture or home sites. Immediately north of Germantown Road a dirt road crosses the stream and its vegetation has been cleared apparently for a home site. Vegetation becomes more diverse. Western red cedar, western hemlock, and Douglas fir are included in the overstory and snowberry, and elderberry are added to the shrub layer. A red-legged frog was caught south of German Road.

The USGS map shows two arms of Rock Creek crossing under Kaiser Road. Only one stream channel was observed crossing the road. The stream splits approximately 200 feet east of Kaiser Road. The stream is low gradient (less than 5%). The stream is four-six feet wide and often one-two feet in depth in the lower reaches. It is joined by several tributaries upstream from Germantown Road. The substrate is predominantly silt/clay in the lower reaches, with more cobble/gravel upstream. It is approximately 25% pool and 75% riffle/run.

Rock Creek Tributary VII

The stream splits from Tributary VI 200 feet east of Kaiser Road. The overstory in the stream channel is primarily deciduous. For approximately the first 200 feet, upslope of the stream to the south is a small stand of mixed conifer/deciduous trees. The north side has a 20-25-foot buffer and then pasture upslope. The stream often has just a thin buffer and then a pasture or field to one side or the other. Overstory remains predominantly deciduous. The shrub layer is usually dense and dominated by Himalayan blackberry. Just west of the powerline crossing are several beaver dams. The bottom lands are 200 - 300 feet wide and relatively flat. These areas are probably seasonally inundated. In this area most overstory has been removed or is dead or dying due to inundation. After the powerlines, the stream turns and runs north - south, and the overstory is primarily deciduous (alder and big-leaf maple with occasional western red cedar). In some areas cattle are allowed access to the stream and stream banks have little vegetation. The stream turns east - west again 9,000 feet from Kaiser Road. The banks become steeper and the floodplain narrows. Cattle access is limited by fencing. Further to the east the stream is forested on both sides with multiple home sites along the upper slopes. Its headwaters are just west of Skyline Boulevard.

The stream is low gradient with a wide floodplain for much of its length. It is fairly large, three-six feet across and one-two feet deep until east of the powerlines where it becomes shallower. The primary substrate is silt with more gravel and cobble in the far upstream reaches. It is 85% riffle/run and 15% pools.

Rock Creek Tributary VIIA

Observations were made from north of old Germantown Road. The overstory in the riparian area is red alder, big-leaf maple and western red cedar with salmonberry and Indian plum dominating the shrub layer. The stream bottom is relatively flat and 15-20 feet wide with 30-40 degree slopes. This vegetation type continues upstream until just prior to New Germantown Road where most of the vegetation has been altered by human activity, primarily houses and landscaping. Downstream, three houses have backyards/pastures adjacent to the stream channel, otherwise vegetation remains similar

until the powerline corridor where vegetation is controlled. The confluence with Rock Creek Tributary II is just prior to the powerlines.

The stream is fairly wide and shallow (three feet wide and four inches deep) with substrate of dominated by cobble/gravel with good boulder component and relatively low sediment load. The pool to riffle/run ratio is approximately one-four.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S9254	NESE 23 2N 2W	Domestic (Inc. Stock)	.0100 CFS
S1260	SWNE 26 2N 2W	Livestock	1.1000 AFS
S20759	SWNE 26 2N 2W	Livestock	.0100 CFS
S37297	SWNW 26 2N 2W	Fish	.5000 CFS
S37297	SWNW 26 2N 2W	Recreation	.5000 CFS
S37847	SWNW 26 2N 2W	Recreation	.1000 CFS
S33476	NWSE 36 2N 2W	Fish	.0100 CFS
S16471	SESW 36 2N 2W	Domestic	.0100 CFS
S5469	NWNE 6 1N 1W	Irrigation	3.600 AF
S34283	NWNE 6 1N 1W	Irrigation	.5800 CFS
S35552	NWSW 6 1N 1W	Domestic (Inc. Lawn & Garden)	.0100 CFS
S35552	NWSW 6 1N 1W	Livestock	.0050 CFS
S42187	NWNE 6 1N 1W	Irrigation	.0900 CFS
S29283	SESE 8 1N 1W	Livestock	.0000 CFS
S29284	SESE 8 1N 1W	Domestic (Inc. Stock)	.0100 CFS
S29284	SESE 8 1N 1W	Livestock	.0100 CFS
S11285	SWSW 9 1N 1W	Domestic (Incl Lawn & Garden)	.0500 CFS
S15070	SESW 9 1N 1W	Irrigation	.0100 CFS
S44557	SESW 9 1N 1W	Domestic (Inc. Non-Commercial)	.0100 CFS
S43924	SESW 9 1N 1W	Domestic	.0050 CFS
S41182	NESE 9 1N 1W	Domestic	.0100 CFS
S41182	NESE 9 1N 1W	Livestock	.0200 CFS
S41182	NESE 9 1N 1W	Domestic (Inc. Livestock)	.0400 CFS
S27148	NESE 9 1N 1W	Domestic	.0100 CFS
S42705	NENW 9 1N 1W	Domestic (Inc. Lawn & Garden)	.0100 CFS
S12111	SENE 9 1N 1W	Domestic	.0100 CFS
S5283	SWNE 15 1N 1W	Livestock	.8000 AF

SRI/SHAPIRO Project #7935258
South Rock Creek Profile

May 13, 1994

RECREATION

Park/Recreational Facility: Rock Creek flows to Rock Creek Park in Washington County along Highway 26. Rock Creek Park is a five acre park under the jurisdiction of the Tualatin Hills Parks and Recreation District. Approximately 2.5 acres of the park is in a natural state for passive recreation. A bark chip path has been provided along to the creek for access to the riparian area and wildlife observation.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: Rock Creek Park is used by the Green City Data Project for high school educational programs. The Creek flows through Rock Creek Park in Washington County.

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

Riparian Corridor - see attached table

Average Width: 69 ft

Range of Width: 10-300 ft

Benefit to Water Quality: The current canopy cover and width of the riparian area in the upper reaches are sufficient to have a positive influence to water quality. The downstream segments have been subject to variable levels of disturbance causing a reduced level of canopy closure and reduction of vegetation in the riparian corridor. The areas will have a negative influence on water quality.

SRI/SHAPIRO Project #7935258
South Rock Creek Profile

May 13, 1994

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 22%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 47

Range of scores: 43-51

Essential Connections: N/A

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

GERMANTOWN

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:							TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
Rock Creek Trib. VI (North)	1	8	6	7	2	2	6	2	2	2	2	1	1	2	0			43
Rock Creek Trib. VI (North)	2	8	6	6	4	3	6	2	4	4	2	1	1	2	2			51
Rock Creek Trib. VI (North)	3	8	6	3	2	4	4	2	5	4	3	1	2	3	0			47
AVERAGES		8.0	6.0	5.3	2.7	3.0	5.3	2.0	3.7	3.3	2.3	1.0	1.3	2.3	0.7			47.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. VI (North)	1	20	30	X			
Rock Creek Trib. VI (North)	2	30	30	X			
Rock Creek Trib. VI (North)	3	60	60	X			
AVERAGES		36.7	40.0	100%	0%	0%	0%

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. VII (South; Main Stem)	1	6	3	4	8	4	4	2	3	3	2	2	2	2	2	47
Rock Creek Trib. VII (South; Main Stem)	2	4	3	4	3	4	4	2	4	4	2	2	2	4	0	42
Rock Creek Trib. VII (South; Main Stem)	3	4	2	8	2	4	4	4	6	4	2	2	2	5	0	49
Rock Creek Trib. VII (South; Main Stem)	4	4	3	6	3	4	4	2	6	4	2	2	2	4	0	46
Rock Creek Trib. VII (South; Main Stem)	5	4	3	5	3	4	4	2	4	5	2	3	2	4	0	45
AVERAGES		4.4	2.8	5.4	3.8	4.0	4.0	2.4	4.6	4.0	2.0	2.2	2.0	3.8	0.4	45.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. VII (South; Main Stem)	1	150	150			X	
Rock Creek Trib. VII (South; Main Stem)	2	20	20			X	
Rock Creek Trib. VII (South; Main Stem)	3	10	8				X
Rock Creek Trib. VII (South; Main Stem)	4	10	10				X
Rock Creek Trib. VII (South; Main Stem)	5	6	4				X
AVERAGES		39.2	38.4	0%	0%	40%	60%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. VIIA (North)	1	4	3	7	2	4	4	2	4	4	3	4	3	3	0	47
AVERAGES		4.0	3.0	7.0	2.0	4.0	4.0	2.0	4.0	4.0	3.0	4.0	3.0	3.0	0.0	47.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. VIIA (North)	1	10	10				X
AVERAGES		10.0	10.0	0%	0%	0%	100%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Rock Creek Trib. VIIB (North)	1	4	3	5	4	4	4	2	5	5	2	3	2	3	3	49
AVERAGES		4.0	3.0	5.0	4.0	4.0	4.0	2.0	5.0	5.0	2.0	3.0	2.0	3.0	3.0	49.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Rock Creek Trib. VIIB (North)	1	20	30				X
AVERAGES		20.0	30.0	0%	0%	0%	100%

*Width of riparian corridor in feet (in segment) looking downstream.

Bonny Slope Area

NORTH BRONSON CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Bonny Slope Area

Length Inventoried: 5,280 ft (1.0 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 5,280 ft (1.0 miles)

Area of Watershed in Multnomah County: 210 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
North Bronson		60%		40%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

North Bronson Creek

The headwaters of North Bronson begin at the intersection of Northwest Springville Road and Skyline Boulevard. Riparian overstory is open and primarily red alder, big leaf maple and occasional western red cedar. Canopy cover is approximately 50%. The understory is variable in density and primarily salmonberry and vine maple. The stream bottom is 5-10 feet wide, the northwest slope is 45 degrees and southeast 25-30 degrees. The stream passes under powerlines with associated construction; some overstory has been removed for guyline corridors. After the powerlines the east side is dominated by 8-12 inches Douglas fir and the west side is dominated by 4-8 inches red alder. The slope to the west is approximately 12 degrees. Salmonberry becomes very dense and the flood plain widens to 20 - 30 feet. The stream turns west approximately 3,000 feet from the headwaters. The north side is still dominated by alder, the south is more diverse with alder, big-leaf maple, western red cedar and occasional Douglas fir (24 inches). In this portion of the stream coarse woody debris (old logging debris) is common in the stream channel and is 20 inches or larger in most cases. The stream passes through a culvert under a gravel road and then leaves the County.

The stream is of moderate gradient. The substrate is dominated by gravel with boulders and cobbles common in the lower reaches. Higher up the substrate becomes more silt/clay. The stream is 20% pool and 80% riffle run. The average stream temperature was 7.0 degrees Celsius.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S39760	NWNW 22 1N 1W	Irrigation	.0300 CFS
S14655	NWSW 22 1N 1W	Recreation	.0200 CFS
S14655	NWSW 22 1N 1W	Domestic	.0100 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: 119 ft

Range of Width: 80-150 ft

Benefit to Water Quality: The current moderately high level of canopy closure and the width of the riparian corridor will have a positive influence on water quality.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Bronson Creek - North Fork	1	8	6	4	2	6	5	3	6	6	3	3	4	3	0	59
Bronson Creek - North Fork	2	4	3	6	2	5	4	2	4	4	2	4	4	5	0	49
Bronson Creek - North Fork	3	4	3	6	2	6	6	2	4	4	3	3	4	5	0	52
Bronson Creek - North Fork	4	4	3	2	2	3	4	2	2	4	2	2	4	3	0	37
Bronson Creek - North Fork	5	4	3	4	2	3	3	2	3	3	2	2	3	3	0	37
AVERAGES		4.8	3.6	4.4	2.0	4.6	4.4	2.2	3.8	4.2	2.4	2.8	3.8	3.8	0.0	46.8

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Bronson Creek - North Fork	1	75	75			X	
Bronson Creek - North Fork	2	40	40			X	
Bronson Creek - North Fork	3	100	50			X	
Bronson Creek - North Fork	4	75	40			X	
Bronson Creek - North Fork	5	50	50			X	
AVERAGES		68.0	51.0	0%	0%	100%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 53

Range of scores: 35-76

Essential Connections: N/A

SOUTH BRONSON CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Bonny Slope Area

Length Inventoried: 7,390 ft (1.4 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 7,390 ft (1.4 miles)

Area of Watershed in Multnomah County Study Area: 395 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
North Bronson		60%		40%	
South Bronson				100%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

South Bronson Creek

The headwaters of South Bronson Creek begin just west of Skyline Boulevard in a shallow draw with a open mixed deciduous/conifer overstory. The draw rapidly becomes steeper with side slopes of 30 - 45 degrees. The shrub layer is dense and composed of vine maple, elderberry, huckleberry, rose, and Himalayan blackberry. At approximately 2,000 feet from Skyline Boulevard a new dirt road has been put in. Debris from the construction was pushed over the embankment towards the stream. The road affects the stream for 1,000 feet or more. Three conifer snags were seen in this area with pileated woodpecker foraging holes. Houses become more prevalent on the upper slopes in the lower reaches. Just prior to Laidlaw Road the understory vegetation has been scraped away. Two human-made ponds have also been constructed here. Downstream from Laidlaw Road the floodplain widens to 100-200 feet. A small natural pond is north of the stream. The overstory is made up of larger trees including alder, big-leaf maple, Douglas fir, and western hemlock. Four larger conifer snags are in this area, at least two have been used by pileated woodpeckers. At approximately 7,000 feet from the start, the stream flows through a cow pasture. Most of the overstory has been removed and riparian

vegetation is dominated by Himalayan blackberry. Cows have access to the stream. Approximately one-half or more of the remaining Douglas fir overstory had been recently cut.

In the upper reaches the substrate is predominantly clay and boulders. Lower down it becomes silt/gravel/cobble/boulder, with silt the most prevalent. The stream is 85% riffle/run and 15% pool. Average stream temperature was 8.5 degrees Celsius.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S9808	SWSE 22 1N 1W	Fish	.2500 CFS
S9808	SWSE 22 1N 1W	Domestic (Inc. Lawn & Garden)	.2500 CFS

RECREATION

Park/Recreational Facility: None

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: None

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: Yes

Flood storage limited to stream channel: No

SRI/SHAPIRO Project #7935258

South Bronson Creek Profile

May 13, 1994

Riparian Corridor - see attached table

Average Width: 94 ft

Range of Width: 40-200 ft

Benefit to Water Quality: The current moderately high level of canopy cover and the width of the riparian area will have a positive influence on water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 42

Range of scores: 32-52

Essential Connections: The downstream segments with lower WHA scores provide potential travel corridors for movement to the upstream areas with higher WHA scores.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

BONNY SLOPE

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:							TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N			
Bronson Creek – South Fork	1	4	3	8	2	6	3	2	4	4	2	3	3	4	0	48		
Bronson Creek – South Fork	2	4	3	8	2	6	3	2	4	4	2	0	0	2	2	42		
Bronson Creek – South Fork	3	4	3	8	2	6	3	2	6	2	2	1	2	2	0	43		
Bronson Creek – South Fork	4	4	3	6	4	6	3	2	6	3	2	1	1	3	0	44		
Bronson Creek – South Fork	5	4	3	8	4	6	4	2	6	5	2	2	0	4	2	52		
Bronson Creek – South Fork	6	4	3	1	2	2	8	4	1	2	2	0	0	3	0	32		
Bronson Creek – South Fork	7	8	6	1	2	2	8	1	1	2	2	0	0	3	0	36		
AVERAGES		4.6	3.4	5.7	2.6	4.9	4.6	2.1	4.0	3.1	2.0	1.0	0.9	3.0	0.6	42.4		

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Bronson Creek - South Fork	1	30	30				X
Bronson Creek - South Fork	2	20	50		X		
Bronson Creek - South Fork	3	50	100				X
Bronson Creek - South Fork	4	50	50			X	
Bronson Creek - South Fork	5	100	100				X
Bronson Creek - South Fork	6	20	20	X			
Bronson Creek - South Fork	7	20	20		X		
AVERAGES		41.4	52.9	14%	29%	14%	43%

*Width of riparian corridor in feet (in segment) looking downstream.

BALCH CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Balch Creek Area

Length Inventoried: 14,100 ft (2.8 miles)

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 14,100 ft (2.8 miles)

Area of Watershed in Multnomah County: 700 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Balch		95%			5%

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

Balch Creek - Main Stem

The headwaters of of Balch Creek are southeast of the intersection of Skyline Boulevard and Thompson Road. Access to the headwaters and upper reaches of of Balch Creek was denied. Lower down the stream is bordered on the east by Thompson Road. The stream bottom and lower slopes are sparsely forested with mature red alder, big-leaf maple, Douglas fir, western red cedar, and western hemlock. The shrub layer is moderately dense and comprised of Indian plum, elderberry, salmonberry, vine maple, and Himalayan blackberry. A gravel road parallels the stream on the west side for a short distance. The stream crosses Thompson Road approximately 800 feet from the Cornell Road intersection. Two houses with associated lawns and clearing are immediately adjacent to the stream. After crossing under Cornell Road, Balch Creek enters a steep-sided draw (35 degrees). Cornell Road borders the creek on the east. The riparian vegetation is similar to the forested portions upstream. Several houses are adjacent to the stream on the east side and one driveway crosses it. The stream then crosses under Cornell Road and turns east as it enters Macleay Park.

II.

Balch Creek Area

The stream is six feet wide and average six inches in depth. Coarse woody debris is common in the stream and forms some deeper pools. The substrate is predominately cobbles with gravel and boulders. The stream is 65% riffle/run and 35% pools

Balch Creek - Tributary I

The stream originates east of the Skyline Boulevard/Cornell Road intersection. Cornell Road parallels the stream on the north. The stream flows through a mixed deciduous/conifer stand of red alder, big-leaf maple, occasional Douglas fir and western red cedar. Upslope adjacent to Cornell Road are three Douglas fir that range in size from 38-50 inches. The shrub layer in the riparian area is moderately dense and comprised of Indian plum, salmonberry, snowberry, and Himalayan blackberry. In the bottom sections, near the confluence with the main stem there are houses on the north and south banks; landscaping associated with the house on the south has removed most of the native vegetation for approximately 200 feet.

The stream width is varied, it is often incised two-three feet and two-three feet deep or 8-12 feet wide with a 200-foot-wide floodplain. The upper slopes are relatively steep (45 degrees). The stream substrate is dominated by gravel and cobbles with some of the upper reaches in clay/mud. The stream is 70% riffle/run and 30% pool.

Balch Creek - Tributary II

This small stream flows through a moderately shallow draw. The original conifer overstory was removed and now a young alder stand has established itself with occasional big-leaf maple and scattered small western hemlock and western red cedar. The understory in the stream area is diverse and very dense and comprised of Indian plum, vine maple, salmonberry, Himalayan blackberry, rose, snowberry, and elderberry. Several structures, apparently used for erosion control, are in the stream.

The stream is small, only one-two feet wide and less than six inches deep at the confluence with the main stem. It flows through a narrow bottom with 35 degree side slopes. The substrate is primarily cobble with a light to moderate sediment load.

Balch Creek - Tributary III

The stream flows through the Collins Sanctuary (managed by the Audubon Society). A trail runs upslope to the north of the stream for most of it's length. The overstory is primarily red alder and big-leaf maple with some Douglas fir and western red cedar. The shrub layer is moderate to dense and comprised of salmonberry, vine maple, elderberry, and occasional Himalayan blackberry.

The stream is deeply incised prior to crossing Cornell Road and, then flows in a shallow channel further upstream. The stream is small, only one-two feet wide and less than six inches deep at the confluence with the main stem. The substrate is evenly distributed between cobbles, gravel, sand, and sediment. The stream is 35% pool and 65% riffle/runs.

Balch Creek - Tributary IV (Audubon or Bones Creek)

The stream originates in a stand of large conifers north of Burnside Road. Downstream 300 feet, the stream enters a open stand of red alder with occasional small big-leaf maple, western red cedar and western hemlock. Two Pacific yew trees were seen in the upper reach. The stream flows under a foot bridge and enters a mixed conifer/deciduous stand. The understory/shrub layer varies from sparse to dense but is consistent in composition all along the stream. Shrubs include salmonberry, currant, vine maple, elderberry, and Indian Plum. Two hemlock snags (30-40 inches) with pileated woodpecker holes are in the lower reach. A small pond is located south of, and probably was formed by, Cornell Road. A house and barn are located on the east upper bank near Cornell Road. The Audubon House is immediately north of Cornell Road and the stream flows just west of it to the main stem.

The stream is in a draw with a 10-20-foot-wide bottom and side slopes of 35-45 degrees. The channel morphology varies from a 6-8-foot-wide channel to a one-three-foot-wide and one-three-foot-deep incised channel with a 15-20 foot wide flood plain. The stream itself is small, one-two feet wide and eight inches or less deep. The substrate is predominately gravel and cobble. Coarse woody debris is common especially in the upper reaches. The stream is 40% pools and 60% riffle/run.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S7023	SWNE 31 1N 1E	Recreation	2.000 AF
S42851	SWNE 31 1N 1E	Recreation	.0200 CFS

RECREATION

Park/Recreational Facility: Balch Creek is located within Forest Park. Tributary III flows through the Collins Sanctuary (managed by the Audubon Society).

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: Balch Creek is used by the Audubon Society for educational purposes.

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: 98

Range of Width: 10-160

Benefit to Water Quality: The current moderately low level of canopy cover and width of the riparian corridor should have a positive influence on overall water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 25%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: 52

Range of scores: 48-61

Essential Connections: N/A

May 13, 1994

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

BALCH CREEK

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:			Food:			Cover:			Additional Values:					TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Balch Creek (Main Stem)	1	8	6	6	2	6	4	3	6	6	2	2	2	3	0	56
Balch Creek (Main Stem)	2	8	6	6	2	4	4	2	5	3	2	2	2	3	0	49
Balch Creek (Main Stem)	3	8	6	4	2	4	4	2	4	4	3	2	2	3	0	48
Balch Creek (Main Stem)	4	8	6	6	2	4	3	2	4	3	2	3	2	3	3	51
AVERAGES		8.0	6.0	5.5	2.0	4.5	3.8	2.3	4.8	4.0	2.3	2.3	2.0	3.0	0.8	51.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Balch Creek (Main Stem)	1	70	65		X		
Balch Creek (Main Stem)	2	8	30			X	
Balch Creek (Main Stem)	3	30	20			X	
Balch Creek (Main Stem)	4	5	5				X
AVERAGES		28.3	30.0	0%	33%	67%	33%

*Width of riparian corridor in feet (in segment) looking downstream.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: BALCH CREEK

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Balch Creek Trib. I (North)	1	8	6	6	2	6	4	3	4	6	3	2	2	3	0	55
AVERAGES		8.0	6.0	6.0	2.0	6.0	4.0	3.0	4.0	6.0	3.0	2.0	2.0	3.0	0.0	55.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Balch Creek Trib. I (North)	1	60	70			X	
AVERAGES		60.0	70.0	0%	0%	100%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: BALCH CREEK

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Balch Creek Trib. II (Middle North)	1	4	3	8	2	6	7	2	3	3	2	3	3	3	0	49
AVERAGES		4.0	3.0	8.0	2.0	6.0	7.0	2.0	3.0	3.0	2.0	3.0	3.0	3.0	0.0	49.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Balch Creek Trib. II (Middle North)	1	50	50		X		
AVERAGES		50.0	50.0	0%	100%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Balch Creek Trib. III (Middle)	1	4	3	5	2	6	5	3	6	4	3	3	1	3	0	48
AVERAGES		4.0	3.0	5.0	2.0	6.0	5.0	3.0	6.0	4.0	3.0	3.0	1.0	3.0	0.0	48.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Balch Creek Trib. III (Middle)	1	80	80		X		
AVERAGES		80.0	80.0	0%	100%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Balch Creek Trib. IV (Middle South)	1	4	3	6	4	6	6	3	7	8	3	2	2	5	2	61
Balch Creek Trib. IV (Middle South)	1	4	3	4	2	8	4	3	3	4	2	3	2	5	2	49
AVERAGES		4.0	3.0	5.0	3.0	7.0	5.0	3.0	5.0	6.0	2.5	2.5	2.0	5.0	2.0	55.0

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Balch Creek Trib. IV (Middle South)	1	75	70		X		
Balch Creek Trib. IV (Middle South)	2	55	55	X			
AVERAGES		65.0	62.5	50%	50%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

SALTZMAN CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Balch Creek Area

Length Inventoried: Not surveyed

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): Not surveyed

Area of Watershed in Multnomah County: 195 acres

Abutting Land Use Designations (percent of study area stream length):

Creek	EFU	CFU	MUA	RR	R10
Saltzman		70%		30%	

Key:

EFU: Exclusive Farm Use
CFU: Commercial Forestry Use
MUA: Multiple Use Agriculture
RR: Rural Residential
R10: Urban Residential

Stream Description:

Lack of access permission prevented on-site observation of the upper Saltzman Creek tributaries. Only a small portion of the stream's three upper tributaries (0.7 miles total) is outside of Forest Park. All three are small intermittent streams. The overstory is mixed conifer/deciduous and the dominant species is red alder in these upper sections. Summer canopy cover during full leaf-out approaches 100%. The understory is most likely dominated by salmonberry. The proximity to Forest Park and the current lack of surrounding development make it very likely that this area receives regular wildlife use.

ECONOMIC

DWR Water Rights Data: None

RECREATION

Park/Recreational Facility: Yes. Much of Saltzman Creek is located within Forest Park. This park is unique in the Portland area because of its passive recreation facilities. Local streams such as Saltzman Creek are an integral part of this recreational experience.

EDUCATIONAL

Oregon Natural Heritage Program (ONHP) - significance designation: As of 2/22/94, no area along surveyed stream segments have been identified by ONHP as ecologically or scientifically significant.

Public Educational Use: Yes. Forest Park is used for public education programs.

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage

Wetlands provide additional flood storage capacity: No

Flood storage limited to stream channel: Yes

Riparian Corridor - see attached table

Average Width: Not surveyed

Range of Width: Not surveyed

Benefit to Water Quality: Aerial photo's indicate that there is sufficient summer canopy cover and riparian buffer width to have a positive influence on water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 0%

Threatened and Endangered Species data: No recorded observations as of 2/22/94 and none observed during survey.

Wildlife Habitat Assessment - see attached table

Average score: Not surveyed

Range of scores: Not surveyed

Essential Connections: Not Surveyed.

List of Common and Scientific Names

Mammals

Bald eagle	<i>Haliaeetus leucocephalus</i>
Beaver	<i>Castor canadensis</i>
Black-tailed deer	<i>Odocoileus hemionus</i>
Elk	<i>Cervus elaphus</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>

Herptiles

Pacific giant salamander	<i>Dicamptodon tenebrosus</i>
red-legged frog	<i>Rana aurora aurora</i>

Fish

Cutthroat trout	<i>Oncorhynchus clarki</i>
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Plants

ash	<i>Fraxinus</i> sp.
big-leaf maple	<i>Acer macrophyllum</i>
black cottonwood	<i>Populus trichocarpa</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
Pacific yew	<i>Taxus brevifolia</i>
red alder	<i>Alnus rubra</i>
western hemlock	<i>Tsuga heterophylla</i>
western red cedar	<i>Thuja plicata</i>
willow	<i>Salix</i> sp.
elderberry	<i>Sambucus</i> sp.

cattail	<i>Typha</i> sp.
currant	<i>Ribes</i> sp.
Devil's club	<i>Oplopanax horridum</i>
Himalayan blackberry	<i>Rubus discolor</i>
huckleberry	<i>Vaccinium</i> sp.
Indian plum	<i>Oemleria cerasiformis</i>
Oregon grape	<i>Berberis nervosa</i>
Pacific trillium	<i>Trillium ovatum</i>
piggy back plant	<i>Tolmiea menziesii</i>
reed canary grass	<i>Phalaris arundinacea</i>
rose	<i>Rosa</i> sp.
salal	<i>Gaultheria shallon</i>
salmonberry	<i>Rubus spectabilis</i>
skunk cabbage	<i>Lysichiton americanum</i>
snowberry	<i>Symphoricarpos albus</i>
stinging nettle	<i>Urtica dioica</i>
sword fern	<i>Polystichum munitum</i>
trailing blackberry	<i>Rubus ursinus</i>
viny maple	<i>Acer circinatum</i>
waterleaf	<i>Hydrophyllum</i> sp.
Western wahoo	<i>Euonymus occidentalis</i>

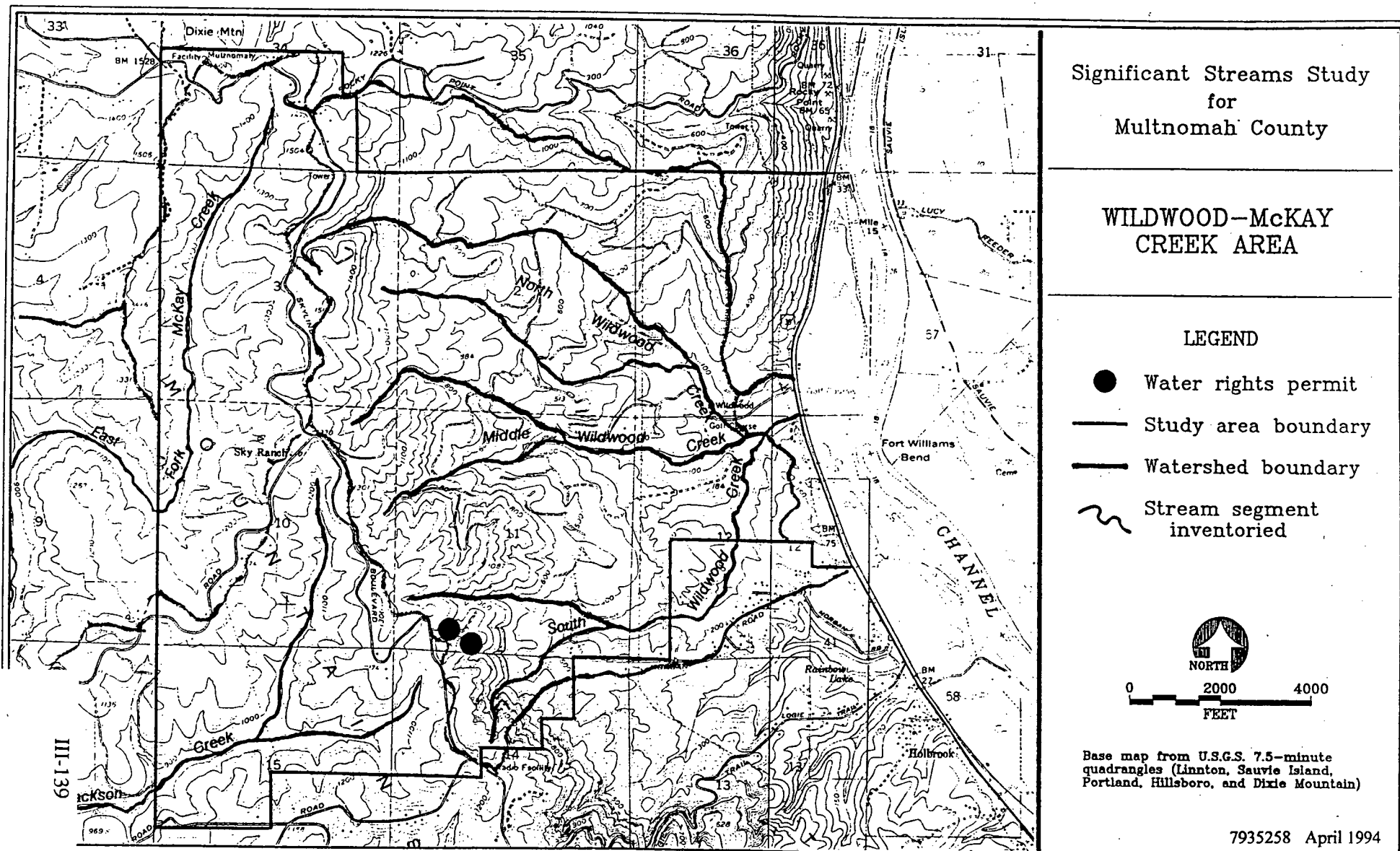
APPENDIX B

SAMPLE WILDLIFE HABITAT ASSESSMENT FORM

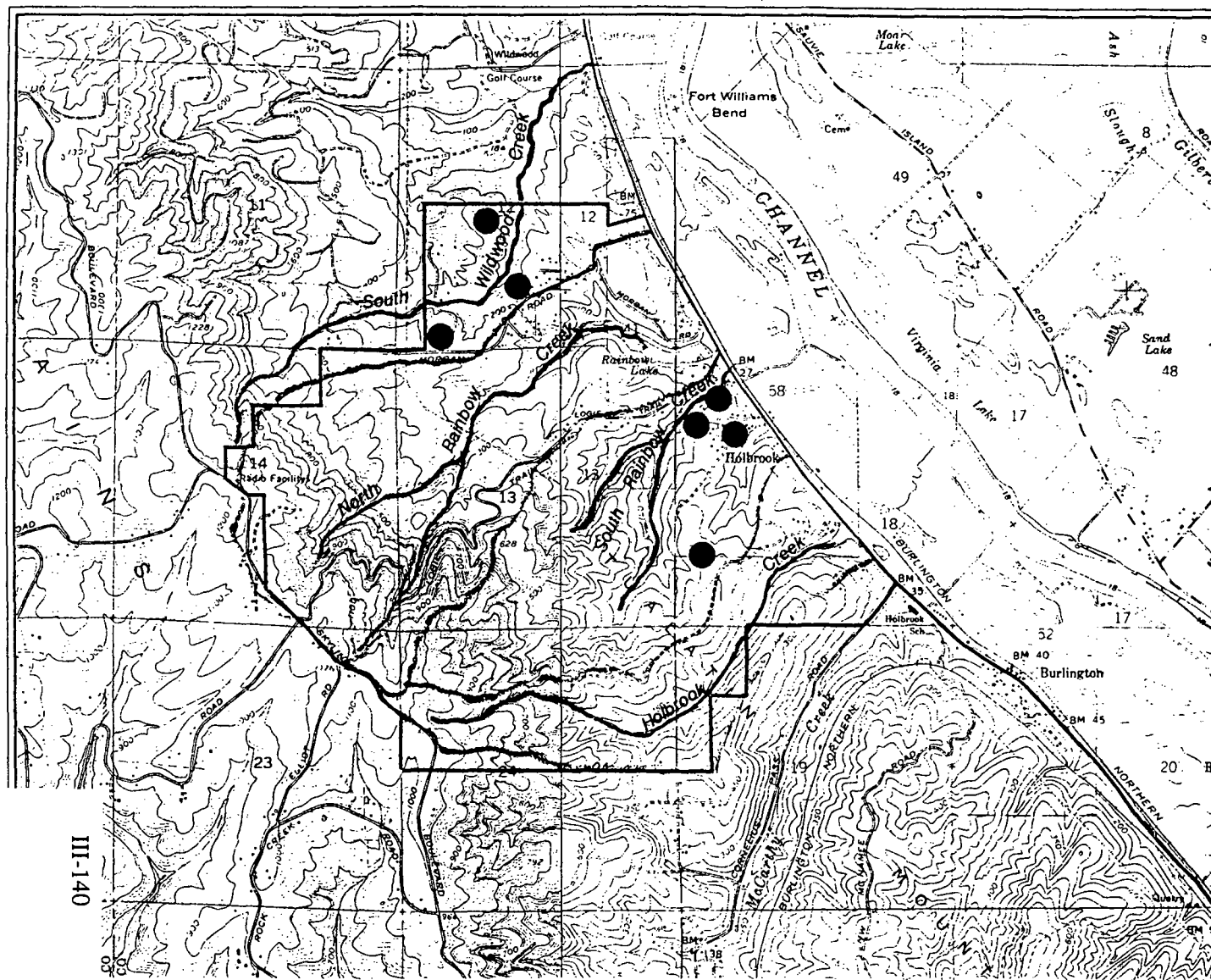
**MULTNOMAH COUNTY SIGNIFICANT STREAMS
SRI/SHAPIRO
RIPARIAN WILDLIFE HABITAT ASSESSMENT***

SITE NUMBER	2	TOTAL HABITAT SCORE AS EXISTING	24	POTENTIAL HABITAT SCORE IF ENHANCED	TOTAL ACRES	
SITE LOCATION	Burlington	FIELD DATES	03/08/94	FIELD OBSERVERS	ASAT/AOL	
GENERAL COMMENTS						
Continues through clear cut stream slopes become less steep stream bed widens - Road crosses stream 48-52" culvert. Fill 100-200' wide E 100' high						
Tree Ø						
Shrubs - salmonberry, vine maple, occ. Willow and red osier dogwood						
g.c. Rushes						
CWD - small diameter 2-4" abundant, 1 lg Douglas fir snag upslope						
Pair of red tails seen hunting						
	COMPONENT	DEGREE			SCORE	COMMENTS
W A T E R	Seasonality	Seasonal 4-----	Perennial -----8		4	U.S.G.S
	Quality	Stagnant 0-----	Seasonally Flooded -----3	Continually Flushed -----6	3	
	Proximity to Cover	None 0-----	Nearby -----4	Immediately Adjacent -----8	Ø	
	Diversity (Streams, Ponds Wetlands)	One Present 2-----	Two Present -----4	Three Present -----8	2	
F O O D	Variety	Low 0-----	Medium -----4	High -----8	3	
	Quantity	Low 0-----	Medium -----4	High -----8	3	
C O V E R	Seasonality	None 0-----	Limited -----2	Year Round -----4	1	
	Structural Diversity	Low 0-----	Medium -----4	High -----8	1	
	Variety	Low 0-----	Medium -----4	High -----8	2	
	Seasonality	None 0-----	Limited -----2	Year Round -----4	1	
ADDITIONAL VALUES						
Disturbance	Physical	High 0-----	Medium -----2	Low -----4	Ø	CC Power line, Road's
	Human	High 0-----	Medium -----2	Low -----4	4	
Interspersion		Low 0-----	Medium -----3	High -----6	Ø	
Unique Features - 4 points each		Wildlife Flora Rarity of Habitat Type			Ø	

*Developed with the assistance of
Dennis Peters & Diana H
Esther Lev, Biological Cc



FIGURE



Significant Streams Study for Multnomah County

HOLBROOK-LOGIE AREA

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried

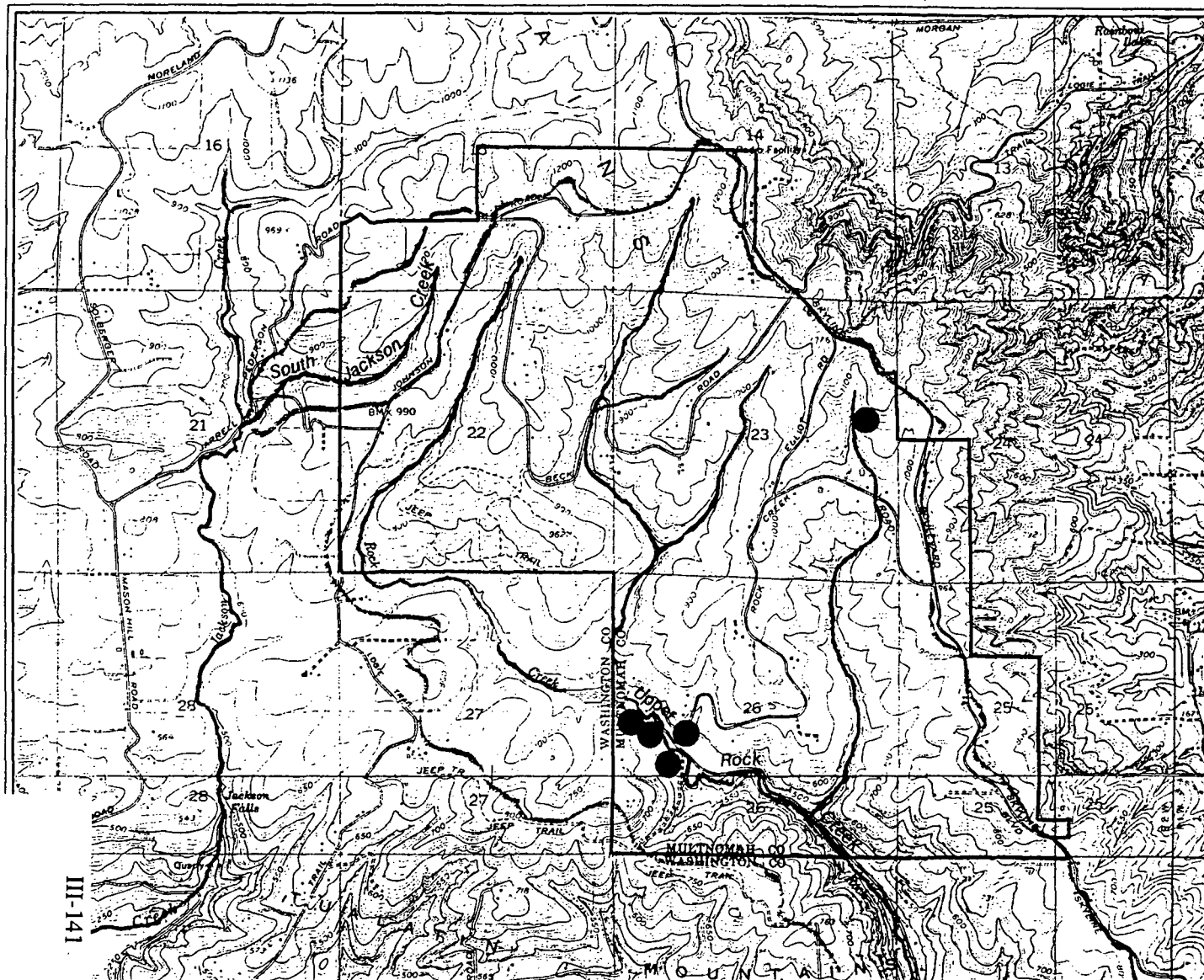


Base map from U.S.G.S. 7.5-minute
quadrangles (Linnton, Sauvie Island,
Portland, Hillsboro, and Dixie Mountain)

7935258 April 1994

FIGURE

SHAPIRO



Significant Streams Study for Multnomah County

UPPER ROCK CREEK AREA

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried

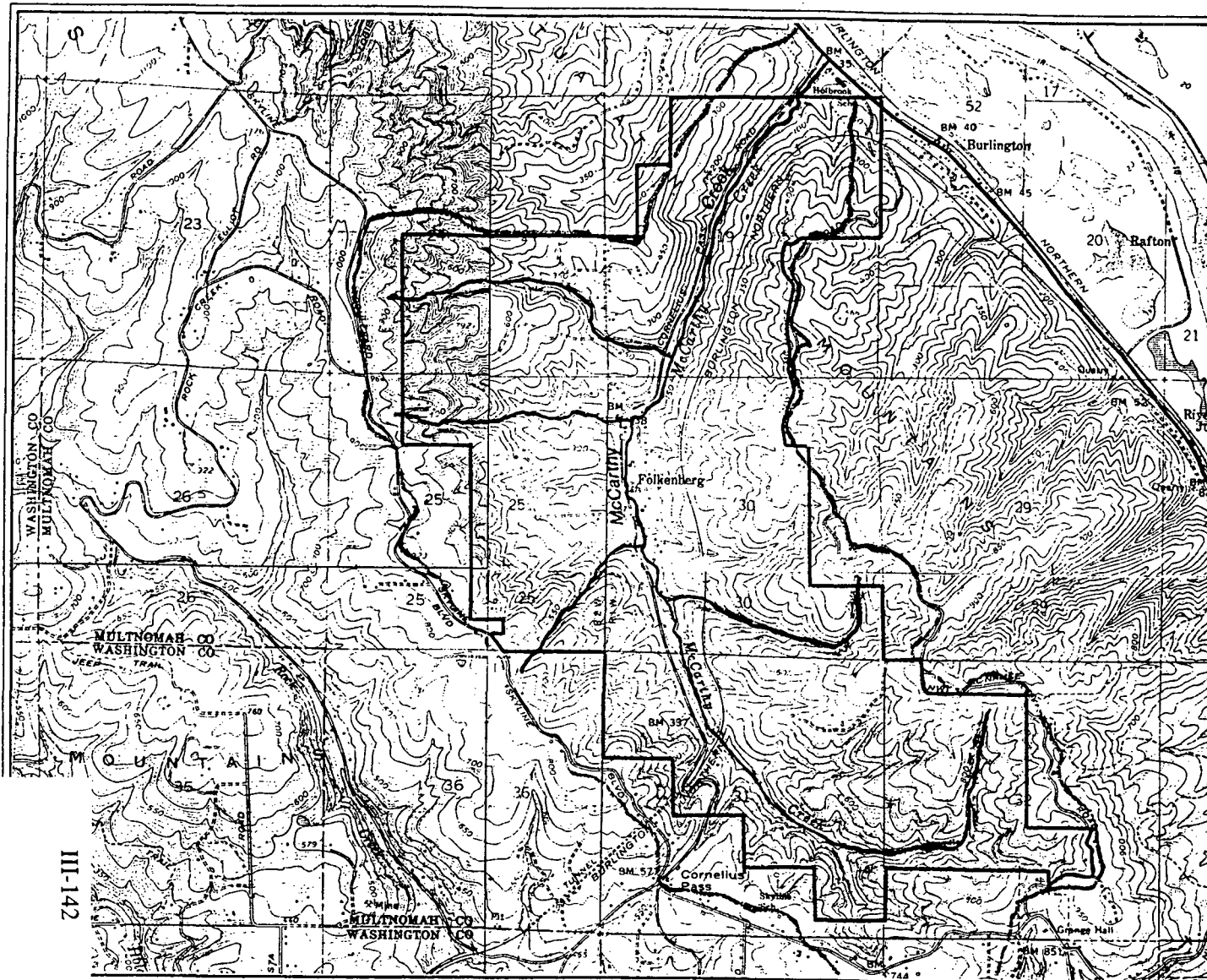


Base map from U.S.G.S. 7.5-minute quadrangles (Linnton, Sauvie Island, Portland, Hillsboro, and Dixie Mountain)

7935258 April 1994

FIGURE

SHAPIRO



Significant Streams Study for Multnomah County

FOLKENBERG AREA

LEGEND

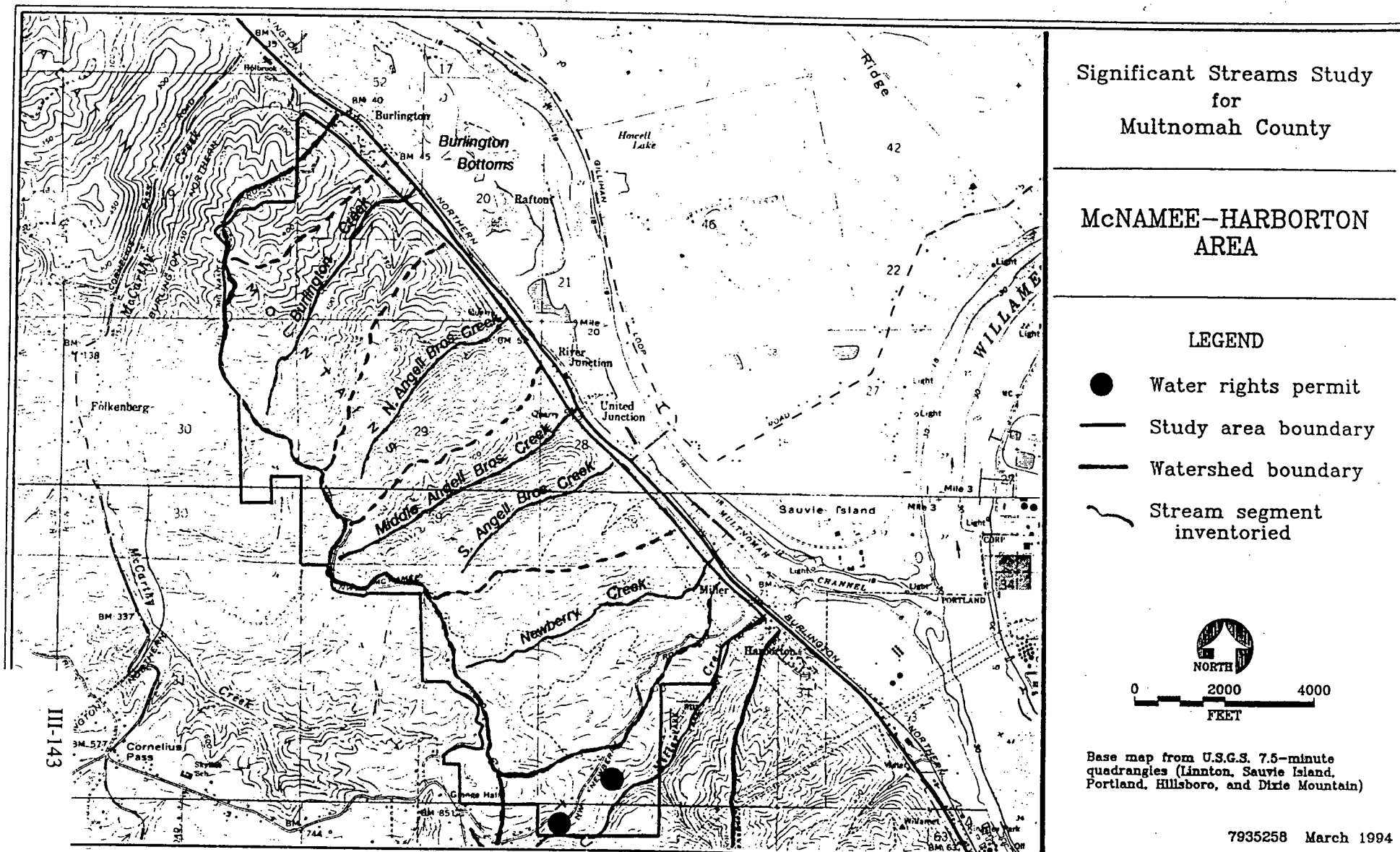
- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried



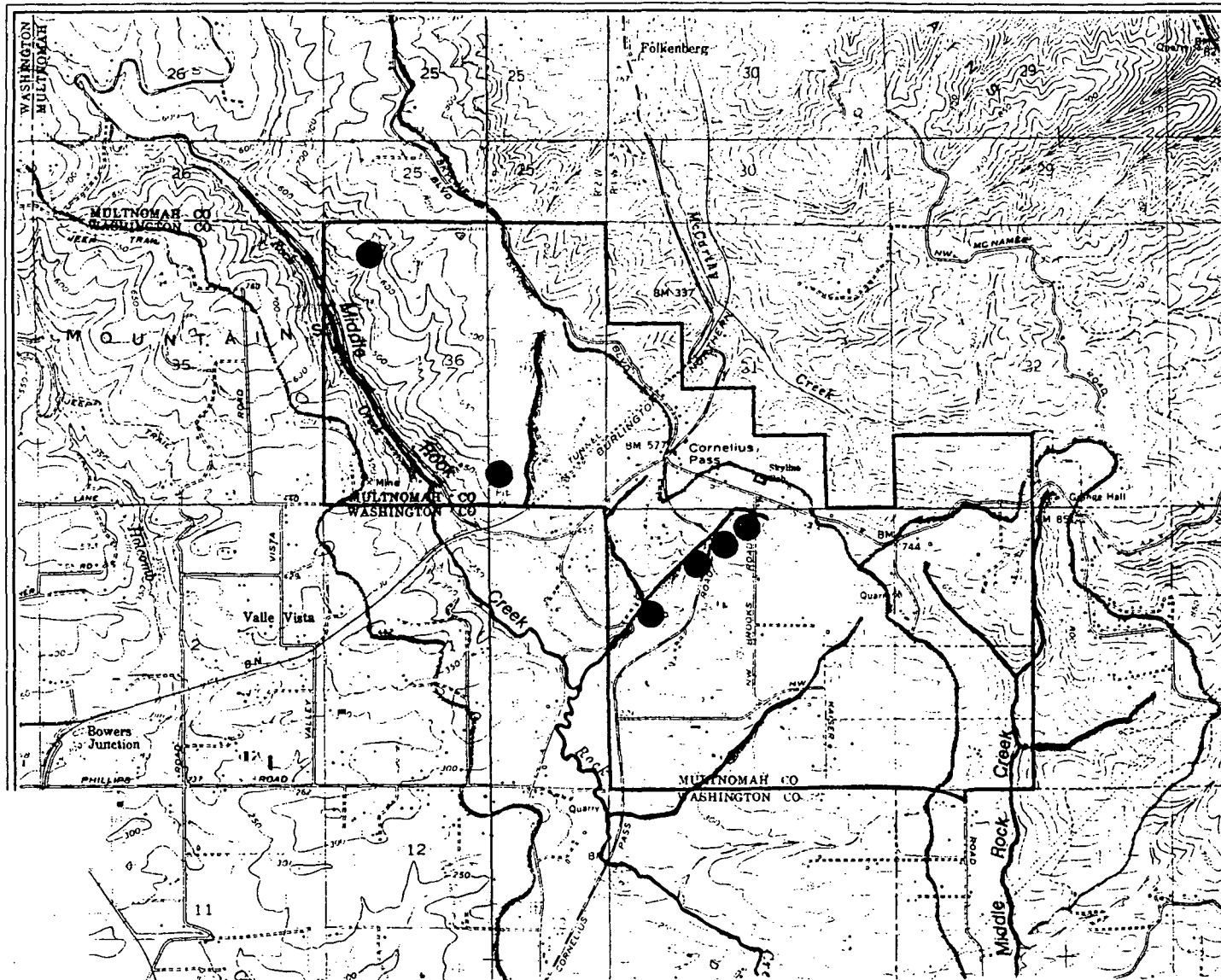
Base map from U.S.G.S. 7.5-minute quadrangles (Linnton, Sauvie Island, Portland, Hillsboro, and Dixie Mountain)

7935258 April 1994

FIGURE



FIGURE



Significant Streams Study for Multnomah County

CORNELIUS PASS AREA

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried



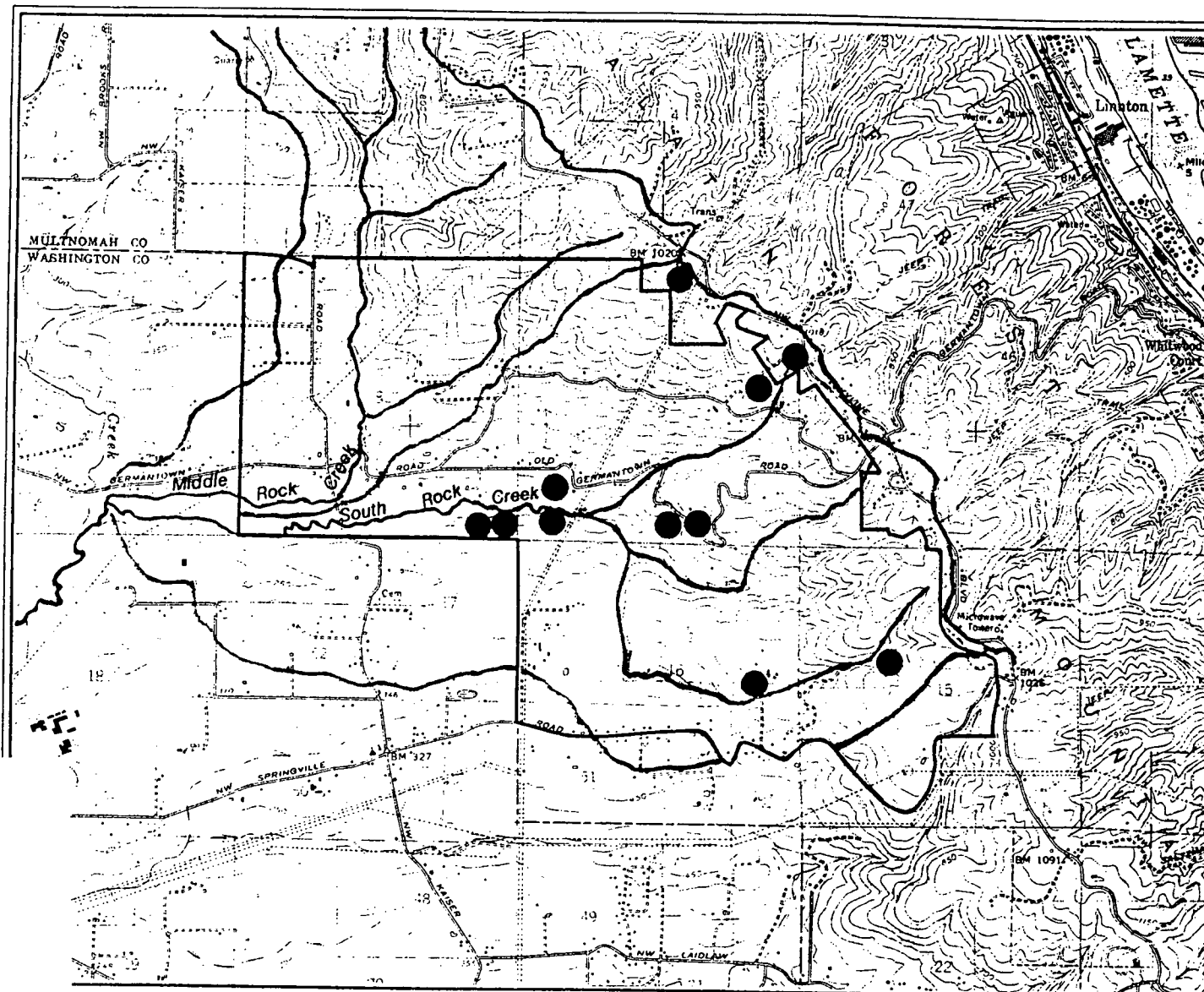
Base map from U.S.G.S. 7.5-minute quadrangles (Linnton, Sauvie Island, Portland, Hillsboro, and Dixie Mountain)

7935258 March 1994

FIGURE

SHAPIRO

4-11 11/93-III



Significant Streams Study for Multnomah County

GERMANTOWN ROAD AREA

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried



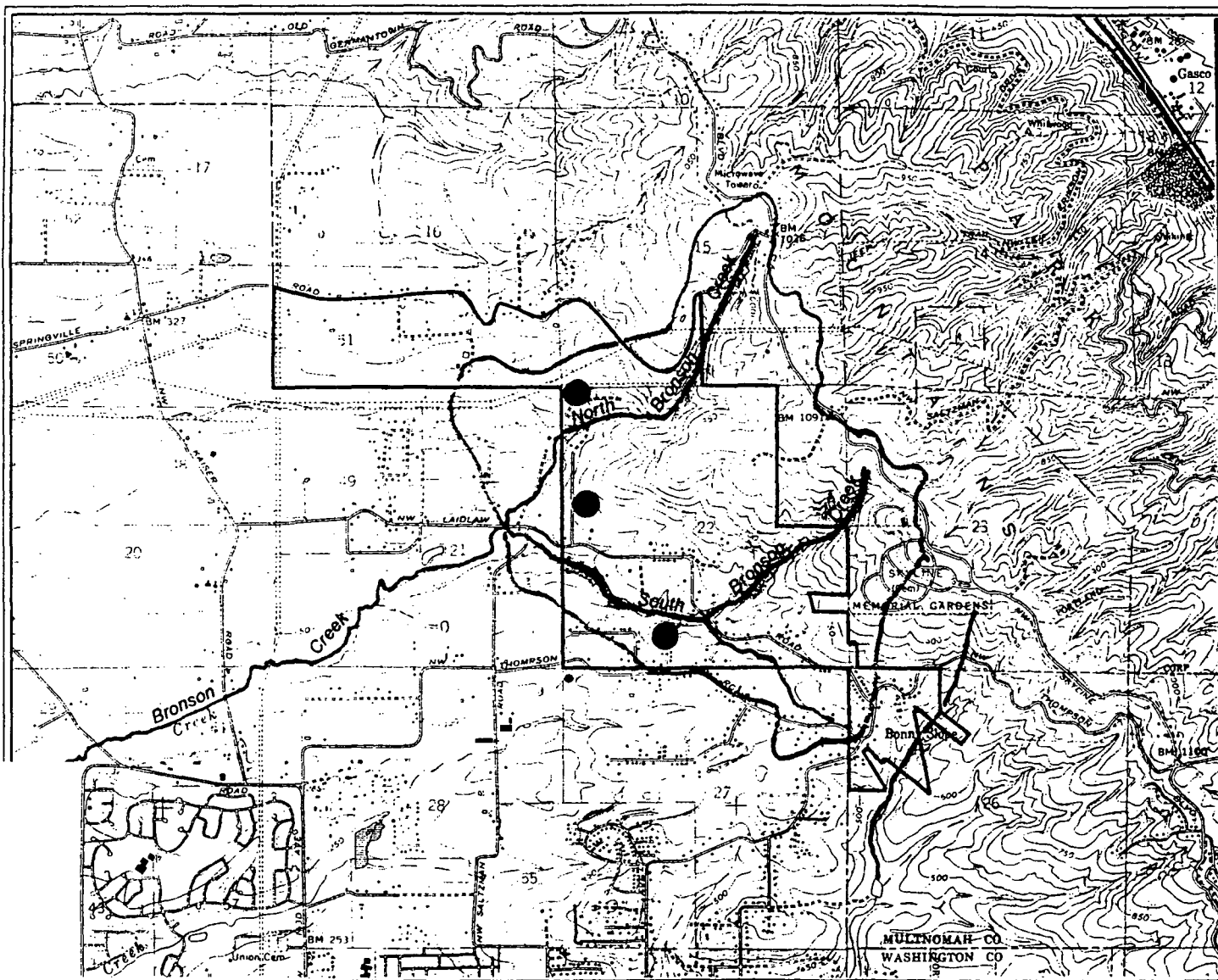
Base map from U.S.G.S. 7.5-minute
quadrangles (Linnnton, Sauvie Island,
Portland, Hillsboro, and Dixie Mountain)

7935258 March 1994

FIGURE

SHAPIRO

54/2007-111



Significant Streams Study for Multnomah County

BONNY SLOPE AREA

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried

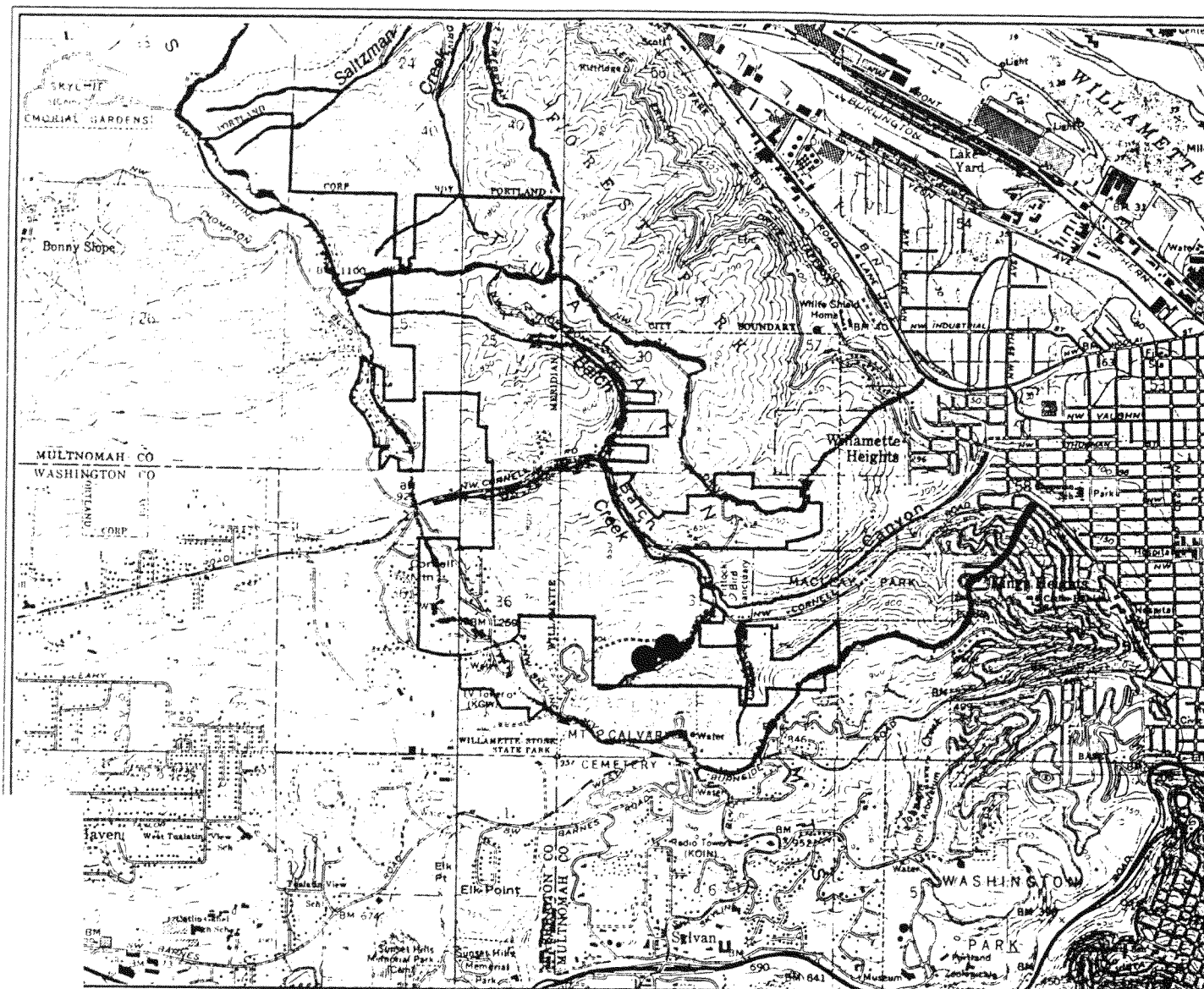


Base map from U.S.G.S. 7.5-minute
quadrangles (Linnton, Sauvie Island,
Portland, Hillsboro, and Dixie Mountain)

7935258 April 1994

FIGURE

SHAPIRO



Significant Streams Study for Multnomah County

BALCH CREEK AREA (Saltzman Creek & Balch Creek Watersheds)

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- ~ Stream segment inventoried



Base map from U.S.G.S. 7.5-minute
quadrangles (Linnton, Sauvie Island,
Portland, Hillsboro, and Dixie Mountain)

7935258 April 1994

FIGURE

SHAPIRO

7-11-147

CHAPTER IV

ANGELL BROTHERS
MINERAL AND AGGREGATE

TABLE OF CONTENTS

	<u>page</u>
A. SIGNIFICANCE DETERMINATION	
1. Background.....	IV-3
2. Location	IV-3
3. Quantity	IV-5
4. Quality.....	IV-6
5. Conclusion	IV-6
 B. RESOURCE ANALYSIS	
1. Impact Area	IV-7
2. Conflicting Uses	IV-11
a. Zoning Districts and Resources Within the Impact Area	IV-11
b. Uses Allowed by Zoning	IV-12
c. Other Goal 5 Resources	IV-17
3. ESEE Analysis	IV-18
a. Economic Effects.....	IV-18
b. Social Effects.....	IV-20
c. Environmental Effects	IV-22
d. Energy Effects	IV-24
e. Other Applicable Statewide Planning Goals	IV-26
4. Resource Analysis Summary	IV-27
a. General Conclusions	IV-27
b. Synopsis of ESEE Consequences	IV-28
 C. APPENDIX	
Citations	IV-33
 MAPS	
Map of Angell Brothers Resource Site	IV-4
Map of Angell Brothers Resource Site & Impact Area	IV-10

A. SIGNIFICANCE DETERMINATION

1. BACKGROUND

This first portion of an ESEE analysis is the determination of significance. The procedure for that determination is given in OAR 660-16-000 (1) through (5). The rule directs the local government to determine whether there is sufficient information on the location, quality and quantity of the resource at a particular site. Then, based on that evidence, the local government must decide if the site is significant. The County's Comprehensive Plan will then reflect that conclusion. A prior determination of significance for this site was adopted on April 24, 1990 and concluded that the Angell Brothers' site was significant and the site was included in the significant (important) site inventory. The following significance determination incorporates currently available information on location, quantity and quality as required by the administrative rule.

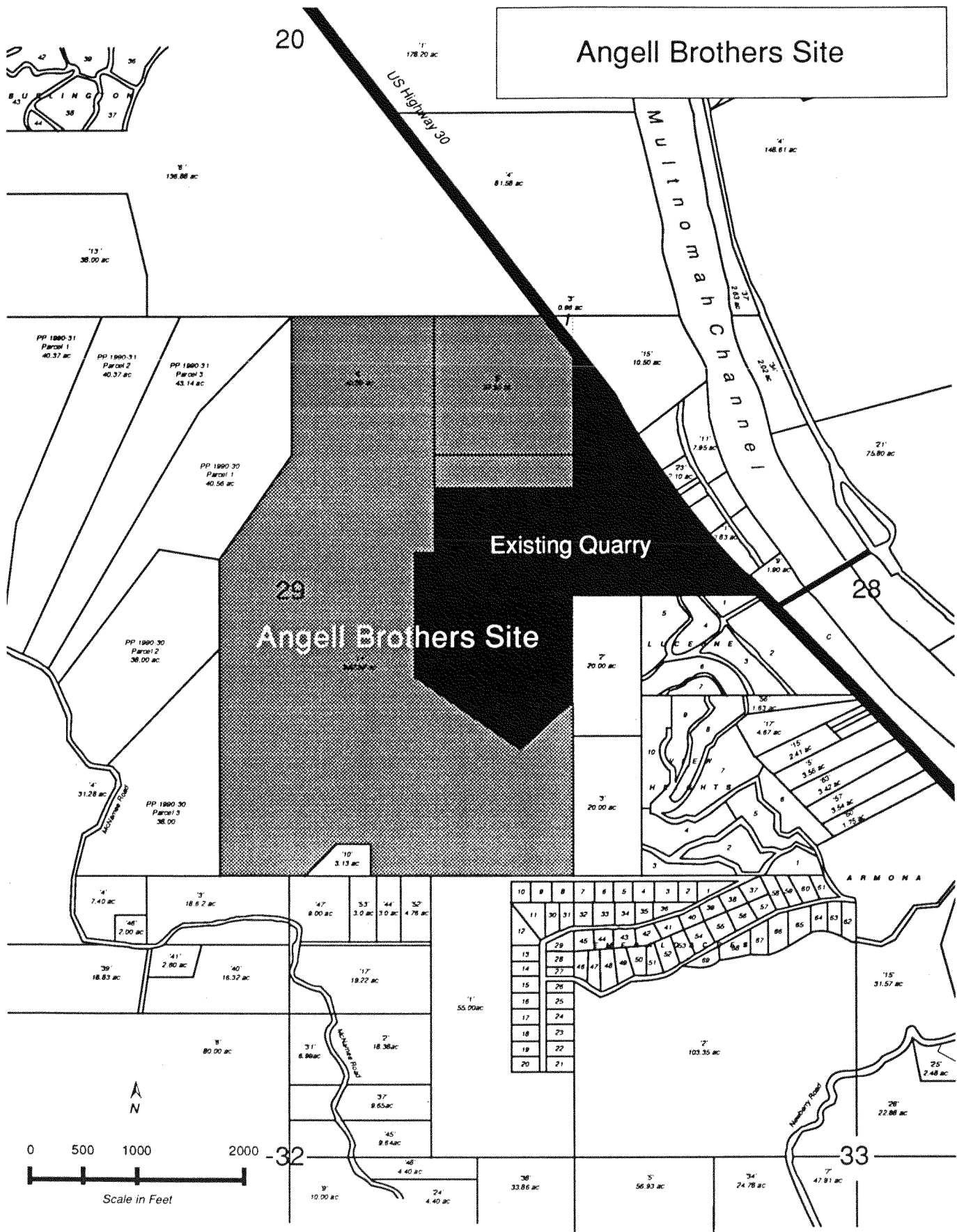
2. LOCATION:

The Angell Brothers site is approximately two miles north of the city limits of Portland, with direct access to US Highway 30, and less than $\frac{1}{4}$ mile north of the Sauvie Island Bridge. Access to the site is by way of Highway 30 onto a paved access road. The legal description of the property is Tax Lot 12, in the NW $\frac{1}{4}$ of Section 28, T2N, RIW, Willamette Meridian; and Tax Lots 2, 6, 8 and 11 in the E $\frac{1}{2}$ of Section 29, T2N, RIW, Willamette Meridian, 1993 Assessor's Map.

A 114 acre portion of this site is an operating rock quarry. The operation consists of mining, crushing, stockpiling, and transport of various forms of aggregate material throughout the Portland Metropolitan Area.

The Oregon Department of Geology and Mineral Industries indicates that there are five other fully operating mineral extraction operations within Multnomah County. Those include Gresham Sand & Gravel, Multnomah County Vance, Roger's Construction, Oregon Asphaltic Paving, Portland Sand and Gravel, and Yett. With the exception of the Portland Sand and Gravel and Yett operations which are located at 107th and SE Division Street and 5949 NE Cully Boulevard respectively (in Portland), all of those operations are located in the vicinity of SE 190th Avenue between SE Division and SE Yamhill streets (in Gresham). An additional production site, Ross Island Sand and Gravel which is regulated by the Division of State Lands, is located at 4315 SE McLoughlin Blvd. There is an additional mineral resource site on the Multnomah County plan inventory that is identified as being significant and capable of future production. That is the Howard Canyon site on SE Howard Road approximately $\frac{3}{4}$ of a mile east of NE Littlepage Road in Section 36, T1N, R4E. The City of Portland plan inventory contains no additional significant sites.

All of these sites, with the exception of the Howard Canyon site (local road access only),



have direct access to a least a major arterial within the metropolitan area. The Angell Brothers site is the only operating site within Multnomah County that can serve the western portion of the metropolitan area without crossing a Willamette River bridge. The Angell Brothers site, then, when considering road access and proximity to the metropolitan area, is similar to all but one (Howard Canyon) of the other operating and inventoried mineral and aggregate sites within Multnomah County.

3. QUANTITY:

A study by H. G. Schlicker and Associates, submitted in August, 1989, analyzed the geologic characteristics of the entire 397 acre site (Exhibits E, F & L contained in case file CU 17-90 which is incorporated by reference). That report indicates that the rock material consists of a series of Tertiary Columbia River Basalt flows stacked one upon another, some as much as 70 feet thick. Those flows are overlain in many places by Quaternary loess which the Schlicker report found to range up to 70 feet thick on one ridge top. That report concluded that, based upon their materials tests, borings, and seismic studies, this site most likely contains approximately 220 million cubic yards of very good aggregate material.

The geology of this resource site is indicated to be comparable to a majority of the central portion of the Tualatin Mountains extending from the Dunthorpe area to beyond the north-westerly corner of Multnomah County (Trimble, 1963 – *Geology of Portland, Oregon and Adjacent Areas*, which is incorporated by reference). There is, however, no available quantitative quality or quantity information for other properties within that geologic unit. The most recent information is a *Mineral and Aggregate Resources Inventory* (incorporated by reference) by the Portland Bureau of Planning (August, 1988) which discusses the following sites within that unit:

- Cornell #9 – an inactive site with about half of its excavation potential remaining;
- Forest Park #10 – a currently inactive, but potential future small-scale extraction site with ninety percent of the resource available; and
- Rivergate #11 – an inactive site with a large reserve which was closed due to conflicts with potential redevelopment of the surrounding area.

The study makes no mention of the original quantity of the resource at any of these sites, nor does it discuss quality and concludes that all three should be designated 1-A.

The Schlicker report has been faulted for having considered only two test borings. Additional support of resource quantity in the form of well logs from surrounding properties was introduced during the hearings on PR 7-92. At the hearing of October 5, 1992, Dr. Marvin Beeson, a professional geologist, indicated that such well log information was not reliable. He indicated that, "They are done by drillers. They are not either engineers nor geologists and I have a lot of experience with them. They should be used with great great caution in any case." The Schlicker report remains the only available information regarding resource quantity at this resource site.

The only other mineral and aggregate resource site within the county for which there is any available quantity and quality information is the Howard Canyon site in east Multnomah County. That site contains 2.2 million cubic yards of available resource (see Resource Significance Determination, Chapter II Howard Canyon Reconciliation Report).

Multnomah County Comprehensive Framework Plan Policy 16-B states, "Determination that a particular mineral and aggregate site is both *Important* and should be included in the plan inventory is to be based on the site's proven ability to yield more than 25,000 cubic yards of resource." Exhibit L of CU 17-90 indicates that this resource site normally produces up to 810,000 tons of aggregate material per year, which converts to a minimum of 401,000 cubic yards (using the specific gravity of 2.5 indicated in the Schlicker report and ignoring interstitial spaces within the crushed material). This site, therefore, is significant because it has a demonstrated production capability in excess of 25,000 cubic yards. It is also significant with respect to other mineral and aggregate resource sites in the county for which quantity information is available, having a reserve of 100 times that of the Howard Canyon site.

4. QUALITY:

Appendix D of the Schlicker report contains laboratory analyzes indicating that the material meets Oregon State Highway Department specifications for base rock. The samples tested exceeded the other standards in the *Test Standards by Usage* matrix contained in Table 1. of that same report.

The Schlicker report indicates that "...the processed rock at the site easily passes all common specifications." The report concludes that, "The rock is well suited for use as aggregate in asphaltic concrete and as base, subbase, topping, riprap and embankments. The rock is also suitable for use as aggregate in cement concrete under certain conditions. The overburden is satisfactory for embankment landscaping and landfill operations as well as reclamation of the site."

The laboratory studies presented in the Schlicker report consist of a number of various tests for both hardness and particle size. The only available information with which to compare the material from this site to other resource sites is also from the Howard Canyon site. The only comparable test conducted at both sites is a Los Angeles Abrasion test. The percent loss or wear results of that test must be less than 35 percent to meet Oregon State Highway Department specifications. The percent loss or wear of the material tested from the Angell Brothers resource site was 12.2% and 15.0%, while that of the material tested from the Howard Canyon resource site was 32.7%. The Angell Brothers mineral and aggregate resource site, therefore, is also significant in terms of the quality of the material when considering available information from other resource sites within Multnomah County.

5. CONCLUSION:

The entire 397 acre property remains a significant Goal 5 Mineral and Aggregate site

based on the above description of location, quantity and quality.

B. RESOURCE ANALYSIS

This section addresses the part of the administrative rule which directs the local government to: (1) identify land uses which would conflict with the resource, and (2) analyze the economic, social, environmental, and energy consequences allowing, limiting or prohibiting the mining and the conflicting uses. The last task, (3) determination of the level of protection for the resource, will be considered in Chapter VI.

1. IMPACT AREA

The Goal 5 Rule requires identification of an impact area surrounding the resource site if different from the resource site itself [OAR 660-16-000(2)]. The impact area for a mineral and aggregate site must be the area which includes uses that could adversely affect utilization of the resource, plus the area that includes those uses which could be affected by a mineral and aggregate operation.

On December 29, 1992, The Board of County Commissioners adopted an ESEE analysis for a proposed 283 acre expansion area of this resource site (Final Order PR 7-92). The impact area identified in that decision included:

“...the site itself; property adjoining the site located west of State Highway 30; the City of Portland's Forest Park; a peninsula of land between Portland's Forest Park and the forests of Oregon's coast range, popularly known as a “wildlife corridor”; downstream areas, located east of State Highway 30, including a small wetland to the east, the 430 acre Rafton-Burlington Bottoms wetland to the northeast, and Multnomah Channel; residences adjoining the Channel and houseboats on the Channel; and Sauvie Island.”

Findings #3-11 of the Board's Final Order identify conflicts between extraction of the mineral resource and forestry uses, wildlife habitat, streams and wetlands, residential uses, and scenic resources. Of these, only residential uses and streams and wetlands have the potential of adversely affecting a future mining operation. Residential complaints regarding noise and dust could potentially restrict areas and methods of operation. Regulatory controls limiting the type and amount of discharge into streams and wetlands could also place limitations on an operation.

The Board's 1992 decision identified a large impact area because no analysis had been completed on the identified conflicting Goal 5 resources (wildlife habitat, streams and wetlands, and scenic resources). Consequently, the entire area of those resources was included in the impact area of this site. Each of those resources, however, has subsequently been evaluated by a separate ESEE analysis, each with their individual impact area. The

impact areas of each of those resources includes this resource site and considers the potential impact of mining on the resource being considered; conversely, the impact area for this resource site should be large enough to include a portion of each of the resource areas for wildlife habitat, streams and wetlands, and scenic resources so that potential conflicts with those resources can be considered.

The two remaining conflict issues identified by the Board are forestry and residential uses. The finding regarding impacts on forestry uses is limited to the site of the mineral and aggregate resource. Therefore, the entire site should be included in the impact area.

With respect to residential issues, the Board relied on three items of written testimony [Sauvie Island Conservancy Letter, Linnton Letter, and Bellant Letter (see Appendix)] and the oral testimony of Darlene Wruble (see Appendix) to establish the area of conflict with residential uses. With respect to residential impacts, the Sauvie Island Conservancy Letter states, "... excessive dust and noise from the quarry's present operation have been common occurrences for nearby residents..." Therefore, existing and potential nearby residences should be included in the impact area. The Linnton Letter is concerned with truck traffic on US Highway 30, wildlife, and site reclamation. Portions of US Highway 30, adjacent wildlife habitat, and the resource site should be included in the impact area. The Bellant Letter (undated, but received July 2, 1992) addresses impact on neighboring homes, property and roads, scenic, wildlife and water resources, and site rehabilitation. The impact area should include neighboring homes, property and roads, areas of conflict with the scenic, wildlife and water resources previously mentioned, and the site itself. The Wruble testimony concerns noise and dust problems associated with the existing operation encountered by an adjacent property owner. Therefore, the Wruble property should be included in the impact area.

Of the various issues identified, complaints regarding noise, blasting and dust, and traffic could adversely affect utilization of the resource. Conversely, utilization of the resource may adversely affect wildlife habitat, streams and wetlands, and scenic resources, all of which are Goal 5 resources.

A study by Daly, Standlee & Associates dated September 25, 1992 (contained in case file PR 7-92) to evaluate compliance of DEQ noise regulations of a proposed mining expansion with respect to surrounding residences indicated there would be no violation of the DEQ standards during phases I and II of the operation proposed at that time. The study also indicated that there would be violations of those standards without mitigation measures during phases III and IV. The nearest residence to phases I and II (no noise impact) is located 1,200 feet away from that proposed operation area, and residence located most distant from phases III and IV (noise impact) is 600 feet away. The point at which DEQ noise standards are exceeded, therefore, is somewhere between 1,200 and 600 feet from the active mining site. Lacking information regarding the exact distance of that point, a 1,200 foot impact area is appropriate to consider noise issues.

A letter dated May 24, 1992 from Steve Harris of Austin Powder Company (see Appendix) states that, based on seismic measurements taken at a number of locations including at

least four properties in the surrounding area, "...vibrations...were significantly below the accepted particle velocity limit..." as determined by the US Bureau of Mines and other State and Federal agencies. The letter indicates that, "As an example of the level of vibrations produced from the shots at the quarry, we recorded higher vibrations from trains going through the tunnel than we did from a shot." That tunnel is located on property adjacent to the northeast of this resource site. Therefore, only adjacent properties, at most, need be included in the impact area to consider blast impact issues.

Location specific dust problems were raised as an issue in the Bellant Letter. Ms. Bellant resides at Bridgeview Moorage located in Multnomah Channel adjacent to Tax Lot '11', Section 28, T2N, R1W. That moorage is approximately 800 feet from this resource site. All properties within 800 of the resource site should be included in the impact area to consider dust issues.

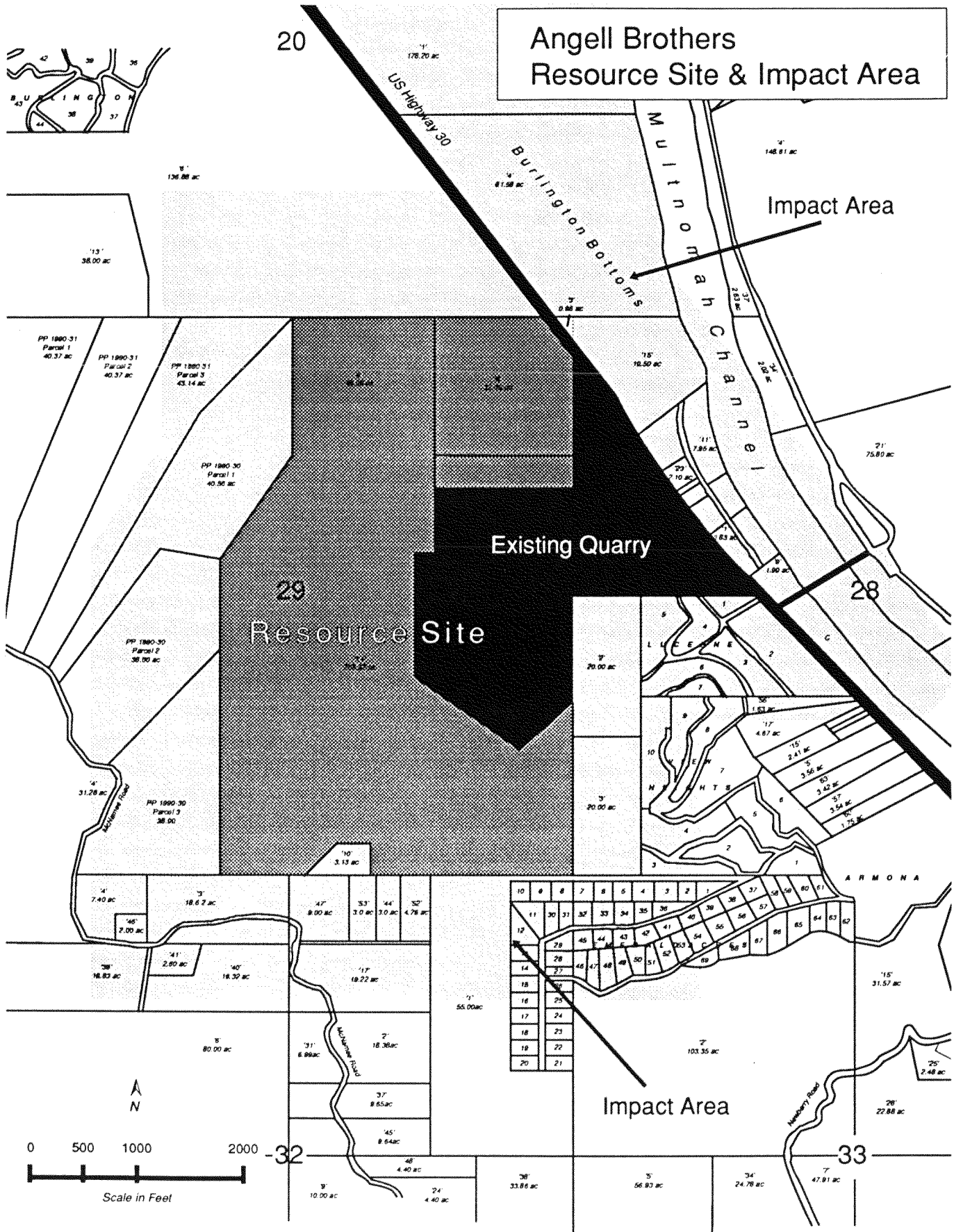
Increased mine truck traffic on US Highway 30 has been identified as a concern relative to any expanded activity at this site (Linnton Letter).

The structural cross section of US Highway 30 is designed to accommodate truck traffic. This includes the type of traffic that is generated by the quarry. Therefore, the estimated maximum of 250 truck trips per day (estimated by applicant's submittal in PR 7-92) will not adversely effect the normal life cycle of the structural cross section of the roadway.

The "1992 Oregon Department of Transportation Traffic Volume Tables" indicate the section of Highway 30 north of the Sauvie Island Bridge has an average daily trip (ADT) count of 16,000, and the portion south of the bridge 20,000 ADT. Using those 1992 tables, ODOT staff computed the peak hour peak direction traffic volume at 1,200 vehicles. Given the four travel lanes with center left configuration, ODOT staff estimates the 1992 Level of Service to be "B". Consequently, Highway 30 has sufficient capacity to accommodate increased truck volume in the vicinity of the Sauvie Island Bridge.

Since ODOT indicates that US Highway 30 has sufficient capacity and structural capability to safely handle the traffic generated by the quarry operation, traffic on Highway 30 will not be considered a conflicting use.

An impact area of 1,200 feet from the perimeter of the resource site would also include resource areas of all of the potentially conflicting Goal 5 resources. The site itself is within the West Hills Scenic Area, the West Hills Wildlife Habitat Area, and the Water Resource and Wetland Sites. Burlington Bottoms is immediately to the northeast of the site across US Highway 30. Burlington Bottoms is one of the state's largest remaining wapato wetlands and a designated '3-C' Goal 5 resource. Therefore, an impact area including this resource site plus that area 1,200 feet in all directions from the perimeter of this resource site and including Burlington Bottoms (tax lot '7', Sec. 17; tax lots '1', '2' and '4', Sec. 20; and, tax lot '15', Sec. 28, all in T2N, R1W) is selected since it will include all known conflict issues (see Map on next page).



2. CONFLICTING USES

The Goal 5 Rule requires identification of conflicting uses. A conflicting use is one which, if allowed, could adversely affect a Goal 5 resource site. Identifying conflicting uses is primarily done by examining uses authorized by zoning districts within the impact area.

a. Zoning Districts and Resources Within the Impact Area

The majority of the property within the impact area (the resource site plus a 1,200 foot perimeter area) is zoned Commercial Forest Use (CFU). Exceptions to this include that area 2,200 feet north of the Sauvie Island Bridge, east of US Highway 30 and west of Multnomah Channel which is designated Multiple Use Agriculture (MUA-20), and an area on the westerly edge of Sauvie Island in the vicinity of the Sauvie Island Bridge which is designated Exclusive Farm Use (EFU). There is a small portion of one lot (Tax Lots '27' & '56', Section 28, T2N, R1W, 2.00 acres) to the south of the easternmost tip of the site designated Rural Residential (RR) within the impact area.

The Multiple Use Agriculture portion of the impact area is within the Rafton/Burlington Bottoms which is a recognized Goal 5 resource and designated "3-C". It is in the ownership of the Bonneville Power Administration and serves as a wetland mitigation area for which a management plan is being developed. That plan calls for the area to be maintained in a natural state, with no development of any kind allowed. Since there is no development potential within that portion of the impact area designated MUA-20, MUA-20 uses other than the conservation use will be excluded from the following analysis of conflicting uses allowed by zoning district. The conservation use is considered in discussions of the Rafton/Burlington Bottoms.

The Rural Residential lot is developed with a single family residence located 150 feet outside of the impact area. The portion of the lot within the impact area consists mainly of Bonneville Power Administration right-of-way. Since the lot is committed to residential use and no development is allowed within the BPA right-of-way, there is no other category of use that could be made of that portion of the lot within the impact area. Rural Residential uses, therefore, will not be considered in the conflict analysis.

Also, the Exclusive Farm Use area will not be considered in this analysis since the portion of the impact area designated EFU consists entirely of property developed with a portion of the dike which protects Sauvie Island. With the exception of occasional grazing, no use is allowed of the dike.

There are two overlay zoning districts within the impact area, the Willamette River Greenway (WRG) and Flood Hazard (FF) & (FW). With the exception of the FW overlay which limits uses allowed by the base zone, those overlay districts do not identify allowed uses, rather, they place design restrictions on uses allowed by the base zone. Therefore, they will not be considered in the conflicting use analysis.

There are three other Goal 5 resources which have been identified within the impact

area. Those include wildlife habitat, streams and wetlands, and scenic resources.

b. Uses Allowed by Zoning

Multnomah County is required to allow only those uses allowed by new requirements of Goal 4—Forest Lands and the Goal 4 Rule, even though they have not yet been incorporated into the CFU section of the Zoning Code. Therefore, the items i.–iv. of the following analysis only consider uses allowed by the Goal 4 Rule and the potential conflicts between allowing those uses and protection of the mineral resource.

i. Allowed Uses Not Applicable to the Analysis

The following uses allowed in the Commercial Forest Use district are not applicable to the analysis:

- Exploration for mineral and aggregate resources as defined in ORS Chapter 517
- Widening of roads within existing rights-of-way in conformance with the transportation element of acknowledged comprehensive plans including public road and highway projects as described in ORS 215.213(1)(m) through (p) and ORS 215.283(1)(k) through (n)
- Exploration for and production of geothermal, gas, oil, and other associated hydrocarbons, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the well head
- Mining and processing of oil, gas, or other subsurface resources as defined in ORS Chapter 520, and not otherwise permitted under OAR 660-06-025(3)(m) (e.g., compressors, separators and storage serving multiple wells), and mining and processing of aggregate and mineral resources as defined in ORS Chapter 517
- Temporary asphalt and concrete batch plants as accessory uses to specific highway projects
- Public road and highway projects as described in ORS 215.(1,(2)(q) through (s), 215.213(10), 215.283(2)(p) through (r) and 215.283(3)

Activities involving utilization of a mineral resource cannot conflict with mineral and aggregate resource protection since the purpose of protecting a mineral resource is for its eventual use.

- Expansion of existing airports

There are no airports within the impact area.

- Destination resorts reviewed and approved pursuant to ORS 197.435 to ORS 197.465 and Goal 8

Destination resorts are not allowed on sites of less than 160 acres. There are no sites of that size within the impact area.

ii. Allowed Uses that Will Not Conflict With the Aggregate Resource

The following uses allowed by the Commercial Forest Use district within the impact area would not conflict with, or be impacted by, protection or utilization of the significant resource:

- Forest operations or forest practices including, but not limited to, reforestation of forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash (on properties within the impact area other than the site itself)
- Temporary on-site structures which are auxiliary to and used during the term of a particular forest operation (on properties within the impact area other than the site itself)
- Physical alterations to the land auxiliary to forest practices including, but not limited to, those made for purposes of exploration, mining, commercial gravel extraction and processing, landfills, dams, reservoirs, road construction or recreational facilities (on properties within the impact area other than the site itself)
- Farm use as defined in ORS 215.203
- Local distribution lines (e.g., electric, telephone, natural gas) and accessory equipment (e.g., electric distribution transformers, poles, meter cabinets, terminal boxes, pedestals), or equipment which provides service hookups, including water service hookups
- New electric transmission lines with right of way widths of up to 100 feet as specified in ORS 772.210. New distribution lines (e.g., gas, oil, geothermal) with rights-of-way 50 feet or less in width
- Temporary portable facility for the primary processing of forest products
- Towers and fire stations for forest fire protection
- Water intake facilities, canals and distribution lines for farm irrigation and ponds
- Uninhabitable structures accessory to fish and wildlife enhancement
- Permanent facility for the primary processing of forest products

- Permanent logging equipment repair and storage
- Log scaling and weigh stations
- Disposal site for solid waste that has been ordered established by the Environmental Quality Commission under ORS 459.049, together with the equipment, facilities or buildings necessary for its operation
- Disposal site for solid waste approved by the governing body of a city or county or both and for which the Oregon Department of Environmental Quality has granted a permit under ORS 459.245, together with equipment, facilities or buildings necessary for its operation
- Television, microwave and radio communication facilities and transmission towers
- Fire stations for rural fire protection
- Utility facilities for the purpose of generating power
- Aids to navigation and aviation
- Cemeteries

These uses do not satisfy the DEQ definition of noise sensitive property. There is no available information that they would be impacted by potential dust or traffic resulting from mining activity. These uses, if allowed within the impact area, would pose no threat to quarry operations or force a significant change in current or future mining activities.

iii. Allowed Uses that May Conflict, but Unlikely to Occur

The following uses allowed by the Commercial Forest Use district within the impact area either meet the DEQ definition of noise sensitive property, or are uses that could be adversely affected by dust or traffic resulting from mining activities. They could conflict with, or be impacted by mining activities, but are unlikely to be sited within the impact area.

- Temporary forest labor camps
- Caretaker residences for public parks and fish hatcheries
- Private seasonal accommodations for fee hunting operations
- Private accommodations for fishing occupied on a temporary basis

The locational requirements for the above uses are not present within the impact

area. Proximity to the Portland Metropolitan Area and relatively small ownerships eliminate the possibility of forest labor camps and hunting lodges. All of these uses, however, are residential in nature, and that land use category will be considered in section D below.

- Water intake facilities, related treatment facilities, pumping stations, and distribution lines
- Reservoirs and water impoundments

These two uses are uses which would provide an urban service. Such uses are not encouraged outside of the Urban Growth Boundary. Further, the three streams within the impact area are unlikely to be dammed, and Multnomah Channel is incapable of being impounded.

- Forest management research and experimentation facilities accessory to forest operations
- Private hunting and fishing operations without any lodging accommodations
- Parks and campgrounds

These are land extensive uses that are categorized by the Comprehensive Plan as Minor Community Facilities (Plan Policy #31) and considered Conditional Uses by zone. Minor Community Facilities require direct access to at least a collector street. All of the roads in the impact area are local with the exception of US Highway 30 which is a major arterial. There are no large ownerships within the impact area with direct access to Highway 30.

These uses will not be treated as conflicting uses to utilization of the aggregate resource at this site.

iv. Allowed Uses that May Conflict

The following uses allowed by the Commercial Forest Use district within the impact area may conflict with or be impacted by mining activities on the resource site:

- Forestland dwellings
- Alteration, restoration or replacement of a lawfully established dwelling
- A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

The above uses satisfy the DEQ definition of noise sensitive property. Noise sensitive property is defined by OAR 340-35-015(38) as:

...real property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Property used in industrial or agricultural activities is not noise sensitive property unless it meets the above criteria in more than an incidental manner.

There are 15 residences on land and two existing houseboat moorages with a total of 38 houseboats and one moorage under development with 19 houseboats and a caretakers residence within the impact area. All of the land-based residences are sited on parcels zoned Commercial Forest Use. The nearest residence to the resource site is approximately 400 feet to the south.

The potential for additional dwellings in the impact area is relatively low. Houseboat moorages are not an allowed use under the new Goal 4 rule. Therefore, there is no potential for new moorages or expansion of existing moorages. There are three subdivisions which were created in 1909 and 1911 and eight vacant Lots of Record within the impact area. The subdivisions are held in large private, public, and semi-public ownerships. Due to the new forest goal rules, topography and access problems, it is unlikely that any of those subdivided properties would be developed for residential use. The existing and eight potential residential uses, however, both impact and are impacted by mineral extraction. They will be considered conflicting uses.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources do, and will continue to occur in the impact area. While they do not impact mineral extraction, they could be adversely impacted by mining. They will be considered as conflicting uses, but limited to soil, air and water quality uses. Uses to provide for wildlife and fisheries resources will be considered along with the West Hills Wildlife Habitat Area and West Hills Water Resource and Wetlands.

- Forest operations or forest practices including, but not limited to, reforestation of forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash (on the resource site).

Permanent management of the resource site for forest operations or forest practices would prohibit the short-term mineral and aggregate use of the resource site itself. The site, however, has been proposed to be reclaimed for forest purposes after mining. Mining would preclude the immediate management of the site for forest purposes, while reclamation could provide for future forest management. The Forest Goal and Rule designate mining and processing of mineral and aggregate resources as locationally dependent uses. Such uses may be allowed when it is found that:

- The proposed use will not force a significant change in, or significantly increase

the cost of, accepted farming or forest practices on agriculture or forest lands;

- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel; and
- A written statement recorded with the deed or written contract with the county or its equivalent is obtained from the land owner which recognizes the rights of adjacent and nearby land owners to conduct forest operations consistent with the Forest Practices Act and Rules for uses authorized in OAR 660-06-025(4)(e), (l), (r), (s) and (v).

Since utilization of the resource site for mineral and aggregate use requires evaluation against the above criteria, forestry on the site itself will be considered a conflicting use.

c. Other Goal 5 Resources

i. West Hills Scenic Area

The West Hills Scenic Area has been identified as consisting "...of the east face of the West Hills (Tualatin Mountains) between the ridgeline and Highway 30, extending from the Portland City Limits to the Columbia County line. The attributes of the resource which make it significant are the landform, consisting of a combination of hillside and ridge bisected by numerous canyons; the vegetation pattern, which provides a blanket of various shades of green along with colorful fall foliage; the intactness, or lack of development to disrupt the overall forested appearance; and unity, because the West Hills are part of the mountain chain extending from Portland to the Coast Range."

The Angell Brothers mine has been identified as an existing conflicting use to the scenic resource. "Mining requires removal of vegetation, changes the landform, and the exposed rock face creates a highly visible intrusion on the forested hillside. The size of the disturbed area, as well as the amount of screening vegetation and topography, affects the degree of visual conflict. Mining activities, like logging, can be considered temporary, and reclamation is required. Many people, however, have expressed concerns about the ability of reclaimed land to support forest growth and whether the reclaimed landform will blend in with the surrounding topography (reference file PR 7-92, Angell Brothers Goal 5 analysis)."

The West Hills Scenic Area, therefore, is a conflicting Goal 5 resource.

ii. West Hills Wildlife Habitat Area

The West Hills Wildlife Habitat area has been identified as the entirety of Multnomah County north of the City of Portland and west of US Highway 30. This resource site

is within that habitat area; therefore, wildlife is a potential conflicting Goal 5 resource.

iii. Water Resource and Wetland Sites

There are three streams which flow through this site. The northerly stream (Angel Brothers North) has been identified as being a significant Goal 5 resource and designated "1C" and will be considered potential conflicting uses. The other two streams (Angel Brothers Middle and South) are not significant and are designated "1A". The Rafton/Burlington Bottoms and the east bank of Multnomah Channel have been designated "3-C" and are within the impact area of the Angell Brothers resource site. Consequently, the Rafton/Burlington Bottoms and the east bank of Multnomah Channel will be considered potential conflicting uses.

3. ESEE ANALYSIS

The Goal 5 rule requires that if conflicting uses to the resource are identified, the economic, social, environmental, and energy (ESEE) consequences of the conflicts must be identified. Both the impacts on the resource site and on conflicting use must be considered in analyzing the ESEE consequences. The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate at this stage of the process.

The ESEE consequences will be analyzed by examining, (1) the effect on use of the aggregate resource if conflicting uses are allowed fully without restriction, and (2) the effect on conflicting uses if development of the aggregate resource is allowed fully without restriction. The conflicting uses to be considered include:

- Residential Uses
- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources
- Forest operations or forest practices on the resource site
- West Hills Scenic Area
- West Hills Wildlife Habitat Area
- Water Resource and Wetland Sites

a. Economic Effects

i. Economic Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- Residential Uses

There is no available information regarding the economic effect of residential uses on mining. Such uses may generate complaints which, in turn, may result in changes in operational methods with possible additional production expense and increased end product costs. Residential use of the site itself would prevent any expansion of the mining activity.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

The development of these uses within the impact area would have no economic impact on the aggregate resource. Any mining operation would have to be conducted within environmental control standards insuring compliance with air and water quality standards, and possible permit conditions to conserve soil resources and provide for wildlife and fishery resources. Satisfaction of those standards and conditions represent operational expenses that would be incurred at any time mining occurred.

- Forest operations or forest practices on the resource site

Use of the site solely for forestry purposes would prevent mining. A letter from Frank Parisi, Angell Brothers representative (see Appendix), indicates that the rock material at this resource site is worth 42 million dollars, and the site provides a payroll of about \$500,000.

- West Hills Scenic Area

Full protection of identified scenic resources would prevent mining expansion. That would result in the loss of the value of the resource at this site.

- West Hills Wildlife Habitat Area

Full protection of identified wildlife resources would prevent mining expansion. That would result in the loss of the value of the resource at this site.

- Water Resource and Wetland Sites

The Rafton/Burlington Bottoms is a "3C" Goal 5 resource site. The existing mining operation is conducted in compliance with state regulations that insure minimal adverse impact on that site, as would be the case for any expanded operation. Compliance with those regulations represents an operational expense. The form of mine expansion would be limited if the significant stream on the site is fully protected.

ii. Economic Effect on Conflicting Uses if Development of the Resource is Allowed

- Residential Uses

Mining would have an effect of reducing construction and maintenance costs for residential development within the impact area due to reduced hauling costs. Each hour of hauling aggregate material adds at least \$4.60 to the cost per ton of material [1990 ODOT letter to DLCD (see Appendix)]. There is no documented evidence in the record regarding the effect of mining on property values.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

Any mining operation would be conducted within environmental control standards insuring compliance with air and water quality standards, and possible permit conditions to conserve soil resources and provide for wildlife and fishery resources. Satisfaction of those standards and conditions would have no economic impact on conservation uses within the impact area.

- Forest operations or forest practices on the resource site

The Board has previously found that the 283 acre proposed expansion area is capable of producing timber resources worth over six million dollars. That potential would be lost on mined portions of the site until they were reclaimed for forestry purposes if mining occurred. Testimony at previous hearings has questioned the viability of reclamation for commercial forestry purposes.

- West Hills Scenic Area, Wildlife Habitat Area, and Water Resource and Wetland Sites

The economic impacts of loss of wildlife habitat, scenic resources and streams and wetlands directly impact our quality of life. The protection of significant natural resources has direct economic benefits that contribute substantially to our quality of life. Quality of life is an important consideration for business recruitment and retention. Forest Park, one of the nation's unique urban parks, is an amenity which enhances livability in Multnomah County which in turns attracts and supports a healthy and viable business community. Multnomah County's wildlife and natural resources (Forest Park, Sauvie Island, Columbia Gorge) are key elements in the state and region's tourism industry.

b. Social Effects

i. Social Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- Residential Uses

The addition of approximately eight new residences in the impact area would increase the potential for complaints regarding noise, dust, vibration, etc.; thereby, potentially limiting the extent of an expanded mining operation (Final Order PR 7-92 § 22).

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

There have been no adverse social impacts on mining identified that would result with respect to conservation activities on properties in the impact area.

- Forest operations or forest practices on the resource site

Use of the site solely for forestry purposes would prevent mining. The social impact of that would be the conscious elimination of the production of one construction material in favor of the production of another.

- West Hills Scenic Area

Prohibition of mining to preserve the scenic resource would have the social impact of limiting the availability of a needed construction material.

- West Hills Wildlife Habitat Area

Preservation of the site for wildlife habitat would prevent mining expansion. That would also have the social effect of limiting the availability of a needed construction material.

- Water Resource and Wetland Sites

Any mining expansion would have to be conducted in a manner that minimizes impact on the "3C" Rafton/Burlington Bottoms. The impact on North Angell Brothers Creek would be considered a limitation on an expanded operation since it has been found to contribute to the park/recreation facility of Burlington Bottoms. Middle Angell Brothers Creek has been found not to contribute flow to Burlington Bottoms.

ii. Social Effect on Conflicting Uses if Development of the Resource is Allowed

- Residential Uses

Increased mining would not prevent additional residential uses on legal Lots of Record within the impact area. Mining, crushing, and trucking could add to the noise and dust experienced by residents within the impact area.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

There are several conservation easements within the impact area intended to maintain natural habitat areas in the West Hills. Their utility would be diminished by mining activities. Also, mining would fragment the "peninsula" of open space that connects Forest Park with the forests of the coast (Final Order PR 7-92 § 20 and 21).

- Forest operations or forest practices on the resource site

Use of the site solely for mining purposes would prevent its immediate use for forestry purposes. Reclamation could allow for its future utilization for forestry. The social impact of that would be the conscious acceptance of the short-term production of one construction material versus the long-term production of another.

- West Hills Scenic Area, Habitat Area, and Water Resource and Wetland Sites

The West Hills have a psychological value to people, being perceived as an integral and important part of the forested landscape linking Forest Park to the Coast Range; contributing to the image of a natural area with wildlife habitat on the outskirts of Portland; and providing a scenic backdrop to visitors and residents of Sauvie Island. Loss of these significant natural resources will have a social public impact if the educational and recreational opportunities are eroded.

c. Environmental Effects

i. Environmental Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- Residential Uses

The only identified environmental effect of residential uses on the aggregate resource is the required compliance with environmental control standards which regulate impact on residential uses.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

Mining conducted in compliance with environmental control standards would have no identified effect on conservation activities on properties within the impact area.

- Forest operations or forest practices on the resource site

Use of the site solely for forestry purposes would prevent mining. That would

result in no environmental effect on the aggregate resource.

- West Hills Scenic Area

Total preservation of the site for scenic purposes would prevent mining.

- West Hills Wildlife Habitat Area

Mining within an existing contiguous half-mile band of forest habitat between the existing quarry and McNamee Road would reduce that minimum width necessary to prevent isolation of Forest Park wildlife from the forests of the Coast Range (Final Order PR 7-92 § 25). Expansion of the mining activity within that area would not be allowed if the wildlife habitat is fully allowed.

- Water Resource and Wetland Sites

The Rafton/Burlington Bottoms is a "3C" resource site. Mining must be conducted in a manner that minimizes any environmental impacts on that resource. The significant stream on the site has been found to have wildlife habitat in the upper portions of the watershed. Total preservation of that habitat would prevent mining adjacent to those streams; thereby, limiting the extent of mining expansion.

ii. Environmental Effect on Conflicting Uses if Development of the Resource is Allowed

- Residential Uses

Expanded development of the mineral resource could result in increased noise, dust and vibration. Such development, however, would have to be conducted in compliance with environmental control standards. Compliance with those standards could still result in complaints, but would have no adverse environmental impact on residential uses.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

An expanded mining operation would have no identified environmental conflict with conservation activities on properties in the impact area.

- Forest operations or forest practices on the resource site

It has previously been found that allowing mining would have a devastating environmental consequence on the site's forest habitat (Final Order PR 7-92 § 24). Use of the site solely for mining purposes would prevent its immediate use for forestry purposes. Reclamation would allow for its future utilization for forestry. The Board has indicated that they are not convinced that attempts to reclaim the site would succeed in enabling the forest habitat to function again (Final Order PR

7-92 § 24). An inability to reclaim the site as a functioning forest habitat would be an adverse environmental effect on the forest resource of the site.

- West Hills Scenic Area, Wildlife Habitat Area, and Water Resource and Wetland Sites

There would be a direct loss of wildlife habitat in West Hills. Loss of prime wildlife habitat in the West Hills means obstruction of a vital connecting link between Forest Park and the thousands of acres of wildlife in the Coast Range.

There could be significant degradation to Burlington Bottoms, a mitigation project for wildlife habitat already lost to dam construction. It is one of the state's largest remaining wapato wetlands and the 3rd highest ranking wildlife habitat of all Goal 5 wetlands in Multnomah County.

Mining would result in permanent changes to the landform, scarring the scenic backdrop to Sauvie Island, resulting in a loss of significant aesthetic qualities.

Runoff from mining would cause a significant reduction in water resources and water quality.

d. Energy Effects

i. Energy Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- Residential Uses

There is no identified energy effect on the aggregate resource if residences are fully allowed.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

There is no identified energy effect on the aggregate resource if conservation practices are fully allowed within the impact area.

- Forest operations or forest practices on the resource site

There would be less energy expended for aggregate production on this site if forestry uses are fully allowed since the energy expended to harvest the forest resource is less than that of extracting the mineral resource.

- West Hills Scenic Area

If scenic resources are fully allowed, no mining expansion would occur. The ener-

gy effect of that would be to reduce the amount of energy expended for extraction activities at this site.

- West Hills Wildlife Habitat Area

There would be less energy expended for aggregate production on this site due to reduced expansion potential if the wildlife habitat use is fully allowed.

- Water Resource and Wetland Sites

The Rafton/Burlington Bottoms wetland area must be protected by limiting conflicting uses. Any expanded aggregate production, therefore, must minimize conflict with that use. The energy effect on the aggregate use could be either positive or negative depending on whether the conflict resolution was to limit extraction activity, or to impose additional water control and treatment measures. Full preservation of the essential corridors associated with North Angell Brothers Creek would reduce energy consumed by the aggregate use due to a reduction in mineable area.

ii. Energy Effect on Conflicting Uses if Development of the Resource is Allowed

- Residential Uses

There would be a reduction of the energy expended in delivering aggregate products for residential uses within the impact area due to reduced delivery distance if expansion of the mining activity is allowed.

- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources

There is no identified energy effect on conservation uses within the impact area if expansion of the mining activity is allowed.

- Forest operations or forest practices on the resource site

There would be no short-term forest operations on the site if mining expansion occurred; therefore, there would be no energy effect during the period of mining. There would possibly be an increase in energy consumption relative to forest management of the site in the long-term as a result of the added management requirement of reclamation.

- West Hills Scenic Area, Wildlife Habitat Area, and Water Resource and Wetland Sites

There would be no energy effect on water resource and wetland sites within the impact area if expansion of the mining activity is allowed.

e. Other Applicable Statewide Planning Goals

The following additional Statewide Planning Goals have been found to apply to the ESEE analysis of the Angell Brothers resource site (Final Order PR 7-92 § 16, 26, 27, 28 and 29).

i. Goal 4—Forest Lands

The Forest Goal and Rule designate mining and processing of mineral and aggregate resources as locationally dependent uses. Such uses may be allowed when it is found that:

- The proposed use will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands;
- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel; and
- A written statement recorded with the deed or written contract with the county or its equivalent is obtained from the land owner which recognizes the rights of adjacent and nearby land owners to conduct forest operations consistent with the Forest Practices Act and Rules for uses authorized in OAR 660-06-025(4)(e), (l), (r), (s) and (v).

There is no indication that expanded mining at this site would force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands. Several properties surrounding the existing operation are used for primary resource production without recorded adverse impact. An expanded operation should similarly have no impact. Also, there is no indication that an expanded mining operation would increase fire hazard or the costs and risks associated with fire suppression.

The third Rule criteria is not applicable to aggregate resources. It applies only to parks and campgrounds, reservoirs and water impoundments, home occupations, health hardship mobile homes, and temporarily occupied accommodations for fishing.

ii. Goal 6—Air, Water and Land Resources

Goal 6 requires "All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules or standards." The existing operation is not in full compliance with all applicable state

and federal regulations. Measures are being taken to achieve compliance, however, the Board is not been convinced that current technology will achieve compliance.

iii. Goal 7—Areas Subject to Natural Disasters and Hazards

Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards." The majority of this resource site has been identified as having slope hazard potential (Shannon & Wilson, 1978) and the conduct of a mining operation is defined in the Statewide Planning Goals as a development. The existing operation is conducted in compliance with all applicable mine safety regulations. Any expansion would also be required to comply with those safety regulations.

iv. Goal 15—Willamette River Greenway

While none of the resource site is within the Willamette River Greenway, that portion of the impact area east of US Highway 30 is within the Greenway. An expanded operation should be conducted in a manner that conserves the scenic quality of lands within the Greenway.

4. RESOURCE ANALYSIS SUMMARY

a. General Conclusions

- i. The preceding Section A *Significance Determination* confirmed that the Angell Brothers site is a significant Goal 5 resource.
- ii. The discussion in Section B *Resource Analysis* identifies several conflicts between expansion of an aggregate production operation on this resource site and identified conflicting uses within a 1,200 foot impact area surrounding the resource site.
- iii. The list of land uses under the heading of allowed uses not applicable to the analysis" (section B.3.a.) are determined to not conflict with protection (for extraction) of the aggregate resource.
- iv. The list of conflicting uses that are described as "allowed uses that may conflict, but are unlikely to occur" (section B.3.c.) should not be included in the list of allowed uses in the mapped impact that may be made part of any subsequent aggregate resource protection program; thereby, assuring that there will be no conflict.
- v. Within the impact area there is an inventoried significant Goal 5 stream and a 3-C wetland that are found to be potential conflicts with the aggregate resource.
- vi. Within the impact area there are Goal 5 scenic resources that are found to be poten-

tial conflicts with the aggregate resource.

- vii. Within the impact area there are Goal 5 wildlife habitat resources that are found to be potential conflicts with the aggregate resource.
- viii. Within the impact area there are residential, forest and conservation uses that are found to be potential conflicts with the aggregate resource.
- ix. For the area of the aggregate resource site subject to any future Oregon Department of Geology and Mineral Industries (DOGAMI) operational permit, Multnomah County deems Oregon Department of Environmental Quality (DEQ) standards for noise levels, air quality, and water quality to be appropriate to protect the health, safety and welfare of citizens and to be appropriate to protect the land and water resources within the impact area. The County requests participation by DEQ and the Oregon Department of Fish and Wildlife in the review of any new DOGAMI operational mining permit at this site.

(b) Synopsis of ESEE Consequences

i. Residential

Consequences if Residential Uses are not allowed (in impact area)

Economic: Lower property values; protection of aggregate resource
Social: Loss of opportunity for rural homesites and lifestyle; takings issue
Environmental: Insignificant
Energy: Insignificant

Consequences if Residential Uses are allowed in a limited manner (in impact area)

Economic: Development standards may require homebuilder to mitigate conflicts with potential mining operation
Social: Development standards may limit location of residence on property; potential additional complaints of mining operation
Environmental: Insignificant
Energy: Increased energy consumption in home construction to provide mitigating measures from mining

Consequences if Residential Uses are allowed fully (in impact area)

Economic: Retention of property values; possible modification of mineable area and/or operational methods
Social: More opportunity for rural homesites and lifestyle; increase in complaints regarding aspects of mining operation
Environmental: New homes could be located in a manner that could place an

aggregate operation in violation of DEQ environmental standards

Energy: Insignificant

ii. Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources

Consequences if Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources are not allowed

Economic: Reduction of mining operation expense

Social: Loss of habitat and passive recreation opportunities

Environmental: Reduction of environmental quality and habitat within impact area

Energy: Reduction of energy expended for environmental quality control measures

Consequences if Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources are allowed in a limited manner

Economic: No increase over existing mining expense for environmental quality control measures; reduction of possible expansion areas

Social: Provision of passive recreation opportunities

Environmental: Maintenance of resource quality and habitat areas

Energy: No increase over existing energy expended for environmental quality control measures

Consequences if Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources are allowed fully

Economic: No, or slight, increase over existing mining expense for environmental quality control measures; reduction of possible expansion areas

Social: Provision of passive recreation opportunities

Environmental: Maintenance of resource quality and habitat areas

Energy: No increase over existing energy expended for environmental quality control measures

iii. Forest Operations or Forest Practices on the Resource Site

Consequences if Forest Operations or Forest Practices are not allowed

Economic: Loss of the value of the forest products

Social: Production of mineral instead of wood construction material

Environmental: Loss of forest resource

Energy: No energy expended to reclaim site for forestry purposes

Consequences if Forest Operations or Forest Practices are allowed in a limited manner

Economic: Increased mine operation expense for reclamation for forest purposes; full realization of the income potential of the primary resources of the site

Social: Production of both wood fiber and aggregate material

Environmental: Incremental modification of the topography and reclamation for forest purposes

Energy: Increased energy used for reclamation of site for forest use

Consequences if Forest Operations or Forest Practices are allowed fully

Economic: Retention of the value of the forest products; loss of utilization of the mineral resource

Social: Production of wood fiber vs aggregate material

Environmental: Retention of existing forest resource base

Energy: No energy expended for mineral production at this site, but probable transfer of energy expenditure to an alternative site; less energy expended for forestry than mining

iv. West Hills Scenic Area

Consequences if West Hills Scenic Area is not allowed

Economic: No operational expenses for buffering, screening or phasing

Social: Loss of aesthetic enjoyment

Environmental: Loss of the scenic environment

Energy: Increased energy cost for individuals to drive further to other recreation sites.

Consequences if West Hills Scenic Area is allowed in a limited manner

Economic: Increased operational expenses for buffering, screening and phasing

Social: Increased availability of aggregate material

Environmental: Modification of this portion of the viewshed over time

Energy: Increased energy expenditure for buffering, screening and phasing

Consequences if West Hills Scenic Area is allowed fully

Economic: Loss of the value of the aggregate material

Social: Retention of aesthetic enjoyment; limitation of the availability of aggregate material

Environmental: Retention of existing natural environment

Energy: No energy expended for mineral production at this site, but probable transfer of energy expenditure to an alternative site

v. West Hills Wildlife Habitat Area

Consequences if West Hills Wildlife Habitat Area is not allowed

Economic: Full utilization of the aggregate resource, reduction in quality of life
Social: Loss of educational and recreational activities
Environmental: Loss of habitat area; isolation of Forest Park species
Energy: None identified

Consequences if West Hills Wildlife Habitat Area is allowed in a limited manner

Economic: Increased operational expenses resulting from reclamation; reduction of supply due to limitation of expansion areas
Social: Continued wildlife migration; provision of a necessary construction material
Environmental: Retention of habitat area necessary for migration and modification of habitat in mined areas
Energy: Insignificant

Consequences if West Hills Wildlife Habitat Area is allowed fully

Economic: Loss of potential expansion area
Social: Retention of existing educational and recreational activities
Environmental: Retention of all existing habitat areas
Energy: Reduction of energy expended for aggregate production at this site

vi. West Hills Water Resource and Wetland Sites Area

Consequences if Water Resource and Wetland Sites are not allowed

Economic: Reduction of mining operation expenses
Social: Loss of educational and recreational activities and aesthetic quality
Environmental: Reduction of water resources and water quality
Energy: Reduction of energy expended for water quality control

Consequences if Water Resource and Wetland Sites are allowed in a limited manner

Economic: Increased mining operation expense to protect water quality and to avoid water resource areas
Social: Provision of aggregate material within the limitation of environmental quality control standards
Environmental: Retention of existing level of water quality
Energy: Increased energy expended for water quality control

Consequences if Water Resource and Wetland Sites are allowed fully

Economic: Increased mining operation expense to protect water quality and to avoid water resource areas

Social: Retention of existing educational and recreational activities and aesthetic quality

Environmental: Retention of existing level of water quality

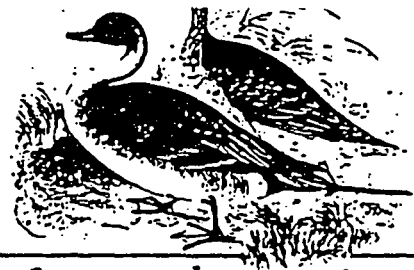
Energy: Increased energy expended for water quality control

C. Appendix

Citations:

Sauvie Island Conservancy Letter.....	34
Linnton Community Center Letter.....	37
Jodeanne Bellant Letter.....	38
Testimony of Darlene Wruble at Public Hearing for PR 7-92.....	40
Austin Powder Company Letter.....	42
Frank Parisi Letter	44
Oregon Department of Transportation Letter.....	47

SAUVIE ISLAND Conservancy



dedicated to the preservation of island rural life, wildlife & natural recreation areas

P.O Box 83873
Portland, OR 97283
August 8, 1992

Multnomah County Planning Commission
2115 SE Morrison St.
Portland, OR 97214

To the Commissioners:

Angell Brothers proposes a Comprehensive Plan Amendment and a Conditional Use Permit for an expansion of their quarry which, at its present size, already looms over the view from Sauvie Island as a grim reminder of planning gone awry. The Sauvie Island Conservancy opposes this expansion, and would like to emphasize the most critical issues raised by this proposal for residents and visitors to Sauvie Island:

1. SCENIC IMPACTS

Sauvie Island is considered by many to be the scenic jewel of Multnomah County. Island wildlife areas alone accounted for nearly 800,000 visitors last year. The Angell Brothers quarry is located by the Sauvie Island Bridge, the island's sole access and exit point, where it is overwhelmingly visible to every island visitor. The scar carved by this invasive excavation can be seen from the entire southern end of the island, and over much of Gillihan Road, including the popular Pumpkin Patch farm market and U-Pick. It is also prominently viewed from the Bybee-Howell Territorial Park, where a potential interpretive center would draw an even higher concentration of visitors encouraged to congregate in that area to better protect the island's wildlife areas. The Burlington Bottoms natural area would also be invaded by the view of an expanding quarry operation.

2. THE QUARRY SCAR

The present size of this quarry already represents an unsettling industrial patch in the once thickly-wooded hillside. The proposal indicates there will be speedy reclamation of the hillsides, using successions of 12-foot terraced benches with a soil depth of 2 feet for tree replanting, guaranteed by a bond. There has been no history of reclamation at the site, though the

bond is an encouraging addition. But many say a 2-foot soil depth in a 12-foot bench is nowhere near adequate to replant trees in an area known to be susceptible to landslides. Nor is there any evidence that this kind of reclamation has been successful on comparable slopes. Oregon's coastal mountains are dotted with replanted clearcuts where the seedlings have slid away in the soggy terrain. This proposal needs to be on firmer ground to merit any confidence.

3. FUTURE NEED FOR AGGREGATE

Recent advances in technology, such as the reuse of other materials such as asphalt from older roads, could create a decreasing demand for aggregate. Further, this pit is not the only place this kind of aggregate can be mined. Hard basalt is said to be generously distributed from West Linn to St Helens. Local residents fear a 100-year commitment for such a physically disruptive operation if demand for the product declines and the company's commitment to thorough reclamation declines correspondingly.

4. AIR AND WATER QUALITY AND OTHER NEIGHBORHOOD EFFECTS

Runoff from this project is not permitted to drain into the sensitive Multnomah Channel. But plans include a settling pond, on a hillside, to capture drainage from 600 acres. There may be no effective way to contain the enormous downfall of water from entering the channel during heavy rains. The defunct Wildwood landfill site proved to be extremely susceptible to landslides; the quarry is merely five miles from that site, with the potential to damage houseboats and natural areas below. Considerable dirt will have to be mined to reach the aggregate. This overburden will either have to be piled on site, threatening landslides in a wet winter, or hauled away, meaning more traffic. Overflow would have to enter the newly-protected area at Burlington Bottoms, and there are no provisions to protect the water quality of that drainage. In addition, excessive dust and noise from the quarry's present operation have been common occurrences for nearby residents, likely even more so from expanded mining activities. There have also been numerous accidents involved with quarry trucks on highway 30, and the danger could increase with expanded quarry activity.

5. WILDLIFE CORRIDOR

Angell Brothers' proposed 200-meter wildlife corridor is probably the most controversial issue in an area already being threatened by extensive construction. Angell Brothers officials have made serious attempts to reach an accord with the Oregon Department of Fish And Wildlife over this narrow patch of hilltop. But this planning effort has seemingly not taken into account the surrounding land use which could rapidly destroy the existing wildlife corridor. Many lots which could -- and likely will -- receive building permits ring the proposed corridor. What will that corridor mean if ultimately there is no way for wildlife to reach it?

The Sauvie Island Conservancy asks that the Plan Amendment and Conditional Use Permit be denied. The Angell Brothers' scope of work should be limited to their permitted site until the already-funded comprehensive zoning and natural resources review of Multnomah County's Northwest Hills and Sauvie Island has been completed. This unique natural area is much too sensitive to be condemned prematurely to such an invasive activity as an expanded rock quarry without considerably more study.

Yours truly,




Donna Matrazzo

Stuart Sandler

Representing the Sauvie Island Conservancy



LINTON

Community Center

10614 N.W. St. Helens Rd.
Portland, Oregon 97231
1-503-286-1344

Sept. 18, 1992

Multnomah County Planning Commission
2115 SE Morrison St.
Portland, OR 97214

RE: Angell Bros. Quarry Expansion
PR 7-92, #66 , CU 14-92, #66

Dear Commissioners,

The Linnton Neighborhood Association is very concerned with the planned expansion of the Angell Bros. quarry.

We are concerned that truck traffic will increase over time as stated on page 7 of the Comprehensive Plan Revision CU 14-92. Nearly all traffic from the quarry passes through Linnton on highway 30. We already have considerable problems with noise, pollution, and safety due to excessive truck traffic. In addition, large numbers of trucks from the quarry pass over the St Johns Bridge daily, many of them loaded with topsoil bound for the St Johns landfill. Topsoil from the expansion is destined for the landfill as well. The bridge is deteriorating and is not adequate to support this continued or expanded use. The bridge is a scenic and historic structure and should be protected. Alternate routes, although longer, should be used.

Also, Linnton residents are concerned about the continued viability of wildlife in Forest Park if the wildlife corridor is disrupted in this way. Nearly all residences in Linnton border the Park or are a few hundred feet away. We think the wildlife corridor does exist even if the time and money have not been spent to prove it. We believe the reclamation plan will be inadequate to restore the integrity of the forest for timber, scenic, or wildlife values. Even with a financial bond it would be extremely difficult to try and fix problems if it is not done right the first time. Trying to establish a healthy conifer forest on one foot of topsoil over bedrock does not sound promising.

For these reasons, we oppose the expansion plan, and request that you deny the permit.

Sincerely,

Julie Winslow,
Linnton Neighborhood Association

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SEP 21 1992

RECEIVED

JUL 2 - 1992

Multnomah County
Zoning Division

Jodeanne Bellant M.D.
14956 N.W. Mill Road
Portland, Oregon 97231

Multnomah County Planning Commission
2115 SE Morrison
Portland, Oregon 97214

PR 7-92
CX 14-92

Dear Commissioners:

I am writing to oppose the Comprehensive Plan Amendment and Conditional Use Permit for Angell Brothers Quarry on Highway 30 near the Sauvies Island Bridge. I oppose this expansion for a number of important reasons, which I will outline below.

1. Detrimental Impact on Neighboring Homes, Property and Roads:

I live on a houseboat below the existing quarry. We suffer from diminished air quality and dust pollution from the existing operations, and the noise generated from blasting activities are considerable. Currently, our moorage residents must wash their cars on a daily basis if they wish them to stay clean due to dust buildup from quarry activities. Our homes, our lungs and our property will be subject to many times the current air pollution levels should the quarry be enlarged and more land become deforested. To allow such a massive expansion of activities at this site would sharply amplify our existing problems.

Additionally, I have personally witnessed several fatal and near fatal accidents involving trucks exiting the Angell Brothers facility, and I was once nearly rear-ended and side-swiped on Highway 30 by a fully loaded runaway truck leaving their steep access road. Increasing the truck traffic on and off Highway 30 to this expanded facility will dramatically increase the risk to the public using Highway 30, secondary to the poor visibility and steep slope of the Angell Brothers access road.

2. Scenic Degradation of the West Hills Corridor:

Among the most painful sights along the West Hills Corridor is the current devastation of forested habitat by wanton clear cutting along the hills, and the current scar imposed by the existing Angell Brothers Quarry. These blights are visible for many miles along Highway 30, on Sauvies Island and from Washington State. The West Hills are immediately adjacent to some of the most scenic areas in Multnomah County and should be preserved as such for future generations. The expansion of Angell Brothers would have devastating effects on the scenic values so honored by the residents of Multnomah County and should not be allowed. The so-called buffer zones currently do not buffer the visual blight caused by the existing quarry; to think that they would buffer an operation 4-5 times the size is ludicrous.

3. Environmental Impacts:

There has been substantial citizen and county work aimed at preserving the integrity of the Wildlife Corridor between the Coast Range and Forest Park. The West Hills are an important link in this ecologically and scientifically established significant natural area. We cannot rehabilitate this important natural area 100 years from now when all the biodiversity of flora and fauna have disappeared. We must steward these lands today, and the Angell Brothers expansion will devastate the integrity of the West Hills Corridor and significantly reduce the habitat available for use by many species of animals that currently live and forage in Forest Park. Allowing this expansion to proceed would be to ignore and trivialize the will and hard work of so many citizens and officials who understand the importance of land use stewardship and who wish to safeguard Multnomah County's special urban wilderness system.

Water quality would also suffer as a result of the proposed expansion. My moorage property receives the runoff from the creek that flows through the existing quarry site. We have experienced an increase in the past 10 years of silt runoff from quarry operations, which is building up in our backwater area. If the riparian zone of this stream is devegetated, as stated in the Angell Brothers application, water pollution and erosion will surely increase, having a detrimental effect on the water quality of Multnomah Channel. The build up of silt in our backwater will force us to eventually dredge our backwater, which is a direct negative impact on our property and on Multnomah Channel due to quarry operations. I am very concerned that the settling ponds which are currently in place at the Angell Brothers site are not working adequately even now, and certainly would not adequately control the runoff from a completely devegetated stream (which would, for all purposes, be sacrificed to this proposal).

4. Rehabilitation:

The Angell Brothers Application addresses the concept of "rehabilitation" of quarry operations after cessation of activities. This term deserves some elucidation. It is my firm belief that quarry activities that denude and degrade forest habitat and create steep rock slopes cannot be rehabilitated. For example, please consider the old rock quarry at the site just east of the St. John's bridge. This "rehabilitated" site is still an eyesore many years after its shut down. No significant vegetation has been able to thrive on the steep denuded slopes, or at the base of the quarry. The site has recently been turned into some sort of large and barren parking lot. The physical scar into the hillside is visible from land and air. Likewise, enlarging the current Angell Brothers quarry to 4-5 times its current size will leave that much larger of a blighted eyesore in the West Hills for hundreds of years to come.

In sum, for the various reasons elucidated above, I urge you to conduct an ESEE analysis and to deny this permit application. This proposed expansion of quarry operations is not in the public's best interest.

estimated to last 30 years at most would be most short sighted. Lets protect the continued life and flexibility of wildlife species of Forest Park intrigal parts of a significant echo system valued by Oregonians state wide. Thank you.

Chairman: Questions? Next speaker please.

Dar Wruble: My name is Darlene Wruble and I live at 13162 NW McNamee, Portland, 97231. My main concern is that I live on that 3.12 acres that's the little glitch that you'll see on the map. My main concern is regarding the expansion of Angell Bros. quarry have to do with the noise level. As the present time who lives at my home and he works evenings and they do hear the noise during the day time of what the existing quarry and so if it comes within 625 feet of my property line it basically is going to be much louder as well as the dust level. One of the things that I would like to also clarify while I'm here, there was a statement by Angell Bros.'s attorney last time regarding an easement that I had agreed to an easement for the Friends of Forest Park or for whatever. - I have agreed to no easement whatsoever on my property. Anybody have a map, on the big one. I'm in that little notch. My home is about 150 feet from the back property line and so of course I am very concerned. I'm also concerned regarding the water. I have a well that is 730 feet deep and so what is this rock quarry going to do to the existing wells that are up there. Everyone of these people on these new proposed 38 acres will have a well that will be approximately that deep, probably in the 600 feet maybe 500 feet and so will there be contamination to our water. This is something that no one has brought up at all before. Being here and listening to the people regarding the having the places for them to have the guns and so forth basically I am concerned because of all the noise level.

Hunt: Can you clarify one thing for me? You live on McNamey Road.

Dar Wruble: Yes I do.

Hunt: Is there a lot of houses being built currently on that road.

Dar Wruble: There have been a few, yes I've been there since 1985.

Hunt: So in your opinion is there more houses affected currently then. Is there more houses going to be affected by the quarry then there was a couple years ago?

Dar Wruble: Of course, yes.

Hunt: Thank you.

Chairman: Commissioner Douglas.

Douglas: You were there when the well was drilled for your homesite.

Dar Wruble: Yes I was.

Douglas: Do you have knowledge of what it went through, whether it was rock all the way down, what was it.

Dar Wruble: I don't know but I do have what they hit, how many feet down, yes. I really couldn't tell you that.

Douglas: How exten...in that, what the formation was underneath it.

Other Voice: Just by answering the dialogue between the opponent and the chair the rules do provide an opportunity to the opposition to respond to the rebuttle and the extend of that respond and to the rebuttle was determined by the board but by the planning commission and that's stated in these rules for conducted hearings section 6 subsection N and the sub one is the provision for allowing you to determine the extent of the rebuttle.

Other Voice: I have a question, says allowing any part of application about testimony and evidence.

Other Voice: And provide opportunity for the opposition to respond.

Chairman: The rules are a little...because felt that it states that the opposition is entitled to submit...you the commission must consider those findings...whether in factwe can determine that at the next meeting.

Other Voice: There is an opportunity for the opposition to provide you questions and that you're for you to ask those of the...

Neil Kagen: Excuse me, Mr. Chair if you make that decision next

AUSTIN POWDER COMPANY



CHEHALIS, WASHINGTON 98532

Mr. Skip Anderson
Angell Bros., Inc.
P.O. Box 03449
Portland, OR 97203

May 24, 1992

Dear Skip,

Per your request, the following is a discussion of the blasting practices currently in use at the Angell Bros. quarry.

Austin Powder Co. has been supplying explosives and providing technical assistance at this quarry for about five years. During this time, we have performed vibration and air blast measurements on various shots. The seismographs used have been placed in a number of different locations, including a residence on Saurie Island, adjacent to the railroad tunnel, on a houseboat at the mooring, and at a residence on the ridge south of the quarry.

In all instances, the vibrations recorded on the seismograph were significantly below the accepted particle velocity limit of 1.75 inches per second. This limit has been determined by the U.S. Bureau of Mines and other State and Federal agencies as being the point at which possible minor structural damage could occur to wood framed structures. Possible damage at this level would include cracks in plaster walls. As the particle velocity at the structure increased over 2.50 inches per second, evidence of separation between ceilings and walls, as well as cracks in foundations could occur.

As an example of the level of vibrations produced from the shots at the quarry, we recorded higher vibrations from trains going through the tunnel than we did from a shot.

Along with concerns of structural damage, the possibility of damage to domestic water wells also should be addressed. Obviously, the closest well to the areas where the blasting occurs is in the quarry itself. We have not seen any evidence of reduced flow rates or even any cloudiness in the water from this well during the time we have been involved in the blasting. Studies on the effects on wells from blasting indicate that unless the shot is in very close proximity to the well, there is little probability of causing damage. In my opinion, there are no wells that I am aware of close enough to be affected by the blasting operations.

Typical shots at the quarry consist of approximately 100 holes, 3 1/2" diameter on either an 8' x 8' or a 9' x 9' pattern. Depending on the area being blasted, the holes will range from 20' to 80' in depth. Normally, holes are loaded to within 8' of the top, that space being backfilled with crushed rock. This loading process typically results in a powder factor of around 0.85 lbs. of explosives per cubic yard of rock. Because of the basalt formation in the quarry, this relatively light powder factor is sufficient to produce excellent results with minimal vibration and noise effects.

As in the past, the blasting program at Angell Bros. Quarry will continue to include periodic use of blasting seismographs to monitor ground vibrations and air blast. By doing this, we will be able to fine tune the blasting program as we move into different areas of the quarry.

Hopefully, this brief summary is sufficient. Please call if I can be of further assistance.

Sincerely,
AUSTIN POWDER COMPANY

Steve Harris

LANE
POWELL
SPEARS
LUBERSKY

Frank H. Parisi
(503) 778-2116

October 12, 1992

Multnomah County Planning Commission
2115 SE Morrison
Portland, OR 97214

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Shipment
Insurance
Professional
Corporations

Re: Angell Bros. Rock
Our File No. 701062-1

Dear Commissioners:

In response to the various issues that were raised at last Monday's hearing, Angell Bros. submits the following information:

1. For purposes of comparison, the economic value of the mineral and aggregate resource may be estimated as follows: Assuming that Angell Bros. is able to achieve similar rates of recovery of useable material in the expansion area as it does in the existing area, and assuming also that the proposed buffer and wildlife conservation easement areas are not mined, Angell Bros. can expect to produce approximately 84,000,000 cubic yards of aggregate material from the expansion area. The average royalty paid by the Oregon Department of Transportation for material of this type is presently \$.50 per cubic yard. This would mean that the Angell Bros.' resource has a value of \$42 million.

It is easy to throw around big numbers like this, but some caution is probably in order. The \$42 million figure has not been reduced to present value, even though the potential stream of income from the resource would be received over the life of the mine. The life of the mine depends on the market, and what economies of scale can be realized from the expansion area. If the current robust market continues, the mine could be played out in approximately 30 years.

Another component of the economic value of the site is employment. The present employment at the site averages about 12 persons, with peak employment at approximately 17 persons. Wages average \$12-13 per hour. The total direct payroll generated by the Angell Bros. site is about \$500,000, and to this should be added another \$500,000 for the employees, such as truck drivers, who work directly for customers of Angell Bros. who haul material in their own trucks.

Anchorage, AK
Los Angeles, CA
Portland, OR
Seattle, WA
London, England
Tokyo, Japan

As I recall, the figure proposed by one of the objectors for the supposedly "lost" value of the forestry resource was \$2 million (I don't recall if this was gross or net), and this was based upon prices for timber cut from a tract approximately 140 acres in size that had soil similar to the soil on the Angell Bros. site. If this figure is used for comparison, it too would have to be reduced to its present value on the assumption that the \$2 million would not be realized for 60 years, since all of the timber on the portions of the Angell Bros. site that are within the proposed expansion area were logged in 1990 and could not be logged for another 60 years. The employment value of the timber would be negligible, since all of it would be cut in a few months.

Probably the most important point in making your economic comparison is that mining is a transitional land use. It does not permanently displace any other use. Thus, timber receipts or residential housing values, or other potentially valuable uses of the site, should not be viewed as items that are "lost", but rather as items that are delayed until the site is reclaimed.

2. I believe one Commissioner had a question about the noise test data I submitted and whether there were tests for blasting activity. I had lost my copy of the May 8, 1992 letter from Mr. Harris and could not respond at the hearing. I now enclose a copy of Mr. Harris's May 8, 1992 letter. As we explained at the hearing, we did not blast this year, and do not presently see a need to blast in 1993. However, blasting has occurred from time to time in the past and could conceivably occur on one or two days in future years. I asked Mr. Standlee to provide the attached letter regarding compliance with DEQ blasting standards.

3. Commissioner Yoon asked a question about a statement I made to the effect that rebuilding habitat was the only way of enhancing environmental values, since prohibiting all activities in the site was no longer an option. My point may not have been clearly expressed. My point was this: the Tualatin Ridge is not a wilderness area. Many activities are allowed in the area and will be pursued by private landowners. Prohibiting all use of the site is not an option for the County, unless the County is willing to acquire all of the expansion site.

The current owners are willing to agree to a reasonable compromise, but they are not willing to give up all use of the site, nor is Angell Bros. willing to permit its leasehold interest in the property to sit idle. If the expansion area permit is not granted, the owner of the property, Linnton Rock Corporation, will undoubtedly harvest timber on the property in all of the buffer areas that were proposed to shield the expansion area from Sauvie Island and other areas. (I enclose the statement from Linnton

Multnomah County Planning Commission
October 9, 1992
Page 3

Rock to this effect.) In addition, both Angell Bros. and Linnton Rock will have to put the property to some economically viable use if they are not permitted to engage in mining. The only such use that makes economic sense is housing. I believe a number of the Commission members understand that this is the only realistic alternative, and that none of the environmental advantages that Angell Bros. is willing to grant in conjunction with mining would be available if mining is prohibited.

Very truly yours,



Frank M. Parisi

Enclosure

cc (w/enc): Skip Anderson
Neil S. Kagan, Esq.

J:\CG1\FMP\10706FMP.LTR

RECEIVED
OCT 12 1992

Multnomah County



Department of Transportation

HIGHWAY DIVISION

TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.

DATE: February 22, 1990

INT

TO: Susan Brody, Director
Department of Land Conservation and Development

FROM: Donald E. Forbes, P.E.
State Highway Engineer

SUBJECT: Oregon Land Use Planning Goal
Resource Planning

The Highway Division requires quality mineral aggregates for road and bridge construction. If Oregon's Highway System is to continue to be maintained and expanded, the State's mineral aggregate resources must be inventoried and protected for future use.

Aggregates which do not meet our requirements for quality cannot be used for construction of bridges and highways. Collectively, Oregon has a lot of rock but it is poorly distributed. For example, quality rock from which to make aggregates is extremely scarce in Multnomah, Clatsop, Tillamook and Lincoln counties. In some locations the importing of aggregates requires a 75-mile round trip.

During the 1988-1989 fiscal period the Division used approximately 6,000,000 tons of aggregates in various forms in its Construction and Maintenance Programs. This represents an expenditure of some \$45,600,000.

Many more miles of highway are scheduled to be improved or repaved in the future through our Access Oregon Highways and Surface Preservation Programs. Repaving projects require between 4,000 and 5,000 tons of quality aggregate per mile of two-lane highway.

Cities and counties also depend on a steady supply of quality aggregates for their road construction and maintenance programs. The recent increases in gasoline tax revenues have allowed these agencies to begin to expand their programs to stay abreast of their roadway transportation needs.

Susan Brody
February 22, 1990
Page Two

Some of the criteria for mineral aggregates to be used in road construction and maintenance are:

Quality - The aggregates must be of a sufficiently high quality to provide the necessary strength and durability for highway and bridge construction.

Quantity - To make an aggregate source economically feasible there must be a sufficient quantity of materials available for use over a period of several years.

Availability - The materials must be as close as possible to the construction site to reduce transportation costs.

This third criterion is especially important. The cost of hauling aggregates by truck is currently \$46 per hour, so any haul distance requiring an extra hour per trip would add \$4.60 per ton to the cost.

The hauling costs start to add up in Multnomah County, where half of the high quality aggregate must be imported from sources outside the county. Even with the economics of barge and freeway transport we pay an extra \$1.50 to \$2.75 to haul each ton of aggregate. Last year, projects in Multnomah County used some 375,000 tons of aggregate for which we paid \$796,875 in added transportation costs.

The Highway Division feels the need to help protect sources of quality aggregates to assure that we are able to get the most value from our gasoline tax revenues. If you feel we can be of assistance in this endeavor, please do not hesitate to call on us.

bc Robert H. Bothman
Bill Anhorn
Duane Christensen
Bill Penhollow

Ken Husby
Jack Bryan
Don Hull
Dick Angstrom ✓

JB:sl

CHAPTER V

WILDLIFE HABITAT

TABLE OF CONTENTS

	<u>page</u>
A. SIGNIFICANCE DETERMINATION	
1. Resource Description	V-3
2. Location	V-3
3. Quantity	V-4
4. Quality	V-11
5. Conclusion	V-16
6. Footnotes	V-16
 B. RESOURCE ANALYSIS	
1. Impact Area	V-18
2. Regulatory Context	V-18
3. Conflicting Use Analysis	V-23
4. ESEE Analysis	V-24
6. Summary	V-49
7. Footnotes	V-51
 C. APPENDICES	
Appendix A – Road Impact Analysis	V-66
Appendix B – Landscape Ecology Definitions	V-76
Appendix C – References Cited	V-78
 D. MAPS	
West Hills Subarea Map	V-7
West Hills Wildlife Habitat Area Map	V-8
 D. TABLES	
Table 1 – Relative Size of Multnomah County Non-Urban Areas	V-4
Table 2 – Relative Size of Adjacent Non-Urban Areas	V-6
Table 3 – West Hills Wildlife Habitat Areas	V-6
Table 4 – West Hills Wildlife Group Priority Habitat	V-10
Table 5, 5.A-D. – West Hills Conflicting Uses & Activities	V-55
Table 6 – Existing & Potential Rural Residential Units	V-39
Table 7 – Aggregate Suppliers	V-46
Table 8 – Rural Residential Land Values	V-60

A. SIGNIFICANCE ANALYSIS

1. RESOURCE DESCRIPTION

No precise definition for wildlife habitat is contained within the Oregon Statewide Planning Goals document or the Oregon Administrative Rules -- it is the responsibility of the local jurisdiction to make findings, based upon evidence, that an area is or is not significant for wildlife habitat. Multnomah County contains a number of existing areas which are identified as wildlife habitat, including areas which are important for big game, waterfowl, and sensitive bird species. However, recent studies have documented the importance of preserving whole eco-systems for a full range of wildlife, from insects to large carnivores, as opposed to identifying and preserving small areas for a certain target species of concern such as elk, or bald eagles. These studies (see bibliography for *Wild About the City* (Houle 1990) and *A Study of Forest Wildlife Habitat in the West Hills* (Lev, Fugate & Sharp, 1992), discussed later in this report) assert that the only way to preserve sensitive species from further declines in population or extinction is to preserve large, contiguous areas of the entire ecosystem in which these species reside.

The definition of wildlife habitat recommended by the Oregon Department of Fish & Wildlife and adopted for the purposes of this study reads as follows:

Wildlife habitat is an area containing physical and biological features which supply resources sufficient to sustain the presence of a resident or migratory wildlife species population for at least some part of their annual life cycle. Such an area is significant if it is large enough to sustain a viable population; or sustains the presence of unique, sensitive, threatened, or endangered species; or provides a critical component to a species' life requirements during some time during the year (i.e. nesting or roosting sites, big game winter range); or sustains the presence of a high diversity of native plant or animal species; or comprises a functioning ecosystem in whole or in part (i.e. wetland, old growth forest); or provides a connection between other areas of significant wildlife habitat (i.e. riparian or upland wildlife corridor).

2. LOCATION

OAR 16-600(3): Some Goal 5 resources (e.g. natural areas, historic sites, mineral and aggregate sites, scenic waterways) are more site-specific than others (e.g. groundwater, energy sources). For site-specific resources, determination of location must include a description or map of the boundaries of the resource site and of the impact area to be affected, if different. For non-site-specific resources, determination must be as specific as possible.

Wildlife are guided in their choice of locale and movement by natural features which may allow or hinder their movement (watercourses, terrain, type of vegetation) and built features which hinder them (roads, residences, fences, agricultural operations). Given the

large population of the Portland Metropolitan Area, the latter set of constraints are far more important in the patterns of wildlife habitation and migration. The West Hills rural area has a limited number of built features due to its location outside of the urban limit line and its low intensity levels of agricultural and forestry operations, and rural residential development.

Wildlife habitat areas, by definition, are not site-specific.¹ The distinct habitat needs of observed and probable wildlife species are described in Table 1 of *A Study of Forest Wildlife Habitat in the West Hills*. For example, some species require a forested habitat, while others do well in meadow and even suburban habitats; smaller mammals often have different habitat needs than larger mammals; birds often have different habitat needs than reptiles, etc. In short, the wildlife habitat areas of varying species overlap, and cannot be "unambiguously defined" by a line on a map.

However, it is useful to determine precise boundaries for primary, secondary, and impacted *forest* wildlife habitat areas. The determination of each wildlife habitat category is based on relative habitat suitability for *forest-dwelling species* with the most demanding forest habitat needs. Definitions and discussion of primary, secondary, and impacted wildlife habitat areas can be found later in this report under **QUALITY**.

3. QUANTITY

OAR 660-16-000(3)...A Determination of quantity requires consideration of the relative abundance of the resource (of any given quality).

Some amount of wildlife habitat occurs in all non-urban portions of Multnomah County. In the absence of more specific data on wildlife resources within other non-urban portions of Multnomah County, the best available standard of comparison of wildlife abundance (quantity) is the total size of each non-urban area within Multnomah County. The West Hills Rural Area is 34 square miles (approximately 21,865 acres) in size. The following table compares the size of the West Hills rural area to other non-urban portions of Multnomah County:

TABLE 1: RELATIVE SIZE OF MULTNOMAH COUNTY NON-URBAN AREAS

<u>AREA</u>	<u>SIZE</u>	<u>% OF NON-URBAN AREAS</u>
West Hills	34 sq. mi.	13%
Sauvie Island	26 sq. mi.	10%.
West of Sandy River	16 sq. mi.	6%
East of Sandy River	128 sq.mi.	50%
<u>Columbia Gorge NSA Area</u>	<u>52 sq. mi.</u>	<u>21%</u>

TOTAL NON-URBAN AREA	256 sq. mi.	100%
----------------------	-------------	------

In addition, the quantity of the wildlife habitat resource should be measured against three other areas outside Multnomah County and one area within the City of Portland. These

areas are chosen because they are directly adjacent to the West Hills Rural Plan Area.

a. Washington County Forest

This area, in Washington County, is a non-urban forested area bounded to the west by Highway 26, to the north by the Washington County line, to the east by the West Hills Rural Plan Area, and to the south by mixed agricultural and rural residential uses within Washington County. It is approximately 100 square miles in size and is almost entirely designated Washington County for non-urban, forest uses. It should be noted that west of Highway 26 lie the forested natural areas of the Oregon Coast range.

b. Washington County Farm

This area, also in Washington County, is a non-urban area consisting primarily of agricultural and rural residential uses which is bounded to the south by Highway 26 and the community of North Plains, to the east by the West Hills Rural Plan Area, and to the north and west by forested lands within Washington County. It is approximately 40 square miles in size.

c. Columbia County Forest

This area is within Columbia County and is designated primarily for non-urban forest uses, with some rural residential pockets included. It is bounded to the north and east by the communities of Chapman and Spitzenberg along the Scappoose-Vernonia Road, to the west by State Highway 47 and the Community of Vernonia, and to the south by the West Hills Rural Plan Area. It is approximately 80 square miles in size. It should be noted that west of Highway 47 and Vernonia lie the forested natural areas of the Oregon Coast Range.

d. Forest Park

The Forest Park area within the City of Portland is a public "natural" park with significant quantities of wildlife as documented by various sources. It is bounded to the north by the West Hills Rural Plan Area, to the south by Cornell Rd., to the east by urban development within Northwest Portland, and to the west by the Balch Creek portion of the West Hills Rural Plan Area and low-density residential development within the City of Portland. It is approximately 8 square miles in size.

The following table compares the size of the West Hills Rural Plan Area to these three areas outside of Multnomah County which are contiguous to the West Hills:

TABLE 2: RELATIVE SIZE OF NON-URBAN AREAS ADJACENT TO THE WEST HILLS

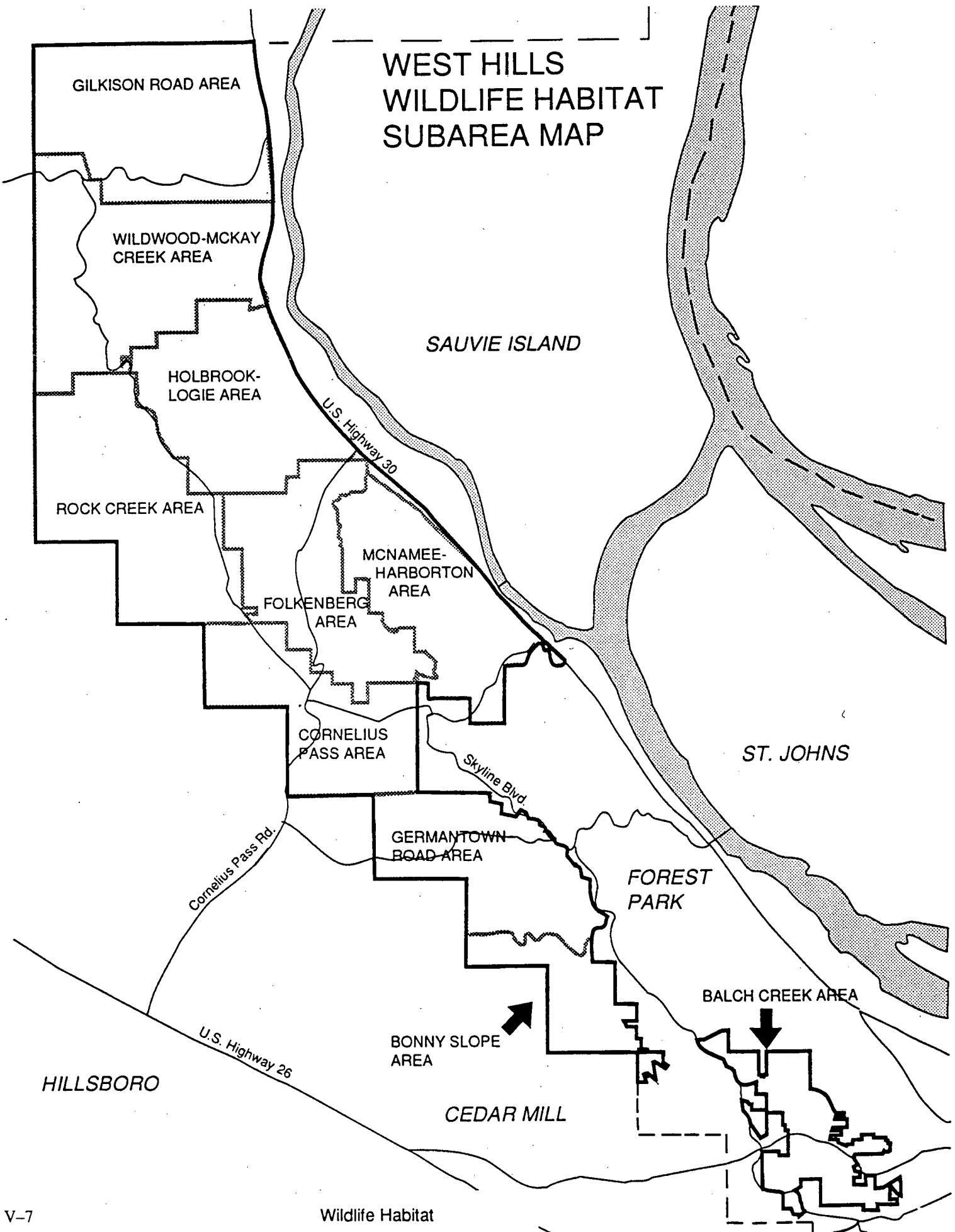
<u>AREA</u>	<u>SIZE</u>	<u>% OF AREA</u>
West Hills	34 sq. mi.	13%
Washington County Forest	100 sq.mi.	38%
Washington County Farm	40 sq. mi.	15%
Columbia County Forest	80 sq. mi.	31%
<u>Forest Park</u>	<u>8 sq. mi.</u>	<u>3%</u>
TOTAL AREA	262 sq. mi.	100%

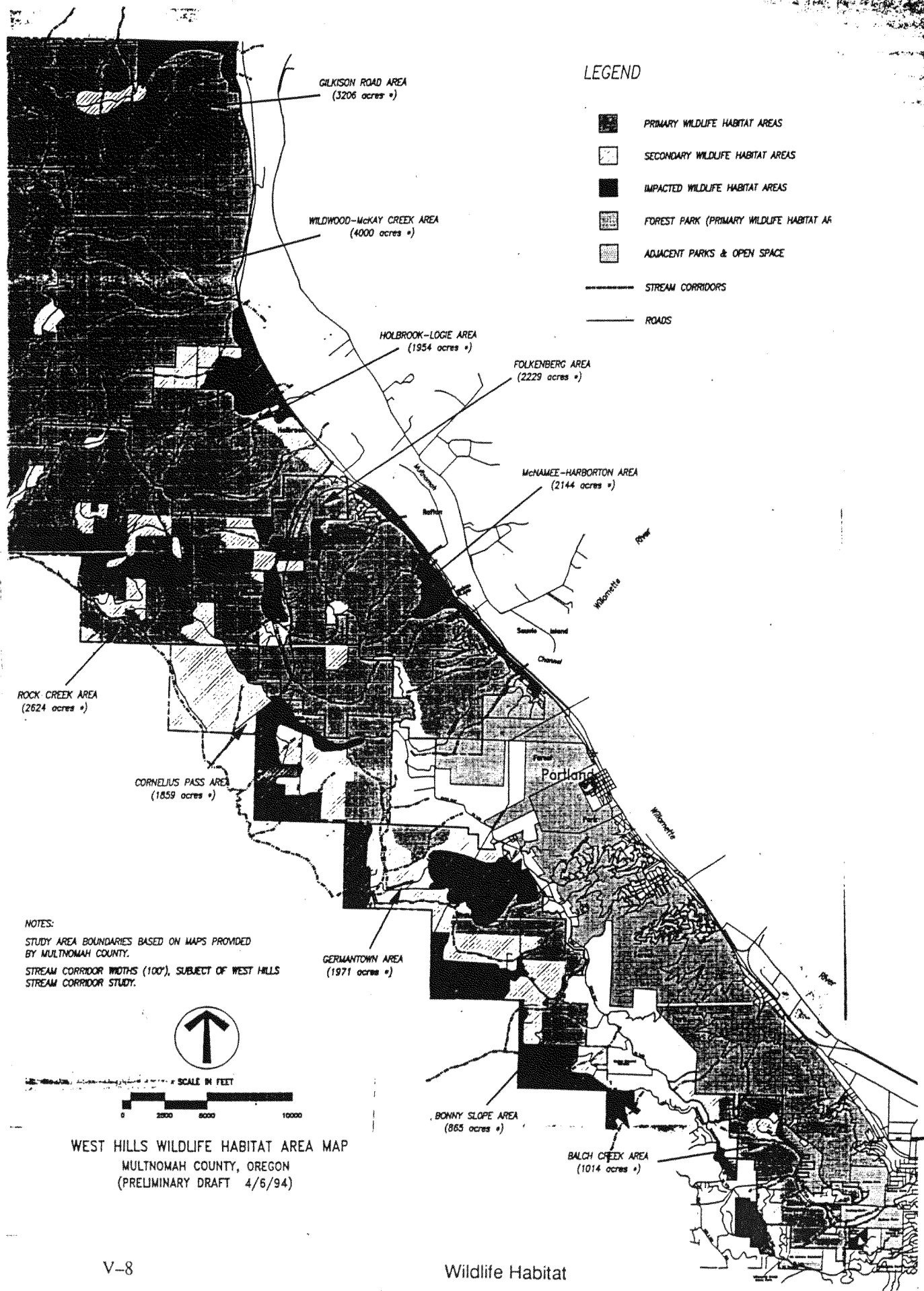
Within the West Hills, there lie areas differentiated by this study into primary, secondary, and impacted wildlife habitat areas within ten subareas (see definitions of these three categories under **QUALITY**). There are approximately 15,687 acres of primary wildlife habitat, 3,612 acres of secondary wildlife habitat, and 2,559 acres of impacted wildlife habitat within the West Hills Rural Area. The acreage breakdown among primary, secondary, and impacted wildlife habitat resource areas is as follows:

TABLE 3 WEST HILLS WILDLIFE HABITAT AREAS			
SUBAREA OR IMPACT AREA	PRIMARY HABITAT ACRES	SECONDARY HABITAT ACRES	IMPACTED AREAS ACRES
GILKISON ROAD	2,935	105	166
WILDWOOD-MCKAY	3,860	94	46
HOLBROOK-LOGIE	1,385	310	260
ROCK CREEK	2,119	505	0
FOLKENBERG	1,841	260	128
MCNAMEE-HARBORTON	1,772	118	254
CORNELIUS PASS	533	921	406
GERMANTOWN ROAD	445	846	680
BALCH CREEK	628	248	139
BONNY SLOPE	169	205	490
<u>TOTAL -- 21,865 Acres</u>	<u>15,687-- 72%</u>	<u>3,612--17%</u>	<u>2,569--11%</u>

The quantity of the West Hills wildlife habitat resource also depends upon factors other than just gross acreage of the resource area. *A Study of Forest Wildlife Habitat in the*

WEST HILLS WILDLIFE HABITAT SUBAREA MAP





West Hills (1992, Lev, Fugate & Sharp, see further discussion of this report under **QUALITY**) identifies the number of wildlife species, or category of species, found in the West Hills. This study found that species diversity depends upon both the quantity and the quality of habitat. Table 4, West Hills Wildlife Group Priority Habitat, describes the habitat needs of individual species, or groups of species, found within the West Hills Wildlife Forest Habitat Area.

Assured survival of diversified wildlife populations depends upon preventing local habitat loss and isolations (Merriam, 1991). Wilcox and Murphy (1985) have described habitat loss as the most serious threat to biological diversity and as the primary cause of the present extinction crisis. Noss (1987a) proposed a system of larger nodes of suitable habitat connected by corridors² to provide sufficient habitat for viable populations in a fragmented landscape.

For these reasons, *A Study of Forest Wildlife Habitat in the West Hills* recommends maintenance of a continuous, 1.5 mile peninsula of forested habitat extending from Forest Park³ to the Coast Range. This recommended 1.5 mile swath of forest land is intended to compensate for the temporary loss of forest habitat that results from clear-cutting. A minimum half-mile wide corridor of forested habitat is necessary to maintain a forested connection at any given location.⁴ The half-mile wide forest strip allows for animals to travel and seek cover in dense forests, and to compensate for edge effects that diminish wildlife habitat where forests meet clear cuts, agricultural land, roads, rural development, and mining operations.⁵

Finally, the West Hills' relationship to Forest Park is critical to the West Hills' significance. From a quantitative standpoint, Forest Park covers approximately 4,700 acres. Yet Forest Park, in isolation, is not large enough to support self-sustaining populations of medium and large size mammals, such as elk, bobcats, mountain lions (*Felis con color*) and black bears,⁶ for which hundreds of square miles of habitat would be required (Brown 1985; Forman and Godron, 1986; Ruggiero et al., 1991). These species, as well as smaller and much less mobile species, will not be able to pass securely through the northern part of this peninsula if current trends of urbanization and clear cutting continue without regard to maintaining contiguous forest habitat throughout.

The long-term survival of smaller, less mobile species is dependent on the size of current populations within the undisturbed portions of Forest Park. Many of these species may already have been lost, or are in the process of disappearing, from residential and clear cut areas. The success of future colonization or recolonization of this peninsula will depend on habitat conditions throughout the peninsula. For example, species which for some reasons do not now occur, or those found primarily in older forests of the Coast Range, such as the red tree vole, white-footed vole, or marten (*Manes Americans*) will not be able to recolonize Forest Park if contiguous forest habitat throughout the peninsula is lost.

Thus, it is the quantity of the West Hills Wildlife Habitat Area in relation to its quality and location that are critical to this inquiry. High quality habitat elsewhere in Multnomah County cannot substitute for even medium quality habitat in the West Hills.⁷ It is because medium

TABLE 4: WEST HILLS WILDLIFE GROUP PRIORITY HABITAT

(adapted from "A Study of Forest Wildlife Habitat in the West Hills -- Final Report," Lev, Fugate and Sharp, 1992.)

Forest Wildlife Group	2nd Growth Forest	Clearcut	Early Succession	Young Forest	Meadow	Suburban	Quarry
Band tailed pigeon	P	S	S	P	N	L	N
Cavity makers	P	L*	L*	L*	N	L	N
Cavity users	P/S	L*	L*	L*	N	L	N
Flycatchers	P	L	S	P	N	L	N
Finches	P	S	P	P	N	L	N
Ground nesters	P	S	P	P	N	N	N
Raptors	P	S	P	P	S	L	N
Suburban	P	S	P	P	P	P	N
Thrushes	P	S	P	P	N	L	N
Warblers	P	S	P	P	N	L	N
Underground mammals	P	P	P	P	P	L	N
Small carnivores (weasel)	P	P	P	P	L	L	N
Shrews	P	P	P	P	N	N	N
Medium carnivores (coyote, bobcat)	S	P	P	P	L	N	N
Ungulates	P	P	P	P	L	N	N
Tree Squirrel	P	N	S	S	N	L	N
Chipmunk	P	S	P	P	N	N	N
Ground squirrel**	N	P	N	N	P	N	N
Voles/mice	P	P	P	P	P	L	L
Mountain beaver	P	S	S	P	N	N	N
Large carnivores (bear, cougar)	P	S	S	P	N	N	N
Brush rabbit	N	L	P	S	N	N	N
Bats***	P	P	P	P	N	N	N
Amphibians/reptiles	P	N	L	P	N	N	N

Key:

P = Primary habitat (an area which will support a viable population of a species because it provides all the environmental factors needed).

S = Secondary habitat (an area in which an animal may spend part of its time but which does not meet all its life requirements).

L = Limited

N = Not habitat

* Provides limited habitat only if some snags are left after logging and persist through forest regeneration; otherwise is N (not habitat).

** Not a forest-dwelling species.

*** Bats may forage over open habitats, but many require forests for roosting.

quality habitat is limited, and *threatened* by conflicting uses at a *particular* location, that makes the West Hills a *significant* Goal 5 resource.

As noted in the ESEE analysis, the environmental consequences of losing a small amount of West Hills wildlife habitat in certain locations are much greater than losing a great deal of habitat in other portions of Multnomah County. Simply put, loss of the prime wildlife habitat in the West Hills means obstruction of a vital connecting link between Forest Park and the thousands of acres of wildlife habitat in the Coast Range.

4. QUALITY

OAR 660-16-000(3): The determination of quality requires some consideration of the resource site's relative value, as compared to other examples of the same resource in at least the jurisdiction itself.

Multnomah County has commissioned two studies of wildlife in the West Hills, which, along with other relevant studies, are summarized below.

a. **WILD ABOUT THE CITY** (Marcy Houle, 1990)

This report discusses the concept of contiguous areas of natural habitat for wildlife and the results of the fragmentation of habitat into "islands." In the latter instance, numerous biological studies (see bibliography for *Wild About the City*) have documented the diminishment and loss of native plants and animals due to a lack of connection to a larger ecosystem. Continued development in the West Hills wildlife area would result in the fragmentation, and therefore the degradation of both the West Hills' and Forest Park's natural systems, the loss of species diversity (particularly for larger mammals such as bears, elk, and cougars which require large habitat areas for each animal), the permanent loss of natural populations to catastrophe such as fire, and the weakening of plant and animal populations due to the lack of genetic diversity available in larger areas.

b. **A STUDY OF FOREST WILDLIFE HABITAT IN THE WEST HILLS** (Esther Lev, Jerry Fugate, Lynn Sharp, 1992)

This report provides a more in depth study of existing wildlife within the West Hills area. Research for the study included a series of six transects throughout the region, representing different types of land use (forested, residential, agricultural, clear-cut forest, quarry). A total of 19 species of mammals (including coyote, black bear, mountain beaver, trowbridge's shrew, and coast mole) and 34 species of birds (including Swainson's thrush, pine siskin, downy woodpecker, and black-headed grosbeak) were observed during the field study from both trapping and observations. The specific outcome of the transect evaluations are contained within the report; however, the transect with the most species diversity and numbers were found in the "control" transect within the boundaries of Forest Park. This indicates the high wildlife habitat values to be found within the park, and the importance of integrating Forest Park into a larger con-

tiguous wildlife habitat area in order to protect this high value. The amount and diversity of wildlife within the rural West Hills area to the northwest of Forest Park is somewhat lower due to the impact of residential development, agriculture, quarry operations, and commercial forestry. However, each of the five transects outside of Forest Park showed significant numbers and diversity of wildlife, indicating that this area remains an important area for native plants and animals.

c. Other Studies

The City of Portland has thoroughly studied the quality of wildlife habitat in the area of Forest Park to the south of the proposed West Hills wildlife habitat area/corridor. The *Northwest Hills Natural Areas Protection Plan*, (adopted 1992) documents the abundance of wildlife habitat in Forest Park and the surrounding areas within the City of Portland. The *Balch Creek Watershed Protection Plan* (adopted 1990) provides information about the wildlife habitat values in the portions of the Balch Creek basin which are within the Urban Growth Boundary and the Portland City limits. Both reports provide information about wildlife habitat values within adjacent unincorporated areas west and north of Forest Park, and within the Balch Creek basin. These habitat values are significant, associated with forested lands and the wildlife which inhabit them (such as salamanders, frogs, snakes, lizards, over 80 species of birds, and 62 mammal species, from squirrels and chipmunks to bears and cougars).

The County has already identified two significant wildlife habitat areas within the West Hills Rural Area based upon information compiled by the Oregon Department of Fish and Wildlife, a big game wintering habitat within much of the Northern Forested Area, and a bald eagle roost in the vicinity of Dixie Mountain in the far northern portion of the County. Additionally, fish and riparian-based flora and fauna are a significant identified resource within major streams in the West Hills area.

d. Comparison with Other Non-Urban Habitat Areas

i. Sauvie Island

Unlike the West Hills, the Multnomah County portion of Sauvie Island Area is generally flat, and approximately two-thirds is devoted to agricultural uses, of a significantly more intense nature than those in the West Hills, befitting the higher quality of soils on the island. Sauvie Island contains significant identified fish and wildlife habitat areas, including a large sensitive waterfowl area in the northern portion of the island. The Multnomah Channel Area, between Sauvie Island and Highway 30, contains significant identified wetland resources such as the Burlington Bottoms wetland located in the vicinity of the Sauvie Island bridge. While Sauvie Island provides very important habitat for waterfowl, fish, and wetland flora and fauna, it is relatively unimportant for terrestrial wildlife due to the preponderance of agricultural uses on the island and its isolation by water from nearby wildlife habitat areas within the West Hills (separated by Multnomah Channel) and in Washington (separated by the Columbia River).

ii. Eastern Multnomah County Non-Urban Areas

Two of the eastern three rural areas (East of Sandy River and Columbia Gorge NSA Area) contain significant identified wildlife habitat areas, including large big game wintering areas and osprey nests. While no significant wildlife habitat areas have been identified by the Oregon Department of Fish & Wildlife in the West of Sandy River area, the Sandy River Gorge is identified as a significant natural area. These areas appear to maintain significant connectivity to each other and to adjacent areas of the Cascade Range -- however, this wildlife community is distinct from the wildlife in the Coast Range and West Hills area.

iii. Washington County Adjacent Non-Urban Areas

The Washington County Forested area between the West Hills Rural Area of Multnomah County and Highway 26 is designated on the Washington County Rural/Natural Resource Plan as a Wildlife Habitat Area, which contains sensitive habitat identified by the Oregon Department of Fish & Wildlife and forested areas coincidental with water areas and wetlands. The Washington County Non-urban farm areas contain a small amount of sensitive wildlife habitat. These areas are connected and contiguous to Columbia County natural areas to the north, the West Hills of Multnomah County to the east, and the Coast Range to the west and southwest.

Washington County's Rural Natural Resource Plan, Policies 6, 10, and 11 require protection and enhancement of significant fish and wildlife habitat areas, and water areas. Like Multnomah County, Washington County relies on Oregon Forest Practices rules to mitigate adverse impacts of commercial forestry on wildlife habitat values. Washington County also limits development in riparian corridors and implements the recommendations of the Oregon Department of Fish and Wildlife with respect to Big Game Range habitat. The Land Conservation and Development Commission has acknowledged Washington County's program as being in compliance with Statewide Planning Goal 5.

iv. Columbia County Adjacent Non-Urban Areas

The Columbia County forested area to the north of the West Hills Rural Area is designated by the Columbia County Comprehensive Plan as a major big game habitat area. These areas are connected and contiguous to the Washington County natural areas to the southwest, the West Hills of Multnomah County to the southeast, and the Coast Range to the west.

The Columbia County Zoning Code contains a Big Game Range Overlay to protect areas identified as major big game habitat areas. This Overlay district requires clustering of development to avoid habitat conflicts and consultation with the Oregon Department of Fish & Wildlife.

v. Forest Park Area

Based upon comprehensive studies, the City of Portland has identified large areas within and around Forest Park as significant wildlife protection areas, and has protected these areas through implementation of an environmental overlay zone which restricts disturbance and development of sensitive areas. This environmental overlay zone consists of two sub-zones, and E-P district which virtually prohibits new development except under extreme conditions, and an E-C district which limits new development and provides standards by which to mitigate impacts upon fish & wildlife habitat. The code also includes a provision for the Transfer of Development Rights from parcels constrained by the environmental overlay zone to parcels which are not so constrained. Forest Park is connected and contiguous to the West Hills area to the west and northwest.

e. Summary of Quality Findings

The suitability of the West Hills for wildlife habitat is documented in *A Study of Forest Wildlife Habitat in the West Hills*. When viewed in isolation, the intrinsic habitat suitability of the West Hills is comparable to (and in some cases worse than) many other forested areas of Multnomah, Washington, and Columbia Counties. In fact, the absolute wildlife habitat suitability of the West Hills (when considered in isolation) has declined as a result of many conflicting uses, as described in the ESEE analysis.

However, *if* the West Hills were not strategically located between two important wildlife habitat areas (Forest Park and the Coast Range) and *if* the West Hills were not located in a large metropolitan area where wildlife habitat is scarce, *then* it would not be uniquely significant. It is these two factors that make the West Hills a significant Goal 5 resource.

This report distinguishes among primary, secondary, and impacted wildlife habitat areas within the West Hills rural area.

Primary wildlife habitat areas have environmental qualities that support, or will support, viable populations of a wide range of animal species. One of the conditions that contributes greatly to quality of habitat is generally referred to as structure. This term includes such components as large trees, snags, downed and dead wood, and a wide range of plant species at all canopy levels (Ambuel, B. & Temple, S.A., 1983). Generally, mammal species diversity is lowest in young Douglas fir forests and increases toward the old growth stage (Franklin & Spies, 1991). Small mammal diversity is greatest in the early successional stage. In the case of the West Hills, maintaining black bear and elk habitat ensures that the habitat needs of a wide range of other species will be met (*A Study of Forest Wildlife Habitat in the West Hills*, page 3). Since bear and elk require large, contiguous forested tracts to survive, primary wildlife habitat areas are so defined. Primary habitat areas are located principally in the northern forested areas of the West Hills north of Forest Park and Cornelius Pass. As noted above, recently-logged areas also qualify as primary habitat, because eventually they will be re-forest-

Secondary wildlife habitat areas meet the habitat needs of well-adapted species, but overall support the needs of a narrower range of species. Secondary habitat areas are those which have been, or probably will be, adversely affected by human activity (usually farming or rural residential development) but which contribute to maintaining an open space connection between Forest Park and the Coast Range. Secondary wildlife habitat areas are generally found in (a) forested and riparian areas of within the agricultural areas between Laidlaw Road and Rock Creek Road along the west side of the West Hills that are connected to primary habitat areas within the West Hills Wildlife Forested Habitat Area, and 9b) in sparsely developed, forested, rural residential areas throughout the West Hills. Undeveloped, forested land zoned for Rural Residential uses is considered secondary wildlife habitat, recognizing that it will eventually be developed, and assuming that regulations will be in place to minimize the impacts of such development.

Impacted wildlife habitat areas support a much narrower range of animal species, and from barriers to the movement of many forest species. Impacted wildlife habitat areas are those which do not have, and are unlikely to have, forests in the short-to-medium future (1-10 years). Such areas typically are adjacent to primary or secondary habitat areas, but have been adversely affected (impacted) by residential development.⁹ Human and pet impacts, roads, lawns, gardens, and fences associated with rural residential development in these impact areas can adversely affect resource quality. The Bonny Slope area and permanently cleared (pastures and cultivated land) portions of the agricultural area between Laidlaw Road and Rock Creek Road on the west side of the West Hills are considered to be "impacted wildlife habitat areas." The West Hills Rural Area has "patches" of land in this category, which are usually zoned rural residential and are located along roads.

Mining operations also fall into the category of impacted wildlife habitat areas. Where gravel pits are required to be reclaimed under ORS 517, they may eventually be reclassified as secondary habitat, even though they typically have low habitat value now. Residential "impacted" areas may also be reclaimed as wildlife habitat through techniques such as replanting of native vegetation and removal or modification of fences.

Primary, secondary, and impacted habitat areas have been mapped based on *existing* and *probable* conditions. Areas zoned Rural Residential probably will have, eventually, houses on five acre lots. Such development will degrade primary habitat areas to secondary habitat status, even with mitigating measures. Therefore, even relatively undisturbed areas zoned Rural Residential are defined as "secondary" habitat areas. Clear cut areas zoned CFU, however, usually are designated as primary habitat. Although recent clear cuts have relatively low wildlife habitat value, such areas will increase in habitat value over time, as revegetation occurs. Due to Statewide Planning Goal 4 (Forest Lands) constraints on non-forest uses (houses)¹⁰, logged-over areas will again become primary wildlife habitat. Therefore, clear cut areas zoned for Commercial Forest Use are considered primary habitat areas for long-term planning purposes.

As part of the report, Ecologists Esther Lev and Lynn Sharp conducted analysis of roadways in the West Hills to document the degree to which the movement of wildlife is likely to be obstructed along roads. Their field notes are included in **Appendix A**.

The Map entitled West Hills Wildlife Habitat Area Map indicated primary, secondary, and impacted wildlife habitat areas within the West Hills Rural Area. This map was developed based upon field work, a detailed review of 1993 aerial photographs, METRO vegetative cover maps, and a review of Multnomah County data regarding the location of housing units.

5. CONCLUSION

OAR 660-16-000(3) Include on Plan Inventory: When information is available on location, quantity and quality, and the local government has determined a site to be significant or important as a result of the data collection and analysis process, the local government must include the site on its plan inventory and indicate the location, quality and quantity of the resource site (see above. Items included on this inventory must proceed through the remainder of the Goal 5 process.

This report, when combined with information already available to Multnomah County, describes the location, quality and quantity of wildlife habitat in the West Hills rural area in sufficient detail to support a determination of *significance*. Thus, the primary and secondary wildlife habitat areas in the West Hills Rural area are a 1C resource. The impacted wildlife habitat areas, while not significant in themselves, are within the impact area of the West Hills significant wildlife habitat resource due to their proximity to the resource and will be discussed as such within the ESEE analysis.

From this point on in this report, the significant resource shall be referred to as the West Hills Wildlife Forested Habitat Area.

6. FOOTNOTES -- Determination of Significance

¹ Nevertheless, the determination of resource site and impact area boundaries is property-specific. In this way, property owners and citizens will know which properties are affected by Goal 5 regulations.

² Within a peninsula of forested wildlife habitat area, there may be several "corridors" where various species of wildlife routinely travel. Examples of such corridors include streams, areas with protective vegetative cover, interconnected wetlands and ridgelines. Corridors may also be defined by obstacles. Thus, forest wildlife often will skirt recently cleared areas, agricultural areas, or areas characterized by human settlement.

³ Forest Park itself averages about 1.5 miles in width.

⁴ *A study of Forest Wildlife Habitat in the West Hills*, pages 26-27.

5 The 1.5 mile peninsula is partially obstructed in the McNamee-Harbor and Folkenberg Sub-areas of the West Hills Rural Area (north of Forest Park, south of Cornelius Pass Road). For this reason, it is especially important to minimize further obstructions in these subareas. Because Oregon's forest practices rules allow for clear cutting of forested habitat areas, other uses (housing, roads and fences, agriculture, mining, etc.) must be limited more stringently in order to maintain continuous forest cover in these Sub-areas.

6 The implication is not that Forest Park should be managed exclusively for bear and elk; rather, the point is that managing Forest Park and the adjacent wildlife area for bear and elk will ensure sufficient habitat for smaller mammal and bird species that reside in the Portland region. However, there have been several reported sightings of bear and elk in Forest Park. If the connection between Forest Park and the resources of the Coast Range were cut off, occasional visits from these large mammals to Forest Park probably would cease.

7 An analogy with aggregate resource sites is appropriate in this case. Just as an aggregate resource site's *value* increases in proportion to its proximity to urban markets, so do wildlife habitat values increase in proportion to how close they are to population centers. It is the *scarcity* of forested wildlife habitat areas in metropolitan areas which increases their relative value to people who live there.

8 Clear cut areas on forest land have a short-term adverse impact on habitat quality, and are considered a conflicting use in this study. Oregon Forest Practices rules require reforestation on such lands. One of the principal purposes of State-wide Planning Goal 4 (Forest Lands) is conservation of wildlife habitat. Moreover, State law prohibits local regulation of forest practices where forest operations are a permitted or conditional use, outside of urban growth boundaries or the Portland City Limits. Since Multnomah County lacks authority to regulate forest practices, it is especially important that the impacts of other conflicting land use be carefully controlled at the local level. One of the reasons why it is important to maintain a wide peninsula of undeveloped forest land is so that the pattern of clear cuts -- when combined with other conflicting land uses -- does not result in long-term, uninterrupted barriers to wildlife movement.

9 Impacted areas were determined based on analysis of aerial photographs, vegetative cover maps, and zoning. Generally, an area is considered "impacted" if it (a) has developed residential densities of one unit per five acres or greater, (b) includes developed areas along Highway 30, (c) is predominately agricultural in character, or (d) is a large quarry.

10 In the past, Multnomah County has approved many forest dwellings on land zoned for forest use (CFU). However, new County CFU regulations are expected to severely limit new dwellings on forest lands in the West Hills.

B. RESOURCE ANALYSIS

1. IMPACT AREA

The "impact area affected" includes forest wildlife habitat areas outside of the West Hills Rural Area, including Forest Park and forest land in Columbia and Washington Counties. These areas are *connected* to the West Hills Wildlife Forested Habitat Area. The quantity and diversity of forest wildlife habitat species in "impact areas" depends upon maintenance and enhancement of forest wildlife habitat values in the West Hills Wildlife Forested Habitat Area, and *vice versa*.

Unincorporated Multnomah County has no defined "impact area" which is directly affected by the West Hills Wildlife Forested Habitat Area. To the east, Highway 30, a major railroad, and development provide an effective wildlife barrier separating the West Hills from Sauvie Island.¹¹

To the south and west, the Portland Metropolitan Area effectively separates the West Hills and Forest Park from forest land in East Multnomah County.

Impact areas outside unincorporated Multnomah County include:

- (a) Washington County rural resource land north and west of the West Hills;
- (b) Columbia County forest land immediately north of the West Hills; and
- (c) Forest Park, neighboring parks, and the Balch Creek drainage.

Although these areas are outside of Multnomah County's jurisdiction, they are integrally connected with, and cumulatively define the resource value of, the West Hills Wildlife Forested Habitat Area.

2. REGULATORY CONTEXT

The economic, social, environmental, and energy (ESEE) consequences of protecting, partially protecting, or not conserving the West Hills Wildlife Forested Habitat Area should not be considered in a vacuum. This area has *cultural* as well as *natural* history. The relative environmental and social value of the West Hills Wildlife Forested Habitat Area, and hence its *significance*, is a consequence of the cumulative impact of natural events as well as human actions. Similarly, the ESEE consequences of protecting, partially protecting, or not protecting the significant area depends on a number of site-specific factors, including the site's regulatory history, the location of property lines and public improvements relative to the resource site, and planned public and private development affecting the resource site. One of the key questions to be asked in any ESEE consequences analysis is: How practical is it to *avoid*, or *plan around*, significant wildlife habitat areas?

The regulatory context -- Multnomah County's existing natural resource conservation programs -- are critical to (a) setting a base line for evaluation of the impacts of additional resource conservation programs, and (b) determining conflicting uses allowed by zoning.

Were it not for the Statewide Planning Goals, Oregon's Forest Practices Act, the City of Portland's foresight in acquiring and maintaining Forest Park as an urban natural area, and Multnomah County's Comprehensive Plan and zoning regulations, there would probably be no significant wildlife habitat remaining in the West Hills. The existence of moderate-to-high value habitat so close to a major metropolitan area is uncommon among metropolitan areas in this country. This achievement is the result of the concerted efforts by the Oregon Legislature, County elected officials, local and state agencies, and an active, informed and engaged citizenry.

Nevertheless, a number of conflicting uses have degraded, and threaten to degrade further, wildlife habitat in the West Hills. As noted above, maintaining a peninsula of forested wildlife habitat connecting Forest Park with the Coast Range is essential to the long-term maintenance of forest species diversity and habitat quality for all three areas.

The primary adverse impacts to the quantity and quality of wildlife habitat are related to urban development. Urban development is prohibited by County zoning designed primarily to protect farm and forest land. Moreover, a beneficial secondary affect of farm and forest zoning is conservation of wildlife habitat.

a. Commercial Forest Land

The Commercial Forest Land designation applies to 16,700 acres, or 76%, of the land within the West Hills Rural Area. Most of the West Hills Rural Area's Commercial Forest Use land is also primary wildlife habitat. Developed areas along roads, areas that have been cleared for agriculture, and gravel mining areas are either secondary or impacted wildlife habitat areas. (See *West Hills Wildlife Habitat Area Map*)

Policy 11 of the Multnomah County Comprehensive Plan, as it pertains to commercial forestry and wildlife habitat, is primarily to allow commercial forest uses and secondarily to maintain wildlife habitat.¹² Other purposes include allowing agriculture, recreational opportunities, and forest/non-forest dwellings. The County's Commercial Forest Use (CFU) Zone (Multnomah County Zoning Ordinance 11.15.2042-2194) generally limits new residential (forest management) lot size to 80 acres, except for "lots of record." This large minimum lot size has been, and continues to be, critical to maintaining forest habitat.¹³

Table 5.A.(at the back of the report) describes each conflicting use¹⁴ allowed in the CFU zoning district. The CFU zone allows for a number of additional conflicting uses outright, such as mineral, aggregate, and geothermal resource exploration, additional road travel lanes, and solid waste disposal sites ordered by the Oregon Department of Environmental Quality (DEQ). Replacement of a dwelling more than 200 feet from an existing dwelling may be permitted under "prescribed conditions." Conditional uses

include a variety of additional conflicting uses, including non-forest dwellings under limited circumstances (see also HB 3661, enacted by the Oregon Legislature in 1993), campgrounds, cemeteries, reservoirs, new utility distribution lines, forest management research stations, parks, power generating facilities, transmission towers, sanitary landfills and refuse dumps, private hunting and fishing operations, aggregate mining, forest products processing, logging equipment storage and repair, log scaling and weight stations, new passing and travel lands outside the right-of-way, and aircraft landing area expansions. Many of these conditional uses, if allowed, could have serious adverse impacts upon the West Hills Wildlife Forested Habitat Area.

b. Exclusive Farm Use

The Exclusive Farm Use (EFU) designation applies to 2,200 acres, or 10 percent, of the land within the West Hills Rural Area. Most EFU land is considered secondary and impacted wildlife habitat area (See *West Hills Wildlife Habitat Area Map*.)

Policy 9 of the Multnomah County Comprehensive Plan, Agricultural Land, designates Class I-IV agricultural soils that are not committed to non-resource use for exclusive farm use.

The EFU zone (Multnomah County Zoning Ordinance 11.15-2002-2030) generally limits residential development to lot sizes of 38 acres or greater.¹⁵ The EFU zone permits farming as well as commercial forest uses outright. Other outright permitted uses that conflict with wildlife habitat include limited road expansions and DEQ mandated solid waste facilities.

Uses permitted under prescribed conditions include farm and non-farm dwellings and replacement dwellings. Conflicting conditional uses are similar to those allowed in the CFU zone, and also allow other uses which could have major adverse impacts on wildlife habitat, including private and public schools, churches, private parks and hunting and fishing preserves, golf courses, commercial activities in conjunction with farm use, non-farm dwellings, horse boarding and training facilities, "homestead lots," propagation of aquatic species, personal use airports, dog kennels, and "residential homes." Accessory structures are also allowed, including livestock fences and structures, outbuildings and barns, and parking. Table 5.B. describes conflicting uses allowed by EFU zoning.

c. Multiple Use Agriculture

The Multiple Use Agriculture (MUA) designation applies to only 400 acres, or two percent, of the land within the West Hills Rural Area. MUA land usually is considered either secondary or impacted wildlife habitat. However, the impact of MUA zoning is minor compared with Rural Residential (RR) zoning. MUA zoning is found only in isolated groupings in the western portion of the West Hills Rural Area (Cornelius Pass, Germantown Road, and Bonny Slope subareas). All of these sub-areas are located to the south and west of the northern boundary of Forest Park.

The large minimum lot sizes (20 acre minimum for new lots) and the largely developed character of land zoned MUA helps to reduce the impacts of rural residential development on these portions of the West Hills Wildlife Forested Habitat Area. The MUA district serves as a transition between farm and forest resource land, and rural residential land.

Policy 10 of the Multnomah County Comprehensive Plan designates land for "small-scale farm use" which has been parcelized or which is relatively unproductive. The County's policy is to protect adjacent exclusive farm use areas by restricting MUA uses. The MUA zoning district (Multnomah County Zoning Ordinance 11.15.2122-2150) establishes a 20-acre minimum lot size, with exceptions for conditional uses and lots or record. The MUA-20 zone encourages part-time farming, forestry, open space, and low density residential development. Permitted uses are generally the same as found in the CFU and EFU zones. Single-family residences and farm-worker residences are permitted under "prescribed conditions," as are retail and wholesale sales for products raised on site. Conflicting conditional uses include most of the uses allowed in farm and forest zones, except that "community service uses," "planned developments," and "limited rural service commercial uses" may also be approved. Accessory uses include any use customarily constructed in association with a permitted use, including fences, outbuildings, barns, etc. An exception to the 20-acre minimum lot size may be granted under limited circumstances; conditional uses have no minimum lot size.

Based on research conducted by County planning staff, there are 59 existing dwelling units sited on MUA land in the West Hills Rural Area. Based on County analysis, there is the potential for an additional 16 dwellings in the West Hills. If properly sited and conditioned, the limited residential development allowed in the MUA zoning district does not pose a serious threat to wildlife. It is the wide range of conditionally permitted uses that has the potential to adversely affect wildlife habitat values in the West Hills Wildlife Forested Habitat Area. Table 5.C. describes conflicting uses allowed by MUA zoning.

d. Rural Residential

The Rural Residential (RR) designation applies to 2,500 acres, or 11 percent, of the land within the West Hills Rural Area. Developed RR land is considered secondary or impacted wildlife habitat area (See *West Hills Wildlife Habitat Area Map*).

The RR designation offers the least amount of protection for wildlife habitat areas of any of the four major zoning districts. Policy 8, Rural Residential Land, states that RR zoning shall be applied where land has been significantly parcelized, is not part of a cohesive commercial farm or forest resource area, and would not conflict with adjacent resource uses.

The RR zoning district (Multnomah County Zoning Ordinance 11.15.2202-2230) establishes a five-acre minimum lot size, with exceptions for conditional uses and lots of record. Allowed conflicting uses are virtually the same as those allowed in the MUA-20

zoning district.

Based on research conducted by County planning staff, there are 446 existing dwelling units sited on RR land in the West Hills Rural Area. Based on County analysis,¹⁶ there is the potential for an additional 286 dwellings in the West Hills -- an increase of 39 percent (see Table 6). Moreover, several rural residential areas are completely surrounded by CFU land, and are invariably located along roads, thus compounding their impacts. Thus, the location of these additional potential dwellings poses a serious threat to wildlife habitat and movement within the West Hills. Existing and potential RR dwelling units are located primarily along roadways that run in an east-west direction, limiting north-to-south wildlife movement through the West Hills.

Although prohibiting this conflicting use would have major economic consequences for owners of vacant RR property in the West Hills, there are methods of siting rural residences, and *limiting* conflicting activities associated with rural residential development, which can greatly reduce their impact on forested wildlife habitat values.

Table 5.D. describes conflicting uses allowed by RR zoning.

e. Urban Residential Zones

Urban residential development is allowed in portions of the Balch Creek subarea. In those areas, R10 and R20 zoning allows urban levels of development where urban services are available. Multnomah County is considering applying to METRO for exclusion of some currently urban zoned land in the Balch Creek basin from the regional urban growth boundary because of environmental constraints and because the City of Portland has determined that it will not provide urban services to this area. Areas which remain within the urban growth boundary will be excluded from the West Hills Wildlife Forested Habitat Area because of their urban nature. Land excluded from the urban growth boundary will most likely be designated rural residential and thus will have a similar regulatory context to other rural residentially-zoned areas of the West Hills. Therefore, specific impacts of uses allowed by the urban R-10 and R-20 zones will not be considered in the analysis of conflicting uses.

f. Mining

Multnomah County Comprehensive Plan Policy 16-B protects mineral and aggregate "from inappropriate land uses which could limit their future use." The County is committed to inventorying mineral and aggregate resources as part of the "ongoing planning process," based on Department of Geology and Mineral Resources (DOGAMI) and other sources of information. A threshold of 25,000 cubic yards for importance is listed. Only sites with OAR 660, Division 6 rating of 2A (no conflicting use), 3A (preserve resource site), or 3C (allow on limited basis) "should be considered for conditional use approval."

Mining for aggregate and geothermal resources is a conditional use in all four zones

applicable within the West Hills Wildlife Forested Habitat Area. County conditional use review criteria allow the County to approve, approve with conditions, or deny any conditional uses based on neighborhood impacts and consistency with comprehensive plan provisions. One of the approval criteria is that the mining operation, "will be located outside a big game winter habitat area as defined by ODF&W or that agency has certified that the impacts will be acceptable." The County's specific review criteria for mining proposals are currently under review by the Land Conservation and Development Commission, as part of Multnomah County's periodic review.

The Angell Brothers mining operation, the only major existing mining operation in the West Hills, covers two tax lots and about 114 acres. The proposal is to expand the area protected for mineral and aggregate extraction to include an additional 283 acres, extending a third of a mile westward into the West Hills Wildlife Forested Habitat Area. For these reasons, expansion of this mining operation, or introduction of a new mining operation, in the McNamee Road area is considered a major conflicting use. However, as noted below, prohibiting or limiting this conflicting use would have major economic consequences.

3. CONFLICTING USES

OAR 660-16(5): It is the responsibility of local government to identify conflicts with inventoried Goal 5 resource sites. This is done primarily by examining the uses allowed in broad zoning districts established by the jurisdiction...A conflicting use is one which, if allowed, could negatively impact a Goal 5 resource site. Where conflicting uses have been identified, Goal 5 resource sites may impact those uses. These impacts must be considered when analyzing the economic, social, environmental, and energy consequences...

Once conflicting uses are determined, the economic, social, environmental, and energy consequences of allowing the conflicting use must be determined.¹⁷ To identify land use conflicts for each of the above categories, the applicable zoning districts are examined to identify permitted and conditionally permitted land uses. Land uses which are typically allowed in rural zoning districts are included as potential conflicting uses. However, this report does not rely exclusively on the Multnomah County Zoning Ordinance to determine conflicting land uses. Recent court decisions have made it clear that identification of conflicting uses allowed by zoning are only the first step in determining conflicting land uses.¹⁸

Other sources for identifying probable land use conflicts include public facilities master plans for sewer, water and storm drainage, known or probable development proposals, and planned transportation facilities. In the West Hills Rural Area, there are no major public facilities or road improvement projects planned. Possible developments include (a) the Angell Brothers quarry expansion, and (b) rural residential development on the hundreds of vacant lots in RR and MUA zones.

Once the land use conflicts have been identified, activities and side-effects of these land uses are considered.¹⁹ In the ESEE consequences analysis, conflicts resulting from the

primary land use and secondary land use activities and impacts are considered together in packages. This report is intended to be useful to the County in determining whether and how to (1) make siting decisions for new or expanding conflicting uses, and (2) regulate the conflicting activities of existing and potential land uses.

Land uses and associated activities/impacts are described on Tables 5.A.-D. Permitted uses, uses permitted under prescribed conditions, and conditionally permitted uses are determined based on the Multnomah County Zoning Ordinance, Sections 11.15.2002 to 11.15.2270, which include the County's Exclusive Farm Use (EFU), Commercial Forest Use (CFU), Multiple Use Agriculture (MUA), and Rural Residential (RR) zoning districts.

Adverse impacts resulting from potential conflicting uses were derived from *A Study of Forest Wildlife Habitat in the West Hills*. Adverse impacts on wildlife habitat, from conflicting uses, are defined in Tables 5.A.-D. and in the ESEE Analysis below. For further elaboration on the meaning of these terms, *A Study of Forest Wildlife Habitat in the West Hills*, cited above, should be consulted.

Tables 5.A.-D. recognize conflicting uses and *associated adverse environmental impacts* on wildlife habitat values. Impacts are considered in terms of duration and magnitude, as follows:

As noted above, the West Hills Wildlife Forested Habitat Area has three levels of wildlife habitat -- primary, secondary, and impacted. "Resource degradation," as applied in the table above, means degrading from one level of resource quality to the next lower level. Thus, clearing and plowing land for agriculture will result in primary forested habitat being re-classified to secondary wildlife habitat. Similarly, intensive residential development in RR-zoned areas can result (without mitigation) in the resource level dropping from "secondary" to "impacted."

4. ESEE ANALYSIS

There are four principal land use threats to the West Hills Wildlife Forested Habitat Area:

- Rural Residential Development and associated roads and public facilities
- Agriculture
- Forestry
- Mining

Since the environmental consequences of allowing these land uses, and their associated activities, overlap, environmental consequences common to most or all uses are described in subsection **a.** below. The remaining economic, social, and energy consequences of allowing these land uses, and their associated activities, are described in subsection **b.** below. Subsection **c.** addresses the economic, social, environmental, and energy consequences of prohibiting or limiting conflicting uses to protect wildlife habitat.

Rural residential development, because it is associated with roads, brings in people and traffic, and usually leads to long-term clearing of land, poses the greatest single threat to the objective of maintaining a continuous band of forested wildlife habitat. Community service and conditional uses whose impacts are listed on Tables 5.A.-D. have impacts similar to residential development. Throughout the remainder of this report, community service and conditional use impacts shall be considered synonymous with residential impacts.

Agricultural uses are largely established, and occur primarily on land planned and zoned for agricultural use on the west side of the West Hills Rural Area. Forested habitat areas are generally too steep, and soils generally unsuitable, for farming.

The County's ability to limit forest uses is restricted by State law, which states that conflict resolution involving forest operations on forest land occurs exclusively through Oregon Forest Practices rules.

The West Hills are a rich rock reserve, with huge, long-term potential for aggregate extraction. However, there is only one, large active mining operation in the West Hills, which is leased and mined by Angell Brothers. Unfortunately, this quarry already constricts wildlife movement, and is proposed to extend further into the narrowest portion of the forested habitat peninsula. For this reason, the ESEE consequences of expansion of the Angell Brothers quarry operation is a major focus of this analysis. The critical question which must be answered in the County's program to achieve the conflicting purposes of Goal 5 in this instance is which is ultimately of greater public value -- long term retention of a continuous half-mile of forested habitat, or expansion of this quarry operation.

a. Consequences of Allowing Conflicting Uses Upon Wildlife Habitat

i. Economic Consequences

The economic impacts of loss of wildlife habitat cannot be quantified with any reasonable degree of certainty. Wildlife habitat has not traditionally been part of the market system, and it is difficult, if not impossible to evaluate it in the same manner as market or commodity resources. There is no particular economic activity which relies on the maintenance of wildlife habitat in the West Hills to continue its existence. However, protection of wildlife habitat may provide some less direct economic benefits to the quality of life in Multnomah County, which is an attraction to new business, conventions, and tourism. In particular, Forest Park, one of the nation's most unique urban parks, is an amenity which adds significantly to the County's quality of life, which in turn attracts new business, conventions, and tourism. These indirect economic benefits could be lessened if conflicting uses cause impacts to wildlife habitat in the West Hills Wildlife Forested Habitat Area.

ii. Social Consequences

The West Hills have a psychological value to some people, being perceived as an integral and important part of the forested landscape linking Forest Park to the

Coast Range, and contributing to the image of a natural area with wildlife habitat on the outskirts of Portland. Loss of the wildlife habitat linkage between Forest Park and the Coast Range could have a social/public impact if the educational or passive recreational attributes of Forest Park and the West Hills Wildlife Forested Habitat Area (which includes a recently purchased 30-acre old grove forested area near McNamee Road) are eroded.

iii. Environmental Consequences

The following discussion describes adverse environmental consequences associated with allowing conflicting uses and activities recognized on Tables 5.A.-D. Table 5 documents the magnitude and duration of each of these impacts on individual species, or groups of species, in the West Hills Wildlife Forest Habitat Area. These adverse environmental impacts include:

- Direct Loss of Habitat
- Edge Effects
- Creation of Barriers
- Fragmentation
- Native Vegetation Removal
- Application of Herbicides
- Soil Excavation
- Topsoil Removal
- Human Intrusion
- Pet Impacts
- Increased Impervious Surface Area
- Use of Insecticides and Poisons
- Application of Fertilizers
- Other Water Quality Impacts

Following this discussion is a specific discussion of the environmental consequences of residential development, agriculture, forestry, and mining on wildlife habitat.

• Direct Loss of Habitat

Direct loss of habitat occurs whenever native vegetative cover is removed, water quality reduced or human intrusion increased. Thus rural residential development, clearing for agricultural purposes, harvesting of trees, road construction, and mining and a range of uses allowed in the four zoning districts which apply to the West Hills Wildlife Forested Habitat Area. However, direct loss of habitat area is much more critical in the Folkenberg and McNamee-Harberton Subareas, than in other areas within the West Hills.

A principal conclusion of *A Study of Forest Wildlife Habitat in the West Hills* was that *if* existing trends in residential development and logging continue without regard to maintaining continuous forested habitat throughout, isolation of Forest

Park and the entire peninsula will result. To avoid such isolation, the forest habitat throughout the peninsula must be capable of supporting viable populations of resident species native to the area. The continuous forest habitat should be wide enough to contain home ranges of smaller wildlife species; generally, the longer the connected strip of forested habitat, the wider the peninsula should be. (Noss, 1987a; Houle, 1990; Marcot, pers. comm., 1992). Maintenance of the West Hills Wildlife Forested Habitat Area peninsula as largely interconnected forest habitat will assure its value as a timber resource as well as protecting wildlife, water quality and the special livability of our community.

Existing residential development, and recent logging followed by subdivision and residential development along the top of the crest between the Tualatin River watershed and Multnomah Channel watersheds and on the west side probably preclude restoration of continuous forest sufficiently wide to be usable by many species. The only portion of the peninsula between Cornelius Pass Road and Newberry Road, in which a continuous forested area can be maintained over the long term, is on the east side of the crest.

However, land use practices in the McNamee-Harborton and Folkenberg Subareas have fragmented the existing forest habitat, to the point where there appear to be short term interruptions in the requisite half-mile-wide continuous forest habitat. Clear cut forests will re-generate over time. However, longer term impacts — such as rural residential development, clearing of land for agriculture, construction of roads and fences, and quarrying — must be strictly controlled if connectivity is to be maintained in the long run. There is little the County can do about existing conflicting uses. In a sense, those conflicting uses which are “last to the table” must compensate for the forest habitat degradation allowed in the past.

It is recognized that Cornelius Pass and McNamee Roads act as obstacles for small mammals, reptiles and amphibian species. However, the distance these animals must travel to cross the road is far less than required to cross a road with development on either side, or to cross an exposed agricultural area. The distance and height obstacles posed by an active quarry operation pose insurmountable obstacles for all but winged wildlife species.

As part of this study, Ecologist Lynn Sharp reviewed 1993 aerial photographs of the West Hills to determine changes from 1989 METRO data, and 1991 data derived from *A Study of Forest Wildlife Habitat in the West Hills* related to vegetative cover. The *West Hills Wildlife Habitat Vegetative Cover Map* precisely identifies developed or farmed areas, meadows, shrub (early successional forest) areas, and older, established forested areas. What is clear from this map is that the recommended 1.5-mile-wide forested peninsula has been fragmented by clear cuts, and that edge effects have increased markedly in the past five years.

This edge effect is especially pronounced in the McNamee-Harborton and Folkenberg subareas, where there are other obstructions to wildlife movement and forest

cover (*i.e.*, rural residential development, several roads, limited agriculture, and the Angell Brothers quarry operation.) The objective of maintaining a half-mile of continuous forested area is not fully met in these two subareas, and the connection between Forest Park and the Coast Range is in jeopardy due to the combination of the above-mentioned conflicting uses. Because the County cannot regulate forest practices in CFU zones, the threat to forested wildlife habitat is especially pronounced in the Folkenberg and McNamee-Harborton subareas, where other conflicting uses must be *limited* in order to maintain the recommended half-mile of continuous forest cover.

- Edge Effects

Edge effects have been studied by Kendeigh, (1944); Askins, et al., (1987) and Lemkuhl, et al., (1991). Edge effect is defined as the deleterious effects of increased edge to area ratios due to human activity on plant and animal communities (Soule, 1986; Harris, 1989; Reese and Ratti, 1989; Lemkuhl and Ruggiero, 1991). Potentially, one of these effects is competition between edge and interior species where species that use both edge and interior habitat can have a competitive advantage over species that are more dependent on the forest interior.

It was once thought that the creation of edge effect and the adjacency of highly contrasting plant communities like pasture and forest enhanced the wildlife habitat value of an area. Recent studies have shown that creation of sharp edges and maximum contrast, clear cuts next to old growth forest may cause serious losses of the biological health of the old growth stand due to losses of tree cover to wind throw and increased populations of nest parasites (Forman, 1991). Edge habitats provide different character and properties than forest interiors. For some species, mortality rate will be greater along the edge because of increased exposure to predation, nest parasites, sun, wind, or limited cover from rain and snow. Other species, including many predators, prefer ecotonal or edge to forest interior habitats.

Generally the narrower the forested area (in this case the West Hills Wildlife Forested Habitat Area peninsula of forested wildlife habitat) the higher the ratio of edge to interior species. Interior species will predominate in the center of a wider forested area. Examples of species tending to occur in portions of forest far from edges (interior areas) in the study area include the varied thrush, Townsend's warbler, and goshawk. disturbance tolerant species are often abundant in habitats with paths and roads, as well as those adjacent to agricultural fields and residential development (Soule, 1991). Long range migratory songbirds nesting in forests are particularly impacted by clearing and edge creation (Askins, 1987). Nest parasitism and predation increases for as much as 600 m into a stand (Gates, Gysel, 1978), effectively reducing functional interior area to none in small stands.

Animals leaving a forest stand to forage or explore dispersal possibilities may succumb to predation or, in the case of game species, be more likely to be killed by

hunters. In this regard the edge of the stand may be termed a unidirectional filter (Janzen, 1986) in that the net "flow" of animals is out of the stand and population, rather than being balanced by dispersing animals entering the stand from elsewhere decrease. This is not true of all edges, but is the case for systems where edge predominates, which is the situation occurring in the study area.

Changes in microclimate due to edge effect have been studied and found to significantly alter plant communities (Harris, 1984). This is due to light penetration, higher wind velocities and drier conditions (Ranney, et al., 1981). In Pacific Northwest forests, evidence indicates that this effect extends up to 160 meters in a stand (Franklin and Forman, 1987).

- **Barriers -- Roads and Fences**

Roadways and fences contribute to both the "edge effect" and to "fragmentation." Roadways are common to rural residential, agricultural, forestry and quarry conflicting uses. Fences are common to residential, agricultural and quarry conflicting uses, and may apply to some prescribed and conditional uses associated with forestry operations (e.g., forest products processing facility, logging equipment repair, forest management research, gravel extraction and landfills).

No new major roads are planned for the West Hills. However, additional road and driveway construction will occur for residential development, quarrying operations, forestry and agriculture. Roads increase impervious surface area, remove vegetation, and, in steeply-sloped areas, can have major adverse impacts on water quality. Vehicle travel on roads also results in road kill. Finally, roads create barriers for animal movement, especially for less mobile species.

The *Rural West Functional Classification of Trafficways* shows principal and rural arterial roads, rural collectors and local roads. Appendix 1 describes is a "wind-shield" survey of the conditions along each of the roads in the West Hills Wildlife Forested Habitat Area.

Highway 30

The St. Helens Highway (30) is a principal arterial and defines the eastern boundary of the West Hills Wildlife Forested Habitat Area. When coupled with the railroad tracks which parallel this highway, the result is formidable barrier to less mobile wildlife. This barrier effect is increased by concentrations of development on the west side of the highway, and by a large quarry operation. (See *West Hills Wildlife Habitat Area Map*, which shows impacted wildlife habitat areas along Highway 30.)

Cornelius Pass Road

Cornelius Pass Road (a rural arterial) bisects the West Hills. There are concentrations of rural residential development along Cornelius Pass Road at Folkenberg and Cornelius Pass. Cornelius Pass road, roughly parallel railroad

tracks, and associated rural residential development are a major barrier to north-south wildlife movement across the West Hills Wildlife Forested Habitat Area.

Skyline Boulevard

Skyline Boulevard (a rural collector) runs roughly in a north-south direction, and through the middle of the West Hills. Skyline Boulevard also has concentrated rural residential development near Cornelius Pass Road. Skyline Boulevard generally separates forest land (to east) from agricultural land (to west) in the southern portion of the West Hills.

Germantown and Springville Roads

Germantown and Springville Roads, west of Skyline Boulevard, also are rural collectors. Old Germantown Road (a local street) combines with Germantown Road to access a large concentration of rural residential development west of Forest Park. Springville Road also accesses many rural residences. The West Hills Wildlife Forested Habitat Area is impacted in these areas because of the combination of roads and rural development.

Local Roads

Other local roads that serve as barriers to north-south wildlife movement include (from north to south) Gilkison Road, Rocky Point Road, Morgan Road, Logie Trail Road, McNamee Road, Kaiser Road and Newberry Road. Gilkison Road serves a large number of rural residential parcels at the north end of the West Hills, and is a barrier to wildlife movement north to Columbia County Forest Lands. Morgan and Logie Trail Roads serve a large concentration of rural residential development near their junctions with Highway 30. However, wildlife have plenty of room to "jog" westward to forested areas to avoid these rural developments. More serious problems are identified in the McNamee and Sheltered Nook Road areas, where there is rural residential development from a half-mile to a mile from Highway 30. Fences are especially prevalent in rural residential areas, and exacerbate the edge effect already present due to the combination of roads and houses. (See field notes, Appendix 1.)

Roadways present problems to many wildlife species for a variety of reasons. The movement of smaller vertebrates like forest rodents and amphibians is extremely limited by roads, while reptiles seeking to absorb heat from warm roads are killed in large numbers in some areas of the United States (Oxley et. al., 1974; Harris and Scheck, 1991). Highway construction and widening accompanying development, and the subsequent increase in automobile traffic, tend to further fragment habitat and disturb use by wildlife by interfering with foraging and dispersal of many species. Additional adverse to wildlife habitat values can be expected due to deleterious edge effects created by road construction and clearing. For example, the movements of large mobile mammals, such as elk, may be inhibited or disrupted by roads (Ward, 1982).

The evidence on carnivores is contradictory and may be species-specific and variable between regions. Noss (1987) reports that carnivores, particularly large ones, will avoid roads whenever possible. Harris and Scheck (1991) report that some predators opportunistically follow roadside and other linear habitat features while searching for carrion and prey. However, predators following roadside would be exposed to higher risk of mortality from automobile collisions. Significantly, this effect extends for a distance of at least one kilometer (0.62 miles) into adjacent natural areas (Harris and Scheck 1991).

Roadways and fences, together, can create impenetrable barriers for many species of wildlife in the West Hills. For example, wildlife making a dangerous road crossing may find that access to forest cover is blocked by a fence. Wildlife may then retreat back across the road and be struck by a vehicle.

- Fragmentation

Large tracts of forested habitat are necessary to sustain forest wildlife species in the West Hills and neighboring "impact areas." If the fragment size is too small to support a viable population of a given species, it may become locally extinct. Given sufficient time and proximity to a source, recolonization will likely occur (MacMahon et al., 1987). Lemkuhl and Ruggiero (1991) have evaluated a number of species with regard to their risk of local extinction due to fragmentation factors. Animals most at risk tended to be those with small body mass, amphibians and mammals with short dispersal distances and animals with high dependence on specific structural elements, such as snags or abundant large down woody material.

Moreover, the quality of a natural area is linked to its quantity at a particular location. A stand of trees must have a sufficient mix of biotic and abiotic components along with a large enough area to support the home ranges of species with limited dispersal capability (Lemkuhl and Ruggiero, 1991). Structure, including large trees, snags, downed and dead wood, and a wide range of plant species at all canopy levels is an important component of overall natural area quality (Ambuel and Temple, 1983). Fragmentation results in breaking up forested habitat areas, such that there is insufficient area with diversified structure to accommodate a wide range of animal species. It is fragmentation of remaining continuous forested habitat that poses the greatest threat to maintaining a stable ecosystem in the area.

As shown on the *West Hills Wildlife Habitat Area Map*, rural residential development, agriculture, quarrying, roads and quarrying all contribute to the fragmentation of forest habitat areas in the West Hills. The area of greatest fragmentation in primary forested habitat occurs in the vicinity of Folkenberg and Cornelius Pass Road, McNamee Road

- Native Vegetation Removal

Native vegetation, as used in this report, includes forest canopy in mature forests, understory in both early successional and mature forests, brush and dead/fallen trees. As noted above, the conservation of wildlife habitat values depends on maintaining all three native vegetation attributes over as much of the West Hills Wildlife Forested Habitat Area as reasonably possible.

Maintenance of native vegetation contributes directly to decreased to improved water quantity and quality, fish and wildlife habitat. The retention of native vegetation is a critical element in wildlife habitat functions and values. The impact of allowing rural residential development is much greater when it is accompanied by vegetation removal which occurs on otherwise forested areas.

Without vegetative cover, the potential for flood damage and erosion increases. Vegetated soils allow water to filter downward to the groundwater reservoir, adding volume to surface waters during low flow. Increased groundwater adds to surface water flows during low flow periods. Vegetative cover also absorbs chemicals and heavy metals, reducing water pollution. Thus, degradation of wildlife habitat caused by vegetation removal, whether as a result of excavation, cutting, or chemical removal, contributes to the direct loss of wildlife habitat functions and values.

Wildlife habitat areas are characterized by varying levels of plant and animal diversity. Where there is greater structural diversity, wildlife habitat generally has a higher rating. Reduction in the quality, quantity and availability of food and cover provided by forest and riparian vegetation has significant detrimental effect on wildlife. Where wetlands are connected to other natural resources, and provide cover and food for small animals and birds, they also provide essential travel corridors for wildlife.

When native vegetation is removed, the value of the forest or riparian area for habitat usually decreases. Spraying, cutting or scraping of vegetation is often considered to be "routine maintenance," but has the effect of changing vegetative structure and habitat qualities of forested habitat. The removal of native vegetation usually results in replacement with introduced and more hardy species, which tends to decrease biodiversity, as more aggressive and adaptable species survive and displace less adaptable species under changed ecological conditions.

Where native vegetation is replaced with lawns or gardens, increased nutrient loading is likely to occur from increased fertilization. The result is decreased water quantity and quality, and diminished fish and wildlife habitat. Even if the wetland were conserved, the side effects of wetland vegetation loss is more likely to occur where there are higher concentrations of population in proximity to the wetland resource site.

In conclusion, the environmental consequences of allowing native vegetation removal —whether through excavation, maintenance, chemical or mechanical removal — on a forest and riparian habitat would mean that many of the qualities which make each portion of the West Hills Wildlife Forested Habitat Area *significant* would be lost.

- Application of Herbicides

Application of herbicides is widely used in forest practices, in agriculture and in residential lawn and garden maintenance. Logging practices in the Pacific Northwest Douglas-fir forests have included suppression of successional plant species via herbicide application followed by subsequent replanting using a single recommended species (Douglas fir). Unrestricted use of herbicides can destroy habitat diversity necessary for survival of wildlife species. Herbicides also kill plants which contribute to overall structural diversity, and may provide species-specific cover and food for wildlife.

- Soil Excavation

Soil excavation occurs for most development activity. Soils are exposed routinely for agriculture. Quarrying requires excavation of soil and underlying rock. Road construction associated with forestry or development also requires soil excavation. Soil excavation removes vegetation, and increases erosion and sedimentation to streams and wetlands. All of these factors contribute to the degradation of forest wildlife habitat.

- Topsoil Removal

Topsoil removal makes it impossible for native vegetation to be re-established, and thus eliminates most wildlife habitat. Topsoil removal may occur with residential development, although it is usually replaced on site. The practice of topsoil removal is most commonly associated with mining activities. Topsoil may be required to be replaced through reclamation, although this can take many years.

- Human Intrusion

Human intrusion is one of the most detrimental impacts on wildlife. It is most often associated with residential development and along access roads. This "impact" ranges from shooting wildlife, to vandalism, to off-road recreational driving, to frightening animals by human presence. Land use regulations typically are relatively ineffective in controlling human intrusion factors. Education and peer pressure are considered more effective means of limiting this ubiquitous conflicting activity.

- Pet Impacts

Residential developments pose some particular conflicts. Pets, specifically domestic dogs and cats, if allowed to roam free, will prey on a wide variety of small vertebrates from shrews to woodpeckers. Additionally, when dogs are allowed enough freedom they have been known to form packs. These packs have been reported to run off black-tailed deer (*Odocoileus hemionus*), elk, and other large and medium-sized carnivores. Domestic cats are adept hunters, and are known to kill large quantities of birds and small mammals.

- Increased Impervious Surface Areas

Increased impervious surface areas result from virtually all land development and road construction. Mining operations, by stripping topsoil and exposing bedrock, also increase impervious surface area. In addition to removing native vegetative cover, the result is that soils and vegetation lose no longer absorb water, and surface water runoff is concentrated. The potential for erosion and stream bank destabilization increases, and water quality decreases as more sediments reach streams and wetlands. Groundwater recharge and quality may also be adversely affected. The quality of wildlife habitat decreases with water quality, and the loss of native vegetation cover.

- Application of Insecticides and Poisons

Insecticide use is usually associated with rural residential development, agriculture and forestry operations. Since insects are part of the wildlife food chain, the loss of insects, *per se*, contributes to a loss in habitat value. In addition, many insecticides directly harm small animals and birds. Poisons are often intentionally applied to kill predators, which are a danger to farmers or owners of small pets.

- Application of Fertilizers

Fertilizer use is associated with agriculture, forestry, and rural residential uses (lawns, gardens). Over-use of fertilizers increases nutrient loading in streams, and decreases water quality. Fertilizers and irrigation also allow non-native vegetation species to thrive, to the detriment of native plant species which provide superior wildlife habitat.

- Water Quality Impacts

Many of the impacts described above adversely affect water quality. Clean water is essential to maintaining diversity of aquatic life. Where wildlife are dependent upon aquatic life for food, the abundance and diversity of terrestrial life is adversely affected by decreased water quality. Streambank erosion is one of the principal ways in which wildlife habitat is lost. Streambank erosion is intensified as impervious surface areas increase, surface water flows are concentrated, and vegetative

cover lost. Livestock use of streams does major damage to streambanks, through grazing and trampling of vegetation. Many species flourish in riparian areas, which are damaged as streambanks erode. When soils are exposed as a result of development, agriculture, or forestry, especially in steeply-sloped areas, the chances of erosion and slumping increase. Sediment-laden water enters streams, and decreases water quality. Nutrient-loading to streams decreases water quality by increasing food levels for algae, which consume oxygen necessary for aquatic species to survive. Nutrient loading results from virtually all development, from application of fertilizers, from livestock use, and from increased runoff and sedimentation.

- Specific Environmental Consequences -- Residential Uses

Rural residential development requires native vegetation removal for house and road construction. Rural residential development usually results in substituting lawns and gardens for forested habitat. When rural residential development follows timber harvests, reforestation is uncertain. For these reasons, rural residential areas developed at five-acre densities or greater are considered to be impacted wildlife habitat areas. Where rural development is sparse, or where forest cover remains largely intact, Rural Residential and Multiple Use Agriculture-zoned areas may be considered as secondary habitat areas. Secondary wildlife habitat status can be retained over time, even with home construction, if conflicting activities associated with rural residential development are curtailed.

Lawn care and garden products such as pesticides and chemical fertilizers can seriously affect water quality. Some pesticides are toxic to wildlife and native plant species. Many garden crops will attract wildlife and conflicts will develop when homeowners erect fencing designed to keep them out. However, carefully designed fences are a possible solution to reducing conflicts with pets. For these reasons, significant wildlife habitat is reduced at particular locations as a result of rural residential development.

There are certain sub-areas where additional residential development could be extremely harmful to West Hills wildlife habitat values, as described in this analysis. On either side of Cornelius Pass Road (Folkenberg, McNamee Road, Sheltered Nook) there is a large area of Rural Residential land that currently creates significant barriers to wildlife movement, and which could, if fully developed without restriction, greatly restrict such movement:

<u>Critical Sub-Area</u>	<u>Existing Units</u>	<u>Potential Units</u>
Folkenberg	53	79
McNamee-Harborton	29	37

If these areas are built out at these densities, it is probable that the forested habitat connection between Forest Park and the Coast range will be interrupted by impacts from existing and potential residential development.

- Specific Environmental Consequences -- Agriculture

When land is cleared for agricultural use (cultivation of crops, orchards, grazing of livestock), the quantity, quality and location of forested wildlife habitat is diminished. Removal of forest cover increases "edge effect" and fragments forest habitat. Generally, large blocks of cleared agricultural land, such as found in EFU-zoned areas in the Cornelius Pass, Germantown Road, and Bonny Slope Sub-areas, is recognized as "impacted wildlife habitat." Such large blocks of agricultural land act as a buffer between urban development and forested wildlife habitat.

Conflicts between human uses and wildlife survival arise from fencing, pesticide use, carnivore predation on livestock and poultry, and crop damage by a variety of birds and mammals. Species that prey on poultry include foxes, weasels, skunks, bobcat, coyote, raccoon, red-tailed hawk, Cooper's hawk, northern goshawk, and great horned owl. However, these predators also consume rodents that may also be harmful to crops. Riparian areas are susceptible to great damage by large livestock, particularly cattle and swine. Fencing that would keep them out of sensitive areas should be designed to be passable by wildlife.

- Specific Environmental Consequences -- Forestry

Clear-cut logging in the study area has caused a temporary, but nonetheless detrimental, loss of continuous forested habitat. The problem arises when cuts over large areas deplete adjacent habitat by creation of large length of edge as well as eliminating continuous forest in this relatively narrow peninsula. In conjunction with other land uses, there are several areas where the continuous habitat has been effectively disrupted (see maps). This is a temporary situation if the cut-over area is allowed to regenerate. However, the quality of the regenerated area as habitat will be lowered if selective logging practices are not followed (Franklin, 1989). Logging practices in the Pacific Northwest Douglas-fir forests have included clear cutting, suppression of successional plant species via herbicide application followed by subsequent replanting using a single recommended species (usually Douglas fir). Herbicide application on federal lands is now prohibited. However, much of the forested lands within the West Hills Wildlife Forested Habitat Area are privately owned, where herbicide use is not restricted. It has also been standard practice to clear and burn slash and to eliminate down and standing dead wood. This reduces the structural elements and plant diversity carrying over into the re-generating clear-cut. Limiting size and configuration of cuts and replanting with a mix of natural species are practices that would ameliorate some conflicts associated with use of timber resources (Franklin, 1989).

- Specific Environmental Consequences -- Mining

It is important to consider the specific development plans of property owners, especially when the subject property is committed to a particular land use. At issue in *Columbia Steel Castings* was the fact that the company had made major infrastructure investments that could not be readily moved. There were specific impacts related to a particular industrial site that needed to be factored into the Goal 5 balancing process. A review of the Multnomah County Zoning Ordinance simply would not provide the level of detail necessary to consider the trade-offs that have to be made when an existing development desires to expand on a resource site.

The principal known development proposal is the Angell Brothers aggregate extraction mining operation located in the McNamee-Harberton Subarea. The existing mining operation covers approximately 114 acres. Angell Brothers proposes to expand the mining operation to include an additional 283 acres. If approved, the mining operation would extend almost to McNamee Road, and would obstruct the principal connection between Forest Park and the northern portion of the West Hills Wildlife Forested Habitat Area.

Mineral aggregate extraction (quarrying) has obvious and long-term impacts on the landscape and habitat of the area. The removal of top soil inhibits the regeneration of all three forest canopy levels, and makes it difficult to recreate forest conditions similar to the original forests of the site. Blasting and/or low frequency vibration in the ground from heavy equipment may disturb moles and pocket gophers. These fossorial animals play an important role in maintaining soil viability and fertility (MacMahon et al., 1989). The quarry head wall is a cliff which, in its current form, effectively prohibits the movement of terrestrial species, thus forcing animals downslope toward US Highway 30 or upslope toward the remaining strip of trees. The noise and human activity at the quarry may also be avoided by many wildlife species if alternative forested habitat is available. Water quality impacts increase as a result of soil and vegetation removal, especially when excavation occurs in drainage corridors.

Although the loss of wildlife habitat area (an additional 283 acres) is in itself a major conflicting use, it is the location of the Angell Brothers quarry in relation to McNamee Road, Newport Road and Skyline Boulevard which is of critical concern. As shown on the *West Hills Wildlife Habitat Area Map*, Forest Park borders the West Hills Wildlife Forested Habitat Area for a distance of about 1.5 miles. However, heading north from Forest Park, the recommended "peninsula" of forest land narrows to about a mile. The forest peninsula is infringed upon by development associated with Highway 30 on the northeast, and McNamee Road on the west. Continuing north (about two miles from Forest Park), the peninsula narrows to just over a half mile, between McNamee Road (and associated rural residential development) and the *existing* Angell Brothers quarry.

If the quarry were to expand to the southwest, towards McNamee Road, to include the entire 283 acres, *then* the "peninsula" would narrow to a few hundred yards. Such a narrow "neck" of forested land would be inadequate to provide the continuous forest cover needed to sustain wildlife large populations of diverse wildlife. (See *A Study of Forest Wildlife Habitat in the West Hills*.) The only alternative for wildlife needing continuous forest cover would be to jog westward, across McNamee Road and an associated "secondary habitat" area, which has been degraded by rural residential development and clearing for agricultural purposes.²⁰

While there has been some information presented by Oregon Department of Fish & Wildlife that the quarry could be reclaimed to provide wildlife habitat after quarry operations are completed, there has been no convincing evidence presented that such reclamation is indeed feasible-- quarrying involves significant landform modification as opposed to forest practices. The quarrying activities, although temporary, would have a much longer impact than logging would. A long-term disruption to the contiguous wildlife habitat area/ecosystem would logically have less chance of regeneration through reclamation -- after many decades of isolation, Forest Park may be unreclaimable as wildlife habitat due to the spread of non-native plant and animal species and other human impacts.

On the other hand, *if* the quarry were located further to the north, where the forest land peninsula is about three miles wide, it would not have the same constricting effect on forested habitat.²¹

iv. Energy Consequences

There are no significant identified energy consequences of allowing conflicting uses in place of wildlife habitat in the West Hills.

b. Consequences of Protecting Wildlife Habitat on Conflicting Uses

i. Residential Uses

- Economic Consequences

Ideally, to minimize adverse impacts on wildlife habitat, no additional rural residential development would be permitted in the West Hills. However, this would have major adverse economic consequences for property owners. Table 6, below, describes the existing and potential number of rural residences that may be sited in each of the West Hills subareas.

The value of a rural residential lot in the West Hills Rural Area varies according to a number of factors, including proximity to Portland, views (1-5 mountain views), buildability (slopes, access, availability, on-site sewage disposal, water, *etc.*), and whether the property (and surrounding properties) are forested or clear cut.

TABLE 6: EXISTING AND POTENTIAL²⁵ RURAL RESIDENTIAL UNIT SUMMARY

SUBAREA	EXISTING RESIDENTIAL UNITS		POTENTIAL UNITS	
	RURAL RESIDENTIAL	MULTIPLE USE AGRICULTURE	RURAL RES.	MULTIPLE USE AG.
GILKISON ROAD	26		4	
WILDWOOD-MCKAY CREEK	5		5	
HOLBROOK-LOGIE	71		25	
UPPER ROCK CREEK	17		10	
FOLKENBERG	53		79	
MCNAMEE-HARBORTON	29		37	
CORNELIUS PASS	22	17	10	6
GERMANTOWN ROAD	46	8	57	2
BONNY SLOPE	136	34	38	8
BALCH CREEK	41		21	
RURAL RESIDENTIAL TOTALS	446	59	286	16

Based on our analysis of County Assessor's data, the average vacant RR, MUA or urban lot in the West Hills Rural Area has a market value at about \$34,000.²² This figure does not include development costs to render the lot buildable. On the other hand, this figure seems low, especially when scarce "view lots" are considered. Table 8, at the end of this report, uses County Assessor's Records²³ to document the *market value* of vacant, buildable Rural and Urban Residential properties.²⁴

The West Hills Rural Area, exclusive of limited development potential in CFU and EFU land, has the *potential* for an additional 302 rural residential dwelling units on land zoned RR and MUA. Prohibition of development would mean a potential loss to private property owners of \$10,268,000, and for urban property owners of \$14,280,000.²⁶ Suffice to say, there would be substantial adverse economic impacts if the County were to down-zone all RR and MUA lots, so as to prohibit otherwise permitted development of these lots, not only in terms of lost value to owners, but also in terms of diminished tax revenues.²⁷

On the other hand, since there is a limited supply of rural residential lots in the region, removing 302 buildable lots from the inventory of rural lots would likely increase rural residential lot and home prices elsewhere outside the Urban Growth Boundary. Such a price increase could benefit existing property owners and would adversely affect potential home buyers.

Owners of developed residential lots in the West Hills Rural Area likely would benefit from maintenance of open space on land surrounding their homes, rather than having new rural residential development. Thus, if vacant residential lots in the West Hills were restricted from development to maintain wildlife habitat, existing home values in the West Hills would likely increase, due to scarcity and open space conditions around them.

If residential development were not prohibited, but rather subject to development standards in order to partially protect wildlife habitat, adverse economic impacts for individual rural residential property owners would include limited use of property for hobby farm activities, slightly increased development costs if erosion control measures were required, and increased manual labor to maintain cultivated areas without extensive use of herbicides. On the other hand, there would be positive economic consequence, such as reduced impacts from development of adjacent rural residential lots (e.g., erosion on to their properties) and an increase in forested areas and an "open space" ambience.

- Social Consequences

Multnomah County has already restricted the supply of rural residential lots through application of Statewide Planning Goals 3 (Agricultural Lands) and 4 (Forest Lands). Although there is general public acceptance of Oregon's strict regulation of rural residential development in agricultural and forest areas, there is also the expectation that limited rural residential development can occur in "exception" areas. Thus, further restriction of the rural residential land supply would have adverse social consequences for those seeking a rural lifestyle.

On the other hand, urban residents, and those who already live in the West Hills, would benefit from increased open space in the West Hills. Individuals who value wildlife habitat would also benefit from prohibiting additional residences in the West Hills. There is substantial evidence that many residents of the West Hills place a high value on maintenance of native vegetation and wildlife habitat.

- Environmental Consequences

The negative environmental consequences of restricting rural residential development in the West Hills are not significant. While some future rural West Hills residents might reside within the urban growth boundary instead, thus lowering environmental impacts, others might move to rural areas further away from Portland, thus raising environmental impacts in other rural areas.

- Energy Consequences

The energy consequences of prohibiting rural residential development in the West Hills are not significant. Rural West Hills residents probably consume proportionately more gasoline than urban residents, because they live at some distance

from the urban center. However, there would be no assurance that displaced West Hills residents would live within the regional UGB; they could live even further out, and consume even more energy for transportation.

ii. Agriculture

- Economic Consequences

The West Hills Wildlife Forested Habitat Area includes large tracts of land designated as Exclusive Farm Use (EFU) in the Cornelius Pass and Germantown subareas, with limited EFU acreage in the Rock Creek and Bonny Slope subareas. EFU land in these areas is recognized as secondary or impacted wildlife habitat. There would be severe adverse economic consequences if cultivated or pasture land in exclusive farm use zones were required to convert to forested wildlife habitat. Moreover, there would be little benefit to such a program, because Multnomah County's EFU land is not required to maintain the 1.5 mile forested peninsula.²⁸

On the other hand, there appears to be little economic value in farming the steeply sloped areas which comprise most of the West Hills CFU, RR and MUA areas. Most of this land is not Class I-IV farm land, and has little value for agriculture.

- Social Consequences

The social consequences of prohibiting agriculture on EFU land with the West Hills Wildlife Forested Habitat Area are significant and adverse. Agricultural land is considered as attractive open space by urban dwellings, and farming constitutes a way of life for those who live on and operate farms in the area.

- Environmental Consequences

The negative environmental consequences of restricting agricultural development in the West Hills would not be significant. Any benefit to wildlife habitat in the West Hills would be offset by reduced wildlife habitat in "replacement" farming areas elsewhere in the state.

- Energy Consequences

Energy consequences would be negative. Farms in the west Germantown and Cornelius Pass subareas are part of a much larger farming region, which is located close to metropolitan area markets. Displacing farming operations in these areas would therefore increase transportation and energy costs.

iii. Forestry

- Economic Consequences

Statutory prohibitions aside, there would be major adverse economic consequences of prohibiting timber harvests throughout the West Hills Wildlife Forested Habitat Area. Commercial Forest Use (CFU) zoning accounts for approximately 14,600 acres, or 76% of the land (outside of rights-of-way) within the West Hills Rural Area. This land is comprised primarily of good quality forest land, with high yields for Douglas fir and other commercial species.

Using the following assumptions, the commercial value of an acre of mature timber is estimated as follows²⁹:

- 50-60 year old Douglas fir
- fully stocked (not diseased or damaged by wind or fire)
- clear cut one full acre
- assume 25,000 board feet per acre (generous)

The net value, after transportation, logging costs, and taxes is estimated at approximately \$8,000 to \$10,500 per clear cut acre of quality Douglas fir. Assuming that one-third of this acreage will reach maturity during the 20-year planning period, the net future value (in 1994 dollars) of timber in CFU-zoned areas within the West Hills Rural Area is approximately \$48 million.

The economic consequences for limiting timber harvesting on Rural Residential(RR) and Multiple Use Agriculture (MUA) exception lands are considerably less than for CFU (commercial forest) lands. There are approximately 2,500 acres zoned RR and MUA in the West Hills Rural Area. RR and MUA lands are often more difficult and costly to log, due to near-by residential development and small lot sizes. Moreover, rural residential parcels typically are not managed for timber production. Reducing the gross forested area by an acre for each existing and probable residence (807 acres), and assuming that 20 percent of the remainder will be logged over the next 20 years (339 acres), the net future value (in 1994 dollars) of timber in RR and MUA zoned areas is approximately \$3.4 million. This amounts to the residential value of about 100 RR lots.

- Social Consequences

The social consequences of limiting timber harvesting on CFU lands within the West Hills Wildlife Forested Habitat Area are mixed. Clearly, the loss of \$48 million in net timber receipts would negatively affect job opportunities in the area, with attendant social problems. On the other hand, retention of forested areas in the West Hills Wildlife Forested Habitat Area would have open space and aesthetic value to residents of the area (with the probable exception of those who are dependent on the timber economy) .

- Environmental Consequences

The negative environmental consequences of restricting forestry in the West Hills would not be significant. Any benefit to wildlife habitat in the West Hills would be offset by reduced wildlife habitat in "replacement" forestry activities elsewhere in the state.

- Energy Consequences

Energy consequences of prohibiting timber harvesting in the West Hills Rural Area generally would be adverse, to the extent that timber must be imported from more distant areas. On the other hand, energy consequences from preserving wildlife habitat areas, and vegetation generally, would appear to be positive. Forest cover has a moderating effect on climate. Retaining open, forested habitat areas near urban centers may encourage people to recreate closer to home, thus reducing transportation costs.

iv. Mining

Conflicts between gravel extraction (quarrying) and wildlife habitat in the West Hills Wildlife Forested Habitat Area are not easily resolved. It is recognized that State reclamation law and locally-imposed conditions of approval can mitigate the adverse impacts of quarrying over time. However, quarrying operations can be continuous, and can last for decades. It is uncertain whether forested habitat can ever be re-created fully. If wildlife movement and inter-action is blocked by a combination of rural residential development, roads and fences, clear cut logging practices, and quarrying, it will be difficult to re-establish the vital connection between Forest Park and large tracts of forest land to the north and west. It is unclear how many years it would take to reclaim an quarry, or how long it would take to create forest habitat over a quarry site. What is clear is that forest habitat will not be re-established from an expanded quarry mining operation for at least 10 years, and will therefore have "long-term" impacts as defined in this study.

It should be kept in mind that Multnomah County *may* allow additional quarrying operations in any of the rural zoning districts applicable to the West Hills Wildlife Forested Habitat Area. Much of the Tualatin Hills probably contain rock suitable for quarrying and crushing. However, the focus of this ESEE analysis is on the Angell Brothers quarry, because it is the only major quarry operation in the West Hills.

- Economic Consequences

From a regional perspective, there could be major economic consequences associated stopping further quarrying operations in the West Hills Wildlife Forested Habitat Area. From the point of view of Angell Brothers, and in the long-term, the economic consequences of prohibiting further gravel extraction (beyond current operations) are significant and adverse.

Impact on Angell Brothers Quarry

Angell Brothers currently leases 397 acres of land between US Highway 30 on the east and McNamee Road on the west. Angell Brothers currently have permits to mine 114 acres. The original permit, for 71 acres, was granted in 1958. In 1990, the County approved expansion of the site by 42 acres, to allow mining of an estimated 25 million cubic yards of rock. The *significance* of the 113 acre site is not at issue in this Goal 5 review, because conflicting uses have already been resolved in favor of gravel extraction at this location.³⁰

However, the supply of rock in the existing quarry, and the timing of its extraction, are extremely important to this inquiry. When contacted by telephone on April 8, 1994, Skip Anderson of Angell Brothers stated that the remaining life of the 113 acre site could not be divulged, because this information is "proprietary." However, assuming that 400,000 cubic yards are mined annually (based upon the existing crushing capacity), there is a 62-year supply available on the 42-acre, 1990 expansion site (based upon the estimate of 25 million cubic yards of rock). There is considerable controversy over the useful life of the mining operation on land already approved by the County for rock extraction. Known estimates range from 14 months (David Evans Associates, 1990), to 25 years (Skip Anderson, Angell Brothers, *Oregonian*, January 6, 1994), to 60 years (evidence presented by Friends of Forest Park at October 1992 public hearing before Multnomah County Planning Commission). Clearly, the useful life of the existing quarry has a direct economic impact on the Angell Brothers. If there are 25 years of life left in the Angell Brothers quarry, then economic impacts will not be directly felt for many years.

Thus, what *is* at issue is both the timing and the extent of quarry expansion. Allowing additional mining on the 283 acres, leased by Angell Brothers, which currently has no mining permit, must be balanced against its impact on the West Hills Wildlife Forested Habitat Area.³¹ According to Angell Brothers, the 283 acre expansion site has about 160 million cubic yards of rock (the 1989 Schlicker report indicates an estimate of about 195 million cubic yards in this area). Using Oregon Division of State Lands statewide³² leasing price estimates (\$0.50 per cubic yard), Mr. Anderson estimated the present (1994) value is \$80 million.³³ This figure is based on gross income, and does not include the cost of extraction, crushing, transportation, or administration. The Angell Brothers payroll, which may be reduced if and when the subject site is "used up," is estimated at about a half million dollars. If this site were not available to the Angell Brothers, they would eventually need to find another quarry site or sites, or go out of business. As noted above, good quality rock underlies most of the Tualatin Mountains. The economic impact on consumers is unclear, because of the complexities of regional aggregate market.

Regional Economic Impacts

Determining the regional economic effects of stopping further mining operations, now and in the future, would require a detailed economic study, which is beyond the scope of this ESEE analysis.³⁴ However, it is probable that eliminating a major regional gravel supplier, such as Angell Brothers, will drive gravel prices up. Since gravel is consumed for a wide range of purposes — from road building to commercial/industrial development to home building — it is safe to say that consumer and government costs probably will increase to some degree.

The degree of consumer price increase depends primarily on the availability of similar aggregate³⁵ materials from other regional quarrying operations. If the market is competitive enough, losing one operation need not have a major impact on regional gravel prices. If supply is restricted by closure of one mining quarry operation, it is possible that other operations will buy more equipment and extract gravel more efficiently, which could actually drive prices down. As capital is substituted for labor, it is also possible that unemployment in the gravel industry could increase.

Transportation costs are extremely important when moving heavy and bulky materials, such as rock and gravel. For every six miles of distance travelled, costs increase \$1 per ton. If a ton of gravel sells for \$5, increase in travel distance can have a major impact on price. Since aggregate material is heavy, public roads will be damaged more by if gravel is transported greater distances, and road congestion will increase.

Consider the potential impact on the average single family house, which uses an estimated 300 tons of aggregate for its foundation, driveway, patios, sidewalks, etc. The *per capita* consumption of aggregate in Oregon is 11-12 tons per year, or about 65 pounds per day. A large government project like West-side Light Rail can consume all that a single mine can produce in a year. If aggregate prices increase, even slightly, building costs will increase and all Oregonians will share in these increased costs. Oregon's economy, which is especially dependent upon the building industry, could suffer. If there were only two regional suppliers of aggregate material, and one of them closed down, *then* the remaining supplier would have a monopoly, and raise prices to those of a far distant quarry. The result would be a regional monopoly. However, such is not the case on the Portland metropolitan area, as shown on Table 7 below.

In order to quantify economic impacts, other suppliers of similar materials within the four county region would have to be considered. In addition, since Portland is well-served by rail and river barge, it is possible that out-of-region operators may be competitive in the Portland market. However, the Portland region's aggregate market appears to be fairly competitive. A list of major sup-

TABLE 7

AGGREGATE SUPPLIERS*

Multnomah, Clackamas, Washington and Columbia Counties,
and Clark County, Washington

COUNTY	SUPPLIER	TYPE OF ROCK MATERIAL
MULTNOMAH@	Angell Brothers Lone Star NW** Portland Sand & Gravel Ross Island Sand & Gravel Troutdale Sand & Gravel Porter Yett Gresham Sand & Gravel Estacada Rock Products	Quarry#; asphalt ## Ready mix only(no digging) Sand & gravel Sand & gravel (round rock)++ Ready mix Sand & gravel Sand & gravel Aggregate; ready mix
CLACKAMAS	Concrete Service Lone Star NW** Parker NW Wilmes Sand & Gravel Wilsonville Concrete Products	Ready mix Ready mix Sand & gravel; asphalt Aggregate; sand & gravel Ready mix; aggregate***
WASHINGTON@@	Tigard Sand & Gravel Lone Star NW** Lone Star NW(Beaverton) Baker Rock Morse Brothers Best Mix Concrete Karban Corp. Southwest Ready Mix	Quarry & asphalt Ready mix Quarry(crushed rock) & asphalt Quarry & asphalt Quarry rock; asphalt & ready mix Ready mix Quarry Ready mix
COLUMBIA	Scappoose Sand & Gravel Lone Star NW**	Sand & gravel Aggregate****
CLARK	Aphis Ready Mix Pacific Rock Products	Ready mix Quarry rock(crushed); asphalt

* Information provided by Dick Angstrom at Oregon Concrete & Aggregate Producers

** Lone Star has operations in Multnomah, Clackamas, and Columbia Counties, and two operations in Washington County

***Wilsonville Concrete Products is the only supplier who mines from the river. The other suppliers mine in upland areas

****Aggregate from this site is used by Lone Star's ready mix operations for their sand and Gravel.

Quarry rock is extracted from a solid wall or block of rock, then crushed.

Asphalt is a mixture of rock (various sizes used) and a tar residue.

++ Sand and gravel contains round rock, which comes from rivers. If the rock is over 1 1/4" diameter, it can be crushed

@ Multnomah County does its own mining of about 6-8 million tons per year from one or two sites. The County also imports aggregate from surrounding counties.

@@ Washington County also has a quarry, but they import sand and gravel.

pliers, the product supplied, and the County in which the supplier is located, is summarized in Table 7 below. There are a total of 25 aggregate suppliers in Multnomah, Clackamas, Washington, Clark and Columbia Counties, producing a range of products, including crushed rock, asphalt, ready mix, sand and gravel. In the Portland metropolitan region, Angell Brothers, Morse Brothers, Tigard Sand and Gravel, Lone Star, Baker Rock, Karban Corporation and Pacific Rock Products all produced crushed rock from quarries. According to Dick Angstrom of Oregon Concrete and Aggregate Producers, Multnomah and Washington Counties each operate their own rock quarries.

Thus, it would appear that the regional market is reasonably competitive. The useful life of the Angell Brothers permitted quarry has not been determined, but may be as long as 60 years. These two observations, taken together, would indicate that the regional market for aggregate products is unlikely to be constrained, at least in the short-term, if the quarry is not permitted to expand into the West Hills Wildlife Forested Habitat Area.

- Social Consequences

The social consequences of restricting expansion of the Angell Brothers operation to its present 114 acres are mixed. Jobs at the Angell Brothers quarry would be lost, once the current supply of aggregate is used up. As competing suppliers pick up the slack from closing down of Angell Brothers, there probably would be increased truck traffic in other neighborhoods, outside the West Hills / US Highway 30 area. If the construction costs were to increase, there could be increased unemployment in the building trades industries. To the extent that home construction costs increase, families may be priced out of the home ownership market.

On the other hand, immediate residents of the area would benefit from decreased noise, fewer trucks, and increased wildlife in their neighborhoods. Future users of Forest Park would benefit from increased wildlife diversity. Forest Park and the remainder of the West Hills Wildlife Forested Habitat Area peninsula are among the few reasonably high quality wildlife habitat areas remaining near large cities in the United States. These areas are of tremendous value to the people of the Portland Metropolitan area for scientific, educational, aesthetic and recreational purposes, and in some ways indicative of how a large natural area responds to urbanization. Where once human development occurred in a matrix of the natural landscape, today natural areas occur in a matrix of human-dominated landscape.

- Environmental Consequences

The negative environmental consequences of restricting mining in the West Hills would not be significant. Any benefit to wildlife habitat in the West Hills would be offset by reduced wildlife habitat in "replacement" mined areas elsewhere in the vicinity of the Portland Metropolitan Area.

- Energy Consequences

The energy consequences of prohibiting quarry expansion are largely negative. As noted above, the transportation and energy consumption costs for moving aggregate materials are high. Moreover, if concrete costs increase as a result of more expensive aggregate materials, the building industry will substitute other products if possible. Since concrete is a good insulator, substitution of a different product could result in increased space heating costs. On the other hand, the availability of urban open space and recreational opportunities may mean that urban residents drive shorter distances to reach recreational destinations.

- v Other Applicable Statewide Planning Goals

OAR 660-16-005(2) states: "*The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process.*" The following additional Statewide Planning Goals apply to this ESEE analysis:

- GOAL 3 - AGRICULTURAL LANDS

Goal 3 applies to those lands designated and zoned for Exclusive Farm Use. Portions of the three streams in the Howard Canyon area run through lands designated and zoned for Exclusive Farm Use. ORS 215.253 states that "*No ...county...may exercise any of its powers to enact local laws or ordinances or impose restrictions or regulations affecting any farm use land situated within an exclusive farm use zone...in a manner that would unreasonably restrict or regulate farm structures or that would unreasonably restrict or regulate accepted farming practices because of noise, dust, odor, or other materials carried in the air or other conditions arising therefrom...*" Consequently, regardless of impacts accepted agricultural practices may have on significant wildlife habitat, the County cannot place restrictions on accepted agricultural practices in areas designated and zoned as Exclusive Farm Use lands.

- GOAL 4 - FOREST LANDS

Goal 4 applies to those lands zoned Commercial Forest Use. Most of the West Hills Wildlife Forested Habitat Area (76%) is designated and zoned as Commercial Forest Use lands. Forest operations, practices, and auxiliary uses are subject only to such regulation of uses as are found in ORS 527.722, which states that "*no unit of local government shall adopt any rules, regulations, or ordinances or take any other actions that prohibit, limit, regulate, subject to approval or in any other way affect forest practices on forestlands located outside of an acknowledged urban growth boundary.*" Consequently, regardless of impacts forest practices may have on significant streams, the County cannot place restrictions on forest practices in areas designated and zoned as Commercial Forest Use lands. However, the County may prohibit forest practices on lands which are not desig-

nated as forest lands (e.g. Rural Residential and Multiple Use Agriculture "exception" lands).

- **GOAL 5 - OPEN SPACES, SCENIC AND HISTORIC AREAS, AND NATURAL RESOURCES**

Direction from the Department of Land Conservation and Development staff, as part of the Remand Order, requires that only those Goal 5 resources that have been inventoried and determined to be significant are appropriate to be included within the ESEE analysis. Of the three other identified significant Goal 5 resources in the West Hills (Scenic Views and Sites, Mineral & Aggregate Resources, Streams) only Mineral & Aggregate Resources have been deemed to be a use which conflicts with streams.

- **GOAL 9 - ECONOMIC DEVELOPMENT**

Goal 9 calls for adequate opportunities for a variety of economic activities in the state. Opportunities for local businesses and industries that process local resources and serve local residents may be limited because of their conflicts with wildlife habitat. Alternatively, there may be a potential for tourist activities associated with Forest Park, a large natural park in a metropolitan setting, which would be enhanced by maintaining a functioning connection to the Coast Range for wildlife.

- **GOAL 10 - HOUSING**

Goal 10 focuses on providing housing types to meet needs within urban growth boundaries. It indicates that ordinances and incentives should be used to increase population densities in urban areas rather than rural areas such as the West Hills Wildlife Forested Habitat Area

5. SUMMARY

- a. Adverse consequences of allowing conflicting uses upon wildlife habitat are almost entirely environmental in nature. Adverse consequences of protecting wildlife habitat upon conflicting uses are mainly economic in nature.
- b. In balancing wildlife vs. conflicting uses, it is clear that the adverse environmental consequences upon wildlife habitat would greatly outweigh the economic benefits of allowing conflicting uses without restriction. Likewise, the adverse economic consequences upon conflicting uses would greatly outweigh the environmental benefits of prohibiting conflicting uses in order to protect wildlife habitat. Therefore, a balanced approach, which limits, but does not prohibit, conflicting uses in order to protect wildlife habitat, is appropriate.

c. Synopsis of Consequences

Consequences if Residential Uses are not allowed

Economic: Lower property values, less tax revenue

Social: Loss to individuals wishing "rural lifestyle"

Environmental: Insignificant

Energy: Insignificant

Consequences if Residential Uses are allowed in a limited manner

Economic: Possible partial loss if regulations restrict use of property

Social: Loss to owners from diminishment of rural uses conflicting with wildlife.

Environmental: Insignificant

Energy: Insignificant

Consequences if Residential Uses are allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism

Social: Loss of educational and passive recreational opportunities

Environmental: Numerous negative impacts from habitat loss & diminishment

Energy: Insignificant

Consequences if Agriculture is not allowed

Economic: Loss of economic value, loss of farm products to Portland area

Social: Loss of aesthetically pleasing open space, loss of farming lifestyles

Environmental: Insignificant

Energy: Increase in costs to bring more distant farm products to market

Consequences if Agriculture is allowed in a limited manner

Economic: Some loss of economic value and nearby farm products

Social: Loss of aesthetically pleasing open space, burden of regulations

Environmental: Insignificant

Energy: Marginal increase in costs to bring distant farm products to market

Consequences if Agriculture is allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism

Social: Loss of educational and passive recreational opportunities

Environmental: Numerous negative impacts from habitat loss & diminishment

Energy: Insignificant

Consequences if Forestry is not allowed

Economic: Loss of jobs, taxes, and revenue from sales

Social: Loss of timber-based lifestyle

Environmental: Insignificant

Energy: Greater energy expenditure to bring wood products to market

Consequences if Forestry is allowed in a limited manner

Economic: Possible loss of some jobs, taxes and revenue from sales

Social: Insignificant

Environmental: Insignificant
Energy: Insignificant

Consequences if Forestry is allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism
Social: Loss of educational and passive recreational opportunities
Environmental: Numerous negative impacts from habitat loss & diminishment
Energy: Insignificant

Consequences if Mining is not allowed:

Economic: Loss of long-term supplies, potential for increased cost of product
Social: Increased impacts to other communities
Environmental: Insignificant
Energy: Higher consumption for transport, less use of energy-efficient concrete

Consequences if Mining is allowed in a limited manner:

Economic: Possible loss of long-term supplies & increased cost of product
Social: Possibly increased impacts to other communities
Environmental: Insignificant
Energy: Possibly higher consumption for transport, less use of concrete

Consequences if Mining allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism
Social: Loss of educational and passive recreational opportunities
Environmental: Numerous negative impacts from habitat loss & diminishment
Energy: Insignificant

6. FOOTNOTES

¹¹ Sauvie Island has relatively little forested habitat. Highway 30 is not an insurmountable barrier for forest bird species. Terrestrial species such as deer and coyote may also be able to cross Highway 30 during periods of low traffic. Sauvie Island is not considered an "impact area affected" because the island is primarily agriculture and not forest, and because Sauvie Island does not connect to large areas of forest land.

¹² The purpose of the County's Policy 11 is to: *...conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture....Forest operations, practices, and auxiliary uses shall be allowed on forest lands subject only to such regulations of uses as are found in ORS 527.722....The County's policy is to designate and maintain as commercial forest land, areas which are:...F.1. Necessary for watershed protection or are subject to landslides, erosion, or slumping. 2. Wildlife and fishery habitat areas, potential recreation areas or of scenic significance....The County's policy is to allow forest management with related and compatible uses, but to restrict*

incompatible uses, recognizing that the intent is to preserve forest lands from inappropriate and incompatible development.

13 HB 3661 establishes even tighter restrictions for high quality forest land, such as typically found in the West Hills.

14 Non-conflicting uses, such as "uninhabitable structures accessory to fish and wildlife habitat enhancement," are permitted in the CFU zone, but are not listed on Table 5.A.

15 HB 3661 establishes even tighter restrictions for high quality agricultural land, such as typically found on the western portions of the Bonny Slope, Germantown Road, and Cornelius Pass Subareas in the West Hills.

16 The County's analysis looked at individual lots to determine whether they could be further divided consistent with County zoning standards. The analysis did not consider whether each of these lots could meet "perk" tests for septic systems, or whether well water is obtainable.

17 The Goal 5 administrative rule reads:

Determine the Economic, Social, Environmental, and Energy Consequences: If conflicting uses are identified, the economic, social, environmental, and energy consequences of the conflicting uses must be determined. Both the impacts on the resource site and on the conflicting use must be considered in analyzing the ESEE consequences. The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process. A determination of the ESEE consequences of identified conflicting uses is adequate if it enables a jurisdiction to provide reasons to explain why decisions are made for specific sites.

18 In the Columbia Steel Castings case, the Oregon Supreme Court refutes the City of Portland's argument that conflicting uses are identified primarily through an analysis of uses allowed in applicable zoning districts. (The City cited OAR 66016-005 in support of their contention.) The Court found that a review of the zoning code was merely a first step in a process -- not an end result: "An ESEE analysis describes the interaction of the two phenomena, i.e., the impact that each has on the other....The Goal 5 implementing rules contemplate that the resource site and conflicting use identification will be an ongoing process, subject to adjustment as new information appears.....If all that were necessary to complete the identification of conflicting uses were to scan the zoning maps, as City's argument would appear to suggest, it is difficult to imagine a situation in which there would not be adequate information on the nature of any conflicting use from the outset of a planning process....As noted, the end result of the process is supposed to be a balancing of the impacts that the resource site and the conflicting use have on each other....That balancing process cannot be adequate, under the Goal 5 implementing rules, unless the identification of conflicting uses is specific to each resource site." See also *1,000 Friends of Oregon v. LCDC (Tillamook County)*, 303 Or 430 737 P2d (1987) describing the balancing process.

19 Some secondary land use impacts are typically not regulated by zoning, and include such activities as hiking, building forts, frog-collecting, using animals for target practice, climbing trees, and keeping pets. Other secondary impacts -- such as gardening, fence building, vegetation removal, grazing of animals, and siting of residences can be regulated through zoning, and are properly the concern of this analysis.

20 The forested peninsula is also constricted immediately to the north of Angell Brothers, by existing and probable rural residential development in Folkenberg, Sheltered Nook, and along McNamee Road.

21 The Tualatin Mountains (West Hills) have common geological and soil characteristics. (See e.g. Soil Survey of Multnomah County, Oregon, US Department of Agriculture, Soil Conservation Service, 1983) It appears that the quarry qualifies as a Goal 5 resource by virtue of leasing arrangements, as well as by geological conditions.

22 This figure is based on an analysis of vacant Rural Residential lots in the West Hills Rural Area, exclusive of (a) lots that have agricultural or forest tax deferrals, (b) lots valued at \$5,000 or less (under the assumption that they have serious development constraints in order to be valued so low), and (c) lots that are identified in the Tax Assessor's records as being unbuildable. A total of 163 lots were identified in the West Hills Rural Area, spread throughout the area. Their total (1993) market value, based on Tax Assessor's records, was \$5,527,500. The average parcel size was about 3 acres. The average value per acre was \$11,000. A large proportion of the vacant lots were located in the Bonny Slope area.

23 We have relied on Assessor's data because of the wide range of factors affecting parcel values. In order to get more precise and reliable data on property values in the West Hills, individual site appraisals would be necessary. At \$500 per appraisal per lot, this would exceed the project budget.

24 According to Professionals 100 Realty, forest land to the north which is outside an Urban Growth Boundary, which has been recently clear cut, is valued at \$2,000 to \$5,000 per acre. However, a one-acre buildable lot with views can be valued for as much as \$95,000 to \$125,000.

25 The County's analysis looked at individual lots to determine whether they could be further divided consistent with County zoning standards. The analysis did not consider whether each of these lots could meet Department of Environmental Quality "Perk" tests for septic systems, whether well water is obtainable, whether access is available, or the willingness of the property owner to develop or sell.

26 This figure does not consider timber values, of the sale value of Rural Residential or Multiple Use Agriculture zoned property to adjoining residential property owner, or as open space.

27 However, there would be little environmental reason to do so. Since the majority of the vacant lots are located in the "impacted" portions of the West Hills Wildlife Forested Habitat Area, most lots do not interfere substantially with West Hills forested wildlife habitat values (i.e. with the optimum 1.5 mile wide peninsula, or the minimum 0.5 mile-wide strip of forest land necessary to maintain "connectivity."

28 The possible exception occurs in Exclusive Farm Use land located about one-half mile west of Folkenberg, along Skyline Road, which is considered secondary wildlife habitat. (See West Hills Wildlife Habitat Area Map) Part of this area is forested, and helps to provide a continuous connection north to large tracts of forested land.

29 Based on personal communication with a Banks Lumber Company representative on April 8, 1994. A representative from Forest Resources Management, Inc. of Wilsonville corroborated the views expressed by the Banks Lumber Company representative, and provided a net value estimate of \$8,000 to \$10,000 per clear cut acre of mature, good quality Douglas Fir in the West Hills.

30 The question of whether there has been valid Goal 5 inventory of the location of aggregate resource sites in the Tualatin Hills -- let alone on property leased by Angell Brothers -- is beyond the scope of this analysis.

31 Recent timber harvests in the McNamee-Harbornton and Folkenberg subareas have obstructed the requisite half-mile forested connection from Forest Park to the West Hills. Rural residential development partially obstructs the forested peninsula north and west of the Angell Brothers quarry. If the quarry were expanded before clear cut areas regenerate, or in conjunction with additional, unrestricted rural residential development along McNamee and Cornelius Pass Roads, the forested connection would suffer considerably, and perhaps irrevocably.

32 According to DOGAMI, this 50 cent figure is probably low, since gravel prices tend to be higher in the Portland region than statewide.

33 Other information presented to the County by Angell Brothers values the quarry rock at \$42 million. However, this figure is based upon mining actually occurring on only half of the expansion area.

34 Much of the economic discussion below is based on discussion with Bob Well at DOGAMI. Mr. Jerry Gray, Regional Geologist for DOGAMI, has commented that "planning issues such as this one can be better addressed in total with a more rigorous Goal 5 effort tied to regional supply and demand data." (letter dated April 13, 1990)

35 It is important to differentiate between crushed quarry rock, with jagged edges, such as found in the Angell Brothers operation, and smooth river rock, such as mined at Ross Island. These two types of gravel have different purposes, and cannot be substituted for each other in many cases.

TABLE 5: WEST HILLS WILDLIFE GROUP PRIORITY HABITAT
Conflicting Uses and Activities

IMPACTS OR ACTIVITIES ASSOCIATED WITH CONFLICTING USES																Water Quality		
Forest Wildlife Group	Edge Effect	Barriers		Frag- men- tation	Native Vegetation Removal			Herbi- cides Appli- cation	Soil Excava- tion	Topsoil Removal	Human In- trusion	Pet Impacts	Incr. Imperv. Surface Area	Insec- ticides, Poisons	Ferti- lizers	Stream- bank De- stabili- zation	Exposed Soils, Erosion, Slump.	Nutrien Load- ing
		Roads	Fences		Canopy	Under- Story	Dead Wood											
Band tailed pigeon	L+			L+	L+	L+					L	L						
Cavity makers	L+			L+	L+(a)	L+	L+				L	L						
Cavity users	L+			L+	L+(a)	L+					L	L						
Flycatchers	L			L+	L+	L+					L	L		M+				
Finches	L+			L+	L+	L+					L	L						
Ground nesters	L			L+	L+	L+	L+				L	L+		M+				
Raptors	L			L+	L+(b)	L+(b)					L							
Suburban														M+				
Thrushes	L+			L+	L+	L+					L	L		M+				
Warblers	L+			L+	L+	L+					L	L		M+				
Underground mammals		L+		L	L-	L-	L-	L(f)	S+	L	L+(c)	L		L				
Small carnivores (weasel)	L-	L		L	L	L	L					L						
Shrews	L+	L+		L+	L+	L+	L+	L(f)	L	L		L		L				
Medium carnivores (coyote, bobcat)	L	L+		L		L					L	L-						
Ungulates	L	L+	L	L(d)	L(d)	L		L(f)			L	L						
Tree Squirrel	L	L		L+	L+	L						L						
Chipmunk	L	L		L+	L+	L+	L				L	L+						
Ground squirrel												L						
Voies/mice	L	L		L	L	L	L	L(f)	S+	L		L						
Mountain beaver	L+	L		L+	L	L		L(f)										
Large carnivore (bear, cougar)	L+	L+	L	L+	L+	L+					L							
Brush rabbit	L+	L		L+	L+	L+		L(f)			L	L						
Bats	L+			L+	L(e)	L(e)					L							
Amphibians/reptiles	L+	L+		L+	L+	L+	L+	L(f)	L	L		L		L+	L+	L+		L+

Key:

S = Short term impacts lasting up to one year.	(S, M or L) - = Minor Impact
M = Medium term impacts lasting up to ten years.	(S, M or L) = Moderate Impact
L = Long term impacts lasting over ten years.	(S, M or L) + = Major Impact

- (a) Over the very long term, grazing will totally eliminate forest canopy and therefore recruitment of snags.
 (b) Forest raptors (sharp-shinned and coopers hawks, forest owls) would be severely affected. Others that use forested and open habitats (red-tailed hawk, great horned owl) would be less affected.
 (c) These species are often eradicated by humans in agricultural and rural residential areas, and sometimes in regenerating clear cuts.
 (d) Deer and elk use of open areas declines greatly beyond 200 feet from the nearest forest cover.
 (e) Bats are assumed to forage over open areas but require nearby forest habitats.
 (f) Direct effects of reductions in food supply and cover.

TABLE 5 : CONFLICTING USES ALLOWED IN COMMERCIAL FOREST USE ZONING DISTRICT
Affected Subareas: Gildson Road, Wildwood-McKay Creek, Holbrook-Lodge, Upper Rock Creek, Folkenberg,
McNamee-Harbor, Cornelius Pass, Gamantown Road, Bonny Slope

IMPACTS OR ACTIVITIES ASSOCIATED WITH CONFLICTING USES																Water Quality		
Conflicting Use	Code Reference (11.15)	Edge Effect	Barriers		Prognosis - Roads	Native Vegetation Removal		Herbicide Application	Soil Erosion	Topsoil Removal	Human Inundation	Pest Impacts	Insecticide Surface Area	Insecticides, Poisons	Fertilizers	Streambank Disturbance	Exposed Soils, Erosion, Slumps	Nutrient Loading
			Roads	Fences		Understorey	Dead Wood											
Uses Permitted Outright																		
A. Forest operations	2048(A)(1)	L+	L+		L+	L+	M+	L+	M+	M+	L+			M+	M+	M+	M+	M+
1. Forest clear cut		L+	L+		L+	L+	M+	L+	M+	M+	L+			M+	M+	M+	M+	M+
2. Forest selective cut (A)		L+	L+		L+	L+	M+	L+	M+	M+	L+			M+	M+	M+	M+	M+
3. Forest prod. propagation		L+	L+		L+	L+	M+	L+	M+	M+	L+			M+	M+	M+	M+	M+
B. Temporary structures	2048(A)(2)	S-	S-		S-	S-	S-	S-	S-	S-	M		S	S	S	S	S	S
C. Auxiliary uses	2048(A)(3)																	
Mining		L+	L+		L+	L+	L+	L+	L+	L+	L+		L+	L+		L+	L+	L+
Gravel extraction		L+	L+		L+	L+	L+	L+	L+	L+	L+		L+	L+		L+	L+	L+
Landfills		L+	L+		L+	L+	L+	L+	L+	L+	L+		L+	L+		L+	L+	L+
Dams/reservoirs		L+	L+		L+	L+	L+	L+	L+	L+	L+		L+	L+		L+	L+	L+
Road construction		L+	L+		L+	L+	L+	L+	L+	L+	L+		L+	L+		L+	L+	L+
Recreational activities		L+	L+		L+	L+	L+	L+	L+	L+	L+		L+	L+		L+	L+	L+
D. Temp processing facility	2048(B)	S-	S-		S-	S-	S-	S-	S-	S-	S		S	S		S	S	S
E. Farm use	2048(C)	L+	L+	L+	L+	L+	L+	L+	L+	L+	L+		L+	L+	L+	L+	L+	L+
F. Maintenance, operation of existing single family	2048(D)	L	L	L	L	L	L	L	L	S-	S-	L	L	L	L	S	S	L
G. Replacement dwelling within 200' of existing dwelling	2048(E)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L
H. Use to conserve soil, air, water quality & provide for wildlife/fisheries resources	2048(F)		L-															
I. Nonbuilding structure related to fish/wildlife enhancement	2048(G)	L-	L-		L-	L-	L-	L-		S-	S-	S-		L-		S	S	S
J. Park or hatchery caretaker residence	2048(H)	L-	L-	L-	L-	L-	L-	L-	S	S	L	L+	L-	L-	L-			
K. Distribution lines (electric, telephone) & equipment	2048(I)	L	L	L	L	L	L	L	S	S	L		L			S	S	L-
L. Paving lanes with ROW (C)	2048(J)	L	L	L	L	L	L	L	S	S	S		L			S	S	L-
M. Public road reconstruction (no additional lanes, building removal or new parcels) (C)	2048(K)	L	L		L	L	L	L	S	S	S		L			M	M	L
N. Temporary detours	2048(L)	S	S		S	S-	S-	S-	S	S	S		S	S		S	S	S
O. Minor improvements to weigh stations, rest areas, maintenance yards	2048(M)								S	S	L		L-			S	S	L-
P. Forest fire lookout tower	2048(N)	L-	L-		L	L-	M-					L+	L-			S	L-	
Q. Water intake facility & distribution lines for farm irrigation & ponds	2048(O)		L-								L		L-			L	S	(g)
R. Temp forest labor camp	2048(P)	S-	S-		S	S	S	S	S	S	M		S	S		S	S	S
S. Exploration for mineral & aggregate resources	2048(Q)	M	M		M	M	M	M	M	M	M		M			M	M	M
T. Exploration for geothermal	2048(R)	M	M		M	M	M	M	M	M	M		M			M	M	M
U. Solid waste disposal site	2048(S)	L+	L+	L	L+	L	L	L	L	L	L+		L	L		L	L	L+
Uses Permitted Under Prescribed Conditions																		
A. Replacement dwelling over 200' from existing dw.	2049(A)	L	L	L	L	L+	L+	L+	L	S	S	L	L	L	L	S	S	L
B. Renovation or replacement of dwelling	2049(B)	L	L	L	L	L-	L-	L	L	S	S	L	L	L	L	S	S	L
Conditional Uses																		
A. Forest management dwelling	2050(A)	L	L+	L-	L+	L+	L+	L+	L-	S	S	L	L+	L-	L-	L	S	L-
B. Nonforest management dwelling, pursuant to MCC 2072 & 2074	2050(B)	L	L+	L-	L+	L+	L+	L+	L-	S	S	L	L+	L-	L-	L	S	L-
C. Community service uses:	2050(C)																	
Campground	2050(C)(1)	L+	L+		L+	L+	L+	L+	L	S	S-	L	L	L-	L	L	L-	L
Cemetery	2050(C)(2)	L+	L+	L	L+	L+	L+	L+	L+	L+	L+	L+	L-	L	L+	S+	S+	L+
Fire station - rural/forest	2050(C)(3)	L-	L-		L-	L-	L-	L-	L-	S	S	L	L-	L-	L-	S	S	L-
Auto to service/repair station	2050(C)(4)	L-	L-		L-	L-	L-	L-	L-	S	S	L	L-	L-	L-	S	S	L-
Water intake facility, treatment facility, pumping station, distribution line	2050(C)(5)		L	L-					S	S	L		L-			S	S	L-
Reservoir & water impoundment	2050(C)(6)	L+	L+	L-	L+	L+	L+	L+	L	S	S	L-				L	L	
New distribution (gas, oil) or electric line	2050(C)(7)	L	L		L	L	L	L	L	S	S	L		L-	L-	S	S	L-
(F) Forest management research	2050(C)(8)	L	L		L	L	M-	M-		S-	S-	L-		L-	L-	S	S	L-
Park, including fish & wildlife conservation area	2050(C)(9)	L	L		L	L	L	L	L	S	S	L	L	L	L	L	S	L
Power generating utility facility	2050(C)(10)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	S	L
Radio, microwave, television transmission towers	2050(C)(11)	L	L	L	L	L	M-	M-	L	S	S	L-		L-		S	L	
Refuse dump or landfill	2050(C)(12)	L+	L+	L	L+	L	L	L	L	L	L	L+		L	L	L	L	L+
Regional sanitary landfill	2050(C)(13)	L+	L+	L	L+	L	L	L	L	L	L	L+		L	L	L	L	L+
Private hunting & fishing operations (no lodging) (g)	2050(C)(14)																	
Private seasonal second-residence for hunting & fishing operation	2050(C)(15)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L
Geothermal mining, processing & production	2050(C)(16)	L-	L-		L-	M-	M-		M	M	L-		L-	L-		M-	M-	L-
Aggregate mining & processing	2050(D)(1)	L+	L+	L	L	L+	L+	L	L	L	L+	L+		L+	L	L	M+	L
Forest products processing facility (permanent)	2050(D)(2)	L	L	L	L	L	L	L	L	S	S	L		L	L	L	S	L+
Logging equipment repair & storage (permanent)	2050(D)(3)	L	L	L	L	L	L	L	L	S	S	L		L	L	S	S	L-
Log scaling & weigh stations	2050(D)(4)	L-	L-		L-	L-	L-	L-	S	S	L		L-	L-		S	S	L-
Construction of paving & gravel beds requiring acquisition of ROW	2050(D)(5)	L	L		L	L+	L+	L+	L	M	M	L		L	L	M	M	L
Road reconstruction involving building removal	2050(D)(6)	L	L		L	L	L	L	L	M	M	L		L	L	M	M	L
Weigh station & rest area improvement where additional ROW is required	2050(D)(7)	L	L		L	L	L	L	L	S	S	L		L	L	S	S	L
Expansion of aircraft landing areas auxiliary to forestry practices	2050(D)(8)	L	L		L+	L+	L+	L+	L	S	S	L+		L+	L	S	S	L

Key:
S = Short term impacts lasting up to one year.
M = Medium term impacts lasting up to ten years.
L = Long term impacts lasting over ten years.
(S, M or L) = Minor Impact
(S, M or L) = Moderate Impact
(S, M or L) + = Major Impact

Notes:

- (a) Severity depends on proportion of canopy removed and ground disturbance.
(b) Assumes this applies to activities to benefit forest wildlife species.

(c) Effects may occur only if additional clearing occurs in R-O-W.

(d) Irrigation runoff can adversely affect water quality.

(e) May vary from no effect for simple data gathering to more severe effects shown here, which would result from physical stand management activities.

(f) Varies from no impact (wilderness or no development) to large impact shown here from recreational facilities, access and clearing.

(g) Assumes no land alteration.

TABLE 5 : CONFLICTING USES ALLOWED IN EXCLUSIVE FARM USE ZONING DISTRICT
Affected Sub areas: Upper Rock Creek, Cornelius Pass, Germantown Road, Bonny Slope

IMPACTS OR ACTIVITIES ASSOCIATED WITH CONFLICTING USES																	Water Quality			
Conflicting Use	Code Reference (11.15)	Edge Effect	Barriers		Progr- men- tation	Native Vegetation Removal			Horti- cides Appli- cation	Soil Erosion	Topsoil Removal	Human Intra- sion	Pet Impacts	Inac- terial Surface Area	Insecti- cides, Pesticides	Fertili- zers	Stream bank De- stabiliza- tion	Exposed Soils, Erosion, Siltation	Marine Load- ing	
			Roads	Fences		Canopy	Under- story	Dead Wood												
Primary Uses																				
A. Farm use	2008(A)	L+	L-	L+	L+	L+	L+	L+	L+	L+	L+	L+			L+	L-	L+	L+	L+	L+
Ornamental landscape		L+	L-	L	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	L+
Cultivated crops		L+	L-	L	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	L+
Orchard		L+	L-	L+	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	L+
B. Forest products propagation	2008(B)	L+	L-	L+	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	L+
Forest products harvesting		L+	L-	L+	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	L+
1. Clear cut		L+	L+		L+	L+	M+	L+	M+	M+	M+	L+			M+	M+	L+	L+	L+	L+
2. Selective cut (a)		L	L		L	L	M+	L	M	M	M	L			M	M	M	M	M	L
C. Thermal energy power plants	2008(C)	L	L		L	L	L+	L+	L	L	L	L			L	L	M	M	M	L
D. Paving in new vehicle ROW	2008(D)	L	L		L	L	L	L	L	L	L	L			L	L	M	M	M	L
E. Road reconstruction not including addition of travel lanes, and no building removal or new land parcels	2008(E)	L	L		L	L	L	L	L	S	S	S			L		M	M	M	L
F. Temporary road detours	2008(F)	S	S		S	S	S	S	S	S	S	S			S	S	S	S	S	S
G. Weigh stations & rest area improvements within ROW	2008(G)	L	L		L	L	L	L	L	S	S	L			L		S	S	S	L
H. Replacement dwelling in conjunction with farm use	2008(H)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	S	S	L	L
I. Solid waste disposal site	2008(I)	L+	L+	L	L+	L	L	L	L	L	L	L+			L	L	L	L	L+	L+
Uses Permitted Under Prescribed Conditions																				
A. Farm residences	2010(A)	L	L	L	L	L	L	L	L	S	S	L+	L+	L	L	L	S	S	L	L
B. Farm help residences	2010(B)	L	L	L	L	L	L	L	L	S	S	L+	L+	L	L	L	S	S	L	L
C. Residences for relatives	2010(C)	L	L	L	L	L	L	L	L	S	S	L+	L+	L	L	L	S	S	L	L
Conditional Uses																				
A. Public or private schools	2012(A)(1)	L	L		L+	L+	L+	L+	L	L	L	L			L	L	L	S	S	L
B. Churches	2012(A)(2)	L	L		L+	L+	L+	L	L	S	S	L			L	L	L	S	S	L
C. Utility facilities for public services, except power generation	2012(A)(3)	L	L	L	L+	L+	L+	L	L	S	S	L			L	L	L	S	S	L
D. Exploration for geothermal resources	2012(A)(4)	M	M		M	M	M	M	M	M	M	M			M		M	M	M	M
E. Private parks, playgrounds, hunting & fishing preserves & campgrounds (b)	2012(A)(5)	L	L		L	L+	L+	L+	L	S	S	L	L	L	L	L	L	S	L	L
F. Parks, playgrounds, community centers owned by government or non-profit	2012(A)(6)	L+	L	L+	L+	L+	L+	L+	L	M	L	L+	L	L	L	L	L+	L	S	L+
G. Golf courses	2012(A)(7)	L+	L	L+	L+	L+	L+	L+	L	M	L	L+	L	L	L+	L+	L+	S	L+	L+
H. Solid waste disposal site	2012(A)(8)	L+	L+	L	L+	L	L	L	L	L	L	L+			L	L	L	L	L+	L+
I. Construction of additional paving & travel lanes requiring acquisition of ROW	2012(A)(9)	L	L		L	L+	L+	L+	L	M	M	L			L	L	L	M	M	L
J. Road reconstruction involving building removal	2012(A)(10)	L	L		L	L	L	L	L	M	M	L			L	L	L	M	M	L
K. Improvement of weigh stations & rest areas where additional ROW required	2012(A)(11)	L	L		L	L	L	L	L	S	S	L			L	L	L	S	S	L
L. Commercial activities in conjunction with farm use	2012(B)(1)											L+								
M. Geothermal mining & processing	2012(B)(2)	L	L		L	M	M	L	M	M	L				L	M		M	M	L
Aggregate exploration, mining & processing	2012(B)(3)	L+	L+	L	L+	L+	L+	L	L+	L+	L+				L+	L		L	M+	L
N. Non-farm residential	2012(B)(4)	L	L	L	L	L+	L+	L	L	S	S	L	L	L	L	L	L	S	S	L
O. Home occupations	2012(B)(5)	L	L	L	L	L+	L+	L+	L	S	S	L	L	L	L	L	L	S	S	L
P. Forest products processing facilities	2012(B)(6)	L	L	L	L	L	L	L	L	S	S	L			L	L	L	L	S	L+
Q. Horse breeding & boarding for profit	2012(B)(7)	L+		L	L+	L+	L+	L+	L	S	S	L			L	L	L	L	L	L+
R. Residential use in conjunction with farm use on acreage for	2012(B)(8)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	L	S	S	L
S. Homebased lot windbreak	2012(B)(9)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	L	S	S	L
T. Propagation, cultivation maintenance & harvesting of aquatic species	2012(B)(10)		L		L	L	L	L	L			L				L	L	S	S	L
U. Personal use airport	2012(B)(11)	L	L		L+	L+	L+	L+	L	S	S	L+			L+	L	L	S	S	L
V. Dog breeds	2012(B)(12)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	L	S	S	L
W. Residential homes in existing dwellings for handicapped persons	2012(B)(13)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	L	S	S	L

Key:
S = Short term impacts lasting up to one year.
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(S, M or L) - = Minor Impact
(S, M or L) = Moderate Impact
(S, M or L) + = Major Impact

Notes:

- (a) Effects can vary from minimal (when relatively few trees are removed) to large (when over 20 percent of canopy or land area are affected).
(b) Worst-case effects shown here. Undeveloped hunting and fishing preserves could have little to no effect.

TABLE 5 : CONFLICTING USES ALLOWED IN MULTIPLE USE AGRICULTURE ZONING DISTRICT
Affected Subareas: Cornelius Pass, Germantown Road, Bonny Slope

IMPACTS OR ACTIVITIES ASSOCIATED WITH CONFLICTING USES																	Water Quality			
Conflicting Use	Code Reference (11.15)	Edge Effect	Barriers		Prag-ma-tion	Native Vegetation Removal			Herbi-cide Appli-cation	Soil Erosion	Topsoil Removal	Human Intra-sion	Pet Impacts	Inac- Imperv. Surfaces Area	Insec-ticides, Pesticides	Ferti-lizers	Stream-bank De-stabiliza-tion	Exposed Soils, Erosion, Siltation	Nutrient Load-ing	
			Roads	Fences		Canopy	Under-story	Dead Wood												
Primary Uses																				
A. Farm uses for:		2128(A)	L+	L-	L	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
Raising & harvesting crops			L+	L-	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
Raising livestock & horses			L+	L-	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
Any other agricultural use			L+	L-	L+	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
B. Forest products propagation		2128(B)	L+	L-	L	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
Forest products harvesting		2128(B)	L+	L-	L	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
1. Clear cut			L+	L-	L	L+	L+	L+	L+	L+	L+	L+			L+	L+	L+	L+	L+	
2. Selective cut (A)			L	L	L	L	L	L	L	L	L	L			L	L	L	L	L	
C. Single family dwelling		2128(C)	L	L	L	L	L	L	L	L	L	L			L	L	L	L	L	
D. Public & private conserva-tion areas for protection of water, soil, open space, forest & wildlife resources		2128(D)		L-								L-	L-							
Conservation structures			L-	L-		L-	L-	S	S		S	S-	L-		L-					
Uses Permitted Under Prescribed Conditions																				
A. Single family dwelling constructed off-site		2130(A)	L	L	L	L	L-	L-	L	L	S	S	L+	L+	L	L	L	S	S	L
B. Farm help residence		2130(B)	L	L	L	L	L-	L-	L	L	S	S	L+	L+	L	L	L	S	S	L
C. Sale of farm or forest products raised on premises or in immediate vicinity		2130(C)																		
Conditional Uses																				
A. Community service uses		2132(A)																		
Boat moorage or marina		7020(A)(1)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Camp, campground, RV park		7020(A)(2)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Cemetery, mortuary		7020(A)(3)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Church		7020(A)(4)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Group care facility		7020(A)(5)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Government building or use		7020(A)(6)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Hospital, rest or retirement home		7020(A)(7)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Kindergarten or day nursery		7020(A)(8)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Library		7020(A)(9)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Park, playground, sports area and golf course		7020(A)(10)	L+	L	L+	L+	L+	L+	L	M	L	L+	L	L	L	L	L+	L+	S	L+
Philanthropic or elemen-tary institution		7020(A)(11)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
Power substation or other public utility building or use		7020(A)(12)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
Private club, fraternal organization		7020(A)(13)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
Recreation		7020(A)(14)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
Radio & television trans-mission towers		7020(A)(15)	L	L	L	L	L	M	M	L	S	L		L	L	L	S	S	L	
Refuse dump or sanitary landfill		7020(A)(16)	L+	L+	L	L+	L	L	L	L	L	L+		L+	L		L	L	L+	
Resort, dude ranch, hunting or fishing lodge		7020(A)(17)	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
Recycling collection center		7020(A)(18)	L	L	L	L	L	L	L	S	S	L		L	L		S	S	L	
Riding academy / horse boarding for profit		7020(A)(19)	L+	L	L	L+	L+	L+	L	S	S	L		L	L	L	L	L	L	
Private or public schools		7020(A)(20)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
Transit station		7020(A)(21)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
Waste collection, transfer processing facility		7020(A)(22)	L+	L+	L	L	L	L	L	S	S	L		L+	L		S	S	L	
Regional sanitary landfill		7020(A)(23)	L+	L+	L	L	L	L	L	L	L	L		L+	L		L	L	L	
B. Geothermal mining & processing operations		2132(B)(1)	L	L	L	L	M	M	M	M	M	L		L	M		M	M	L	
Aggregate exploration, mining & processing		2132(B)(1)	L+	L+	L	L+	L+	L+	L	L	L	L		L	L		L	M	L	
C. Commercial processing of agricultural products		2132(B)(2)	L	L	L	L	L	L	L	S	S	L		L	L		S	S	L	
D. Raising any type of food & selling by-products		2132(B)(3)	L	L	L	L	L	L	L	S	S	L		L	L				L	
E. Food lots		2132(B)(4)	L	L	L	L	L	L	L	S	S	L		L	L				L	
F. Raising four or more swine		2132(B)(5)	L	L	L	L	L	L	L	S	S	L		L	L		L	L	L	
G. Raising for breeding animals		2132(B)(6)	L	L	L	L	L	L	L	S	S	L		L	L		L	L	L	
H. Commercial dog breeding		2132(B)(7)	L	L	L	L	L	L	L	S	S	L		L	L		S	S	L	
I. Commercial processing of forest products		2132(B)(8)	L	L	L	L	L	L	L	S	S	L		L	L	L	L	S	L	
J. Horsebarns & horseboat moorage		2132(B)(9)	L	L	L	L	L	L	L	S	S	L		L	L	L	L	S	L	
K. Permitted on lands not predominantly Class I, II, or III soils:		2132(C)																		
1. Planned developments for single family residences		2132(C)(1)	L+	L+	L+	L+	L	L	L	M	M	L	L	L	L	L	M	M	L	
2. Cottage industries		2132(C)(2)(a)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
3. Rural service commercial (local stores, shops, offices)		2132(C)(2)(b)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	
4. Tourist commercial (restaurants, gas stations)		2132(C)(2)(c)	L	L	L	L	L	L	L	S	S	L		L	L	L	S	S	L	

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(S, M or L) + = Major Impact

Notes:

- (a) Effects can vary from minimal (when relatively few trees are removed) to large (when over 20 percent of canopy or land area are affected).
(b) Worst-case scenario assumed with free-ranging animals in fenced outdoor enclosure. Indoor facilities would have fewer impacts.

TABLE 5 : CONFLICTING USES ALLOWED IN RURAL RESIDENTIAL ZONING DISTRICT
 Affected Subareas: Wildwood-McKey Creek, Holbrook-Logie, Upper Rock Creek, Folsenberg, McNamee-Harbor, Cornelius Pass,
 Germantown Road, Bonny Slope, Balch Creek

IMPACTS OR ACTIVITIES ASSOCIATED WITH CONFLICTING USES															Water Quality				
Code Reference (11.15.)	Edge Effect	Barriers		Frag-ment-ation	Native Vegetation Removal		Herbi-cides Appli-cation	Soil Ex-cu-sion	Topsoil Removal	Human In-tru-sion	Pet Impacts	Incr. Imperv. Surface Area	Insec-ticides, Pesticides	Parti-cles	Stream-bank Dis-tabil-ization	Exposed Soil, Erosion, Slump	Nutrient Load-ing		
		Roads	Fences		Under-story	Dead Wood													
Conflicting Use																			
Primary Uses																			
A. Farm use:																			
Raising & harvesting crops	2208(A)	L+	L-	L	L+	L+	L+	L+	L+	L+	L+				L+	L+	L+	L+	L+
Raising livestock	2208(A)(2)	L+	L-	L+	L+	L+	L+	L+	L+	L+	L+				L	L-	L+	L+	L+
Any other agricultural use	2208(A)(3)	L+	L-	L+	L+	L+	L+	L+	L+	L+	L+				L	L-	L+	L+	L+
B. Forest products production																			
Forest products harvesting	2208(B)	M+	L		L+	L+	L+	L	L+	L+	L+				L+	L+	L+	L+	L+
1. Clear cut																			
2. Selective cut (a)		L+	L+		L+	L+	M+	L+	M+	M+	M+	L+			M+	M+	L+	L+	L+
C. Single family dwelling																			
D. Public & private conserva-tion areas for protection of water, soil, open space, forest and wildlife resources (b)	2208(D)																		
Conservation structures	2208(D)	L-	L-		L-	L-	S	S		S	S-	L-				S	S	S	S
Uses Permitted Under Prescribed Conditions																			
A. Single family dwelling constructed off-site																			
B. Farm help residence	2210(B)	L	L	L	L	L-	L-	L	L	S	S	L+	L+	L	L	L	S	S	L
C. Sales of products raised or grown on premises	2210(C)																		
Conditional Uses																			
A. Community Service Uses																			
Boat moorage or marina	2212(A)																		
Camp, campground, RV park	2212(A)(1)	L	L	L-	L	L	L	L	L	L	L	L-	L		L	L	L	L	L+
Community, nursery	2212(A)(2)	L+	L+	L	L+	L+	L+	L+	L+	L+	L+	L	L	L	L+	S+	S+	L+	L+
Church	2212(A)(3)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Group care facility	2212(A)(4)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Government building or use	2212(A)(5)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Hospital, rest or retirement home	2212(A)(6)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Kindergarten or day nursery	2212(A)(7)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Library	2212(A)(8)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Park, playground, sports area, golf course	2212(A)(9)	L+	L	L+	L+	L	L	L	L	M	L	L+	L	L	L	L	S	L+	L+
Philanthropic or eleemo-synary institution	2212(A)(10)	L	L-	L-	L-	L-	L-	L-	L-	S	S	L	L	L	L	S	S	L	L
Power substation or other public utility building or use	2212(A)(11)	L	L	L-	L	L	L	L	L	S	S	L-	L	L	L	S	S	L	L
Private club, fraternal organization	2212(A)(12)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Racetrack	2212(A)(13)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Road to & television trans-mission tower	2212(A)(14)	L	L	L	L	L	L	L	L	S	S	L+	L	L	L	S	S	L+	L+
Refuse dump or sanitary landfill	2212(A)(15)	L-	L	L-	L	L	M-	M-	L-	S	S	L-	L	L	L	S	S	L-	L-
Resort, dude ranch, hunting or fishing lodge	2212(A)(16)	L+	L+	L	L+	L	L	L	L	L	L	L+	L	L	L	L	L	L+	L+
Recycling collection center	2212(A)(17)	L	L+	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Riding academy/show boarding for profit	2212(A)(18)	L+	L	L	L+	L+	L+	L+	L	S	S	L-	L	L	L	L	L	L+	L+
Private or public school	2212(A)(19)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
Transfer station	2212(A)(20)	L	L	L	L	L	L	L	L	S	S	L+	L	L	L	S	S	L	L
Waste collection, transfer processing facility	2212(A)(21)	L+	L+	L	L	L	L	L	L	S	S	L+	L	L	L	S	S	L	L
Regional sanitary landfill	2212(A)(22)	L+	L+	L+	L+	L+	L+	L	L	L	L	L+	L	L	L	L	L	L+	L+
B. Geothermal mining & processing operations																			
Aggregate exploration, mining & processing	2212(B)(1)	L-	L-		L-	L-	M-	M-	M	M	M	L-	L	L	M	M	L	L	L
C. Commercial processing of agricultural products																			
D. Raising any type of food & selling by-products	2212(B)(2)	L	L	L	L	L	L	L	L	S	S	L+	L	L	S	S	L	L	L
E. Feed lot	2212(B)(3)	L	L	L	L	L	L	L	L	S	S	L+	L	L	L	L	L	L	L
F. Raising four or more swine	2212(B)(4)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	L	L	L
G. Raising (or bearing) animals	2212(B)(5)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	L	L	L	L
H. Commercial dog breeds	2212(B)(6)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
I. Single family phased developments	2212(B)(7)	L+	L+	L+	L+	L	L+	L+	L	M	M	L+	L+	L+	L	L+	M	M	L+
J. Cottage industries	2212(B)(8)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L
K. Local stores, offices, repair services, etc.	2212(B)(9)	L	L	L	L	L	L	L	L	S	S	L	L	L	L	S	S	L	L

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 (S, M or L) + = Major impact

Notes:

- (a) Effects can vary from minimal (when relatively few trees are removed) to large (when over 20 percent of canopy or land area are affected).
- (b) Assumes this applies to activities to benefit forest wildlife species.
- (c) Worst-case scenario assumed with free-ranging animals in fenced outdoor enclosure. Indoor facilities would have fewer impacts.

TABLE 8 : WEST HILLS RESIDENTIAL LAND VALUES
Market Value of Vacant Non-Resource Parcels
 (Source: Multnomah County Assessor's Records, 1993)

TOTAL - ALL AREAS

	Acres	Value
Total all subareas:	500.8	\$5,518,100
No. of parcels:	161	
Mean size (acres):	3.1	
Mean market value:		\$34,274

Subarea: Germantown

	Total Acres	Total Value
Subarea totals:	107.9	\$1,056,500
No. of parcels:	21	
Mean size (acres):	5.1	
Mean market value:		\$50,310

Subarea: Folkenberg

	Total Acres	Total Value
Subarea totals:	121.7	\$1,127,900
No. of parcels:	46	
Mean size (acres):	2.6	
Mean market value:		\$24,520

Subarea: Gilkison Road

	Total Acres	Total Value
Subarea totals:	10.3	\$92,000
No. of parcels:	2	
Mean size (acres):	5.2	
Mean market value:		\$46,000

Subarea: Rock Creek

	Total Acres	Total Value
Subarea totals:	27.5	\$334,500
No. of parcels:	9	
Mean size (acres):	3.1	
Mean market value:		\$37,167

Subarea: Bonny Slope

	Total Acres	Total Value
Subarea totals:	56.7	\$603,100
No. of parcels:	15	
Mean size (acres):	3.8	
Mean market value:		\$40,207

Subarea: Wildwood-McKay

	Total Acres	Total Value
Subarea totals:	44.6	\$501,700
No. of parcels:	9	
Mean size (acres):	492381.6	
Mean market value:		\$55,744

Subarea: Cornelius Pass

	Total Acres	Total Value
Subarea totals:	24.8	\$355,800
No. of parcels:	9	
Mean size (acres):	2.8	
Mean market value:		\$39,533

Subarea: Holbrook-Logie

	Total Acres	Total Value
Subarea totals:	16.1	\$257,400
No. of parcels:	14	
Mean size (acres):	1.2	
Mean market value:		\$18,386

Subarea: McNamee-Harbarton

	Total Acres	Total Value
Subarea totals:	8.7	\$47,400
No. of parcels:	6	
Mean size (acres):	1.5	
Mean market value:		\$7,900

Subarea: Balch Creek

	Total Acres	Total Value
Subarea totals:	82.5	\$1,141,800
No. of parcels:	30	
Mean size (acres):	2.8	
Mean market value:		\$38,060

TABLE 8 : WEST HILLS RESIDENTIAL LAND VALUES**Market Value of Vacant Non-Resource Parcels**

(Source: Multnomah County Assessor's Records, 1993)

Subarea: Germantown

Section 9 1N 1W

Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 17	Germantown Rd.	11.0	\$69,900
TL 7	Germantown Rd.	2.6	\$9,300
Lot 3	Germantown Add.	4.7	\$43,700
TL 1 of 4,5,6	Germantown Add.	9.2	\$101,000
Lot 9 (part)	Germantown Rd.	1.5	\$7,500
Lot 10 (part)	Germantown Add.	2.4	\$54,400
Lot 11	Germantown Add.	4.4	\$29,900
TL 1 of 12,13	Germantown Add.	6.4	\$95,600
Lot 15	Germantown Add.	8.2	\$85,400
Lots 22,23 (part)	Germantown Add.	6.7	\$93,200
Lot 2	Germantown Add.	4.6	\$74,800
Lot 3	Germantown Add.	4.8	\$74,800
Lot 24	Skyline Acres	1.8	\$7,800
Lot 27	Skyline Acres	2.6	\$54,400
Lot 29	Skyline Acres	3.6	\$14,000
TL 2	Germantown Rd.	6.8	\$23,300
TL 4	Germantown Rd.	2.2	\$38,900
TL 11	Germantown Rd.	11.6	\$93,200
TL 18	Germantown Rd.	6.4	\$62,100
TL 20	Germantown Rd.	6.4	\$23,300

Subarea: Rock Creek

Section 23 2N 2W

Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 48	Elliott Rd.	2.0	\$28,800
TL 47	Elliott Rd.	2.0	\$11,500
TL 18	Elliott Rd.	5.6	\$30,200
Section 26 1N 1W	Zoning: RR		
TL 18		0.9	\$28,800
TL 22		0.8	\$23,000
TL 47		10.3	\$149,500
TL 51		5.0	\$34,500
TL 52		0.5	\$23,000
TL 92		0.4	\$5,200

Subarea: Folkenberg
Section 19 2N 1W
Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 8	Sheltered Nook Rd	10.0	\$58,700
TL 55		1.0	\$17,300
TL 21		3.4	\$29,900
TL 20	NW Vista	0.3	\$12,100
TL 19	NW Vista	4.3	\$31,100
TL 11	NW Vista	0.1	\$5,200
Section 24 2N 2W Zoning: RR			
Lot 2	Sheltered Nook	4.5	\$32,200
Lot 1	Sheltered Nook Rd.	4.3	\$36,300
Section 25 1N 1W Zoning: RR			
TL 5		0.3	\$40,300
TL 4		0.7	\$61,400
Lot 8, Bl. 3		0.3	\$44,200
Lot 10,11, Bl.3		0.1	\$55,700
Lot 1, Bl. 4		0.3	\$44,200
TL5,Lot 10,Bl.4		0.3	\$44,200
Lot 16, Bl. 4		0.4	\$38,400
Lot 3, Bl. 5		0.3	\$38,400
Lot 4, Bl. 5		0.3	\$38,400
TL 40		4.9	\$50,300
TL 53		3.6	\$48,100
TL 56		1.7	\$12,700
TL 83		5.0	\$51,800
Section 30 2N 1W Zoning: RR			
TL 22	McNamee Rd.	6.7	\$50,600
TL 8	McNamee Rd.	4.6	\$5,300
TL 7	McNamee Rd.	4.6	\$5,300
TL 6	McNamee Rd.	5	\$5,800
Block 13	Cornelius Pass Rd.	1.6	\$10,900
Block 12	Cornelius Pass Rd.	2.7	\$12,100
Lot 1-10, Bl. 7		1.5	\$13,800
Lot 5&12, Bl. 6		0.2	\$5,800
Lot 4&13, Bl. 6		0.2	\$5,800
Lot 1-10, Bl. 5		1.5	\$13,800
Lot 1-21,22-27, Bl.3	Corn. Pass Rd.	3.0	\$29,900
TL 3,Lot 41-43	Cornelius Pass Rd.	7.7	\$38,800
Lot 31&31	Cornelius Pass Rd.	5.7	\$23,000
Lot 25	Cornelius Pass Rd.	3.8	\$15,000
Lot 22-24	Cornelius Pass Rd.	6.4	\$25,900
Lot 21	Cornelius Pass Rd.	2.0	\$8,100
TL 6, Lot 19,20	Cornelius Pass Rd.	4.0	\$16,100
Lot 16&17	Cornelius Pass Rd.	8.3	\$29,900
Lot 14	Cornelius Pass Rd.	2.0	\$5,800
Lot 13	Cornelius Pass Rd.	4.1	\$15,000

Subarea: Gilkison Road

Section 26 3N 2W Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 38	Gilkison Rd.	5.3	\$33,400
TL 34	Watson Rd.	5.0	\$58,600

Subarea: Holbrook—Logie

Section 12 2N 2W Zoning: RR

Parcel	Street or Addition	Acres	Value
Lot 6	King Rd.	0.5	\$14,400
Lot 4	King Rd.	0.5	\$14,400
Lot 3	King Rd.	0.3	\$9,200
Lot 2	King Rd.	0.5	\$14,400
TL 31	Morgan Rd.	1.0	\$20,700
TL 34	Morgan Rd.	0.3	\$8,100
TL 27	Clark Ave.	0.4	\$7,500
TL 22	Morgan Rd.	0.6	\$13,200
TL 19	Clark Ave.	0.9	\$18,400
TL 10	Cleetwood	0.9	\$19,600
TL 8	Cleetwood	1.0	\$20,700
TL 3	Cleetwood	0.4	\$6,900
TL 9	Gallaher Rd.	5.7	\$46,000
TL 29	St. Helens Rd.	2.8	\$34,700
TL 1	King Rd.	0.3	\$9,200

Subarea: Wildwood—McKay

Section 10 1N 1W Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 33	Skyline Blvd.	5.7	\$62,100
TL 25		2.2	\$7,800
TL 12	Germantown Rd.	5.3	\$66,800
TL 10		9.9	\$116,500
Lot 19	Tulamette Acres	4.8	\$46,500
TL 8, Lot 14, 15		0.8	\$7,800
TL 7, Lot 12–15		9.6	\$108,700
TL 6, Lot 12–14	Germantown Rd.	3.5	\$38,900
Lot 5–7	Lambert St.	2.8	\$46,600

Subarea: Cornelius Pass

Section 31 2N 1W

Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 61	Skyline Blvd.	5.0	\$46,000
TL 57	Old Corn. Pass Rd.	2.9	\$43,700
TL 55	Old Corn. Pass Rd.	2.0	\$34,500
Section 6 1N 1W			
Zoning: MUARR			
TL 68		1.9	\$35,000
Zoning: RR			
TL 65		5.0	\$60,600
TL 37	Cornelius Pass Rd.	1.1	\$42,700
TL 23, Lot 12	NW 185th Pl.	2.4	\$38,900
TL 22, Lot 11, 12	NW 185th Pl.	2.3	\$31,100
TL 54	Plainview Rd.	2.2	\$23,300

Subarea: McNamee—Harborton

Section 28 2N 1W

Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 5	NW Riverview Dr.	3.6	\$10,400
TL 29	NW Riverview Dr.	0.6	\$6,900
TL 57	NW Riverview Dr.	3.5	\$10,200
Section 20 2N 1W			
Zoning: R7			
Lot 1—5, Bl. 9		0.4	\$5,500
Section 33 2N 1W			
Zoning: RR			
Lots 18—20, Bl. 4	Harborton	0.3	\$7,200
Lot 18—20, Bl. 4		0.3	\$7,200

Subarea: Bonny Slope

Section 22 1N 1W

Zoning: RR

Parcel	Street or Addition	Acres	Value
Lot 1	NW Laidlaw Rd.	7.3	\$86,300
TL 17, Lot 4		2.9	\$34,500
TL 3, Lot 4		1.1	\$5,800
TL 2, Lot 5	NW Laidlaw Rd.	0.8	\$53,500
TL 22, Lot 8		0.6	\$17,300
TL 14, Lot 11		3.0	\$8,600
TL 1, Lot 12		0.5	\$5,800
Lot 17		5.0	\$34,500
TL 21, Lot 19		1.4	\$40,300
Lot 21	NW Laidlaw Rd.	4.8	\$74,800
Lot 23		1.3	\$34,500
Lot 28—30		11.4	\$63,300
Lot 31		9.5	\$63,300
TL 8, Lot 39		1.0	\$11,500
Lot 47		4.7	\$28,800
TL 9		1.4	\$40,300

Subarea: Balch Creek
Section 23 1N 1W
Zoning: RR

Parcel	Street or Addition	Acres	Value
TL 26	Thompson Rd.	3.0	\$60,600
Map 3022	Zoning: R10		
Lot 13, Bl. D	Barnes Pk. Hts. Addn.	1.6	\$22,200
TL 62	NW Penridge	1.2	\$61,100
	Zoning: R20		
TL 4, Lot 2, Bl. E	Barnes Pk. Hts. Addn.	1.0	\$38,900
TL 119	NW Skyline	0.3	\$11,100
TL 197		0.4	\$30,000
Map 2922	Zoning: R10		
Block A		2.6	\$22,200
Lot 1-4, Bl. B	Barnes Pk. Hts. Addn.	8.8	\$48,600
Lot 1-4, Bl. C	Barnes Pk. Hts. Addn.	6.0	\$33,300
Lot 1-3, Bl. D	Barnes Pk. Hts. Addn.	5.0	\$28,200
Lot 4,5, Bl. D	Barnes Pk. Hts. Addn.	2.1	\$11,700
Lot 6-12, Bl. D	Barnes Pk. Hts. Addn.	12.6	\$69,700
Lot 1-5, Bl. E	Barnes Pk. Hts. Addn.	10.3	\$56,600
Lot 6,7, Bl. E	Barnes Pk. Hts. Addn.	2.0	\$11,100
Lot 8, Bl. E	Barnes Pk. Hts. Addn.	2.0	\$11,100
Lot 9, Bl. E	Barnes Pk. Hts. Addn.	1.0	\$7,000
Map 2922	Zoning: R20		
Lot 1-3, Bl. A	NW Skyline	8.0	\$83,900
Lot 4, Bl. A		0.7	\$11,100
TL 5, Lot 1-3, Bl. C	NW Penridge	1.4	\$77,700
Lot 5,6, Bl. C	NW Penridge	1.0	\$61,100
TL 3, Lot 6,7, Bl. D		0.4	\$22,200
TL 4, Lot 7,8, Bl. C	St. Helens Ave.	0.4	\$22,200
Lot 5, Bl. H	Barnes Pk. Hts. Addn.	1.0	\$7,000
Lot 6, Bl. H	Barnes Pk. Hts. Addn.	1.4	\$10,000
Lot 6, Bl. J	Barnes Pk. Hts. Addn.	1.5	\$10,900
Lot 7, Bl. J	Barnes Pk. Hts. Addn.	1.3	\$25,500
TL 4, Lot 4, Bl. A	NW Penridge	0.9	\$77,700
TL 6, Lot 6, Bl. A	NW Penridge	1.1	\$77,700
TL 8, Lot 8, Bl. A	NW Penridge	1.3	\$99,900
TL 162		2.2	\$31,500

APPENDIX A

ROAD IMPACT ANALYSES

The following mile-by-mile, roadside analysis was conducted by Ecologists Esther Lev and Lynn Sharp, in January of 1994. The analysis documents obstacles to wildlife movement along roadways crossing through the WHWFHA.

1. NEWBERRY ROAD -- starting at Highway 30.

0 - .43 steep slope, patches of conifers, mostly deciduous (50 -80 year old forest)
ivy and Himalayan blackberry in patches
major fragmentation is 2 lane road

0- .1 3 strand barb wire fence paralleling road
some snags

.45-.46 5 strand fence and clearing

.468 west of road large clear cut
east of road 5 strand barb wire fence

1.25 5 strand barb wire fence

1.4 -1.73 undisturbed conduit to Forest Park, mixed deciduous forest, good habitat, very important as houses and roads fragment the habitat
some laurel and holly invasion

1.73 - 2.0 scattered residential, some second growth forest, few fences

1.9 chain link fence

2.0 MacNamee Road

2. SKYLINE ROAD

ivy, rural residential, lots of clearing, fences, dogs and cats, small pockets of trees

small riparian corridor very important

.83- .85 large meadow/ agriculture hay
transmission line, all grasses and forbes below

.85 large subdivision, roads have been built

1.5 transmission line

1.8 Old Skyline Rd.

3. SKYLINE ROAD AT MCNAMEE ROAD

0 barb wire fences, clearing, rural residential including houses with large clearings and fences

.55 selective logging, small stream with remaining trees

.7 - .8 major fences/houses

.85 - 1.1 ravine on left, fence on the right; left side good regrowth on clearcut- 100% cover, existing forest corridors, several tributaries, right side lots of impenetrable fences blocking off movement

1.2 -1.45 good habitat on ridgeline, good herp. underpass potential

1.45 fences, houses and major clearcut to the left

1.55 ravine with forest on both sides good herp underpass potential

1.7 Pauley Road

4. MACNAMEE ROAD

1.75 along ridgeline immediately adjacent to road good mixed forest

2.2 open field

2.4 re growing clearcut

2.6 - 2.8 woods again

2.8 clearcut/ for sale signs on right

2.9 forest again

major fence left/residential

3.0 orchard, residential fences

3.2 - 3.3 no fences

3.3 - 3.4 fences

3.45 out of fence, houses, pockets of trees

3.7 right is good, left is clearcut.

5. CORNELIUS PASS ROAD -- HIGHWAY 30

0 left side old trees, good habitat/ mixed conf/decid.
houses down along creek on the left side

1.25- 1.27 slope selectively logged

1.25 Sheltered Nook Road

1.5 fences residential

1.25- 2.8 young forest

0 - .7 back on Cornelius Pass Road, chopped up, residential/ fences

.9 1.4 forest on both sides

1.2 stream corridor

1.25 stream corridor

1.4 marginal young forest, mostly broken up

1.75 road con.

1.9 tenuous connection on left

2.0 - 2.15 forest on both sides

Cornelius Pass road is wide and very busy, difficult for mammal and amphibian and reptile crossing.

6. SKYLINE ROAD AT CORNELIUS PASS ROAD

rural residential

.5 Rock Creek Road turn onto Rock Creek Road, mixed stages of forest cover

.51 Railroad

Multnomah County Line

0 Rural Residential, lots of bad fences

Clearcut on both sides of road, narrow strip of trees along the road corridor

.6 good habitat left

.7 house on left

.88 young forest

1.08 house

1.15 young forest

1.25 good older young forest

1.3 house

1.35 house

1.8 houses, cleared land, sculpture garden

2.0 220th Road major dam on Rock Creek

7. SKYLINE ROAD AT CORNELIUS PASS - MACNAMEE ROAD

0 - .7 Ag

.7 major clearcut on left

1.1 small patches of fragmented forest

1.25 new fence, rural residential/ag.

8. SKYLINE ROAD WEST FROM CORNELIUS PASS

rural residential/ fences

.4 young forest on right

.5 clearcut right/ ag. left

- 1.1 houses left and right

1.25 forest on right

1.45 open ag both sides

1.7 forest both sides

1.8 houses, fences

1.9 good ravine on left side

1.95 open on left

2.1 some forest cover/ ridgeline with houses

2.3 chopped up rural residential

2.5 right side forest with houses

2.7 forest both sides

3.0 clearcut right

3.1 early successional clearcut

3.3 forest left Early successional clearcut right

3.4 forest rural residential

8. BECK ROAD

0 - .4 Early Succession, planted clearcut

.4 strip of trees along road

.55- .6 major fence

.7 trees

.9 fences

1.05 forest both sides

1.2 creek

1.28 creek

1.28 young forest both sides

1.5 early successional planted

1.6 young forest with patches of early successional

1.8 residential on right

1.9 selectively logged forest left

2.0 young forest both sides

2.5 clearcut on right

2.6 good mixed forest

9. JOHNSON ROAD – BECK TOWARD SKYLINE

0 - .15 young forest

.15 clearcut both sides

.4 trees, houses, fences, patchy

.7 young forest

.9 end

SKYLINE (RIGHT)

0 - .15 good young forest

.15 mosaic

.2 good forest

.4 house/ fences right, clearcut left

.7 end of road

10. LOGIE TRAIL AT SKYLINE DOWN TO HIGHWAY 30

0 .1 good patch

clearcut on all sides

.25 clearcut to road on left, right good cover (small area between road terraces)

.8 creek

.9 clearcut growing up

1.8 early successional both sides

1.75 young forest

1.8 under transmission line

1.8 - 1.9 nice old cedars

1.9 houses, fences, animals

2.4 right side good habitat/ stream corridor

11. KAISER -- OLD GERMANTOWN ROAD

0.3 some oak

.04 second growth

.55 rural residential/ 4 strand fences

1.05 stream crossing

1.0 rural residential with large pockets of forest

1.25 stream crossing

1.38 transmission line

1.40 - 1.5 dense residential

1.5 second growth/stream corridor

1.7 hairpin curve, new housing, good example of forest houses - lack of landscaping and fences

2.4 edge/rural residential

2.8 second growth

2.9 more residential density; turn onto Germantown Road; young forest pockets of older conifers, scattered residential no fences

1.1 logged and cleared on right side

1.3 rural residential, agriculture, fences, cleared

1.25 back to junction with Old Germantown Road

12. KAISER AT OLD GERMANTOWN

Agriculture/ rural residential

.5 young forest interspersed with agriculture/rural residential use

.6 agriculture/rural residential, bad fences

2.4 Cornelius Pass; second growth good residential mix

3.1 clearing/ agriculture

13. ROCK CREEK

Agriculture/Rural Residential

Patchy young forest

.3 railroad

.5 stream

.6-.7 fences, houses

.7 mixed forest right, clearcut left stream

1.1-1.4 houses, fences, dead cars

1.4 young forest

1.7 stream parallels road, good second growth left

1.8 both sides

2.2 fences/clearing domestic animals

2.45 NW 220th Ave.

3.1 Opening, large house with big white fence along ridge top

3.5 trees right along road, cleared to left, logged to the right; new houses

4.0 right side short bad fence

4.3 end

14. ELLIOTT ROAD

second growth; young forest; field

patchy young forest with dense residential

.4 clearcut left

.5 new houses

15. ROCKY POINT AT SKYLINE

2nd growth

.2 clearcut on left (1 snag)

.5 good second growth on both sides; stream to right, good habitat

1.8 transmission line

1.9 young forest -left

2.2 2nd growth

2.6 young forest

2.8 early succession

16. WATSON / HIGHWAY 30

rural residential fences major

.5 transmission corridor; ponderosa pine, oak

17. GILKISON ROAD

.85 second growth

rural residential fences; clearcut to the left; dense rural residential with fences;
some older conifers

1.35 good 2 nd growth on right

1.65 2 nd growth both sides/ some houses

2.25 clearcut on left

2.4 end of road

18. SKYLINE (INTERSECTION WITH BECK AND LOGIE TRAIL)

second growth; some rural residential, some clearcuts

.5 weather station; interspersed second growth, clearcut, low density rural residential

1.2- 1.6 clearcut on both sides; rural residential with some trees

1.7-2.3 clearcut, planted 1994

2.3 second growth, fences, horses

19. MORELAND ROAD

rural residential

APPENDIX B

LANDSCAPE ECOLOGY DEFINITIONS

Adaptation: a process of gradual change resulting from environmental constraints and variation among individuals in a population.

Carrying capacity: the maximum number of individuals or maximum biomass that a particular environment can support.

Catastrophe point: a threshold at which the continuity in structure and function of a system is easily and significantly altered or broken.

Configuration: the location and juxtaposition of landscape elements.

Convergency line: a line corridor separating two types of landscape elements, thus providing three types in close proximity.

Corridor: a narrow strip of land that differs from the matrix on either side.

Cultivated landscape: a landscape dominated by plowed land for crops, but usually with patches of natural and managed land present.

Disturbance: an event that causes a significant change from the normal pattern in an ecological system.

Land potential: the possible uses and values of a land area.

Landscape: a heterogeneous land area composed of a cluster of interacting ecosystems that are repeated in similar form throughout; landscapes vary in size, down to few kilometers in diameter.

Landscape ecology: a study of the structure, function and change in heterogeneous land area composed of interacting ecosystems.

Landscape Element: the basic, relatively homogeneous, ecological unit, whether of natural or human origin, on land at the scale of a landscape.

Line Corridor: a narrow band essentially dominated throughout by edge species.

Long distance dispersal: movement to a different landscape.

Managed landscape: a landscape, such as rangeland or forest, where native species are harvested.

Mosaic tract: a tract of patches of different aged trees.

Multi-aged stand: a naturally developed stand usually with trees of many ages.

Natural landscape: an area where human effects, if present are not ecologically significant to the landscape as a whole.

Network complexity: the combination of network connectivity and circuitry.

Network connectivity: the degree to which all nodes in a system are linked by corridors.

Node: a patch attached to a corridor, both of the same landscape type. Also, an intersection of corridors, and a source or sink of flows of object.

Non-equilibrium coexistence: survival of species with irregular fluctuations because of disturbance or unpredictable (stochastic) events.

Patch: a nonlinear surface area differing in appearance from its surroundings.

Patch turnover: the rate of appearance and disappearance of patches.

Porosity of landscape matrix: the measure of density of patches in a landscape.

Recovery: ability of a system to return to an earlier state after being changed.

Recovery time: a measure of how long it would take to replace a characteristic with a comparable one if it were disturbed or destroyed.

Regenerated patch: an area that becomes free of disturbance within a chronically disturbed matrix.

Remnant patch: an area remaining from a former large landscape element and now surrounded by a disturbed area.

Shifting mosaic: a system exhibiting a pattern of long-term change along with short-term internal spatial conversions.

APPENDIX C

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CHAPTER VI RECONCILIATION

TABLE OF CONTENTS

A. INTRODUCTION.....	VI-3
B. CONFLICT RESOLUTION	VI-4
1. Forestry	VI-5
2. Agriculture	VI-7
3. Community Service and Conditional Uses	VI-9
4. Uses to conserve soil, air and water quality and provide for wildlife and fisheries resources	VI-11
5. Residences	VI-12
6. Transportation/Public Improvements	VI-13
7. Mining	VI-14
C. RESOURCE PROTECTION	VI-17
1. Scenic Views	VI-17
2. Streams	VI-19
3. Angell Brother's Aggregate Site	VI-21
4. Wildlife Habitat	VI-23
5. Summary	VI-26

A. INTRODUCTION

Preceding chapters have determined that scenic views, streams, wildlife habitat and the Angell Brother's aggregate site are significant Goal 5 resources in the West Hills. Uses that would conflict with each resource were identified, as follows:

Scenic

Forestry
Community service and
Conditional Uses
Residences
Mining

Wildlife

Forestry
Agriculture
Residences
Mining

Streams

Forestry
Agriculture
Community Service and
Conditional Uses
Residences
Transportation/Public Improvements
Mining

Angell Brother's Aggregate

Forestry
Uses to conserve soil, air & water
quality & wildlife & fisheries resources
Residences
Scenic resources
Wildlife resource
Streams resources

Previous chapters identified the economic, social, environmental and energy (ESEE) consequences that allowing conflicting uses would have on the significant resources, and the consequences if the conflicting uses were not allowed. Decisions to allow, not allow, or limit conflicting uses must be based on this analysis of ESEE consequences. However, each of the significant resources does not stand alone. The impact areas of the resources overlap in many areas. For example, both the Angell Brother's aggregate site and portions of significant streams lie within the scenic area, which itself lies within the significant wildlife habitat area. Consequently, decisions about whether to allow fully, not allow, or allow conflicting uses in a limited manner must consider the results of the resource analysis for the other significant resources, and reconcile any differences. For example, if the results of the ESEE analysis of forestry showed that forestry should not be allowed in the scenic area, but should be allowed in the other resource areas, these different conclusions would have to be reconciled.

Section B of this chapter will examine the previously identified ESEE consequences for each conflicting use and reconcile any differences to reach a conclusion as to whether that particular *use* should be allowed, not allowed, or allowed in a limited manner. Section C will then reach a determination as to whether each significant *resource* should be fully protected by not allowing conflicting uses (designate "3-A"), not protected because conflicting uses are of such importance that they should be allowed fully (designate "3-B"), or protected by allowing conflicting uses in a limited manner (designate "3-C").

B. CONFLICT RESOLUTION

OAR 660-16-010: Based on the determination of the economic, social, environmental and energy consequences, a jurisdiction must "develop a program to achieve the Goal". Assuming there is adequate information on the location, quality, and quantity of the resource site as well as on the nature of the conflicting use and ESEE consequences, a jurisdiction is expected to "resolve" conflicts with specific sites in any of the following three ways listed below....

(1) Protect the Resource Site: Based on the analysis of the ESEE consequences, a jurisdiction may determine that the resource site is of such importance, relative to the conflicting uses, and the ESEE consequences of allowing conflicting uses are so great that the resource site should be protected and all conflicting uses prohibited on the site and possibly within the impact area identified in OAR 660-16-000(5)(c). Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

(2) Allow Conflicting Uses Fully: Based on the analysis of ESEE consequences and other Statewide Goals, a jurisdiction may determine that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. This approach may be used when the conflicting use for a particular site is of sufficient importance, relative to the resource site. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

(3) Limit Conflicting Uses: Based on the analysis of ESEE consequences, a jurisdiction may determine that both the resource site and the conflicting use are important relative to each other, and that the ESEE consequences should be balanced so as to allow the conflicting use but in a limited way so as to protect the resource site to some desired extent. To implement this decision, the jurisdiction must designate with certainty what uses and activities are allowed fully, what uses and activities are not allowed at all and which uses are allowed conditionally, and what specific standards or limitations are placed on the permitted and conditional uses and activities for each resource site. Whatever mechanisms are used, they must be specific enough so that affected property owners are able to determine what uses and activities are allowed, not allowed, or allowed conditionally and under what clear and objective conditions or standards. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

The "goal to be achieved", according to Goal 5, is protection of significant resources for future generations. This does not simply mean that a use which adversely impacts the resource should not be allowed if the ESEE analysis has shown that protection is more important than the conflicting use (a "3-A" designation). The conflict resolution process should also take into consideration whether adverse impacts can be mitigated. If mitigation is possible, the appropriate designation is "3-C", and clear and objective standards should be adopted which will allow the conflicting use in a manner that also protects the resource. If the use of development standards would resolve conflicts by both allowing the use and

protecting the resource, then the appropriate Goal 5 level of protection is "3-C", limit conflicting uses.

The following subsections re-examine the previously identified ESEE consequences of the conflicting use, resolve any conflicts, and reach a conclusion as to whether that conflicting use should be allowed, not allowed, or allowed in a limited manner.

1. Forestry

Forestry activities have been identified as a conflicting use in all four resource impact areas. A synopsis of the identified ESEE consequences is as follows:

Consequences if Forestry is not allowed

Economic: Loss of jobs, taxes, and revenue from sales; increased transport costs, regulatory burden

Social: End to resource-based lifestyle/heritage for some families; reduced property rights;

Environmental: Older, less productive forest, possibility of disease and infestation

Energy: Possibility of greater energy expenditure to import/transport materials and wood products, shortage of goods; greater energy used for mining

Goal 4: County cannot prohibit forest practices

Consequences if Forestry is allowed in a limited manner

Economic: Possible loss of some jobs, taxes, and revenue from sales; regulatory burden

Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources for timber

Environmental: No impacts

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Goal 4: County cannot limit or regulate forest practices

Consequences to Scenic Resource if Forestry is allowed fully

Economic: Loss of indirect benefits related to quality of life

Social: Loss of aesthetic enjoyment

Environmental: Less protection of fish and wildlife habitat, water and air quality

Energy: No impact

Consequences to Streams if Forestry is allowed fully

Economic: Reduced water quality for use, change in water quantity for use

Social: Loss of flood storage capacity

Environmental: Loss of riparian vegetation, reduced water quality

Energy: Decreased water flow for energy use

Consequences to Wildlife Habitat Area if Forestry is allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism

Social: Loss of educational and passive recreational opportunities

Environmental: Numerous negative impacts from habitat loss and diminishment
Energy: Insignificant

Consequences to Angell Brothers if Forestry is allowed fully

Economic: Loss of jobs, taxes and revenue from aggregate sales if forestry supercedes mining
Social: Loss of construction material if forestry supercedes mining
Environmental: No impact
Energy: Less energy used for forestry than mining

DISCUSSION: Growing and harvesting trees is a cyclical process, and many of the negative effects caused by logging are temporary in nature - once trees begin to grow the scenic appearance of the site and its usefulness as wildlife habitat and riparian value are regenerated. The impacts to streams, wildlife habitat and scenic resources if forestry is allowed fully are generally environmental and aesthetic in nature, as compared to the economic impacts if forestry activities were not allowed. The impacts to mining if forestry is allowed fully center around whether utilizing the site for forestry would supercede mining. However, since allowing forestry is not the same as requiring forestry to occur on the mineral and aggregate site, a decision to fully allow forestry would cause no major conflicts with the Angell Brother's site.

The Oregon Forest Practices Act contains rules to provide for the overall maintenance of water resources, fish and wildlife. For instance, the rules require maintaining a buffer area along streams and the Highway 30 scenic corridor. Thus the impacts caused by forestry are limited. More importantly, ORS 527.722 restricts the county from prohibiting, limiting or regulating forest practices on forest lands.

The county could prohibit forest practices on lands zoned RR and MUA, where an exception to Goal 4 has been taken. However, most of these lots are too small to be of commercial value for logging. In addition, the aesthetic value and tax incentives of retaining forested areas on these properties makes much logging unlikely. The expense and effort for the county to set up its own program to regulate forestry practices on exception lands would be great. Consequently, since impacts from allowing forestry on exception lands are minimal, forestry should not be prohibited.

CONCLUSION: The county cannot regulate or prohibit forestry activities on forest lands. On exception lands, forestry activities are unlikely to occur on a scale that would impact significant resources. The conflicting use analysis shows, however, that forest practices, if not carried out in a manner which provides effective buffer areas for streams, can result in significant adverse impacts to streams. While logging causes only a temporary interruption to wildlife habitat, in the long term modification of logging practices to ensure maintenance of some forested cover areas would enhance wildlife habitat values greatly over current forest practices. Similarly, the scenic aspects of the West Hills would be enhanced by more selective logging practices, even if the impacts of clear-cutting are temporary in a long-term sense. Multnomah County should urge the Oregon Department of Forestry to effectively enforce the Forest Practices Act provisions for protection of fish and wildlife habitat in the West Hills, and work with the Department of Forestry to craft new rules, if

necessary, which better protect significant scenic views, wildlife habitat, and streams in the West Hills.

2. Agriculture

Identified as a conflict to wildlife habitat and streams. The synopsis of ESEE consequences is as follows:

Consequences if Agriculture is not allowed

Economic: Loss of economic value, loss of farm products to Portland area, lost jobs, reduced tax revenues, regulatory burden

Social: Loss of aesthetically pleasing open space, loss of farming lifestyles, reduced property rights, reduced local sources of farm products

Environmental: Transferring environmental impacts to another site.

Energy: Increase in costs to bring more distant farm products to market, shortage of goods

Consequences if Agriculture is allowed in a limited manner

Economic: Some loss of economic value and nearby farm products, regulatory burden, potential for loss of jobs and tax revenues

Social: Loss of aesthetically pleasing open space, burden of regulation, reduced farm lifestyle, reduced local sources of farm products

Environmental: Transfer of some environmental impacts to another site

Energy: Marginal increase in costs to bring distant farm products to market, shortage of goods

Consequences to Wildlife Habitat if Agriculture is allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism

Social: Loss of educational and passive recreational opportunities

Environmental: Numerous negative impacts from habitat loss & diminishment

Energy: Insignificant

Consequences to Streams if Agriculture is allowed fully:

Economic: Reduced water quality for use, change in water quantity for use

Social: Insignificant

Environmental: Loss of riparian vegetation, reduced water quality, greater-wildlife disturbance

Energy: Decreased water flow for energy use

DISCUSSION: The analysis for significant streams (Chapter III) identifies specific conflicts with agricultural activities only in certain West Hills streams -- other stream impact areas have no soils which are suitable for agricultural activities. The analysis for significant wildlife habitat identifies conflicts with agriculture primarily in "secondary" habitat areas, and "impacted" habitat areas so designated because existing agricultural activities make the area less desirable as wildlife habitat when compared to the forested "primary" habitat

areas. Soils in the "primary" habitat areas make agricultural activities generally infeasible. So agriculture is not a major threat to wildlife habitat in the West Hills. However some agricultural practices, such as misuse of pesticides, degradation of stream quality, and removal of riparian vegetation, do have negative consequences upon both streams and wildlife habitat.

Regulation and restriction of agricultural activities to protect Goal 5 natural resources is theoretically possible for Multnomah County.

ORS 215.253 states: No State Agency, City, County, or Political Subdivision of this state may exercise any of its powers to enact local laws or ordinances or impose restrictions or regulations affecting any farm use land situated within an exclusive farm use zone established under ORS 215.203 ...in a manner which would unreasonably restrict or regulate farm structures or that would unreasonably restrict or regulate accepted farming practices because of noise, dust, odor, or other materials carried in the air or other conditions arising therefrom... ..."Accepted Farming Practice" as used in this subsection shall have the meaning set out in ORS 215.203.

Nothing in this section is intended to limit or restrict the lawful exercise by any state agency, city, county or political subdivision of its power to protect the health, safety, and welfare of the citizens of this state.

As this language seems to indicate, regulation of agricultural activities by Multnomah County is feasible under state law.

However, it is not desirable or necessary for the County to institute a regulations for agricultural activities or practices, for the following reasons:

1. Agricultural activities and practices have been demonstrated to be marginal in their negative impact upon the primary wildlife habitat areas identified in the Resource Analysis Report.
2. Areas where agricultural activities would have a more significant impact upon wildlife habitat have soil types unsuitable to agriculture, and thus are unlikely to be cleared for such use.
3. Because of steep topography and poor soil conditions, many West Hills streams will likewise not be impacted by agricultural activities and practices.
4. Regulation of agricultural activities and practices would require a major effort by Multnomah County in order to study and adopt appropriate regulatory mechanisms and would require significant expenditure in order to enforce them.
5. The regulatory burden of mandatory restrictions on agricultural practices would be considered onerous by many if not most farmers.

6. Measures to protect streams and associated wildlife habitat areas are already practiced by many farmers, and are considered to be beneficial not only to the natural resources involved, but also to the agricultural activity or practice.
7. The U.S. Soil and Water Conservation Service and the West Multnomah Soil and Water Conservation District have as one of their primary missions the promotion of sound agricultural practices which protect streams and associated wildlife habitat areas from degradation due to agricultural activities and practices.
8. Multnomah County is part of a program to educate farmers in measures which will maintain and improve water quality within the Tualatin River Basin as per Department of Environmental Quality mandates.

CONCLUSION: For the reasons listed above, Multnomah County should not institute a regulatory scheme for agricultural activities. As an alternative, Multnomah County should work cooperatively with the U.S. Soil Conservation Service and the West Multnomah Soil and Water Conservation District to promote agricultural practices which protect streams and associated wildlife habitat. Joint programs should promote the following measures:

- Fencing could be limited in uncultivated areas along roadways, thus reducing barriers to wildlife movement.
- Fencing should be used to keep domestic livestock from degrading streams and adjacent riparian habitat. Design standards for fences could be used which ensure that fences do not block passage for a wide range of wildlife species.
- Application of fertilizers and pesticides could be limited, especially outside of cultivated farming areas.
- Uncultivated riparian "buffer" areas should be maintained along streams in order to maintain fish and wildlife habitat values and maintain water quality.

3. Community Service and Conditional Uses

Community service and conditional uses have been identified as uses that would conflict with the scenic area and streams. The identified ESEE impacts are:

Consequences if CS and Conditional Uses are not allowed

Economic: No new jobs/income/taxes, possible increased costs to develop elsewhere

Social: No new provider of local goods and other services

Environmental: No opportunity for potential benefits provided by environmental protection facilities; transfer of impacts to another site

Energy: Continuing energy used for transportation to obtain goods, services and employment outside area

Goal 9: Decreased opportunity for local economic development

Consequences if CS and Conditional Uses are allowed in a limited manner

Economic: Regulatory burden, changes in customary practices; less exposure to Highway 30 could reduce commercial business
Social: Reduced availability of amenities
Environmental: Possible impacts related to siting
Energy: Insignificant
Goal 9: Compatible with Goal

Consequences to Scenic Resource if CS and Conditional Uses are allowed fully

Economic: Loss of indirect benefits related to quality of life
Social: Loss of aesthetic enjoyment
Environmental: Less protection of fish and wildlife habitat, water and air quality
Energy: No impact

Consequences to Streams if CS and Conditional Uses are allowed fully

Economic: Insignificant
Social: Insignificant
Environmental: Deterioration of water quality, increased disturbance of wildlife
Energy: Decreased water flow for energy use

DISCUSSION: There are a variety of community service, conditional uses and other uses that, if allowed, could conflict with preservation of streams and scenic values. Within this category are commercial businesses, churches, schools, solid waste facilities, forest processing operations, and transmission towers, to name a few. The likelihood of these uses being approved is unknown, but the total number is limited due to restrictive CFU zoning and a lack of public services such as water and sewer.

The greatest potential for new commercial or industrial uses is in Burlington and in a small area along Highway 30 just south of Scappoose. Both these areas already contain commercial development, so scenic value is compromised. Both areas also are visible from only one key viewing area - Highway 30 - and are seen only briefly as travellers pass by. Jones Creek and Joy Creek flow through the Scappoose area, so would potentially be impacted by the location of new uses. "Burlington" Creek is along the southern edge of the platted Burlington community, so would not be impacted by new uses in the area.

If allowed fully, community service and conditional uses could have negative effects to stream quality, quantity and associated habitat, and contribute to a loss of aesthetic enjoyment of scenic views. If the uses were not allowed, there would be less availability of social and environmental benefits provided by some uses, and economic and energy costs to area residents to travel elsewhere to obtain the amenities provided by these services.

If the uses are allowed, but in a limited manner that requires location away from stream corridors and siting in a manner that reduces visibility from key viewing areas, the impacts to the significant resources will be minimal.

CONCLUSION: In Burlington, community service and conditional uses should be allowed

fully (subject to other zoning requirements for approval). In all other areas, uses should be allowed in a limited manner by requiring the use to meet siting standards that reduce visibility of the use from key viewing areas and prevent removal of vegetation and runoff into stream corridors.

4. Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources

Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources has been identified as a possible conflicting use only within the Angell Brothers mineral and aggregate impact area. A synopsis of the identified ESEE consequences between mining and those uses is as follows:

Consequences if Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources are not allowed

Economic: Reduction of mining operation expense

Social: Loss of habitat and passive recreation opportunities

Environmental: Reduction of environmental quality and habitat within impact area

Energy: Reduction of energy expended for environmental quality control measures

Consequences if Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources are allowed in a limited manner

Economic: No increase over existing mining expense for environmental quality control measures; reduction of possible expansion areas

Social: Provision of passive recreation opportunities

Environmental: Maintenance of resource quality and habitat areas

Energy: No increase over existing energy expended for environmental quality control measures

Consequences if Uses to Conserve Soil, Air and Water Quality and to Provide for Wildlife and Fisheries Resources are allowed fully

Economic: No, or slight, increase over existing mining expense for environmental quality control measures; reduction of possible expansion areas

Social: Provision of passive recreation opportunities

Environmental: Maintenance of resource quality and habitat areas

Energy: No increase over existing energy expended for environmental quality control measures

DISCUSSION: Any mining must be conducted under appropriate DEQ and DOGAMI operating permits that insure acceptable levels of air and water quality and provide for bank stabilization, erosion control and reclamation. The benefits of allowing uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources on surrounding properties within the impact area outweigh the burden on a mine operator of any additional regulations that might be placed on aggregate mining.

CONCLUSION: Uses to conserve soil, air and water quality and to provide for wildlife and

fisheries resources should be allowed without limitation throughout the impact area of the Angell Brothers resource site.

5. Residential Use

Identified as a conflict to Wildlife Habitat, Streams, Scenic Views and Sites, and Mining (Angell Brothers quarry). The synopsis of ESEE consequences is as follows:

Consequences if Residential Uses are not allowed:

- Economic: Lower property value, less tax revenue, protection of aggregate resource
- Social: Reduced availability of amenities, "takings" issue, loss to individuals of opportunity for "rural" lifestyle
- Environmental: Transferring environmental impacts to another site.
- Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Residential Uses are allowed in a limited manner:

- Economic: Partial loss of property value, regulatory burden, changes in customary practices
- Social: Regulatory burden, diminishment of rural uses which conflict with wildlife, reduced availability of amenities, additional complaints about mining operation impacts
- Environmental: Possible increase in erosion, drainage problems and fire hazards, possible transferring environmental impacts to another site
- Energy: Increased energy consumption in home construction to mitigate mining impacts

Consequences to Wildlife Habitat if Residential Uses are allowed fully

- Economic: Loss of indirect benefits related to quality of life and tourism
- Social: Loss of educational and passive recreational opportunities
- Environmental: Numerous negative impacts from habitat loss & diminishment
- Energy: Insignificant

Consequences to Streams if Residential Uses are fully allowed:

- Economic: Insignificant
- Social: Insignificant
- Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife
- Energy: Decreased water flow for energy use

Consequences to Scenic Views if Residential Uses are fully allowed:

- Economic: Loss of indirect benefits related to quality of life
- Social: Loss of aesthetic enjoyment
- Environmental: Less protection for fish & wildlife habitat, water & air quality
- Social: Insignificant

Consequences to Mineral & Aggregate (Angell Bros.) if Residential Uses are fully allowed (in impact area):

- Economic: Retention of property values, possible modification of mineable area and/or operational methods
- Social: More opportunity for rural homesites and lifestyle; increase in complaints regarding aspects of mining operation
- Environmental: New homes could be located in a manner that could place an aggregate operation in violation of DEQ environmental standards
- Energy: Insignificant

DISCUSSION: Residential uses represent a significant potential impact upon wildlife habitat and streams resources because areas of the West Hills where most additional homes at the greatest densities could be built -- Rural Residential zoned "exception" lands are in the midst of important wildlife habitat and significant stream areas. Almost all lands within the impact area of scenic views and sites are zoned Commercial Forest Use, and will therefore be built at very low residential densities which will have much less impact on scenic qualities. Likewise, new homes sited on lands zoned Commercial Forest Use will have a lesser impact upon wildlife habitat and streams due to the low densities of development allowed. Also, conflicts between the proposed Angell Brothers Quarry expansion and potential new residential development are fairly small because virtually all land within the proposed quarry's impact area is zoned Commercial Forest Use. It should be noted, however, that the lesser impacts upon Commercial Forest Use lands are the result of strong, controversial statewide restrictions on residential development on rural forest lands -- should these restrictions be lessened by future legislative action, the impacts of residential development on forest lands could grow significantly. Animal control requirements -- fencing of dogs and "belling" of cats, is not a proper use of zoning powers. More appropriately, Multnomah County should increase enforcement of existing animal control ordinances which require restraining of dogs, and also institute educational programs to educate pet owners as to the negative impacts their domesticated pets can have on wildlife if not properly restrained.

CONCLUSION: Clearly, there would be significant adverse consequences to Goal 5 resources if residential uses were allowed fully, and to property owners and the community if residential uses were prohibited. A balanced approach, which protects the resources while allowing residential development which minimizes impacts upon these resources, is the optimal solution for this issue.

6. Transportation/Public Improvements

Identified as a conflict to streams. The synopsis of ESEE consequences is as follows:

Consequences if Transportation/Public Improvements are not allowed:

- Economic: Increased cost of material transport, regulatory burden, changes in practices
- Social: Insignificant
- Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are allowed in a limited manner:

Economic: Increased cost of material transport, regulatory burden, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences to Streams if Transportation/Public Improvements are fully allowed:

Economic: Insignificant

Social: Loss of education & recreation associated with wildlife habitat

Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife

Energy: Decreased water flow for energy use

DISCUSSION: Transportation facilities and Public Improvements have the potential to adversely impact significant streams wherever such an existing facility is modified or a new facility is constructed within the riparian zone of the stream. The County has no regulatory authority over logging roads constructed in accordance with the Forest Practices Act, and driveways are more appropriately considered under the category of the development they are proposed to serve (residential, community service, etc.). Although no major proposed public improvements, such as utility extensions, or road widenings were identified in the West Hills, such improvements may be proposed in the future.

Transportation facilities and public improvements which are located within a stream's impact area are too vital in most cases to be prohibited in order to protect the stream. However, such facilities can generally be constructed in a manner which can minimize the impacts to streams.

CONCLUSION: Clearly, there would be significant adverse consequences to Goal 5 resources if transportation facilities and public improvements were allowed fully, and to the community if such uses were prohibited. A balanced approach, which protects the resources while allowing improvements to roads and public facilities which minimizes impacts upon these resources, is the optimal solution for this issue.

7. Mining

Mining has been identified as a conflicting use in the scenic, streams, and wildlife habitat impact areas. A synopsis of the identified ESEE consequences of mining with respect to those other uses is as follows:

Consequences if Mining is not allowed

Economic: Loss of jobs, taxes, and revenue from sales; increased cost to consumers;

loss of long-term supplies
Social: Reduced property rights; no more local sources; loss of needed construction material; increased impacts on other communities
Environmental: Insignificant
Energy: Increased energy consumption in transporting material and building infrastructure

Consequences if Mining is allowed in a limited manner

Economic: Regulatory burden, taxes, and revenue from sales; possible loss of long-term supply and increased cost.
Social: Reduced property rights, reduced local sources; possible increased impacts on other communities; less availability of needed construction material
Environmental: More stringent buffering and reclamation requirements
Energy: Some increase in energy use for transporting materials to market; less use of concrete

Consequences to Scenic Resources if Mining is allowed fully

Economic: Loss of indirect benefits related to quality of life
Social: Loss of aesthetic enjoyment
Environmental: Less protection of fish and wildlife habitat, water and air quality
Energy: Increased energy cost for individuals to drive further to other recreation sites.

Consequences to Streams if Mining is allowed fully

Economic: Insignificant
Social: Insignificant
Environmental: Loss of riparian vegetation, deterioration of water quality
Energy: Insignificant

Consequences to Wildlife Habitat Area if Mining is allowed fully

Economic: Loss of indirect benefits related to quality of life and tourism
Social: Loss of educational and passive recreation opportunities
Environmental: Numerous negative impacts from habitat loss and diminishment
Energy: Insignificant

DISCUSSION: Mining is a conflicting use that potentially could occur at many locations throughout the West Hills. The Angell Brothers site, however, is the only location in the West Hills that has been identified as being a significant mineral and aggregate site. The discussion of mining use conflicts with other identified significant Goal 5 resources, then, will be limited to the Angell Brothers resource site.

Scenic: The scenic resource analysis indicates that mining affects the scenic qualities of the West Hills through removal of the vegetative cover and modification of the landform that comprise a portion of the scenic resource. The impact of mining, however, is of much longer term. It has not been demonstrated that there are acceptable reclamation techniques available to ensure maintenance, or even restoration of scenic values after

mining. And, the location of the Angell Brother's quarry directly opposite the Sauvie Island Bridge impacts the large number of visitors to the Island.

Streams and Wetlands: The North Angell Brothers Creek has been found to be a significant stream because of its contribution of water to the Rafton/Burlington Bottoms, its provision of "essential" connections exist between fish and wildlife habitat areas on high quality upstream and low quality downstream portions of the stream, and its canopy cover and riparian vegetation which has a positive impact on water quality.

The Rafton/Burlington Bottoms and the East bank of Multnomah Channel are significant "3-C" resource areas that must continue to be protected by limiting conflicting uses, of which mining is one. Water quantity and quality flowing into Burlington Bottoms from the Angell Brother's quarry site from the "Angell Brother's North" stream must be maintained by the quarry operator pursuant to standards set by the Oregon Department of Environmental Quality. Based on the evidence presented, current technology is not sufficient to ensure maintenance of those standards as a result of quarry expansion. This site has been acquired by the Bonneville Power Administration as partial mitigation for wildlife habitat lost due to construction of the federal hydropower system. Any degradation of Burlington Bottoms will thus reduce the wildlife habitat value of this publicly owned wetland. Multnomah County has an important responsibility to see that degradation of such a regionally important wetland does not take place.

Wildlife Habitat: The wildlife habitat analysis indicates that a forest habitat would not be re-established on a mined area for at least 10 years following reclamation. That would have the long-term impact of destroying the vital connection between Forest Park and large tracts of forest land to the north and west. The analysis indicates that a minimum half-mile wide undisturbed forested habitat is necessary at any given location to allow animals to travel and seek cover in dense forests, and to compensate for edge effects that diminish wildlife habitat where forest meet clear cuts, agricultural land, roads, rural residential development, and mining operations.

The wildlife study has identified three areas of secondary wildlife habitat along McNamee Road within one-half mile of the Angell Brothers resource site. One site is south of the resource site, and the other two are to the west. Any mining expansion should preserve the minimum forest habitat of the surrounding area with respect to those secondary habitat areas.

CONCLUSION: The above discussion indicates that mining is a use that may occur only if conflicts with the scenic, streams and wetlands, and wildlife habitat resources can be balanced. The above analysis indicates that balance is not possible. The protection of scenic, wildlife and stream resources outweighs the protection of the aggregate resource. The irreversible negative impacts to the other resources which would result from any expansion of mining are far more important than the limited benefits to be gained by such expansion.

C. RESOURCE PROTECTION

1. SCENIC VIEWS OF THE WEST HILLS

a. Designated Level of Protection

The identification of conflicting uses in Chapter II showed that forestry activities, residential use, community service and conditional uses, and mining could all conflict with preservation of the scenic qualities of the West Hills if the use or structure would be visible from a key viewing area. The subsequent ESEE analysis and conflict resolution led to the conclusion that forestry activities should be allowed fully, but the other conflicting uses should be limited in manner through the use of siting, design and screening requirements. The exception would be uses within Burlington, which would be allowed fully since the area is already developed to an extent that it no longer has the same scenic appearance as the rest of the West Hills scenic resource area and is only visible from the Highway 30 key viewing area. Scenic views of the West Hills should be designated "3-C".

b. Uses Which Will Be Allowed Fully (subject to other code requirements)

Agriculture

Forestry

Uses and structures in Burlington

Any other use or structure which would not be visible from a key viewing area

c. Uses Which Will Be Allowed Conditionally (also subject to other code requirements)

Residences

Mining, excluding expansion of the Angell Brothers beyond the existing approved mining area

Any use or structure which is visible from a key viewing area, unless in Burlington

d. Program to Achieve the Goal

The Comprehensive Framework Plan must be amended to include Scenic Views of the West Hills as a significant scenic resource. An overlay zone should be applied to the resource area, and standards to protect the scenic resource need to be incorporated into the zoning code.

The attributes of the scenic resource which contribute to its significance are the existing landform, the vegetation pattern which provides a blanket of various shades of green along with colorful fall foliage, and the overall intactness and lack of development to disrupt the overall forested appearance. Zoning code standards should be developed which will allow uses but preserve scenic attributes. Applicability of standards should be based on the degree of visual impact the development would have, as seen from key viewing areas. The degree of impact would be determined after consideration of the size of the developed area that would be visible, the distance from the development to key viewing areas, the number of key viewing areas that could see the development,

and the linear distance the development could be seen from key viewing corridors such as Highway 30. Development should be exempted from complying with the standards if it would not be visible from a key viewing area because of existing topographic features. In addition, the Burlington area should be exempted because it is already developed and is visible only from Highway 30, as discussed in the previous section. Standards for protection of the scenic resource should include:

- New development should be visually subordinate - it should not noticeably contrast with the surrounding landscape as seen from a key viewing area. Development that is visually subordinate may be partially visible, but should not be visually dominant in relation to the surroundings.
- Development should be sited on portions of the property which utilize existing topography and vegetation to minimize visibility from key viewing areas.
- New development that does not require an alteration to the landform should be sited to retain the existing topography and reduce necessary grading to the maximum extent practicable.
- Existing vegetation that screens the development should be retained wherever possible.
- New vegetation should be planted to provide additional screening when any portion of new development will be visible from a key viewing area. Such trees should be primarily coniferous to provide winter screening, and species native to the West Hills such as Doug fir, grand fir, alder or white oak.
- The exterior color of structures should be natural or dark earthtone colors that blend with the forested landscape.
- Reflective building materials should not be allowed.
- Exterior lighting should be sited, hooded, or shielded so that it is not visible from key viewing areas.
- Structure height should remain below the surrounding forest canopy level.
- The silhouette of structures should remain below the skyline.
- Activities that require alterations to the landform, such as mining, should be staged so that the land area disturbed at any one time remains visually subordinate as seen from key viewing areas.
- Landform altering activities should show, prior to approval, that after reclamation the resulting landform and vegetation will be similar to and not contrast with the surrounding landscape as seen from key viewing areas.

2. SIGNIFICANT STREAMS

a. Designated Level of Protection

The designated level of protection for the Significant Streams in the West Hills area is 3.C. -- Limit Conflicting Uses.

b. Conflicting Uses to be allowed fully

Forestry/timber
Farm Use

c. Conflicting Uses to be allowed conditionally

Community Service/Commercial Uses

Wood Processing(limited, sawmills, etc.)

Wholesale/retail for farm/forest products

Playgrounds, Churches, Schools

Parks/Golf Courses

Dog Kennels

Aircraft Landing Area

Cottage Industries

Rural Service/Commercial

Other Community Service Uses

Transportation/Public Improvements

Residential Uses

Single-family Residential

Farm/Forest Worker Housing

Mining, excluding expansion of Angell Brothers beyond the existing approved mining area/Geothermal Uses

d. Conflicting Uses not allowed

None

e. Program to achieve the goal

Residential, Community Service/Commercial, and Transportation/Public Facilities

Standards for protection of stream resources should consider erosion control, native vegetation maintenance and enhancement, and fish and wildlife maintenance and enhancement for any of the conflicting uses proposed for development within the riparian zone which are designated above as uses to be allowed conditionally. This protection can best be accomplished through placement of an "overlay" zone similar in concept to the Significant Environmental Concern (SEC)-Streams overlay currently within the Multnomah County Zoning Ordinance.

The riparian zone for the West Hills has been generally measured as part of the stream survey conducted by SRI/Shapiro. The area where the SEC overlay zone should be placed is within the riparian area, defined as follows in the SRI/Shapiro Report:

"A riparian area is comprised of an aquatic ecosystem and associated upland area. Water in the aquatic system influences upland vegetation and microclimate. Upland areas affect the aquatic ecosystem by providing thermal regulation, biomass, and structure."

Since measurement of the riparian zone was very generalized in the Streams study, provisions should be made for an applicant under the SEC provisions to provide evidence as to a more precise boundary of the riparian zone on the property which meets the above-listed definition.

Specific protection measures for streams which will be used with the SEC overlay zone provisions include the following:

- Maximum provision of landscaped area, scenic and aesthetic enhancement, open space, or vegetation between any use and a stream.
- Preservation of agricultural and forest land adjacent to streams for farm and forest use.
- Building, structure, or use located so as to best preserve and protect the riparian zone area
- Minimum conflict between recreational uses and the riparian zone area
- Protection of public safety and private property from vandalism and trespass to the maximum extent practicable considering environmental values of the riparian zone
- Protection and enhancement of opportunities for fish and wildlife to live in and travel through the riparian zone
- Protection and enhancement of natural vegetation along streams
- Retention of areas of annual flooding and wetlands in their natural state
- Limit development to portions of a site located away from steep slopes, soils, and other unstable geological conditions
- Protection of areas within and adjacent to the riparian zone from erosion
- Regulation of construction practices and schedules in order to minimize erosion into streams from water runoff and soil erosion

- Minimization of impervious surface area in order to reduce pollution of stream waters
- Do not allow expansion of the Angell Brothers quarry site any further into the watershed of the "North Angell Brothers" stream than is currently approved
- Provide for a minimum setback from the ordinary high water mark of each stream which will protect the stream's resources.

As discussed earlier, agricultural and forestry activities adjacent to streams can have significant negative environmental consequences. While Multnomah County cannot (forestry on forest lands) or should not (forestry on "exception" lands, agriculture) institute zoning regulation of these uses, the County must work to ameliorate and if possible eliminate the conflicts between these uses and significant streams. As regards forestry, the County should monitor the Oregon Department of Forestry's effective enforcement of the State Forest Practices Act, and work with the Department of Forestry to adopt and implement standards which may more effectively protect significant streams. As regards agriculture, the County should work with the West Multnomah Soil and Water Conservation District to adopt and properly fund a program of education and assistance to farmers in order to better protect significant streams from the negative impacts of some agricultural practices such as livestock damage to streams, misuse of fertilizers and pesticides, and cultivation adjacent to streams which negatively impacts fish and wildlife habitat and water quality.

3. ANGELL BROTHERS AGGREGATE

- a. Designated Level of Protection: -The 114 acre currently approved for mining should remain a "3-C" designation, and the remainder of the resource site is designated "3-B". There will be no limitation of uses beyond those of the underlying zone within the "3-B" area. The following limitations apply with respect to the "3-C" area:
- b. Uses Fully Allowed – The following uses should be allowed fully in the impact area:
 - Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources
 - Exploration for mineral and aggregate resources as defined in ORS Chapter 517
 - Widening of roads within existing rights-of-way in conformance with the transportation element of acknowledged comprehensive plans including public road and highway projects as described in ORS 215.213(1)(m) through (p) and ORS 215.283(1)(k) through (n)
 - Exploration for and production of geothermal, gas, oil, and other associated hydrocarbons, including the placement and operation of compressors, separators and other

customary production equipment for an individual well adjacent to the well head
 Mining and processing of oil, gas, or other subsurface resources as defined in ORS
 Chapter 520, and not otherwise permitted under OAR 660-06-025(3)(m) (e.g., com-
 pressors, separators and storage serving multiple wells), and mining and processing
 of aggregate and mineral resources as defined in ORS Chapter 517
 Temporary asphalt and concrete batch plants as accessory uses to specific highway
 projects
 Public road and highway projects as described in ORS 215.(1,(2)(q) through (s),
 215.213(10), 215.283(2)(p) through (r) and 215.283(3)
 Forest operations or forest practices including, but not limited to, reforestation of forest
 land, road construction and maintenance, harvesting of a forest tree species, appli-
 cation of chemicals, and disposal of slash (on properties within the impact area
 other than the site itself)
 Temporary on-site structures which are auxiliary to and used during the term of a partic-
 ular forest operation (on properties within the impact area other than the site itself)
 Physical alterations to the land auxiliary to forest practices including, but not limited to,
 those made for purposes of exploration, mining, commercial gravel extraction and
 processing, landfills, dams, reservoirs, road construction or recreational facilities (on
 properties within the impact area other than the site itself)
 Farm use as defined in ORS 215.203
 Local distribution lines (e.g., electric, telephone, natural gas) and accessory equipment
 (e.g., electric distribution transformers, poles, meter cabinets, terminal boxes,
 pedestals), or equipment which provides service hookups, including water service
 hookups
 New electric transmission lines with right of way widths of up to 100 feet as specified in
 ORS 772.210. New distribution lines (e.g., gas, oil, geothermal) with rights-of-way
 50 feet or less in width
 Temporary portable facility for the primary processing of forest products
 Towers and fire stations for forest fire protection
 Water intake facilities, canals and distribution lines for farm irrigation and ponds
 Uninhabitable structures accessory to fish and wildlife enhancement
 Permanent facility for the primary processing of forest products
 Permanent logging equipment repair and storage
 Log scaling and weigh stations
 Disposal site for solid waste that has been ordered established by the Environmental
 Quality Commission under ORS 459.049, together with the equipment, facilities or
 buildings necessary for its operation
 Disposal site for solid waste approved by the governing body of a city or county or both
 and for which the Oregon Department of Environmental Quality has granted a per-
 mit under ORS 459.245, together with equipment, facilities or buildings necessary
 for its operation
 Television, microwave and radio communication facilities and transmission towers
 Fire stations for rural fire protection
 Utility facilities for the purpose of generating power
 Aids to navigation and aviation
 Cemeteries

- c. Uses Conditionally Allowed – The following uses should be conditionally in the impact area:

Forestland dwellings

Alteration, restoration or replacement of a lawfully established dwelling

A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

- d. Uses Not Allowed – The following uses should not be allowed in the impact area:

Destination resorts reviewed and approved pursuant to ORS 197.435 to ORS 197.465 and Goal 8

Residential on the resource site

Temporary forest labor camps

Caretaker residences for public parks and fish hatcheries

Private seasonal accommodations for fee hunting operations

Private accommodations for fishing occupied on a temporary basis

Water intake facilities, related treatment facilities, pumping stations, and distribution lines

Reservoirs and water impoundments

Forest management research and experimentation facilities accessory to forest operations

Private hunting and fishing operations without any lodging accommodations

Parks and campgrounds

- e. Program to Achieve the Goal

Multnomah County needs to amend its Comprehensive Framework Plan to identify the 114 acre area approved for mining as "3-C" and the remainder of the site as "3-B".

4. WILDLIFE

- a. Designated Level of Protection

The designated level of protection for the Significant Wildlife Habitat in the West Hills area is 3.C. -- Limit Conflicting Uses.

- b. Conflicting Uses to be allowed fully

Forestry/timber

Farm Use

c. Conflicting Uses to be allowed conditionally

Community Service/Conditional Uses

Wood Processing(limited, sawmills, etc.)

Wholesale/retail for farm/forest products

Campgrounds

Cemeteries

Fire Stations

Water infrastructure facilities

Utility facilities

Parks

Landfills

Hunting & Fishing lodges

Logging equipment repair and storage

Aircraft landing areas

Schools

Churches

Golf Courses

Road widening requiring additional right-of-way or building removal

Farm-related commercial activities

Dog Kennels

Group Care Facility

Cottage Industries

Rural Service/Commercial

Tourist Commercial

Other Community Service Uses

Residential Uses

Single-family Residential

Farm/Forest Worker Housing

Mining, excluding expansion of Angell Brothers beyond the existing approved mining area/Geothermal Uses

d. Conflicting Uses not allowed

None

e. Program to achieve the goal

Residential and Community Service/Conditional Uses

Standards for protection of wildlife habitat should consider various measures to ensure the maintenance and enhancement of the designated primary habitat areas as homes for various species of wildlife. Differing standards are necessary for protection of primary, secondary, and impacted wildlife habitat areas. Implementation of these standards as regards residential and community service/conditional uses should be accomplished through use of a Significant Environmental Concern (SEC) overlay zone for wildlife habitat protection.

Specific protection measures for primary wildlife habitat areas include the following:

- Where a parcel to be developed contains both primary and secondary, or primary and impacted wildlife habitat areas, development activities should be limited to the secondary or impacted areas to the maximum extent feasible.
- Fencing should be prohibited along roadways, thus reducing barriers to wildlife movement. Design standards for fences outside of the "cultivated" area discussed below should be adopted which ensure that fences do not block passage for a wide range of wildlife species.
- The "cultivated" area (*i.e.*, lawns and gardens) of residential lots in the primary habitat areas should be limited to one acre (consistent with fire safety standards), leaving the remaining land in the parcel in native vegetation, to be altered only in conjunction with approved forest management practices. This cultivated area should be designed to minimize the edge effect along roads.
- Similarly, the cleared area for community service and conditional uses should be limited to the minimum size necessary for the use, and should under no circumstances exceed two acres (consistent with fire safety standards).
- Certain introduced vegetation should be prohibited (*e.g.*, English Ivy, Vinca, and other invasive species), even in cultivated areas.
- Erosion control standards should be adopted where there will be prolonged exposure of soils, or excavation, associated with residential development.
- Development along significant streams should be regulated as proposed in the discussion of streams.

Specific protection measures for secondary and impacted wildlife habitat areas should include the following:

- Where a parcel to be developed contains both secondary and impacted wildlife habitat areas, development activities should be limited to the impacted areas to the maximum extent feasible.
- Fencing should be prohibited along roadways, thus reducing barriers to wildlife movement. Design standards for fences outside of the "cultivated" area discussed below should be adopted which ensure that fences do not block passage for a wide range of wildlife species.
- New development activities should be located on existing cleared areas of the site to the maximum extent feasible. Existing forested areas should be maintained consistent with approved forest management practices.

- Certain introduced vegetation should be prohibited (*e.g.*, English Ivy, Vinca, and other invasive species), even in cultivated areas.
- Erosion control standards should be adopted where there will be prolonged exposure of soils, or excavation, associated with residential development.
- Development along significant streams should be regulated as proposed in the discussion of streams.

In addition, it should be noted that the existing Commercial Forest Use Designation and Zoning District provides significant protection for wildlife habitat because of its severe limitations on new residential and non-forest practices type development. This protection is in part based upon state land use law, which is controversial and subject to change by legislative action in the future. Consequently, it is recommended that the Comprehensive Framework Plan include a policy for the West Hills Wildlife Forested Habitat Area which states that, should state law regarding forest lands change so as to allow more intensive non-forestry related uses on such lands, that Multnomah County would require a minimum parcel size of 38 acres (similar to the old Multiple Use Forest Zone) for new subdivision parcels in the areas within the significant wildlife habitat area designated as Commercial Forest Use lands.

5. SUMMARY

The scenic area, stream riparian areas, the 114 acre area of the Angell Brothers site approved for mining, and wildlife habitat areas are designated "3-C" and the Angell Brothers expansion area "3-B". This will provide a level of protection that recognizes and protects the attributes that make each resource significant.

The scenic area, stream riparian areas and wildlife habitat areas shall be protected through implementation of the Significant Environmental Concern (SEC) overlay zone. Specific standards to govern new development have been outlined in the previous section. These standards will be drafted into code language and reviewed by the Planning Commission and Board of County Commissioners beginning in August. The standards in many cases provide overlapping protection to the significant resources. For example, the standard to limit the size of the area cleared of native vegetation around a house also protects scenic qualities because the break in the forest cover will be limited.

These designations and proposed protection standards provide overall protection to all four of the significant resources in the West Hills. This program complies with Statewide Planning Goal 5.

#2

PLEASE PRINT LEGIBLY!

MEETING DATE

9-22-94

NAME

Susan Fry

ADDRESS

123 N.E. Littlepage Rd

STREET

Corbett

Que 97019

CITY

ZIP CODE

I WISH TO SPEAK ON AGENDA ITEM #

R-18 Hawaii Canyon

SUPPORT

Comment

OPPOSE

SUBMIT TO BOARD CLERK

#3

PLEASE PRINT LEGIBLY!

MEETING DATE 9-22-94

NAME Paul Hreibernick

ADDRESS 1200 The Bank of California Tower

STREET 707 S.W. Washington

Portland, Or 97205

CITY **ZIP CODE**

I WISH TO SPEAK ON AGENDA ITEM # 12-18

SUPPORT _____ **OPPOSE** _____

SUBMIT TO BOARD CLERK

SEP 22 1994

MEETING DATE: September 13, 1994 R-18

AGENDA NO: P-5

(Above Space for Board Clerk's Use ONLY)

AGENDA PLACEMENT FORM

C 2-94a First Reading - Howard Canyon Reconciliation Report

SUBJECT: _____

BOARD BRIEFING Date Requested: _____

Amount of Time Needed: _____

REGULAR MEETING: Date Requested: September 13, 1994

Amount of Time Needed: 30 Minutes

DEPARTMENT: DES DIVISION: Planning

CONTACT: R. Scott Pemble TELEPHONE #: 3182
BLDG/ROOM #: 412/103

PERSON(S) MAKING PRESENTATION: _____

ACTION REQUESTED:

☐ INFORMATIONAL ONLY ☐ POLICY DIRECTION ☐ APPROVAL ☐ OTHER

SUMMARY (Statement of rationale for action requested, personnel and fiscal/budgetary impacts, if applicable):

C 2-94a Adopt an Ordinance amending the Multnomah County Comprehensive Framework Plan, Volume I, to include the Howard Canyon Reconciliation Report.

First Reading

SIGNATURES REQUIRED:

ELECTED OFFICIAL: _____

OR

DEPARTMENT MANAGER: PC Betsy Willis

ALL ACCOMPANYING DOCUMENTS MUST HAVE REQUIRED SIGNATURES

Any Questions: Call the Office of the Board Clerk 248-3277/248-5222

0516C/63

6/93

BOARD OF
COUNTY COMMISSIONERS
1994 SEP - 8 AM 10:47
MULTNOMAH COUNTY
OREGON

ORDINANCE FACT SHEET

Ordinance Title: Adoption of Howard Canyon Reconciliation Report

Give a brief statement of the purpose of the ordinance (include the rationale for adoption of ordinance, description of persons benefited, other alternatives explored):

This ordinance will amend the Multnomah County Comprehensive Plan, Volume 1 Findings to include the Howard Canyon Reconciliation Report, in partial fulfillment of Periodic Review Remand Order requirements. The Remand Order required the county to complete the Statewide Planning Goal 5 process for streams and mineral and aggregate resources in the Howard Canyon area. The persons benefited will be the public in general.

What other local jurisdictions in the metropolitan area have enacted similar legislation?

Every county and city in the state is subject to compliance with Statewide Planning Goal 5. The City of Portland has a number of Environmental zones to protect Goal 5 resources within city limits.

What has been the experience in other areas with this type of legislation?

Additional regulations governing development in order to provide environmental protections.

What is the fiscal impact, if any?

There will be no fiscal impact from adoption of the Reconciliation Report, although subsequent permit requirements as part of the protection program will generate additional staff workload to process applications.

SIGNATURES

Person Filling Out Form: _____

Planning & Budget Division (if fiscal impact): _____

Department Manager/Elected Official: ESP Betty Willis

BOARD REVISIONS HOWARD CANYON RECONCILIATION REPORT

Attached are the revisions to the Howard Canyon Reconciliation that were a result of the August 9, 1994 Board decision to designate streams and the Howard Canyon aggregate site as "3-C" pursuant to Goal 5 Periodic Review Remand Order requirements. These revisions have been incorporated into the September, 1994 Howard Canyon Reconciliation Report (Exhibit A), but are printed separately here in order to facilitate review.

runoff and increase the potential for erosion unless storm water detention facilities are planned in conjunction with the improvement. Detention facilities or special designs are generally addressed on a case-by-case basis depending on the scale of the proposed development or improvement.

The three creeks in the Howard Canyon area are part of the Sandy River watershed, in turn part of the Columbia River watershed. Between 1980 and 1990, over one billion dollars were spent on efforts to restore the Columbia River salmon fishery. Habitat destruction and associated impacts on flows and water quality are important factors contributing to the salmon crisis which has only continued to escalate into the 1990's. Without question, salmon are an important economically to the Northwest. Although none of the creeks are utilized by anadromous fish (due to a natural barrier) they are tributaries to the Sandy River which is an important spawning and rearing area. Big Creek flows into the Sandy River approximately 100 yards upstream from a known spawning area for Fall chinook salmon and winter steelhead. The Sandy River is a reflection on the quality of its tributaries.

The Federal Bureau of Land Management and Oregon State Parks have estimated that up to one million people annually utilize the Sandy River for a myriad of recreational activities. This intense use creates substantial economic activity for a variety of businesses throughout the region.

MATRIX KEY

ECON 1: Negative economic impacts from reduced water quality for domestic or irrigation use or use by commercially important fish due to increased runoff, erosion, turbidity, water temperature, or pollutants

ECON 2: Negative economic impacts result from changes in water quantity that can affect availability for domestic or irrigation use due to loss of storage capacity and increased runoff.

ii. Social Consequences of Allowing Conflicting Uses

Conflicting uses adjacent to a stream may have a social impact if removal of riparian vegetation has occurred and there has been a significant loss of wildlife habitat. The social impact results in the loss of opportunities for nature study and recreational activities if vegetation and wildlife habitat are removed. Streams that flow through public parks or publicly-accessed recreation facilities have the greatest potential to be negatively affected in this manner.

Although none of the study area streams flow ~~into~~ through publicly-owned parks or recreation facilities, they do drain to the Sandy River, which flows past state parks and private recreation facilities (e.g. Camp Collins). The Sandy River is an important spawning and rearing area for salmon.

Social consequences also result from impacts on the aesthetic quality of a stream if riparian vegetation is removed and a stream is degraded. This has an overall impact on the livability of the area.

campgrounds and Parks, playgrounds or community centers owned and operated by a governmental agency or a nonprofit community organization

- A winery as described in ORS 215.452

d. Program to Achieve the Goal – OAR 660-16-010 requires, based on the determination of the economic, social, environmental and energy consequences, that a jurisdiction must "develop a program to achieve the Goal." Following is the program for protection of the Howard Canyon aggregate resource in accordance with the determination to "Limit Conflicting Uses" (3C level of resource protection).

- (i) Comprehensive Framework Plan Policy 16-B and the Zoning Code shall be amended to include items required by the LCDC Remand Order.
- (ii) Multnomah County shall amend Comprehensive Framework Plan Policy 16-B to identify the Howard Canyon aggregate resource as 3C and acknowledge the impact area identified in the ESEE Analysis as the appropriate area for regulation of conflicting uses. All of the following quarry development conditions shall also be made a part of the Plan Policy language specific to this site and shall supercede corresponding less restrictive provisions in the Zoning Code (MCC 11.15).
- (iii) A mapped plan designation and overlay zoning district "extraction zone" shall be adopted to protect the ~~actual~~ aggregate resource area that is appropriate to mine. Within this area only aggregate extraction and processing, land reclamation, farming and forestry activities would be permitted.

The extraction area for the Howard Canyon site shall be the mapped area of the aggregate resource except for the portion shown on tax lot 25, T. 1 N., R. 4 E., and tax lot 16, T. 1 S., R. 4 E., WM. Eliminating those two tax lots would provide additional buffer area to the majority of existing residences in the impact area which are located to the west of the resource, thereby reducing noise and dust impacts to those noise and dust sensitive land uses. The aggregate resource mapped on tax lots 25 and 16 is the narrowest in width and, from information supplied by the property owner, there were no test pits or drill holes on this portion of the mapped resource area verifying exact extent of the resource.

- (iv) A plan designation and overlay zoning district "impact area" ~~extending 1,200 feet~~ around the "extraction zone" shall be adopted matching the impact area in this analysis. Within the "impact area" overlay zone some future conflicting uses would not be allowed and other conflicting uses such as new homes would be required to address certain setbacks and orientation requirements so as not to cause approved mining activities within the "extraction zone" to violate State standards for noise levels, air quality, etc.
- (v) For the area of the aggregate resource site subject to an Oregon Department of Geology and Mineral Industries (DOGAMI) operational permit, Multnomah County

deems Oregon Department of Environmental Quality (DEQ) standards for noise levels, air quality, and water quality to be appropriate to protect the health, safety and welfare of citizens and to be appropriate to protect the land and water resources within the impact area. The County will request participation by DEQ and the Oregon Department of Fish and Wildlife in the review of any DOGAMI operational mining permit at this site. No mining operation shall commence without Oregon DEQ and ODF&W approval of the proposed DOGAMI permit.

(vi) Phasing. At the Conditional Use review and approval of any proposed mining plan for this site the Approval Authority shall establish conditions of phased development in the amount of aggregate extracted within certain time periods. The timing between phases and the amount of aggregate extracted are directly related to the factors listed in program requirements. (vi), (vii), and (xvi).

: All of the nearby roads and the roads serving the aggregate site are rural local roads that are inadequate in construction for certain levels of heavy truck service. [See III.B.2.b. and III.B.4.e.(vii).] The ability of the roads to safely handle certain numbers and weights of trucks will directly determine the extraction limits of each phase. The findings of the Traffic Management Plan outlined in (xvi) and subsequent review and findings of the County Engineer will be the basis for the necessary information to establish the phase limits. It should be noted that, although the operator should only fund the amount for road improvements derived in the "cost responsibility" analysis, it may be necessary to limit the number of gravel trucks (and thereby extraction levels) until full improvements are completed.

: The Oregon Department of Environmental Quality no longer contains noise enforcement staff and, therefore, before approval of an increase to the next higher extraction total it shall be demonstrated A condition of approval of a mine operation shall be a verification that DEQ noise standards are continually satisfied. Noise studies shall be periodically required. The studies shall be by an independent consultant and paid for by the mine operator. The mine operator and the Planning Director shall agree on the cost and scope of the studies and the Planning Director shall select the consultant. In the event that the Planning Director and the mine operator do not agree on the cost and scope of the studies, the Planning Director shall make this determination.

(vii) : Drainage from this hilltop aggregate site flows into Goal 5 Significant Streams which all flow into the highest rated Goal 5 Significant River, the Sandy River. Phasing of development of the aggregate site will better ensure that all storm water silt retention facilities are adequate at each rate of extraction. Therefore, before approval of an increase to the next higher extraction total it shall be demonstrated A condition of approval of a mine operation shall be a verification that DEQ water quality standards are continually satisfied. Water quality studies shall be periodically required. The studies shall be by an independent consultant and paid for by the mine operator. The mine operator and the Planning Director shall agree on the cost and scope of the studies and the Planning Director shall

select the consultant. In the event that the Planning Director and the mine operator do not agree on the cost and scope of the studies, the Planning Director shall make this determination.

- : Before approval of an increase to the next higher extraction total it shall be demonstrated that DEQ dust standards are continually satisfied. This requirement may be satisfied by the maintenance of a DEQ permit for the rock crusher and written concurrence from DEQ of compliance at all other aspects of the mining operation.
- : All aggregate mined for forest roads not on or contiguous to this site is subject to and included in the total limits placed on each phase.

(vii) Production Cap. The Approval Authority reviewing the Conditional Use application shall make a determination of an ultimate annual cap on the amount of aggregate extracted. The cap will be determined by the Traffic Management Plan in (xvi).

(viii) Multnomah County in its participation in the review of any proposed DOGAMI mining permit plan should inform the state agency of the need for special notice of mining operational methods and haul road construction at the interface of the Basalt and Troutdale formations where there may be a potential for stability problems.

(ix) All haul roads to be used as part of a DOGAMI operational permit shall be paved or treated with dust suppression emulsion to control dust.

(x) Except for aggregate extraction areas, holding ponds, and haul roads, vegetation that functions as a visual screen and retains dust should be retained. Holding ponds shall not be constructed in the stream riparian zone.

(xi) It is requested that DOGAMI delay its final decision on approval of an operating permit until Multnomah County makes an affirmative decision on any proposed conditional use application. It is the policy of Multnomah County to participate in and cooperate with DOGAMI in reviewing any such mining operation permit application.

No operation shall commence without approval of all applicable state agency permits.

(xii) All overburden stockpiles shall be stabilized from erosion as required by DOGAMI.

(xiii) Conflicts with residential uses occurring from extraction and processing activities can be lessened by restricting operating hours to reasonable weekday hours. Conflicts arising from large haul truck traffic with morning school buses and peak traffic periods on surrounding roads can also be avoided by a restriction of hours that the gravel trucks arrive at or leave the site. (conflicts attested to in public testimony at Planning Commission and Board of County Commissioners Hearings on this report). Therefore, hours and days of operation shall be more restricted than other

mining sites without such conflicts.

• Operating hours shall be restricted to the hours of 8:30 am to 5:00 pm Monday through Friday. No operation shall be allowed on Saturdays, Sundays or the following legal holidays: New Year's Day, Memorial Day, July 4, Labor Day, Thanksgiving Day, or Christmas Day. The only activities allowed at the site outside the stated operating hours would be the arrival and departure of workers in their private passenger vehicles and trucks not used for hauling aggregate. Short term exceptions to these hours and days of operation shall be pursuant to the zoning code provisions for a Temporary Permit.

• Blasting shall be restricted to the hours of 9:00 a.m. to 5:00 p.m., Monday through Friday. No blasting shall occur on Saturdays, Sundays, or the following legal holidays: New Year's Day, Memorial Day, July 4, Labor Day, Thanksgiving Day, or Christmas Day. Notice of blasting events shall be given by the mining operator to all residents within the impact area in a manner that will ensure receipt of the notice at least 48 hours prior to the blasting event. Notice of blasting events shall also be posted by the mining operator at the Corbett Post Office at least 48 hours in advance.

(xiv) Noise deflecting berms and vegetative screening are features that are encouraged to be incorporated into the DOGAMI reviewed operational plan.

(xv) Reclamation of the site should be done in a manner to ensure the establishment of either forestry at Oregon Department of Forestry forest practices standards or the establishment of accepted farm practices.

(xvi) Traffic Management Plan. In recognition of the inadequacy of Howard, Knieriem, Littlepage and possibly other nearby roads for certain levels of heavy truck service [see III.B.2.b. and III.B.4.e.(vii)], it shall be a requirement of a conditional use review of any mining operation that an applicant submit the following as part of the proposed application:

1. A traffic management plan for normal operating conditions; and
2. A traffic management plan for extraordinary demands for aggregate and other rock materials supplied to a single site, such as a large public works project.

The Traffic Management Plan shall be submitted to the County Engineer. Then, Pursuant to County policy procedures in MCC 11.60 and related Administrative Rules, the County Engineer will stipulate the mine operator's fair share of the costs for improvements to Howard, Knieriem, Littlepage and other roads which will be impacted by heavy truck traffic as identified in any approved traffic management plans and cost responsibility analysis. The County Engineer will also stipulate a timeline for payments for road improvements and a timeline for number and weight of trucks to be allowed at specific levels of road improvement.

The Traffic Management Plan shall contain the following components as compiled by Multnomah County Transportation Division staff:

"I. Subject to the County Engineer's review and approval, hire a consulting engineer, licensed in the State of Oregon, independent of the applicant or operator, acceptable to the Transportation Division and acting under its general supervision, conduct studies, analyses, and evaluations, perform engineering and design work, and prepare preliminary and final reports in conformance with generally accepted engineering principles and practices and the requirements, guidelines, methods, and procedures contained in the latest issues of the following publications:

- A. Multnomah County Department of Environmental Services Rules for Street Standards
- B. AASHTO Policy on Geometric Design of Highways and Streets
- C. AASHTO Guide for Design of Pavement Structures
- D. AASHTO Standard Specifications for Highway Bridges and Manual for Maintenance Inspections of Bridges
- E. AASHTO Guide for the Development of Bicycle Facilities
- E. ODOT Standard Specifications for Highway Construction
- G. FHWA and OR Supplement Manual on Uniform Traffic Control Devices

II. The consultant shall perform the following studies and produce preliminary and final engineering, design, and economy reports that show the results of data collection, provide roadway system characteristics, information, and factors, analyze and evaluate the effects of the proposed resource development on County Roads, and identify recommended improvements and relative cost responsibilities to accommodate local and resource development traffic. The report outline below is considered a guide; revisions to the plan may be necessary. The reports will be submitted to the County Engineer for review and approval. At a minimum, the reports must have the following components:

- A. Traffic Study Section
 - 1. Collect field data of existing traffic conditions;
 - 2. Provide physical and operating characteristics of vehicles attending the resource development;
 - 3. Provide traffic volumes forecasted by the resource development for each stage of expansion;
 - 4. Identify roadways, bikeways, and walkways impacted by resource development traffic;
 - 5. Identify and map resource development vehicular haul routes east of the Sandy River; and

6. Provide other information as determined and directed by the Transportation Division.

B. Operational Study Section

1. Collect field data of existing geometric and traffic control conditions for roadways, bikeways, and walkways;
2. Analyze and evaluate the effect of resource development traffic on the safety of roadway, bikeway, and walkway users;
3. Analyze and evaluate the adequacy of existing roadway, and bridge geometries to accommodate resource development traffic; and
4. Provide other information as determined and directed by the Transportation Division.

C. Pavement and Other Structures Study Section

1. Collect field data of existing structure conditions and perform a condition survey of pavement, bridge, and culvert structures on roadways identified as haul routes;
2. Perform survey and testing of pavement deflections on roadways identified as haul routes using non-destructive methods;
3. Analyze and evaluate the structural adequacy of existing roadways, culverts, and bridges;
4. Analyze and evaluate the effects of resource development traffic on the structural adequacy of existing roadways, culverts, and bridges; and
5. Provide other analyses and evaluations as determined and directed by the Transportation Division.

D. System Condition Conclusions and Improvement Alternatives Analysis Section

1. Provide assessment of the adequacy of existing roadways and structures to accommodate traffic for the life of the proposed resource development ignoring the effects of resource development traffic;
2. Identify limitations of the existing roadways, culverts, and bridges to accommodate resource development traffic for each stage of development expansion including startup;
3. Identify and provide alternatives analysis of roadway geometry and traffic control changes for safety improvements where necessitated by the physical and operating characteristics of the proposed resource development traffic;
4. Identify and provide alternatives analysis of measures to strengthen and/or rehabilitate pavements, culverts, and bridges to adequately withstand the stress repetition loading and other detrimental effects of resource development traffic; and
5. Provide other assessments and recommendations as deter-

mined and directed by the Transportation Division.

E. Economy/Cost Responsibility Study Section

1. Provide cost estimates to rehabilitate existing roadways for the life of the proposed development ignoring the effects of resource development traffic;
2. Determine and provide cost estimates of alternatives provided in Section D-3 above with respect to each stage of development expansion, considering and accommodating resource development traffic for the expected life of the proposed development;
3. Determine and provide cost estimates of alternatives provided in Section D-4 above with respect to each stage of development expansion, considering and accommodating resource development traffic for the expected life of the proposed development;
4. Provide other cost estimates as determined and directed by the Transportation Division."

3. CONCLUSION

- a. The aggregate resource at the Howard Canyon site is being designated to be protected for future aggregate expansion, subject to the limitations set forth above in subsection 2 of section C, Chapter IV. These limitations include 1) prohibition of certain conflicting uses on the aggregate site itself, 2) requiring construction of new noise sensitive uses within the "impact area" (1200 feet around the "extraction zone") to demonstrate that they will not conflict with mining operations to extract the aggregate resource, 3) determination at conditional use review of any mining operation application of an appropriate phasing of annual extraction amounts using attainment and maintenance of certain noise, water quality, and dust standards and the findings of a Traffic Management Plan as the basis for the phasing amounts on-going demonstration by the mining operator (with independent validation) that Oregon Department of Environmental Quality (DEQ) standards regarding noise levels, air quality, and water quality are maintained, and 4) various other standards.
- b. The three significant streams in the Howard Canyon area which would be affected by the Howard Canyon quarry operation are being designated to be protected from degradation, subject to the conditions set forth above in subsection 1 of section C, Chapter IV. These limitations involve regulating conflicting uses in the riparian zone of the stream in order to maintain and enhance stream and stream bank economic, educational, public safety, recreational, and fish & wildlife habitat values.
- c. In weighing the relative merits of the Howard Canyon quarry aggregate resource and the streams resources, the Program to Achieve the Goal would protect both resources. The potential impacts to streams from the quarry site would be eliminated by the protection measures, which include 1) verification that DEQ standards relating to water quality which protect the health, safety and welfare of Oregonians are met for mine

runoff into the streams, and 2) prohibition of holding pond construction (holding ponds are used to reduce pollutants from mine runoff to acceptable levels) within the riparian zone of either Knieriem or Howard Canyon Creeks.

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September 13, 1994

OUR FILE NUMBER
S152

HAND-DELIVERED

Honorable Beverly Stein, Chair
Multnomah County Board of Commissioners
602 Multnomah County Courthouse
1021 S.W. Fourth Avenue
Portland, OR 97201

Reference: Board Revisions to Howard Canyon
Reconciliation Report

Dear Chair Stein and Members of the Board:

We have briefly reviewed the proposed Board revisions to the Reconciliation Report and have the following comments:

1. Page II-15, Sandy River/Salmonid Consideration. As noted in the record, there are no expected offsite sedimentation flows or impacts which will reach any of the creeks in the area from the Howard Canyon quarry. A site visit by both DOGAMI and DEQ reclamation of storm water personnel indicated that offsite sedimentation is highly unlikely, and in the event there was a threat of such offsite sedimentation, there are substantial flat areas in which sedimentation ponds may be constructed. Because the evidence demonstrates that there will be no expected effect, we believe it is appropriate to add additional language to the Reconciliation Report that indicate that no adverse effects are expected.

2. Removal of Tax Lots 25 and 16. The Commission has reduced the size of the Howard Canyon quarry by eliminating bigger resources shown on tax lots 25 and 16. We understand the Board's concern about these areas being closest to existing residences. However, the proposed extraction plan would protect existing residences that are closest to tax lots 16 and 25. We feel that these two tax lots should be retained because the evidence in the record demonstrates that there are no conflicts

Honorable Beverly Stein, Chair
September 13, 1994 - Page 2

which cannot be resolved between the conflicting residential and mining uses.

In the event the Board chooses to remove tax lots 16 and 25 from the protected area, the impact area must be recalculated. Specifically, the 1,200-foot impact area needs to be moved to the east, a distance equal to the east/west width of tax lots 16 and 25. We note that this would remove Big Creek from the impact area, as well as many of the houses that are presently shown in the impact area. The county should not change the protected resource area without revising its analysis of the impact area and conflicting uses as the county's existing analysis relied on the resource and impact areas, as designated. If the Board chooses to reduce the size of the site, it should re-identify conflicts and reanalyze the ESEE consequences in order to comply with the Goal 5 requirements.

3. Page IV-22. The final change in the last sentence of the first paragraph should be changed to read:

"No nonexempt mining operation shall commence without Oregon DEQ and ODF&W approval plus the proposed DOGAMI permit."

This language would recognize the county's existing exemption provision and eliminate any ambiguity about existing sites and the DOGAMI exemption permit.

4. Traffic Considerations, IV-22-27. In general, the county has used these revisions to do what DLCD, LCDC and the Oregon Court of Appeals has told the county that it may not do in the Goal 5 process: Expand the impact area to include the entire east county road system. The county's previous attempt to do this was specifically argued and rejected by the Court of Appeals in the *Friends of Forest Park* litigation (appeal of LCDC's rejection of the county's previous work concerning impact areas). In essence, the revised language requested by the Board expands its impact areas to include all "other roads" which may be impacted by heavy truck traffic. This position is no different from the position previously taken by the county and previously rejected by LCDC and the courts.

Additionally, the county road conditions are so onerous that they are a pretext for denial of protection to Goal 5 mineral and aggregate resources. The traffic management plan is so detailed and so extensive that it essentially requires one

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use, the Howard Canyon Goal 5 mineral and aggregate resource, to bear the entire cost of the county's road planning efforts in the east county area. Not only is the operator expected to open up its checkbook to a consultant to be selected and approved by the county, the consultant must work under the supervision of the county and must address more than seven specific ASHTO, state, and local highway standards. The end study is required to contain both preliminary engineering designs and final engineering designs for all the roads in the entire east county area that could potentially be affected by the proposed use. The cost of this study, as outlined in the Board's revisions, will probably exceed \$250,000 and will provide the county with a complete blueprint for improvement of the entire road system in the east county area. The cost of the study will be several times the actual and expected gross annual receipts for the quarry. The county is planning a trompe l'oeil denial using the traffic safety brush. By any standard, this is simply a pretext for denial for protection of the Goal 5 mineral and aggregate resource. If protected under Goal 5, mineral and aggregate resources must be protected for economic use, not some esoteric concept of future use unrelated to economic reality. This rule is followed by LCDC, LUBA and, in the *Eckis v. Linn County* case, the Court of Appeals. By removing any economic ability to use the resource through onerous traffic conditions, the county simply denies protection of the resource.

While carefully attempting to maintain proportionality so as to avoid "taking" issues, the county in fact stumbles right into a taking situation by requiring, as a condition of application, conditions so onerous and so unrelated to the effects of the quarry that proportionality is destroyed. This is particularly true when the trucks involved already pay substantial weight/mile taxes, a portion of which are remitted to the county road fund.

In addition, the study requires a complicated, and expensive, analysis which has already been done by the county (e.g., survey of bridge and culvert structures in the area; survey of general road structural adequacy). The study is also not required to address the evidence in the record that gravel is already coming into the east county area (on county roads) from sources outside the county. These existing gravel truck uses must be specifically addressed in any study.

Mr. Smith has consistently stated his willingness to assist the county in road maintenance issues. More than four

Honorable Beverly Stein, Chair
September 13, 1994 - Page 4

years ago, he indicated that he would be willing to pave Howard Canyon Road, the primary traffic corridor. The county has established much more lofty requirements for this small business that the Board must know cannot economically be borne by the business. The result is a denial of protection for the resource. One use should not be responsible for all the county's regional road planning issues. It is that simple.

The County Board of Commissioners is treating the rural road system in eastern Multnomah County as though they were an urban system. The county assumes that the east county roads were developed to serve mobile and bicycle traffic. In reality, east county roads are a series of farm-to-market and forest roads, not recreational roads. They clearly have limits. All of the residents in the area recognize those limits and live with them on a daily basis. To require that one use shall be solely responsible for identifying, qualifying and eliminating those limitations in the county road system is simply unjust and incorrect. Log trucks use the road, but the county makes no effort to review the traffic impacts of timber harvesting in the area. Farm-to-market trucks have effects on the road system, and again, the county makes no provision to assess road impacts to these uses. Tour buses going through the Columbia Gorge have similar impacts. Finally, the record shows that existing gravel trucks coming from existing sources outside the area use the roads in the area and have the same effects. The county has made no efforts to assess the traffic impacts of these uses and require traffic studies from those operators. Instead, the county chooses to disproportionately single out a Goal 5 resource for an extremely onerous traffic planning project that the county should be undertaking as part of its responsibility to the citizens of Marion County.

We are concerned that the "ultimate annual cap" discussed in the revisions, as well as the traffic requirements discussed in the revisions, are not clear and objective standards that are in conformance with the Goal 5 rule.

We are concerned that the traffic conditions imposed by the county are not related to concerns identified in the county's ESEE analysis. There is further concern in this matter the cart is pushing the horse. Mr. Smith wants a small quarry but the road impact study assumes that there will be a big quarry. The size of the traffic study should be proportional to the size of the proposed quarry. We are concerned that there has been no budget for this traffic study. Presently, the budget is

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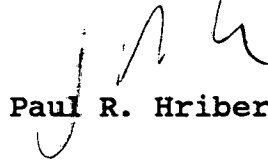
Honorable Beverly Stein, Chair
September 13, 1994 - Page 5

limitless and may involve unrealistic six-figure expenditures. The study is not a clear and objective requirement which allows the property owner to determine what use and activities are allowed. If the study is a full-blown \$250,000 study, the small Howard Canyon quarry use is not allowed. If the county pays for the study, or there is a small budget assigned to the study, the use may be allowed. Goal 5 requires this should be resolved clearly and objectively.

Finally, we are concerned that the operating hours beginning at 8:30 a.m. are not sufficient to allow material to be brought to job sites in the area, particularly during the summer months when contractors generally choose to begin work early.

Thank you for the opportunity to comment and we will see you in court.

Very truly yours,



Paul R. Hribernick

PRH:vc
S152\PRH42

cc: Mr. Raymond Smith



MULTNOMAH COUNTY OREGON

DEPARTMENT OF ENVIRONMENTAL SERVICES
DIVISION OF PLANNING
AND DEVELOPMENT
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BOARD OF COUNTY COMMISSIONERS
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TANYA COLLIER • DISTRICT 3 COMMISSIONER
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September 22, 1994

TO: Board of County Commissioners

FROM: Planning Staff *David H. Hansen*

SUBJECT: Howard Canyon Reconciliation Report Issues raised by Paul Hribernick

BOARD OF
COUNTY COMMISSIONERS
1994 SEP 21 AM 10:08
MULTNOMAH COUNTY
OREGON

At the 1st Reading of the Ordinance adopting the Howard Canyon Reconciliation Report there was submitted a letter and testimony given by Paul Hribernick, representing the Howard Canyon aggregate property owner. Five issues were raised by Mr. Hribernick. Responses to those concerns follow with some staff suggested changes to the Reconciliation Report.

1. Page II-15, Sandy River/Salmonid Consideration. Staff sees no reason to add suggested additional language in chapter II that "no adverse effects are expected" from mining the Howard Canyon aggregate resource. The importance of Salmon in the Sandy River, as given in this section of the report, is applicable to the economic consequences of allowing all conflicting uses, not just mining. The finding that mining is not expected to affect the stream resources, if DEQ standards are met for the control of soil erosion and dust entering the streams, is specifically addressed later in Chapter III (pages 32&33) and Chapter IV (page 12).
2. Page IV-21, Removal of Tax Lots 25 and 16 [IV.C.2.d.(iii)&(iv)]. The mapped aggregate resource and the impact area of the ESEE Analysis is the appropriate area of analysis in determining conflicting uses and all other requirements of the Goal 5 Rule. The result of the ESEE Analysis was the determination that the aggregate resource was "3-C, Limit Conflicting Uses". This designation is a decision that both the resource and the conflicting uses are important relative to each other and the program to achieve the goal includes methods to balance and mitigate conflicts. Department of Land Conservation and Development staff and Multnomah County Counsel have confirmed that removal of a portion of the site from potential extraction to mitigate conflicts is a valid program tool in implementing a "3-C, Limit Conflicting Uses" decision.

This does not require redoing the ESEE Analysis based upon the reduced extraction area. However, staff does agree that the future overlay zoning district around the extraction area, (in which land uses which conflict with mining activities are regulated), should be adjusted

accordingly. The drafting of a new map for the Reconciliation Report is not necessary as the action can be described adequately and then it will later be drawn onto the County Zoning Maps. The recommended language change is as follows:

- (iii) A mapped plan designation and overlay zoning district "extraction zone" shall be adopted to protect the aggregate resource area that is appropriate to mine. Within this area only aggregate extraction and processing, land reclamation, farming and forestry activities would be permitted.

The extraction area for the Howard Canyon site shall be the mapped area of the aggregate resource except for the portion shown on tax lot 25, T. 1 N., R. 4 E., and tax lot 16, T. 1 S., R. 4 E., WM. Eliminating those two tax lots would provide additional buffer area to the majority of existing residences in the impact area which are located to the west of the resource, thereby reducing noise and dust impacts to those noise and dust sensitive land uses. The aggregate resource mapped on tax lots 25 and 16 is the narrowest in width and, from information supplied by the property owner, there were no test pits or drill holes on this portion of the mapped resource area verifying exact extent of the resource.

- (iv) A plan designation and overlay zoning district "impact area" extending 1,200 feet around the "extraction zone" shall be adopted ~~matching the impact area in this analysis~~. Within the "impact area" overlay zone some future conflicting uses would not be allowed and other conflicting uses such as new homes would be required to address certain setbacks and orientation requirements so as not to cause approved mining activities within the "extraction zone" to violate State standards for noise levels, air quality, etc.
3. Pages IV-21&22, Exempt mining [IV.C.2.d.(v)]. The suggestion is made to add the word "nonexempt" in the last sentence to make it clear that until all required approvals are obtained to start a larger scale DOGAMI operating permit that the present DOGAMI limited exempt permit activities can continue. This was also the intent of the original wording and the change is recommended.
- (v) For the area of the aggregate resource site subject to an Oregon Department of Geology and Mineral Industries (DOGAMI) operational permit, Multnomah County deems Oregon Department of Environmental Quality (DEQ) standards for noise levels, air quality, and water quality to be appropriate to protect the health, safety and welfare of citizens and to be appropriate to protect the land and water resources within the impact area. The County will request participation by DEQ and the Oregon Department of Fish and Wildlife in the review of any DOGAMI operational mining permit at this site. No nonexempt mining operation shall commence without Oregon DEQ and ODF&W approval of the proposed DOGAMI permit.

4. Pages IV-23 to 24, Operating Hours [IV.C.2.d.(xiii)]. The concern of the property owner is that: (1) the 8:30 a.m. starting time does not allow material to be brought to job sites that start construction earlier in the morning, (2) the prohibition of Saturday operation prevents many people who work weekdays from easily obtaining needed aggregate, and (3) there may be a need for Saturday hours in order to provide aggregate material for unusual or special projects. County staff discussed a potential meeting between the applicant and members of an East County Community/Interest Group, but a representative of the latter indicated that they were satisfied with the current staff-recommended hours of operation, and did not wish to discuss a modification of those hours. The Board will need to make a final determination on this issue based upon the relative merits of each side.
5. Pages IV-24 to 27, Traffic Management Plan [IV.C.2.d.(xvi)]. Mr. Chuck Henley from the County Transportation Division will be available at the 2nd Reading to answer questions from the Board regarding the contents and rough cost estimates of completing a Traffic Management Plan as outlined in the Reconciliation Report.

1 BEFORE THE BOARD OF COUNTY COMMISSIONERS

2 FOR MULTNOMAH COUNTY, OREGON

3 ORDINANCE NO. 798

4
5 An Ordinance amending the Comprehensive Framework Plan Volume 1 Findings to
6 include the Howard Canyon Reconciliation Report, as revised by the Board, in partial fulfill-
7 ment of Periodic Review Work Program tasks for Statewide Planning Goal 5 resources in the
8 Howard Canyon area.

9
10 Multnomah County Ordains as follows:

11
12 Section I. Findings.

13
14 (A). Periodic Review Remand Order 93-RA-876 required Multnomah County to com-
15 plete additional work related to Statewide Planning Goal 5 resources in the Howard Canyon
16 area.

17
18 (B). On March 9, 1994, the Land Conservation and Development Commission
19 approved the county's Work Program (WKPROG - 0038) which indicated work tasks that must
20 be completed to fulfill the requirements of the Remand Order.

21
22 (C). In accordance with WKPROG - 0038, the Howard Canyon Reconciliation Report
23 contains findings and reaches the conclusion that the subject three streams and aggregate
24 resource are significant Goal 5 resources and the appropriate level of protection for each
25 resource is "3-C" (allow conflicting uses in a limited manner that will give some protection to
26 the resource).

1 (D). Notice and the opportunity for public comment were provided at several steps dur-
2 ing the writing of the Howard Canyon Reconciliation Report. A review and comment period
3 on significance reports was provided from March 11 - March 21, 1994 and March 28 - April 5,
4 1994; on resource analysis reports from April 11 - April 25, 1994; and on the completed Rec-
5 onciliation Report from May 23 until June 20, 1994. Additional explanation of the process uti-
6 lized in completing the Reconciliation Report and information on opportunities for submitting
7 oral and written testimony was presented at a North East Multnomah County Community
8 Association meeting on May 25, 1994 in the Rural Center of Corbett.

9
10 (E). A joint public hearing with the Planning Commission and Board of County Com-
11 missioners was conducted on June 13, 1994, to consider oral and written testimony on the
12 Howard Canyon Reconciliation Report.

13
14 (F). The Planning Commission, after deliberation on June 21 and June 27, 1994 recom-
15 mended that the Howard Canyon Reconciliation Report with Addenda be adopted by the Board
16 of County Commissioners.

17
18 (G). On July 26, 1994, the Board conducted a *de novo* publichearing on appeal of the
19 Planning Commission recommendation. After deliberation on August 9, 1994, the Board
20 adopted the Howard Canyon Reconciliation Report as recommended by the Planning Commis-
21 sion with changes, principally to the "Programs to Acheive the Goal" in Chapter IV.

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Section II. Amendments

Multnomah County Comprehensive Framework Plan Volume 1 Findings is hereby amended to include the Howard Canyon Reconciliation Report attached hereto as Exhibit A.

ADOPTED THIS 22nd day of September, 1994, being the date of its 2nd reading before the Board of County Commissioners of Multnomah County.



By Beverly Stein
Beverly Stein, County Chair
MULTNOMAH COUNTY, OREGON

REVIEWED:

John DuBay
John DuBay, Deputy County Counsel
of Multnomah County, Oregon



EXHIBIT "A"

Howard Canyon
Reconciliation Report
(September, 1994)

Amendment to Multnomah County
Comprehensive Framework Plan
Volume One: FINDINGS

Prepared by:
Multnomah County
Planning Division

TABLE OF CONTENTS

I. INTRODUCTION	I-1
II. STREAM RESOURCES	II-1
A. Significance Determination	II-3
B. Resource Analysis	II-8
C. Appendix	II-29
IV. HOWARD CANYON AGGREGATE SITE	III-1
A. Significance Determination	III-3
B. Resource Analysis	III-9
C. Appendix	III-47
VI. CONFLICT RESOLUTION and PROTECTION	IV-1
A. Introduction	IV-3
B. Conflict Resolution	IV-5
C. Protection of Resources	IV-13

CHAPTER I

INTRODUCTION

ORS 197.628 requires cities and counties to review their comprehensive plans and land use regulations periodically and make changes necessary to keep plans and regulations up-to-date and in compliance with the statewide planning goals. If plans are found to be out-dated or not in compliance with statewide planning goals, local governments must adopt findings and enact measures to make their plan and regulations current.

On October 30, 1980, the Land Conservation and Development Commission acknowledged the Multnomah County Comprehensive Framework Plan and land use regulations to be in compliance with the statewide planning goals. Approximately seven years later, on August 27, 1987, the Department of Land Conservation and Development (DLCD) notified the county of requirements under the periodic review and initiated a periodic review process with the county. On February 22, 1989, Multnomah County submitted its proposed periodic review order to the DLCD, and the department subsequently directed the county to complete additional work on two aggregate sites. The additional work was completed and conveyed to the DLCD on June 27, 1990.

The Land Conservation and Development Commission on April 23, 1993 determined additional Goal 5 work needed to be completed on several aggregate sites, streams and West Hills wildlife and scenic views (Remand Order 93-RA-876). This Remand Order required Multnomah County to complete work by October 29, 1993. Several extensions have been granted by the Land Conservation and Development Commission, in part because additional work on streams needed to be completed which had not been anticipated in the Remand Order.

The revised work program requires Multnomah County to complete a Goal 5 planning process that concludes with the adoption of "Reconciliation Reports" and protection measures which resolve (reconcile) stream, wildlife, scenic views and mineral/aggregate resource issues. Two "Reconciliation Reports" have been prepared, one for the West Hills rural area and the other for the east rural county area in the vicinity of Howard Canyon. The "West Hills Reconciliation Report" and the "Howard Canyon Area Reconciliation Report" focus on different Goal 5 issues.

Four Goal 5 resource issues exist in the rural West Hills of the county and two Goal 5 resource issues are analyzed in the Howard Canyon area. West Hills Goal 5 resource issues which are analyzed include wildlife, scenic views, streams and the Angell Brothers aggregate site. In the Howard Canyon area, three streams within the Howard Canyon drainage and the Howard Canyon aggregate site are the subject of the Reconciliation Report.

In general, the Reconciliation Reports record the County's effort to complete the Goal 5 process as outlined in OAR 660-16-000. The rule requires local governments to analyze the significance of Goal 5 resources, and, if deemed significant (designated "1-C"), determine the appropriate level of protection ("3-A", "3-B", and "3-C") and provide protection strategies. The process includes a number of steps intended to provide the basis for establishing a rationale for deciding which resources should be protected and what types of protection are required.

Specifically, the Goal 5 process begins with the local government determining significance based on an analysis of location, quality, and quantity. The local government is required to use the best available information to make determinations throughout the Goal 5 process. If the resource is deemed "significant" it is designated "1-C" and the process continues. Conversely, the process is concluded if the resource is determined to not be significant and designated "1-A". Significant resources must then be analyzed to determine the appropriate level of protection when compared to other resources and conflicting uses. This analysis compares the **E**conomic, **S**ocial, **E**nvironmental, and **E**nergy consequences of protecting the entire resource as compared to allowing conflicts to exist. This analysis is commonly referred to as the ESEE analysis. The last step in the Goal 5 process is the determination of the level of protection based on the rationale provided by the the ESEE analysis. At this final step, local governments are required to identify the "uses" that will be allowed on the resource site and vicinity, and explain programs deemed necessary to protect the resource.

The "Reconciliation Report" is organized in a manner that follows the Goal 5 process. The report consists of two major parts: "Resource" chapters for each Goal 5 resource under review (*i.e.*, streams, scenic view, wildlife, mineral/aggregate), followed by the "Conflict Resolution and Protection Program" chapter. Each "resource" chapter is broken down into three subsections. Subsection "A" explains the "significance" determination and includes a discussion of "location", "quantity", and "quality". Subsection "B" contains the ESEE analysis, including a description and rationale for the "Impact Area" and a listing and description of conflicting uses. Subsection "C" contains the appendixes, which include technical background information.

The last chapter of the "Reconciliation Report" is the "Conflict Resolution and Protection Program". This chapter reconciles conflicts between each Goal 5 resource and other uses and/or other Goal 5 resources. The chapter also reaches conclusions concerning the appropriate level of protection and suggests specific protection strategies. Subsection "B" discusses previously identified ESEE consequences for each conflicting use and reconciles any differences to reach conclusions concerning whether conflicting uses should be allowed. Subsection "C", "Resource Protection", determines the level of protection and dis-

cusses a protection program for each of the Goal 5 resources.

During the preparation of this report, numerous opportunities for public review and comment were provided. Determinations of significance for mineral & aggregate resources (both Angell Brothers and Howard Canyon), scenic views, and wildlife habitat were distributed for public review and comment from March 11 through March 21, 1994. All of these determinations of significance were reaffirmations of previous decisions made by the Multnomah County Board of Commissioners (Howard Canyon quarry - 1990, Angell Brothers quarry - 1992, scenic views and wildlife habitat - 1993). Determinations of significance for West Hills streams in the vicinity of the Angell Brothers quarry and Howard Canyon streams were distributed for public review and comment from March 28 through April 5, 1994. Determination of significance for the remainder of West Hills streams was distributed for public review and comment from April 28 through May 11, 1994.

A review and comment period for all of the resource analysis sections (conflicting uses, impact area, ESEE analysis) except for West Hills streams outside of the Angell Brothers quarry area was provided from April 11 through April 25, 1994. The resource analysis section for the remainder of the West Hills streams was available for public review and comment from April 28 through May 11, 1994.

A draft of this "Reconciliation Report" was completed by the Multnomah County Division of Planning on May 23, 1994. This draft was the subject of three weeks of public review, culminating in a joint public hearing of the Multnomah County Planning Commission and Board of Commissioners on June 13, 1994. Additional written comment was received until June 20, 1994. On June 21, 1994, the Multnomah County Planning Commission deliberated upon the draft "Reconciliation Report" and approved it with minor changes. This approval was appealed by two parties to the Board of Commissioners, which then held a public hearing on the draft "Reconciliation Report" on July 26, 1994. On August 9, 1994, the Board of Commissioners made a tentative decision to approve the "Reconciliation Report" with amendments, and directed Planning Division staff to return on September 13, 1994 with a revised final "Reconciliation Report." On September 13, 1994, the Board of Commissioners adopted an ordinance approving the final "Reconciliation Report," which had its second reading on September 22, 1994.

The "Reconciliation Report" is considered an amendment to the Multnomah Comprehensive Framework Plan. The "Reconciliation Reports" include both findings and policy recommendations. Policy recommendations will be incorporated into the Comprehensive Framework Plan by separate actions by the Multnomah County Planning Commission and Board of County Commissioners pursuant to the Multnomah County Code and state statutes. Also, some subsequent Planning Commission and Board actions may be required to implement the full set of strategies outlined in the protection programs.

The "Reconciliation Report" is intended to satisfy in part the requirements of the Land Conservation and Development Commission's Remand Order 93-RA-876 and satisfies all other statewide goal requirements of the county's work program approved by the Commission, WKPROG - 0038.

CHAPTER II

HOWARD CANYON STREAM RESOURCES

C 6-94

CHAPTER II TABLE OF CONTENTS

A. Significance Determination	page
1. Background	II-3
2. Location	II-3
3. Quantity	II-4
4. Quality	II-5
5. Conclusion	II-6
B. Resource Analysis	
1. Introduction	II-8
2. Description of Resource	II-8
3. Impact Areas	II-9
4. Conflicting Use Analysis	II-10
5. ESEE Analysis	II-14
6. Summary	II-25
Appendix	
Appendix A: Inventory/Significance Analysis	II-28
Map of Howard Canyon Area Streams	II-54
Matrices	
Matrix 1: ESEE Consequences – Allowing Conflicting Uses	II-18
Matrix 2: ESEE Consequences – Prohibiting Conflicting Uses	II-23

A. SIGNIFICANCE DETERMINATION

1. BACKGROUND

Multnomah County's Periodic Review Order was reviewed by the Land Conservation & Development Commission on April 23, 1993 (Remand Order 93-RA-876). Among the actions of the Commission was a finding that the Multnomah County Comprehensive Plan and land use regulations for significant streams do not comply with Goal 5 of the Oregon Statewide Planning Program and Oregon Administrative Rules (OAR) 660, Division 16, which implements the Statewide Planning Program. The Remand Order stated that the County must amend the comprehensive plan to map or identify significant streams.

To complete this work, the County must conduct an inventory of streams in order to determine which are significant. The procedure for determining significance is stated in OAR 660-16-000 (1) through (5). The rule directs the local government to determine whether there is sufficient information on the location, quality, and quantity of the resource at a particular site. The County has determined that the most efficient way to complete this work for the entire County is to conduct stream inventories concurrently with the Rural Area Planning Program, by which rural area plans will be adopted for the entire rural Multnomah County between now and 1998. The Howard Canyon Stream inventory is being completed at this time because of the need to analyze the significance of streams which may be impacted by the Howard Canyon quarry site.

This significance chapter is the second of two documents completed to date which discuss significance of streams in Multnomah County per the Remand Order. The first of these documents, Multnomah County Ordinance # 784, amends the Multnomah County Comprehensive Plan to provide specific criteria for judging the significance of streams, and adopts a map of streams which have already been determined to be significant pursuant to the criteria.

This significance chapter covers three streams in the Howard Canyon area of Corbett, Big Creek, Howard Canyon Creek, and Knierem Creek. Significance reports on these streams have been completed at this time because of their relevance to the issue of mineral and aggregate resources pursuant to the Howard Canyon Quarry site. Significance reports on the remainder of the streams in the eastern, rural unincorporated portions of the County will be completed as part of the preparation of Rural Area Plans for these areas over the next four years.

2. LOCATION

The three streams surveyed are located east of the Sandy River and approximately one-half to two miles south and east of the rural community of Corbett. Knierem Creek and Howard Canyon Creek are tributaries of Big Creek, which in turn is a tributary of the Sandy River which empties into the Sandy at Oxbow County Park. The Sandy River is designated as a state scenic waterway and a federal wild and scenic waterway. Within the County's existing Goal 5 inventory the Sandy River is designated as a significant natural area.

and a significant water body. A map of the sites is located within the SRI/Shapiro section of this chapter contained within Appendix A.

3. QUANTITY

For a measurement of quantity, the length and drainage area of these three streams will be compared to the length and drainage area of all Oregon Department of Forestry Class I designated streams within the eastern unincorporated area of Multnomah County outside of the Columbia Gorge National Scenic Area and west of the Bull Run River watershed (more detailed statistics on East County streams is not available at this time). The following table summarizes this comparison:

<u>STREAM</u>	<u>LENGTH</u>	<u>DRAINAGE AREA</u>
KNIEREM CREEK	2.4 mi.	1,185 acres
HOWARD CANYON CREEK	3.2 mi.	1,575 acres
BIG CREEK	1.2 mi.	1,374 acres (excluding Knierem & Howard Canyon Creek drainages)
TOTAL FOR THREE CREEKS	6.8 mi.	4,134 acres
TOTAL FOR EAST MULTNOMAH COUNTY (EAST OF SANDY RIVER, CLASS I STREAMS ONLY, EXCLUDING GORGE NSA AREA, WEST OF BULL RUN WATERSHED)	84 mi.	33,000 acres
PERCENTAGE OF THREE CREEKS VS. EAST RURAL AREA	8%	12%

Comparatively speaking, these streams and their watersheds are a small percentage of all stream mileage and watershed area within an area of similar streams in East Multnomah County. When streams in the West Hills, Sauvie Island, and remainder of eastern Multnomah County are added, these streams are even less significant in terms of quantity. Following is a discussion of stream quantity in the West Hills and Sauvie Island.

WEST HILLS

A recently completed inventory of streams in the West Hills has identified 64.2 miles of USGS-mapped streams draining a combined area of 19,425 acres. The drainages on the east side of the West Hills, into Multnomah Channel, are generally small and steeply-sloped, on heavily forested or recently cut land. the drainages on the west side are part of

the Tualatin River watershed, and are generally gently-sloped, draining both forest and farm land. The character of these western drainages is most directly comparable to Big, Howard Canyon, and Knierem Creeks. The streams in these drainages are approximately 23.4 miles long, and drain approximately 7,470 acres.

SAUVIE ISLAND

Sauvie Island is approximately 26 square miles (16,600 acres) in size. Since the island is virtually flat, waterways on the island are of a much different nature than those of the West Hills, being best characterized as drainage ways for runoff from adjacent agricultural lands and as sloughs and wetlands.

REMAINDER OF EAST MULTNOMAH COUNTY

The remainder of East Multnomah County streams include streams to the west of the Sandy River, which run through urbanized and developed rural areas, the Bull Run watershed, which is tributary to the Sandy River and is in a condition adequate to supply drinking water to the City of Portland, and various streams in the Columbia River Gorge. Length and watershed data for these streams is not available.

4. QUALITY

The quality of these three streams is measured by the five criteria adopted by Multnomah County as part of Ordinance 784 discussed above and contained within Policy 16-G of the Multnomah County Comprehensive Framework Plan. These criteria, and the measurements used to judge these criteria, are discussed extensively in the "Multnomah County Significant Streams Study Howard Canyon Area" contained in the Appendix.

Based upon the inventory of streams conducted by SRI/Shapiro and contained in the Appendix, all three of the streams in the Howard Canyon area meet at least several of the criteria for significance stated in Policy 16-G of the Multnomah County Comprehensive Plan.

In terms of quality relative to other streams in the eastern portion of Multnomah County, east of the Sandy River and outside of the Columbia Gorge NSA, detailed data is available only for Gordon Creek, a tributary of the Sandy which lies to the south of the three creeks inventoried. This data is contained within *An Inventory of Nine Stream Corridors in Multnomah County, Oregon* prepared for the East and West Multnomah County Soil and Water Conservation Districts in 1990. This report found Gordon Creek to be relatively undisturbed by human intrusion and of a quality which, despite different measurement levels, is higher than that of Knierem, Howard Canyon, and Big Creeks. Absent a detailed survey of all East County streams which will be completed during Multnomah County's Rural Area Plan Program as each plan is prepared, the only other comparison of relative quality available is the common designation of these three streams and 77 other miles of streams in East Multnomah County between the Sandy River and the Bull Run drainage (south of the Columbia Gorge NSA) as Class 1 streams by the Oregon Department of

Forestry.

Multnomah County has recently collected detailed information on quality of streams in the West Hills of Multnomah County. Some information is also available as to significant water features on Sauvie Island. Very little information is available on stream resources in the remainder of East Multnomah County.

WEST HILLS

A recently completed inventory of streams in the West Hills has identified 62.2 miles of significant streams draining a combined area of 18,750 acres. These streams are significant because they meet at least one of the five criteria contained in the Multnomah County Comprehensive Plan for evaluating significance. The most comparable streams in the West Hills, those within the Tualatin River basin, are all deemed to be significant.

SAUVIE ISLAND

Sauvie Island contains numerous protected water resources. However, these resources are not directly comparable to the streams of the Howard Canyon area in that they are slow-moving drainages and sloughs on the island's flat terrain.

REMAINDER OF EAST MULTNOMAH COUNTY

The limited amount of quality information on the remainder of streams in East Multnomah County is not directly comparable to these three streams. Streams in the Bull Run watershed serve a national forest area and Portland City's water supply. Streams in the Columbia Gorge are part of a National Scenic Area. Streams west of the Sandy River flow through urbanized areas.

5. CONCLUSION

Big Creek, Howard Canyon Creek, and Knierem Creek are significant streams based upon the above description of location, quantity, and quality and are designated "1-C".

B. RESOURCE ANALYSIS REPORT

1. INTRODUCTION

The analysis of significant streams is an element of the broader analysis of water resources as required by Goal 5. The stream analysis is focused on stream channels and the riparian zone along stream channels. This analysis does not directly address associated wetlands or the watershed outside the riparian zone. It is recognized that other future Goal 5 studies including a Wildlife Habitat analysis and an analysis of Scenic Resources will address resource protection on a broad scale and will discuss impacts similar to those that will affect the watershed as a whole.

As part of the Goal 5 process, streams were inventoried to determine location, quantity, and quality. The qualitative aspect of each stream was examined using a modified "streamwalk" methodology and a wildlife habitat assessment process. Field inventory data sheets were prepared for two-tenths mile segments. The "streamwalk" data forms included the collection of information related to the stream channel, streambank stability, the width of the riparian corridor, streamside vegetation, stream conditions, and adjacent land use. The wildlife habitat assessment forms addressed habitat in terms of the presence of water, food, and cover. The inventory was valuable in assessing the significance of each stream. It was also valuable in providing information on riparian zone width, wetlands, and adjacent uses. This data is important in addressing impacts areas and conflicting uses.

The Goal 5 analysis is designed to meet the requirements of the Goal 5 Administrative Rule (OAR Chapter 660, Division 16). The report will address impact areas, conflicting uses, and the economic, social, environmental, and energy (ESEE) consequences of conflicting uses. Each component of the analysis is organized by county study area.

2. DESCRIPTION OF RESOURCE

This report discusses three significant streams in the Howard Canyon area of East Multnomah County. These streams drain westward from Ross Mountain to the Sandy River. They lie between the Sandy River and Loudon Road to the south, and Larch Mountain Road and the rural community of Corbett to the north. The Sandy River is designated as a state scenic waterway and a federal wild and scenic waterway. Within the County's existing Goal 5 inventory the Sandy River is designated as a significant natural area and a significant water body. A map of the sites is contained within Appendix A.

The significant streams discussed in this Resource Analysis are as follows:

STREAM	LENGTH (feet)	DRAINAGE AREA (acres)
Big Creek	5,125	4,135
Knierem Creek	12,670	1,185
Howard Canyon Creek	15,840	1,575

* includes drainage area for Howard Canyon and Knierem Creeks.

The rationale for determining that these streams are significant is contained within the attached Appendix relating to significance at the back of this report.

3. IMPACT AREAS

The impact areas for this study is the riparian zone along each stream. The riparian zone influences the quality and health of the stream and varies in width. It is affected by adjacent slope and the size of the vegetation along the stream. Generally, wider riparian zones have steep slopes with large trees, which shade the stream and contribute woody debris to the stream channel.

For streams that flow through or contribute water to public parks or to recreation areas used by the public, the impact area includes the downstream park or recreational facility.

Each stream is examined in terms of the number of properties abutting the stream and the zoning of the adjacent properties. The property/land use data provided is based on County study area maps.

Streams in the Howard Canyon area include: Big Creek, Knierem Creek, and Howard Canyon Creek. All three streams met the County's significance criteria.

HOWARD CANYON LAND USE DATA

STREAM	NUMBER OF ADJACENT PROPERTIES	ZONING OF ADJACENT PROPERTIES	
		#	ZONING
Big	11	1 6 4	EFU - EXCLUSIVE FARM USE CFU - COMMERCIAL FOREST USE RR - RURAL RESIDENTIAL
Knierem	18	7 11	EFU - EXCLUSIVE FARM USE CFU - COMMERCIAL FOREST USE
Howard Canyon	19	7 12	EFU - EXCLUSIVE FARM USE CFU - COMMERCIAL FOREST USE

The impact area and land use adjacent to each stream is discussed below. Land uses were inventoried and documented by field survey crews. It was noted if uses were "present" and whether the use was "clearly impacting" the stream.

Big Creek - The width of the riparian zone along Big Creek averages 126 feet with a range of 80-200 feet. Adjacent land uses which clearly impact the stream include logging, housing,,

roads and culverts, and agriculture (pasture land). The stream drains to the Sandy River.

Knierem Creek - The width of the riparian zone along Knierem Creek averages 107 feet with a range of 0-160 feet. Adjacent land uses which clearly impact the stream include housing, roads and culverts, and agriculture (pasture land). The stream drains to Big Creek and then to the Sandy River.

Howard Canyon Creek - The width of the riparian zone along Howard Canyon Creek averages 150 feet with a range of 10-200 feet. Adjacent land uses which clearly impact the stream include roads and culverts, housing, and agriculture (pasture land). The stream drains to Big Creek and then to the Sandy River.

4. CONFLICTING USE ANALYSIS

a. Planned Uses

Conflicting uses include those uses which conflict or interfere with the protection of the significant streams. To identify conflicting uses, the uses permitted under the zoning ordinance and comprehensive plan were examined. In addition, other known conflicts are noted. Conflicting uses which "clearly impact" the stream were identified in the field by survey crews and have been referred in the previous section.

The analysis is based primarily on uses outlined in the zoning ordinance. The zoning districts that affect the relevant sites include the following:

- Exclusive Farm Use - EFU
- Commercial Forest Use - CFU
- Rural Residential - RR

Uses that represent potential conflicts with streams include any use that results in the removal of vegetation along the riparian zone. The removal of vegetation and trees will reduce shade along the stream, eliminate wildlife cover, and decrease the amount of woody debris that enters the stream channel. When this occurs, the stream will fail to provide economic, social, and environmental benefits. When healthy, streams and the associated riparian zone provide water for domestic use and irrigation, fish and wildlife habitat, and flood storage capacity. A stream on which the riparian zone has been eliminated or severely damaged poses a threat by the increased amount of runoff and turbidity and by the increased potential for flooding.

The generic uses permitted in each zone are described in the following table:

USE	EFU	CFU	RR
Forestry/Timber	P	P	P
Wood Processing (limited)	CU	P/C	NP
Farm Use (crops/livestock)	P	P	P

USE	EFU	CFU	RR
Resource Conservation	P	P	P
Single-Family Residential (> 80 acres)	P/C	CU	P
Single-Family Residential. on < 80 acres in conjunction with a Farm/Forest Use	P/C	CU	P
Farm/Forest Worker Housing	CU	NP	P/C
Wholesale/retail for farm/forest products	CU	NP	P/C
Playgrounds, Churches, and Schools	CU	NP	CU
Parks/Golf Courses	CU	CU	CU
Other Community Service Uses	CU	CU	CU
Mining/Geothermal	CU	CU	CU
Agricultural Processing	NP	NP	CU
Wood Processing (sawmills, etc.)	CU	CU	NP
Fowl, feed lot, swine, fur farming	P	CU	CU
Dog Kennels	CU	NP	CU
Aircraft Landing Area	CU	CU	NP
Single Family Residential (Non Farm/Forest)	CU	CU	P
Home Occupations	CU	P	P
Planned Developments	NP	NP	CU
Cottage Industries	NP	NP	CU
Rural Service/Commercial	NP	NP	CU

KEY: P - Permitted
P/C - Permitted with conditions
CU - Conditional Use
NP - Not Permitted

b. Conflicting Use Impacts

For purposes of further analysis, uses are grouped into general categories. The categories and a brief discussion of the nature of the conflicts follow.

Forestry Use - Forestry uses have significant conflicts with stream resources. The standard process of clear cutting increases run-off and turbidity in the streams. This results in a reduction in water quality and a loss of fish habitat. Logging roads that cross streams result in extensive stream damage. Field teams conducting the stream survey in the Howard Canyon area noted numerous instances where logging roads and clear cutting had significantly damaged the streams. Wood processing facilities and wholesale/retail sales of forest products will result in the increase in storm water runoff from impervious surfaces. Housing in connection with forest use may be located near streams and have impacts similar to those listed below under residential use. Forestry use includes the following uses permitted under the zoning ordinance: forestry/timber; wood processing (limited); wood processing (sawmills, etc.); forest worker housing; single family residential in conjunction with a forest use; wholesale/retail for forest products.

Agricultural Use - Agricultural use conflicts with stream resources in a variety of ways. Agricultural chemicals, including pesticides and fertilizers, may enter the stream and destroy or alter wildlife habitat. Farm livestock may graze near and enter the stream thereby destroying riparian vegetation and depositing excrement, which can affect water quality. Riparian vegetation may be removed to maximize cultivated area. Agricultural processing, housing, and wholesale/retail use will result in the increase of storm water runoff from impervious surfaces. Housing will also have impacts similar to those listed below under residential use. Agricultural use includes the following uses permitted under the zoning ordinance: farm use crops/livestock; agricultural processing; fowl, feed lot, and swine for farming; farm worker housing; single family residential housing in conjunction with a farm use; wholesale/retail for farm products.

Residential Use - Streams provide an amenity for a residential dwelling. According to Rick Walker, a residential appraiser with Palmer Groth and Pietka, a stream will generally increase the value of any nearby dwelling. For this reason, pressure exists for new dwellings to be located near streams. Riparian vegetation may need to be removed to site the dwelling near the stream. Often residents living along streams clear the native vegetation adjacent to the stream and install lawn up to the stream bank, which results in a significant loss of habitat. Residential development adjacent to the stream increases impervious surface, which can result in increased runoff to the stream. Residential use includes the following uses permitted under the zoning ordinance; single family residential on >80 acres; single family residential (non farm/forest); home occupations; and planned developments.

Community Service Use/Commercial Use - Community service and commercial uses conflict with streams due to the potential for increased storm water runoff from structures and parking areas. The increase in storm water runoff from hard surfaces will increase the rate of flow and result in erosion and a deterioration of water quality. Parks or recreation facilities, including golf courses, may result in the removal of vegetation along the stream and the use of

pesticides and fertilizer. Community service/commercial uses include the following uses from the zoning ordinance: playgrounds, churches, schools; parks; other community service uses; dog kennels; cottage industries; and rural service/commercial.

Mining - Aggregate mining is a potential conflict for streams in the study areas. Aggregate mining will result in alteration of the land contours and the diversion of the stream. Until full restoration of the stream following the mining operation, the stream resource will be impacted. The time period of this impact will vary depending on the restoration plans filed with the Department of Geology and Mineral Industries (DOGAMI). Following restoration the stream may return to health, but it will no longer follow the original natural stream bed. Aggregate mining operations located away from the channel can have water quality impacts related to siltation and increased turbidity from mine runoff. Mining uses include the following uses from the zoning ordinance: mining/geothermal.

The Howard Canyon Quarry, which comprises the ridge between the canyons of Knierem Creek on the north and Howard Canyon Creek on the south, is identified as a Goal 5 Mineral and Aggregate resource site(site #8). The Howard Canyon Quarry is located upslope from both Knierem Creek and Howard Canyon Creek.

The site geology and potential as a mineral and aggregate resource was evaluated by Schlicker and Associates in 1989. Schlicker and Associates concluded that the ridge rock deposit is more than 4,200 feet long and 350 feet wide and contains at least 33 acres of ground, and that the volume of rock in place is about 2.2 million cubic yards, which will produce more than 2.7 million tons of crushed basalt. In 1994, as part of the County's ESEE analysis, Squier Associates were hired as independent consulting geologists to review and verify information regarding quantity and quality of the resource. Based upon Squier's review of available data and experience in Multnomah County, it was concluded that the Howard Canyon Quarry contains a substantial aggregate resource.

Transportation/Public Improvements - Transportation systems create conflicts with streams. Fill is often necessary to cross a stream. Culverts generally increase erosion. Field teams found that private logging roads have severe impacts on streams in the Howard Canyon Area. Public improvements, such as utility extensions, can result in alteration and conflict of streams. No planned public improvements were identified.

Other Uses - Aircraft landing areas are not likely to be located in this area due to topography constraints. If a landing area were to be sited, it would most likely be located away from a stream channel due to slope and vegetation constraints. Resource conservation is a permitted use and does not present a conflict with the stream resource. No other uses allowed outright, conditionally, or under prescribed conditions have been noted within the impact area for these streams.

c. Conflicting Use By Study Area

Conflicting uses are examined by study area and stream. Known conflicts are described based on field observations. No other uses allowed outright, conditionally, or under prescribed conditions have been noted within the impact area for these streams.

i. Howard Canyon Study Area

Big Creek: This watershed is affected primarily by use of adjacent properties as pasture land and by rural residential development in its upper reach (below the confluence of Howard Canyon Creek and Knierem Creek). The lower stream segments, west of Gordon Creek Road, are more protected by vegetation and steep topography.

Knierem Creek: This watershed is affected by logging in its upper reach, mining in its middle reach, and use of adjacent property as pasture land in its lower reach where it joins Howard Canyon Creek. Rural residential uses associated with exclusive farm use also impact the watershed, primarily along the lower stream segments. The creek flows into Big Creek.

Howard Canyon Creek: This watershed, like the Knierem Creek watershed, is affected by logging in its upper reach, mining in its middle reach, and adjacent pasture land uses in its lower segments where it joins Knierem Creek. A small segment of the creek, near its confluence with Knierem Creek, is affected by rural residential use associated with the exclusive farm use zone.

5. ESEE ANALYSIS

The ESEE consequences analysis includes a general discussion of impacts by conflicting use category. The initial section examines impacts on the stream if the conflicting uses are allowed. The second section addresses impacts on the conflicting uses if the stream is protected. Each section includes a listing of impacts that are keyed to matrices that specifically tie the impacts to each stream. The matrices are organized by County study area.

a. ESEE Consequences of Allowing Conflicting Uses - Impacts on Streams

i. Economic Consequences of Allowing Conflicting Uses

Negative economic impacts result from conflicting uses which lower water quality and reduce the usefulness of water withdrawn from the stream. The reduction of water quality has a direct economic impact on those properties and streams where water rights exist for domestic and irrigation purposes. If water quality is lowered to a point that water is no longer useful, alternative sources will need to be identified. An economic consequence is noted only in those instances where water rights exist along the stream. Conflicting uses that have the potential of lowering water quality include uses which increase runoff, erosion, turbidity, and pollutants.

A negative economic consequence also will result if water quantity is reduced or increased due to stream or riparian alteration. Streamside vegetation has the effect of moderating the flow and transport of water through the drainage. Removal of vegetation increases the rate of runoff and reduces water storage capacity. This results in higher peak flows and lower flows during drought periods.

Development of paved parking areas or roadways associated with transportation facilities, community service commercial uses, and residential uses will generally increase the rate of

runoff and increase the potential for erosion unless storm water detention facilities are planned in conjunction with the improvement. Detention facilities or special designs are generally addressed on a case-by-case basis depending on the scale of the proposed development or improvement.

The three creeks in the Howard Canyon area are part of the Sandy River watershed, in turn part of the Columbia River watershed. Between 1980 and 1990, over one billion dollars were spent on efforts to restore the Columbia River salmon fishery. Habitat destruction and associated impacts on flows and water quality are important factors contributing to the salmon crisis which has only continued to escalate into the 1990's. Without question, salmon are an important economically to the Northwest. Although none of the creeks are utilized by anadromous fish (due to a natural barrier) they are tributaries to the Sandy River which is an important spawning and rearing area. Big Creek flows into the Sandy River approximately 100 yards upstream from a known spawning area for Fall chinook salmon and winter steelhead. The Sandy River is a reflection on the quality of its tributaries.

The Federal Bureau of Land Management and Oregon State Parks have estimated that up to one million people annually utilize the Sandy River for a myriad of recreational activities. This intense use creates substantial economic activity for a variety of businesses throughout the region.

MATRIX KEY

ECON 1: Negative economic impacts from reduced water quality for domestic or irrigation use or use by commercially important fish due to increased runoff, erosion, turbidity, water temperature, or pollutants

ECON 2: Negative economic impacts result from changes in water quantity that can affect availability for domestic or irrigation use due to loss of storage capacity and increased runoff.

ii. Social Consequences of Allowing Conflicting Uses

Conflicting uses adjacent to a stream may have a social impact if removal of riparian vegetation has occurred and there has been a significant loss of wildlife habitat. The social impact results in the loss of opportunities for nature study and recreational activities if vegetation and wildlife habitat are removed. Streams that flow through public parks or publicly-accessed recreation facilities have the greatest potential to be negatively affected in this manner.

Although none of the study area streams flow ~~into~~ through publicly-owned parks or recreation facilities, they do drain to the Sandy River, which flows past state parks and private recreation facilities (e.g. Camp Collins). The Sandy River is an important spawning and rearing area for salmon.

Social consequences also result from impacts on the aesthetic quality of a stream if riparian vegetation is removed and a stream is degraded. This has an overall impact on the livability of the area.

The removal of riparian vegetation will also reduce water storage capacity and increase the rate of runoff. This has the potential of increasing the capacity for flooding, especially where wetlands are associated with the stream. For those streams with wetlands, negative social consequences may occur if vegetation is removed and the wetlands flood storage capacity reduced.

MATRIX KEY

SOC 1: Negative social impacts result from the loss of educational and recreational opportunities associated with wildlife habitat and riparian vegetation.

SOC 2: Negative social impacts result from the loss of flood storage capacity and increases in the rate of runoff.

SOC 3: Negative social impacts result from a loss in aesthetic quality and livability.

iii. Environmental Consequences of Allowing Conflicting Uses

Environmental consequences of allowing conflicting uses vary by the type of conflicting use. As noted above, forestry practices that include clear cut areas result in increased runoff, turbidity, water temperature, and sedimentation. The removal of vegetation reduces food and cover for wildlife. The loss of wildlife habitat directly impacts wildlife diversity. During the stream inventory, field teams observed a wide range of wildlife from amphibians and rodents to elk and eagles. As one would expect, clear cut areas contained less habitat and less wildlife.

Consequences of agricultural use include water quality and wildlife habitat impacts. Agricultural use adjacent to the stream may result in damage to the stream through the use of chemical pesticides and fertilizers. Livestock along a stream will negatively impact the water quality by trampling streamside vegetation, overgrazing, and through the deposition of animal excrement. Removal of streamside vegetation either by livestock or to increase cultivated area will reduce wildlife cover and habitat. Pastures where streams are not fenced have the greatest potential for negative impact.

Residential, community service, and commercial uses negatively impact the environmental quality of streams. The primary impact is the loss of wildlife habitat that results from nearby human activity. For example, it is rare when elk wander into residentially developed areas. Domestic animals are a major source of conflict with wildlife and often drive animals from their natural habitat. New residential dwellings often include residential lawns which replace riparian vegetation along streams and the wildlife cover that it provides. As noted previously, parking areas associated with community service or commercial uses may increase runoff. These areas may also result in water quality deterioration due to oils and materials that are washed into the streams and drainageways.

Transportation and public improvements have negative environmental consequences. Roads that cross streams often are culverted. Culverts increase the rate of flow and result in a narrowing of the stream channel. Culverts and roads also create a barrier for wildlife migration.

Roads also result in wildlife mortality when animals are hit by vehicles.

Allowing mining will result in temporary adverse stream impacts including rerouting and stream channel destruction. Reclamation would include stream channel restorations. Environmental compliance issues for quarry operations are regulated by the Oregon Department of Geology and Mineral Industries and the Oregon Department of Environmental Quality.

MATRIX KEY:

ENV 1: Negative environmental impacts result from the loss of wildlife habitat when riparian vegetation is removed or destroyed.

ENV 2: Negative environmental impacts result from deterioration in water quality due to increased runoff, turbidity, water temperature, and pollutants.

ENV 3: Negative environmental impacts result from increased disturbance or mortality of wildlife, or by limiting the mobility of wildlife.

iv. Energy Consequence of Allowing Conflicting Uses

Energy consequences of allowing conflicting uses are less clear than other impacts. When streams are used for small hydro-electric or mill purposes a negative impact may occur if the flow of the stream is interrupted. No negative energy impacts were found for any of the streams in the Howard Canyon Area.

MATRIX KEY:

ENRGY1: Negative energy impacts would result from decreased water flow.

v. Summary of ESEE Consequences - Impacts on Streams

A summary of ESEE consequences describing impacts on streams is included in Matrix 1. The matrix lists ESEE impacts by stream and conflicting use category.

b. ESEE Consequences of Prohibiting Conflicting Uses - Impacts on Uses

i. Economic Consequences of Prohibiting Conflicting Uses

Prohibiting natural resource based activities, including forestry, agriculture and mining, can result in substantial economic impacts by causing loss in jobs, preventing creation of new jobs, reducing tax revenues, and reducing revenues from the sale of raw materials or finished products.

The economic value of a resource-based operation is increased when it is located relatively close to markets or potential customers, since the cost of transporting the raw materials is reduced. For example, construction projects, such as major public road projects, benefit from

MATRIX 1.

HOWARD CANYON ESEE CONSEQUENCES Allowing Conflicting Uses - Impacts On Streams

Stream	Forestry	Agriculture	Residential	Community Service	Mining	Transportation /Public Improvements
Big	-	ENV 1,2,3 ECON 1,2	ENV 1,2,3	ENV 2,3	ENV 2	SOC 1,2 ENV 1,2,3
Knieriem Canyon	SOC 2,3 ENV 1,2 ECON 1,2	ENV 1,2,3 ECON 1,2	ENV 1,2,3	ENV 2,3	ENV 1,2 SOC 1,3	SOC 1 ENV 1,2,3
Howard Canyon	SOC 2,3 ENV 1,2 ECON 1,2	ENV 1,2,3 ECON 1,2	ENV 1,2,3	ENV 2,3	ENV 1,2 SOC 1,2,3	SOC 1,2 ENV 1,2,3

MATRIX KEY:

- ECON 1: Reduced water quality for domestic or irrigation use.
- ECON 2: Reduced or increased water quantity for domestic or irrigation use.
- SOC 1: Loss of educational and recreational opportunities associated with the loss of wildlife habitat.
- SOC 2: Loss of flood storage capacity.
- SOC 3: Negative social impacts result from a loss in aesthetic quality and livability.
- ENV 1: Loss of wildlife habitat when riparian vegetation is removed or destroyed.
- ENV 2: Deterioration of water quality.
- ENV 3: Increased disturbance or mortality of wildlife, or limitation in the mobility of wildlife.
- ENRGY 1: Decreased water flow for energy use.

- Note: 1) For Forestry, Community Service, and Mining uses the listed impacts represent potential for the impact to result. Forestry and mining impacts are not likely on Big Creek due to the location of the resources at the upper reaches of the streams. For Agriculture, Residential, and Transportation/Public Improvements uses the listed impacts represent actual impacts that are currently occurring along the creek.
- 2) Refer to previous section for a description of the impacts.

having a rock source nearby and the cost of such projects can increase when a nearby mining activity is prohibited.

Similarly, prohibiting transportation or other public improvement projects, particularly utility projects, can increase the cost of providing a service to consumers. For example, if development of an electric substation is not allowed, it may cost more to provide electricity to residents in the county or region, because the power must be obtained from a more distant source or purchased from another utility with excess supply.

Prohibiting residential development to protect streams can negatively affect the value (purchase price and tax assessment) of a lot, thus affecting the property owner. A reduction in value can affect the potential tax revenue to the County.

With any use, the economic costs of carrying on an activity (whether extraction, construction, or residential development) can increase when regulations or standards are enacted to specify conditions under which the activity can occur. For example, regulations that limit the size of the working face, specify the timing of reclamation activities, or require extensive screening of mining activities can increase the economic cost to the operator of carrying on the mining business.

In regard to the Howard Canyon Quarry, it is one of a very limited number of known aggregate sources available for development in Multnomah County. Limitations on site development to preserve significant streams will result in a shortened life span of the facility, with economic impacts on the owners, and on employees and suppliers.

MATRIX KEY:

ECON 1: Negative economic impacts result from lost jobs, reduced tax revenues, or reduced revenue from the sale of goods and services.

ECON 2: Negative economic impacts result from increased cost of transporting raw materials to markets or consumers, and providing services.

ECON 3: Negative economic impacts result from decreased property value (for residential uses).

ECON 4: Negative economic impacts result from regulations and standards that specify conditions under which an activity or use can occur.

ECON 5: Negative economic impacts result from increased cost due to practices or construction techniques.

ii. Social Consequences of Prohibiting Conflicting Uses

Prohibiting natural resource based activities, such as forestry, agriculture, and mining, can affect property owners who depend on revenue from the activity as an income source.

Reduced income from prohibiting these activities can affect the way of life of families that may have carried on the operation (e.g. timber production, farming, or mining) for several generations. These families, who have a heritage of being involved with these activities, would consider a change in their way of life a negative social impact. In regard to quarry operations, once resources are depleted, social impacts result from attendant relocation or dislocation of employees.

Another social impact of prohibiting resource based activities is reducing or eliminating access to a local source of a needed material. For example, mining provides a social benefit by providing a needed supply of rock and aggregate material for construction projects in the county and region. This social benefit would be negatively affected by prohibiting mining activities because access to these materials would become more difficult. In addition, longer haul distances increase traffic loads with resultant social impacts.

Prohibiting certain uses can affect the amenities available to local residents, whether these are natural or man-made. For example, residential lots located along a stream often are sought by buyers, since the stream is considered a positive natural amenity. Not allowing residential development on lots with stream access would prevent this social benefit. Similarly, community services and commercial facilities provide a social benefit to local residents by providing needed goods and services near where they live and work. Prohibiting these uses would negatively affect this social benefit by causing residents to drive further to obtain the goods and services.

MATRIX KEY

SOC 1: Negative social impacts result from reduced income (from natural resource based activities).

SOC 2: Negative social impacts result from affecting or changing the way of life of families involved in natural resource based activities and industries.

SOC 3: Negative social impacts result from reduced or eliminated access to local sources of needed materials.

SOC 4: Negative social impacts result from reduced availability of amenities (both natural and man-made).

iii.. Environmental Consequences of Prohibiting Conflicting Uses

Not allowing uses that involve construction of buildings or public improvements can result in the use occurring elsewhere. Transfer of the use to a new location can result in the same or even greater environmental impacts on site, depending on the natural features of the new site, its location, and the type of development or activity that is proposed. It is possible that the new site would require more infrastructure or improvements to service, thus resulting in greater impacts from construction of roads, utilities, and services.

MATRIX KEY:

ENV 1: Negative environmental impacts result from transferring development (and associated impacts) from a site where a conflicting use is prohibited to one where it is allowed.

iv. Energy Consequences of Prohibiting Conflicting Uses

One energy consequence of prohibiting natural resource based uses is increased use of energy for transporting raw materials to markets and consumers. For example, it requires less energy to transport logs from a harvesting site near a mill than from a site farther away. Similarly, transporting rock and aggregate materials to Portland from more distant locations requires more energy than from a source within the County.

Prohibiting resource based uses can result in a shortage of goods and services, such as lumber or produce, for construction or processing. Particularly with lumber and forestry products, limited availability can result in use of alternative, less energy-efficient building materials.

Prohibiting residential uses and development of community services and commercial areas can result in greater distances between local residents and the places where they work and purchase goods and services. If community services or commercial amenities are located farther from residents, they must drive greater distances to obtain these goods and services. Increased travel results in increased use of energy for transportation.

Greater distances between raw materials and processing, products and markets, and consumers and goods and services, can result in additional energy expenditure to construct needed roads, transportation facilities (such as transit centers), and infrastructure that may not be necessary if conflicting uses were allowed to occur.

MATRIX KEY:

ENRGY 1: Negative energy impacts result from increased use of energy for transporting raw materials to markets and consumers.

ENRGY 2: Negative energy impacts result from shortage of goods and services, such as lumber or produce, for construction or processing.

ENRGY 3: Negative energy impacts result from greater distances between local residents and the places where they work and purchase goods and services.

ENRGY 4: Negative energy impacts result from increased energy expenditure to construct additional roads, transportation facilities, and infrastructure to accommodate greater distance between products and consumers.

v. Summary of ESEE Consequences -

A summary of ESEE consequences describing impacts on conflicting uses is included in Matrix 2. The matrix lists ESEE impacts by stream and conflicting use category.

c. Other Applicable Statewide Planning Goals

OAR 660-16-005(2) states: "The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process." The following additional Statewide Planning Goals apply to this ESEE analysis:

i. Goal 3 - Agricultural Lands

Goal 3 applies to those lands designated and zoned for Exclusive Farm Use. Portions of the three streams in the Howard Canyon Area run through lands designated and zoned for Exclusive Farm Use. This designation is intended to preserve and maintain agricultural lands. Limitations of agricultural uses in order to protect streams would result in a direct conflict between implementation of Goal 3 and Goal 5 of the Statewide Planning Program.

ii. Goal 4 - Forest Land

Goal 4 applies to those lands zoned Commercial Forest Use. All significant streams in the Howard Canyon Area run through lands designated and zoned as Commercial Forest Use lands. Forest operations, practices, and auxiliary uses are subject only to such regulation of uses as are found in ORS 527.722, which states that "no unit of local government shall adopt any rules, regulations, or ordinances or take any other actions that prohibit, limit, regulate, subject to approval or in any other way affect forest practices on forestlands located outside of an acknowledged urban growth boundary." Consequently, regardless of impacts forest practices may have on significant streams, the County cannot place restrictions on forest practices in areas designated and zoned as Commercial Forest Use lands.

iii. Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources

Direction from the Department of Land Conservation and Development staff, as part of the Remand Order, requires that only those Goal 5 resources that have been inventoried and determined to be significant are appropriate to be included within the ESEE analysis. Mineral & Aggregate Resources (the Howard Canyon Quarry site) has been deemed to be a use which conflicts with streams.

iv. Goal 6 - Air, Water, and Land Resources Quality

Goal 6 requires that, "All waste and process discharges from future development, when combined with such discharges...shall not (1) exceed the carrying capacity of such resources, considering long range needs; (2) degrade such resources; or (3) threaten the availability of such resources."

MATRIX 2.

HOWARD CANYON ESEE CONSEQUENCES Prohibiting Conflicting Uses - Impacts on Conflicting Uses

Stream	Forestry	Agriculture	Residential	Community Service	Mining	Transportation /Public Improvements
Big	-	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 3,4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 4,5 SOC 4 ENV 1 ENRGY 3,4	-	ECON 2,4,5 ENRGY 4
Knieriem	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 1,2,4 SOC 1,2,3 ENV 1 ENRGY 1,2,4	ECON 3,4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 2,4,5 ENRGY 4
Howard Canyon	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 1,2,4 SOC 1,2,3 ENV 1 ENRGY 1,2,4	ECON 3,4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 2,4,5 ENRGY 4

MATRIX KEY:

- ECON 1: Lost jobs, reduced tax revenues, and reduced revenue from the sale of goods and services.
- ECON 2: Increased cost of transporting raw materials to markets or consumers, and providing services.
- ECON 3: Decreased property value (for residential uses).
- ECON 4: Increased cost resulting from regulations and standards that specify conditions under which an activity or use can occur.
- ECON 5: Increased cost due to changes in customary practices or construction techniques.
- SOC 1: Reduced income (from natural resource based activities) and possible "taking" of private property for public benefit.
- SOC 2: Affecting or changing the way of life of families involved in natural resource based activities and industries.
- SOC 3: Reduced or eliminated access to local sources of needed materials.
- SOC 4: Reduced availability of amenities (both natural and man-made).
- ENV 1: Transferring development (and associated impacts) from a site where a conflicting use is prohibited to one where it is allowed.
- ENRGY 1: Increased use of energy for transporting raw materials to markets and consumers.

All of the impacts posed by various uses upon streams have a bearing on the water quality of such streams. To the extent that these conflicts can be resolved in a manner which preserves or enhances the existing water quality of these significant streams, such resolution would be in conformance with the requirements of Goal 6.

In addition, Clean Water Act requirements may affect proposed conflicting uses. As noted, Goal 6 requires that all waste and process discharges from future development, combined with those from existing development, not threaten to violate or violate state or federal environmental quality statutes.

v. Goal 7 - Areas Subject to Natural Disasters and Hazards

Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards." Pursuant to this Goal, the Multnomah County Comprehensive Framework Plan has identified areas of Natural Hazards in the West Hills which are the result of steep slopes, unstable geological and soil conditions, erosion potential and stream flooding.

Many of the impacts posed by various uses upon streams have a bearing on the capacity of these streams to instigate flooding and siltation problems to downstream areas. To the extent that these conflicts can be resolved in a manner which minimizes the flood and siltation hazard potential of streams, they would be in conformance with the requirements of Goal 7.

vi. Goal 9 - Economic Development

Goal 9 calls for adequate opportunities for a variety of economic activities in the state. Opportunities for local businesses and industries that process local resources and serve local residents may be limited because of their conflicts with significant streams.

vii. Goal 10 - Housing

Goal 10 focuses on providing housing types to meet needs within urban growth boundaries. It indicates that ordinances and incentives should be used to increase population densities in urban areas rather than rural areas such as the Howard Canyon significant streams sites.

6. SUMMARY

a. General Conclusions

The consequences of not protecting significant streams are primarily environmental in nature, while the consequences of prohibiting or limiting conflicting uses in order to preserve significant streams are primarily economic, social, and energy in nature.

b. Synopsis of ESEE Consequences

Consequences if Forestry is not allowed:

Economic: Lost jobs, reduced tax revenues, increased transport costs

Social: Reduced property rights, end of "timber" lifestyle, no more local sources

Environmental: Insignificant

Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Forestry is allowed in a limited manner:

Economic: Regulatory burden, potential for some lost jobs, tax revenues

Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources

Environmental: Insignificant

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Forestry is fully allowed:

Economic: Reduced water quality for use, change in water quantity for use

Social: Loss of flood storage capacity

Environmental: Loss of riparian vegetation, reduced water quality

Energy: Insignificant

Consequences if Agriculture is not allowed:

Economic: Lost jobs, reduced tax revenues, increased transport costs

Social: Reduced property rights, end of farming lifestyle, no more local sources

Environmental: Transferring environmental impacts to another site

Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Agriculture is allowed in a limited manner:

Economic: Regulatory burden, potential for some lost jobs, tax revenues

Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources

Environmental: Transfer of some environmental impacts to another site

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Agriculture is fully allowed:

Economic: Reduced water quality for use, change in water quantity for use

Social: Insignificant

Environmental: Loss of riparian vegetation, reduced water quality, greater wildlife disturbance

Energy: Insignificant

Consequences if Residential Use is not allowed:

Economic: Decreased property value

Social: Reduced availability of amenities

Environmental: Transferring environmental impacts to another site

Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Residential Use is limited:

Economic: Regulatory burden, changes in customary practices

Social: Reduced availability of amenities

Environmental: Transferring environmental impacts to another site

Energy: Insignificant

Consequences if Residential Use is fully allowed:

Economic: Insignificant

Social: Insignificant

Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife

Energy: Insignificant

Consequences if Community Service Uses are not allowed:

Economic: Changes in customary practices

Social: Reduced availability of amenities

Environmental: Transferring environmental impacts to another site

Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Community Service Uses are limited:

Economic: Regulatory burden, changes in customary practices

Social: Reduced availability of amenities

Environmental: Transferring environmental impacts to another site

Energy: Insignificant

Consequences if Community Service Uses are fully allowed:

Economic: Insignificant

Social: Insignificant

Environmental: Deterioration of water quality, increased disturbance of wildlife

Energy: Insignificant

Consequences if Mining is not allowed:

Economic: Lost jobs, reduced tax revenues, increased transport costs

Social: Reduced property rights, no more local sources

Environmental: Insignificant

Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Mining is allowed in a limited manner:

Economic: Regulatory burden, potential for some lost jobs, tax revenues

Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources

Environmental: Insignificant

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Mining is fully allowed:

Economic: Insignificant

Social: Insignificant

Environmental: Loss of riparian vegetation, deterioration of water quality

Energy: Insignificant

Consequences if Transportation/Public Improvements are not allowed:

Economic: Increased cost of material transport, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are allowed in a limited manner:

Economic: Increased cost of material transport, regulatory burden, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are fully allowed:

Economic: Insignificant

Social: Loss of education & recreation associated with wildlife habitat

Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife

Energy: Insignificant

APPENDIX A
INVENTORY/SIGNIFICANCE ANALYSIS

PREPARED BY SRI/SHAPIRO

INVENTORY/SIGNIFICANCE ANALYSIS

INTRODUCTION

Inventories have been completed for streams in the Howard Canyon Area. The inventory profiles address location, quality, and quantity consistent with Statewide Planning Goal 5 requirements. The inventory is part of the Multnomah County Significant Streams study. Stream profiles are mapped and organized by planning area. Maps indicate which stream reaches were inventoried.

Stream profile sheets include the location and the length of stream inventoried. The profiles provide information on economic use based on water rights data. The profiles address educational, recreational, and public safety issues. Natural resource values are addressed in terms of Stream Class, threatened and endangered species information, wildlife habitat assessment information and riparian vegetation. A qualitative description of each stream is also provided.

The significance criteria is addressed in a matrix format. If any of the criteria are is satisfied, the stream is considered significant and a Goal 5 analysis is conducted. If the stream does not meet the criteria, an ESEE analysis under Goal 5 is not prepared and no further action is required or appropriate under Goal 5. These streams are not included on the Plan Inventory for Goal 5 purposes.

The significance analysis is conducted on a stream by stream basis. Because a stream's tributaries contribute to the health, quality, and significance of the whole stream, individual tributaries are examined collectively. Field data was collected along individual stream segments, but the data has been consolidated for purposes of this evaluation. The limitations of this process are that data is averaged and segments of exceptionally high quality or exceptionally low quality may be over looked. The advantage of this process is that streams are examined as a whole and are not fractured into small segments that may include highly conflicting data. It should be noted that water seasonality is based on USGS mapping. Canopy cover is "winter canopy." In areas with a deciduous overstory component, "summer canopy" cover could be significantly higher.

SIGNIFICANCE CRITERIA

Policy 16-G sets forth the criteria for determining significance of water resources and wetlands. The methodology followed for use of the criteria is described below.

A. Economic Value

Strategy A of Policy 16-G states that sites should be designated significant "if any use of the water resource can be shown to be feasible for use in significantly increasing a specified economic activity or function or substantially increasing the economic value of the land through which the waters flow".

To assess economic significance, we analyzed surface water rights for properties along the streams. A list of surface water rights was obtained from the Oregon Water Resources Department. The list of relevant permits is included as part of the stream profile. The rate or quantity of water being diverted and the use of the water is noted. All uses, including domestic use, are assumed to provide an economic benefit to the user.

B. Recreation Value

Strategy B of Policy 16-G states that a water resource should be designated significant if:

1. The resource lies within the boundaries of a public park or recreation facility and the resource is an integral part of the facility's recreational activities; or
2. The resource contributes water to a park or recreation facility and diversion or degradation of the resource would significantly diminish the recreational value of the resource.

Park and recreation facilities along stream segments and downstream were documented. The role of the water resource in regard to the recreational activity was noted. For example, boating or fishing activities are water based and diversion and degradation of the water resource would clearly diminish the recreational quality of the resource.

C. Educational Value

Strategy C of Policy 16-G states that water resources should be designated significant if they have been identified as being ecologically or scientifically significant by the Oregon Natural Heritage Program or if the resource is used for public educational purposes.

Sue Vrillakas, botanist and data manager for the Oregon Natural Heritage Program conducted a data system search of the West Hills Rural Area for rare, threatened, and endangered plant and animal species. The search, completed on February 22, 1994, identified 34 records in the general vicinity but only four records were within the watersheds for the streams being studied. The existence of the significant sites is noted on the inventory profile sheets but detailed locations are not provided due to the confidential nature of the data.

Ron Klein of the Metro Greenspaces program was contacted regarding public educational activities. Ron provided information on streams that have been used for classes offered by the Portland Audubon Society and for public and private school classes sponsored through the Green City Data grants program.

D. Public Safety

Policy 16-G includes strategy D which states that sites and resources should be designated significant in the following cases:

1. The water resource is within the Watershed Management Unit of an existing or proposed municipal water source; or
2. The water resource is part of the groundwater area for a municipal water supply; or
3. The water resource and surrounding lands are flood storage areas which if altered would increase the frequency or height of floods downstream.

Strategy D also addresses water quality in terms of the significance of the riparian vegetation associated with the water resource.

To document water source information, the cities of Portland, Beaverton, Hillsboro, and Scappoose were contacted. Staff at each city indicated that the study area streams were not part of the respective municipal water supply systems.

In regard to flood storage, field inventories documented whether wetlands were associated with the streams. The number of wetlands and the approximate size of wetlands were noted. Depending on the size of the wetland and the form of the stream channel, wetlands may provide water storage capacity that will reduce the intensity of a storm event. When streams and wetlands provided this function, a determination of significance was made.

In regard to water quality and riparian vegetation, the width of the riparian corridor was documented in the field and canopy cover was noted. The inventory profiles provide the average maximum width of the corridor. If 75% of the stream length had canopy cover that was less than 25%, the riparian vegetation was determined to be insignificant and have little positive influence on water quality. If greater canopy cover was provided, the riparian area was considered significant. If field surveyors were unable to inventory at least two-thirds of the length of a stream within the county, the relationship of riparian vegetation and water quality could not be established with confidence. For this reason, if a stream appears to meet the canopy cover criteria, it is considered significant only if more than two-thirds of the stream was inventoried.

E. Natural Area Value

Strategy E of Policy 16-G addresses the natural area value of the resource. Sites are considered significant if they are designated Class 1 by the Oregon Department of Forestry, if the area is the habitat of a threatened or endangered species or if a Wildlife

Habitat Assessment form has been completed and the site scored 45 or more points. A site may also be considered significant if it scores between 35-44 and it provides an essential connection between or enhances adjoining higher rated areas.

As part of the inventory Class 1 waters were documented and noted on inventory forms. If any portion of the stream within the County is designated Class 1, the stream was considered significant.

As noted under Educational Value, above, the Oregon Natural Heritage Program data base was searched for rare, threatened and endangered plant and animal species. Inventory forms identify whether sites were identified. Due to the confidential nature of the data, details are not provided.

Wildlife Habitat Assessment forms were completed for segments along each stream at two/tenths of a mile intervals. The data is summarized in a table following each of the profile forms. Streams averaging 45 points and above were considered significant resources. Sites with WHA scores between 35-44 points were designated significant if they function as "essential connections or demonstrably enhance higher rated adjacent areas." The scope of this study was limited to the stream channel area and only addresses connections and enhancement within a given stream channel. Connections or enhancement to upslope areas were not considered.

For the purposes of this report, a riparian area is comprised of an aquatic ecosystem and associated upland area. Water in the aquatic ecosystem influences upland vegetation and microclimate. Upland areas affect the aquatic ecosystem by providing thermal regulation, biomass, and structure.

SIGNIFICANCE MATRIX

The Significance Matrix summarizes the findings and research documented on the profile sheets. The matrix is designed so that a yes - no answer is provided when the county significance criteria are satisfied. The conclusion is based on whether the threshold for significance has been met.

SIGNIFICANCE MATRIX – Study Area: Howard Canyon

CRITERIA:	STREAMS:		
	Big	Howard Canyon	Knieriem
ECONOMIC:			
Water Rights Permits	Y	Y	Y
RECREATION:			
Within Park/Rec. Facility	N	N	N
Contributes water to Park/Rec. Facility	Y	Y	Y
EDUCATION:			
Designated significant by the Oregon Natural Heritage Program	N	N	N
Used for public education	N	N	N
PUBLIC SAFETY:			
Within Watershed Management Unit	N	N	N
Groundwater Recharge for Municipal Supply	N	N	N
Flood Storage Function	Y	Y	Y
Riparian Zone Water Quality Benefits	N	Y	N
NATURAL AREA VALUE:			
Designated Class 1	Y	Y	Y
Habitat of an Endangered or Threatened Species	N	N	N
Wildlife Habitat Assessment Score			
If > 44 points – considered significant	N	Y	Y
If 35–44 points, essential connections are provided	Y	–	–
CONCLUSION: Significant	Y	Y	Y

Key:	
Y – Yes	I – Incomplete
N – No	NA – Not Applied

Howard Canyon Area

BIG CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Howard Canyon

Length Inventoried: 5,124 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 6,000 ft

Area of Watershed in Multnomah County: 4,134 acres - Includes Knieriem and Howard Creek drainages.

Abutting Land Use Designations (percent of study area stream length):

	Exclusive Farm Use	Commercial Forest Use	Rural Residential
Big Creek	15%	70%	15%

Stream Description:

The survey started at the west side of the bridge where the stream crosses Littlepage Road and ended where the stream creates a 90 ft falls. There was no safe way of continuing the survey past this point. The mouth of the stream could not be located in the amount of time allowed.

Big Creek was severely impacted by housing and pasture land. Over half of the surveyed area had paved roads adjacent to the stream. Streamside vegetation was degraded and cover was minimal in most areas. In some parts of the riparian area natural vegetation was present. There were at least two obvious withdrawal sites with pipes in the stream and a landowner told us how he had confronted another neighbor about gravel removal from Big Creek. Much of the creek contained potentially good gravel cobble. The flow of the stream was fast enough for good aeration.

Section one runs along Littlepage Rd. The first half of this section has some riffles and deep areas that could count as pools. It even contained some backwater areas. The stream is wide, average 35 feet, consisting mainly of runs. There is woody debris in the first half of this section along with trees and shrubs that have been recently uprooted, see photos. Banks are undercut or have silt build up. However, in the first half there is some cover and groundcover is more natural. The second part of section one is closer to the road and more severely impacted by housing and pastures. What over there is, is brushy and grass runs up to stream. Banks are often bare and muddy. Animals have unrestricted access to stream. There are good gravels in this section, though somewhat embedded.

Section two continues to look like the last half of section one. Pasture is dominant and cover is minimal. Parts of the creek are fenced off to limit animal access. Alders and cedars provide some cover toward the end of this section. Banks not well covered and show signs of erosion, see photos.

Stream fairly uniform but in some places depths can reach hip boot level. Flow is steady, not many pools or riffles, mostly runs.

Section three had better cover from cedar trees. Much of the groundcover continues to be lawn grass. First part of the section is pasture. There is a fence and blackberry brambles form a partial barrier to animal access. Second half of this section almost looks like a park with evidence of horse use. Some intrusive plants in area like English ivy and Himalayan blackberry and non-native holly trees. Large area of banks are bare.

There is a pumping station by a modern-looking brown house. This house also has a tire structure to enforce landscape. There looks like there might be some construction in this area. There are some boulder and riffle areas in this section.

Section four is characterized by change in gradient. Rapids instead of riffles are evident. Boulders make up the major part of the substrate. Houses on both sides of the creek still impact area and there seems to be another pumping station right by small falls. Creek entering Big Creek from the south side had cattle in and around it. There are steep hillsides but surrounding area is still pasture and houses. Some woody debris in and around streams but not much. Landslide area in this section. Canyon walls provided the majority of shade in this area.

Section five had natural riparian vegetation and cover. More evidence of landslide. Cover is shrubby consisting of flowering currant and willows; trees include some cedar, with more Douglas fir. There is more woody debris in this area than before. Springs and tributaries coming in from both sides of canyon. Predominant plants are sword fern, piggyback, bleeding hearts, and oxalis.

Substrate along this section was bedrock and boulders. Water very fast with a 90ft falls at about 900ft into section. Banks showed large areas of wearing away and, as mentioned, there was landslide by the falls where the survey ended.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S8927	SWSE 2 1S4E	Domestic	.0500 CFS
S12596	SESW 2 1S4E	Domestic	.0100 CFS
		(incl. lawn & garden)	
S16233	SWNE 2 1S4E	Irrigation	.0600 CFS
S22546	SWSW 35 1N4E	Irrigation	.0700 CFS
S22539	NESW 2 1S4E	Irrigation	.3000 CFS
S24926	SESE 3 1S4E	Irrigation	.4600 CFS
S22535	SWSW 2 1S4E	Irrigation	.2500 CFS
S24053	SWSW 2 1S4E	Irrigation	.1600 CFS
S37747	SWSE 2 1S4E	Irrigation	.0200 CFS
S39817	SWSE 2 1S4E	Domestic	.0050 CFS
S39817	SWNE 2 1S4E	Irrigation	.0400 CFS
S39817	SWNE 2 1S4E	Livestock	.0050 CFS

RECREATION

Park/Recreational Facility: Big Creek drains to the Sandy River. The creek meets the river at Camp Collins, a private YMCA camp adjacent to Oxbow County Park. The Sandy flows downstream through Dabney State Park and Lewis and Clark State Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: N/A

Groundwater Recharge for a Municipal System: N/A

Flood Storage Area:

Number of wetlands/ approximate size: Small wetlands adjacent to stream.

Flood Storage Capacity: Small increase in storage capacity beyond that of the immediate stream channel.

Riparian Corridor: see attached table

Average Width: 126 ft

Range of Width: 80-200 ft

Benefit to Water Quality: The current low level of low canopy cover will allow seasonal increases in water temperature and may result in higher peak flow levels. Stream cover is insufficient to be a benefit to water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: N/A

Wildlife Habitat Assessment: (see attached table) Wildlife Habitat quality is directly related to water quality activities.

Average score: 42

Range of scores: 39-49

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

Howard Canyon

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Big Creek	1	8	6	4	4	3	3	2	3	2	2	1	1	1	0	40
Big Creek	2	8	6	5	4	3	3	2	3	3	2	0	0	2	0	41
Big Creek	3	8	6	4	3	3	3	2	3	3	2	0	0	2	0	39
Big Creek	4	8	6	7	3	5	4	2	4	4	2	1	0	3	0	49
Big Creek	5	8	6	5	2	3	3	2	3	3	2	2	2	2	0	43
AVERAGES		8.0	6.0	5.0	3.2	3.4	3.2	2.0	3.2	3.0	2.0	0.8	0.6	2.0	0.0	42.4

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width of Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Big Creek	1	50	80	X			
Big Creek	2	20	100	X			
Big Creek	3	30	50	X			
Big Creek	4	50	50	X			
Big Creek	5	100	100		X		
AVERAGES		50.0	76.0	80%	20%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

HOWARD CANYON CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Howard Canyon

Length Inventoried: 15,840 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 17,000 ft + 8,000 ft for two unsurveyed tributaries.

Area of Watershed in Multnomah County: 1,575 acres

Abutting Land Use Designations (percent of study area stream length):

	Exclusive Farm Use	Commercial Forest Use	Rural Residential
Howard Canyon	20%	80%	0%

Stream Description:

The survey started from the confluence with Big Creek at Littlepage Road. The first seven sections have housing and pasture lands adjacent to stream. Where there is pasture, animals for the most part have unrestricted access and at the time this survey was done, cattle were actually seen in the stream. Streamside cover is of moderate quality and density near houses and pasture cover was sparse to none. Banks along this area were eroding with large pieces of bank falling off into stream because of a storm event.

The start of the Howard Canyon Creek survey was arbitrary and assigned to Littlepage Road. This is how the data sheets and this report will reference the stream, however, the first section could be assigned as Big Creek and the first 400 ft of section two could also be assigned as Big Creek.

Sections 8-12 showed many small springs coming from north side of road. At least 12 small tributaries formed from springs crossed under road via culvert. These springs usually corresponded to adjacent wetlands along the main stream. These sections were also characterized by large cedars, cedar snags and large downed woody debris on hillside and in stream.

Section 1 started at bridge where stream crosses under Littlepage Road. Most of section one was landscaped front yard of house. Large cedars provided cover along with salmonberry, red alders, and willows for shrub layer. In front of house groundcover was mostly grass but other groundcover was more natural like piggyback, sword fern, buttercup, English ivy, and Himalayan blackberry. Area that was not house yard had good natural cover. Toward end of section there was a small wetland area that had dense, tall horsetails. Substrate in this area was composed of mainly cobble and gravels. Typical banks were silt with some cover. The water in this system even after flood event contained suspended material, however the substrate did not seem severely embedded.

Section two consisted mostly of pasture for cows and possibly horses. Animals had unlimited access to stream and there were severe erosion problems and bank degradation. Cover was minimal to non-existent. There was evidence of vehicle traffic through stream via mud road. Pasture drained directly to stream. Substrate consisted of cobbles and gravels. No pools were evident at time of sampling.

Section three was continuation of section two. Pasture with unrestricted access to stream by animals. Some cover was provided by brushy alders and willows. Severe bank erosion. Saw rivulets coming from pasture into stream during storm event. Substrate still a mixture of gravel and cobbles.

Section four at the beginning has pasture with cows in stream. Stream is culverted and crosses Howard Road. This section has new construction, trailer house, and outbuildings on it. Much of the bank around houses is garden area and grass. Steep mud bank on new construction site. Man-made pond in same area between new house and trailer house. Cover is provided by hillside and sparse trees. Stream consists of runs and some riffles. Substrate continues to be gravel and cobble.

Section five has structures close to stream but the cover is more natural. Thick blackberry brambles prevent access to stream first 400ft. Howard Road is still running parallel to stream but further away than downstream sections. Trees consist of cedar, red alder, big leaf maple. Shrub layer is made up of alder, willows, and salmonberry. Groundcover is blackberry, waterleaf, piggyback, sword fern. Small wetland appears toward end of this section. There is a side gravel road that heads north off Howard Road that has large dump truck traffic.

Section six starts with a house and outbuildings. Grass runs down to streamside and front of house has large cement patio area. Cover here is cedar, hemlock and alders predominantly. Large snags and large down woody debris along banks make good habitat. Very brushy along streamside after the house, made up of salmonberry, willow, small red alder, and blackberry. Noticed some 12-inch cedar seedlings growing along streamside in this section. Groundcover upstream from house consists of sword fern, licorice fern, oxalis, nettles, phalaris.

Garbage dumped adjacent to stream severe in one area where the road is fairly close to stream. Some pools in this area but hard to tell because of level of water. Lots of large and small woody debris in and around stream. Substrate appeared to be mostly cobble and gravel.

Section seven has more tributaries coming in on both sides of the creek allowing for better developed wetlands on either side of creek. Big cedars across stream, along bank and standing snags. Looks like a fire went through this section some years back. Cover came from cedars, hemlock, Douglas fir, red alder. shrub layer consisted of willow, salmonberry, vine maple, and small red alders.

Besides wetlands alongside stream there were mud bars or silt build up. Substrate when visible was cobble and gravel. This section had some good riffles and lots of down woody debris.

Section eight is similar to section seven but the brush is not so dense. Snags are smaller and there is more down woody debris in and around stream. More moss and groundcover consists of sword fern, bracken fern, licorice fern, oxalis, iris, nettles, piggyback, devil's club. Cedar, hemlock, red alder still predominant tree cover and shrubs still salmonberry, willow with some blackberry.

Section nine is similar to last two sections. Most of the same plant species with good assortment of liverworts on bank in evidence. Still lots of good moss and to groundcover add bleeding heart and mullen. Possibly more hemlocks in this area and black cottonwoods added to cedar, red alders as tree layer. There are more small tributaries coming in and more wetlands on both sides of creek. Wetlands have skunk cabbage. Cedar and deciduous snags and down woody debris in and around stream still common. Shrub layer not as dense as previous sections made up of willow, salmonberry, not as much blackberry. Substrate is gravel and cobble with gravel bars along side. Also have island in stream to add to diversity.

Section ten looks comparable to sections seven through nine. New feature in this section are the islands in the stream adding to the diversity of habitat. Most of these islands are 10ft wide and 20ft long. There are several in this section. Not as many large snags, but still some smaller deciduous snags. Less brush in this section. There seems to be less tributaries and correspondingly less wetlands. Half way through section there is a dirt road that crosses stream that is used, possible house(s) on south side of creek that use road. Banks in this section appear more undercut with possible erosion potential. Substrate silt, gravel and cobble.

Section eleven has more conifer cover with cedars being the dominant tree. Stream receives good shade from trees and down woody debris in stream. Tributaries, springs, and wetlands are back in this section. Stream has good diversity with pools, backwater, runs and riffles. Plants stay about the same with moss and liverworts in wet and shady areas. Substrate still gravel and cobble with more sand, silt still present.

Section twelve is similar to eleven but less riffles and pools. Tributaries and wetlands on both sides of stream. Cover is still good. There is more silt in stream though it is usually in isolated areas or near stream bank. Gravel and cobble does not seem to be severely embedded. Not as much large woody debris but still plenty of small woody debris in and around stream.

Section thirteen has the faster riffles back like in section eleven. Sections eleven, twelve and thirteen are very comparable in cover and plant species. Still have liverworts and moss, sword fern, piggyback. Shrub layer is still dense with dominant plant species being salmonberry and willow. Large cedars present but not as numerous as in eleven. Not as many wetlands but tributaries and wetlands are still present. Snags, woody debris in and around streams add to habitat dimensions. Substrate embeddedness is minimal.

Section fourteen at the beginning has skunk cabbage wetlands. Trees do not seem as old and cover is less. More brushy with smaller snags than in previous sections. No new plant species. There is still down woody debris in and around stream but not as common. This is the first section that has had boulders except for pasture in first section. Stream more uniform. Banks are undercut.

Section fifteen is where the fork in stream is. This survey chose the stream on left looking upstream. Other stream headed south and quickly disappeared from sight. Both streams looked similar in flow. Wetlands and tributaries drop out in this section. Plant species stay the same except no liverworts and less moss. Add deer fern to plant list. Very shrubby, predominantly willow. There is still woody debris in and around stream, but not as common. Trees and woody debris much smaller in diameter. Substrate still gravel and cobble with silt in isolated areas. Stream continues on.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
S22539	NESW 2 1S4E	Irrigation	.3000 CFS

RECREATION

Park/Recreational Facility: Howard Canyon Creek flows into Big Creek which drains into the Sandy River. Big Creek meets the Sandy River at Camp Collins, a private YMCA camp adjacent to Oxbow County Park. The Sandy flows downstream through Dabney State Park and Lewis and Clark State Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: Eleven - small to medium size wetlands adjacent to stream.

Flood Storage Capacity: The wetlands provide greater flood storage capacity than the stream channel alone. They are spread out over the length of the stream and will also mitigate flow rates.

Riparian Corridor: see attached table

Average Width: 150 ft

Range of Width: 10-200 ft

Benefit to Water Quality: Present canopy cover is sufficient to increase water quality by maintaining stream temperature and mitigate peak flows.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: None

Wildlife Habitat Assessment: see attached table

Average score: 55.4

Range of scores: 22-73

Essential Connections: N/A

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

Howard Canyon

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Howard Canyon Creek	1	8	6	6	4	5	5	3	6	6	3	1	1	3	0	57
Howard Canyon Creek	2	8	6	1	3	1	1	1	1	1	1	0	0	1	0	25
Howard Canyon Creek	3	8	6	0	2	0	1	1	1	1	1	0	0	1	0	22
Howard Canyon Creek	4	8	6	3	2	2	2	2	2	2	2	0	0	1	0	32
Howard Canyon Creek	5	8	6	6	4	5	6	3	6	6	3	2	2	3	0	60
Howard Canyon Creek	6	8	6	7	4	5	7	3	6	6	3	2	2	3	0	62
Howard Canyon Creek	7	8	6	7	5	4	5	3	7	7	3	2	2	3	0	62
Howard Canyon Creek	8	8	6	7	4	6	7	3	6	6	3	2	2	3	0	63
Howard Canyon Creek	9	8	6	6	5	4	6	3	6	5	3	3	3	5	0	63
Howard Canyon Creek	10	8	6	6	4	6	6	3	6	6	3	2	2	4	0	62
Howard Canyon Creek	11	8	6	7	7	7	7	3	7	7	3	2	3	6	0	73
Howard Canyon Creek	12	8	6	6	7	7	7	3	6	6	3	2	2	5	0	68
Howard Canyon Creek	13	8	6	6	6	6	6	3	6	6	3	3	3	5	0	67
Howard Canyon Creek	14	8	6	5	6	6	6	3	4	5	3	3	4	4	0	63
Howard Canyon Creek	15	8	6	4	3	4	4	2	4	4	2	4	4	3	0	52
AVERAGES		8.0	6.0	5.1	4.4	4.5	5.1	2.6	4.9	4.9	2.6	1.9	2.0	3.3	0.0	55.4

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: Howard Canyon

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width of Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Howard Canyon Creek	1	100	100		X		
Howard Canyon Creek	2	0	100	X			
Howard Canyon Creek	3	0	10	X			
Howard Canyon Creek	4	100	10	X			
Howard Canyon Creek	5	100	60		X		
Howard Canyon Creek	6	100	50		X		
Howard Canyon Creek	7	100	60		X		
Howard Canyon Creek	8	100	50		X		
Howard Canyon Creek	9	100	90		X		
Howard Canyon Creek	10	100	50		X		
Howard Canyon Creek	11	100	50		X		
Howard Canyon Creek	12	100	50		X		
Howard Canyon Creek	13	100	70		X		
Howard Canyon Creek	14	100	100		X		
Howard Canyon Creek	15	100	100	X			
AVERAGES		86.7	63.3	27%	73%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

KNIERIEM CREEK Stream Profile

GENERAL INFORMATION

Location Study Area: Howard Canyon

Length Inventoried: 12,670 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 12,670 ft

Area of Watershed in Multnomah County: 1,185 acres

Abutting Land Use Designations (percent of study area stream length):

	Exclusive Farm Use	Commercial Forest Use	Rural Residential
Knieriem Creek	15%	85%	0%

Stream Description:

Knieriem Creek in general is impacted by housing, roads running alongside and lack of cover. Large trees are minimal in the area. The diversity of different water habitats in the sections are low, tending mostly toward runs with few pools and riffles. Substrate is embedded and consists predominantly of silt. The water is murky and banks show signs of erosion.

Knieriem Creek has two areas of severe impacts to the stream and riparian area. The first two sections, starting at the mouth where Knieriem Creek and Howard Canyon Creek meet, run through pasture. Animals have direct access to stream and there is little or no riparian vegetation. The stream also looks channelized.

The second major area of concern is near the source. There is dense housing for a rural area at the end of Salzman Road off the Crown Point Highway. A private gravel drive leads across the stream. To the east there is stream diversion, ponding and clearing of riparian vegetation.

Section one Knieriem Creek meets Howard Canyon Creek in pasture next to Howard Road. There is no cover and cattle have unrestricted access to stream. Banks show severe signs of erosion and in places stream is channelized.

Section two has pasture and houses alongside the creek. Cover is minimal consisting mainly of willows and Himalayan blackberry brambles. There is a pond adjacent to stream, great blue heron and mallards were sighted there.

Section three has better tree cover than the previous section, still sparse. Wetlands adjacent to streamside. Stream substrate predominantly silt in this section. Banks show some signs of erosion. Some woody debris in stream.

Section three has woody debris in and around stream. Gravels are present but embedded. Wetlands are adjacent to stream. Knieriem Road runs 20-30ft away from stream. Cover is better in this area with some conifers.

Section four similar to section three. Banks show signs of erosion. Cover is still sparse but there are trees and woody material is present in and around stream. Wetlands present both sides of stream.

Section five single family dwelling with much clearing and construction started in this section. Land scraped clean down to stream. There is a gravel road that crosses and continues alongside the stream and up hill. English ivy is present around construction area. Stream heavily silted.

Section six has three noticeable tributaries entering stream. There is housing at downstream and upstream portions of section. Stream itself has more diversity. Riffles are better developed and there are boulders. Banks still show signs of severe erosion. Cover is better, and there is woody debris in and around stream. Wetlands are present but not common.

Section seven has brushy cover with some trees. Pond and better developed wetlands in this section. Some woody debris in stream and snags along riparian area. House and pasture impacts section at downstream beginning.

Section eight similar to sections six and seven. Hillside provides shade and there are more trees in riparian area. Several springs enter creek in this section. Substrate still silty and gravels embedded.

Section nine has grassy road leading down to stream from hill. Hillside has sparse vegetation with possibility of pasture and construction above horizon. Creek extremely turbid. Bank erosion evident. Some tree cover. Silt built up alongside stream. Dominant substrate still silt.

Section ten is transition between nine and eleven. Few conifers and cover is sparse. Water is very silty, noticed abrupt change around 700ft into section where water cleared. Could not locate source of turbidity. Possible construction on hilltop. Bank erosion still evident.

Section eleven is most natural section. Cover is thicker with more sword ferns. There is a footpath that follows creek from gravel road at end of this section down through section eight. Small wetlands adjacent to stream. Man-made pond runs alongside stream for about 120ft and is 30ft wide. Pond receives shade from hillside and trees.

Section twelve highly impacted by housing and construction. Stream has been diverted to make two pond areas. Trees have been cut and riparian area cleared. Segment outside construction area is brushy and substrate is silty. Flow is mostly runs. Banks eroded and covered with silt.

ECONOMIC

DWR Water Rights Data:

<u>Permit Number</u>	<u>Location</u>	<u>Use</u>	<u>Rate/Quantity</u>
15917	NENE 2 1S4E	Irrigation	.8700 CFS
40933	NENE 2 1S4E	Irrigation	.0600 CFS
40933	NENE 2 1S4E	Livestock	.005 CFS

II-50

RECREATION

Park/Recreational Facility: Knieriem Creek flows into Big Creek which drains into the Sandy River. Big Creek meets the Sandy River at Camp Collins, a private YMCA camp adjacent to Oxbow County Park. The Sandy flows downstream through Dabney State Park and Lewis and Clark State Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: Five adjacent to stream channel.

Flood Storage Capacity: The wetlands provide greater flood storage than the stream channel alone. They are spread out over the length of the stream and will also mitigate flow rate and reduce erosion.

Riparian Corridor: see attached table

Average Width: 10 ft

Range of Width: 0-160 ft

Benefit to Water Quality: Canopy where it exists is predominantly deciduous - it will mitigate summer temperatures to maintain summer stream temperatures.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: None

Wildlife Habitat Assessment: see attached table

Average score: 51

Range of scores: 30-72

Essential Connections: N/A

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: Howard Canyon

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width of Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0-25%	25-50%	50-75%	75-100%
Knieriem Creek	1	0	0	X			
Knieriem Creek	2	10	10	X			
Knieriem Creek	3	60	80	X			
Knieriem Creek	4	100	30	X			
Knieriem Creek	5	50	20	X			
Knieriem Creek	6	80	50	X			
Knieriem Creek	7	80	60	X			
Knieriem Creek	8	60	60		X		
Knieriem Creek	9	50	80	X			
Knieriem Creek	10	40	80	X			
Knieriem Creek	11	80	80	X			
Knieriem Creek	12	80	40	X			
AVERAGES		57.5	49.2	92%	8%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

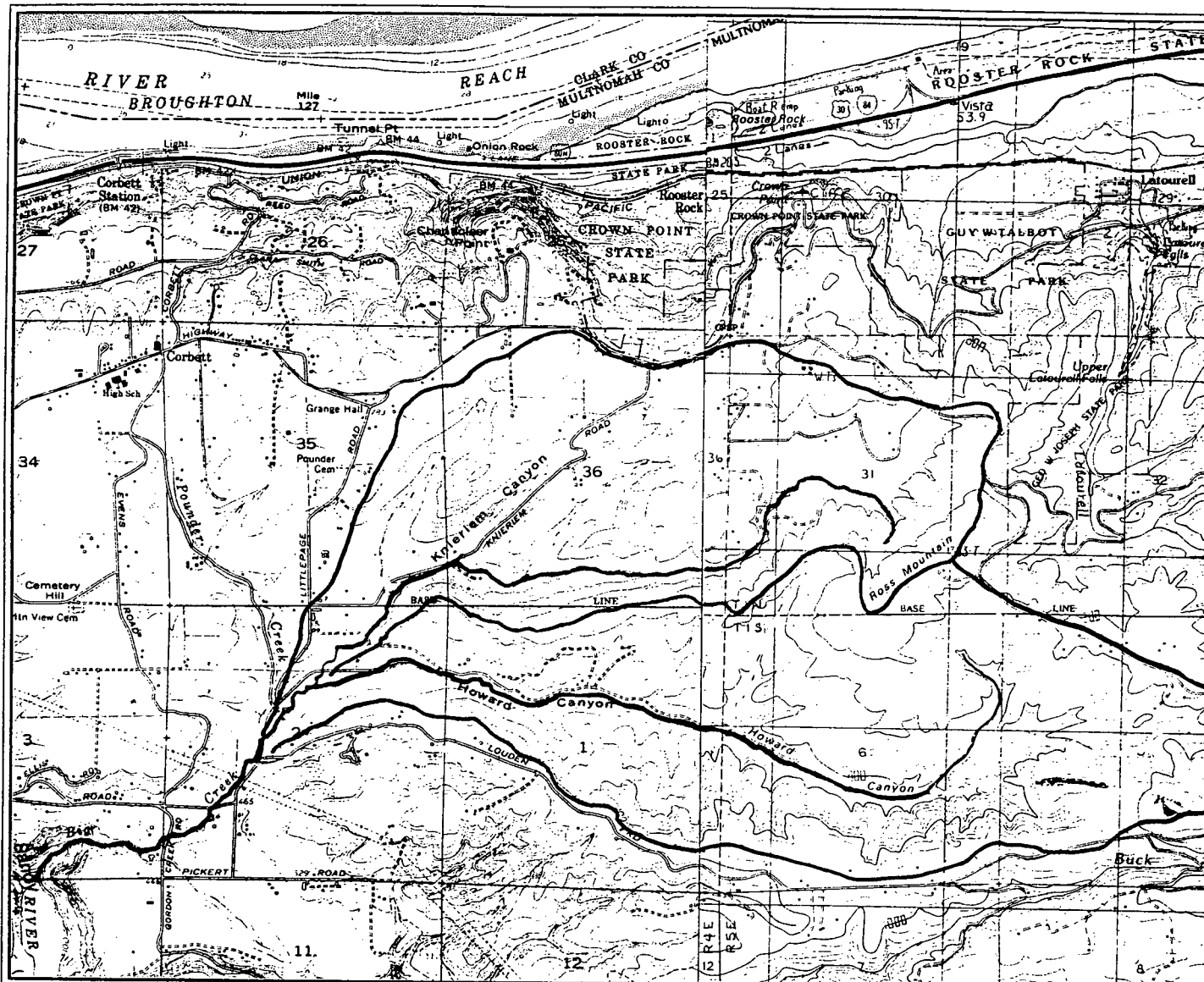
MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA:

Howard Canyon

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Knieriem Creek	1	8	6	1	2	1	4	3	1	1	3	0	0	1	0	31
Knieriem Creek	2	8	6	5	4	3	3	3	3	2	3	0	0	2	0	42
Knieriem Creek	3	8	6	6	4	5	5	3	5	4	2	2	2	3	0	55
Knieriem Creek	4	8	6	5	4	5	5	3	5	5	3	1	1	3	0	54
Knieriem Creek	5	8	6	6	5	6	6	3	3	3	2	0	0	2	0	50
Knieriem Creek	6	8	6	5	6	6	6	3	6	6	3	2	2	3	0	62
Knieriem Creek	7	8	6	5	6	4	4	4	6	6	3	2	2	4	0	60
Knieriem Creek	8	8	6	6	4	5	6	3	5	5	3	3	3	4	3	64
Knieriem Creek	9	8	6	4	4	3	3	3	4	3	3	2	2	3	0	48
Knieriem Creek	10	8	6	4	3	4	3	3	2	2	3	3	3	3	0	47
Knieriem Creek	11	8	6	7	8	7	7	3	6	6	3	3	3	5	0	72
Knieriem Creek	12	8	6	2	2	2	2	3	1	1	2	0	0	1	0	30
AVERAGES		8.0	6.0	4.7	4.3	4.3	4.5	3.1	3.9	3.7	2.8	1.5	1.5	2.8	0.3	51.3



Significant Streams Study for Multnomah County

HOWARD CANYON AREA

LEGEND

- Water rights permit
- Study area boundary
- Watershed boundary
- Stream segment inventoried



Base map from U.S.G.S. 7.5-minute
quadrangles (Linnton, Sauvie Island,
Portland, Hillsboro, and Dixie Mountain)

7935258 March 1994

FIGURE

SHAPIRO

45-11

CHAPTER III

HOWARD CANYON AGGREGATE RESOURCE

Mineral and Aggregate Inventory Site #8

C 2-94

CHAPTER III TABLE OF CONTENTS

A. Significance Determination	page
1. Background	III-3
2. Location	III-3
3. Quantity	III-5
4. Quality	III-7
5. Significance Conclusions	III-8
B. Resource Analysis	
1. Description of Resource	III-9
a. Summary Of Statewide Planning Goal 5 Administrative Rules	III-9
b. Site Description	III-9
c. Existing And Anticipated Mining Activities	III-10
2. Impact Area	III-11
a. Impact Area Description	III-12
b. Area Road Limitations On Resource Extraction	III-14
3. Conflicting Uses	III-17
a. Allowed Uses Not Applicable To The Analysis	III-17
b. Allowed Uses That Will Not Conflict With Resource	III-19
c. Allowed Uses That May Conflict, But Are Unlikely To Occur	III-22
d. Allowed Uses That May Conflict	III-23
e. Other Goal 5 Resources	III-25
4. ESEE Analysis	III-25
a. Economic Effects	III-26
b. Social Effects	III-30
c. Environmental Effects	III-31
d. Energy Effects	III-34
e. Other Applicable Statewide Planning Goals	III-35
5. Resource Analysis Summary	III-40
6. Footnotes	III-44

Maps

Boundary of Aggregate Resource	III-4
Resource / Impact Area / Streams / Houses / Roads	III-13

A. AGGREGATE RESOURCE SIGNIFICANCE DETERMINATION

1. BACKGROUND

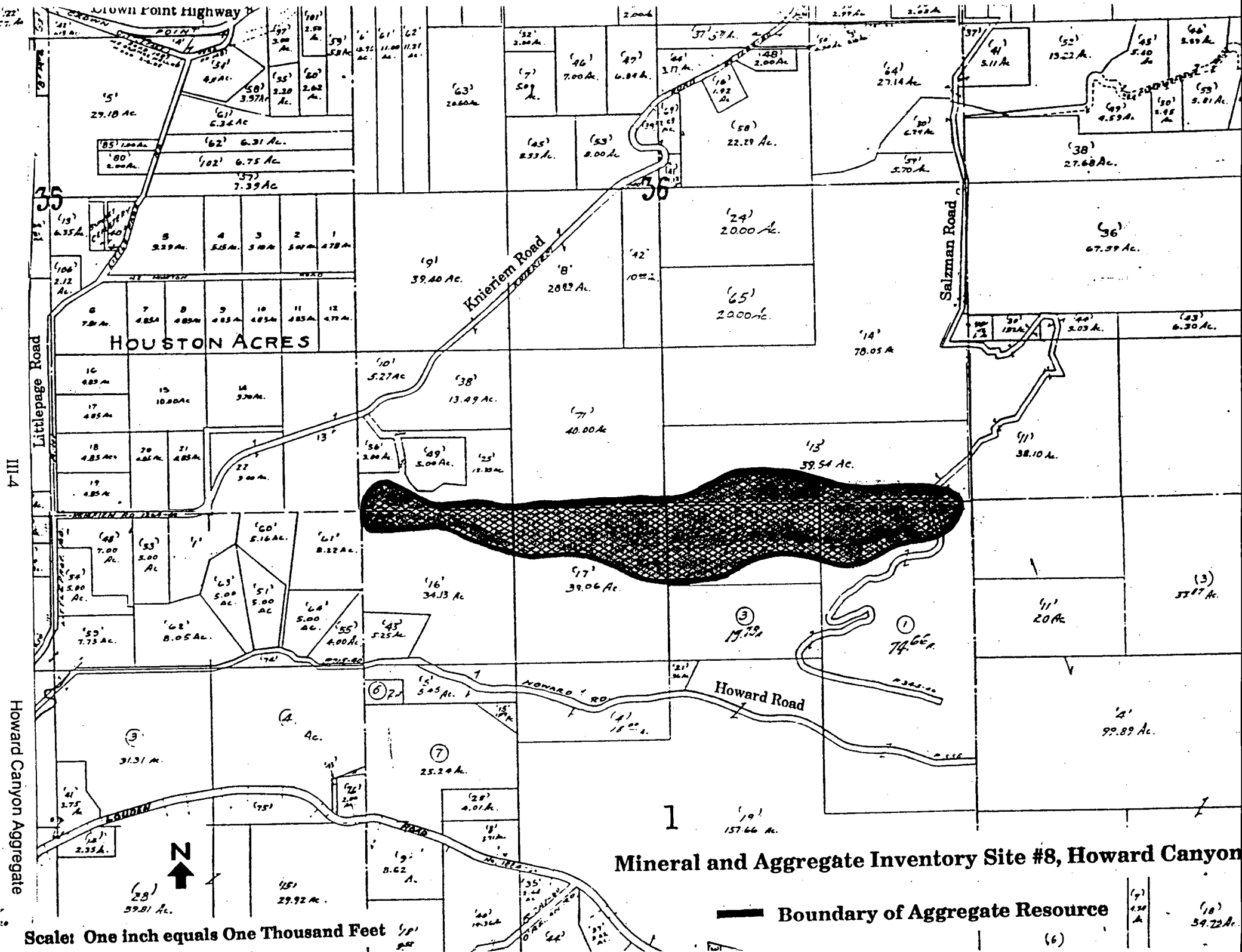
This first portion of this revised analysis is the determination of significance. The procedure for this determination is given in Oregon Administrative Rules (OAR) 660-16-000 (1) through (5). The rule directs the local government to determine whether there is sufficient information on the location, quality and quantity of the resource at a particular site. Then, based on that evidence, the local government must decide if the site is significant. The County's Comprehensive Plan will then reflect that conclusion. The prior determination of significance for this site was adopted on March 27, 1990 and concluded that the Howard Canyon site was significant and the site was included in the significant (important) site inventory. The following significance determination report is a redraft of the 1990 analysis to more closely follow the administrative rule requirements.

2. LOCATION

This aggregate resource is a cleared ridge top which runs in an east-west orientation along the section line between Section 36, Township 1 North, Range 4 East and Section 1, T. 1 S., R. 4 E., WM. The resource is a Boring Lava Formation that comprises the ridge between Knieriem / Ross Creek on the north and Howard Canyon Creek on the south. The formation covers portions of tax lots 25, 71, and 13 in Section 36 and tax lots 16, 17, 2 and 1 in Section 1.

The extent of the resource is shown on a map submitted by the property owner and confirmed by 31 test pits dug by both the property owner and the consulting firm of H. G. Schlicker & Associates, Geologists and Engineers. Maps in this Goal 5 report have been prepared by County staff, but are based upon the map submitted by the property owner. The location of the test pits are shown on the property owner's map and on a map in the appendix of a January 9, 1989 report entitled "Geologic Reconnaissance, Howard Canyon Quarry, East Multnomah County, Oregon," Project #88-416, prepared by H.G. Schlicker & Associates, Inc., Geologists and Engineers, 235 NE 122nd Avenue, Suite 315 [now 300], Portland, Oregon, 97230. The 22 page Schlicker report is incorporated in it's entirety by reference as findings. That report did not map the boundary of the resource, only the location of the test pits. The westernmost test pit, as shown on the Schlicker report test pit map, is actually about 700 feet from the western boundary of the resource as drawn on the property owner's map. Except for the exact westerly extent of the resource, Multnomah County accepts and believes the aggregate resource location information cited. However, lacking any conflicting information, the property owner's boundary will be used for this Goal 5 analysis.

The geologic process that resulted in this ridgetop formation occurred from basalt lava pouring from boring vents into and filling stream valleys that existed about 2 million years ago. Since that time streams have cut new channels and valleys into the softer "Troutdale Formation" that is between the lava filled valleys. As a result, the former valleys are today's ridge tops (page 2, Schlicker, 1/9/89).



Scale: One inch equals One Thousand Feet

The basalt lava resource occupies the upper 50 feet or more of the ridge crest and is more than 4,200 feet long and more than 350 feet in width. The width of the whole ridge, (not just the lava), is approximately 700 feet. The ground surface at the top ranges in elevation from 780 feet to 860 feet above sea level. On page one of a December 8, 1986 "Report of On-Site Inspection," (site ID #26-0065), written by E. Frank Schnitzer, Reclamationist with the Department of Geology and Mineral Industries, it was reported that the slopes off of the ridge range from 50 to 90 percent. Access to the resource area is by private drives connecting with Knieriem Road on the north side of the ridge and connecting with Howard Road on the south side.

The Howard Canyon aggregate resource is located just north of the approximate geographic center of the unincorporated area of the County that is between the City of Gresham on the west and the National Forest on the east. There is no other aggregate site in unincorporated East Multnomah County with the required Goal 5 OAR location, quantity and quality information available.

The Boring Lava geologic unit is not uncommon in Multnomah County. In the area east of the Sandy River to the National Forest, Boring Lava (basaltic flows, cinders and tuffs) is the predominant geologic unit in area covered, (Geologic Map, Figure 5, "Geologic and Slope Hazard Maps, Unincorporated Multnomah County, Oregon," Shannon & Wilson, Inc., Geotechnical Consultants, September, 1978). What is not known about these locations is the depth of overburden, quality of the rock, and the extent of the quality rock.

Unlike other operating quarries in Multnomah County, such as the Angell Brothers site and nearly all urban locations, direct access to the Howard Canyon quarry is only from local roads instead of collector, major collector, or arterial streets.

The closest operating aggregate quarries are in the City of Gresham, located in the vicinity of SE 190th Avenue between SE Division and SE Yamhill Streets (Gresham Sand and Gravel, Rogers Construction, and Multnomah County Public Works). There is no current information on the quantity of the aggregate resource remaining at these sites. The sites are all zoned Heavy Industrial under the jurisdiction of the City of Gresham. Urban land uses, including residential, commercial, and industrial, surround and abut the resource sites. Under the present zoning, it appears that the sites are at some risk of conversion to non-mining land uses before depletion of the resource if the value of the properties for industrial uses exceed the value of the aggregate resource.

3. QUANTITY

On page three of the January 9, 1989 Schlicker report it reads:

Quantity

The basalt occupies the upper 50 feet or more of the ridge crest except for the thin Loess overburden. The ridge rock deposit is more than 4200 feet

long and 350 feet wide and contains at least 33 acres of ground. The volume of rock in place is then $(4200' \times 350' \times 40') / 27 = 2,177,778$ cu yards. When rock is crushed it expands about 25% therefore the deposit will produce more than 2.7 million tons of crushed basalt.

Because the lava is believed to occupy an old stream valley and the center of the valley should be much deeper, the deposit should be thicker than it appears and an estimate of an additional 30% of rock is not unreasonable. This additional rock would bring the total to 3.5 million tons. ...

On page one of the same report it was stated that the 31 test pits that were dug showed that, on average, there was a little over seven feet of overburden on top of the rock. The top two feet of the rock is highly weathered and is considered to also be overburden (page three). These two depths are conservatively added together to total ten feet of overburden.

At the time of the Schlicker report there had not been any drillings to determine the depth of the resource. However, from the rock exposures in the existing quarry face and the geologic knowledge of this formation there is confidence in the continuity of the resource depth across the ridgetop.

The above cited DOGAMI on-site inspection report of December 8, 1986 notes that at that time of the inspection the DOGAMI Reclamationist also believed the layer of hard rock to be approximately 40 feet thick. The report is incorporated by reference as findings.

Multnomah County accepts the above as sufficient findings in determining the quantity of aggregate material at the resource site.

There is only one other aggregate site in unincorporated Multnomah County for which there is sufficient information on quantity to meet Goal 5 OAR requirements. That site is the Angell Brothers Quarry which is located west of the City of Portland. Angell Brothers is estimated to contain approximately 220 million cubic yards of very good aggregate material (see the Resource Significance Determination portion of the chapter on Angell Bros. in the "West Hills Reconciliation Report"). In comparison with the quantity of aggregate at the Angell Brothers site, the Howard Canyon site is small. However, the 2.2 million cubic yards at Howard Canyon is the only aggregate resource site in unincorporated East County for which the quantity of material has been verified. Therefore, it is Multnomah County's determination that an amount of material in the millions of cubic yards, although so much smaller than the site on the other side of the County, is difficult to deny as being significant, especially in light of the lack of information on other sites.

Multnomah County Comprehensive Framework Plan Policy 16-B (effective at the time of this report) states, "Determination that a particular mineral and aggregate site is both *Important* and should be included in the plan inventory is to be based on the site's proven ability to yield more than 25,000 cubic yards of resource." Therefore, this site with a reserve of over 2 million cubic yards is significant by the Comprehensive Plan criteria.

The closest operating aggregate quarries, located in the City of Gresham, are the Gresham Sand and Gravel, Rogers Construction, and Multnomah County Public Works. What information that is known on the quantity of aggregate resource at these sites is from a 1978 publication from the State of Oregon Department of Geology and Mineral Industries. The publication is titled "Special Paper 3, Rock Material Resources of Clackamas, Columbia, Multnomah, and Washington Counties, Oregon" and the authors are Jerry J. Gray, Garwood R. Allen, and Gregory S. Mack. On Table 5 of the publication, the 1978 estimate of "future potential" production was: 230,000 cubic yards on the Multnomah County property (which now contains the Yeon Shops, main offices and maintenance facilities for the Division of Transportation); 1,200,000 cubic yards on the Gresham Sand and Gravel property; and 4,000,000 cubic yards on the Rogers Construction property. Tables 5 and 11 are incorporated by reference as findings. In consideration of the 16 years of extraction that have taken place since the 1978 DOGAMI publication and the questions about future availability of these sites raised in the previous section, it is difficult to compare the quantities of aggregate available at these City of Gresham sites with the quantity available at the Howard Canyon site.

4. QUALITY

The January 9, 1989 Schlicker report states on page three:

Quality

Exposures in the existing quarry face show the basalt to be columnar jointed and thinly weathered. Beneath the thin weathering scale the rock is hard and fresh. ... Tests show the partially weathered rock to make satisfactory base rock. The harder fresh rock can be used for oil and topping. ...

In addition to crushed rock, the site can produce high quality rip-rap. This material is scarce and after major floods is in short demand.

A December 13, 1988 letter from Gary Fielding, (Senior Technician with Rittenhouse-Zeman & Associates, Inc., Geotechnical & Hydrogeological Consultants, 8050 SW Cirrus Drive, Beaverton, Oregon, 97005), to Raymond Smith, Corbett, Oregon, reads in part:

This letter presents the results of laboratory testing of rock sampled from the subject location. The purpose of this test was to determine the suitability and quality of the rock products for use in construction as defined by the Oregon State Highway Division (OSHD). The test was performed in general accordance with the American Standard for Materials and Testing (ASTM), test designation C-535, Resistance to Abrasion of Large Size Course Aggregate by use of the Los Angeles Machine.

Based upon the above test results, it is our opinion this rock meets OSHD's specifications for Base Aggregate.

Attached to Mr. Fielding's letter to Mr. Smith is a letter, dated the same date, to Mr. Fielding from a Dennis Cody, Supervisor of Field Operations, with Northwest Testing Laboratories, Inc., 5405 N. Lagoon Avenue, Portland, Oregon, 97217. This one page report, (number 86679), stated in part:

Subject: Abrasion test performed one (1) aggregate sample 12-12-88
Item: Howard Canyon Pit

Results:

Abrasion: ASTM C-535 Grading #3

% Wear 32.7%

Spec: OSHD 703.07 (base aggregate) 35 max.

Multnomah County believes that the Oregon State Highway Department specifications are a valid test of the quality of a significant aggregate resource. In the test cited above, by use of a "Los Angeles Machine" abrasion test the Highway Department specifications require that the percent of wear in the test cannot be more than 35 percent. The percent wear from the Howard Canyon sample was 32.7 percent.

There is only one other aggregate site in unincorporated Multnomah County for which there is sufficient information on quality to meet Goal 5 OAR requirements. That site is the Angell Brothers Quarry, west of the City of Portland. The test results for rock at the Angell Brothers site were 12.2 percent and 15.0 percent loss or wear in the "Los Angeles Machine" abrasion test. These results demonstrate that rock from this site is harder and better for many uses than the rock at the Howard Canyon site.

For the aforementioned sites in the City of Gresham, Table 11 of the 1978 DOGAMI publication lists the following quality information on the percent loss by test in the "Los Angeles" machine: 20.0 - 23.6 percent for rock from the Multnomah County property (essentially depleted and converted to other land uses); 15.5 - 23.3 percent for rock from Rogers Construction; and no information for rock from Gresham Sand and Gravel.

The quality of the aggregate from the Howard Canyon site is less than the one other site in unincorporated Multnomah County and is less than the closest sites in the City of Gresham. However, the Howard Canyon resource is significant when the following is considered: the aggregate does meet the State of Oregon Highway Department wear requirements, the site is the only one in unincorporated East Multnomah County with sufficient known information on quality of the resource, and there is some uncertainty regarding future production potential from the City of Gresham sites.

5. SIGNIFICANCE CONCLUSIONS

This site is a significant Goal 5 Mineral and Aggregate resource site based upon the above description of the location, quantity and quality.

B. AGGREGATE RESOURCE ANALYSIS

1. DESCRIPTION OF THE RESOURCE

a. Summary of Statewide Planning Goal 5 Administrative Rules

Goal 5 requires local governments to inventory certain natural resources and develop programs to protect the resources that are determined to be significant. The Howard Canyon aggregate resource was determined to be significant in the preceding section A "Significance Determination." This Resource Analysis section is the second portion of the revised Goal 5 work on the Howard Canyon aggregate resource. The requirements for this analysis are given in OAR 660-16-005 and 660-16-010. An additional guide in the process is a May, 1990 technical bulletin entitled "Planning for Mineral and Aggregate Resources Under Statewide Planning Goal 5" by the Oregon Department of Land Conservation and Development (DLCD).

This section will address the part of the administrative rules which direct the local government to: (1) identify land uses which would conflict with the resource, (2) analyze the economic, social, environmental, and energy consequences of allowing, limiting or prohibiting the mining and the conflicting uses, and (3) determine the level of protection for the resource. The last task, the determination of the level of protection will not be fully resolved in this section B, but will be concluded in Chapter IV which will also include other Goal 5 resources.

b. Site Description

This aggregate resource is a cleared ridge top which runs in an east-west orientation along the section line between Section 36, Township 1 North, Range 4 East and Section 1, T. 1 S., R. 4 E., WM. The resource is a Boring Lava Formation that comprises the ridge between the canyons of Big Creek and Knieriem/Ross Creek on the north and Howard Canyon on the south. The formation covers portions of tax lots 25, 71, and 13 in Section 36 and tax lots 16, 17, 2 and 1 in Section 1. The extent of the resource is shown on a map submitted by the property owner and confirmed by 31 test pits dug by the applicant and the consulting firm of H. G. Schlicker & Associates, Geologists and Engineers.

The geologic process that resulted in this ridge top formation occurred from basalt lava pouring from boring vents into and filling stream valleys that existed about 2 million years ago. Since that time streams have cut new channels and valleys into the softer "Troutdale Formation" that is between the lava filled valleys. As a result, the former valleys are today's ridge tops.¹

The basalt lava resource occupies the upper 50 feet or more of the ridge crest and is more than 350 feet in width. The width of the entire ridge is approximately 700 feet and the ground surface ranges from 780 feet to 860 feet in elevation. Access to the

resource area is by two private drives, one connecting with Knieriem Road on the north side of the ridge and one connecting with Howard Road on the south side.

c. Existing and Anticipated Mining Activities

- (i) **Existing Mining Activities.** The following description of the existing mining activities at the Howard Canyon site is from a site inspection report written by Allen H. Throop, Reclamationist with the Oregon Department of Geology and Mineral Industries (DOGAMI):

This inspection was conducted to determine if this site remains qualified for a Grant of Total Exemption. The total exemption remains valid until such time as commercial production exceeds 5,000 cubic yards per year.

... The site was active at the time of the visit. Two locations are being worked. The biggest disturbance is a two-acre area near the north-east corner of Section 1. Approximately one acre is an extraction area of diced basalt. The other acre has been used to store overburden which has been stripped off of the basalt. Mr. Muck was ripping some of this basalt for later crushing at the time of this visit. According to the owner and operator, most of the crushed material is used on-site for the logging road construction on contiguous parcels owned or being logged by Mr. Muck. Such production is exempt from the 5,000 yard limit under on-site construction exemption.

The second site being actively mined is an outcrop of columnar basalt a few hundred yards to the southwest of the first site. This is being mined with a back hoe and loader. Large rocks are being hauled from the site for use as rip rap. According to Mr. Muck, less than 5,000 cubic yards will be produced for this job and other commercial sales within a 12-month period. The 5,000 yard limit would apply to overburden hauled from the site as well as the rock that is removed.

As long as commercial production remains below the 5,000 cubic yard limit, no permit is needed from this department and the Grant of Total Exemption remains valid. However, prior to the time when the 5,000 cubic yard for a 12-month period level is exceeded, a full Operating Permit complete with reclamation plan and bond is required. This would also be required should commercial mining expand the pit such that over one new acre is affected during a year or a total of five acres are affected. There is no evidence that these thresholds have ever been exceeded.²

- (ii) **Anticipated Future Mining Activities.** A mining plan at this stage in the Goal 5 process is not required and no detailed mining plans have been submitted to

DOGAMI or the County. In a 1987 application to Multnomah County for Conditional Use approval of an expanded three acre commercial operation, the proposed mining was described at that time as follows:

The applicant has leveled out a platform below the rock face on which are now located a rock crusher, trailer and a large shovel. ... The proposal is to remove the soil overburden (about one and one-half to five feet) on the grass ridge top and then cut into the face of the rock cliff in one-half acre cells. ... The proposal would result in a lower ravine in the middle of the east/west hill top.³

In a 1986 inspection report from a DOGAMI reclamationist, a brief appraisal of the anticipated mining that might take place under a full operational DOGAMI permit reads in part:

Mining and reclamation at this remote site will involve scalping the topsoil material, and then removing the layer of hard rock which is approximately 40' thick. The Troutdale Formation is present under the mineable rock deposit. After mining the topsoil material will be placed back over the leveled mine area. It is planned that the mined area will be planted to Christmas trees and/or grasses. The slopes off of this ridge range from 50 to 90 percent. The sideslopes are thickly vegetated with red alder, vine maple, big leaf maple, cottonwood and willows. The trees along the sideslopes will be left intact for visual screening.

...

There are no drainages, springs or sweeps which would be affected by this operation as it is a hilltop removal project. ...

The rock deposit should be easy to reclaim providing the topsoil resource is properly stored and then replaced over the mine area. Once an adequate area is opened up for mining, which will be approximately five acres, topsoil stripped from the expansion areas will be directly reapplied to the mined out pit.⁴

2. IMPACT AREA

Identification of an impact area surrounding the resource is required by OAR 660-16-000(2). The impact area is the area in which specific conflicting uses may adversely affect the resource. However, aggregate resources, which are "protected" for eventual extraction, are different from other Goal 5 resources in this part of the analysis. Not only must the impact area include an area that includes uses that could adversely affect the resource, but the impact area must also encompass those land uses which could be affected by the presence of the aggregate resource (expected extraction activities).

The description of the impact area for this resource falls into two categories. The first impact area is a mapped distance surrounding the entire known aggregate resource. The second impact area is a description of specific points and segments in the transportation network of East Multnomah County.

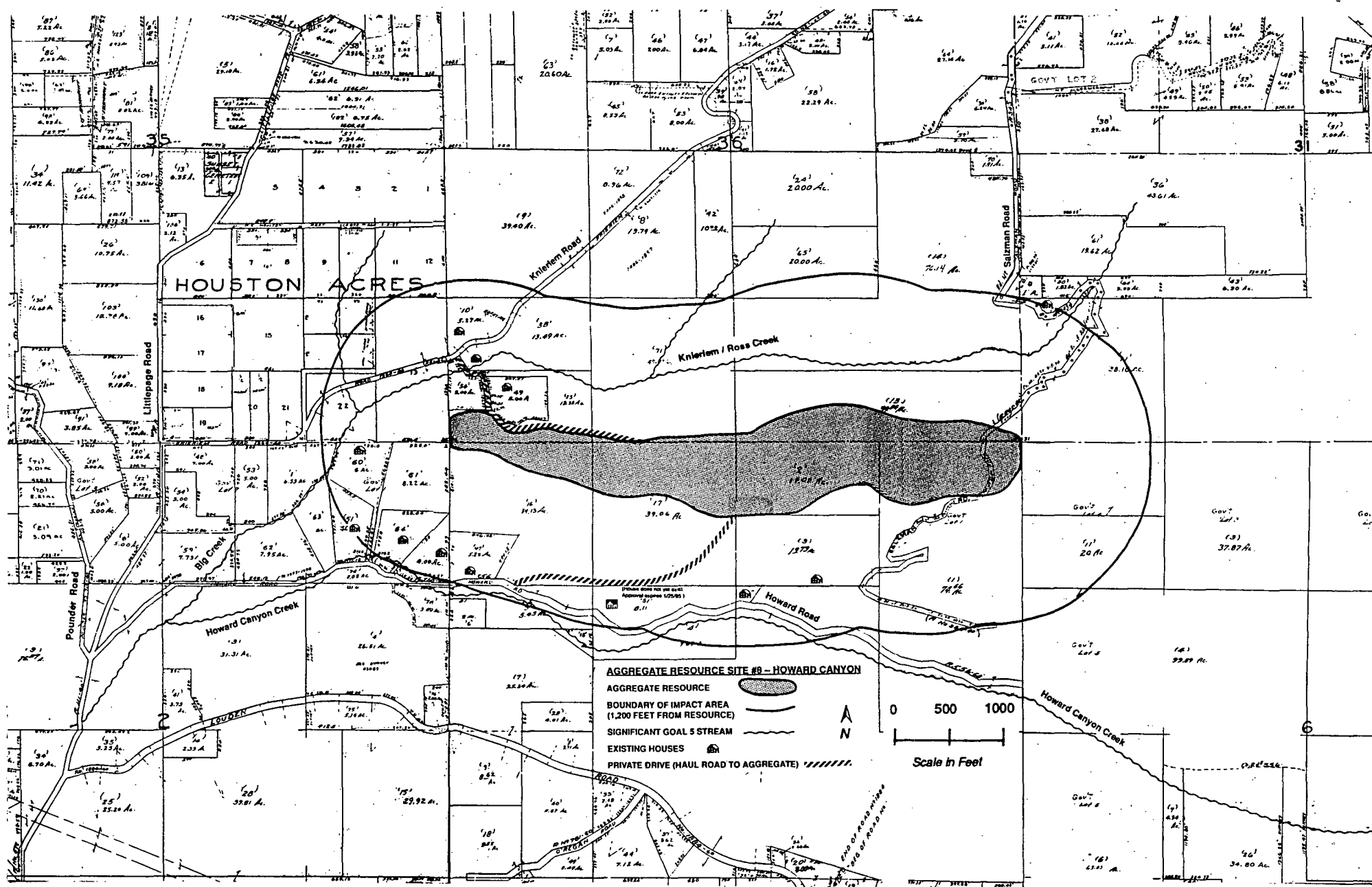
a. Impact Area Description

In the process of mapping an impact area for an aggregate resource a very important consideration must be in the forefront: the larger the area, the more properties that will receive restrictions on future permitted future land uses if the aggregate site is, in the later stages of the Goal 5 analysis, determined to meet the standards for protection. Therefore, an impact area that extends farther than the distance in which conflicts will actually occur, results in unnecessary development restriction on some property owners.

Noise, dust, and blasting associated with extraction and processing of aggregate resources may adversely affect surrounding land uses. Conversely, complaints expressed by surrounding property owners about those effects, as well as complaints about visual concerns and traffic may influence how aggregate is mined. In addition, there are Goal 5 inventoried "Significant Streams" to the north and south of the subject aggregate resource for which extraction and processing activities may conflict. To address these potential impacts, Multnomah County believes that an impact area of 1,200 feet is appropriate.

A noise assessment study of this site, prepared for the aggregate property owner, has been submitted to the County. At seven different distant locations, predictions of noise levels were made based upon the mining equipment located in the center of the resource on both the north and south sides. Typical mining equipment sound levels used in the test were those for a dozer, front end loader, jaw crusher, screens, cone crusher, and generator set. At receiver point number 4 the sound level, without any mitigation methods such as berms, exceeded the DEQ noise standard. At receiver point number 5 the sound levels, again without berms, did not exceed the DEQ noise standard.⁵ Using the scale shown on a map within the report, County staff has estimated that the distances between the noise source and the receiving points were about 1,000 feet for number 4 and about 1,200 feet for number 5. The 1,200 foot distance is thus determined to be valid estimate of the range of noise conflicts because it is the distance in which DEQ standards could be met without berms – a distance greater than necessary if berms were in place. Noise from blasting was addressed in a subsequent March 13, 1990 addendum to the February 19, 1990 noise study by the same consultant. The report concluded:

We have found at other quarry sites similar in layout to that at Howard Canyon that blasting related sound can be reduced effectively by using berms. If a berm were located around the initial start-up area to barrier residences to the south, blasting noise could be reduced to meet DEQ standards at all residences. Once the quarry operation is moved into the



mountain, the natural barrier provided by the rock formation will be adequate to insure DEQ standards are met at all residences without the need for a man-made barrier.

State DEQ noise standards do not apply to trucks engaged in interstate commerce but would apply to trucks and equipment that were permanently on-site during extraction and processing activity. For a further justification of the impact area chosen see section C.2.b.

The 1,200 foot distance also includes the drainages from the aggregate resource area down to the Howard Canyon Creek, Big Creek, and Knieriem/Ross Creeks. The 1,200 foot distance includes all three creeks at least in part. The stream lengths that fall within the impact area are sufficient to address all conflicts that could occur between the aggregate resource and the stream resources – any erosion problem into one portion of the stream is also a conflict downstream.

There is confidence that the chosen distance is a reasonable balance between resolving potential conflicts and not burdening more property owners than necessary with additional land use regulations. The difference in elevation of the resource and the surrounding lands could result in extraction activities, over time, to progress into the ridge to where they would take place in a modified "bowl" below the ridge top. In this situation, impacts associated with noise, dust, blasting, and visibility of the operation would be lessened for surrounding properties.

b. Area Road Limitations on Resource Protection

"Impact area" is not defined in either the Statewide Planning Goals or Administrative Rules. As such, it is Multnomah County's position that the above described impact area does not contain all locations of conflict with full "protection" (utilization) of this resource. Using an extreme hypothetical example, not applicable to this site, there could exist severe weight limits on the bridges on all of the roads that led from a site. If those road limitations were outside a single mapped impact area of, for example 1,000 feet, then to ignore the road limit conflict is a disservice to any potential extraction operation who was not informed of the limits and was not aware that the operation would be forced to utilize uneconomical size trucks to transport the material.

Load limits placed at different points of the road system adversely affect the delivery and as such the "protection" for use of an aggregate site. These same points of weakness in the road system which cannot accommodate aggregate truck traffic from a resource site can be adversely affected by structural failures occurring from frequent large truck traffic. The road restrictions for this resource site fall into two categories: (1) bridges and culvert structures, and (2) certain road segments. Additional discussion of these road limitations is found in subsection B.4.e., Statewide Planning Goal 12, Transportation.

(i) Bridges and Culverts.

An "Inventory Rating" on a County bridge applies to situations of regular, long-term use by heavy traffic. The ratings differ for different truck configurations. Based upon what County transportation Engineers know of typical gravel/crushed rock hauling, a Type 3 truck would be expected to be used. A Type 3 truck has tandem rear axles and a total maximum weight of 25 tons. Listed below is an assessment of the capability of certain East County bridge structures which would be marginal or fail to handle this type of truck traffic on a long term basis. The information is from a report from the Multnomah County Bridge Office, Division of Transportation.⁶

- Corbett Hill Viaduct: This is a concrete bridge built in 1952 located at the bottom of Corbett Hill Road approximately 1,000 feet east of the Corbett overpass / entrance / exit to Interstate 84. The Type 3 Inventory Rating is 22.9 tons. This is below the legal limit for Type 3 trucks.
- Stark Street Bridge over the Sandy River: This is a steel truss/stringer bridge located near Dabney State Park where Stark Street intersects with the Crown Point Highway. The Type 3 Inventory Rating is 18.3 tons. This rating is well below the 25 ton legal limit for Type 3 trucks.
- Stark Street Viaduct: This is a concrete arch structure built in 1915, about a thousand feet south of the Stark Street Bridge. There are two Type 3 Inventory ratings: 28.0 tons for the main arch, but only 9.0 tons for floor beams in the current condition of the bridge. Structure is unacceptable for high-volume heavy truck traffic.
- Gordon Creek Road Viaduct: This concrete bridge, built in 1952, is located northeast of Oxbow County Park. The Type 3 Inventory Rating is 24.8 tons. Rating is "barely OK" being right at the legal limit for Type 3 trucks.
- Littlepage Road over Big Creek: This short-span concrete culvert is about 3,000 feet south of the intersection of Knieriem Road with Littlepage Road. The Type 3 Inventory Rating is 25.0 tons. Rating is "barely OK," right at the legal limit for Type 3 trucks.

(ii) Road Segments. Following is an assessment of the three road segments nearest the Howard Canyon aggregate site. In describing the structural cross section of the roads it should be noted that for roughly equivalent durability: **"for each inch of Plant Mix AC you would need two inches of Road Mix AC."**⁷ For example, to equal three inches of Plant Mix AC there would need to be six inches of Road Mix AC.

- Howard Road: This road is designated a local road on the Multnomah County Functional Classification of Trafficways adopted in March, 1993. The road travels up Howard Canyon to the south of the aggregate resource. The road is, at

Existing structural section of the road:

	4 inches of road mix AC
	9 inches of rock base⁸

- **Knieriem Road:** This road is designated a local road on the Multnomah County Functional Classification of Trafficways adopted in March, 1993. Knieriem Road is also a bikeway route on the April, 1992 Multnomah County Bicycle Master Plan. The other private drive to the aggregate resource is from this road. Knieriem travels from Littlepage Road northeasterly to Crown Point Highway. Existing and projected needed road improvements are as follows:⁹

Under present traffic loading conditions the structural section should be:

3 inches of plant mix AC
14 inches of 1 inch rock base

* In Conditional Use application CU 7-87 the applicant for mining this site stated that he intended to mine "less than one acre per year." The property owner also estimated that each acre contains about 75,000 cubic yards of material. Extracting one acre a year would then result in 7,500 full truck loads at 10 cubic yards per truck load, and an equal number of empty truck trips.¹⁰

- Howard Canyon Aggregate

Existing structural section of the road:

5 inches of **road mix AC**
6 inches of rock base

Under present traffic loading conditions the structural section should be:

3 inches of **plant mix AC**
7.5 inches of 1 inch rock base

If aggregate truck traffic increases according to projections,* the structural section should be:

4 inches of **plant mix AC**
10 inches of 1 inch rock base

* See * comments under Knieriem Road above.

3. CONFLICTING USES

The Goal 5 Rule requires identification of conflicting uses. A conflicting use is one which, if allowed, could adversely affect a Goal 5 resource site. Identifying conflicting uses is primarily done by examining uses authorized by zoning districts within the impact area.

There are two zoning districts within the impact area (the resource site plus a 1,200 foot deep perimeter area): Commercial Forest Use (CFU) and Exclusive Farm Use (EFU). The CFU zoned portion covers approximately five-sixths of the total impact area with EFU zoning on the remainder. Both zoning districts require a minimum parcel size of 80 acres for the creation of new parcels.

Multnomah County is required to only permit those uses allowed by the new requirements of Oregon Administrative Rule 660, Division 6 – Forest Lands and Division 33 – Agricultural Land, (adopted February 18, 1994), even though the Rules have not yet been incorporated into the CFU and EFU sections of the County Zoning Code. Therefore, subsections a through d of the following analysis considers only those uses allowed by the new Rules and potential conflicts between allowing those uses and protection of the aggregate resource.

a. Allowed Uses Not Applicable to the Analysis

- (i) CFU District. The following uses allowed in the Commercial Forest Use district are not applicable to the analysis:
 - Exploration for mineral and aggregate resources as defined in ORS Chapter 517
 - Widening of roads within existing rights-of-way in conformance with the transportation element of acknowledged comprehensive plans including public road and highway projects as described in ORS 215.213(1)(m) through (p) and ORS 215.283(1)(k) through (n)

- Exploration for and production of geothermal, gas, oil, and other associated hydrocarbons, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the well head
- Mining and processing of oil, gas, or other subsurface resources, as defined in ORS Chapter 520, and not otherwise permitted under OAR 660-06-025(3)(m) (e.g., compressors, separators and storage serving multiple wells), and mining and processing of aggregate and mineral resources as defined in ORS Chapter 517
- Temporary asphalt and concrete batch plants as accessory uses to specific highway projects
- Public road and highway projects as described in ORS 215.(1),(2)(q) through (s), 215.213(10), 215.283(2)(p) through (r) and 215.283(3)

Activities involving utilization of a mineral resource cannot conflict with mineral and aggregate resource protection since the purpose of protecting a mineral resource is for its eventual use through mining.

- Expansion of existing airports

There are no airports within the impact area.

- Destination resorts reviewed and approved pursuant to ORS 197.435 to ORS 197.465 and Goal 8

A destination resort is not applicable to this analysis because the site is within 24 air miles of a UGB containing 100,000 population (which eliminates associated housing) and Multnomah County has not designated any eligible sites in the comprehensive plan [ORS 197.455(1)(a)&(2)].

(ii) EFU District. The following uses allowed in the Commercial Forest Use district are not applicable to the analysis:

- Operations for the exploration for and production of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the well head
- Operations for the exploration for minerals as defined by ORS Chapter 517.750
- Operations conducted for mining and processing of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005 not otherwise permitted under this rule

- Operations conducted for mining, crushing or stockpiling of aggregate and other mineral and other subsurface resources subject to ORS 215.298
- Processing as defined by ORS 517.750 of aggregate into asphalt or portland cement
- Processing of other mineral resources and other subsurface resources
- Public road and highway projects described under the heading "Transportation" in OAR 660-33-120
- Destination resort which is approved consistent with the requirements of Goal 8

A destination resort is not applicable to this analysis because the site is within 24 air miles of a UGB containing 100,000 population (which eliminates associated housing) and Multnomah County has not designated any eligible sites in the comprehensive plan [ORS 197.455(1)(a)&(2)].

- Living history museum

This use is not permitted in Multnomah County (allowed only in "Marginal Lands" Counties).

b. Allowed Uses that Will Not Conflict With the Aggregate Resource

- (i) CFU District. The following uses allowed by the Commercial Forest Use district within the impact area would not conflict with, or be impacted by, protection or utilization of the significant aggregate resource:

- Forest operations or forest practices including, but not limited to, reforestation of forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash
- Temporary on-site structures which are auxiliary to and used during the term of a particular forest operation
- Physical alterations to the land auxiliary to forest practices including, but not limited to, those made for purposes of exploration, mining, commercial gravel extraction and processing, landfills, dams, reservoirs, road construction or recreational facilities
- Farm use as defined in ORS 215.203
- Local distribution lines (e.g., electric, telephone, natural gas) and accessory equipment (e.g., electric distribution transformers, poles, meter cabinets, terminal

boxes, pedestals), or equipment which provides service hookups, including water service hookups

- New electric transmission lines with right of way widths of up to 100 feet as specified in ORS 772.210. New distribution lines (e.g., gas, oil, geothermal) with rights-of-way 50 feet or less in width
- Temporary portable facility for the primary processing of forest products
- Towers and fire stations for forest fire protection
- Water intake facilities, canals and distribution lines for farm irrigation and ponds
- Water intake facilities, related treatment facilities, pumping stations, and distribution lines
- Reservoirs and water impoundments
- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources
- Uninhabitable structures accessory to fish and wildlife enhancement
- Private hunting and fishing operations without any lodging accommodations
- Permanent facility for the primary processing of forest products
- Permanent logging equipment repair and storage
- Log scaling and weigh stations
- Disposal site for solid waste that has been ordered established by the Environmental Quality Commission under ORS 459.049, together with the equipment, facilities or buildings necessary for its operation
- Disposal site for solid waste approved by the governing body of a city or county or both and for which the Oregon Department of Environmental Quality has granted a permit under ORS 459.245, together with equipment, facilities or buildings necessary for its operation
- Television, microwave and radio communication facilities and transmission towers
- Fire stations for rural fire protection
- Utility facilities for the purpose of generating power

- Aids to navigation and aviation
- Cemeteries

These uses do not satisfy the DEQ definition of noise sensitive property. There is no available information that they would be impacted by potential dust or traffic resulting from mining activity. These uses, if allowed within the impact area, would pose no threat to quarry operations or force a significant change in future mining activities.

(ii) EFU District. The following uses allowed by the Exclusive Farm Use district within the impact area would not conflict with, or be impacted by, protection or utilization of the significant aggregate resource:

- Farm use as defined in ORS 215.203 and other buildings customarily provided in conjunction with farm use (except residences)
- Commercial activities in conjunction with farm use
- Farm stands
- The propagation, cultivation, maintenance and harvesting of aquatic species
- Dog kennels and the breeding, kenneling and training of greyhounds for racing
- Propagation or harvesting of a forest product
- Forest management research and experimentation facilities accessory to forest operations
- A facility for the primary processing of forest products
- Utility facilities necessary for public service
- A site for the disposal of solid waste that has been ordered to be established by the Environmental Quality Commission under ORS 459.049, together with the equipment, facilities or buildings necessary for its operation
- A site for the disposal of solid waste approved by the governing body of a city or county or both and for which a permit has been granted under ORS 459.245 by the Department of Environmental Quality together with equipment, facilities or buildings necessary for its operation
- Commercial utility facilities for the purpose of generating power for public use by sale

- Golf courses
- Cemeteries

These uses do not satisfy the DEQ definition of noise sensitive property. There is no available information that they would be impacted by potential dust or traffic resulting from mining activity. These uses, if allowed within the impact area, would pose no threat to quarry operations or force a significant change in future mining activities.

c. Allowed Uses that May Conflict, but are Unlikely to Occur

- (i) CFU District. The following uses allowed by the Commercial Forest Use district within the impact area either meet the DEQ definition of noise sensitive property, or are uses that could be adversely affected by dust or traffic resulting from mining activities. They could conflict with, or be impacted by mining activities, but are unlikely to be sited within the impact area.

- Temporary forest labor camps
- Caretaker residences for fish hatcheries

The locational requirements for labor camp housing and fish hatcheries are not present within the impact area. The proximity to the Portland Metropolitan Area would indicate no need for temporary forest labor housing at this site. Steep terrain preclude the construction of fish hatcheries and, therefore, a caretaker residence within the impact area.

- Parks and campgrounds
- Caretaker residences for public parks

"Minor Community Facilities," including parks, can only be sited on property with direct access to a collector street (Comprehensive Plan Policy 31). No property within the impact area has frontage on a collector street.

The uses listed above will not be considered further in this analysis. Any subsequent resource protection program provisions should not list these uses as permitted uses in the impact area.

- (ii) EFU District. The following uses allowed by the Exclusive Farm Use district within the impact area could conflict with, or be impacted by mining activities, but for site specific reasons are unlikely to be sited within the impact area:

- Public or private schools, including all buildings essential to the operation of a school

- Churches
- Parks, including the following:

Private parks, playgrounds, hunting and fishing preserves and campgrounds
Parks, playgrounds or community centers owned and operated by a governmental agency or a nonprofit community organization

"Minor Community Facilities," including schools, churches and parks, can only be sited on property with direct access to a collector street (Comprehensive Plan Policy 31). No property within the impact area has frontage on a collector street.

- A winery as described in ORS 215.452

A winery could be adversely affected by an associated "batch plant" or dust resulting from mining activities. However, the higher elevation of the site and the colder winter Eastern Oregon climactic influences that funnel into the Columbia River Gorge result in too few frost free days to support this type of agriculture on the scale defined in the State Statute.

The uses listed above will not be considered further in this analysis. Subsequent resource protection program provisions should not list these uses as permitted uses in the impact area.

d. Allowed Uses that May Conflict

- CFU District. The following uses allowed by the Commercial Forest Use district within the impact area may conflict with or be impacted by mining activities on the resource site:

- Residential uses including the following as provided by the Administrative Rules:

Forestland dwellings

Alteration, restoration or replacement of a lawfully established dwelling

A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

Private accommodations for fishing occupied on a temporary basis

Private seasonal accommodations for fee hunting operations

Residences are defined by the Oregon Department of Environmental Quality (DEQ) as "noise sensitive property." OAR 340-35-015(38) reads:

"Noise Sensitive Property" means real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more

than an incidental manner.

In the CFU zoned portion of the impact area there are six existing residences and one unexpired approval for a residence. The closest residences to the aggregate resource are two houses north of the west end of the resource. The two houses are approximately 400 and 500 feet away from the aggregate resource and are located along the private access drive connecting to Knieriem Road.

The CFU zoned portion of the impact area covers portions or all of sixteen different tax lots that do not contain a dwelling. More than one-half of those tax lots are under the same ownership. Under the OAR provisions adopted by LCDC on February 18, 1994, only one dwelling is allowed per "tract." A "tract" means all contiguous parcels under the same ownership. There appears to be a maximum potential for seven more houses. The more realistic estimate may actually be only four more houses when considering the various new OAR approval criteria. Regardless, the existing and potential residential uses both impact and are impacted by aggregate extraction activities.

(ii) EFU District.

- Residential uses including the following as provided by the Administrative Rules:

- Dwelling customarily provided in conjunction with farm use

- A dwelling on property used for farm use occupied by relative whose assistance in management of the farm is required by farm operator

- One single-family dwelling on a lawfully created lot or parcel (optional provision using date of ownership, soil productivity ratings, and other criteria)

- A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

- Single family residential dwelling, not provided in conjunction with farm use

- Seasonal farmworker housing as defined in ORS 197.675

- Alteration, restoration or replacement of a lawfully established dwelling

All of the above residential uses are "noise sensitive property" [OAR 340-35-015(38)]. In the EFU zoned portion of the impact area there are five existing residences. The closest residence is approximately 850 feet away from the aggregate resource.

There are two tax lots within the EFU zoned portion of the impact area that do not contain a residence. The existing and potential residential uses both impact and are impacted by aggregate extraction activities.

e. Other Goal 5 Resources

The following Goal 5 resources are within the impact area:

- (i) Big Creek
- (ii) Knieriem/Ross Creek
- (iii) Howard Canyon Creek

These inventoried significant Goal 5 streams are within the impact area. Harm to fish habitat could result if there was inadequate soil erosion control measures associated with mining activities because drainages from the ridgetop aggregate resource location flow to the north and west into the Big and Knieriem/Ross Creeks and to the south into the Howard Canyon Creek. Consequently, extraction activities are considered to be a conflict with these Goal 5 resources.

4. ESEE ANALYSIS

OAR 660-16-005 (2) Determine the Economic, Social, Environmental, and Energy Consequences: If conflicting uses are identified, the economic, social, environmental and energy consequences of the conflicting uses must be determined. Both the impacts on the resource site and on the conflicting use must be considered in analyzing the ESEE consequences. The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process. A determination of the ESEE consequences of identified conflicting uses is adequate if it enables a jurisdiction to provide reasons to explain why decisions are made for specific sites.

The Goal 5 Rule requires that if conflicting uses to the resource are identified, the economic, social, environmental, and energy (ESEE) consequences of the conflicts must be identified. Both the impacts on the resource site and on the conflicting use must be considered in analyzing the ESEE consequences. The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this step.

The ESEE consequences will be analyzed by examining: (1) the effect on use of the aggregate resource if conflicting uses are allowed fully without restriction, and (2) the effect on conflicting uses if development of the aggregate resource is allowed fully without restriction. The conflicting uses to be considered include:

Residential Uses (all residential uses listed in B.3.d. above)

Big, Knieriem/Ross, and Howard Canyon Creeks (Significant Goal 5 Resources)

a. Economic Effects

(i) Economic Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- **Residential Uses**

If residential uses were allowed on the resource area or in close proximity to the resource area, it would effectively prevent economic use of the aggregate resource. Although a residential use close to an aggregate site does not have a measurable effect on the resource itself, extraction of the resource can be curtailed or prohibited by complaints from neighbors. Allowing a residential use on top of the resource itself would, of course, take a sizable area out of potential production.

Even assuming that use of an aggregate resource is not totally precluded, constraints on mining operations to eliminate conflicts with nearby residential uses may be costly. Economic use of certain portions of the quarry may be curtailed, or the mining operator would have to put in place additional measures to eliminate or sufficiently reduce conflicts with those neighbors. Additional measures to reduce conflicts with quarrying activities increases the cost of surface mining. The increased cost of mining results in higher costs for raw materials. However, the more probable consequence on the resource from allowing conflicting residential uses on or near the site would be the loss of the resource. It would be extremely difficult, if not impossible, to design an extraction plan which would allow aggregate operations to proceed if conflicting residential uses were allowed to locate on or in close proximity to the resource site.

Countywide Effects

In Multnomah County, quality rock is considered by the State Highway Division to be "extremely scarce." The availability of quality aggregate as close as possible to the construction site is very important. In 1990, the cost of hauling aggregate by truck was \$46 per hour, and as a result any haul distance requiring an extra hour per trip would add \$4.60 per ton to the cost. The effect on the State Highway program is described as follows:

The hauling costs start to add up in Multnomah County, where half of the high quality aggregate must be imported from sources outside the county. Even with the economics of barge and freeway transport we pay an extra \$1.50 to \$2.75 to haul each ton of aggregate. Last year, projects in Multnomah County used some 375,000 tons of aggregate for which we paid \$796,875 in added transportation costs.¹²

An example of the large amounts of rock material used in asphalt paving is the 16,000 tons of aggregate used to produce one mile of typical 30-foot-wide, two lane road with standard road base and safety shoulders.¹³

Based upon the above it is concluded that allowing conflicting residential uses would result in adverse economic effects in the potential cost of roads in the County.

Local East County Effects

The closest existing aggregate source for unincorporated East Multnomah County is Gresham Sand and Gravel. Unlike the rock materials available at Howard Canyon, Gresham Sand and Gravel does not sell base rock that can be used for road construction. In addition, the President of Gresham Sand and Gravel has stated that:

... for a trip to the Corbett area, we have to allot one to one and one-half hours of truck time for one delivery. ... The length of the trip directly adds to the cost of the rock taken to the Corbett area. It costs approximately \$45.00 per hour for truck time. This adds \$50.00 to \$70.00 to the cost of a ten-yard load delivered to the Corbett area. Transportation costs delivered to that area equals or exceeds the cost of the rock material.¹⁴

Deliveries farther east of Corbett would, by the same factors, require even more transportation costs to be added. The aggregate deliveries to the East County area do not just include materials for public roads, but also include rock for concrete building foundations, driveways, patios, septic and sewer systems, drainage control systems, and embankment rip rap material.

In consideration of the above, the economic effect of allowing conflicting residential uses would not only likely prevent the extraction of a significant amount of aggregate with a certain (undetermined) dollar value, but the resulting economic effect will also be higher costs for this material for most of the unincorporated East Multnomah County.

- Big, Knieriem/Ross, and Howard Canyon Creeks

If the interpretation of "fully allowed" for these conflicting significant Goal 5 resources was "zero tolerance" of any adverse drainage impacts from an extraction operation, then the resulting economic effect on the aggregate resource would most likely be total prohibition of extraction activities. This concept is, however, unrealistic and improperly selective in not considering that several other land uses along the creeks such as forestry and farming practices, and residentially associated activities, like runoff from driveways, contribute some amount of erosion into the waters entering the creeks.

Staff from the Department of Geology and Mineral Industries has verified that they are confident that there is enough separation between the extraction area

and these significant Goal 5 streams to accommodate holding ponds that would catch enough soil to ensure that the drainage that leaves the ponds would meet applicable water quality control standards.

The resulting economic effect of "zero tolerance" or severely strict erosion control standards would be the same as found in (a) above.

(ii) Economic Effect on Conflicting Uses if Development of the Aggregate Resource is Fully Allowed

- Residential Uses

During public hearings in 1990 there were strong opinions expressed by several property owners near this aggregate site that the value of their homes would be reduced due to operation of the quarry so close to their property. Also, on record in the County Planning Offices are letters from four property owners on Howard Road within the 1,200 foot impact area who commented on the property value issue. In each of the four letters the property owner stated that they have "no doubt" that "definite" and "significant" reduction in property values will result from extraction and rock transport activities. The basis for the residents concerns were primarily about the noise and dust from a mining operation and noise and safety concerns about truck traffic passing their properties on the inadequately improved Howard Road.

Even though the property owners were sincere in their feeling that the resale value of their homes would be significantly affected, there exists no convincing evidence in support of that position (ie. studies, reduction in appraised valuation or Board of Equalization petitions). See LCDC Remand Order Issue #2 and section C.2.h. of this chapter. In addition to the evidence requirement in Remand Order #2, the directive in the LCDC Remand Order "Issue #3 – No Impact Test" is that Multnomah County cannot use as a basis for denial of protection of the aggregate resource a finding of any impact. In other words, denial of protection based upon a requirement of no impact is not a valid interpretation of the Goal 5 Rule – some amount of conflict is to be expected. Local governments must work to resolve those conflicts by a balancing of the competing values. Although none exists at this time, any proven data on property value loss would also have to be balanced against loss of the value of the resource and, most importantly, could not be the basis for denial of protection of the resource unless it can also be shown that no measures are possible to mitigate the conflict and that the impact was significant.

The issue of noise effects was responded to by a report by a Registered Acoustical Engineer that concluded that the "results of the analysis show that typical commercial rock quarry equipment could be used at Howard Canyon Quarry and the appropriate noise standards could be met with certain procedures followed."¹⁵ The sound tests were taken at the east-west mid-point of the aggregate

gate resource on the north side and south sides of the ridgeline. Only at the initial excavation points, before the extraction process progressed far enough into the ridge, would there need to be constructed earthen berms to control sound radiating from mining and crushing activities. Once the extraction moved horizontally into the ridge, all subsequent activity would always be below the top elevation, often as much as 40 feet below. At that time, "if a rock ridge is left at the perimeter of the resource area, all residences will be protected from sound levels in excess of that allowed at all hours of the day" (DEQ noise standard levels).¹⁶

Expert testimony has demonstrated that noise levels, (from blasting and typical on-site equipment), associated with a mining plan which starts at the present extraction points which incorporates acoustic berms, will produce noise levels at any nearby existing residence well below the DEQ noise standards. The State of Oregon DEQ standards are deemed appropriate standards by which to judge noise impacts on adjoining properties, and it is concluded that under DEQ standards there will not be a significant economic impact on existing dwellings in the area. As a result, the expressed large reductions in resale value attributed to noise impacts is determined to be speculative and not an economic effect from extraction activities that would occur.

The rock crusher to be used at the site has an existing DEQ Minimal Source Air Contaminant Discharge Permit which requires control of dust from crushing activities. The county roads in the area are paved which will further reduce dust. The evidence at hand indicates that the Howard Canyon aggregate resource site can be developed without significant adverse economic effects on the resale value of existing homes in the area attributable to dust.

A protection program to allow full development of the aggregate resource may have the economic effect of prohibiting new residential uses to be built over or near the resource area and require new residences in the impact area to assume a portion of the obligation to mitigate conflicts. Mitigating surface mining impacts typically involves building design and orientation considerations, sound insulation, and visual and noise screening. The costs of such measures will impact the builder of a new home in the impact area.

- Big, Knieriem/Ross, and Howard Canyon Creeks

The County has no knowledge of any adverse economic impact that a mineral extraction operation would have on these streams if all extraction and processing activities met State operational requirements.

b. Social Effects

(i) Social Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- **Residential Uses**

The addition of approximately nine new residences in the impact area would increase the potential for complaints to the mining operator regarding noise, dust, vibration, etc. (The number of potential residences cannot be definite because of the complexity of the new OAR's for farm and forest lands; the potential may actually be fewer.) If the new residences were located on top of or too near the aggregate resource the result would either be severe modification of mining operations or outright prohibition of mining.

- **Big, Knieriem/Ross, and Howard Canyon Creeks**

Any mining must be conducted in a manner that does not impact these Significant Goal 5 resources.

(ii) Social Effect on Conflicting Uses if Development of the Aggregate Resource is Fully Allowed

- **Residential Uses**

For the dozen existing residences in the impact area the social consequences resulting from full development could be a perceived reduction in the quality of home life from any noise and dust produced during mining operating hours.

Registered Professional Engineer (acoustical) Mr. Standlee has determined that noise from blasting, machinery and rock crushing will be well within DEQ standards as measured at existing dwellings in the area. The County accepts Mr. Standlee's report as credible expert testimony. The County further accepts the State of Oregon DEQ standards as providing an appropriate basis for determining whether or not noise is an adverse social impact. DEQ has established noise standards which are measured at the point of reception and, therefore, we conclude they are designed to protect adjacent properties. It is understood that DEQ standards are designed to meet the legislative policy to protect the health, safety and welfare of Oregon citizens. Because DEQ standards will be met by the proposed use at the quarry, it is concluded that social impacts of the resource are minimal on the conflicting use.

Crushing equipment previously used at the site has a DEQ air contaminant discharge permit which requires the crushing machinery to control dust. DEQ permit limits are designed to protect the health, safety and welfare of the citizens of Oregon and, therefore, it is concluded that DEQ standards present an appropri-

ate basis for determining whether the impact would have an adverse effect on the conflicting use.

Dust can be expected to be produced from aggregate truck traffic on either of the long unpaved private access drives that connect the public road and the resource site. To ensure minimal dust effects on homes in the impact area, concerns regarding truck traffic speed limits on the drive and the type of driveway improvements would be appropriate issues to address in developing any operational standards for the site. Measures, such as retention of vegetative buffers, and watering, oiling, or paving the private drive that is used are options to be considered to minimize dust.

The social effect on new residential uses in the impact area if the aggregate resource is developed fully would also include the above discussion. In addition, the new residences, under full resource use (protection), may not be permitted to build and live at this location at all or at least will have fewer choices on home location, orientation, design, and views.

- Big, Knieriem/Ross, and Howard Canyon Creeks

There may be some social perception that the "natural state" of the stream is compromised by noise arriving from extraction and processing activities, but that noise, at expected levels, will have no impact on fish habitat.

c. Environmental Effects

(i) Environmental Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- Residential Uses

The addition of approximately nine new residences in the impact area, if sited in a manner that causes the quarry to violate noise control standards, would force a mining operator to either make severe modifications in mining operations or would result in an outright prohibition of mining. The result of these situations are discussed above as economic consequences.

- Big, Knieriem/Ross, and Howard Canyon Creeks

"Allowing fully" these Significant Goal 5 creeks is accepted to mean maintaining the attributes of the creeks that qualified them as "Class 1 waters" as defined in the State Forest Practices Act. The effect on the aggregate resource is the requirement to put operational measures in place to ensure the fish habitat will not be adversely affected. Multnomah County can request that mining operation plans at the application stage with DOGAMI also be reviewed by other state agencies such as the Oregon Fish and Wildlife.

(ii) Environmental Effect on Conflicting Uses if Development of the Aggregate Resource is Fully Allowed

- Residential Uses

Fully allowing development of the mineral resource could result in increased noise, dust and vibration. The majority of the existing conflicting residential uses that would experience these effects are located at the western end of the resource site. Such development, however, would have to be conducted in compliance with environmental control standards. The consequences of those effects are discussed above as social issues. No adverse environmental impacts, that cannot be operationally mitigated, are foreseen.

- Big, Knieriem/Ross, and Howard Canyon Creeks

There would be no adverse environmental effect on the creeks to the south, west, and north of the aggregate resource by an "allowed fully" mining activity if the mining were conducted under current state environmental control measures. The larger the mining extraction activities occurring at one time, the more difficult it would be to meet those environmental standards. Based upon submitted expert testimony there is confidence that mining at this site, at least at a rate of one to two acres per year, would be able to meet required environmental standards to preserve the "Class 1 waters" qualities of the creeks. Dr. Robert H. Ellis, an Aquatic Ecologist with Beak Consultants, Inc. surveyed the site and after reviewing a preliminary extraction plan concluded that the quarry can be developed without harm to the trout population in the creeks. The basis for this conclusion, in part, is as follows:

1. Runoff from the quarry site would be limited due to a development plan which calls for mining of only a small percentage (e.g., one to two acres) of the quarry site at any one time. As the site is mined, the mined portion would be continually reclaimed by back-filling and replanting with native vegetation. Thus the potential for erosion and runoff would be minimal.
2. Drainage from the quarry site could be easily controlled since the mined area would be surrounded by a berm that would direct all of the drainage to a single point. No drainage is expected to be discharged to the north of the site since the development plan calls for leaving a strip of unmined rock along the north border of the site. On the south side of the quarry site, there are several relatively flat benches of land between the quarry site and Howard Canyon Creek that provide adequate space for construction of a sediment pond. Drainage from the quarry could be channeled to a properly sized detention pond on one of the benches, thus insuring

that all but the finest sediment components would be prevented from reaching Howard Canyon Creek. Since logging and associated road building is presently occurring in both drainage basins and is expected to continue, it is doubtful that any increases in sediment loading from the quarry site would be detectable above existing background levels. No measurable impact on the fishery resources of either stream or on downstream areas would be anticipated if the above precautions are incorporated as part of the development permit for the quarry.¹⁷

The conclusions of Dr. Ellis were based upon a tentative plan where extraction activities would enter the south side of the ridge and the operation would use the private drive leading to Howard Canyon Road as the "main access road." An extraction plan which entered the north side of the ridge instead, and used the driveway to Knieriem Road, could also be expected to match the above described lack of environmental effects if a similar system of holding ponds on the north side were put into place.

- Other Perceived Conflicts

Written and oral testimony has been presented to Multnomah County by some residents in the surrounding area as to the existence of wetlands and deer and elk habitat in the impact area. The wetlands referred to are along only the very edge of the banks of the above creeks. Because of the extreme proximity to the Significant Goal 5 creeks, the wetlands are considered to essentially be part of the inventoried stream description.

The big game habitat in the impact area has not been inventoried as a significant Goal 5 resource. Under current Goal 5 procedural direction from DLCD, in order for a Goal 5 resource, such as deer and elk habitat, to be considered to be a conflict with the aggregate resource, the habitat must also be on the County's Goal 5 inventory. The deer and elk habitat within the impact area is not on the Goal 5 inventory and from available information would not qualify for inclusion on the inventory.

Although it is believed that deer and elk are, at times, present in the impact area, the closest acknowledged critical winter range is over one mile and several canyons to the southwest. The top of the ridge of the aggregate resource is mostly a relatively flat grass field used for cattle grazing. Dr. Ellis found no evidence that the ridgetop is providing important forage for either deer or elk. Forests on the north and south slopes of the ridge are comprised primarily of mature red alder. Such forests do not provide thermal cover for deer and elk and, therefore, are not critical winter refuge areas.¹⁸

d. Energy Effects

(i) Energy Effect on Use of the Aggregate Resource if Conflicting Uses are Fully Allowed

- **Residential Uses**

Allowing conflicting residential uses too close to the resource will alter the manner, location and extent of extraction activities and result in a greater use of energy by the operator. As stated above, allowing these conflicting uses on or near the site will likely prevent use of the resource altogether (also see economic discussion).

Allowing residential uses to prevent use of the aggregate resource would result in the aggregate material that is needed in the "Corbett area" to only be supplied by out-of-state quarries, out-of-county quarries, a quarry on the west side of the county, or locations in the county where material is transshipped from outside the county. These longer distance deliveries use additional energy that would not be consumed if material was available from the Howard Canyon resource.

- **Big, Knieriem/Ross, and Howard Canyon Creeks**

Energy effects of allowing fully (protection) these creeks will be the energy the operator will expend in meeting State DEQ water quality and erosion standards.

(ii) Energy Effect on Conflicting Uses if Development of the Aggregate Resource is Fully Allowed

- **Residential Uses**

Operation of the aggregate resource on the site is not expected to increase or decrease energy consumption for existing residential uses.

Allowing full development of the aggregate resource, besides prohibit some homes from occurring, could require new homes that are approved to expend energy in constructing buffering measures such as earthen berms or require more energy in the need for additional sound insulation in the construction of the home.

- **Big, Knieriem/Ross, and Howard Canyon Creeks**

No energy effects are foreseen.

e. Other Applicable Statewide Planning Goals

OAR 660-16-005(2): " ... The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process. ..." The following additional Statewide Planning Goals apply to this ESEE analysis:

(i) Goal 3 – Agricultural Land

Goal 3 applies to those lands zoned Exclusive Farm Use: Tax lots 16 and 43, Section 1, T. 1 S., R. 4 E.; and tax lots 1, 51, 55, 60, 61, 63, and 64, Section 2, T. 1 S., R. 4 E., WM. Only tax lot 16 in Section 1, on which a small portion of the aggregate resource is mapped, is of sizable acreage (34 acres). All of the other tax lots range in area from 4 to 8 acres and can not be expected to be any more than part-time farm endeavors by the property owners.

Counties may authorize those nonfarm uses defined by commission rule that will not have significant adverse effects on accepted farm or forest practices. The review standards for aggregate mining are given in OAR 660-33-130(5)(a)&(b). Mining may be approved only where the use:

- Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

There are letters in the record from property owners, located in the southwest area of the impact area, which expressed concern that an expanded mining operation would adversely affect their farm animals. The County understands the property owners concerns. However, under the above State Rule criteria, there is no evidence that normal mining operations would force a significant change in the property owners farm animal husbandry practices. There are many farms adjacent to areas of high sound decibels, such as along highways, that experience not only as high or higher sound levels, but also experience noise levels of longer duration than an aggregate operation would produce. In addition, there is no indication that mining at this site would force a significant change in any other accepted farming or forest practices on surrounding agriculture or forest lands (also see Goal 4 below).

(ii) Goal 4 – Forest Lands

The Forest Goal and Rule designate mining and processing of mineral and aggregate resources as locationally dependent uses. Such uses may be allowed when it is found that:

- The proposed use will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands;

- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel; and
- A written statement recorded with the deed or written contract with the county or its equivalent is obtained from the land owner which recognizes the rights of adjacent and nearby land owners to conduct forest operations consistent with the Forest Practices Act and Rules for uses authorized in OAR 660-06-025(4)(e), (l), (r), (s) and (v).

Under exemption provisions, mining has been occurring at the site and there is no indication that an expansion of those mining activities would force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands. Most of the properties surrounding the existing operation have been used for forest resource production without recorded adverse impact (for farming discussion see Goal 3 above). An expanded operation should similarly have no impact. Also, there is no indication that an expanded mining operation would increase fire hazard or the costs and risks associated with fire suppression.

The last Rule criteria does not apply to aggregate resources.

(iii) Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources

Direction from the Department of Land Conservation and Development staff, as part of the Remand Order, requires that only those Goal 5 resources that have been inventoried and determined to be significant are appropriate to be included in the ESEE analysis. Therefore, the creeks that are in this analysis are the only Goal 5 issues that are considered to be a conflict with the aggregate resource. Also see discussion in section B.4.c.(ii), Chapter III of this report.

(iv) Goal 6—Air, Water and Land Resources

Goal 6 requires "All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules or standards."

A State of Oregon DEQ permit is currently in place for the existing rock crusher in use on the site. There is no evidence that the existing crusher has not been in full compliance with all state permit requirements. Other effects on air, water and land resources resulting from mining operations, (such as noise, runoff, and dust from other activities), will be required to be mitigated by mining and reclamation techniques and be in full compliance with DEQ standards. Direction from DLCD staff is that compliance with this Goal can be shown if the proposed use can meet environmental standards via conditions on extraction and processing operations.

(v) Goal 7 – Areas Subject to Natural Disasters and Hazards

Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards." The conduct of a mining operation is defined in the Statewide Planning Goal Definitions as a "development."

Direction from DLCD staff is that compliance with this Goal, as in Goal 6, can be shown if the proposed use can meet environmental standards via conditions on extraction and processing operations.

Because there are steep slopes and potential soil instability problems, the north and south slopes of this aggregate resource ridge are designated as potential development hazard areas on the "Slope Hazard Map" made part of the County Comprehensive Plan. The basis for the inclusion on the map is from a study that included the following findings about the Boring Lava where it overlies the Troutdale formation:

Where fresh, the lavas will stand in near vertical cuts, and in natural slopes of up to 100 percent. However, weathering along joint surfaces generally has produced a clayey residuum along joint blocks which, with moisture, significantly reduces the strength of the lava in some outcrops. Such slopes, or slopes underlain by any depth of weathered basalt may be unstable at more than 50 percent.

In addition, several of the steepest slopes in the Boring Lava have been produced by failure of the underlying Troutdale silts or gravels. Consequently in cases where significant vertical exposures of Troutdale and Boring occur together, we consider that slopes of the overlying Boring are controlled in the long term by the stability of the Troutdale. Many such slopes are shown as potentially hazardous ...¹⁹

Even though there is reason for extra diligence in reviewing extraction and road construction plans, there has been no site specific information provided that extraction activities and the necessary haul roads up the sides of the ridge could not be built with the correct construction design and construction methods. Therefore, the County should make known to the State of Oregon Department of Geology and Mineral Industries (DOGAMI) what geologic information and concerns exist concerning development of mining at this site. The timing of this coordination should be at the initial review of a mining reclamation and operation plan submitted to DOGAMI.

(vi) Goal 9 – Economic Development

Nearly all of the Goal provisions, guidelines, and implementation directives pertain only to urban areas. In a general sense, any aggregate resource located so as to

reduce transportation costs would have the beneficial economic effect of lowering the cost of aggregate materials used in roads and the affordability of homes. [See B.4.a.(i) above.]

(vii) Goal 12 – Transportation

To date, during the time period of Multnomah County's Periodic Review, people that have testified in public forums or submitted letters in opposition to mining at this site were virtually unanimous on one belief – the existing rural road system is not safe for nor can it stand up to truck traffic of the size and frequency that would be expected from a mining operation at this site.

The issue has been raised that transportation issues are only to be addressed in the aggregate development application to occur after the ESEE Analysis is completed. Multnomah County disagrees and includes the following transportation discussion for three reasons.

First, to ignore transportation issues raised by citizens of the local area would not be in compliance with Statewide Planning Goal Number 1 – Citizen Involvement, Subpart 5. "Feedback Mechanisms - - To assure that citizens will receive a response from policy-makers."

Secondly, there are two different local roads that are in the designated surrounding 1,200 foot impact area. The choice of which road will be used will dictate which private drive will be used for hauling to the respective public road and, also determine if extraction activities will proceed into the ridge from the north or the south. The north or south extraction decision will be a major factor in designing a future mining operation and reclamation plan for DOGAMI. In addition to the surrounding impact area, section B.2. of this report contains the rationale for considering road segments and points of impact for inadequate bridges.

The last reason is that Goal 5 OAR, subpart 660-16-020(1) requires the involvement of property owners at the earliest possible opportunity to " ... avoid problems or disagreements later in the process in the development of the plan and implementing measures." Specifically, it would be a disservice to the present or future property owner to provide no forewarning of information that could either limit or prohibit the immediate extraction and use of the aggregate resource at the "development application" stage after the Goal 5 analysis is completed.

In taking the above position, Multnomah County also acknowledges that, pursuant to the DLCD Director's instruction in 1989, potential road maintenance and traffic problems should not be a basis for not protecting the resource under the Goal 5 process. However, as also stated in the same review of the County's Goal 5 work, after completion of the Goal 5 process "The county can always invoke regulations under its 'police powers' to limit the quarry activities at this site to assure the health, safety and welfare of citizens living in the area" (underlining in original letter).²⁰

Therefore, the information on transportation given in section B.2. of this report is needed information to assist all involved parties in latter development reviews. Derived from that same information in section B.2., it is also concluded that:

- Serious deficiencies exist in the adequacy of three bridges in East Multnomah County to handle Type 3 trucks: The Corbett Hill Viaduct, the Stark Street Bridge over the Sandy River, and the Stark Street Viaduct.
- All three of the closest roads that must be traveled from the Howard Canyon aggregate resource site are classified local roads and are inadequate in their structural sections to accommodate forecasted Type 3 truck traffic at a rate of extraction of one acre per year.
- Knieriem Road and Littlepage Road from Knieriem south to Hurlburt Road are designated Bikeway Routes on the County Bicycle Master Plan. Conflicts between large truck traffic and bicycles will occur until wider or any bike lanes are added.
- Littlepage Road is the better improved of Knieriem and Littlepage Roads. Therefore, wear on the local roads in the area would be reduced if travel to the Corbett Rural Center area and Crown Point Highway (Columbia River Scenic Highway) to the north from the resource site used Littlepage Road instead of Knieriem Road when possible. For example, from the northerly haul road to Knieriem, trucks could travel south to Littlepage Road before heading north to the Crown Point Highway.
- The nearest "Rural Collector" roads as designated on the Classification of Trafficways are further to the west of Littlepage Road. The two Rural Collectors that also travel to the Crown Point Highway are Evans and Hurlburt Roads. Travel to the Springdale Rural Center and travel to Gresham that resulted in the fewest mileage on the Columbia River Scenic Highway would use Hurlburt Road. The nearest and only Rural Collector west of the Sandy River that travels south is Gordon Creek Road.

(viii) Goal 13 – Energy Conservation

Energy conservation benefits depend upon the spatial relationship of the aggregate resource to the locations that the aggregate material will be used. For serving the local market east of the Sandy River there are opportunities to conserve energy by the protection and use of the Howard Canyon aggregate site. [See B.4.a.(i) and B.4.d.(i) above.]

5. RESOURCE ANALYSIS SUMMARY

a. General Conclusions

- (i) The preceding Section A "Significance Determination" confirmed that the Howard Canyon site is a significant Goal 5 resource.
- (ii) In this Section B "Resource Analysis," it is explained why two different impact areas are appropriate for the Howard Canyon aggregate resource:
 - A mapped 1,200 foot area surrounding the entire known aggregate resource; and
 - For needed information to the aggregate property owner and post ESEE Analysis operational planning use, a description of bridges and road segments leading from the resource site that are inadequate to safely handle the anticipated heavy truck traffic (points of impact).
- (iii) The list of land uses under the heading of "allowed uses not applicable to the analysis" (section B.3.a.) are determined to not conflict with protection (for extraction) of the aggregate resource.
- (iv) The list of conflicting uses that are described as "allowed uses that may conflict, but are unlikely to occur" (section B.3.c.) should not be included in the list of allowed uses in the mapped impact that may be made part of any subsequent aggregate resource protection program; thereby, assuring that there will be no conflict.
- (v) Residential uses are found to conflict with full protection of the aggregate resource. The lists of residential uses, by zoning district, are as follows:
 - Commercial Forest Use District:
 - Forestland dwellings
 - Alteration, restoration or replacement of a lawfully established dwelling
 - A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative
 - Private accommodations for fishing occupied on a temporary basis
 - Private seasonal accommodations for fee hunting operations
 - Exclusive Farm Use District:
 - Dwelling customarily provided in conjunction with farm use
 - A dwelling on property used for farm use occupied by relative whose assistance in management of the farm is required by farm operator
 - One single-family dwelling on a lawfully created lot or parcel (optional provision using date of ownership, soil productivity ratings, and other criteria)
 - A mobile home in conjunction with an existing dwelling as a temporary use for

the term of a hardship suffered by the existing resident or a relative
Single family residential dwelling, not provided in conjunction with farm use
Seasonal farmworker housing as defined in ORS 197.675
Alteration, restoration or replacement of a lawfully established dwelling

(vi) The number of existing and estimated potential permanent new residential uses in the mapped impact area are as follows:

- Commercial Forest Use District: six existing; 1 unexpired approval; 7 potential
- Exclusive Farm Use District: five existing; 2 potential

(vii) Within the impact area there are inventoried significant Goal 5 streams to the north, west, and south that are found to be potential conflicts with the aggregate resource.

(viii) For the area of the aggregate resource site subject to any future Oregon Department of Geology and Mineral Industries (DOGAMI) operational permit, Multnomah County deems Oregon Department of Environmental Quality (DEQ) standards for noise levels, air quality, and water quality to be appropriate to protect the health, safety and welfare of citizens and to be appropriate to protect the land and water resources within the impact area. The County requests participation by DEQ and the Oregon Department of Fish and Wildlife in the review of any new DOGAMI operational mining permit at this site.

b. Synopsis of ESEE Consequences

(i) Residential

Consequences if Residential Uses are not allowed (in impact area)

Economic: Lower value of property; protection of aggregate resource
Social: Loss of opportunity for rural homes and lifestyle
Environmental: Insignificant
Energy: Insignificant

Consequences if Residential Uses are allowed in a limited manner (in impact area)

Economic: New homebuilder assumes a portion of the obligation and costs to mitigate conflicts with mining; protection of aggregate resource
Social: Reduced options for location of home on an existing lot; some potential for additional complaints to any mining operator
Environmental: Potential for some increase in soil erosion and fire hazard
Energy: Additional energy in mitigating mining conflicts by new homebuilder

Consequences if Residential Uses are allowed fully (in impact area)

Economic: More choices of new home location on existing lots; curtailment of area of extraction or more likely the total loss of aggregate resource and associated value from sales, jobs, taxes; increased

cost to consumers for aggregate

Social: Increase of complaints to any mining operator

Environmental: New homes could be sited as to cause mining operator to violate DEQ noise standards; new homes could be sited on top of aggregate resource which would result in loss of resource

Energy: New homes could be sited as to cause quarry to alter mining methods which use more energy; energy used to transport other aggregate to local area will be increased

(ii) Mining

Consequences if Mining is not allowed

Economic: Loss of aggregate resource and associated value from sales, jobs, taxes; increased cost to consumers for aggregate; more choices for new home location on existing lots in impact area

Social: Potentially more choice of new rural homesite settings in impact area (ie. higher elevation views); no conflicts from noise and dust from mining activities

Environmental: No consequence

Energy: Increase in energy expended to transport aggregate to East County

Consequences if Mining is allowed in a limited manner

Economic: Aggregate available at lower cost; all new home builders in impact area assume a portion of the obligation and costs to mitigate conflicts with mining

Social: Mining noise and dust conflicts, to the extent allowed by DEQ standards, will be experienced by existing nearby residents; fewer location (siting) choices for new homes on existing lots in the impact area

Environmental: Noise, dust, and erosion effects, to the extent allowed by DEQ standards, will occur in the impact area

Energy: Reduction in energy expended to transport aggregate to East County

Consequences if Mining is allowed fully

Economic: Aggregate available at lower cost; all new home builders in impact area assume a portion of the obligation and costs to mitigate conflicts with mining

Social: Mining noise and dust conflicts, to the extent allowed by DEQ standards, will be experienced by existing nearby residents; fewer location (siting) choices for new homes on existing lots in the impact area

Environmental: Noise, dust, and erosion effects, to the extent allowed by DEQ standards, will occur in the impact area

Energy: Reduction in energy expended to transport aggregate to East County

(iii) Streams

Consequences if Streams are not protected

Economic: Some loss of value of recreational fishing related attraction to the area; costs of remedying adverse erosion effects at a downstream point before they might enter the Sandy River which is recognized as significant by the County, the State of Oregon, and the Federal Government; same economic consequences as listed in "allowed fully" for residential and mining

Social: Potential loss of recreational amenity

Environmental: If erosion from mining and processing activities is not subject to sufficient control measures or disruption of the stream occurs from the effects of aggregate haul roads then severe disruption or loss of streams and their fish habitat is possible; potential effects downstream at the Sandy River

Energy: Insignificant

Consequences if Streams are protected in a limited manner (State DEQ standards)

Economic: Some costs for new homes associated with regulation of house location, erosion control methods utilized, and sanitation systems; costs for mining operator to employ sufficient control measures to meet DEQ standards

Social: Some reduction in quality of recreational experience along stream from noise of mining operation

Environmental: Some erosion effects, to the extent allowed by DEQ standards, will occur to the streams; potential for some increase in soil erosion from new homes too near the streams

Energy: Insignificant

Consequences if Streams are protected fully (zero tolerance of adverse impacts)

Economic: No mining – loss of aggregate resource and associated value from sales, jobs, taxes; increased cost to consumers for aggregate;
No new homes in stream drainage areas – lower value of property

Social: No mining impacts from noise, dust, or erosion perceptible at streams for residents or visitors along streams; no new homes would help to preserve the degree of perceived natural experience that presently exists along the streams

Environmental: No new erosion impacts from mining or new homes

Energy: Insignificant

6. FOOTNOTES

a. Footnotes in Section B. Resource Analysis:

- ¹ H. G. Schlicker & Associates, Inc., Geologic Reconnaissance, Howard Canyon Quarry, East Multnomah County, Oregon, Technical Report prepared for Mr. Raymond Smith, Project #88-416, January 9, 1989, p.2.
- ² Throop, Allen H., "Report of On-Site Inspection," a two page report under the State of Oregon Department of Geology and Mineral Industries letterhead, regarding site ID No. 26-0065, date of inspection and report was September 9, 1993, p. 1.
- ³ Multnomah County Planning Commission, "Decision in the Matter of: CU 7-87," decision regarding a Conditional Use request for approval for the sale of rock from a private quarry, May 11, 1987, page 4.
- ⁴ Schnitzer, E. Frank, "Report of On-Site Inspection," a two page report under the State of Oregon Department of Geology and Mineral Industries letterhead, regarding site ID No. 26-0065, date of inspection was December 8, 1986, p. 1.
- ⁵ Standlee, Kerrie G., P.E., & Gardner, David, 17 page report, Attn: Paul Hribernick, Re: Howard Canyon Quarry Noise Assessment, From: Daly-Standlee & Associates, Inc., 11855 SW Ridgecrest Drive, Suite 201, Beaverton, OR, dated February 19, 1990, p. 13.
- ⁶ Wortman, Ed, two page memorandum to John Dorst, subject: "Howard Canyon Quarry, Truck Traffic on County Bridges," Multnomah County Department of Environmental Services letterhead, dated March 17, 1994, p. 1.
- ⁷ Kirby, Gregory, two page memorandum to Chuck Henley and John Dorst, subject: "Traffic study on NE Little Page Road and E Knieriem Road," Multnomah County Department of Environmental Services letterhead, dated March 18, 1994, p. 1.
- ⁸ Nelson, Burt, one page memorandum to Lorna Stickel, subject: "Request for permit to haul quarry rock on Howard Road," Multnomah County Department of Environmental Services letterhead, dated May 4, 1987 which stated that the existing structural section was 2 inches of road mix AC. From verbal communication with John Dorst, Multnomah County Division of Transportation, on May 5, 1994 it was confirmed that in the intervening time 2 additional inches of road mix have been overlaid on the road.
- ⁹ Kirby, p. 1.
- ¹⁰ Multnomah County Planning Commission, "Decision in the Matter of: CU 7-87," p. 4.

- 11 Kirby, p. 2.
- 12 Forbes, Donald E, P.E., State Highway Engineer, two page letter to Susan Brody, Director of DLCD, subject: "Oregon Land Use Planning Goal, Resource Planning," Highway Division, Department of Transportation letterhead, dated February 22, 1990, p. 1.
- 13 Joint authorship of David Evans and Associates, Oregon Concrete and Aggregate Producers Assn., Inc., and Asphalt Pavement Association of Oregon, publication entitled: Future Aggregate Resources and Land Use Planning in Oregon, Rev. 8/89, p. 6.
- 14 Ekstrom, Roger, two page letter to Lorna Stickel, Multnomah County Planning Director, subject: "Multnomah County, Howard Canyon Quarry," Gresham Sand and Gravel letterhead, 1339 NW Eastwood Ave., Gresham, OR , dated February 15, 1990, p. 1.
- 15 Standlee, p. 7.
- 16 Ibid., p. 6.
- 17 Ellis, Robert H., Ph.D, 10 page letter from Robert H. Ellis to Paul Hribernick, letter under letterhead of Beak Consultants, Inc., 317 SW Alder, Suite 800, Portland, OR 97204, dated February 19, 1990, p. 1.
- 18 Ibid., p. 2.
- 19 Shannon & Wilson, Inc., Geotechnical Consultants, Geologic and Engineering Slope-Hazard Studies. Unincorporated Multnomah County, Oregon, Technical Report prepared for Multnomah County Department of Environmental Services, January 9, 1989, p. 15.
- 20 Department of Land Conservation and Development, Susan Brody, Director, "Review of the Multnomah County Proposed Periodic Review Order," dated June 9, 1989, p. 8.

CHAPTER IV

CONFLICT RESOLUTION AND PROTECTION PROGRAM FOR HOWARD CANYON AREA GOAL 5 RESOURCES

CHAPTER IV TABLE OF CONTENTS

A. Introduction	page
1. Intent of Chapter IV	IV-3
2. OAR 660-16-010	IV-3
B. Conflict Resolution	
1. Forestry	IV-5
2. Residential Uses	IV-6
3. Community Service and Conditional Uses	IV-7
4. Agriculture	IV-8
5. Transportation/Public Improvements	IV-10
6. Mining of Aggregate Resource	IV-11
C. Protection of Resources	
1. Streams	IV-13
2. Aggregate Resource	IV-16
3. Conclusion	IV-27

A. INTRODUCTION

1. INTENT OF CHAPTER IV

Preceding Chapters II and III have determined that the Big, Knieriem/Ross, and Howard Canyon Creeks are significant Goal 5 resources and that the Howard Canyon aggregate resource is also a significant Goal 5 resource. Uses that would conflict with these resources have been identified as follows:

Streams (Big, Knieriem, and Howard Canyon Creeks)

- Forestry
- Residential Uses (homes)
- Conditional and Community Service Uses
- Agriculture
- Transportation Facilities
- Mining

Mining of Howard Canyon Aggregate (Conflicts within designated impact area)

- Residential Uses (homes, including all residential uses listed in B.3.d. of Chapter III)
- Streams

Chapters II and III have also determined the economic, social, environmental, and energy (ESEE) consequences that allowing conflicting uses would have on the significant resources, and the consequences if the conflicting uses were not allowed. Decisions to allow, not allow, or limit conflicting uses must be based upon this analysis of ESEE consequences. However, each of the significant resources does not stand alone as each of the designated impact areas overlap. Any decisions about allowing conflicts must consider the results of the ESEE analysis for both the resources and reconcile any differences.

Section B of this chapter will examine the previously identified ESEE consequences for each conflicting use and reconcile any differences to reach a conclusion as to whether that particular *use* should be allowed, not allowed, or allowed in a limited manner.

Section C of this chapter will then reach a determination as to whether each significant *resource* should be fully protected by not allowing conflicting uses (designate "3-A"), not protected because conflicting uses are of such importance that they should be allowed fully (designate "3-B"), or protected by allowing conflicting uses in a limited manner (designate "3-C").

2. OAR 660-16-010

This OAR 660-16-010 requires, based on the determination of the economic, social, environmental and energy consequences, that a jurisdiction must "develop a program to achieve the Goal." Assuming there is adequate information on the location, quality, and quantity of the resource site as well as on the nature of the conflicting uses and ESEE consequences, a jurisdiction is expected to "resolve" conflicts with specific sites in any of the

following three ways:

(1) Protect the Resource Site: Based on the analysis of the ESEE consequences, a jurisdiction may determine that the resource site is of such importance, relative to the conflicting uses, and the ESEE consequences of allowing conflicting uses are so great that the resource site should be protected and all conflicting uses prohibited on the site and possibly within the impact area identified in OAR 660-16-000(5)(c). Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision. (This is a "3-A" designation for the Goal 5 resource.)

(2) Allow Conflicting Uses Fully: Based on the analysis of ESEE consequences and other Statewide Goals, a jurisdiction may determine that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. This approach may be used when the conflicting use for a particular site is of sufficient importance, relative to the resource site. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision. (This is a "3-B" designation for the Goal 5 resource.)

(3) Limit Conflicting Uses: Based on the analysis of ESEE consequences, a jurisdiction may determine that both the resource site and the conflicting use are important relative to each other, and that the ESEE consequences should be balanced so as to allow the conflicting use but in a limited way so as to protect the resource site to some desired extent. To implement this decision, the jurisdiction must designate with certainty what uses and activities are allowed fully, what uses and activities are not allowed at all and which uses are allowed conditionally, and what specific standards or limitations are placed on the permitted and conditional uses and activities for each resource site. Whatever mechanisms are used, they must be specific enough so that affected property owners are able to determine what uses and activities are allowed, not allowed, or allowed conditionally and under what clear and objective conditions or standards. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision. (This is a "3-C" designation for the Goal 5 resource.)

The "goal to be achieved," according to Goal 5, is protection of significant resources for future generations. This does not simply mean that a use which adversely impacts the resource should not be allowed if the ESEE analysis has shown that protection is more important than the conflicting use (a "3-A" designation). The conflict resolution process should also take into consideration whether adverse impacts can be mitigated. If mitigation is possible, the appropriate designation is "3-C," and clear and objective standards should be adopted which will allow the conflicting use in a manner that also protects the resource.

If the use of development standards would resolve conflicts by both allowing the use and protecting the resource, then "3-C," limit conflicting uses, is the appropriate Goal 5 level of protection.

B. CONFLICT RESOLUTION

COMPILATION OF CONFLICTS AND THE CONSEQUENCES OF NOT ALLOWING, ALLOWING IN A LIMITED MANNER, OR ALLOWING FULLY THE CONFLICTS

The following is compiled from the Summary subsections of section B, Resource Analysis, in Chapters II and III and is a combined synopsis of all the ESEE consequences.

1. FORESTRY

Forestry activities have been identified as a conflicting use to significant streams. A synopsis of the identified ESEE consequences is as follows:

Consequences if Forestry is not allowed

Economic: Lost jobs, reduced tax revenues, increased transport costs, regulatory burden

Social: Reduced property rights, impact to "timber" lifestyle, no more local sources

Environmental: Insignificant

Energy: More energy use for transporting materials and building infrastructure, shortage of goods

Goal 4: County cannot prohibit forest practices on forest lands

Consequences if Forestry is allowed in a limited manner

Economic: Possible loss of some jobs, tax revenue; regulatory burden

Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources

Environmental: Insignificant

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Goal 4: County cannot limit or regulate forest practices on forest lands

Consequences to Streams if Forestry is allowed fully

Economic: Reduced water quality for use, change in water quantity for use

Social: Loss of flood storage capacity

Environmental: Loss of riparian vegetation, reduced water quality

Energy: Insignificant

DISCUSSION: The significant streams are bordered by lands in three zoning districts, EFU, CFU and RR. Forestry is unlikely to occur on areas zoned EFU (the impacts of agriculture are discussed in a separate section). Four properties adjacent to Big Creek are zoned RR. However, the ESEE analysis showed there would be no impacts to Big Creek if forestry is allowed. Consequently, only the impacts of forestry on CFU zoned lands adjacent to Knieriem Canyon and Howard Canyon streams must be considered.

The Oregon Forest Practices Act (FPA) governs forestry activities on lands zoned CFU. The FPA contains rules to provide for the overall maintenance of water resources, fish, and wildlife by requiring buffer areas along streams, where logging is not allowed. In addition to these protections, ORS 527.722 restricts the county from prohibiting, limiting or regulating forest practices on forest lands.

CONCLUSION: The FPA, if properly enforced, provides some protections to streams from logging activities, and the county cannot regulate or prohibit forestry activities on forest lands. Forestry activities should be allowed fully within the impact area of the significant streams. The conflicting use analysis shows, however, that forest practices, if not carried out in a manner which provides effective buffer areas for streams, can result in significant adverse impacts to streams. Multnomah County should urge the Oregon Department of Forestry to effectively enforce the Forest Practices Act provisions for protection of fish and wildlife habitat in the Howard Canyon area, and work with the Department of Forestry to craft new rules, if necessary, which better protect significant streams in the Howard Canyon area.

2. RESIDENTIAL USES (HOMES)

Residential Uses (new homes) in the mapped aggregate impact area or in the stream riparian impact area have been identified as a conflict to the listed significant streams and mining of the Howard Canyon aggregate resource.

Consequences if Residential Uses are not allowed (in impact areas)

Economic: Lower value of property; less tax revenue; regulatory burden; change in customary practice; protection of aggregate resource
Social: Reduced availability of amenities; loss of opportunity for rural lifestyle
Environmental: Transfer of environmental impacts to another site
Energy: Potentially greater distance between destinations (build further away); increased cost of infrastructure

Consequences if Residential Uses are allowed in a limited manner (in impact areas)

Economic: Partial loss of property value if required to setback greater distance from stream; regulatory burden; change in customary practice; new homebuilder assumes a portion of the obligation and costs to mitigate conflicts with mining; protection of aggregate resource
Social: Reduced availability of amenities; some potential for additional complaints to any mining operator
Environmental: Transfer of environmental impacts to another location; potential for some increase in soil erosion and fire hazard
Energy: Additional energy in mitigating mining conflicts by new homebuilder

Consequences if Residential Uses are allowed fully (in impact areas)

Economic: Curtailment of area of extraction or the total loss of aggregate resource and associated value from sales, jobs, taxes; increased cost to consumers for aggregate
Social: Increase of complaints to any mining operator

Environmental: Loss of riparian vegetation; loss of water quality; more disturbance of wildlife habitat in riparian vegetation; new homes could be sited as to cause mining operator to violate DEQ noise standards; new homes could be sited on top of or too close to aggregate resource which would result in loss of resource

Energy: New homes could be sited as to cause quarry to alter mining methods which use more energy; increased energy used to transport aggregate from another source to East County area

DISCUSSION: Residential uses pose a significant conflict with the Goal 5 inventoried significant stream resources and the Howard Canyon significant aggregate resource. Due to the low density of permitted dwellings in the rural zoning districts, the greatest concern for conflict with the resources as is the proximity of the homes to the Goal 5 resources. Only residential uses inside the impact areas would potentially affect the resources.

The impact areas of the streams are the adjacent riparian zones along the streams. The riparian zones are as follows: Big Creek, an area ranging from 80-200 feet of the stream bank; Knieriem/Ross Creek, 0-160 feet of the stream bank; and Howard Canyon Creek, 10-200 feet of the stream bank.

The impact area of the aggregate resource is the area within 1,200 feet of the mapped aggregate resource. Based upon the ESEE analysis there is confidence that outside that distance all DEQ standards for noise and dust from mining activities will be met for new homes.

CONCLUSION: There would be significant adverse consequences to the two Goal 5 resources if residential uses were allowed fully. There would also be adverse consequences to property owners if residential uses were prohibited. A balanced approach which protects the resource while allowing residential uses which are sited to minimize the adverse impacts on the resources is the desired solution to this issue.

The specific limitations on residential development which may be adopted to protect the stream resources and the aggregate resource must be carefully crafted to prevent a total prohibition on the ability to site a residence on any particular lot of record. This is a concern where the individual resource protection measures or the combination of the two resource protection measures might result in too severe restriction of the buildable portion of a property. For example, requiring the siting of a proposed home a certain distance from one of the streams may also overlap into a building prohibited setback area established to protect the aggregate resource.

3. COMMUNITY SERVICE AND CONDITIONAL USES

Community service and conditional uses have been identified as uses that would conflict with significant streams. The identified ESEE impacts are:

Consequences if Community Service and Conditional Uses are not allowed

Economic: Regulatory burden, changes in customary practices
Social: Reduced availability of amenities
Environmental: Transfer of impacts to another site
Energy: Insignificant

Consequences if Community Service and Conditional Uses are allowed in a limited manner

Economic: Regulatory burden, changes in customary practices
Social: Reduced availability of amenities
Environmental: Transfer of impacts to another site
Energy: Insignificant

Consequences to Streams if Community Service and Conditional Uses are allowed fully

Economic: Insignificant
Social: Insignificant
Environmental: Deterioration of water quality, increased disturbance of wildlife
Energy: Insignificant

DISCUSSION: Several factors limit the number and type of community service and conditional uses likely to be allowed, including a lack of public utilities such as sewer and water; no direct access to a collector street as required by Comprehensive Plan Policy 31; and limited population in the area which makes any commercial activity unfeasible. However, there is a potential for a few uses such as utility facilities, campgrounds, or forest or farm processing facilities.

The impacts to streams if community service and conditional uses are allowed fully are environmental in nature, as compared to the economic and social impacts if these uses are not allowed. If the uses are allowed, but in a limited manner that requires protection of riparian vegetation and prevents runoff into streams, the impacts to the significant resources will be minimal. Community service and conditional use approval criteria include a provision that the use "will not adversely affect natural resources" (MCC .7015(B) and .7120(A)(2)). This may be adequate to provide protection to the stream resources.

CONCLUSION: Community service and conditional uses should be allowed in a limited manner by requiring the use to not adversely affect the stream corridor.

4. AGRICULTURE

Identified as a conflict to streams. The synopsis of ESEE consequences is as follows:

Consequences if Agriculture is not allowed

Economic: Lost jobs, reduced tax revenues, increased transport costs
Social: Loss of farming lifestyles, reduced property rights, reduced local sources of farm products
Environmental: Transferring environmental impacts to another site.
Energy: Increase in costs to bring more distant farm products to market, shortage of

goods

Consequences if Agriculture is allowed in a limited manner

Economic: Regulatory burden, potential for loss of jobs and tax revenues

Social: Loss of aesthetically pleasing open space, burden of regulation, reduced farm lifestyle, reduced local sources of farm products

Environmental: Transfer of some environmental impacts to another site

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Agriculture is allowed fully

Economic: Reduced water quality for use, change in water quantity for use

Social: Insignificant

Environmental: Loss of riparian vegetation, reduced water quality, greater wildlife disturbance

Energy: Insignificant

DISCUSSION: The analysis for significant streams (Chapter II) identifies specific conflicts with agricultural activities, such as misuse of pesticides, degradation of stream quality, and removal of riparian vegetation, which have negative consequences upon streams.

Regulation and restriction of agricultural activities to protect Goal 5 natural resources is theoretically possible for Multnomah County. ORS 215.253 states: *No State Agency, City, County, or Political Subdivision of this state may exercise any of its powers to enact local laws or ordinances or impose restrictions or regulations affecting any farm use land situated within an exclusive farm use zone established under ORS 215.203 ...in a manner which would unreasonably restrict or regulate farm structures or that would unreasonably restrict or regulate accepted farming practices because of noise, dust, odor, or other materials carried in the air or other conditions arising therefrom... .."Accepted Farming Practice" as used in this subsection shall have the meaning set out in ORS 215.203.*

Nothing in this section is intended to limit or restrict the lawful exercise by any state agency, city, county or political subdivision of its power to protect the health, safety, and welfare of the citizens of this state.

As this language seems to indicate, regulation of agricultural activities by Multnomah County is feasible under state law.

However, it is not desirable or necessary for the County to institute a regulations for agricultural activities or practices, for the following reasons:

1. Regulation of agricultural activities and practices would require a major effort by Multnomah County in order to study and adopt appropriate regulatory mechanisms and would require significant expenditure in order to enforce them.
2. The regulatory burden of mandatory restrictions on agricultural practices would be con-

sidered onerous by many if not most farmers.

3. Measures to protect streams are already practiced by many farmers, and are considered to be beneficial not only to the natural resources involved, but also to the agricultural activity or practice.

4. The U.S. Soil and Water Conservation Service and the East Multnomah Soil and Water Conservation District have as one of their primary missions the promotion of sound agricultural practices which protect streams from degradation due to agricultural activities and practices.

CONCLUSION: For the reasons listed above, Multnomah County should not institute a regulatory scheme for agricultural activities. As an alternative, Multnomah County should work cooperatively with the U.S. Soil Conservation Service and the East Multnomah Soil and Water Conservation District to promote agricultural practices which protect streams. Joint programs should promote the following measures:

-- Fencing should be used to keep domestic livestock from degrading streams and adjacent riparian habitat. Design standards for fences could be used which ensure that fences do not block passage for a wide range of wildlife species.

-- Application of fertilizers and pesticides could be limited, especially outside of cultivated farming areas.

-- Uncultivated riparian "buffer" areas should be maintained along streams in order to maintain fish and wildlife habitat values and maintain water quality.

5. TRANSPORTATION/PUBLIC IMPROVEMENTS

Identified as a conflict to streams. The synopsis of ESEE consequences is as follows:

Consequences if Transportation/Public Improvements are not allowed:

Economic: Increased cost of material transport, regulatory burden, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are allowed in a limited manner:

Economic: Increased cost of material transport, regulatory burden, changes in practices

Social: Insignificant

Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are fully allowed:

Economic: Insignificant

Social: Loss of education & recreation associated with wildlife habitat

Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife

Energy: Decreased water flow for energy use

DISCUSSION: Transportation facilities and Public Improvements have the potential to adversely impact significant streams wherever such an existing facility is modified or a new facility is constructed within the riparian zone of the stream. The County has no regulatory authority over logging roads constructed in accordance with the Forest Practices Act, and driveways are more appropriately considered under the category of the development they are proposed to serve (residential, community service, etc.). Although no major proposed public improvements, such as utility extensions, or road widenings were identified in the Howard Canyon area, such improvements may be proposed in the future.

Transportation facilities and public improvements which are located within a stream's impact area are too vital in most cases to be prohibited in order to protect the stream. However, such facilities can generally be constructed in a manner which can minimize the impacts to streams.

CONCLUSION: Clearly, there would be significant adverse consequences to Goal 5 resources if transportation facilities and public improvements were allowed fully, and to the community if such uses were prohibited. A balanced approach, which protects the resources while allowing improvements to roads and public facilities which minimizes impacts upon these resources, is the optimal solution for this issue.

6. MINING OF THE MAPPED AGGREGATE RESOURCE

Consequences if Mining is not allowed

Economic: Lost jobs; increased transportation costs for obtaining aggregate; loss of aggregate resource and associated value from sales; increased cost to consumers for aggregate

Social: No local source for aggregate; reduced property rights for aggregate owner; no conflicts from noise and dust from mining activities to noise and dust sensitive uses

Environmental: Insignificant

Energy: Increase in energy expended to transport aggregate to East County

Consequences if Mining is allowed in a limited manner

Economic: Potential for some lost jobs; aggregate available at lower cost; new home builders in impact area assume a portion of the obligation and costs to mitigate conflicts with mining

Social: Reduced amount of local source of aggregate; mining noise and dust conflicts, (to the extent allowed by DEQ standards), will be experienced by residents of the impact area; fewer siting choices for new homes on existing lots in the

impact area

Environmental: Noise, dust, and erosion effects, (to the extent allowed by DEQ standards), will occur in the impact area

Energy: Some reduction in energy expended to transport aggregate to East County

Consequences if Mining is allowed fully

Economic: Jobs created for extracting, processing and transporting aggregate; aggregate available at lower cost; new home builders in impact area assume a portion of the obligation and costs to mitigate conflicts with mining

Social: Mining noise and dust conflicts, (to the extent allowed by DEQ standards), will be experienced by residents of the impact area; fewer siting choices for new homes on existing lots in the impact area

Environmental: Noise, dust, and erosion effects, (to the extent allowed by DEQ standards), will occur in the impact area

Energy: Reduction in energy expended to transport aggregate to East County

DISCUSSION: Mining activities pose a significant potential conflict with the Goal 5 inventoried significant stream resources and residential uses in the designated impact area. There are significant streams to the north, west and south of the aggregate resource which are within the impact area of the aggregate and which would potentially receive any erosion problems that might occur from mining activities. Also within the aggregate impact area are 11 existing homes, 1 unexpired approval of a home, and the estimated maximum potential for 9 additional homes which would receive the impacts of noise and dust resulting from aggregate extraction and processing.

The impact areas of the streams are the adjacent riparian zones along the streams. The riparian zones are: Big Creek, an area ranging from 80 to 200 feet of the stream bank; Knieriem/Ross Creek, 0 to 160 feet of the stream bank; and Howard Canyon Creek, 10 to 200 feet of the stream bank.

The aggregate resource is not located within any of the impact areas (riparian zones) of the significant streams and, therefore, impacts from mining on the streams will not be from extraction of aggregate, but from other mining effects. Those effects could potentially include erosion into the streams, construction within the riparian zone of holding ponds to reduce erosion, construction and maintenance of private haul roads, and dust. Of those effects State DEQ standards are in place and compliance by any mining operator is required for the amount of soil erosion and dust that reaches the streams.

The impact area of the aggregate resource is the area within 1,200 feet of the mapped aggregate resource. That distance was based upon both the impacts to residential uses from potential noise and the distance also included the aforementioned streams. Based upon the ESEE analysis, for residential uses there is confidence that outside that distance all DEQ standards for noise and dust from mining activities will be met.

Within that impact area,(and outside the impact area), a mining operation is required by the State of Oregon Department of Geology and Mineral Industries to also meet DEQ stan-

dards for impacts to noise and dust sensitive land uses, if those standards are not met then mining does not take place.

CONCLUSION: There would be significant adverse economic consequences if the Goal 5 aggregate resource was not protected (mining not allowed). There would also be adverse consequences to streams and residential uses if mitigating measures were not required of a mining operation to reduce where practicable or necessary. A balanced approach which protects the aggregate resource for mining while requiring a mining operation to minimize adverse effects on the streams and residential uses is the desired solution to this issue.

C. PROTECTION OF RESOURCES

1. STREAMS

a. Designated Level of Protection

The designated level of protection for the three Significant Streams in the Howard Canyon area (Big Creek, Howard Canyon Creek, and Knieriem Creek) is 3.C. -- Limit Conflicting Uses.

b. Conflicting Uses to be allowed fully

- (i) Forestry/timber (however, see discussion under 1.e. below)
- (ii) Farm Use (however, see discussion under 1.e. below)

c. Conflicting Uses to be allowed conditionally

(i) Community Service/Commercial Uses

- Wood Processing(limited, sawmills, etc.)
- Wholesale/retail for farm/forest products
- Playgrounds, Churches, Schools
- Parks/Golf Courses
- Dog Kennels
- Aircraft Landing Area
- Cottage Industries
- Rural Service/Commercial
- Other Community Service Uses

(ii) Transportation/Public Improvements

(iii) Residential Uses

- Single-family Residential
- Farm/Forest Worker Housing

(iv) Mining/Geothermal Uses

d. Conflicting Uses not allowed

None

e. Program to achieve the goal

Standards for protection of stream resources should consider erosion control, native vegetation maintenance and enhancement, and fish and wildlife maintenance and enhancement for any of the conflicting uses proposed for development within the riparian zone which are designated above as uses to be allowed conditionally. This protection can best be accomplished through placement of an "overlay" zone similar in concept to the Significant Environmental Concern(SEC)-Streams overlay currently within the Multnomah County Zoning Ordinance.

The riparian zone for the three Howard Canyon Creeks has been generally measured as part of the stream survey conducted by SRI/Shapiro. The area where the SEC overlay zone should be placed is within the riparian area, defined as follows in the SRI/Shapiro Report:

"A riparian area is comprised of an aquatic ecosystem and associated upland area. Water in the aquatic system influences upland vegetation and microclimate. Upland areas affect the aquatic ecosystem by providing thermal regulation, biomass, and structure."

Since measurement of the riparian zone was very generalized in the Streams study, provisions should be made for an applicant under the SEC provisions to provide evidence as to a more precise boundary of the riparian zone on the property which meets the above-listed definition.

Specific protection measures for streams which will be used with the SEC overlay zone provisions include the following:

- Maximum provision of landscaped area, scenic and aesthetic enhancement, open space, or vegetation between any use and a stream.
- Preservation of agricultural and forest land adjacent to streams for farm and forest use.
- Building, structure, or use located so as to best preserve and protect the riparian zone area
- Minimum conflict between recreational uses and the riparian zone area

- Protection of public safety and private property from vandalism and trespass to the maximum extent practicable considering environmental values of the riparian zone
- Protection and enhancement of opportunities for fish and wildlife to live in and travel through the riparian zone
- Protection and enhancement of natural vegetation along streams
- Retention of areas of annual flooding and wetlands in their natural state
- Limit development to portions of a site located away from steep slopes, soils, and other unstable geological conditions
- Protection of areas within and adjacent to the riparian zone from erosion
- Regulation of construction practices and schedules in order to minimize erosion into streams from water runoff and soil erosion
- Minimization of impervious surface area in order to reduce pollution of stream waters
- Provide for a minimum setback from the ordinary high water mark of each stream which will protect the stream's resources.

As discussed earlier, agricultural and forestry activities adjacent to streams can have significant negative environmental consequences. While Multnomah County cannot (forestry on forest lands) or should not (forestry on "exception" lands) institute zoning regulation of these uses, the County must work to ameliorate and if possible eliminate the conflicts between these uses and significant streams. As regards forestry, the County should monitor the Oregon Department of Forestry's effective enforcement of the State Forest Practices Act, and work with the Department of Forestry to adopt and implement standards which may more effectively protect significant streams. As regards Agriculture, the County should work with the East Multnomah Soil and Water Conservation District to adopt and properly fund a program of education and assistance to farmers in order to better protect significant streams from the negative impacts of agricultural practices such as livestock damage to streams, misuse of fertilizers and pesticides, and cultivation adjacent to streams which negatively impacts fish & wildlife habitat and water quality.

2. AGGREGATE RESOURCE

Based upon the ESEE Analysis in Chapter III, and the reconciliation of the interrelationships of the relevant resources and conflicts in Chapter IV, the Howard Canyon significant aggregate resource is to be protected under the provisions of OAR 660-16-010(3), Limit Conflicting Uses (also referred to as a **"3C" designation**). This designation is a determination that both the aggregate resource and the conflicting uses are important relative to each other, and that the ESEE consequences should be balanced so as to allow conflicting uses but in a limited way, so as to protect the resource site. To implement this decision, the jurisdiction must designate with certainty what uses and activities are allowed fully, what uses and activities are not allowed at all and which uses are allowed conditionally, and what specific standards or limitations are placed on the permitted and conditional uses and activities for each resource site. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

a. Uses Fully Allowed – The following uses should be allowed fully in the aggregate resource impact area:

(i) Commercial Forest Use Zoning District:

- Exploration for mineral and aggregate resources as defined in ORS Chapter 517
- Widening of roads within existing rights-of-way in conformance with the transportation element of acknowledged comprehensive plans including public road and highway projects as described in ORS 215.213(1)(m) through (p) and ORS 215.283(1)(k) through (n)
- Exploration for and production of geothermal, gas, oil, and other associated hydrocarbons, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the well head
- Mining and processing of oil, gas, or other subsurface resources, as defined in ORS Chapter 520, and not otherwise permitted under OAR 660-06-025(3)(m) (e.g., compressors, separators and storage serving multiple wells), and mining and processing of aggregate and mineral resources as defined in ORS Chapter 517
- Temporary asphalt and concrete batch plants as accessory uses to specific highway projects
- Public road and highway projects as described in ORS 215.(1,(2)(q) through (s), 215.213(10), 215.283(2)(p) through (r) and 215.283(3)
- Forest operations or forest practices including, but not limited to, reforestation of

forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash

- Temporary on-site structures which are auxiliary to and used during the term of a particular forest operation
- Physical alterations to the land auxiliary to forest practices including, but not limited to, those made for purposes of exploration, mining, commercial gravel extraction and processing, landfills, dams, reservoirs, road construction or recreational facilities
- Farm use as defined in ORS 215.203
- Local distribution lines (e.g., electric, telephone, natural gas) and accessory equipment (e.g., electric distribution transformers, poles, meter cabinets, terminal boxes, pedestals), or equipment which provides service hookups, including water service hookups
- New electric transmission lines with right of way widths of up to 100 feet as specified in ORS 772.210. New distribution lines (e.g., gas, oil, geothermal) with rights-of-way 50 feet or less in width
- Temporary portable facility for the primary processing of forest products
- Towers and fire stations for forest fire protection
- Water intake facilities, canals and distribution lines for farm irrigation and ponds
- Water intake facilities, related treatment facilities, pumping stations, and distribution lines
- Reservoirs and water impoundments
- Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources
- Uninhabitable structures accessory to fish and wildlife enhancement
- Private hunting and fishing operations without any lodging accommodations
- Permanent facility for the primary processing of forest products
- Permanent logging equipment repair and storage
- Log scaling and weigh stations

- Disposal site for solid waste that has been ordered established by the Environmental Quality Commission under ORS 459.049, together with the equipment, facilities or buildings necessary for its operation
- Disposal site for solid waste approved by the governing body of a city or county or both and for which the Oregon Department of Environmental Quality has granted a permit under ORS 459.245, together with equipment, facilities or buildings necessary for its operation
- Television, microwave and radio communication facilities and transmission towers
- Fire stations for rural fire protection
- Utility facilities for the purpose of generating power
- Aids to navigation and aviation
- Cemeteries

(ii) Exclusive Farm Use District:

- Operations for the exploration for and production of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the well head
- Operations for the exploration for minerals as defined by ORS Chapter 517.750
- Operations conducted for mining and processing of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005 not otherwise permitted under this rule
- Operations conducted for mining, crushing or stockpiling of aggregate and other mineral and other subsurface resources subject to ORS 215.298
- Processing as defined by ORS 517.750 of aggregate into asphalt or portland cement
- Processing of other mineral resources and other subsurface resources
- Public road and highway projects described under the heading "Transportation" in OAR 660-33-120
- Farm use as defined in ORS 215.203 and other buildings customarily provided in conjunction with farm use (except residences)

- Commercial activities in conjunction with farm use
- Farm stands
- The propagation, cultivation, maintenance and harvesting of aquatic species
- Dog kennels and the breeding, kenneling and training of greyhounds for racing
- Propagation or harvesting of a forest product
- Forest management research and experimentation facilities accessory to forest operations
- A facility for the primary processing of forest products
- Utility facilities necessary for public service
- A site for the disposal of solid waste that has been ordered to be established by the Environmental Quality Commission under ORS 459.049, together with the equipment, facilities or buildings necessary for its operation
- A site for the disposal of solid waste approved by the governing body of a city or county or both and for which a permit has been granted under ORS 459.245 by the Department of Environmental Quality together with equipment, facilities or buildings necessary for its operation
- Commercial utility facilities for the purpose of generating power for public use by sale
- Golf courses
- Cemeteries

b. Uses Conditionally Allowed – The following uses should be allowed conditionally in the aggregate resource impact area:

(i) Commercial Forest Use Zoning District:

- Residential uses including the following as provided by the Administrative Rules:

Forestland dwellings

Alteration, restoration or replacement of a lawfully established dwelling

A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

Private accommodations for fishing occupied on a temporary basis

Private seasonal accommodations for fee hunting operations

(ii) Exclusive Farm Use District:

- Residential uses including the following as provided by the Administrative Rules:

Dwelling customarily provided in conjunction with farm use

A dwelling on property used for farm use occupied by relative whose assistance in management of the farm is required by farm operator

One single-family dwelling on a lawfully created lot or parcel (optional provision using date of ownership, soil productivity ratings, and other criteria)

A mobile home in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative

Single family residential dwelling, not provided in conjunction with farm use

Seasonal farmworker housing as defined in ORS 197.675

Alteration, restoration or replacement of a lawfully established dwelling

c. Uses Not Allowed – The following uses should not be allowed in the aggregate resource impact area:

(i) Commercial Forest Use Zoning District:

- Expansion of existing airports
- Destination resorts reviewed and approved pursuant to ORS 197.435 to ORS 197.465 and Goal 8
- Temporary forest labor camps
- Caretaker residences for fish hatcheries
- Parks and campgrounds
- Caretaker residences for public parks

(ii) Exclusive Farm Use District:

- Destination resort which is approved consistent with the requirements of Goal 8
- Living history museum
- Public or private schools, including all buildings essential to the operation of a school
- Churches
- Parks, including Private parks, playgrounds, hunting and fishing preserves and

campgrounds and Parks, playgrounds or community centers owned and operated by a governmental agency or a nonprofit community organization

- A winery as described in ORS 215.452

d. Program to Achieve the Goal – OAR 660-16-010 requires, based on the determination of the economic, social, environmental and energy consequences, that a jurisdiction must "develop a program to achieve the Goal." Following is the program for protection of the Howard Canyon aggregate resource in accordance with the determination to "Limit Conflicting Uses" (3C level of resource protection).

- (i) Comprehensive Framework Plan Policy 16-B and the Zoning Code shall be amended to include items required by the LCDC Remand Order.
- (ii) Multnomah County shall amend Comprehensive Framework Plan Policy 16-B to identify the Howard Canyon aggregate resource as 3C and acknowledge the impact area identified in the ESEE Analysis as the appropriate area for regulation of conflicting uses. All of the following quarry development conditions shall also be made a part of the Plan Policy language specific to this site and shall supercede corresponding less restrictive provisions in the Zoning Code (MCC 11.15).
- (iii) A mapped plan designation and overlay zoning district "extraction zone" shall be adopted to protect the aggregate resource area that is appropriate to mine. Within this area only aggregate extraction and processing, land reclamation, farming and forestry activities would be permitted.

The extraction area for the Howard Canyon site shall be the mapped area of the aggregate resource except for the portion shown on tax lot 25, T. 1 N., R. 4 E., and tax lot 16, T. 1 S., R. 4 E., WM. Eliminating those two tax lots would provide additional buffer area to the majority of existing residences in the impact area which are located to the west of the resource, thereby reducing noise and dust impacts to those noise and dust sensitive land uses. The aggregate resource mapped on tax lots 25 and 16 is the narrowest in width and, from information supplied by the property owner, there were no test pits or drill holes on this portion of the mapped resource area verifying exact extent of the resource.

- (iv) A plan designation and overlay zoning district "impact area" extending 1,200 feet around the "extraction zone" shall be adopted. Within the "impact area" overlay zone some future conflicting uses would not be allowed and other conflicting uses such as new homes would be required to address certain setbacks and orientation requirements so as not to cause approved mining activities within the "extraction zone" to violate State standards for noise levels, air quality, etc.
- (v) For the area of the aggregate resource site subject to an Oregon Department of Geology and Mineral Industries (DOGAMI) operational permit, Multnomah County deems Oregon Department of Environmental Quality (DEQ) standards for noise lev-

els, air quality, and water quality to be appropriate to protect the health, safety and welfare of citizens and to be appropriate to protect the land and water resources within the impact area. The County will request participation by DEQ and the Oregon Department of Fish and Wildlife in the review of any DOGAMI operational mining permit at this site. No nonexempt mining operation shall commence without Oregon DEQ and ODF&W approval of the proposed DOGAMI permit.

(vi) Phasing. At the Conditional Use review and approval of any proposed mining plan for this site the Approval Authority shall establish conditions of phased development in the amount of aggregate extracted within certain time periods. The timing between phases and the amount of aggregate extracted are directly related to the factors listed in program requirements, (vi), (vii), and (xvi).

- All of the nearby roads and the roads serving the aggregate site are rural local roads that are inadequate in construction for certain levels of heavy truck service. [See III.B.2.b. and III.B.4.e.(vii).] The ability of the roads to safely handle certain numbers and weights of trucks will directly determine the extraction limits of each phase. The findings of the Traffic Management Plan outlined in (xvi) and subsequent review and findings of the County Engineer will be the basis for the necessary information to establish the phase limits. It should be noted that, although the operator should only fund the amount for road improvements derived in the "cost responsibility" analysis, it may be necessary to limit the number of gravel trucks (and thereby extraction levels) until full improvements are completed.
- The Oregon Department of Environmental Quality no longer contains noise enforcement staff and, therefore, before approval of an increase to the next higher extraction total it shall be demonstrated that DEQ noise standards are continually satisfied. Noise studies shall be periodically required. The studies shall be by an independent consultant and paid for by the mine operator. The mine operator and the Planning Director shall agree on the cost and scope of the studies and the Planning Director shall select the consultant. In the event that the Planning Director and the mine operator do not agree on the cost and scope of the studies, the Planning Director shall make this determination.
- Drainage from this hilltop aggregate site flows into Goal 5 Significant Streams which all flow into the highest rated Goal 5 Significant River, the Sandy River. Phasing of development of the aggregate site will better ensure that all storm water silt retention facilities are adequate at each rate of extraction. Therefore, before approval of an increase to the next higher extraction total it shall be demonstrated that DEQ water quality standards are continually satisfied. Water quality studies shall be periodically required. The studies shall be by an independent consultant and paid for by the mine operator. The mine operator and the Planning Director shall agree on the cost and scope of the studies and the Planning Director shall select the consultant. In the event that the Planning Director and the mine operator do not agree on the cost and scope of the studies, the Planning Director shall make this determination.

- Before approval of an increase to the next higher extraction total it shall be demonstrated that DEQ dust standards are continually satisfied. This requirement may be satisfied by the maintenance of a DEQ permit for the rock crusher and written concurrence from DEQ of compliance at all other aspects of the mining operation.
 - All aggregate mined for forest roads not on or contiguous to this site is subject to and included in the total limits placed on each phase.
- (vii) Production Cap. The Approval Authority reviewing the Conditional Use application shall make a determination of an ultimate annual cap on the amount of aggregate extracted. The cap will be determined by the Traffic Management Plan in (xvi).
- (viii) Multnomah County in its participation in the review of any proposed DOGAMI mining permit plan should inform the state agency of the need for special notice of mining operational methods and haul road construction at the interface of the Basalt and Troutdale formations where there may be a potential for stability problems.
- (ix) All haul roads to be used as part of a DOGAMI operational permit shall be paved or treated with dust suppression emulsion to control dust.
- (x) Except for aggregate extraction areas, holding ponds, and haul roads, vegetation that functions as a visual screen and retains dust should be retained. Holding ponds shall not be constructed in the stream riparian zone.
- (xi) It is requested that DOGAMI delay its final decision on approval of an operating permit until Multnomah County makes an affirmative decision on any proposed conditional use application. It is the policy of Multnomah County to participate in and cooperate with DOGAMI in reviewing any such mining operation permit application.
- No operation shall commence without approval of all applicable state agency permits.
- (xii) All overburden stockpiles shall be stabilized from erosion as required by DOGAMI.
- (xiii) Conflicts with residential uses occurring from extraction and processing activities can be lessened by restricting operating hours to reasonable weekday and Saturday hours. Conflicts arising from large haul truck traffic with morning school buses and peak traffic periods on surrounding roads can also be avoided by a restriction of hours that the gravel trucks arrive at or leave the site, (conflicts attested to in public testimony at Planning Commission and Board of County Commissioners Hearings on this report). Therefore, hours and days of operation shall be more restricted than other mining sites without such conflicts.
- Operating hours shall be restricted to the hours of: 8:30 am to 5:00 pm Monday

through Friday when school is in regular session; 7:00 am to 4:00 pm Monday through Friday during the summer when school is not in session; and 8:30 am to 1:00 pm on Saturday (all year). No operation shall be allowed on Sundays or the following legal holidays: New Year's Day, Memorial Day, July 4, Labor Day, Thanksgiving Day, or Christmas Day. The only activities allowed at the site outside the stated operating hours would be the arrival and departure of workers in their private passenger vehicles and trucks not used for hauling aggregate. Short term exceptions to these hours and days of operation shall be pursuant to the zoning code provisions for a Temporary Permit.

- Blasting shall be restricted to the hours of 9:00 a.m. to 5:00 p.m., Monday through Friday when school is in regular session and 9:00 am to 4:00 pm Monday through Friday during the summer when school is not in session. No blasting shall occur on Saturdays, Sundays, or the following legal holidays: New Year's Day, Memorial Day, July 4, Labor Day, Thanksgiving Day, or Christmas Day. Notice of blasting events shall be given by the mining operator to all residents within the impact area in a manner that will ensure receipt of the notice at least 48 hours prior to the blasting event. Notice of blasting events shall also be posted by the mining operator at the Corbett Post Office at least 48 hours in advance.

(xiv) Noise deflecting berms and vegetative screening are features that are encouraged to be incorporated into the DOGAMI reviewed operational plan.

(xv) Reclamation of the site should be done in a manner to ensure the establishment of either forestry at Oregon Department of Forestry forest practices standards or the establishment of accepted farm practices.

(xvi) Traffic Management Plan.

In recognition of the inadequacy of Howard, Knieriem, Littlepage and possibly other nearby roads for certain levels of heavy truck service [see III.B.2.b. and III.B.4.e.(vii)], it shall be a requirement of a conditional use review of any mining operation that an applicant submit the following as part of the proposed application:

1. A traffic management plan for normal operating conditions; and
2. A traffic management plan for extraordinary demands for aggregate and other rock materials supplied to a single site, such as a large public works project.

The Traffic Management Plan shall be submitted to the County Engineer. Then, pursuant to County policy procedures in MCC 11.60 and related Administrative Rules, the County Engineer will stipulate the mine operator's costs for improvements to Howard, Knieriem, Littlepage and other roads which will be impacted by heavy truck traffic as identified in any approved traffic management plans and cost responsibility analysis. The County Engineer will also stipulate a timeline for payments for road improvements and a timeline for number and weight of trucks to be allowed at specific levels of road improvement.

The Traffic Management Plan shall contain the following components as compiled by Multnomah County Transportation Division staff:

"I. Subject to the County Engineer's review and approval, hire a consulting engineer, licensed in the State of Oregon, independent of the applicant or operator, acceptable to the Transportation Division and acting under its general supervision, conduct studies, analyses, and evaluations, perform engineering and design work, and prepare preliminary and final reports in conformance with generally accepted engineering principles and practices and the requirements, guidelines, methods, and procedures contained in the latest issues of the following publications:

- A. Multnomah County Department of Environmental Services Rules for Street Standards
- B. AASHTO Policy on Geometric Design of Highways and Streets
- C. AASHTO Guide for Design of Pavement Structures
- D. AASHTO Standard Specifications for Highway Bridges and Manual for Maintenance Inspections of Bridges
- E. AASHTO Guide for the Development of Bicycle Facilities
- F. ODOT Standard Specifications for Highway Construction
- G. FHWA and OR Supplement Manual on Uniform Traffic Control Devices

II. The consultant shall perform the following studies and produce preliminary and final engineering, design, and economy reports that show the results of data collection, provide roadway system characteristics, information, and factors, analyze and evaluate the effects of the proposed resource development on County Roads, and identify recommended improvements and relative cost responsibilities to accommodate local and resource development traffic. The report outline below is considered a guide; revisions to the plan may be necessary. The reports will be submitted to the County Engineer for review and approval. At a minimum, the reports must have the following components:

- A. Traffic Study Section.
 - 1. Collect field data of existing traffic conditions;
 - 2. Provide physical and operating characteristics of vehicles attending the resource development;
 - 3. Provide traffic volumes forecasted by the resource development for each stage of expansion;
 - 4. Identify roadways, bikeways, and walkways impacted by resource development traffic;
 - 5. Identify and map resource development vehicular haul routes east of the Sandy River; and

6. *Provide other information as determined and directed by the Transportation Division.*

B. Operational Study Section

1. Collect field data of existing geometric and traffic control conditions for roadways, bikeways, and walkways;
2. Analyze and evaluate the effect of resource development traffic on the safety of roadway, bikeway, and walkway users;
3. Analyze and evaluate the adequacy of existing roadway, and bridge geometries to accommodate resource development traffic; and
4. *Provide other information as determined and directed by the Transportation Division.*

C. Pavement and Other Structures Study Section

1. Collect field data of existing structure conditions and perform a condition survey of pavement, bridge, and culvert structures on roadways identified as haul routes;
2. Perform survey and testing of pavement deflections on roadways identified as haul routes using non-destructive methods;
3. Analyze and evaluate the structural adequacy of existing roadways, culverts, and bridges;
4. Analyze and evaluate the effects of resource development traffic on the structural adequacy of existing roadways, culverts, and bridges; and
5. *Provide other analyses and evaluations as determined and directed by the Transportation Division.*

D. System Condition Conclusions and Improvement Alternatives Analysis Section

1. Provide assessment of the adequacy of existing roadways and structures to accommodate traffic for the life of the proposed resource development ignoring the effects of resource development traffic;
2. Identify limitations of the existing roadways, culverts, and bridges to accommodate resource development traffic for each stage of development expansion including startup;
3. Identify and provide alternatives analysis of roadway geometry and traffic control changes for safety improvements where necessitated by the physical and operating characteristics of the proposed resource development traffic;
4. Identify and provide alternatives analysis of measures to strengthen and/or rehabilitate pavements, culverts, and bridges to adequately withstand the stress repetition loading and other detrimental effects of resource development traffic; and
5. *Provide other assessments and recommendations as deter-*

mined and directed by the Transportation Division.

E. Economy/Cost Responsibility Study Section

1. Provide cost estimates to rehabilitate existing roadways for the life of the proposed development ignoring the effects of resource development traffic;
2. Determine and provide cost estimates of alternatives provided in Section D-3 above with respect to each stage of development expansion, considering and accommodating resource development traffic for the expected life of the proposed development;
3. Determine and provide cost estimates of alternatives provided in Section D-4 above with respect to each stage of development expansion, considering and accommodating resource development traffic for the expected life of the proposed development;
4. *Provide other cost estimates as determined and directed by the Transportation Division."*

3. CONCLUSION

- a. The aggregate resource at the Howard Canyon site is being designated to be protected for future aggregate expansion, subject to the limitations set forth above in subsection 2 of section C, Chapter IV. These limitations include 1) prohibition of certain conflicting uses on the aggregate site itself, 2) requiring construction of new noise sensitive uses within the "impact area" to demonstrate that they will not conflict with mining operations to extract the aggregate resource, 3) determination at conditional use review of any mining operation application of an appropriate phasing of annual extraction amounts using attainment and maintenance of certain noise, water quality, and dust standards and the findings of a Traffic Management Plan as the basis for the phasing amounts and 4) various other standards.
- b. The three significant streams in the Howard Canyon area which would be affected by the Howard Canyon quarry operation are being designated to be protected from degradation, subject to the conditions set forth above in subsection 1 of section C, Chapter IV. These limitations involve regulating conflicting uses in the riparian zone of the stream in order to maintain and enhance stream and stream bank economic, educational, public safety, recreational, and fish & wildlife habitat values.
- c. In weighing the relative merits of the Howard Canyon quarry aggregate resource and the streams resources, the Program to Achieve the Goal would protect both resources. The potential impacts to streams from the quarry site would be eliminated by the protection measures, which include 1) verification that DEQ standards relating to water quality which protect the health, safety and welfare of Oregonians are met for mine runoff into the streams, and 2) prohibition of holding pond construction (holding ponds are used to reduce pollutants from mine runoff to acceptable levels) within the riparian zone of either Knieriem or Howard Canyon Creeks.

MEETING DATE: SEP 22 1994

AGENDA NO: R-19

(Above Space for Board Clerk's Use ONLY)

AGENDA PLACEMENT FORM

SUBJECT: PCRB EXEMPTION REQUEST

BOARD BRIEFING Date Requested: _____

Amount of Time Needed: _____

REGULAR MEETING: Date Requested: September 22, 1994

Amount of Time Needed: 5 - 10 minutes

DEPARTMENT: DES DIVISION: Facilities and Property Management

CONTACT: Jim Emerson/Lillie Walker TELEPHONE #: 248-3322/5111

BLDG./ROOM #: 421/1st

PERSON(S) MAKING PRESENTATION: Jim Emerson/Lillie Walker

ACTION REQUESTED:

☐ INFORMATIONAL ONLY ☐ POLICY DIRECTION ☒ APPROVAL ☐ OTHER

SUMMARY (Statement of rationale for action requested, personnel and fiscal/budgetary impacts, if applicable):

Request of the Board of County Commissioners as Public Contract Review Board for approval of an Exemption to contract with Selectron, Inc. To replace the Card Key System at the Multnomah County Justice Center.

9/15/94 notice & application to PCRB list, Lillie & Jim
9/26/94 notice & order to PCRB list, Lillie & Jim
SIGNATURE REQUIRED:

9/27/94 Jim Emerson CALLED - TYPED IN
ELECTED OFFICIAL: ORDER - SEE ATTACHED COPY

OR

DEPARTMENT MANAGER:

Jan Hazel Jim Walker

ALL ACCOMPANYING DOCUMENTS MUST HAVE REQUIRED SIGNATURES

Any Questions: Call the Office of the Board Clerk 248-3277/248-5222

**BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM BRIEFING
STAFF REPORT SUPPLEMENT**

TO: BOARD OF COUNTY COMMISSIONERS

FROM: Lillie Walker, Purchasing Director

TODAY'S DATE: September 13, 1994

REQUESTED PLACEMENT DATE: September 22, 1994

RE: Request for an Exemption to contract with Selectron, Inc. to replace the Card Key System at the Multnomah County Justice Center.

I. Action Requested:

DES, Transportation is requesting approval of an exemption from the formal competitive bid process to contract with Selectron, Inc. For replacement of the Card Key System at the Multnomah County Justice Center.

II. Background/Analysis:

Access to the Justice Center (Portland Police Headquarters and Multnomah County's highest security jail) is controlled at many access points by electronic card readers. These electronic card readers allow only qualified card-holders access to the facility, including various entry times for each individual and a record of all entries.

Major maintenance problems have been experienced for at least two years. Several weeks ago the existing system began a cycle of almost continuous failure, culminating in failure of the main controller unit.

To expedite the process, Facilities Management Division staff contacted all known vendors of card key systems. Three provided proposals and Selectron received the highest evaluation at the lowest cost.

I. Financial Impact:

The Facilities Management Division budgeted funds in the FY 94-95 budget to replace the card key access system.

IV. Legal Issues:

None.

V. Controversial Issues:

Public safety if Justice Center security is breached.

VI. Link to Current County Policies:

Current County policies allow for Exemptions from the competitive bid and RFP process.

VIII. Other Government Participation:

None.



MULTNOMAH COUNTY OREGON

DEPARTMENT OF ENVIRONMENTAL SERVICES
DIVISION OF FACILITIES AND
PROPERTY MANAGEMENT
2505 S.E. 11TH AVENUE
PORTLAND, OREGON 97202
(503) 248-3322

BEVERLY STEIN
MULTNOMAH COUNTY CHAIR

September 6, 1994

From: Cyrus Yamin
To: Purchasing
Subject: Justice Center's access control system replacement
proposal selection

Following was the vendor selection process for Justice Center's
Access Control System replacement.

Four vendors were contacted.

1. Selectron Inc.
2. Entrance Control Inc.
3. Protec Inc.
4. Allied Security Inc.

Allied Security formally pulled out due to their present work
load.

Tree proposals were submitted by other vendors as follows:

Selectron Inc.

Base proposal with CSI system and I/Disc readers and cards.	\$50,716.00
with proximity readers and cards.	52,597.00

Entrance Control Inc.

Base proposal with Mag strip readers and cards.	63,172.00
with Weigand readers and cards.	87,039.00
with proximity readers and cards.	66,277.00
with proximity readers and key chain devices.	77,211.00

Protec Inc.

Their proposed system was not matching the specified
system in several aspects.

Base proposal with Weigand readers and cards.	54,618.00
---	-----------

All submitted proposal were evaluated by the selection team based
on nine criteria. Attached tables show the evaluation results.

Sincerely;

CC. Jim Emerson



MULTNOMAH COUNTY OREGON

DEPARTMENT OF ENVIRONMENTAL SERVICES
DIVISION OF FACILITIES AND
PROPERTY MANAGEMENT
2505 S.E. 11TH AVENUE
PORTLAND, OREGON 97202
(503) 248-3322

BEVERLY STEIN
MULTNOMAH COUNTY CHAIR

MEMO

To: Lillie Walker

From: Jim Emerson *[Signature]*

Date: August 24, 1994

Re: Exemption to Bidding, for Justice Center Access System

I urgently request that an exemption to the bidding rules be granted for the acquisition and installation of an electronic access-control system at the Justice Center. Please see the attached supporting documents from the Multnomah County Sheriff's Office and the Portland Bureau of Police.

BACKGROUND: Access to the Justice Center (Portland Police Headquarters and Multnomah County's highest-security jail) is controlled at many access points by electronic card readers. These allow only qualified card-holders access to the facility, and can control for various entry times for each individual. The system also provides a record of all entries. The original, Card-Key brand system has been experiencing major maintenance problems for at least 2 years, so the County budgeted for system replacement. Specifications were prepared as part of a process towards bidding a new system in 1994-5.

Several weeks ago the existing system began a cycle of almost-continuous failure, culminating in the demise of the main controller unit. CardKey has not yet been able to repair and re-install the unit due to its obsolete design, so the Justice Center is approaching a month without its secure-access system functional. This is completely unacceptable to the PPB and S.O.

During this month, a team comprising PPB, S.O., and Facilities contacted the three well-known local vendors who deal in such systems and requested proposals for replacement on an emergency basis. A matrix of criteria was established for evaluating the proposals, and a date set for receipt. The proposals were evaluated today, and SELECTRON was unanimously selected by the team as the most appropriate system. Availability meets our requirements, system performance meets our specification, and their price is the lowest.

Please obtain a bid exemption so that we may issue a contract to SELECTRON for this important system.

Backup data is available if you need it.

*approved
Betsy Williams
8/24/94*

Exemption for Justice Center Access System

August 24, 1994

page 2

FINDINGS:

1. This exemption will not reduce competition. All known vendors for this specialized system have already submitted proposals, and ranking was objective.
2. This exemption will save money. The selected vendor had the lowest-cost proposal. Further delay costs money in securing the Justice Center, and carries risks of security breaches.
3. This exemption is required for the public safety. Installation of a reliable system is paramount.

Please call me at x6246 or Cyrus Yamin, Project Manager, at x2256, if there are questions.

cc: F. Wayne George
Cyrus Yamin
Walter Heil
Jan Thompson



CITY OF
PORTLAND, OREGON
BUREAU OF POLICE

VERA KATZ, MAYOR
Charles A. Moose, Chief of Police
1111 S.W. 2nd Avenue
Portland, Oregon 97204

MEMORANDUM

August 18, 1994

TO: Wayne George
Facilities Management, Multnomah County

SUBJECT: Justice Center Card Key Security Access

As it stands currently the card key system is not secure in that anyone who has been previously issued a card key and still has that card may access the building. Obviously this is not acceptable.

I understand that the County is in the process of obtaining a vendor to provide this service. However, the process for selecting a vendor may take as much as five months. I also understand that you are trying to process this work order on an emergency LPO procedure. This memo is to support the emergency need of the effort and to urge you to move forward as quickly as possible to install a new system.

DAN NOELLE
Assistant Chief

CardKey.DN/ckf

cc: Chief Moose



Multnomah County Sheriff's Office

12240 N.E. GLISAN ST., PORTLAND, OREGON 97230

BOB SKIPPER
SHERIFF

(503) 255-3600

MEMORANDUM

TO: JIM EMERSON, Department of Environmental Services
Facilities & Property Management

cc: Sheriff Bob Skipper
John Schweitzer, Chief Deputy Corrections Branch

FROM: MAJOR THOMAS B. SLYTER, JR. *TBS*
Facilities Division Commander

DATE: AUGUST 15, 1994

SUBJECT: JUSTICE CENTER CARD KEY SYSTEM REPLACEMENT

It is my opinion that with the recent problems with the Justice Center Card Key access/control system that we are currently in a "CRITICAL SITUATION" concerning safety and security of the Justice Center. The current situation allows any card key whether active or inactive, (such as lost, stolen, etc.), to operate any of the Card Key System devices. This essentially means unauthorized access to critical areas of the Justice Center can be compromised at any time. Even with the computer repairs being made it is uncertain the system will continue functional operation as is indicative of the recent last six months performance, or more accurately non-performance.

As stated earlier, it is my opinion we are in a "CRITICAL SITUATION." With security potentially compromised and staff as well as the public's safety, I am requesting you proceed with obtaining access control as quickly as possible. Replacement of this system has been an ongoing discussion item for at least 1½ to 2 years that I'm aware of. I would request an emergency exemption to the bid process be done to have a system installed immediately to alleviate the situation as it exists. The current situation is completely unacceptable.



MULTNOMAH COUNTY OREGON

OFFICE OF THE BOARD CLERK
SUITE 1510, PORTLAND BUILDING
1120 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204

BOARD OF COUNTY COMMISSIONERS		
BEVERLY STEIN •	CHAIR •	248-3308
DAN SALTZMAN •	DISTRICT 1 •	248-5220
GARY HANSEN •	DISTRICT 2 •	248-5219
TANYA COLLIER •	DISTRICT 3 •	248-5217
SHARRON KELLEY •	DISTRICT 4 •	248-5213
CLERK'S OFFICE •	248-3277 •	248-5222

NOTICE OF HEARING

The Multnomah County Board of Commissioners, sitting as the Public Contract Review Board, will consider an application on Thursday, September 22, 1994, at 9:30 a.m. in Room 602 of the Multnomah County Courthouse, 1021 SW Fourth, Portland, Oregon, in the Matter of an Exemption from Formal Competitive Bid Process to Contract with Selectron, Inc. for Card Key Access System.

A copy of the application is attached.

For additional information, please contact Multnomah County Purchasing and Central Stores Director Lillie Walker at 248-5111.

**BOARD OF COUNTY COMMISSIONERS
MULTNOMAH COUNTY, OREGON
PUBLIC CONTRACT REVIEW BOARD**

*Deborah L. Bogstad
Office of the Board Clerk*

*enclosure
cc: Lillie Walker
Jim Emerson*

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON
ACTING AS THE PUBLIC CONTRACT REVIEW BOARD

In the Matter of an Exemption From the)
Formal Competitive Bid process to contract)
with Selectron, Inc. to replace the Card Key)
Access System at the Justice Center)

APPLICATION

Application to the Public Contract Review Board is hereby made on behalf of a request from the DES, Facilities and Property Management Division, pursuant to the Board's Administrative Rule AR 20.030 adopted under the provisions of ORS 279.015, for an order of exemption to contract with Selectron, Inc. to replace the Card Key Access System at the Multnomah County Justice Center. The estimated replacement cost is \$50,716.

This Exemption Request is due to the following facts:

1. Access to the Justice Center is controlled at many access points by electronic card readers. The system allows only qualified cardholder's access to the facility. The system records all entries of access time for each individual.
2. The original card key system has experienced major maintenance problems in the past two years. The Facilities Management Division budgeted for replacement of the system in FY 94-95 and specifications were prepared for bidding the system during the fiscal year.
3. Several weeks ago the existing system began a cycle of almost continuous failure that culminated in the loss of the main controller unit.
4. All known vendors of electron card access systems were contacted and given specifications for the card key access system. Three responses were received. The lowest bidder for the system will receive the contract award.
5. Because of security issues, it is in the best interest of the County to expedite the award of a contract for the system replacement.

The DE S Facilities and Property Management has funds budgeted for this project in the FY 1994-95 budget.

Dated this 12th day of September, 1994.


Lillie Walker, Director
Purchasing and Central Stores

Attachments



MULTNOMAH COUNTY OREGON

OFFICE OF THE BOARD CLERK
SUITE 1510, PORTLAND BUILDING
1120 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204

BOARD OF COUNTY COMMISSIONERS

BEVERLY STEIN •	CHAIR •	248-3308
DAN SALTZMAN •	DISTRICT 1 •	248-5220
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TANYA COLLIER •	DISTRICT 3 •	248-5217
SHARRON KELLEY •	DISTRICT 4 •	248-5213
CLERK'S OFFICE •	248-3277 •	248-5222

NOTICE OF APPROVAL

The Multnomah County Board of Commissioners, sitting as the Public Contract Review Board, considered an application on Thursday, September 22, 1994, at 9:30 a.m. in Room 602 of the Multnomah County Courthouse, 1021 SW Fourth, Portland, Oregon, and approved Order 94-183 in the Matter of an Exemption from Formal Competitive Bid Process to Contract with Selectron, Inc. for Card Key Access System.

A copy of the Order is attached.

**BOARD OF COUNTY COMMISSIONERS
MULTNOMAH COUNTY, OREGON
PUBLIC CONTRACT REVIEW BOARD**



**Deborah Bogstad
Office of the Board Clerk**

enclosure

*cc: Lillie Walker
Jim Emerson*

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON
ACTING AS THE PUBLIC CONTRACT REVIEW BOARD**

In the Matter of an Exemption from Formal)
Competitive Bid Process to Contract with)
Selectron, Inc. for Card Key Access System)

ORDER
94-183

The above entitled matter is before the Board of County Commissioners, acting in its capacity as the Multnomah County Public Contract Review Board, to review, pursuant to ORS 279.015 (2) and AR 20.030, a request from the DES, Facilities and Property Management Division, for a exemption to contract with Selectron, Inc. The total replacement cost is \$50,716.

It appearing to the Board that the request for exemption, as it appears in the application, is based upon the fact that the Facilities and Property Management Division budgeted the replacement cost of the card key access system in its 1994-95 budget due to problems experienced with the existing system over the past two years. Several weeks ago, the system began a cycle of almost continuous failure with culminated in the loss of the main controller unit. Because of security issues, the Portland Police Department and the Multnomah County Sheriff's office wanted the problem corrected as soon as possible. An informal competitive bid process was expedited with Selectron, Inc. being the lowest responsive, responsible bidder.

It appearing to the Board that this request for an exemption is in accord with the requirements of PCRB Rule AR 20.030 and ORS 279.015 (2) in that it does ^{not} substantially inhibit competition and is a cost effective alternative procurement process; it is therefore

ORDERED that the alternative procurement process be exempted from the formal competitive bid and the contract be awarded to Selectron, Inc.

Dated this 22nd day of September, 1994.



Laurence Krasel, County Counsel
for Multnomah County, Oregon
or Multnomah County, Oregon

By John L. DuBay
Assistant County Counsel
John L. DuBay

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON
ACTING AS THE PUBLIC CONTRACT
REVIEW BOARD:

By Beverly Stein
Beverly Stein, County Chair

MEETING DATE: SEP 22 1994

AGENDA NO: R-20

(Above Space for Board Clerk's Use ONLY)

AGENDA PLACEMENT FORM

SUBJECT: Notice of Intent: Child Abuse Multidisciplinary Intervention Plan

REGULAR MEETING: Date Requested: September 22, 1994

Amount of Time Needed: 15 minutes

10:15 am TC

DEPARTMENT: District Attorney's Office DIVISION:

CONTACT: Kelly Bacon

TELEPHONE #: x3105

BLDG/ROOM #: 101/600

PERSON(S) MAKING PRESENTATION: Michael D. Schrunk

ACTION REQUESTED:

INFORMATION ONLY ☐ POLICY DIRECTION ☒ APPROVAL ☒ OTHER ☐

SUMMARY (Statement of rationale for action requested, personnel and fiscal/budgetary impacts, if applicable):

The attached plan has been prepared in accordance with HB 5061 which requires each child abuse team to prepare a plan for child abuse intervention services. Intervention services are defined in the statute as those that take place between the initial referral for investigation up to the time of the case disposition. The funds are not eligible for prevention or long-term treatment services.

The plan outlines the County's proposed use of \$426,414 in grant funds earmarked for such services. \$137,600 will be used to support an assessment of shelter care services, investigative overtime, training, victim advocate services and an additional \$4,444 will be for reimbursement of indirect costs. Other funds are scheduled to be allocated to the Tri-County Assessment Center (\$157,500), City of Gresham (\$54,000), and CSD (\$73,000).

SIGNATURES REQUESTED:

ELECTED OFFICIAL: Michael Schrunk

OR

DEPARTMENT MANAGER: _____

ALL ACCOMPANYING DOCUMENTS MUST HAVE REQUIRED SIGNATURES

Any Questions: Call the Office of the Board Clerk 248-3277/248-5222

Office Memorandum MICHAEL D. SCHRUNK, District Attorney

TO : Board of County Commissioners

FROM : Michael D. Schrunk

DATE : September 12, 1994

REQUESTED PLACEMENT DATE: September 22, 1994

RE: NOI: Child Abuse Multidisciplinary Intervention Plan

I. Recommendation/Action Requested:

Approval to submit plan to state Childrens Services Division.

II. Background/Analysis:

This plan was prepared in accordance with HB 5061 which requires each child abuse multidisciplinary team to prepare a plan for child abuse intervention services. Intervention services are defined as those that take place between the initial referral for investigation up to the time of disposition of the case. They may not be used for prevention or long-term treatment.

The goals of the attached plan are:

1. Streamline and centralize the child abuse reporting and intervention process.
2. Maintain a Tri-County Child Abuse Assessment Center.
3. Expand the Law Enforcement Investigative Task Force to include all law enforcement agencies in Multnomah County.
4. Ensure the availability of temporary care for and assessment of all abused children needing the service during the course of the assessment/ investigation.
5. Integrate prosecution of child sex abuse cases between juvenile and adult court systems.

III. Financial Impact:

A total of \$426,414 is being requested. A subtotal of \$137,600 will support a victim advocate position, a training and resources fund, assessment of shelter care services, and an overtime fund. Indirect costs for this amount will be \$4,444. In addition, other funds to the Tri-County Assessment Center, \$157,500; CSD \$72,966; and \$53,904 to the Gresham Police Department will pass through the county.

IV. Legal Issues:

This plan was prepared by the MDT and is being forwarded to comply with ORS 418.790 through 418.792 and ORS 418.746 through 418.747.

V. Controversial Issues:

VI. Link to Current County Policies:

The Child Abuse Multidisciplinary Team is a multi-agency effort to improve the investigation and prosecution and service delivery in situations involving child abuse. Helping children and intervening at the earliest possible point in abusive situations is consistent with current county policy.

VII. Other Government Participation:

The Child Abuse MDT includes local hospitals, local schools, the Juvenile Court, Probation and Parole, the Multnomah County Health Department, Children Services Division, all local law enforcement agencies, and others involved in providing services to abused children.

Application
for
Funding
**Child Abuse Multidisciplinary
Intervention Account**

County Name:	Multnomah
Name of Legal Entity representing MDT:	Multnomah County District Attorney's Office
Contact Person:	Michael D. Schrunk
Telephone:	503/248-3143
Fax:	503/248-3643
Contact Address:	1021 SW Fourth Avenue
	Room 600
	Portland, OR 97204

Multidisciplinary Team Approval and Assurance

The following members of the Multidisciplinary Team approve of both (1) the attached county's child abuse multidisciplinary intervention plan for comprehensive services to victims of child abuse, and (2) the accompanying plans for expenditure of C.A.M.I. funds.

Profession	Organization	Name	*Signature
District Attorney	Multnomah County District Attorney	Michael D. Schrunk	Refer to Appendix A
Children's Services Division	Multnomah County CSD	Kay Toran	
Health Services	Multnomah County Health Department	Billi Odegard	
Courts (may include Juvenile Department)	Multnomah County Juvenile Court	Harold Ogburn	
School Official	Multnomah ESD	Dee Bauer	
Law Enforcement	Portland Police Bureau	Chief Charles A. Moose	
	Multnomah County Sheriff's Office	Sheriff Bob Skipper	
	Gresham Police Dept.	Chief Art Knori	
	Troutdale Police Dept.	Chief Mark Berrest	
	Fairview Police Dept.	Chief Gil Jackson	
	Portland Public School Police	Mac Lockett	
	Oregon State Police	John Downey, Jr.	
Medical	C.A.R.E.S. Emanuel Hospital	Jim May	
	Kaiser Permanente	Skip McGinty	
	Oregon Health Sciences University	Tim Goldfarb	

Probation & Parole	Multnomah County Dept. Community Corrections	Tamara Holden	
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** Individual signature pages are attached as Appendix A*

Assurance

The C.A.M.I. funds will not be used as replacement revenue in accordance with ORS 418.746.

Chair of Multidisciplinary Team Michael Schwartz 9-6-94
Signature Date

Application
for the
Child Abuse Multidisciplinary Intervention
Account

ELIGIBILITY

To assure eligibility, each county must verify the following: [ORS 418.746 (2)(3)]

I. The existence of a functioning multidisciplinary team, which is responding to allegations of child abuse (ORS 418.747):

A. Provide a list of membership which includes those specified in ORS 418.747 (law enforcement, child protective services, school official, health, courts - this may include juvenile court staff, and others).

Refer to Appendix B

B. Provide copies of the county's written interagency agreements and protocols signed by multidisciplinary team member agencies, specifying the roles of each agency.

Are you following the written agreements ? Y ☒ N ☐

Refer to Appendix C. For copies of MDT general agreements on protocols, hospital protocols and school protocols.

Are you following these protocols? Y ☒ N ☐

C. Verify that team members and investigators have received training in, at a minimum, risk assessment, dynamics of child abuse, legally sound and age appropriate interviewing and investigation techniques per ORS 418.747 (3).

Y ☒ N ☐ District Attorneys

Y ☒ N ☐ Law Enforcement personnel

Y ☒ N ☐ School officials

Y ☒ N ☐ Child Protective Services

Y ☒ N ☐ Health personnel

Y ☒ N ☐ Court personnel (including Juvenile Court Department staff)

Y ☒ N ☐ Others

Due to the numbers of individuals involved in interviewing and investigating child abuse referrals and because of new hires, staff transfers and reassignments within organizations an individual who has not completed all of the training may be involved in a child abuse investigation, but those individuals are supervised by trained personnel. As part of the C.A.M.I. application process, training records have been reviewed and anyone lacking in the appropriate training is being scheduled for it as soon as possible.

What percentage of investigations are conducted by trained agency personnel?

A concerted effort is made to have all of the investigations performed by trained agency personnel.

- D. Provide the multidisciplinary team's policies for an independent review of sensitive cases which have completed court proceedings (ORS 418.747 (7)).

Refer to Appendix C, Sensitive Cases, page 29. The MDT is in the process of developing a more detailed procedure for the independent review of sensitive cases.

- E. Provide copies of MDT agendas for June 1993 - June 1994 with identification of MDT members present, and verification, per ORS 418.747 (6) that the team assesses and reviews cases under investigation.

Refer to Appendix D for copies of MDT agendas. A description of the case review process is contained in the general protocols in Appendix C.

- II. The multidisciplinary team must have established a functioning local child fatality review process as per ORS 418.747, Sections (8), (9), (10), (11), (12) and (13). Verification is established by:

Refer to General Protocols in Appendix C. The description of the child fatality review committee is found in Appendix I of the General Protocols. This includes:

- 1. Membership list of child fatality review;*
- 2. Protocols for child fatality review;*

Multnomah County's Child Fatality Review Team has provided the information requested by the State Fatality Team on an ongoing basis.

MULTNOMAH COUNTY WORKSHEET I September 1994

Coordinated Child Abuse Multidisciplinary Intervention Plan Statement of Goals

LONG TERM GOALS:

Multnomah County anticipates achieving the following goals by 1999:

1. Streamline and centralize the child abuse reporting and intervention process.
2. Maintain a Tri-County Child Abuse Assessment Center.
3. Expand the Law Enforcement Investigative Task Force to include all law enforcement agencies in Multnomah County.
4. Ensure the availability of temporary care for and assessment of all abused children needing the service during the course of the assessment/investigation.
5. Integrate prosecution of child sex abuse cases between juvenile and adult court systems.

SHORT TERM GOALS:

Multnomah County anticipates achieving the following by 1997:

1. Combine the three existing child abuse assessment programs into the Tri-County Child Abuse Assessment Center by March 1995.
2. Improve direct victim intervention services for children by completing a series of special projects designed to eliminate trouble spots in the current intervention and investigative process.
3. Provide timely and appropriate social service response to children referred for allegations of child abuse by locating a CSD Protective Services worker with Portland School Police.
4. Provide additional law enforcement investigative services including coverage after hours and on weekends.
5. Purchase equipment, training, resource materials, and supplies to provide MDT members with specialized training and current technology for case management and to upgrade skill levels.
6. Assess Multnomah County shelter care needs for abused children and recommend options for improving shelter services.

These long- and short-term goals are consistent with the legislation authorizing MDTs and are directly related to furthering the overall MDT goals.

MULTNOMAH COUNTY WORKSHEET II September 1994*Plan for Year 1 January 1995 - December 1995*

- **ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

Ensure the same level of assessment services for all children requiring medical assessment and evaluation by combining the three existing assessment programs and establishing the Tri-County Child Abuse Assessment Center by March 1995.

- **THIS RELATES TO LONG/SHORT TERM GOAL #**

• Long-term goal # 2; Short-term goal # 1

- **DESIRED OUTCOME**

All children in Multnomah County will receive the same level of services for medical assessment and evaluation.

- **HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?**

1. The number of children referred for assessment.
2. The number of assessments completed annually. The current estimate is that on an annual basis 1,600 will be children will receive assessments.

- **PROVIDER OF SERVICE OR ACTIVITY**

The Tri-County Child Abuse Assessment Center; 2800 N. Vancouver, Suite 218; Portland, OR 97227

- **WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?**

The combined program will be fully implemented in March 1995.

- **TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM**

The Multnomah County portion of the tri-county center will be \$150,000 for the first year of operation. A full budget detail is attached. Additionally, \$7,500 is required for needed computer support for the project. Total budget is \$157,500.

FUNDING REQUESTED FROM MULTNOMAH, CLACKAMAS AND WASHINGTON COUNTIES' CAMI ACCOUNTS FOR THE THREE HOSPITAL PROJECT

The following funding requests were based upon the estimated numbers of children seen from each of the three counties in the past year. Neither Kaiser Permanente or O.H.S.U. has data available on the specific numbers of cases seen from an individual county but are committed to gathering data needed in the future, as part of the Three Hospital Project. It should be noted that, even if specific data was gathered by the county of referral, many of these cases are multi-jurisdictional with the family living in one county and the crime occurring in another. Often there are allegations that involve multiple perpetrators and multiple crimes, all in different counties or even outside the State of Oregon.

The number of "other" county children have been folded into the three county funding requests but it might be possible to establish a standard cost per child for assessment services which could be charged to each county CAMI fund account outside the Tri-county area. This amount should reflect costs beyond the reimbursement received from the families medical insurance coverage, if they have any. Several counties have already expressed an interest in utilizing the services of the newly developed center.

For a detailed proposed line item budget for the Three Hospital Project, please see the attached material titled Three Hospital Project Regional Child Abuse Assessment Center, budget estimate based on C.A.R.E.S. model for 1,600 cases per year.

As will be noted in the budgets, the cost per case has increased at each facility, in order to implement the model. This is primarily due to the goal of bringing all three centers to a common level of practice, with use of the colposcope, videotaped interviews and the teaming of the physician and interviewer completing the assessment. It also reflects the staffing needs to provide a timely assessment and report, as well as coverage for staff appearances in needed judicial settings. Every effort has been made, through months of clinical and administrative meetings, to keep the costs at the most reasonable level, while still maintaining the quality desired.

O.H.S.U.

Projected Regional Program	\$ 753.90 x 128 cases	\$ 96,499
Current cost per case	440.00 x 128 cases	<u>56,320</u>
Funding requested from CAMI		\$ 40,179

Request by County

Multnomah County representing 50% of the referrals	\$ 20,090
Clackamas County representing 25% of the referrals	\$ 10,045
Washington County representing 25% of the referrals	\$ 10,045

KAISER PERMANENTE

Projected Regional Program	\$ 753.90 x 512 cases	\$385,997
Current cost per case [estimated]	550.00 x 512 cases	<u>281,600</u>
Projected vs current funding		104,397
plus colposcope		<u>15,603</u>
Funding requested from CAMI		\$120,000

Request by County

Multnomah County representing 60% of the referrals	\$ 72,000
Clackamas County representing 20% of the referrals	\$ 24,000
Washington County representing 20% of the referrals	\$ 24,000

LEGACY EMANUEL CHILDREN'S HOSPITAL

Projected Regional Program	\$ 753.90 x 960 cases	\$ 723,744
Current cost per case	550.00 x 960 cases	<u>528,000</u>
Projected vs current funding		195,744
Less Legacy/Emanuel funding		<u>-100,000</u>
Funding requested from CAMI		\$ 95,744

Request by County

Multnomah County representing 60% of the referrals	\$ 57,446
Clackamas County representing 18% of the referrals	\$ 17,234
Washington County representing 22% of the referrals	\$ 21,064

TOTAL REQUESTED FROM THE THREE COUNTIES \$255,923*
*rounded to the closest dollar

TOTAL REQUESTED FROM MULTNOMAH COUNTY \$149,536

This request was prepared and reviewed by the Health subcommittee whose membership included Mary Steinberg, M.D., O.H.S.U., Mary Rix, R.N., Kaiser Permanente, Sgt. Bob Walliker, Det. Sergeant Portland Police Bureau, Pat Bowman, Children's Services Division Intake Supervisor, Peggy Huseby, CHN Multnomah County and Emmy Sloan, C.A.R.E.S. Program, committee chairperson.

DATE: 4/22/94

3 HOSPITAL PROJECT REGIONAL CHILD ABUSE ASSESSMENT CENTER
BUDGET ESTIMATE BASED ON CARES MODEL FOR 1600 CASES PER YEAR

EXPENDITURE CATEGORY		COST AT 1600 CASES/YEAR	COST PER PATIENT	COMMENTS
PERSONNEL/LABOR:	FTE			
Administrative Manager	1.00	45000		
Clinic Manager	1.00	45000		
MD/PNP(Medical Dir.)	4.38	340000		4 MD @ \$340,000, .40 PNP \$20,000
Social Worker (interviewers)	4.43	177000		
Intake Specialist	2.00	60000		
Clerical	4.00	100000		\$12/hr, \$25,000 each
Medical Assistant	1.00	23000		
Interviewer Supervisor	0.50	22000		
MH Therapist	1.00	Donated by Multnomah County		
Transcriptionist @ \$16./hr	1.78	44400		\$12/hr
TOTAL LABOR		856400	535.25	
BENEFITS:				
Staff vac. holiday, sick, med., dental		312586	195.37	Avg. of 3 hospitals; 36.5% of Labor
TOTAL LABOR & BENEFITS		1168986	730.62	
OTHER EXPENSE:				
Consulting		1173	0.73	
Other Medical Supply		619	0.39	
Office & Admin. Supplies		12965	8.10	
Other Non Med Supply		2144	1.34	
Repairs & Maintenance		94	0.06	
Contract Services (billing, legal, interp.)		13133	0.26	
Contract Maintenance		1437	0.90	
Other Purchased Services		952	0.60	
Travel; \$1500/staff x 15 FTE		22500	14.06	
Training & Education; \$750/clerk x 4 FTE		3000	1.88	
Catering & Food		101	0.06	
Audiovisual		17163	10.73	
Printing & Marketing		5000	3.13	

DATE: 4/22/94

3 HOSPITAL PROJECT REGIONAL CHILD ABUSE ASSESSMENT CENTER
BUDGET ESTIMATE BASED ON CARES MODEL FOR 1600 CASES PER YEAR

EXPENDITURE CATEGORY	COST AT 1600 CASES/YEAR	COST PER PATIENT	COMMENTS
Subscriptions & Journal	949	0.59	
Intercompany Expense	160	0.10	
Lease Costs (\$18 per 6000 sq. ft)	108000	67.50	
TOTAL OTHER EXPENSE	189390	110.43	
TOTAL LABOR AND OTHER EXPENSE	1358376	848.99	Total cost per patient
~~~~~	~~~~~	~~~~~	~~~~~
Contribution from regional members:			
Without Potential Grant Funding-			
Legacy Health System - 1/3	452792		
Kaiser Permanente - 1/3	452792		
OHSU - 1/3	452792		
<b>TOTAL CONTRIBUTION FROM MEMBERS</b>	<b>1358376</b>		
<b>** WITH POTENTIAL GRANT FUNDING-</b>	<b>-152133</b>	<b>CR</b>	
<b>NET TOTAL LABOR AND OTHER EXPENSE</b>	<b>1206243</b>	<b>-95.08</b>	Multnomah, Clackamas & Washington Counties
		<b>753.90</b>	Net Expense per Patient
Contribution from regional members:			
Legacy Health System	402081		
Kaiser Permanente	402081		
OHSU	402081		
<b>TOTAL CONTRIBUTION FROM MEMBERS</b>	<b>1206243</b>		
~~~~~	~~~~~	~~~~~	~~~~~

NOTES:

* Direct cost estimate is based on actual LEHHC CARES year-to-date expenses for the period ending 2/28/94 annualized and increased to 1600 caes/year volume.

* Labor & benefit costs for 3 hosptial program calculated based upon input and agreement form Clinical Team.

* Potential grant funding estimates based upon current CARES grant awards.

file:3HOSCARES

MULTNOMAH COUNTY WORKSHEET II September 1994

Plan for Year 1 January 1995 - December 1995

• **ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

Improve direct victim intervention services for children by hiring a victim advocate.

• **THIS RELATES TO LONG/SHORT TERM GOAL #**

Long-term goal # 1; Short-term goal # 2

• **DESIRED OUTCOME**

Program specifically designed to prepare children for testimony in court will be in place by 1996. Improvements in a docketing system for child abuse cases and elimination of other obstacles that interfere with prompt intervention and victim services for children will be completed.

• **HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?**

1. Number of child victims receiving intervention services.
2. Number of projects identified that streamline, centralize, and support MDT intervention activities.
3. Number of completed projects that result in efficiencies in service delivery to child victims.

• **PROVIDER OF SERVICE OR ACTIVITY**

Multnomah County District Attorney's Office Victim Advocate Program. Refer to attached job description. This position will be responsible for coordinating and facilitating completion of the identified projects. Staff from participating MDT agencies will also participate in the completion of these projects.

• **WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?**

Several projects have already been identified by the MDT. Initial steps to complete projects will take place beginning in January 1995.

• **TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM**

\$55,200

VICTIM ADVOCATE JOB DESCRIPTION

VICTIM ADVOCATE

(Nonexempt/Classified)

DEFINITION

To contact, aid, assist, and support felony crime victims; investigate and document victim losses; coordinate and assist in handling cases of restitution; present restitution information in court.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned professional and supervisory staff.

Exercises no supervision.

EXAMPLES OF DUTIES

Duties may include, but are not limited to, the following:

Work with the MDT, victims, deputy district attorney, defense attorney, counselor, courts, and other involved parties to establish programs and procedures that assist victims of crime.

Provide immediate crisis intervention and/or short term counseling and education to victims; provide emotional support and information on medical exam and during the investigation and prosecution process; explain procedures and requirements; consult with victim to determine the full extent of the crime and assesses victim's needs; refer victim to appropriate community services for assistance made necessary by the crime; provide on-call assistance to rape victims on a 24-hour rotating basis.

Serve as liaison for the victim in dealings with police officers, attorneys, physicians, family, community, and others; and is present in meetings, interviews, or examinations the victim may be required to attend; act as liaison between the D.A.'s Office and all other agencies.

Inform victims and/or families of case situation; monitor restitution paid by defendants; refer to probation officer if non-payment; review parole notices; notifies victims of impending hearings involving defendant.

In homicide cases, review police file and discuss case with deputy district attorney; call medical examiner and/or funeral home for names of family members or representative; contact family members to determine needs and answer questions.

Conduct investigations of cases where restitution is indicated; investigate victims' losses and document these losses via receipts, records, insurance payments, doctors' bill, etc., to determine actual amount of loss due to the crime; recommend restitution.

Assist in the design and delivery of workshops and training programs for police, prosecutors, and medical professionals and others dealing with the special problems encountered by victims and criminal justice practitioners.

Coordinate a volunteer victim advocacy team; recruit, screen, and train volunteers; monitor and evaluate the work of volunteers.

Perform related duties as assigned.

QUALIFICATIONS

Knowledge of:

Crisis intervention and reaction to trauma.

Police, circuit court, medical, parole and probation procedures, and lab techniques.

Victim's rights and applying to court process for compensation/restitution.

Appropriate community resources available.

Restitution statutes and case law of crime victim's compensation program.

Math and accounting skills

Ability to:

Prioritize work appropriately.

Assess, acquire, and document pertinent information for sentencing reports.

Use a computer.

Speak to large groups of people and conduct media presentations.

Relate effectively with people in crisis.

Testify in court.

Organize and conduct training sessions and workshops.

Empathize and establish rapport with victims, communicate court procedures, provide emotional support.

Write and speak concisely; compile and interpret statistical data; and maintain extensive records and files.

Experience and Training Guidelines:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Two years of responsible community service experience,

AND

Training:

Equivalent to an Associate degree from an accredited college with major course work in social work, psychology, sociology or a related field.

MULTNOMAH COUNTY WORKSHEET II September 1994

Plan for Year 1 January 1995 - December 1995

• **ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

To establish a pilot project aimed at improving assessment and intervention services for children who are referred to the Portland School Police by mandatory reporters in the schools. It is essential that the Portland School Police, who refer approximately 700 cases of abuse per year to Children's Services Division, have more rapid access to CSD background information on the referred children and that both Portland School Police and CSD identify and reduce barriers to the effective delivery of assessment and intervention services.

For this pilot project a Protective Services worker will be located at the Portland School Police offices and will work with School Police on prioritizing and assessing child abuse referrals. The pilot project will refine current protocols so that children receive timely and appropriate intervention services. The Protective Services worker position will be supervised by Childrens Services Division. Portland School Police will provide office space.

• **THIS RELATES TO LONG/SHORT TERM GOAL #**

Long-term goal # 1 and # 4; Short-term goal # 3

• **DESIRED OUTCOME**

This pilot project will identify barriers to effective intervention within school settings. By locating a Protective Services worker at the Portland School Police it is expected that information flow between the organizations will be enhanced which will result in improved services to children. By having immediate access to CSD case history information via a computer connection it is anticipated that there will be a reduction in the number of calls to the Child Abuse Hotline.

It is further anticipated that as a result of this pilot effort between the School Police and CSD the general protocols can be refined and other school districts could benefit from the "lessons learned" in the pilot project. This will also offer increased opportunities to provide in-service training to all mandatory reporters in the schools which should result in more accurate and timely reporting. Relations between social service agencies and school law enforcement officials should be enhanced by this pilot program.

• **HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?**

1. The number of assessments performed by the Protective Services worker on a monthly basis.
2. The number of calls diverted from the Child Abuse Hotline by direct requests to the Protective Services worker for CSD family history information.

3. The number of in-service training programs provided and the number of mandatory reporters participating in the training.
4. The number of barriers to effective and timely intervention identified and either eliminated or minimized by the pilot project.

- **PROVIDER OF SERVICE OR ACTIVITY**

The Protective Services worker will be hired by CSD. A preliminary job description for the position is attached as Appendix E. A committee composed of representatives of CSD, School Police, and the Schools will be established by the MDT to further define the duties of the CSD worker in relation to the pilot project.

- **WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?**

The Protective Services worker will be hired within 90 days of receipt of C.A.M.I. funds.

- **TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM**

Total cost for the pilot project will be \$73,466 which will include \$65,316 for the Protective Services worker, \$7,500 for the necessary computer equipment and modem and \$650 for a cellular phone.

MULTNOMAH COUNTY WORKSHEET II September 1994

*Plan for Year 1 January 1995 - December 1995***• ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

Establish capability for consistent law enforcement investigatory response to reports of child abuse. This will include providing an overtime fund so that specially trained child abuse investigators will be available on a timely basis to respond to child abuse cases.

• THIS RELATES TO LONG/SHORT TERM GOAL #

Long-term goal # 3; Short-term goal # 4

• DESIRED OUTCOME (BENEFITS)

Detectives specially trained in child abuse investigations are available to investigate allegations of child abuse during evenings and on weekends.

• HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?

1. Number of incidents referred.
2. Number of investigations performed.
3. Hours of overtime required.

• PROVIDER OF SERVICE OR ACTIVITY

All law enforcement personnel assigned to the Multijurisdictional Child Abuse Investigation Team.

• WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?

The overtime fund program would go into effect January 1995.

• TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM

\$30,000

MULTNOMAH COUNTY WORKSHEET II September 1994

*Plan for Year 1 January 1995 - December 1995***• ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

Establish capability for consistent law enforcement investigatory response to all reports of child abuse in Multnomah County by the addition of a Gresham police officer to the Multidisciplinary Child Abuse Team.

• THIS RELATES TO LONG/SHORT TERM GOAL #

Long-term goal # 3; Short-term goal # 4

• DESIRED OUTCOME

Gresham Police Department becomes a full participant through the assignment of a detective co-located with the Multidisciplinary Child Abuse Team.

• HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?

1. Gresham PD detective assigned to the Multidisciplinary Child Abuse Team.
2. Child abuse cases referred from Gresham/East County are reviewed and investigated in a timely manner.

• PROVIDER OF SERVICE OR ACTIVITY

Gresham Police Department. A job description for the position is attached.

• WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?

The expansion of the Multidisciplinary Child Abuse Investigative Team would go into effect January 1995.

• TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM

\$53,904

GRESHAM PD DETECTIVE JOB DESCRIPTION

JOB DESCRIPTION

CLASSIFICATION: POLICE OFFICER
JOB TITLE: POLICE INVESTIGATOR - POLICE OFFICER
DEPARTMENT: POLICE - INVESTIGATION SECTION

DUTIES AND RESPONSIBILITIES:

Maintains competency to perform the duties described in job description of Police Officer assigned to the Field Operations Section.

Conducts follow-up investigations of reported criminal incidents; gathers physical evidence; photographs crime scenes; interviews witnesses, victims, and suspects for additional information; develops leads for investigative follow-up.

During the course of investigations, recover stolen property and attempt to return to rightful owner.

Serves arrest warrants and enforces civil restraining orders; makes arrests or issues citations for violations of criminal and traffic laws; transports prisoners to the booking facility.

Gathers intelligence information concerning on-going criminal activity in the community; develop suspected criminals engaged in on-going criminal enterprises and investigate incidents to arrest criminal and resolve criminal activities.

Performs other investigations as required; personnel background, administrative reviews, internal investigations as needed.

Prepares reports and documents for departmental, court, state, and other use of investigations conducted in civil or criminal incidents, traffic enforcement, disturbances, and other incidents which require police response.

Attends informational meetings with outside agencies to exchange intelligence information concerning crimes occurring in our jurisdiction, criminals operating within our jurisdiction, and other information valuable in the apprehension of criminals.

Works as a member of surveillance teams on foot or in vehicles, observes, records, and reports movement of suspects and/or vehicles, sales of property, narcotics or drugs.

Upon completion of an investigation, gathers necessary reports, documents, evidence, and other material for presentation to the District Attorney's Office for the issuance of a criminal complaint.

Appears in civil and criminal court to testify as a witness.

May be assigned duties as a member of the Property Crimes Unit, Persons Crimes Unit, or Special Operations Unit.

Prepares and submits to supervisor a monthly report of investigations, arrests, recovered property, closed cases, and pending cases.

Assists the public by answering inquiries about laws, regulations, and ordinances; performs public service activities to aid and inform the public on aspects of law enforcement, crime prevention; talks with civic and homeowner groups concerning crime and burglary prevention; occasionally required to conduct tours of the police department and host interested citizens observing the investigation operation.

Receives specialized training involving preliminary processing of routine crime scenes including photography, lifting of latent fingerprints, collection, identification and preservation of physical evidence. Is expected to utilize training during investigation of cases.

Develops skills in interview techniques; acquires a versatile array of methods to elicit information from interviewed persons.

Acquires the knowledge of sources of information necessary in conducting investigations; sources of information include informants, officers, reports, outside agencies, public utilities, libraries, etc.

Maintains driving skills to allow investigator to respond safely to a call for service, conduct a mobile surveillance, and other opportunities to drive.

May be assigned duties involving the orientation of police recruits or probationary employees to the duties, activities, and procedures pertaining to the Investigation Section.

Serves as a member of boards and committees as assigned; assignment could include City Safety Committee, Department Firearms Review Board, Disciplinary Board, and Awards Review Board.

Serves as advisor or liaison officer for volunteer units within the police department such as Reserves and Explorer Scouts.

May be assigned duties as a member of the Special Emergency Response Team. Receives specialized training in tactical operations involving barricaded suspects, hostage negotiations, building entry and searches, and serving arrest and search warrants on dangerous suspects or under hazardous conditions. Receives specialized training in identification, handling, storage, and disposal of bomb devices, explosives, and chemicals.

All specific duties and responsibilities of this position may not be described.

DECISION MAKING RESPONSIBILITIES:

Makes independent decisions in arrests, use of force including deadly force, searches and seizures, and the extent of case investigation.

CONFIDENTIAL INFORMATION:

Frequently deals with confidential information; the release of the information would be significant.

Confidential information would include criminal suspects, police informants, youthful offenders and victims, internal affairs investigations, and planned special police operations.

CONTACT WITH OTHERS:

Frequent contact with co-workers giving and receiving information requiring tact, discretion, and coordination of work; frequent contact with the public giving and receiving information requiring tact and discretion.

Co-workers contacts; superior officers, supervisors, senior police officers, police officers, investigators, police technician, criminalist, police assistant II, office assistant II.

SUPERVISORY RESPONSIBILITY EXERCISED:

May occasionally be required to exercise supervisory duties involving tactical operations of a case investigation.

SUPERVISION RECEIVED:

Frequent supervision; work is routinely checked for errors by supervisor.

Complex or uncertain situations may be referred to a senior police investigator or Investigation Supervisor.

Immediate supervisor: Investigation Supervisor.

WORKING CONDITIONS:

Normal shift assignment is Monday through Friday between 8 a.m. and 4 p.m., however, may require varied work hours depending upon nature of case investigation; 30 minute paid lunch period subject to call; work days may include weekends and holidays; overtime may be required; work is generally indoors, however, extended periods of work may be performed outdoors in inclement weather. Often works under adverse conditions including incidents of deceased or seriously injured persons or victims of violent assaults who may be in a high emotional state. Is required to carry a pager and may be required to report for work on short notice. Often required to deal with hostile and direct personal or professional criticism. Often works in complex and dangerous situations.

EQUIPMENT OPERATED:

Automobiles
2 Way radios
Breath test equipment
Sound measuring devices
Distance measuring devices
Night vision device
Body wires
Photography equipment
Latent fingerprint equipment
Audio recording equipment
Telephone
Firearms

MULTNOMAH COUNTY WORKSHEET II September 1994

Plan for Year 1 January 1995 - December 1995

- **ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

Purchase training, equipment, videotapes, speakers, library materials and supplies to provide MDT members with specialized training not otherwise available, current technology for case management, and to upgrade skill levels.

- **THIS RELATES TO LONG/SHORT TERM GOAL #**

Long-term goals # 1; Short-term goal # 5

- **DESIRED OUTCOME**

The ultimate outcome expected from this program is the upgrading of skills of MDT members involved in assessment and intervention services. Though there have been additional training opportunities for some MDT members due to the large numbers of MDT agencies in Multnomah County there are other MDT members who have not had the opportunity to participate individually and/or in teams in advanced training programs. This program would allow the MDT to have the added benefit of sending teams to training programs when other funds are not available. This would also allow the MDT to bring in speakers, purchase video tapes and other library and reference materials pertinent to assessment and intervention for circulation among MDT members.

- **HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?**

1. Level of participation in team and individual trainings.
2. Number of sessions where MDT members who participated in the supplemental training report training highlights to MDT member agencies.
3. Team members trained in and effectively utilizing computer technology.
4. Speakers, video tapes, resource and reference materials available to MDT members.

- **PROVIDER OF SERVICE OR ACTIVITY**

Requests for specialized training and/or other resources will be reviewed by the MDT. The Chair of the MDT will authorize expenditures for training, resource materials, equipment or other utilization of the resource fund. The Multnomah County District Attorney's Office will disburse the funds. Examples of anticipated expenses are attached.

- **WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?**

The program fund will become available January 1995.

- **TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM**

\$28,400 is estimated the cost for this program. The budget detailing the possible expenditures is as follows:

BUDGET DETAIL

MDT TRAINING, RESOURCE MATERIALS, EQUIPMENT AND SUPPLIES

There are several annual training opportunities that the MDT is aware of but it is anticipated that there are additional training offerings that may be particularly suitable for participation by a team from MDT. By sending a team to the training there is the added benefit of the participants reinforcing each other following their return as well as the experience of working together as a team under neutral conditions. It is this added benefit in team development that enhances communication among the MDT member agencies and contributes to the elimination of barriers to more effective service delivery. This is at the heart of the premier long term goal of the MDT -- streamline and centralize the child abuse reporting and intervention process.

Examples of possible training activities include:

1. Annual ASPAC Conference: Attendance by four MDT members @ \$1,500 to \$1,800 per person for a total estimated cost of \$6,000 to \$7,200.
2. Annual Child Mistreatment Conference in San Diego, CA: Attendance by five MDT members @ 1,000 to \$1,200 per person for a total estimated cost of \$5,000 to \$6,000.

Estimated training expenses: \$11,000 to \$13,200.

Examples of other possible expenditures:

1. Books, videos and other reference materials: \$2,500.
2. Computer hardware and software: \$8,400.
3. Speakers, outside experts: \$4,300.

MULTNOMAH COUNTY WORKSHEET II September 1994

Plan for Year 1 January 1995 - December 1995

- **ACTIVITY, SERVICE, PROGRAM OR PURCHASE**

An assessment of Multnomah County shelter care needs for abused children and recommended options for improving shelter services.

- **THIS RELATES TO LONG/SHORT TERM GOAL #**

Long-term goal # 4; Short-term goal # 6

- **DESIRED OUTCOME**

An action plan for ensuring timely and stable shelter care for abused children in Multnomah County.

- **HOW WILL YOU MEASURE THE OUTCOME FOR THIS SPECIFIC SERVICE, PROGRAM OR PURCHASE?**

The plan is completed and adopted by appropriate MDT participants, county and state agencies and organizations.

- **PROVIDER OF SERVICE OR ACTIVITY**

Multnomah County District Attorney's Office via consultant agreement.

- **WHAT IS YOUR TIMELINE FOR IMPLEMENTATION OF THIS ACTIVITY, SERVICE, PROGRAM?**

First steps for assessment and plan development will take place in January 1995 with the hiring of a part time consultant/planner. It is anticipated that all planning tasks will be completed by September 1995 and that the Multnomah County plan for shelter care will be finalized by December 1995.

The initial activities involved will include, but not be limited to the following:

1. Identification and analysis of existing reports, studies, reviews and other documents related to assessing shelter care needs.
2. Identification of information gaps on the topic.
3. Review and assessment of other communities' shelter care services.

- **TOTAL ESTIMATED COST OF ACTIVITY AND AMOUNT OF C.A.M.I. FUNDS NEEDED FOR THIS ACTIVITY/SERVICE/PROGRAM**

\$24,000 which would cover costs for a part time consultant/planner at an estimated cost of \$15,000; approximately \$4,000 is budgeted for expenses related to the needs assessment such as a possible survey, focus groups, or other information gathering techniques; and costs for a team from MDT and Multnomah County to make site visits to model shelter care programs such as Orangewood in Orange County, CA at an estimated cost of up to \$4,000.

MULTNOMAH COUNTY BUDGET WORKSHEET III

SERVICE/ITEM TO BE PURCHASED	AMOUNT OF C.A.M.I. FUNDS TO BE USED FOR THIS SERVICE/ITEM	AMOUNT OF NON-C.A.M.I. FUNDS OR IN-KIND CONTRIBUTIONS*	SOURCE OF OTHER FUNDS OR CONTRIBUTIONS	PURPOSE OF SERVICE/ITEM
1. Tri-County Assessment Services	\$157,500	\$237,259		Uniform Medical Assessment Services for Abused Children
2. Victim Advocate	\$55,200	\$557,704		Improve victim intervention services for children
3. CSD worker	\$72,966	\$5,029,332		Improve referral/ service access
4. Overtime fund	\$30,000	\$939,200		Specially trained detectives avail- able for investigation after hours
5. Gresham Police Department Detective	\$53,904	\$53,904		Co-locate Gresham PD Detective with Multidisciplinary Child Abuse Investigative team
6. Training, Resource Materials, Supplies, Equipment	\$28,400	\$		Upgrade technological capabilities and skills of MDT participating agencies
7. Shelter care assessment	\$24,000	\$		Develop a plan to improve shelter care services in Multnomah County
8. Indirect cost @4.13%	\$4,444			

SUBTOTAL C.A.M.I. FUNDS	\$ 426,414
SUBTOTAL NON-C.A.M.I. OR IN-KIND *	\$8,225,853
TOTAL FROM ADDITIONAL PAGES	\$
TOTAL FOR 1994 COORDINATED PLAN	\$

* The description of in-kind contributions are estimated and those listed above are directly related to activities described in this proposal. However, there are other estimated contributions that should be considered. Within Multnomah County there are several agencies and organizations that have provided and will continue to provide a variety of intervention services. Their combined contributions are estimated to be in the millions of dollars. These include:

1. \$237,259 from Multnomah County to support C.A.R.E.S. assessment services.
2. \$5,029,332 from CSD - Based on estimated costs for 12 Hotline and 65 intervention staff @ \$65,316 per worker.
3. \$557,704 from the District Attorney - Based on estimated costs of 8 DDAs at an average cost of \$69,713 per deputy.
4. \$670,054 from School Personnel - Based on estimated costs of .25 FTE of the 77 positions involved in intervention in the schools. The average cost per position is $\$34,809 \times .25 = \$8,702 \times 77 = \$670,054$ @ \$56,860 per worker.
5. \$738,400 from Community Corrections Division - Based on estimated costs of 13 Parole and Probation Officers @ \$56,860 per worker.
6. \$993,104 from Law Enforcement Agencies - Based on estimated costs of the 16 detectives assigned to the Child Abuse Investigation Team @ \$58,700 per officer. In addition, Gresham Police Department has one detective assigned to child abuse investigations at an annual cost of \$53,904.

APPENDICES

A - Signature Pages

B - MDT Membership List

C - MDT General Protocols and Appendices

D - MDT Agendas, June 1993 - June 1994

E - Job Description for CSD Protective Services
Worker for Pilot Project with Schools


APPENDIX A

MULTIDISCIPLINARY TEAM APPROVAL AND ASSURANCE

Individual Signature Pages

Multidisciplinary Team Approval and Assurance


As a member of the Multnomah County Multidisciplinary Child Abuse Team I approve of both the attached child abuse intervention plan and the accompanying plans for expenditure of C.A.M.I. funds.



Michael D. Schrunk
Multnomah County District Attorney

Multidisciplinary Team Approval and Assurance

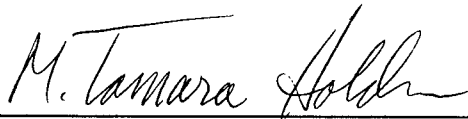
As a member of the Multnomah County Multidisciplinary Child Abuse Team I approve of both the attached child abuse intervention plan and the accompanying plans for expenditure of C.A.M.I. funds.



Chief Charles A. Moose
Portland Police Bureau

Multidisciplinary Team Approval and Assurance

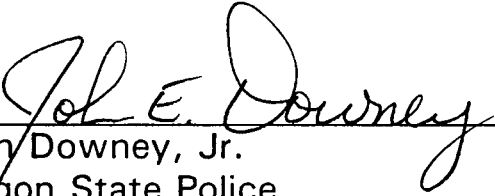
As a member of the Multnomah County Multidisciplinary Child Abuse Team I approve of both the attached child abuse intervention plan and the accompanying plans for expenditure of C.A.M.I. funds.

A handwritten signature in cursive script, reading "M. Tamara Holden", written over a horizontal line.

Tamara Holden
Multnomah County
Department of Community Corrections

Multidisciplinary Team Approval and Assurance

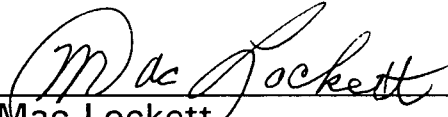
As a member of the Multnomah County Multidisciplinary Child Abuse Team I approve of both the attached child abuse intervention plan and the accompanying plans for expenditure of C.A.M.I. funds.



John Downey, Jr.
Oregon State Police

Multidisciplinary Team Approval and Assurance

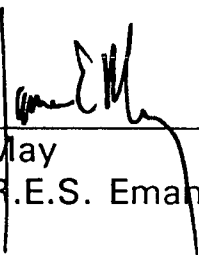
As a member of the Multnomah County Multidisciplinary Child Abuse Team I approve of both the attached child abuse intervention plan and the accompanying plans for expenditure of C.A.M.I. funds.



Mac Lockett
Portland Public School Police

Multidisciplinary Team Approval and Assurance

As a member of the Multnomah County Multidisciplinary Child Abuse Team I approve of both the attached child abuse intervention plan and the accompanying plans for expenditure of C.A.M.I. funds.



Jim May
C.A.R.E.S. Emanuel Hospital

APPENDIX B

MULTNOMAH COUNTY MDT MEMBERSHIP

MDT MEMBERSHIP LIST

<u>AGENCY</u>	<u>MEMBER</u>
District Attorney	Helen Smith Charlene Woods Suzanne Ritter
Law Enforcement	
PPB	John Holly Bob Walliker
MCSO	LeBerge
GPD	Randy Fabian
PPSP	Steve Hollingsworth
*Note: All law enforcement agencies, with the exception of Gresham PD are represented through the Investigative Unit managed by Holly, Walliker and LeBerge.	
CSD	Pat Bowman Richard Varvel
Multnomah County Health Div	Peggy Huesby Sue Winegar
Multnomah County Mental Health	Janice Gratton
Multnomah County Juvenile Justice Division	Dorothy Cole
Multnomah County Educational Service District	Barbara Neely
Emanuel Hospital - CARES program	Emmy Sloan Jan Bays
Kaiser Health Plan	Mary Rix
Oregon Health Sciences University	Adelaide Turner Mary Steinberg
Multnomah County Parole & Probation	James Parent
Childrens Program	Nancy Rotter sp??? (should be on sign in sheets)

APPENDIX C

MULTNOMAH COUNTY MULTIDISCIPLINARY CHILD ABUSE TEAM PROTOCOLS

August 1994

PURPOSE STATEMENT

The Multnomah County Child Abuse Team (CAT) has developed a protocol for the investigation and prosecution of child abuse cases.

Various community agencies share legal responsibility for child protection. The purpose of this protocol is to clarify each agency's duties and responsibilities, and to improve agency coordination. The goals are to lessen any negative impact of services to the child victim; to minimize the number of victim interviews; to prevent the abuse of other potential victims; to increase the effectiveness of prosecution of both criminal and dependency cases; and to provide information to the involved agencies in a coordinated and efficient manner. The best interest of the child is the Team's overriding concern.

COMPOSITION AND FUNCTIONS OF THE MULTNOMAH COUNTY CHILD ABUSE TEAM

1. The Child Abuse Team will consist of individuals representing the District Attorney's office, Children Services Division (CSD), Emanuel Hospital's Child Abuse Response and Evaluation Services (C.A.R.E.S.), Kaiser Permanente Hospital, Oregon Health Sciences University Hospital (OHSU), County Juvenile Department, County Health Department, County Mental Health Department, County Department of School Health Services, Oregon State Police (OSP), Portland Police Bureau (PPB), Gresham Police Department (GPD), Multnomah County Sheriff's Office (MCSO), Portland Public School Police (PPSP), Troutdale Police, Fairview Police, Multnomah County Adult Parole and Probation, and the Children's Program. Other individuals may participate on an invitation basis only.
2. The Child Abuse Team's responsibilities include:
 - a. Providing a forum for discussion and resolution of interagency issues, concerns and problems in the day-to-day management of child protection issues.
 - b. Providing a forum for brainstorming interagency issues, prioritizing identified issues, and developing action plans to resolve these issues.
 - c. Overseeing the implementation of the interagency child abuse protocol. This includes review and update of the protocol as needed.
 - d. Identifying needed legislation.
 - e. Identifying and pursuing resources.
 - f. Classifying, assessing and reviewing cases under investigation.

- g. Reviewing the progress of the working team.
 - h. Assisting in the development of education/training for Child Abuse Team agency members with an emphasis on consistency and quality.
 - i. Addressing other relevant matters relating to child abuse cases.
- 3. The District Attorney, as statutory chair, shall designate a member of his or her staff to chair the Child Abuse Team.
 - 4. The Child Abuse Team Chair shall have the responsibility and authority for setting up subcommittees to review and make recommendations to the Team.
 - 5. The Child Abuse Team has a specialized investigative police unit comprised of police detectives from the Portland Police Bureau, the Oregon State Police and the Multnomah County Sheriff's Office. These CAT detectives are co-housed with the Child Abuse Hotline, the CSD out-of-home care investigators and the Child Abuse Team Deputy District Attorneys. These detectives share responsibility for investigating child abuse crimes committed in Multnomah County, excluding those crimes committed in Gresham, Oregon. It is anticipated that in January 1995, a Gresham Police Department Detective will be joining this specialized police unit. At that time, the CAT Detective Unit will investigate child abuse occurring in Gresham as well as elsewhere in Multnomah County.

TABLE OF CONTENTS

MULTNOMAH COUNTY CHILD ABUSE PROTOCOL

	Page
I. DEFINITIONS.....	5
A. Child	
B. Child Abuse	
C. Serious Physical Injury	
D. Immediate Sexual Assault	
II. INITIAL REPORT.....	6
A. Reporting Parties	
B. Who to Call	
III. REPORT RECEIVED.....	6
A. CSD Screening.....	6
B. Police Investigation.....	8
1. Policy.....	8
2. Initial Response by Uniform Police.....	8
3. Portland Public School Police Response.....	11
4. Photography.....	12
5. Protective Custody.....	14
6. Medical Examinations.....	15
7. Courtesy Reports.....	16
8. Immediate Detective Response.....	17
9. Prosecutor Assistance.....	22
10. Investigative Guidelines	23
C. School Environment Investigations.....	23
IV. MULTI-VICTIM/MULTI-SUSPECT CASES.....	24
V. SENSITIVE CASES.....	29
VI. CRIMINAL PROSECUTION.....	30
VII. CHILD AS VICTIM: DEPENDENCY CASES.....	31
VIII. CHILD AS OFFENDER: DELINQUENCY AND/OR DEPENDENCY CASES.....	35
IX. CSD CASE MANAGEMENT.....	37
X. CHILD FATALITY REVIEWS.....	38

APPENDICES

- A: ORS 419B.005 through 419B.045, Reporting of Child Abuse
- B: Child Protective Service Screening Guidelines
- C: Gresham Police Department Procedures
- D: Hospital Protocols
- E: Investigative Checklist
- F: Multnomah County School District Protocols
- G: CSD Guidelines for Juvenile Sexual Offender Assessment and Treatment
- H: Red Flag Protocol
- I: Fatality Review Protocol

MULTNOMAH COUNTY CHILD ABUSE PROTOCOL

I. DEFINITIONS

A. Child

1. Child means an unmarried person under 18 years of age. An emancipated juvenile will not be considered a child.

B. Child Abuse

1. Any physical injury to a child which has been caused by other than accidental means including any injury which appears to be at variance with the explanation given of the injury.
2. Any mental injury to a child, which shall include only observable and substantial impairment of the child's mental or psychological ability to function caused by cruelty to the child, with due regard to the culture of the child.
3. Sexual abuse, including but not limited to rape, sodomy, sexual abuse, incest, and sexual penetration.
4. Sexual exploitation of a child.
5. Negligent treatment or maltreatment of a child, including but not limited to failure to provide adequate food, clothing, shelter or medical care.
6. Threatened harm to a child, which means subjecting a child to a substantial risk of harm to the child's health or welfare.

C. Serious Physical Injury

1. A physical injury which creates a substantial risk of death or which causes serious and protracted disfigurement, impairment of health or protracted loss of the functions of any bodily organ.
2. Injuries such as serious head trauma, broken bones; serious burns.
3. Injuries, after initial medical treatment, that require a child to be admitted to a hospital.

D. Immediate Sexual Assault

1. A case of rape, sodomy, or sexual penetration within the past 72 hours.

II. INITIAL REPORT

- A. Reporting party makes allegation. (See Appendix A: ORS 419B.005 - 419B.015 which defines child abuse and outlines the reporting process). Reporting parties include:
1. Voluntary reporters (e.g., victim, family, friends, neighbors, others);
 2. Mandatory reporters (e.g., school employees, medical providers, law enforcement, lawyers, clergy, psychologists, licensed day care providers, others) (See Appendix A: ORS 419B.010: Duty of Officials to Report).
- B. Allegation is reported by calling the Children's Services Division Child Abuse Hotline at 238-7555, 731-3100 or by contacting the appropriate police agency.

III. REPORT RECEIVED

A. CSD Screening

1. CSD shall receive and screen all reports of suspected child abuse; (See Appendix B: Screening guidelines).
 - a. See Appendix B for information to be obtained from the reporting person.
 - b. A CSD screener will assess risk to the child, determine need for CSD intervention and advise law enforcement (See Appendix B for risk assessment guidelines; See Appendix A: ORS 419B.015 - 419B.020: Cross-reporting duty and duty of agency receiving report). Cases shall be prioritized as follows:
 1. **High Priority** -- report alleges lack of familial protection and actual physical injury, sexual assault with offender access, continued violent disturbance, suicide threats, failure to thrive, young child alone, offender living in the home;
 2. **Medium Priority** -- refusal of child to return home, child has ability to protect self, there is a need for the child

protection agencies to coordinate the time or place of child victim interview;

3. **Low Priority** -- child is safe, substantial delay between occurrence of incident and report.
- c. A Child Protective Services worker will immediately respond to high priority cases. Generally, CSD and law enforcement jointly respond to high priority cases;
 - d. In medium and low priority cases, the case will be assigned to CPS staff for investigation. Law enforcement may jointly respond;
 - e. If the child is not at risk or insufficient evidence of abuse exists:
 1. Appropriate referral to CSD voluntary programs or to community resources outside CSD is made;
 2. Case closed at the Child Abuse Hotline.
 - f. Cross Reporting to Law Enforcement Agencies (LEA).
 1. High and Medium Priority (serious risk) Cases Open to CSD.

Child Abuse Hotline Screeners will immediately communicate to the appropriate LEA jurisdiction all reports of serious risk. These reports will be coordinated with CSD field staff for joint response if possible.

2. Low priority Cases Open to CSD.

Hotline screeners will coordinate with the CSD worker and record on the 307 the plan for notifying the appropriate LEA.

3. Cases closed at the Child Abuse Hotline.

A Gresham Police Department representative will review and sign all reports of alleged child abuse and neglect that fall within the Gresham Police Department's jurisdiction. The Child Abuse Team's on site Sergeants will

review and sign the remaining reports that involve either physical or sexual abuse where a police report has not been filed. The reviewing officers will ensure that police reports are written when appropriate.

B. Police Investigation (Pending assignment of a Gresham Police Department Detective to the CAT Detective Unit in January 1995, please see Appendix C for GPD investigative procedures).

1. Policy

The responsibilities of each participating law enforcement agency in child abuse situations are to:

- a. Protect the child.
- b. Conduct a thorough criminal investigation.
- c. Coordinate response with other disciplines and law enforcement agencies. A joint response involving Child Protective Services shall be attempted in all appropriate cases. (See Appendix A: ORS 419B.015 - 419B.020).
- d. Provide investigative follow-up when appropriate.

2. Initial Response by Uniform Police

- a. Calls to the Child Abuse Hotline (731-3100; 238-7555) will be assessed and referred as follows:
 1. The Hotline will assess the situation and attempt to coordinate a joint response (M-F, 0800-1600 hours) between law enforcement and Children's Protective Services.
 2. The Hotline, a 24 hour service, will contact the Bureau of Emergency Communications (BOEC). A uniform officer will then be dispatched to perform the initial investigation.
 3. Monday through Friday, 0730-1730 hours, the Child Abuse Team Detectives will be available to assist in the coordination of immediate response calls.
- b. The responsibility for the initial criminal investigation is with the responding officer **even when a CPS worker is present.**

1. The uniform officer will conduct the preliminary investigation and complete an Incident (Crime) or Special Report.
2. **Under no circumstances, even if the allegation appears unfounded, will a coded disposition be given in lieu of writing a report.**
3. In cases of **serious physical injury** or sexual abuse to a child, the responding officer will contact a member of the Child Abuse Team. If unavailable, the officer will contact a Detective Division Supervisor immediately.
4. Depending upon the circumstances of the abuse, a Detective/Investigator may respond to the scene. (Refer Section B(8) infra - Immediate Detective Response).
5. If the initial response and investigation is conducted on public school premises, the school administrator shall first be notified, (unless the administrator is the subject of the investigation). At the **officer's discretion**, the administrator or a designated school staff member may be present to help facilitate the initial investigation. (Refer ORS 419B.045)
6. If probable cause exists to arrest an adult caretaker for physically abusing a child, the adult shall be arrested for Criminal Mistreatment I regardless of the fact that the child is old enough to sign a complaint. An Assault IV, Domestic Violence charge may also be appropriate, but it should not replace the Criminal Mistreatment I charge when there is probable cause to believe that a Criminal Mistreatment I has occurred. See ORS 163.205.
7. When an adult caretaker is arrested for child abuse, the arresting officer will call the Child Abuse Hotline. This must occur even if the child is not taken into protective custody.
8. When a uniform officer makes a custody arrest of a suspect for Criminal Mistreatment I, the following procedure must be followed:
 - a. Transport suspect to Detective Division for a custody assist by a Detective.

- b. If no Detective is available:
 - 1. Advise suspect of Miranda rights on standard form.
 - 2. Interview suspect after waiver of rights.
 - 3. Document suspect's statements in report.
 - 4. Place two copies of incident, custody and special reports along with suspect's PPDS/LEDS printout into a case envelope.
 - 5. If polaroid photos are taken, place one set in the envelope for DDA review.
 - 6. Indicate on that envelope on upper left margin the word "CUSTODY".
 - 7. Place the envelope in the Child Abuse Team mailbox in the Detective Division.
 - c. If the custody assist is performed by a Detective, they will ensure all the above steps are taken.
- c. Variations on the above initial response may be as follows:
- 1. For Portland Public Schools Police, see Section B (3), infra.
 - 2. A uniform officer who comes into contact with a child abuse victim on school property, will ensure an initial investigation and report is completed by the appropriate police agency.
 - 3. The Portland Police Bureau may occasionally generate an Incident Report from various sources, to include Kaiser Permanente Child Abuse Assessment reports.
 - 4. Incidents of child sexual abuse reported to the Child Abuse Hotline more than 72 hours after occurrence, may be taken by the Telephone Report Unit (TRU) in the following manner:
 - a. The Hotline CPS worker will complete a CSD 307 form.
 - b. The form, along with a confidential cover sheet which lists the contact worker's name and phone number, will then be sent by FAX to the PPB Telephone Report Unit.

- c. An officer of the Telephone Report Unit will then generate the appropriate report, Incident or Special, based on the information in the CSD 307 form.
- d. The TRU Officer will then obtain a confidential report number and upon completion of the report, FAX a copy back to the Hotline.
- e. The TRU Officer will forward the original police report to Records.
- f. The TRU Officer will forward a copy of the police report and a copy of the 307 report to the Child Abuse Team.
- g. The CSD 307 form will not be forwarded to the Records Division.
- h. This procedure will only apply if the child is currently safe and away from the perpetrator.

3. Portland Public School Police Response

- a. The Portland Public School Police will respond as follows:
 - 1. Upon being notified by a school administrator or the Child Abuse Hotline, a School Police Officer will respond to the school and conduct the initial interview with the child.
 - 2. The officer at his/her discretion may have Children's Protective Service (CPS) workers involved in the initial investigation. If this is to be done, CPS will be immediately notified of the location and the officer's time of arrival.
 - 3. CSD may notify the School Police office on calls that come directly into the hotline and involve School District #1 students. Upon request, a School Police Officer will then respond to the student's school and conduct an initial investigation. A CPS worker may be present during the interview if pre-arranged. If School Police are unable to respond, the School Police Office will notify BOEC. A PPB Officer will then respond.

4. An immediate or joint response will be attempted on cases where a high probability of protective custody exists.
5. On all physical abuse cases, School Police will write an Incident or Special Report, which will be forwarded via PPB records to the Child Abuse Team for review or follow-up investigation.
6. On all sex abuse cases, School Police will conduct a short interview to determine if a crime has been committed and will complete a Special Report.
7. If a child is taken into custody, the School Police Officer will telephone the Child Abuse Team Sergeants to determine if the child will be transported to the team office or to shelter care.
8. In all custody cases, CPS must be notified immediately if the child is taken into custody. If CPS workers are present, they may take the child to a shelter care home from the school.
9. In a custody case the School Police Officer will write a custody report and insure a copy is FAXED to the Juvenile Court Intake Office and Child Abuse Team Office as soon as possible.
10. School Police will be responsible for follow-up investigation of child abuse cases when the crime occurred on school property.

4. Photography

- a. Except in exceptional circumstances, the Multnomah County District Attorney's Office **requires photographic evidence** of physical injuries or neglect to pursue a child abuse prosecution.
- b. **All injuries**, no matter how minor, will be documented in the police report. Description of the injuries shall include: listing the injuries by location on the child's body; describing each injury by size, shape and color and identifying the object that caused the injury if known.

- c. Photographs must be obtained of all visible injuries that are distinct enough to appear on film.
 - 1. Photographs, Polaroid and/or 35mm can be obtained:
 - a. By the responding officer.
 - b. By Detectives or the investigator.
 - c. By taking the child to the PPB Identification Division.
 - d. By requesting that a Criminalist from the participating agency or PPB Identification Division respond to the scene.
 - 2. If criminal prosecution is likely, 35mm photos are preferred, in addition to Polaroid photos. A scale reference should be used in the photograph to assist in judging the size and scope of the injuries.
 - 3. If the child is taken into protective custody, Polaroid photos of the injuries may be taken for use at the preliminary hearing at Juvenile Court. Such photos must be delivered to Juvenile Court Intake as soon as possible.
 - 4. Photos taken by Portland Public School Police. One set of photos will be delivered to the Child Abuse Hotline. The second set will be maintained in the School Police File.
- d. Child abuse is not just things done to children, but also includes the omission of parental or caretaker responsibilities. Parents or caretakers are required to provide the necessities of life and protection from harm. Photographic documentation of unhealthy environments or unsafe conditions is important for criminal prosecution and juvenile court purposes. Specific investigative techniques include:
 - 1. Photographing empty cupboards, messy sinks, refrigerators, clogged sinks and toilets, feces, beds, drugs and drug paraphernalia, weapons, broken windows and other unsafe conditions.

2. Photographing the child and the parent in the environment. If the parent has track marks, photographing the track marks.
3. Photographing age dates on food containers or other items to show how long the condition has existed.

5. **Protective Custody**

A. A child **shall** be taken into protective custody when:

1. The child has been the victim of sexual molestation by a family member, and that family member is still in the home, likely to return to the home or the other members of the family are not supportive of the victim.
2. The child is in imminent danger if not taken into protective custody.
3. There is a threat of harm that the abuse will continue if the child is not removed from the home.
4. There are no other alternative resources (such as a relative) to care for the child.

B. A child **may** be taken into protective custody when:

1. A child under ten years of age is left without supervision (ORS 163.545).
2. Where the child's conditions or surroundings reasonably appear to jeopardize the child's welfare (ORS 419.569B).

C. Child Abuse Hotline assistance in Protective Custody decision.

NOTE: The Child Abuse Hotline, phone number 238-7555 or 731-3100, can assist the officer in deciding whether removal is appropriate and what placement options are available. A joint determination as to whether protective custody is necessary is the best method to protect the interests of the child.

D. If a child is taken into protective custody, the officer shall make reasonable efforts to notify the

parents **immediately**, regardless of the time of day. Notification may be in person, by telephone, or in writing.

E. Notification will include the following:

1. The child has been taken into custody.
2. The reasons why the child was taken into custody, **general** information about the child's placement i.e. placed in a hospital, shelter home, JDH, etc. and that a juvenile court hearing will occur the next court day.
3. Under **no** circumstances will the officer tell a parent the location of a foster/shelter care home, nor will it be listed in the officer's report.
4. The telephone number of the Child Abuse Hotline will be supplied to the parent of the child.

F. CSD will be notified when a child is taken into protective custody. CSD will provide the Officer/Detective the location of a shelter home for placement of the child.

G. Whenever a child is taken from a custodial parent because of an officer's intervention, i.e., shelter care, medical hold or placed with a relative or friend, a custody report must be written and the Child Abuse Hotline must be notified.

H. A Custody Report will be completed and will be either delivered or FAXED to Juvenile Court Intake, **as soon as possible.**

6. **Medical Examinations**

- A. An officer may transport a child to a medical facility for a medical evaluation of physical or sexual abuse.
- B. If the child's parent or guardian refuses to allow medical treatment for the child, the hospital must obtain a court order by contacting the Juvenile Court, which will in turn contact a judge.
- C. When an officer has reasonable cause to believe a child is a victim of sexual abuse as defined in ORS 418.740 (1) (c) and the physical evidence of the

abuse is likely to disappear, the officer shall proceed with the investigation of any sex crime and seek a physical examination for the collection and preservation of evidence.

1. A minor child 12 years of age or older, may refuse to consent to such an examination.
 2. A child 14 years of age or younger will be transported to Emanuel Hospital for an immediate sexual assault examination if the assault occurred within the last 72 hours.
 3. If the sexual assault to the child is over 72 hours old, the child may be referred to the Child Abuse Resource and Evaluation Services (C.A.R.E.S.) Program at Emanuel Hospital, the Kaiser Permanente Clinic or the Oregon Health Sciences University Hospital for a future examination.
 4. If the child is age 15 through 18 years of age and the sexual assault is within 72 hours, the officer will transport the child to the Oregon Health Sciences University Hospital for a sexual assault examination.
- D. An officer taking a child to a hospital for serious physical injury or a sexual assault examination will immediately notify the Child Abuse Team Sergeants or On-Call Detective/Investigator for their respective agency.
- E. Please see Appendix D for Emanuel Hospital, Kaiser Permanente Hospital and Oregon Health Sciences University Protocols.

7. Courtesy Reports

- A. Responding officers will complete a courtesy report for outside agencies under the following guidelines:
1. When a child abuse victim is within the responding officer's jurisdiction, the location of occurrence is outside the responding officer's jurisdiction, and the outside agency is notified and cannot send a Detective/Investigator to respond; or
 2. When an outside agency requests a courtesy report to be written.

- B. Among those agencies participating in the Multnomah County Child Abuse Team, the initial responder where the child is currently located will be the agency responsible for taking a report.

8. Immediate Detective Response

A. Definitions:

1. Immediate Sexual Assault:

- a. A case of rape, sodomy, or sexual penetration within the past 72 hours.

2. Serious Physical Injury:

- a. A physical injury which creates a substantial risk of death or which causes serious and protracted disfigurement, impairment of health or protracted loss of the functions of any bodily organ.
- b. Injuries such as serious head trauma, broken bones; serious burns.
- c. Injuries, after initial medical treatment, that require a child to be admitted to a hospital.

B. Investigative Responsibilities:

1. The responsibility for follow-up investigations will be divided between the Child Abuse Team and Sex Crimes Investigators from each participating agency. The following definitions apply to case assignments:

- a. Family: Father, stepfather, mother, stepmother, brother, sister, cousin, uncle, aunt, live-in boyfriend or girlfriend, ex-live-in, separated or divorced parent, foster parent and legal guardian.
- b. Non-family: Any person not listed in "family", including: neighbors, friends, teachers, other temporary custodians and strangers.

2. Child Abuse Team responsibilities:

- a. All child physical abuse.

- b. Child rape, sodomy, sex abuse, where suspect is in a family role or is an adult babysitter or adult child care provider.
 - c. Incest cases.
 - d. All child neglect.
 - e. All child abandonment.
 - f. Child pornography where suspect is in a family role.
 - g. Pedophile investigations where suspect is in a family role.
3. Special Assault Detail (Sex Crimes Detail) responsibilities:
- a. Rape, sodomy, sexual abuse to a child where suspect is non-family, or a juvenile babysitter.
 - b. Rape, sodomy, sexual abuse to adult victims.
 - c. Adults molested as children, i.e., rape, sodomy, sexual abuse where victim, now 18 or older, was previously molested as a child.
 - d. Child pornography where suspect is in a non-family role.
 - e. Pedophile investigations where suspect is in a non-family role.
 - f. All expose cases.

C. Response:

- 1. Immediate sexual assault cases.
 - a. If the victim is a child 14 years or under, uniform personnel will transport the child to Emanuel Hospital Emergency Room.
 - 1. Uniform personnel will contact the Detective Division.

2. A Detective will respond to the hospital at the request of a uniform officer or supervisor, and conduct a thorough investigation.
 3. The Detective will insure a Rape Victim Advocate has been summoned by BOEC.
 4. The medical examination and rape kit will be performed at the emergency room.
 5. The Detective will evaluate whether the child needs to be interviewed.
 - a. If the child is under 11 years of age, a CARES video may be more appropriate.
 - b. The Detective may be able to complete an Incident/Crime Report from their interview of the witness to whom the child first disclosed the abuse.
 - c. If the child is 11 years or older, the Detective should interview the child at the hospital in the presence of the RVA.
 6. The Detective will issue a receipt and obtain the rape kit which will be transported to the Property Room or Crime Laboratory as needed.
 7. CARES will evaluate scheduling a video interview of children up to age 11. (An older child may be an exception depending on the child's mental ability.)
 8. The Detective may call the on-call Deputy District Attorney for advice and questions concerning evidence gathering such as search warrants, etc.
2. Serious physical injury.
- a. In cases of serious physical injury where

the child is admitted to a hospital, the responding uniform officer will contact the Detective Division and request response by a CAT or an on-call Detective.

- b. The Detective will respond to the hospital where the child is admitted.
- c. The Detective will determine if the child's injuries are such that death is imminent. If so, the on-call Homicide Detective Sergeant will be contacted.
- d. The Detective will determine protective custody needs of the child and, if appropriate, notify CPS. Arrangements will be made with the hospital for a "medical hold" and a Custody Report will be completed and FAXED to Juvenile Court.
- e. The Detective will insure that child victim's injuries are documented by photographs.
- f. Both 35mm color and Polaroid color photos are preferred.
- g. The Detective will communicate with the child's physician or appropriate medical personnel to determine the medical evidence indicating abuse and document this in the report.
- h. The Detective will interview any witnesses/suspects focusing on the alleged perpetrator(s).
- i. The Detective will complete an Incident Report documenting the initial information concerning the case.

3. "Up" Detective Duties Child Abuse Team

The Sergeant(s) of the Detective Unit of the Child Abuse Team will schedule one "on call" or "Up" Detective of the team per day shift (M-F, 0800 to 1530 hours). "Up" Detective

responsibilities include:

- a. Being "On-Call" all day, which means:
 1. Have beeper on.
 2. Carry the cell phone.
 3. Drive the "up" car only.
- b. Responding to emergency call-out, defined as:
 1. A child hospitalized due to suspected physical abuse or with serious burn, broken bone, head injury.
 2. Child sexual assault within 72 hours.
 3. When the CAT Sergeant determines that either a child is in jeopardy of harm or evidence is in danger of being lost or destroyed and a Detective, rather than uniform response, is deemed necessary.
 4. When the CAT Sergeant, after reviewing the cases scheduled that day for preliminary hearings in juvenile court, determines that immediate Detective response is important to preserve evidence, interview a suspect or protect a child. The CAT Sergeant will coordinate with Troutdale and Fairview Police Departments when the preliminary hearing case involves a crime in their jurisdiction.
 5. Custody assists.
- c. "Up status" is defined as being **available**. Detectives will **not** schedule interviews, arrests, search warrants, etc. for the "up" day. Child Abuse Team coverage hours for "Up" status are from 0800 to 1530 hours.
- d. If the "Up" Detective is on an assignment and a second emergency response or custody assist exists, the CAT Sergeant will pass the assignment on to the Detective due to be the "Up" Detective on the following day.

After hours Detective response is the responsibility of each participating agency from their own on-call or on-duty Detectives.

4. Outside Cases: Crimes occurred outside the Child Abuse Team's law enforcement jurisdiction, but victim is located within CAT's jurisdiction.

a. Uniform officers will make the initial response. If it involves a serious physical injury, a child admitted to the hospital or an immediate sexual assault, the Child Abuse Team Sergeant will be contacted. After hours, the on-call Detective Sergeant for the responding officer will be contacted.

1. A Detective Sergeant will contact the law enforcement agency in whose jurisdiction the crime was committed.

2. The outside agency may request a Detective to respond.

D. Follow-Up Responsibility:

1. CAT Detectives will be assigned to a case if they are responding while on "on-call" status.

2. If the case requires an on-call Detective to respond rather than a member of the CAT, that Detective will perform all investigative duties up to and including the arrest of the suspect, if this can be accomplished within their normal duty hours or soon thereafter in a rapidly progressing investigation.

3. All additional follow-up of cases will be the responsibility of CAT Detectives.

9. Prosecutor Assistance

In addition to the regular on-call Deputy District Attorney, the District Attorney's Office has established a 24-hour on-call system in Unit D, the MDT Unit, and the Juvenile Unit to provide immediate response on child victim cases. This will ensure that a Deputy District Attorney with experience in child abuse cases will be available for consultation and assistance when necessary. The District Attorney on-call list has all necessary phone and pager numbers. All law enforcement agencies

have this list.

10. Investigative Guidelines

Checklists can be valuable tools in carrying out the investigation of child abuse cases. A single checklist cannot adequately address the unique facts and circumstances of each child abuse case, but it can provide guidance to those conducting investigations and evaluating allegations. See Appendix E for a sample Investigative Checklist. The checklist is included to stimulate thought, not to establish investigative mandates.

All agencies involved in the investigation of child abuse agree to train their personnel and to use trained personnel for all investigations as required by ORS 418.747

C. School Environment Investigations (See Appendix A: ORS 419B.045: Investigation Conducted on Public School Premises).

1. Any school employee who has reasonable cause to believe that a child has been abused must either make a report or cause a report to be made to the Child Abuse Hotline or appropriate law enforcement agency. (See Appendix A: ORS 419B.010: Duties of Mandatory Reporters);
2. Each school district is expected to develop policies and procedures consistent with the law for the reporting of child abuse and subsequent investigation on school premises. (See Appendix F: Multnomah County School District Protocols).
3. When reporting suspected child abuse:
 - a. CSD or the appropriate police agency will be called;
 - b. The reporter will not contact the child's parents or guardian at this time;
 - c. Required disclosure of information related to child abuse supersedes confidentiality of student records;
 - d. An investigation on school premises shall be under the direction and authority of the investigating agency.
 - e. The investigator will notify the school

administrator that a child abuse investigation is to take place on school grounds unless the school administrator is a subject of the investigation;

- f. The investigator shall decide who may be present in the child interview. Sensitivity to the school administrator's wishes to participate in the interview or have a staff member present should be considered if necessary to facilitate the investigation;
- g. A school administrator or staff member is not authorized to reveal anything that transpires during an investigation in which school personnel participate, nor shall the information become part of the child's school records.

IV. MULTI-VICTIM/MULTI-SUSPECT CASES

1. Introduction

- a. Mutli-victim and multi-suspect cases present unique challenges for all agencies. They present unique issues including confusion about who is in charge of the investigation, contamination of evidence and the potential overwhelming magnitude of the investigation. Many of these cases become even more difficult if the allegations involve very young children.
- b. Of utmost concern is that the confidentiality of the investigation must not be compromised. Also, the rights of victims and the rights of alleged suspects must be preserved while conducting the investigation in an expedient manner.
- c. These guidelines recommend a team approach to minimize the risk of contamination of evidence, provide for more comprehensive and humane interviews of victims, and assure that the overall investigation is effectively and efficiently carried out on behalf of the children and families involved.
- d. These protocols are designed for investigating allegations of child abuse in settings such as pre-schools and other out-of-home care environments.

2. Definitions

- a. Multiple victim cases are those types of child abuse cases that arise in a setting where several

children are at risk of being victimized by one or more of the offenders.

- b. Multiple suspect cases are those types of child abuse cases that arise where more than one suspect has been named by children as having participated in or been aware of the abuse against one or more child.
- c. Investigative team is comprised of either the Child Abuse Team Detectives or the Gresham Police Department, if the crime occurred within the Gresham Police Department's jurisdiction. The size of the investigative team can vary depending on the scope and size of the investigation.
- d. Inter-agency investigative team is an association of the appropriate law enforcement agency, Children's Services Division, and the District Attorney's Office. It may include medical practitioners and the Victim's Assistance Program of the District Attorney's Office.

3. Duties and Responsibilities

- a. The purpose of this section is to clarify each agency's duties and responsibilities to improve agency coordination and to reduce duplication of efforts. The goal of this protocol is to lessen trauma to child victims, minimize the number of interviewers and interviews, prevent the abuse of other potential victims, increase the effectiveness of prosecution, and to provide information to the involved agencies in a coordinated and efficient manner. The MDT will coordinate all agencies involved in the investigation.

1. Law Enforcement

The designated law enforcement entity will be in charge of the investigation.

2. District Attorney

The District Attorney's Office is the agency responsible for the prosecution of substantiated allegations of child abuse. The District Attorney's Office may also provide assistance to the investigative team throughout the tenure of the investigation by giving legal advice, helping to draft search warrants, observing interviews of potential witnesses and any other assistance deemed

appropriate.

3. Children's Services Division (CSD)

CSD will take the necessary measures to ensure the safety of children who may require protective custody and to make placement recommendations, if appropriate. CSD should make sure that all parents of children identified as victims are apprised of therapy options and other available assistance. If the daycare home is not registered by CSD, the investigating law enforcement agency is responsible for initiating the request that CSD be involved in identifying and/or working with the parents of other potential victims.

CSD is also responsible for taking appropriate administrative action involving any CSD licensed, certified or registered facility which could include revocation or suspension of the license.

4. Victim's Assistance Program

The Victim's Assistance Program will work with the inter-agency investigative team. They will assist the family with processing applications for the Crime Victims Compensation Fund and work with the victim and family throughout the investigation and subsequent court process.

5. Parental Liaison Person

If a Parental Liaison Person is appropriate, the team will determine from which agency that person should be selected. The liaison person will perform an informing, supportive function for the parent. Within the bounds established by the investigators, parents have a need and right to know the general status of the investigation. The role of the Parental Liaison Person is to allay the parents' anxieties and enhance the chance of conviction by keeping parents informed of the stage and progress of the case and the danger of contamination of the case if information about the children's disclosures is shared with other parents.

6. Medical Practitioner

The duties and responsibilities of the medical practitioner(s) is to conduct the medical examinations and, wherever possible, conduct the

primary interviews of the victims or suspected victims. Preference will be given to mutually agreed qualified examiners as determined by the inter-agency team.

4. Investigative Guidelines

- a. The primary objective of the investigation is the protection of the child(ren).

1. Timeliness and Planning

A team will be formed and strategies developed as soon as possible upon learning that there are allegations of child abuse involving the potential for multiple victims/multiple suspects. If there is any doubt regarding the appropriateness of investigating the case as a multi-victim/multiple-suspect case, the Child Abuse Team (CAT) Deputy District Attorneys shall be consulted.

When the investigation of an abuse allegation results in a clear disclosure by one child and the Detective and CSD worker feel there is a potential for other victims who should be interviewed, a request will be made of the Child Abuse Team (CAT) Deputy District Attorneys to have the District Attorney's Office assign a DDA to the case. The investigating officer, the CSD worker, and the DDA will then meet to plan the on-going investigation of the case. Issues discussed in that meeting should include (but not be limited to) the following:

- a. How to proceed to discover if there are more victims. If that means conducting a parent meeting, what format the parent meeting should take.
 - b. How to give the parents of potential victims enough information to decrease their anxiety and help them understand what they should or should not say to their children in order to prevent contamination of the legal case.
 - c. How to assist the parents to understand their own emotions and minimize rumors which may damage the case. Consideration should be given to assigning someone to tact as a liaison between the investigative team and/or involved

agencies and the parents of the victims.

- d. Decide on an effective method of screening potential victims to prevent unnecessary interviews.

2. Coordination of the Investigation

The most important aspect of a major investigation is to determine who is in charge of the investigation. That responsibility cannot be delegated. In a criminal investigation, the agency in charge will be the law enforcement agency responsible for investigating the alleged crime.

3. Communication with Parents

If the alleged crimes have occurred outside the home, the investigative team must address the concerns of the parents of the alleged victim. A parental liaison person should be selected to meet, as needed, with the parents to keep them informed.

4. Communication with Children

Only investigators who have experience and training in child abuse and child interviews should be assigned the task of interviewing children. A therapeutic evaluation should not replace an investigative interview.

To minimize any contamination of information so that disclosures come from children in a spontaneous manner, an appropriate number of interviewers should be assigned. This procedure should minimize contamination of evidence.

Each law enforcement agency should establish a list of trained experienced investigators who can be called upon to assist in a major case investigation.

5. Communication with Medical Evaluators

When possible, children in any major case where there are more than three victims, should not be examined by the same medical evaluator.

6. Communication with the Media

The inter-agency team will designate one person to coordinate communication with the media.

V. SENSITIVE CASES

Sensitive cases may include, but are not limited to, cases in which the circumstance surrounding the child abuse involve such special interest as to demand a more unified approach to the investigation. Examples of sensitive cases and how they should be handled include the following:

A. Crimes in State Institutions by Institution Employees

1. Report of abuse by a patient/inmate will be investigated promptly.
2. The victim will be protected from the suspect during the pendency of the investigation. This may require:
 - a. Reassignment of suspect to other duties;
 - b. Placing the suspect on leave; and/or
 - c. Relocating the victim to a safe area.
3. The criminal investigation will remain separate from internal personnel investigations.
4. Each institution will designate an appropriate contact person for the investigator to deal with and all communication dealing with the investigation will be through that person.
5. The investigator will maintain contact with designated institution's contact person on the status of the investigation.

B. Police Employees, CSD Employees, District Attorney Employees, and Volunteers Associated with those Agencies

1. Upon disclosure, suspect's agency administrator will be notified of the allegations unless the agency administrator is a subject of the investigation.
2. All attempts will be made to avoid having the suspect investigated by persons having personal or professional relationships which may result in conflict.
3. At appropriate time, the District Attorney's Office will consider requesting a special prosecutor be appointed to review the investigation and conduct

the prosecution.

VI. CRIMINAL PROSECUTION

A. Initiation of Legal Proceedings

Except for the grand jury, the decision to initiate or pursue criminal charges lies solely within the discretion of the prosecutor. The District Attorney's charging decision shall be made whenever possible within 30 days of receiving investigative reports. The District Attorney's office will tickle received investigative reports for a report from the assigned deputy district attorney 30 days after receipt.

B. Prosecution Declined

1. The District Attorney will provide to the appropriate police agency a written memorandum stating the reasons for declination. If the case has been declined because follow-up investigation has been requested, the District Attorney's office will tickle the case for a response from the investigating agency.
2. The District Attorney shall re-review a declined case upon its resubmission by team investigators because of the existence of new information.
3. The District Attorney has the responsibility to notify the victim. Concerned adults may also be notified at the discretion of the District Attorney regarding the decision and reason not to prosecute. A Victim Advocate will be available to assist in the process as needed.

C. Prosecution Accepted

1. Determination of the appropriate charges to present to the grand jury is the discretionary responsibility of the District Attorney.
2. The District Attorney may consider the following, non-exhaustive list of factors in determining what charges to present:
 - a. Nature of the conduct;
 - b. Child's ability to testify;
 - c. Admissible statements of child to other persons;
 - d. Suspect's statements;

- e. Physical corroboration;
 - f. Witness corroboration;
 - g. Availability of expert testimony;
 - h. Absence of any legal impediments, e.g., statute of limitations or venue problems.
 - i. Completeness of the investigation.
 - j. See Office Policy Manual Sections 3.10, Screening of Criminal Cases; and 3.20, The Charging Decision, for other general guidelines.
3. The District Attorney's decision to present charges is independent of whether the suspect has been arrested or upon what charges the arrest was based.
 4. A Victim Advocate will be assigned to the case.

D. Integrated Prosecution

When an adult caretaker commits the crimes of Child Abandonment, Criminal Mistreatment I or a felony assault against a child, the case will be assigned to the Child Abuse Team Deputy District Attorneys. The CAT Unit DDAs will handle the dependency case at juvenile court and will prosecute the corresponding criminal case in adult court. In cases where the criminal investigation is not complete by the first dependency pretrial conference, the CAT DDAs will retain responsibility for adjudicating the dependency petition regardless of whether prosecution on the criminal case is later declined.

VII. CHILD AS VICTIM: DEPENDENCY CASES

Separate and distinct from juvenile offender prosecution there exist procedures which focus on the protection of child abuse victims. Known as juvenile dependency cases, these procedures are intended to address the needs of the child with minimal intrusion into the family.

A. CSD Screening

1. After a report of a child abuse allegation to law enforcement or Children's Services Division, CSD screens the report to determine the need for intervention;
2. The CSD screeners assess the information for risk to the child (See CSD Screening procedures Section

III A. infra).

B. CSD Investigation/Assessment of Risk

1. Upon assignment of an abuse case to a Child Protective Services worker, the allegation will be investigated for validity. The focus of the investigation is an assessment of the risk to the child, not a criminal investigation. The criminal investigation is the responsibility of the law enforcement agency. The coordination of these two investigative responsibilities is in the best interests of the child.
2. Components of the CSD investigation include:
 - a. Research of CSD records for prior allegations or referrals;
 - b. Criminal records checks of individuals directly involved in the CPS allegation;
 - c. Initial victim interview;
 - d. Interviews with collateral contacts (e.g., including, but not limited to school personnel, neighbors, friends, family, medical personnel, probation officers);
 - e. Interview of the alleged abuser in coordination and cooperation with law enforcement;
 - f. Medical evaluation and specialized interviewing of the child victim (e.g., CARES, OHSU, Kaiser). CPS worker should consider utilizing the medical assessment center interview as a primary resource to avoid multiple interviews'
 - g. Coordination with law enforcement, juvenile department and District Attorney's office in establishing the need for legal intervention;
3. An assessment of risk is determined on the basis of information obtained in the investigation.

C. Voluntary Family Services

1. If the CPS worker determines that the child appears not to be at risk of abuse, voluntary services and referral to community outreach services will be

offered. In such cases, no legal basis for CSD intervention exists;

2. Voluntary Service options:

- a. Referral to community outreach programs;
 - b. Offering of CSD voluntary services focused on the rehabilitation of the dysfunctional family and the protection of the child;
 - c. Temporary placement of the child outside the home upon the request and consent of a parent.
3. When the child is at risk and the family is unable or unwilling to voluntarily protect the child, CSD will seek juvenile court intervention.

D. CSD and the Juvenile Court

1. To initiate formal proceedings a petition must be filed with the juvenile court. This decision to file is normally a joint decision of CSD, the Juvenile Department and the District Attorney's Office;
2. In determining whether to file a petition, the agencies will review the entire case history, including police reports, medical records and CSD records, when available.

E. Preliminary Hearing

1. If a petition is filed a preliminary hearing before the juvenile court may take place. Such a hearing must take place if the child is to remain in protective custody. A preliminary hearing is the first appearance before the juvenile court and is designed to resolve such matters as assessing the present risk to the child and determining the child's placement status in a manner least intrusive to the family and consistent with the safety needs of the child. The parties are apprised of the allegation and counsel may be appointed.
2. After the filing of the petition, CSD will continue it's investigation and assessment of the case. The filing of a petition does not necessarily mean that a formal adjudication will take place. CSD will continue its effort to resolve the case informally, However, if informal efforts fail, a formal

adjudicative hearing must follow.

F. Juvenile Court Responsibilities

1. The Juvenile Justice Division Intake Unit provides the following services:
 - a. Crisis intervention, consultation, and telephone referral services regarding abuse and/or neglect situations;
 - b. Acts on requests by CSD, the District Attorney's Office, and/or the public to file dependency petitions, obtain temporary custody of children and set preliminary hearings;
 - c. Acts on requests by CSD for protective custody warrants;
 - d. Dockets preliminary hearings upon notification by CSD that a protective custody has taken place;
 - e. Acts on requests from hospitals for temporary custody when treatment of a child cannot be authorized or a parent is attempting or threatening to remove a child from the hospital against medical advice;
 - f. Acts on requests for court orders allowing a physical examination for the purpose of preserving evidence when a child is alleged to have been sexually abused.
2. The Juvenile Court Dependency Counselors provide the following services:
 - a. Review protective custody reports and file a petition on behalf of the child if necessary;
 - b. Schedule the Child Planning Conference, Pretrial Conference, and Judicial Settlement Conference. Prepare summons for interested parties. Prepare copies of relevant discovery for distribution at the Preliminary Hearing;
 - c. Attend the Preliminary Hearing as schedules permit. Provide assistance in completing the Affidavit of Indigence;
 - d. Attend the Child Planning Conference. Other

conference participants include a Child Abuse Team Deputy District Attorney and the CSD caseworker. The conference goal is to review the information and witnesses necessary to prove the petition, to decide whether to adjudicate or to dismiss the petition, to make any necessary amendments to the petition, and to develop a plan for the child and family. Information is also shared about putative fathers, the Indian Child Welfare Act's applicability to the case, and the status of any corresponding criminal case.

- e. Distribute CSD Court Reports to the contract law firms, request transport orders for non-represented parents, and attempt service on any new party identified at the child planning conference.
- f. Attend the Pretrial Conference and make recommendations. Provide copies of amended petitions.
- g. Attend the Judicial Settlement Conference and make recommendations. Prepare the social file and an issue sheet for the Court. Mail orders to parties.
- h. Other duties as requested by the Court.

VIII. CHILD AS OFFENDER: DELINQUENCY AND/OR DEPENDENCY CASES

- A. In cases where a juvenile has abused another juvenile, the procedure is as follows:
 - 1. Upon receipt of police reports, the juvenile court will forward investigations concerning felonies to the District Attorney's Office.
 - 2. The District Attorney's Office will confirm that all the police reports have been received. If an assigned Detective is still investigating the case, the District Attorney's office will retain the initial police reports pending receipt of the Detective's reports. Upon receipt of all the investigative reports, the case will be assigned to a Deputy District Attorney for review. The Deputy District Attorney's charging decision shall be made whenever possible within 10 days of receiving investigative reports.
 - 3. In cases alleging sex crimes where the juvenile

offender is under 12-years of age, a juvenile court counselor meets with designated Deputy District

Attorneys to determine the appropriate course of action.

a. Options available include:

1. making a referral to CSD for voluntary services;
2. filing a dependency petition; or
3. filing a delinquency petition.

b. The following non-exhaustive list of factors will be considered when determining which course of action to pursue:

1. the maturity and intellect of the perpetrator;
2. the age difference between the perpetrator and the victim, particularly when the difference is three or more years;
3. the use of force or coercion;
4. the number of offenses and duration of perpetrator's behavior towards this victim and other victims;
5. the spectrum of injury to the victim; ranging from violation of trust and other such emotional trauma to actual physical harm;
6. vulnerabilities of the victim known to the perpetrator;
7. continued access to victim(s) by perpetrator;
8. responsiveness of perpetrator's family in acknowledging the seriousness of the behavior and the need for intervention;
9. any other mitigating or aggravating factors.

- B. Juveniles in the care, custody and control of CSD, who have been adjudicated for sex offenses, are eligible for sex offender assessment and treatment. Please see Appendix G for CSD guidelines in determining the appropriate type of treatment for juvenile sexual offenders.

IX. CSD CASE MANAGEMENT

1. The focus of CSD supervision is to ensure protection of the child by reducing risk of harm, improving family functioning and assisting the family in complying with court orders;
 - a. High risk cases will be identified and reviewed following established protocols. (See Appendix H: Red Flag Protocol).
2. Agency and Community Family Support Services include:
 - a. Parenting classes;
 - b. Family counseling;
 - c. Group and individual counseling;
 - d. Drug treatment referral;
 - e. Anger management treatment referral;
 - f. Homemaker services;
 - g. Housekeeper services;
 - h. Limited financial assistance;
 - i. Respite day care;
 - j. Referrals to outside support agencies;
 - k. Residential day treatment.
3. Out-of-home placement may be required in cases where the safety of the child cannot be assured in the caretaker's home environment and it is in the best interests of the child. Out-of-home service options include:
 - a. Placement with relatives;
 - b. Foster care placement;
 - c. Group home placement;
 - d. Residential treatment facility placement.
4. All cases where children are removed from the home require six-month reviews by the Citizen Review Board. CSD will continue its efforts to reintegrate the child and family.
5. In extreme cases where the child's protection and best interests cannot be served by reintegration into the family, state agencies will develop a permanent plan for the child which may result in

termination of parental rights and adoption.

X. CHILD FATALITIES

Fatality investigations and reviews will follow the protocol included as Appendix I.

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX A

ORS 419B.005 through 419B.045
Reporting Child Abuse

REPORTING OF CHILD ABUSE

419B.005 Definitions for ORS 419B.005 to 419B.045. As used in ORS 418.747, 418.748, 418.749 and 419B.005 to 419B.045, unless the context requires otherwise:

(1) "Abuse" means:

(a) Any assault, as defined in ORS chapter 163, of a child and any physical injury to a child which has been caused by other than accidental means, including any injury which appears to be at variance with the explanation given of the injury.

(b) Any mental injury to a child, which shall include only observable and substantial impairment of the child's mental or psychological ability to function caused by cruelty to the child, with due regard to the culture of the child.

(c) Rape of a child, which includes but is not limited to rape, sodomy, unlawful sexual penetration and incest, as those acts are defined in ORS chapter 163.

(d) Sexual abuse, as defined in ORS chapter 163.

(e) Sexual exploitation, including but not limited to:

(A) Contributing to the sexual delinquency of a minor, as defined in ORS chapter 163, and any other conduct which allows, employs, authorizes, permits, induces or encourages a child to engage in the performing for people to observe or the photographing, filming, tape recording or other exhibition which, in whole or in part, depicts sexual conduct or contact, as defined in ORS 167.002 or described in ORS 163.665 and 163.670, sexual abuse involving a child or rape of a child, but not including any conduct which is part of any investigation conducted pursuant to ORS 419B.020 or which is designed to serve educational or other legitimate purposes; and

(B) Allowing, permitting, encouraging or hiring a child to engage in prostitution, as defined in ORS chapter 167.

(f) Negligent treatment or maltreatment of a child, including but not limited to the failure to provide adequate food, clothing, shelter or medical care. However, any child who is under care or treatment solely by spiritual means pursuant to the religious beliefs or practices of the child or the child's parent or guardian shall not, for this reason alone, be considered a neglected or maltreated child under this section.

(g) Threatened harm to a child, which means subjecting a child to a substantial risk of harm to the child's health or welfare.

(2) "Child" means an unmarried person who is under 18 years of age.

(3) "Public or private official" means:

(a) Physician, including any intern or resident.

(b) Dentist.

(c) School employee.

(d) Licensed practical nurse or registered nurse.

(e) Employee of the Department of Human Resources, a county health department, a community mental health and developmental disabilities program, a county juvenile department, a licensed child-caring agency or an alcohol and drug treatment program.

(f) Peace officer.

(g) Psychologist.

(h) Clergyman.

(i) Licensed clinical social worker.

(j) Optometrist.

(k) Chiropractor.

(L) Certified provider of day care or foster care, or an employee thereof.

(m) Attorney.

(n) Naturopathic physician.

(o) Licensed professional counselor.

(p) Licensed marriage and family therapist.

(q) Firefighter or emergency medical technician.

(4) "Law enforcement agency" means:

(a) Any city or municipal police department.

(b) Any county sheriff's office.

(c) The Oregon State Police.

(d) A county juvenile department. [1993 c.546 §12; 1993 c.622 §1a]

419B.007 Policy. The Legislative Assembly finds that for the purpose of facilitating the use of protective social services to prevent further abuse, safeguard and enhance the welfare of abused children, and preserve family life when consistent with the protection of the child by stabilizing the family and improving parental capacity, it is necessary and in the public interest to require mandatory reports and investigations of abuse of children and to encourage voluntary reports. [1993 c.546 §13]

419B.010 Duty of officials to report child abuse; exceptions; penalty. (1) Any public or private official having reasonable cause to believe that any child with whom the official comes in contact has suffered abuse or that any person with whom the official comes in contact has abused a child shall immediately report or cause a report to be made in the manner required in ORS 419B.015. Nothing contained in ORS 40.225

to 40.295 shall affect the duty to report imposed by this section, except that a psychiatrist, psychologist, clergyman or attorney shall not be required to report such information communicated by a person if the communication is privileged under ORS 40.225 to 40.295.

(2) A person who violates subsection (1) of this section commits a violation punishable by a fine not exceeding \$1,000. Prosecution under this subsection shall be commenced at any time within 18 months after commission of the offense. [1993 c.546 §14]

419B.015 Report form and content; notice to law enforcement agencies and local Children's Services Division office.

A person making a report of child abuse, whether voluntarily or pursuant to ORS 419B.010, shall make an oral report by telephone or otherwise to the local office of the Children's Services Division, to the division's designee or to a law enforcement agency within the county where the person making the report is located at the time of the contact. Such reports shall contain, if known, the names and addresses of the child and the parents of the child or other persons responsible for care of the child, the child's age, the nature and extent of the abuse, including any evidence of previous abuse, the explanation given for the abuse and any other information which the person making the report believes might be helpful in establishing the cause of the abuse and the identity of the perpetrator. When a report is received by the Children's Services Division, the division shall immediately notify a law enforcement agency within the county where the report was made. When a report is received by a designee of the Children's Services Division, the designee shall notify, according to the contract, either the Children's Services Division or a law enforcement agency within the county where the report was made. When a report is received by a law enforcement agency, the agency shall immediately notify the local Children's Services Division within the county where the report was made. [1993 c.546 §15; 1993 c.734 §1a]

419B.020 Duty of division or law enforcement agency receiving report; investigation; notice to parents; physical examination; child's consent. (1) Upon receipt of an oral report of child abuse, the Children's Services Division or the law enforcement agency shall immediately cause an investigation to be made to determine the nature and cause of the abuse of the child.

(2) If the law enforcement agency conducting the investigation finds reasonable cause to believe that abuse has occurred, the law enforcement agency shall notify by oral report followed by written report the local

office of the Children's Services Division. The Children's Services Division shall provide protective social services of its own or of other available social agencies if necessary to prevent further abuses to the child or to safeguard the child's welfare.

(3) If a child is taken into protective custody by the Children's Services Division, the division shall promptly make reasonable efforts to ascertain the name and address of the child's parents or guardian.

(4)(a) If a child is taken into protective custody by the division or a law enforcement official, the division or law enforcement official shall, if possible, make reasonable efforts to advise the parents or guardian immediately, regardless of the time of day, that the child has been taken into custody, the reasons why the child has been taken into custody and general information about the child's placement, and the telephone number of the division office and any after-hours telephone numbers.

(b) Notice may be given by any means reasonably certain of notifying the parents or guardian, including but not limited to written, telephonic or in-person oral notification. If the initial notification is not in writing, the information required by paragraph (a) of this subsection also shall be provided to the parents or guardian in writing as soon as possible.

(c) The division also shall make a reasonable effort to notify the noncustodial parent of the information required by paragraph (a) of this subsection in a timely manner.

(d) If a child is taken into custody while under the care and supervision of a person or organization other than the parent, the division, if possible, shall immediately notify the person or organization that the child has been taken into protective custody.

(5) If a law enforcement officer or the Children's Services Division, when taking a child into protective custody, has reasonable cause to believe that the child has been affected by sexual abuse and rape of a child as defined in ORS 419B.005 (1)(c) and that physical evidence of the abuse exists and is likely to disappear, the court may authorize a physical examination for the purposes of preserving evidence if the court finds that it is in the best interest of the child to have such an examination. Nothing in this section affects the authority of the Children's Services Division to consent to physical examinations at other times.

(6) A minor child of 12 years of age or older may refuse to consent to the examination described in subsection (5) of this section. The examination shall be conducted by or under the supervision of a physician li-

censed under ORS chapter 677 or a nurse practitioner licensed under ORS chapter 678 and, whenever practicable, trained in conducting such examinations. [1993 c.546 §16; 1993 c.622 §7a]

419B.025 Immunity of person making report in good faith. Anyone participating in good faith in the making of a report of child abuse and who has reasonable grounds for the making thereof shall have immunity from any liability, civil or criminal, that might otherwise be incurred or imposed with respect to the making or content of such report. Any such participant shall have the same immunity with respect to participating in any judicial proceeding resulting from such report. [1993 c.546 §17]

419B.028 Photographing child during investigation; photographs as records. (1)

In carrying out its duties under ORS 419B.020, any law enforcement agency or the Children's Services Division may photograph or cause to have photographed any child subject of the investigation for purposes of preserving evidence of the child's condition at the time of the investigation.

(2) For purposes of ORS 419B.035, photographs taken under authority of subsection (1) of this section shall be considered records. [1993 c.546 §18]

419B.030 Central registry of reports.

(1) A central state registry shall be established and maintained by the Children's Services Division. The local offices of the Children's Services Division shall report to the state registry in writing when an investigation has shown reasonable cause to believe that a child's condition was the result of abuse even if the cause remains unknown. Each registry shall contain current information from reports catalogued both as to the name of the child and the name of the family.

(2) When the division provides specific case information from the central state registry, the division shall include a notice that the information does not necessarily reflect any subsequent proceedings that are not within the jurisdiction of the division. [1993 c.546 §19]

419B.035 Confidentiality of records; when available to others. (1) Notwith-

standing the provisions of ORS 192.001 to 192.170, 192.210 to 192.505 and 192.610 to 192.990 relating to confidentiality and accessibility for public inspection of public records and public documents, reports and records compiled under the provisions of ORS 419B.010 to 419B.030 are confidential and are not accessible for public inspection. However, the Children's Services Division shall make records available to:

(a) Any law enforcement agency or a child abuse registry in any other state for the purpose of subsequent investigation of child abuse;

(b) Any physician, at the request of the physician, regarding any child brought to the physician or coming before the physician for examination, care or treatment;

(c) Attorneys of record for the child or child's parent or guardian in any juvenile court proceeding;

(d) Citizen review boards established by the Judicial Department for the purpose of periodically reviewing the status of children under the jurisdiction of the juvenile court under ORS 419B.100 and 419C.005. Citizen review boards may make such records available to participants in case reviews;

(e) A court appointed special advocate in any juvenile court proceeding in which it is alleged that a child has been subjected to child abuse or neglect; and

(f) The Child Care Division for certifying, registering or otherwise regulating day care facilities.

(2) The division may make reports and records available to any person, administrative hearings officer, court, agency, organization or other entity when the division determines that such disclosure is necessary to administer its child welfare services and is in the best interests of the affected child, or that such disclosure is necessary to investigate, prevent or treat child abuse and neglect, to protect children from abuse and neglect or for research when the assistant director gives prior written approval. The division shall adopt rules setting forth the procedures by which it will make the disclosures authorized under this subsection and subsection (1) of this section. The names, addresses or other identifying information about the person who made the report shall not be disclosed pursuant to this subsection and subsection (1) of this section.

(3) Any record made available to a law enforcement agency in this state or to a physician in this state, as authorized by subsections (1) and (2) of this section, shall be kept confidential by the agency or physician. Any record or report disclosed by the division to other persons or entities pursuant to subsections (1) and (2) of this section shall be kept confidential.

(4) No officer or employee of the Children's Services Division or any person or entity to whom disclosure is made pursuant to subsections (1) and (2) of this section shall release any information not authorized by subsections (1) and (2) of this section.

(5) A person who violates subsection (3) or (4) of this section commits a violation punishable by a fine not exceeding \$1,000. [1993 c.546 §20,20a]

419B.040 Certain privileges not grounds for excluding evidence in court proceedings on child abuse. (1) In the case of abuse of a child, the privileges created in ORS 40.230 to 40.255, including the psychotherapist-patient privilege, the physician-patient privilege, the privileges extended to nurses, to staff members of schools and to registered clinical social workers and the husband-wife privilege, shall not be a ground for excluding evidence regarding a child's abuse, or the cause thereof, in any judicial proceeding resulting from a report made pursuant to ORS 419B.010 to 419B.030.

(2) In any judicial proceedings resulting from a report made pursuant to ORS 419B.010 to 419B.030, either spouse shall be a competent and compellable witness against the other. [1993 c.546 §21]

419B.045 Investigation conducted on public school premises; notification; role of school personnel. If an investigation of a report of child abuse is conducted on public school premises, the school administrator shall first be notified that the investigation is to take place, unless the school administrator is a subject of the investigation. The school administrator or a school staff member designated by the administrator may, at the investigator's discretion, be present to facilitate the investigation. The Children's Services Division or the law enforcement agency making the investigation shall be advised of the child's handicapping conditions, if any, prior to any interview with the affected child. A school administrator or staff member is not authorized to reveal anything that transpires during an investigation in which the administrator or staff member participates nor shall the information become part of the child's school records. The school administrator or staff member may testify at any subsequent trial resulting from the investigation and may be interviewed by the respective litigants prior to any such trial. [1993 c.546 §22]

JUVENILE COURT (Generally)

419B.100 Jurisdiction; bases; Indian children. (1) Except as otherwise provided in subsection (6) of this section and ORS 107.726, the juvenile court has exclusive original jurisdiction in any case involving a person who is under 18 years of age and:

(a) Who is beyond the control of the person's parents, guardian or other person having custody of the person;

(b) Whose behavior is such as to endanger the welfare of the person or of others;

(c) Whose condition or circumstances are such as to endanger the welfare of the person or of others;

(d) Who is dependent for care and support on a public or private child-caring agency that needs the services of the court in planning for the best interest of the person;

(e) Whose parents or any other person or persons having custody of the person have:

(A) Abandoned the person;

(B) Failed to provide the person with the care or education required by law;

(C) Subjected the person to cruelty, depravity or unexplained physical injury; or

(D) Failed to provide the person with the care, guidance and protection necessary for the physical, mental or emotional well-being of the person;

(f) Who has run away from the home of the person; or

(g) Who has filed a petition for emancipation pursuant to ORS 419B.550 to 419B.558.

(2) The court shall have jurisdiction under subsection (1) of this section even though the child is receiving adequate care from the person having physical custody of the child.

(3) The practice of a parent who chooses for the parent or the child of the parent treatment by prayer or spiritual means alone shall not be construed as a failure to provide physical care within the meaning of this chapter, but shall not prevent a court of competent jurisdiction from exercising that jurisdiction under subsection (1)(c) of this section.

(4) The provisions of subsection (1) of this section do not prevent a court of competent jurisdiction from entertaining a civil action or suit involving a child.

(5) The court shall have no further jurisdiction as provided in subsection (1) of this section after a minor has been emancipated pursuant to ORS 419B.550 to 419B.558.

(6)(a) An Indian tribe has exclusive jurisdiction over any child custody proceeding involving an Indian child who resides or is domiciled within the reservation of the tribe, except where the jurisdiction is otherwise vested in the state by existing federal law.

(b) Upon the petition of either parent, the Indian custodian or the Indian child's tribe, the juvenile court, absent good cause to the contrary and absent objection by either parent, shall transfer a proceeding for the foster care placement of, or termination

of parental rights to, an Indian child not domiciled or residing within the reservation of the Indian child's tribe, to the jurisdiction of the tribe.

(c) The juvenile court shall give full faith and credit to the public acts, records and judicial proceedings of an Indian tribe applicable to an Indian child custody proceeding to the same extent that the juvenile court gives full faith and credit to the public acts, records and judicial proceedings of any other entity. [1993 c.33 §53; 1993 c.546 §10; 1993 c.643 §5]

419B.110 Emergency medical care; court may authorize. Whether or not a petition has been filed, if a child requires emergency medical care, including surgery, and no parent is available or willing to consent to the care, a judge of the juvenile court may authorize the care. The judge may thereafter direct the filing of a new petition. [1993 c.546 §24]

419B.115 Parties to proceedings; rights of limited participation. (1) Parties to proceedings in the juvenile court under ORS 419B.100 and 419B.500, are:

(a) The minor child;

(b) The legal parents or guardian;

(c) The state;

(d) The juvenile department;

(e) A court appointed special advocate, if appointed;

(f) The Children's Services Division or other child-caring agency if the agency has temporary custody of the child; and

(g) An intervenor under ORS 109.119 (1) to (4).

(2) The rights of the parties include, but are not limited to:

(a) The right to notice of the proceeding and copies of the pleadings;

(b) The right to appear with counsel and to have counsel appointed as otherwise provided by law;

(c) The right to call witnesses, cross-examine witnesses and participate in hearings;

(d) The right of appeal; and

(e) The right to request a hearing.

(3)(a) Persons who are not parties under subsection (1) of this section may petition the court for rights of limited participation. The petition must be filed and served on all parties no later than two weeks before a proceeding in the case in which participation is sought. The petition must state:

(A) The reason the participation is sought;

(B) How the person's involvement is in the best interest of the child or the administration of justice;

(C) Why the parties cannot adequately present the case; and

(D) What specific relief is being sought.

(b) If the court finds that the petition is well founded, the court may grant rights of limited participation as specified by the court.

(c) Persons petitioning for rights of limited participation are not entitled to court-appointed counsel. [1993 c.546 §25]

419B.118 Venue. (1) Subject to the provisions of subsections (2), (3) and (4) of this section, a juvenile court proceeding shall commence in the county of wardship if, at the commencement of the proceeding, wardship exists as a result of proceedings under this chapter, or, in the absence of such wardship, in the county where the child resides.

(2) If the proceeding is based on allegations of jurisdiction under ORS 419B.100 (1)(a), (b) or (c), the proceeding may also commence in the county in which the alleged act or behavior took place.

(3) If the proceeding is based on allegations of jurisdiction under ORS 419B.100 (1)(b), (c), (d), (e) or (f), the proceedings may also commence in the county where the child is present when the proceeding begins.

(4) A termination of parent-child relationship proceeding may be commenced in the county where the child has been held previously to be within the jurisdiction of the court or where the child resides or is found unless the child is an Indian child subject to the Indian Child Welfare Act and the tribal court has assumed jurisdiction. [1993 c.33 §54; 1993 c.546 §26]

419B.121 Return of runaway children to another state. Notwithstanding ORS 419C.145, the court may order the detention of a child who resides in another state if the court finds probable cause to believe that the child has run away from home or from a placement. If a child is ordered detained under this section, the court shall make such orders as are necessary to cause the child to be immediately returned to the child's state of residence. [1993 c.33 §55]

419B.124 Transfer to juvenile court from another court. If during the pendency of a proceeding in any court other than a juvenile court it is ascertained that the age of the person who is the subject of the proceeding is such that the matter is within the exclusive jurisdiction of the juvenile court, it is the duty of the court in which the pro-

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX B

Child Protective Service
Screening Guidelines

APPENDIX B

PROTECTIVE SERVICE SCREENING

The purpose of screening referrals to the Protective Service Program is to determine if the report or referral received is an actual report of child abuse or neglect under Oregon Statutes, to assess whether the report is credible enough so that a reasonable person would conclude that child abuse or neglect is likely to be occurring, and to determine what response or intervention would be most helpful to the family while protecting the child. Intervention can range from referral to voluntary services to immediate CSD and/or Police contact. Risk to the child of further abuse is considered at every step in the screening process.

To screen protective service referrals, protective service workers need a working knowledge of the child abuse reporting law, the protective service definitions, policy relating to intake and assessment and current protective service practice. They should also be familiar with protocols of local law enforcement agencies, with Juvenile Court procedures, and with local resources.

JG:sas

TELEPHONE SCREENING

Purpose: To elicit information to make a preliminary decision (1.) if abuse/neglect has occurred or is likely to occur, (2.) the risk of harm to child(ren), and (3.) the need for immediate response.

1. Who is caller?
2. Who is caller concerned about? Get names, addresses, ages (DOB's if known) and sex of ALL family members and alleged offender.
3. What specifically is caller concerned about? Describe incident or evidence observed by caller.
4. Where did incident occur?
5. When did incidents occur? First? Last?
6. Who did what?
7. Is the alleged perpetrator employed? Where?
8. Is child(ren) currently in danger? Where is the child?
9. Are there current injuries? What is the nature and extent of the injuries?
10. What (if known) is the explanation for the injuries?
11. Where were parents (if not present)?
12. What is parents attitude toward offender?
13. Are there any witnesses? Are they willing to talk to CSD or the police?
14. If the allegation is sex abuse has the child made a statement? What? To whom?
15. Does the child have any handicaps or special needs?
16. Why did the caller choose today to call?
17. What, if any, is the relationship of the caller to the family?
18. Is the caller willing to give their name and telephone number?
19. Has the caller told the parents of the intent to call CPS?

ASSESS:

- a. Is address in this office county/area? (If in another area have reporter call that office if possible.)
- b. Is this an open case to CSD? Caller may know. Check computer. If the case is open, have a worker (if available) take the call to avoid caller having to repeat their story several times.
- c. Which police agency has jurisdiction? (i.e., Is address in or out of the city limits?, etc.)
- d. Let the caller know that assigned worker may wish to call them for a clarification or more details.
- e. Are there previous reports of abuse on this family? What? When? Where? Valid?
- f. Have family circumstances changed since previous report(s)? More children? New parent figure? etc.
- g. Consider high risk factors. Consult high risk check list if necessary (CSD 955A).
- h. Assess credibility of caller.

(OVER)

IN ADDITION IF THE REPORT IS:

SEX ABUSE

1. Has child seen a doctor?
2. Does alleged offender have access to child(ren)?
3. Is parent protective?

PHYSICAL ABUSE

1. Has child seen a doctor?
2. What explanation (if known) has been given for the injuries? By child? By adult?

NEGLECT

1. What is the age of the child(ren)?
2. What specifically has the parent done or failed to do that could lead to/or has lead to harm of this child?

MENTAL INJURY

1. How does the child function in school?
2. What symptoms does this child have that would indicate psychological/emotional/social/cognitive impairment?
3. Are there any psychological/psychiatric evaluations of child?
4. Is child failing to thrive or developmentally delayed?
5. Is there a bond between parent and child?
6. What has parent done that is harmful?
7. How long has the situation been going on and what changes have been observed?
8. Are there any indications of cruel and unusual punishment?

THREAT OF HARM

1. Specifically what threats have been made?
2. Does the person making the threats have a history of violence?
3. Are there any weapons/instruments used?
4. Are the weapons/instruments currently there?
5. Are there any religious or cult practices occurring?

ABANDONMENT

1. How long has the parent been gone?
2. Did they say when they would be back?
3. Did the parent make arrangements with someone to care for the child?
4. Is the caretaker adequate? Do they wish to continue to provide care for the child? Have they been in recent contact with the parent?
5. Is caller's concern that children were abandoned or that the caretaker is not an adequate provider?

DRUG-EXPOSED INFANTS

1. What is the present physical condition of the child?
2. Is the baby due to be released from the hospital?
3. What is the attitudes of parent(s) toward this child?
4. What health care professionals are presently involved?
5. What drugs are/were present in the baby's system? What medical diagnosis has been made?
6. What is the known drug history of the parents?
7. Has a staffing date been arranged?
8. Has there been a previous CPS referral?
9. Has there been a previous drug-exposed baby?

SCREEN OUT

<u>Guidelines</u>	<u>Assumptions</u>	<u>Exceptions</u>	<u>Who Handles/ Should Handle</u>
Cultural practices (coining, cupping, etc.)	Respect cultural differences; is educational issue	When procedures cause severe tissue damage, injury, disfigurement, sexual abuse or serious mental injury	CHN, minority community leaders, medical professionals
"Age appropriate" sexual activities	Sexual curiosity is part of normal child development	Accompanied by exploitation, violence, threats, or coercion or 3 years age differ- ence between children	Parents, mental health agencies
Lice, scabies, fleas, etc.	Health issues; communi- cable disease	When court intervenes	CHN, school nurse
Assault --no injury (i.e. spanking, a facial slap of a teenage)	Not part of child abuse law	Age or condition of child places at high risk. Parent did something capable of harming the child. Blows to head or trunk of body to young child	Voluntary parenting programs. P/R outreach
Verbal abuse	Not part of child abuse law. Not against the law to yell at your children	Observable, substantial effect on child i.e. mental injury or other abuse/neglect	Referral to parenting classes
Dirty house	Child's welfare must not be at substantial risk of harm	Health risks or safety hazards exist. Infant(s) in household	Family, community agencies, landlords
Lack of supervision over age 10	Child able to care for self. Oregon statute (ORS 163.545) on leaving children unattended. Cultural norm	Where it is clear the child is in danger; child is fearful of being alone; child is responsible for other children in circumstances beyond child's ability	Latchkey, parents, employers
Lack of immunizations	Not child abuse laws. Public health issue. School attendance/day care center requirements	When there are other neglect issues	Schools, Public Health Department

(Over)

<u>Guidelines</u>	<u>Assumptions</u>	<u>Exceptions</u>	<u>Who Handles/ Should Handle</u>
Medical neglect	Child's health must not be at substantial risk of harm from neglect	When neglect is verifiable, life-threatening, painful or potentially disabling and parents not following through	CHN, school nurses community clinics
Homeless	Poverty is not a reason to intervene. Parent is providing minimally for child.	Unaccompanied young child and child who requests assistance. When children have demonstrated physical harm from living situation.	Shelters, AFS
Custody issues	Some parents will use "the system" in an attempt to gain custody. Should be handled through domestic relations/mediation court.	When a credible allegation of abuse or neglect (under ORS) is received.	Attorneys, mediation counselor domestic relations courts, private counseling agencies
Left with caretaker beyond arranged time	Caretaker agrees to keep child & parent has arranged for care	Caretaker cannot or will not keep child. Child is not safe in caretaker's home. Multiple referrals.	Caretaker
Using child for pornography	Criminal matter	If caretaker is sexually exploiting child or unwilling to protect child.	LEA, DA, Postal authorities

REPORTING PARTY CREDIBILITY

Guidelines

Credibility is improved if:

Report from reliable professional source, i.e. medical, LEA

Two or more reports on same child from different sources regarding same incident

Reports detailed and first-hand knowledge of child abuse/neglect

Express genuine concern for child

Child/family has history of child abuse/neglect

Be cautious about:

1.) Ex-spouse and anonymous reports

2.) No other collateral sources of report

3.) No known adverse affect on child from maltreatment

4.) Lifestyle reports

Assumptions

Observed child/family. Have standard of comparison. Familiar with laws and CSD procedure. Better trained to recognize abuse.

More than one report raises likelihood of validity

Unlikely that this level of detail would be fabricated

No ulterior motive

Abuse recurs in families

More likely to be concerned about lifestyle than maltreatment

Usually some type of collateral source is available

Use CSD risk assessment information, not referral source

Concern is often for values, not risk for child abuse/neglect

Source of Assumptions

Validity of reports are higher for this group

Practice

Practice

Practice

Risk Assessment Research

Unfounded rates are higher for these groups

Exceptions

If neighborhood, family feud, or custody issue

Intuition, screener's "gut" feeling of real risk and/or facts indicate risk

When facts indicate significant risk of harm

Family just moved into area

Reporter is not in position to observe child

Cults, drug houses, criminal or ritualistic groups

IMMEDIATE RESPONSE

Good likelihood that assessment of the report needs to begin immediately by either CSD or law enforcement.

<u>Guidelines</u>	<u>Assumptions</u>	<u>Source of Assumptions</u>	<u>Exceptions</u> (Immediate CPS response not necessary.)
Abuse where there is current physical evidence indicative of high risk	Physical evidence may corroborate the need for immediate intervention services. Indication that parent(s) may flee.		LEA is doing investigation
Severe or life-threatening injury or illness;			Child is in the hospital; LEA has made immediate response.
Medical neglect	Withholding life saving medical treatment is abuse.	Public Law	Child is in the hospital; LEA has made immediate response.
Any referral that presents risk of bodily injury to a young child (18 months or so)	Infants/toddlers are most vulnerable to injury		
Pre-school age or handicapped child left unattended.			LEA has responded Left for very short period.
Sexual abuse - Alleged abuser has complete access and current abuse is alleged.	Non-offending parent is not protective or protectiveness is unknown.	Risk Assessment	Abuse incident not recent, and alleged victim is in teens.
Child is fearful or in pain and there is reason to conclude child may be injured			When in doubt of real potential ask a responsible adult with child to assess child's fears
Child fatality (Complete 307 in ALL cases)	Surviving children in household may be in danger	Risk Assessment Practice	No sibling or other children in household
Parent has threatened to seriously injure the child and there is evidence to conclude parent is capable of such action.	Reporter has credible knowledge. Parent has history of abuse or violence or parent is mentally ill or on drugs.		LEA has responded. Other adult assures protection.

(Over)

Guidelines**Assumptions****Source of Assumptions****Exceptions**

(Immediate CPS response not necessary.)

Child is suicidal;
parent appears
unconcerned

Verified by medical
or mental health
practitioner, hospital
personnel or other
professional.

Child is hospitalized.

Parent(s) arrested

Child has no other
other caretaker

Practice

When relative
resources are
available or
other community
arrangements
have been made

Parents reporting stress
of the magnitude that
they may harm or kill
the child

When other
community
resources can
provide immediate
outreach (Ex. P.A.)

Child is not receiving
adequate food, shelter
or clothing; probable
consequence is life
threatening.

NON-IMMEDIATE RESPONSE/ POSSIBLE CONTACT

These guidelines include a range of abuse and neglect issues. This range includes cases that clearly call for a CPS response, however not necessarily an immediate response, as well as cases where CPS eligibility must be determined on an individual case basis.

<u>Guidelines</u>	<u>Assumptions</u>	<u>Exceptions</u> (CPS should respond)	<u>Who Handles/ Should Handle</u>
Drug-abusing pregnant women	Not part of child abuse laws at this time	When court intervenes. If woman is a minor.	Health professionals, local drug & alcohol agency, CSD voluntary services
Drug-exposed infant	Exposure/addiction to drugs may be indicative of neglect or abuse.	Report of high risk to child's welfare.	Health professionals
Runaway teens	No allegation of abuse/neglect.	If reporting abuse.	Community programs, police, or no agency may be handling P/R program or SC
Truancy/educational neglect	Schools have compulsory education laws. Child, not parents, may be reason for truancy.	Young child or never enrolled. Child forced to stay home.	Schools, DA
"Third party" abuse where abuser is not caretaker (i.e., stranger neighbor, non-familial)	Criminal matter; not family protection issue	When parent is unwilling or unable to protect own child. When abuse is sexual and alleged perpetrator has access to children in own family. When LEA requests assistance with interviews.	LEA, DA, Victim's Assistance Programs, Teacher Standards and Practices Commission
Allegations of mental injury, failure to grow, severe emotional problems.	Evidence of observable and substantial impairment of child must be present.	Actions of caretaker pose immediate, severe threat to child's emotional or physical health.	Multidisciplinary response depending on need - physician, schools, Mental Health.
Sexual Abuse - report of non-current abuse.	Lower level of immediate risk		

(Over)

Guidelines

Assault - no injury

Allegations of abuse
by ex-spouse or as
part of custody dispute.

Failure to provide
adequate food, shelter,
clothing, medical,
dental, or mental
health care.

Assumptions

May be history of
significant abuse,
although immediate
danger does not seem
present.

Custodial parent can
protect. Domestic
Relations Court takes
precedence unless
credible allegation of
abuse/neglect to
cause juvenile court
jurisdiction.

Minimal requirements
must be met for adequate
child development and safety.

Exceptions (CPS should respond)

Age or condition of
child places at high
risk. Parent did
something capable
of harming the child.
Blows to head or trunk
of body to young child.

Report of serious
physical harm or where
physical evidence may
be present.

Who Handles/ Should Handle

Private attorney,
Domestic
Relations Court

THREAT OF HARM GUIDELINES

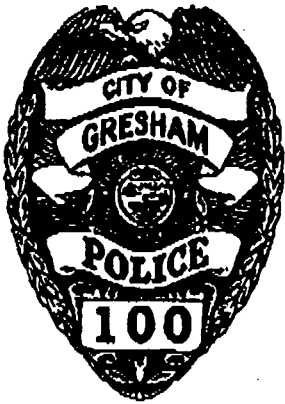
<u>Guidelines</u>	<u>Assumptions</u>	<u>Source</u>	<u>Exceptions</u>
.Convicted, adjudicated, or admitted adult sex offender moving in, returning to, or living with/caretaking children under age 18.	Without treatment, a sex offender is a potential risk to all children	Research and clinical practice	Sex offender has successfully completed treatment
Adjudicated juvenile sex offender moving in, returning to or living with/caretaking children under age 18	Without treatment, a sex offender of any age is a potential risk to all children.	Research and clinical practice	Juvenile sex offender has successfully completed treatment.
A CPS founded referral that a person who has sexually offended a child is moving in, living with or caretaking children under the age of 18	The case record clearly establishes a founded referral supported by documentation	Research and clinical practice	Successful completion of sex offender treatment
Alleged offender moving in, returning to, living with, or caretaking children under age 18. Person making report has first hand, detailed information about past abuse	Alleged offender is untreated or is not following treatment. Caretaker is not protective or willingness or ability to protect is unknown	Appellate decision, risk continuum	No witness or victim is available to substantiate Age and competence of children

<u>Guidelines</u>	<u>Assumptions</u>	<u>Source</u>	<u>Exceptions</u>
Parents who have lost children to termination of parental rights or who are facing pending hearing to terminate rights.	Parents who are sufficiently impaired by either conduct or condition are a risk to children	ORS, Risk Continuum, Appellate decision	None
Parents who have killed or seriously injured children	Past history of homicide or serious injury is sufficient to assume threat of harm to other children.	ORS.Appellate decision, risk continuum	None
Proximal violence: gang related, drug related, domestic violence, criminal activity	Caretaker is unable or unwilling to protect and there are young children in the home	ORS, risk continuum	Violence seems to be an isolated issue. Children are older.
Adults with history of violence or serious person to person crimes such as rape or assault, moving in, returning to, living with or caretaking children under 18.	Pattern of past violent behavior presents risk to children	Research and clinical practice	Individual has successfully completed appropriate treatment
Involvement with illegal child pornography by an adult who is moving in, returning to, living with or caretaking children under 18	Potential for sexually offending children . Fantasy, which may include pornography, is a component of a sex offender's cycle.	Research and clinical practice	None

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX C

Gresham Police Department
Procedures



Gresham Police Department

General Order

NUMBER: 2.02.02-5

SUBJECT: PRELIMINARY SEX CRIME
INVESTIGATION PROCEDURES

EFFECTIVE: September 8, 1994

I. PURPOSE

- A. This directive sets out the general investigative procedure to be followed in the investigation of sex crimes, i.e. rape sodomy, etc. and explains the proper use of the Rape Victim Advocate (RVA) program.

II. INVESTIGATIVE RESPONSIBILITY

- A. The reporting officer is responsible for investigating a sex crime as thoroughly and completely as his/her resources allow. This does not prohibit members from requesting assistance from other department personnel when such assistance will aid the investigation.

III. INVESTIGATIVE PROCEDURES

- A. After confirming the occurrence of a sex crime, the reporting officer will take the following steps:
1. Adult Victim
 - a. If the crime occurred within 24 hours of the report being made, transport the victim to the Oregon Health Sciences University (OHSU), 3101 S.W. Sam Jackson Road, Portland, for a medical examination and the collection of evidence (rape kit). Under extenuating circumstances, this period may be expanded to 48 hours prior to the crime being reported. Such circumstances may include a victim who has not washed since the attack; extensive or prolonged sexual activity by the suspect(s) during

the attack; physical injuries sustained by the victim which are not life-threatening, but are of unique evidentiary value, etc.

- b. Victims with Kaiser health insurance who prefer to be examined at a Kaiser facility will be taken to either Bess Kaiser Hospital, 5055 N. Greeley, Portland; or to Sunnyside Kaiser Hospital, 10180 S.E. Sunnyside Road, Clackamas.
- c. Request BOEC contact an RVA to meet with the officer and victim at OHSU or Kaiser.
- d. The rape kit given to the officer by the examining physician will be entered into evidence at the Department following the procedures outlines in G.O. 3.03.01-6.
- e. The officer will ensure that the victim is provided with transportation from the medical facility to whatever reasonable destination is requested. Since clothing worn during the attack must be seized by the officer as evidence, relatives of the victim may be used as a resource for providing transportation and a change of clothing.
- f. In the event that the victim has been hospitalized subsequent to the attack, the RVA contact and the medical examination will take place at that hospital.

2. Juvenile Victim

- a. When an officer has reasonable cause to believe a child is a victim of sexual abuse as defined in ORS 418.740(1)(c) and the physical evidence of the abuse is likely to disappear, they shall proceed in the investigation of any sex crime and seek a physical examination for the collection and preservation of evidence.

1. A minor child 12 years of age or older may refuse to consent to such an examination.
2. A child 14 years of age or younger will be transported to Emanuel Hospital (3001 N. Gatenbein, Portland, 280-3200) for an immediate sexual assault examination if the assault occurred within the last 72 hours.
3. If the sexual assault to the child is over 72 hours old, the child may be referred to the Child Abuse Resource and Evaluation Services (C.A.R.E.S.) program at Emanuel Hospital, the Kaiser Permanente Clinic, or the University Hospital (OHSU) for a future examination. The preliminary investigator should refer such cases to Investigations to initiate these arrangements.
4. If the child is age 15 through 18 years of age and the sexual assault is within 72 hours, the officer will transport the child to OHSU for a sexual assault examination.



Arthur J. Knori
Chief of Police



Gresham Police Department

General Order

NUMBER: 3.01.02-6

SUBJECT: CONTACTING OFF-DUTY
INVESTIGATORS, CRIMINAL-
IST, POLICE TECHNICIANS,
AND COMPOSITE ARTISTS

EFFECTIVE: August 1, 1994

I. PURPOSE

To establish guidelines for the call-out of off-duty investigators, criminalist, police technicians, and composite artists.

II. INCIDENTS REQUIRING USE OF CALL-OUT PROCEDURE

- A. Major criminal incidents involving complex or lengthy investigations in which a delay would adversely impact the results of the investigation.
- B. Major criminal incidents requiring resources beyond the capabilities of on-duty Field Operations personnel.
- C. Criminal investigations requiring special expertise, knowledge, or equipment beyond the normal capabilities of on-duty Field Operations personnel.
- D. Any death of a person which takes place under suspicious circumstances and/or appears not to be the result of natural causes.
- E. Incidents in which investigation personnel have specifically requested to be notified to expedite an on-going investigation.
- F. Incidents requiring the use of the skills of a composite artist.

III. CONTACTING INVESTIGATORS, CRIMINALIST, POLICE TECHNICIANS AND COMPOSITE ARTISTS

- A. An Investigation Division supervisor will be contacted to request an off-duty investigator, criminalist, police technician, and/or composite artist. That supervisor will determine which personnel will respond and will normally contact assigned personnel to brief them prior to their response. It is recommended that the on-scene

supervisor contact the Investigation Division supervisor to ensure that first hand information is obtained.

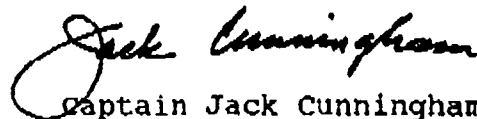
- B. In the absence of an Investigation Division supervisor, the Investigation Division commander will be notified to determine which personnel will respond.
- C. If neither an Investigation Division supervisor nor the commander are available, an investigator, criminalist, police technician, and/or composite artist, will be contacted directly by telephone or pager. (Under normal conditions, an investigator from the unit which would be primarily responsible for the investigation of the incident will be contacted.)
- D. If information is requested from patrol by an individual investigator, that investigator may be contacted directly by the officer with the information.

IV. INVESTIGATORS, CRIMINALIST, POLICE TECHNICIANS, AND/OR COMPOSITE ARTISTS RESPONSIBILITY

- A. Each investigator, criminalist, and police technician is issued a pager and is subject to recall for emergency follow-up on cases.
- B. When notified to respond, the investigator will respond promptly and report to the supervisor or officer in charge for briefing and will assume the responsibilities for the investigation and the crime scene unless otherwise directed by a superior officer of the Investigation Division. The investigator is authorized to request assistance from uniformed officers at the scene.
- C. When notified to respond, the criminalist, police technicians, and/or composite artists will respond promptly and report to the supervisor or officer in charge for briefing. The criminalist, police technicians, and/or composite artists are authorized to request assistance from uniformed officers at the scene.

V. CALL OUT PROCEDURE

- A. A Special Order will be provided to outline any special call out procedures.



Captain Jack Cunningham
Investigation Division Commander

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX D

Hospital Protocols

EMANUEL HOSPITAL & HEALTH CENTER

M E M O R A N D U M

DATE: June 22, 1994

TO: Emmy Sloan
Coordinator CARES

FROM: Virginia Hendrickson V.H.
Manager Social Services
Emanuel and Good Samaritan

RE: Child Abuse Policy and Procedure

The existing Child Abuse policies and procedures from Emanuel and Good Samaritan are attached. These policies will be reviewed and revised within three months, with one integrated policy being developed for both sites. I will be asking representatives from all parts of the hospital who deal with child abuse to be a part of this process and will welcome your input.

Emanuel Hospital
& Health Center

A Lutheran-Affiliated Community Center & Foundation

Policy & Procedure



POLICY NUMBER: N700-2310- -3
EFFECTIVE DATE: 1/89
LAST REVIEW DATE: 5/92
LAST REVISION DATE: N/A
NEXT REVIEW DATE: 5/95

Richard Hill
Nurse Manager

John Jensen
Director

Page ____ of ____

SUBJECT: CHILDRENS SERVICES DIVISION (CSD) INVESTIGATIVE CASES, POLICY IN

POLICY

OBJECTIVE: To provide for the safety of patients at risk and staff members during CSD investigations.

RESPONSIBLE PARTIES: Physicians, Residents, Social Worker (MSW), Nursing Staff, Unit Secretaries, Child Life Therapists, Security Department and CSD.

TEXT

1. In the event of a CSD investigation regarding a pediatric or PICU patient, the MSW or charge nurse will notify the following people, regardless of the potential for disruption to the patient or the pediatric unit.
 - a. Resident
 - b. Physician - admitting physician, attending physician and/or ED physician as appropriate
 - c. Nurse - charge nurse and nurse assigned to patient
 - d. Security Department
2. In the event of a CSD investigation regarding a pediatric or PICU patient the family will be notified, at the discretion of the MSW, by either:
 - a. CSD, or
 - b. MSW
3. In the event of a CSD investigation, every effort will be made to assign the pediatric patient a room in close proximity to the north nursing station. This places the child in an area where they can be easily observed by many staff members.

4. During the course of a CSD investigation the MSW has access to confidential information obtained through CSD.
 - a. Appropriate information is dispersed to those involved with the child's medical care to help ensure that the case operates smoothly and that the child receives appropriate interventions.
 - b. Not all confidential or sensational information may be made available to the staff.
5. During the course of a CSD investigation there may be several levels of involvement or intervention that take place.
 - a. CSD investigates the case and assigns a worker but no legal action is taken.
 - b. CSD investigates the case, assigns a worker, and presents the case to the Judge during a routine hearing, usually the afternoon of the next working day.
 - c. CSD investigates the case, assigns a worker, and takes immediate custody of the patient, obtained by phone through the Juvenile Department Judge.
6. During the course of a CSD investigation, the following decisions may be determined.
 - a. Temporary Custody: May be given to CSD during the hearing, at which time, depending upon assessment of child's safety:
 - 1) A court hold can be placed, if indicated;
 - 2) The child may be placed in foster care upon discharge; or
 - 3) The child may be sent home, under temporary custody, upon discharge.
 - b. Court Hold: Obtained by phone through Juvenile Department Judge or during routine hearing (248-3460).
 - 1) Visitation will be determined by CSD with input from EHHC staff.
 - a) Attempts will be made to limit visitation to two people.
 - b) CSD will clarify if security must be present during visits.
 - c) CSD will notify the family of visitation restrictions as appropriate.
 - 2) Discharge arrangements will be made involving MSW and CSD to ensure that child is discharged to a safe, appropriate environment.
 - c. Medical Hold: A temporary protective device from the physician. Should be used if there is any doubt about the child's safe-keeping in the hospital.
 - 1) Requires written order in chart.
 - 2) May be cancelled by written order in chart.

- 3) Allows for security involvement pending CSD investigation for protection and/or retention of patients in hospital.
 - 4) Should be rewritten every 24 hours.
 - d. Police Hold: Child may be placed in hospital by police pending CSD investigation. Police hold must be officially discontinued prior to discharge of patient.
7. During the course of a CSD investigation, the following safety/security issues may be addressed:
- a. Staff members shall, at no time, place themselves in jeopardy regarding personal safety.
 - b. Security shall be called to intervene if a parent or other person attempts to leave the facility with a child that has been placed on hold.
 - c. Security shall be called to supervise visitation if need determined by CSD investigation.
 - d. Security shall be called to limit, restrict, or remove visitors as determined by CSD investigation.
 - e. Security shall be called for problems with visitation in previously unrestricted instances to provide for patient, visitor and/or staff safety.
 - f. Security can be accessed at any time needed, even if CSD not involved and without need to involve CSD.
8. In the event a child is admitted to the ED or pediatric and pediatric intensive care units under suspicious or questionable circumstances:
- a. Identify your suspicions and report as appropriate.
 - b. Notify MSW
 - 1) Weekdays 0730-1600 notify the pediatric social worker (MSW) at extension 4103 or ~~beeper 850-186~~
 - 2) Weekday evenings ~~1530-2300~~¹⁵³⁰⁻²³⁰⁰ notify the emergency room social worker (MSW) at extension 4121
 - 3) Weekends, holidays and after hours (2300-0730) leave a message on recorder at extension 4103 Department of Social Work, and notify appropriate CSD employees.
 - c. Notify CSD at 238-7555 (coverage available 24 hours a day)
 - 1) By MSW when notified
 - 2) By person with suspicions if MSW unavailable (such as after hours)
 - a) physician
 - b) nurse
 - c) etc.

9. Once determinations made regarding holds or custody, the information will be related to:
 - a. Nursing and/or medical staff caring for the involved patient.
 - 1) Verbally by MSW and/or CSD worker
 - 2) Written note in chart by MSW, physician or nurse as appropriate (progress note and/or physician order sheet)
 - 3) Notation on patient Kardex at desk with date and time of initiation in red felt pen
 - 4) Some method of detection on assignment board - able to be interpreted by staff only, not visitors
 - b. Security Department at extension 4949 with the following information
 - 1) Type of hold or custody obtained
 - 2) Name of patient involved
 - 3) Age, sex and race of child as well as any readily identifiable characteristics
 - 4) Patient's room number and/or changes in room number
 - 5) Name of parents or legal guardians
 - 6) Anticipated problems such as violence, previous history of abductions or attempts, etc.
 - 7) Names of visitors allowed to see child
 - 8) Names of visitors prohibited from seeing child
10. Department of Security may also be utilized for cases in which CSD is not or will possibly not be involved.
 - a. Violence or threats between visitors or against staff.
 - b. Intoxication of visitors attempting to visit or to discharge patients.
 - c. Other cases not listed - call extension 4949 with concerns.
11. Document all interactions regarding these cases. Document phone calls, visits, patient/visitor interactions, etc.

Accession No.: 154
Effective Date: 5/92
Origination Date: 10/15/77
Source: SOCIAL SERVICES/EMERGENCY/NURSERY

✝ Good Samaritan
✝ Hospital & Medical Center
✝ General Operational Policy

SUBJECT: SUSPECTED CHILD ABUSE

A. OBJECTIVE OF THIS POLICY

To assist in the protection of children by complying with the laws of the state of Oregon and to identify infants at risk from intrauterine drug abuse.

B. TEXT OF THIS POLICY

1. Definitions.

a. **Child:** an unmarried person who is under 18 years of age.

b. **Child Abuse:** one or more of the following -

Physical: (1) physical injuries such as bruises, welts, burns, cuts, broken bones, sprains, bites, etc., including any which appears to be at variance with the explanation given of injury.

Neglect: (2) failure to provide food, shelter, medicine, etc., to such a degree that a child's health and safety are endangered.

Mental Injury: (3) continuing pattern of rejecting, terrorizing, ignoring, isolating, or corrupting a child or any action, statement, written or non-verbal message which is serious enough to make a child believe he/she is in danger of being abused.

**Sexual Abuse/
Exploitation** (4) any sexual contact in which a child is used to sexually stimulate another person.

Accession No.: 154

- c. **At Risk Infant:** a newborn whose mother meets one or more of criteria listed in Nursing Unit Policy.

2. Reporting.

- a. When it is suspected that a child has been abused, it shall be reported to the Children's Services Division (C.S.D.) or a law enforcement agency. It is a Class A misdemeanor to fail to report suspected child abuse.
- b. Anyone participating in good faith in the making of a report shall have immunity from civil liability.

3. Confidentiality.

Discussion of the situation will be held to a minimum and the patient's confidential rights upheld outside the confines of the hospital.

4. Staff Training.

- a. This policy will be included in orientation material for nursing and physician staff.
- b. Individual departments will be responsible for providing an annual inservice regarding child abuse (to include, but not limited to, re-reading the policy in its entirety).

5. Procedure for Reporting.

- a. **R.N. Nursing** - Refer to Nursing Unit Policy, "Infants at Risk from Intrauterine Drug Abuse".
- b. **M.D. Emergency Department** -
 - 1) Assess abuse and determine need for critical care/admission. Contact Emanuel Emergency Department if indicated and order appropriate transportation.
 - 2) Complete Emergency Transfer Form.
 - 3) Request Social Work consultation.
 - 4) Contact Children's Services Division (24 hr. - 238-7555) and provide:
 - a) name, address, age of abused child;
 - b) name, address, telephone number of parent or legal guardian;
 - c) nature of abuse;

Accession No.: 154

- d) explanation give for abuse and any other information which may be helpful.

c. R.N. Emergency Department -

- 1) Consult M.D.
- 2) Request Social Work consultation.
- 3) Contact C.S.D.

d. M.D. Inpatient Unit -

- 1) Assess abuse;
- 2) request Social Work consultation;
- 3) Contact C.S.D.

e. R.N. Inpatient Unit - Follow procedure as for Emergency Department R.N.

References:

ORS 418.740 - ORS 418.715

Related Policy:

Departmental Policy (Nursery), "Infants at Risk from Intra-uterine Drug Abuse".

Approval:

Policy Committee, 5/19/92

JCAHO

Emanuel Hospital & Health Center

A Lutheran-Affiliated Center of Caring & Excellence



Policy & Procedure

DIVISION: WOMEN & CHILDREN'S SERVICES
PROGRAM: CARES
PREPARED BY: EMMY SLOAN
APPROVAL: *Emmy Sloan*
Jan Rupp, MD
REVIEWED BY: *Tracy Joyner*
EFFECTIVE DATE: 05-28-92

SUBJECT: CARES CHILD ABUSE REPORTING PROCEDURES

POLICY

TEXT

1. All CARES staff are mandated reporters under current Oregon Child Abuse reporting statutes. A mandatory reporter must inform either Children's Services Division (CSD) or a law enforcement agency (LEA) if he/she has reasonable cause to believe he has had contact with:
 - a. a child who has suffered abuse or
 - b. a person who has abused a child.
2. The following procedures will be utilized to ensure compliance.
 - a. If it is a parent calling about a current abuse concern where there is reason to believe abuse may have occurred, inform the parent of the need to report this issue to either LEA or CSD. Encourage them to initiate the call but inform them of our legal responsibility as well. Give the parent the reporting information and request a call back to CARES when this has been completed.
 - b. When the parent calls CARES back, request the name of the LEA or CSD staff receiving the child abuse report. Log this on the intake form (see attached.) If the parent or caller does not make a report within a reasonable period of time it will be the CARES intake staff's responsibility to report to LEA or CSD. In Multnomah County the CSD child abuse reporting hotline can be reached at 238-7555. To report to Clackamas County CSD call 653-3140 and in Washington County 648-8951. Each individual law enforcement jurisdiction can be contacted through the agencies telephone exchange (see attached list of current numbers) or by contacting 911 and identifying the location of the alleged abuse incident. This report should be logged on the intake sheet.

- c. Every effort should be made to share information with LEA/CSD as mandated in cases involving child abuse allegations.
- d. On occasion a child is referred to the CARES Program for an allegation that does not reach the threshold of child abuse reporting such as child complaining of sore genitals but no disclosure of abuse. This child can be scheduled for an examination without a report to CSD or LEA. However, if upon examination there is reason to believe the child may have been a victim of abuse an immediate report must be made to the appropriate agency.
- e. If during the process of a child abuse evaluation new information not known to LEA or CSD, arises regarding possible abuse to a child this must also be reported immediately to CSD or the appropriate LEA. This would include allegations about incidences or alleged perpetrators of abuse not identified in the original intake but would also include other children who through the evaluation process, may have been identified as possible victims. All of the above information would be included in the CARES written report but should also be reported by telephone or in person to ensure maximum compliance with the reporting law and maximum protection to the involved children.
- f. Parents should be fully informed of our obligation to report and our efforts through a coordinated response with CSD and LEA, to minimize trauma to alleged victims of abuse. This can be discussed at the time staff requests a parent/guardian signature on the Authorization to Release Information form. (see attached)

SUBJECT: REFERRAL AGENCIES - PROTOCOL BETWEEN C.S.D. AND THE C.A.R.E.S. PROGRAM

POLICY

The Child Abuse Response and Evaluation Services (C.A.R.E.S.) Program of Emanuel Hospital and Health Center and Children's Services Division (C.S.D.) agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement was designed to minimize trauma to the child, while affording the maximum child protection capability.

TEXT

C.S.D. ROLES AND EXPECTATIONS

1. C.S.D. may refer to C.A.R.E.S. all sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:
 - A. Sexual Abuse
 1. Child victims any age, with children up to 13 years a priority.
 2. Child has made a statement indicating the possibility of victimization.
 3. As assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
 4. If another professional, C.S.D. or otherwise, has determined a child may have physical evidence of abuse. This may be a reason for the L.E.A. and/or C.S.D. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.
 - B. Physical Abuse

Child is exhibiting a current injury or has injuries that are in need of medical documentation, wound identification and possible medical treatment.
 - C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.
2. C.S.D. will ensure payment for the assessment prior to the C.A.R.E.S. intake, having payment prior authorized, if necessary. This may include determining eligibility for private insurance coverage, or determining eligibility for Title XIX A.F.S. payment.
3. C.S.D. will provide relevant background information prior to the assessment on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist and on site Police Detective will coordinate and ensure all relevant reports are in file prior to assessment.
4. The assigned C.S.D. worker or the intake C.A.R.E.S. team worker of the day, will be present at the time of the C.A.R.E.S. assessment. This worker will act as a team member and may participate in the interview either directly or as an observer through the one-way window. In addition, the worker may use the assessment as an opportunity to interview the non-offending parent or other siblings. Case staffing will follow the assessment with recommendations and/or planning for the child and family.

SUBJECT: REFERRAL AGENCIES - PROTOCOL BETWEEN C.S.D. AND THE C.A.R.E.S. PROGRAM

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule and appointment for the assessment in as timely a manner as possible. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the C.S.D. worker on all cases referred by C.S.D. This report will contain a detailed summary of the interview and/or examination as well as an impression as to the likely validity/invalidity of the alleged abuse. Additional recommendations for future case planning or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing, with reasonable notices. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment, please contact C.A.R.E.S. at 280-4943. Please be prepared with necessary background material as well as billing information. If there are questions or concerns regarding the protocol or the C.A.R.E.S. Program, please contact the Program Manager at 280-4943.

SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN MULTNOMAH COUNTY SHERIFF'S OFFICE AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and the Multnomah County Sheriff's Office {M.C.S.O.} agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement is designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

M.C.S.O. ROLES AND EXPECTATIONS

1. M.C.S.O. may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, with children up to age 13 years a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuses.
5. If the child complains of pain or injury that may be related to sexual assault. This category will receive priority in scheduling an examination.
6. If M.C.S.O. feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

2. M.C.S.O. will provide relevant background information prior to the evaluation on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist and will coordinate and ensure all reports and relevant information are in the file prior to assessment.

The assigned detective or the detective of the day designated to provide coverage at the C.A.R.E.S. center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment will be presented to him/her at a mutually convenient time.

If the detective is present for the interview s/he will act as a team member and will participate in the interview of the child as an observer through the one-way mirror. The detective's additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers if these have been coordinated with the on site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, with subpoena prior to the hearing with sufficient notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment contact the Intake Specialist at 280-4943. Please be prepared with necessary background material, as well as billing information if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss.

SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN GRESHAM POLICE DEPARTMENT
AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and the Gresham Police Department {L.E.A.} agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement is designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

GRESHAM L.E.A. ROLES AND EXPECTATIONS

1. Gresham L.E.A. may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, with children up to age 13 years a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuses.
5. If the child complains of pain or injury that may be related to sexual assault. This category will receive priority in scheduling an examination.
6. If Gresham L.E.A. feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

2. Gresham L.E.A. will provide relevant background information prior to the evaluation on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist detective will coordinate and ensure all reports and relevant information are in the file prior to assessment.

The assigned detective or the detective of the day designated to provide coverage at the C.A.R.E.S. center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment will be presented to him/her at a mutually convenient time.

**SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN GRESHAM POLICE DEPARTMENT
AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL**

Page 2

If the detective is present for the interview s/he will act as a team member and may participate in the interview of the child as an observer through the one-way mirror. The detective's additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers if these have been coordinated with the on site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing with reasonable notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment contact the Intake Specialist at 280-4943. Please be prepared with necessary background material, as well as billing information if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss.

Revised 6/94

SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN SANDY POLICE DEPARTMENT AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and the Sandy Police Department {L.E.A.} agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement is designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

SANDY L.E.A. ROLES AND EXPECTATIONS

1. Sandy L.E.A. may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, with children up to age 13 years a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuses.
5. If the child complains of pain or injury that may be related to sexual assault. This category will receive priority in scheduling an examination.
6. If Sandy L.E.A. feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

2. Sandy L.E.A. will provide relevant background information prior to the evaluation on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist will coordinate and ensure all reports and relevant information are in the file prior to assessment.

The assigned detective or the detective of the day designated to provide coverage at the C.A.R.E.S. center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment will be presented to him/her at a mutually convenient time.

**SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN SANDY POLICE DEPARTMENT
AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL**

Page 2

If the detective is present for the interview s/he will act as a team member and may participate in the interview of the child as an observer through the one-way mirror. The detective's additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers if these have been coordinated with the on site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing with reasonable notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment contact the Intake Specialist at 280-4943. Please be prepared with necessary background material, as well as billing information if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss.

Revised 6/94

SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN TROUTDALE POLICE
DEPARTMENT AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and the Troutdale Police Department {L.E.A.} agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement is designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

TROUTDALE L.E.A. ROLES AND EXPECTATIONS

1. Troutdale L.E.A. may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, with children up to age 13 years a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuses.
5. If the child complains of pain or injury that may be related to sexual assault. This category will receive priority in scheduling an examination.
6. If Troutdale L.E.A. feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

2. Troutdale L.E.A. will provide relevant background information prior to the evaluation on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist will coordinate and ensure all reports and relevant information are in the file prior to assessment.

The assigned detective or the detective of the day designated to provide coverage at the C.A.R.E.S. center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment will be presented to him/her at a mutually convenient time.

If the detective is present for the interview s/he will act as a team member and may participate in the interview of the child as an observer through the one-way mirror. The detective's additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers if these have been coordinated with the on site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing with reasonable notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment contact the Intake Specialist at 280-4943. Please be prepared with necessary background material, as well as billing information if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss.

Revised 6/94

SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN PORTLAND PUBLIC SCHOOLS' POLICE DEPARTMENT AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and the Portland Public Schools' Police Department agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement is designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

PORTLAND PUBLIC SCHOOLS' POLICE DEPARTMENT L.E.A. ROLES AND EXPECTATIONS

1. Portland Public Schools' Police Department may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, with children up to age 13 years a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuses.
5. If the child complains of pain or injury that may be related to sexual assault. This category will receive priority in scheduling an examination.
6. If Portland Public Schools' Police Department feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

2. Portland Public Schools' Police Department will provide relevant background information prior to the evaluation on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist and on-site police detective will coordinate and ensure all reports and relevant information are in the file prior to assessment.

The assigned detective or the detective of the day designated to provide coverage at the C.A.R.E.S. center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment will be presented to him/her at a mutually convenient time.

If the detective is present for the interview s/he will act as a team member and may participate in the interview of the child as an observer through the one-way mirror. The detective's additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers if these have been coordinated with the on site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing with reasonable notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment contact the Intake Specialist at 280-4943. Please be prepared with necessary background material, as well as billing information if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss.

PROTOCOL BETWEEN PORTLAND POLICE BUREAU AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

The C.A.R.E.S. (Child Abuse Response and Evaluation Services) Program of Emanuel Hospital and Health Center and Portland Police Bureau (P.P.B.) agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The system was designed to minimize the trauma to the child for a faster and more effective resolution of cases.

Portland Police Roles and Expectations

- I. Portland Police may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, up to age 13 a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e. where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuse. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.
5. If P.P.B. feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

- II. P.P.B. will provide relevant background information on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist and on-site police detective will coordinate and ensure all reports and relevant information are in the file prior to assessment.

- III. The assigned detective, at the C.A.R.E.S. Center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment, will be available.

If the detective is present for the interview s/he will act as a team member and may participate in the interview of the child either directly or as an observer through the one-way mirror. The detectives additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

PROTOCOL BETWEEN PORTLAND POLICE BUREAU AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

Page -2-

- IV. Charges may be paid by the police bureau after other resources have been explored. Private insurance and Title XIX coverage will be utilized for as many payments as possible. However, if necessary for the police investigation, the police bureau may be billed but only if they are prior authorized.

C.A.R.E.S. Role and Expectations

- I. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers, or Portland Public School Police if these have been coordinated with the on-site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
- II. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be included.
- III. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report promptly, with sufficient notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

Having a detective on-site is a critical element of the C.A.R.E.S. Program and its continued effective functioning. The following is an outline of the roles and responsibilities for this position. The overall purpose and goal of the position remains minimizing the trauma to a child while maximizing the completeness of the law enforcement investigation.

I. Consultant

Will provide input on appropriate forensic interviewing elements as evaluations occur and by review of videotapes. This will help avoid unnecessary re-interviews of children by L.E.A.

II. Coordinator

- A. Ensure appropriate cases are scheduled and processed quickly and effectively through C.A.R.E.S.
- B. Provide liaison function and staffing with Children's Services Division (C.S.D.) and L.E.A.'s on problematic cases.
- C. Gather pertinent L.E.A., C.S.D., mental health material prior to evaluation and present to interviewer and physician at appointment time. Package material with subsequent incident or special report and forward with reports. All other needed evidence such as photos in physical assault cases will be included.

PROTOCOL BETWEEN PORTLAND POLICE BUREAU AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL

Page -3-

- D. Write incident reports on cases seen at C.A.R.E.S. Identify suspects and locations, if possible.
- E. Refer crime or special back to designated investigative unit.
- F. Arrange and participate in staffing with D.A.'s office on cases where judicial intervention is in question.

III. Community Liaison

- A. Participate in multi-disciplinary case staffing on a regularly scheduled basis.
- B. Also participate in interagency coordinating meetings such as M.C.C.A.C., hospital S.C.A.N. team.
- C. Providing training and presentations on child abuse issues as needed.

Based upon scope of above duties and responsibilities assignment of a second detective may be necessary.

To make an appointment for a C.A.R.E.S. assessment contact the C.A.R.E.S. Program at 280-4943. Please be prepared with necessary background material if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss. These guidelines may be revised as appropriate.

SUBJECT: REFERRAL AGENCIES - PROTOCOL BETWEEN C.A.R.E.S. AND MULTNOMAH COUNTY DISTRICT ATTORNEY'S OFFICE

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and Multnomah County District Attorney's Office agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement was designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

MULTNOMAH COUNTY DISTRICT ATTORNEY'S OFFICE ROLES AND EXPECTATIONS

1. The District Attorney may refer cases to C.A.R.E.S. when they feel an assessment through the Center is in the best interest of the child. The age priority will be children up to 13 years in sexual abuse cases.
2. When the District Attorney's office believes there is a need for a sexual assault examination, the assigned District Attorney will request payment through Victims Assistance funds, if no other appropriate source is available. The District Attorney will notify C.A.R.E.S. if Victims Assistance will be the billing resource or if other financial arrangements need to be explored.
3. Multnomah County District Attorney's office will provide relevant background information on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. The C.A.R.E.S. Intake Specialist and on site Police Detective will coordinate and ensure all reports, relevant information, are in the file prior to assessment.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned District Attorney upon subpoena on all cases referred by Multnomah County District Attorney's Office. This report will contain a detailed summary of the interview and/or examination. The physicians's report will also include an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment and medical follow-up may also be included.
3. A videotape will be produced upon a signed protective order.
4. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing, with a subpoena and with sufficient notice. If a personal court appearance is necessary, the C.A.R.E.S staff person will appear, with subpoena to assist at hearings and trials.
4. C.A.R.E.S. will participate of meeting with the District Attorney's Office as needed to discuss new developments in the field in child abuse assessments and any needed adjustment in the C.A.R.E.S. court appearance scheduling procedures.

To make an appointment for a C.A.R.E.S. assessment, contact the Intake Specialist at 280-4943. Please be prepared with necessary background material as well as billing information. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager (280-4943) to discuss.

**SUBJECT: REFERRAL AGENCIES -- PROTOCOL BETWEEN FAIRVIEW POLICE DEPARTMENT
AND THE C.A.R.E.S. PROGRAM OF EMANUEL HOSPITAL**

POLICY

The Child Abuse Response and Evaluation Services {C.A.R.E.S.} Program of Emanuel Hospital and the Fairview Police Department {L.E.A.} agree to implement the system herein described for handling the child abuse and neglect cases referred between our agencies. The agreement is designed to minimize the trauma to the child for a faster and more effective resolution of cases.

TEXT

FAIRVIEW L.E.A. ROLES AND EXPECTATIONS

1. Fairview L.E.A. may refer to C.A.R.E.S. all appropriate sexual abuse, physical abuse and neglect cases that fit the following beginning referral guidelines:

A. Sexual Abuse

1. Child victims, with children up to age 13 years a priority.
2. Child has made a statement indicating the possibility of victimization.
3. An assessment at C.A.R.E.S. may lower the immediate risk to the child (i.e., where the alleged perpetrator has continued direct access to the child).
4. If another professional, L.E.A. or otherwise, has determined a child may have physical evidence of abuses.
5. If the child complains of pain or injury that may be related to sexual assault. This category will receive priority in scheduling an examination.
6. If Fairview L.E.A. feels an assessment is necessary to gather evidence for a court proceeding. This may be a reason for the L.E.A. referral but not the primary goal of the C.A.R.E.S. evaluation, which is medical diagnosis and treatment.

B. Physical Abuse

Child is exhibiting current injury or injuries in need of medical documentation, wound identification and possible medical treatment.

C. Neglect

Child is demonstrating significant delays physically or developmentally that may be a result of caretaker neglect. There is no ongoing medical provider available to complete the neglect assessment.

2. Fairview L.E.A. will provide relevant background information prior to the evaluation on the child and family to assist in most effectively completing the C.A.R.E.S. assessment. C.A.R.E.S. Intake Specialist will coordinate and ensure all reports and relevant information are in the file prior to assessment.

The assigned detective or the detective of the day designated to provide coverage at the C.A.R.E.S. center, will be present, if at all possible at the time of the assessment. If there is no detective present, the videotape and/or other evidentiary material gathered from the assessment will be presented to him/her at a mutually convenient time.

If the detective is present for the interview s/he will act as a team member and may participate in the interview of the child as an observer through the one-way mirror. The detective's additional questions may be submitted to the interviewer or asked directly of the child following the evaluation. The detective may use the C.A.R.E.S. assessment to develop recommendations for the investigative follow-up or case planning for the family.

C.A.R.E.S. ROLES AND EXPECTATIONS

1. C.A.R.E.S. will schedule an appointment for the assessment in as timely a manner as possible. C.A.R.E.S. will accept referrals from 911 officers if these have been coordinated with the on site detective. Consideration will be given to children needing immediate assessment due to emergent medical needs. Efforts will be made to schedule at a time convenient to all parties.
2. C.A.R.E.S. will provide a written report of the assessment to the assigned detective on all cases referred by the special investigative unit. This report will contain a detailed summary of the interview and/or examination as well as an impression of the likely validity/invalidity of the alleged abuse. The interviewer's report will only state the facts of the interview and will not draw a conclusion. Additional recommendations for further investigation, treatment or medical follow-up may also be indicated.
3. If there is upcoming court activity, the C.A.R.E.S. staff will make every effort to provide the written report, prior to the hearing with reasonable notice. If a personal court appearance is necessary, the C.A.R.E.S. staff person will appear, with subpoena, to assist at hearings and trials.

To make an appointment for a C.A.R.E.S. assessment contact the Intake Specialist at 280-4943. Please be prepared with necessary background material, as well as billing information if possible. If there are questions or concerns regarding the C.A.R.E.S. Program, please contact the Program Manager, (280-4943) to discuss.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 1 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

Table of Contents

Protocol for Evaluation of Sexual Abuse and Sexual Assaults

I.	STANDARD OF CARE	2
II.	GENERAL INFORMATION	2
III.	STANDARD OF PRACTICE	2
	• MA-1's, Appointment Clerks, PBX	2
	• Initial RN Evaluation	3
	• Where to Refer	3
	• Patient Instructions	4
	• Preparation For Medical Evaluation and Evidence Collection	5
	• Physical Examination	10
	• Crime Lab Kits	11
	• Pregnancy Prophylaxis	15
	• Discharge Care	15
	• Hospitalized Children	16
IV.	ATTACHMENTS	
	• RN Evaluation Questionnaire	
	• Referral Algorithm for RN's Members/Non-Members	
	• Referral Algorithm for MA-1's, Appointment Clerks, PBX	
	• County Guidelines	
	• Sexual Assault Kit Information	
	- Instructions for Hospital Personnel	
	- Crime Lab Information Form	
	• List of Additional Supplies For Collection of Evidence	

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 2 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

I. STANDARD OF CARE

All patients who may be victims of sexual abuse or assault can expect:

- Appropriate and timely medical evaluation.
- Notification of law enforcement agencies, if appropriate, and compliance with their protocols for collection of evidence.
- Attention by medical staff to the need for emotional support of the patient and their family/significant other.
- Notification of CSD if patient is under the age of 18.

II. GENERAL INFORMATION

- A. Acute sexual abuse/assault is defined for the purpose of this protocol as any recent (within 72 hours), certain, non-voluntary sexual contact that would leave physical evidence or damage.
- B. Evidence of abuse/assault may still be present up to 72 hours post assault, and occasionally up to 7 days; but since the frequency of positive findings does decrease after 24 hours, exams should be done as soon as feasible.
- C. Attention to patient and family confidentiality, and sensitivity to their needs for emotional support is of utmost importance at time of initial triage, and throughout evaluation and treatment process.

III. STANDARD OF PRACTICE

- A. Appointment clerks, MA-1's, and Operators will refer parents/patients who call in or present for care to a Triage/Advice Nurse for immediate evaluation at the following locations:
 - 1. Monday-Friday 8 a.m. - 4:30 p.m.
 - Longview/Kelso 8 a.m.- 8:30 p.m. (10 am. - 5:30 p.m. on Saturday) 206-636-2400
 - Salem 8:00 a.m. - 9 p.m. (8:30 a.m. - 5 p.m. Saturday) Skyline 378-7850
 - a) Children - Age 13 and under – Advice Nurse at the Medical Office they are calling or presenting to for care.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 3 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

- b) Adults or Children - Age 14 and older
Advice Nurse at the Medical Office where they are normally seen.

If they do not have a primary clinic then refer to:

Bess Kaiser Medical Center Triage Nurse, 285-9321, Ext. 4106

OR

Kaiser Sunnyside Medical Center Urgent Care Advice, 652-2880

2. After Medical Office Hours, Weekends and Holidays

• Longview/Kelso-10 am. - 5:30 p.m. on Saturday 206-636-2400

• Salem-8:30 a.m. - 5 p.m. Saturday Skyline 378-7850

All other phone calls should be referred to the: Regional Phone Advice RN

Medical Advice - Tie Line 731-6641

Pediatric Advice - Tie Line 731-6630

After 8 p.m. all calls to 731-6650

Patients (adults or children) who **PRESENT** to the Urgent Care Clinic or the Emergency
Department at either BKMC or KSMC will be referred directly to the Triage RN.

B. Initial Triage/Advice RN Evaluation (Phone Inquiry/Walk-in)

Refer to Initial RN Evaluation Questionnaire. (See attached.)

C. WHERE TO REFER:

Members who are victims of sexual abuse or assault should be encouraged to use Kaiser Permanente facilities (St. Johns for Longview/Kelso members or Salem Memorial for Salem members) when appropriate unless they are directed by the police/sheriff's office or Kaiser personnel to use a non-Kaiser Permanente facility. Evaluations performed at Kaiser Permanente meet the necessary requirements for evidentiary exams and are accepted by the District Attorney's offices. Evaluations performed at non-Kaiser facilities are covered by the member's health plan if the member was directed to that facility by the police or sheriff's office. Services for members who seek evaluation at non-Kaiser facilities without police or sheriff involvement, and without prior direction from our staff, will be reviewed according to emergency claims criteria and paid according to member's emergency benefits if criteria met.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 4 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

Most members have an emergency co-payment when they use non-Kaiser Permanente facilities. Oregon State Crime Lab Rape Kits are available in the Emergency Departments at BKMC, KSMC, Salem Memorial Hospital (for Salem patients), and St. John's Hospital (for Longview/Kelso patients).

ALWAYS PHONE REPORT AND FAX completed RN Triage questionnaire to facility where referred to avoid repetition of questions and alert them to patient's arrival.

1. ACUTE PATIENTS-CHILDREN AND ADULTS

SEE ALGORITHM.

2. NON-ACUTE PATIENTS

- Post 72 hours since assault/abuse occurred
 - Patient does not require urgent medical attention
 - Patient/family safety will not be compromised
- a. Children- Pre-pubertal (13 and under)
 - 1) Refer to primary care pediatrician or family practitioner. If there is no primary care provider, refer to the Advice Nurse at the medical office where the patient receives care, or the Regional Advice Nurse (after hours/weekends) for referral to a provider.
 - b. Adults age 14 and older – refer to primary care physician (IM, FP, Peds) or to Advice Nurse for referral to a provider if there is no primary care physician.
 - c. If medical offices are closed - weekend, holiday or after hours and patient/parents insist on being seen for a chronic abuse situation prior to the date of the next available appointment, refer to BKMC or KSMC Urgent Care Clinic or Emergency Room, St. Johns Emergency Room (for Longview/Kelso patients) and Salem Memorial Emergency Room (for Salem patients). Inform them that it is better to have one exam and/or interview done by their primary physician or CAAC (Child Abuse Assessment Clinic). The Social Worker on-call may be able to assist in these discussions.
 - d. For the severe emotional stress of fearing sexual abuse in one's child, CAAC has set up a parent support group that can help in the interim. Contact the Social Work Departments at: KSMC (503) 652-4160 or BKMC (503) 240-6232, if parents are having severe problems. CAAC Coordinator may also be a resource, contact at 710-3448.

D. PATIENT INSTRUCTIONS

1. Advise patient not to wash, douche, or change clothing if assault/abuse occurred within last 72 hours. (Patients will still be seen if they have already done these things, however.)

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 5 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

2. Discuss with the patient what he/she can expect as far as the process - what will happen next, and what persons they may have contact with during their evaluation.
3. If the police/sheriff have not been notified yet, let patient know that we can assist with this and that a law enforcement officer or detective may be sent to take a report. Patients should be strongly encouraged to report. **NOTE: Evidentiary exam will not be done if patient does not want to report.** Maintaining control of the situation is very important to a sexually assaulted person, particularly regarding who is notified. They may want to make the calls themselves. **ASK.**

For patients under the age of 18 CSD must be contacted in county where child resides.

Use attached guidelines for reporting based on county where incident occurred.

4. If acute assault, tell patient/family of the Victim Advocate Program, and that the patient can contact them or that the police or clinic/hospital personnel can assist them with notification.

Clackamas	655-8616
Clark	(206) 696-0167
Multnomah	248-3222
Washington	640-5311
Marion	370-1969
Longview/Kelso (Cowlitz)	1-206-577-3080

In some cases the hospital/clinic social worker could also be present to assist patient.

5. If patient needs to be referred to a different location than where they present for care, discuss transportation available to patient to insure that it is medically appropriate and safe for patient.
6. Alert the appropriate personnel in the receiving Medical Office/Emergency Department, that patient will be arriving. Give them necessary information from your initial interview to avoid repetition for patient. Advise them if you or patient have notified Police, CSD, Rape Victims Advocate (RVA), or Social Work, and what patient's desire is regarding notification. **FAX copy of RN Evaluation Questionnaire/triage note/copy of medical record to location patient is being referred to.**

E. PREPARATION FOR MEDICAL EVALUATION AND/OR EVIDENCE COLLECTION

1. Kaiser Permanente Social Work Department
 - a. Acute Patients:
 - RVA will be primary support person. Social Work will assume an active role if RVA is absent.



KAISER PERMANENTE

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8
Issued 3/92

Page 6 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

-
- The Social Worker can help assess and serve emotional needs of patient/family while awaiting MD evaluation, but if at all possible, any history taken should be with the physician present to prevent repetition of questions.
 - Social Work will call the patient the day after their ED/Clinic visit to check in, talk about Kaiser Permanente benefits for mental health treatment, review resources in community, etc. as appropriate. The RN should inform patient of this service, if the Social Worker is not available at time of visit. RN should fill out a Social Work Referral Form.
- b. Non-Acute Patients:
RN/MD can refer patients to Social Work using Social Work Referral Form for:
- Counseling
 - Referral to Rape Victims Advocate
 - Community resources
 - Program benefits for Mental Health treatment
2. Kaiser Permanente Emergency Department/Clinic Staff:
- a. To provide for patient confidentiality and continuity of care, one RN should assume primary responsibility for patient. **DO NOT** take further history when patient arrives (if initial RN Evaluation questions have already been completed). Any further history should be taken by physician.
 - b. Notify physician of patient's arrival.
 - c. If patient is pre-pubertal, call house pediatrician. If pediatrician is not available, or feels unskilled in the exam, the pediatrician in Urgent Care Clinic might be called. If no pediatrician is available, an ED physician, who is comfortable with children's exams, can perform exam.
 - d. MD should review the history obtained by triage RN, and be advised as to what agencies/personnel have been notified, and if they have arrived.
 - e. Notify Social worker of patient's arrival if RVA not present.
 - f. Unless medically contraindicated, patient should wait for Police/CSD/Advocate (or Social Worker) to arrive before MD exam, to avoid patient having to relate events repeatedly. Reassure patient/family that CSD/RVA/Police are there to help. When they arrive, allow time for patient to get acquainted with them.
 - g. Make sure State Crime Lab Kits are available. Bring all 3 kits (Necessary, Standards, and Additional) to the exam area; lay out envelopes, cotton swabs, and slides for ease of collection.
 - h. Do not have patient undress until after physician/social worker takes history.
 - i. Obtain consent for care, from patient, or, if appropriate, from legal guardian.



KAISER PERMANENTE

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 7 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

j. MD/Social Worker:

- 1) Explain different emotional responses to acute (versus chronic) and violent (versus nonviolent) sexual abuse. For children these vary greatly particularly at different developmental stages.
- 2) Ascertain as much of history from parents before, and in separate interview from child. Adult history needs separate corroboration from child, if verbal.
- 3) Determine child's terminology for body parts. Anatomical picture books will be available in the Emergency Department.
- 4) If the examining physician cannot get a good history from a young child during the exam, a detailed skilled interview can be set up later at CAAC. Send Referral form to CAAC, PEDS, EIN.

F. EVIDENCE COLLECTION

Kaiser Foundation Hospitals and Clinics will cooperate with law enforcement agencies in the collection and preservation of evidence involving patients treated in our facilities in accordance with appropriate medical ethics and statutes.

1. Definition of Evidence

Evidence may be any article, object, medical photograph, statement, visual, or olfactory observation which may assist in the solution of any suspected crime. Included may be clothing, objects in an unusual state, aspects of physical injury, x-rays, blood, or other body fluids, observation of odors on or about the patient, or statements made by the patient, or even the emotional condition of the patient.

2. The Oregon State Crime Lab Kits consist of **THREE** levels of evidence collection, **EACH WITH ITS OWN KIT**. The procedures outlined on the instruction sheet inside the Sexual Evidence Kit should be followed in order to optimize lab analysis and results. In most cases it is only necessary to collect **Necessary Evidence**. If more than 6 hours post-assault or there is oral or rectal involvement then will need to do **Additional Evidence** collection.

- **Necessary Evidence:** Sexual Assault Evidence Kit- 7 steps **MUST** be completed.

These are the items contained in a sexual assault evidence kit.

- 2 information sheets
- 1 white envelope marked "air dried vaginal swabs (collect 4 swabs)"
- 4 sterile cotton tipped applicators
- 1 smear mailer with glass slides
- 1 white envelope marked "pubic hair combing"
- 1 black comb



KAISER PERMANENTE

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8
Issued 3/92

Page 8 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

- **Standards Evidence:** Standards Kit- 4 steps, each is optional; completion depends on circumstances

These are the items contained in a standard kit.

- 1 black comb
- 1 white envelope marked "head hair standard, comb or pull 12 hairs from various areas of the head"
- 1 white envelope marked "pubic hair standard, pull 10-12 from various areas of the pubic region"
- 1 manila envelope marked "air dried saliva" and white tab of filter paper
- 1 purple topped test tube
- 1 red topped test tube

- **Additional Evidence and Procedures:** Additional Kit- 4 steps, each optional; completion depends on circumstances.

These are the items contained in a standard kit.

- 4 sterile cotton tipped applicators
- 1 smear mailer with glass slides
- 2 white envelopes marked "swabs [cervical [rectal [other [oral [bite mark one area per envelope"

NOTE: When these kits are sent, they are sealed with scotch tape to ensure completeness and to prevent tampering. When all or part of the kit is used, return the **ENTIRE KIT** to the proper agencies in the original manila envelopes in which they came. Please fill out envelope information.

3. Responsibility

- PRESERVATION OF EVIDENCE IS THE DUTY OF ALL.**
- Collection of evidence requiring an invasive procedure and its documentation is the duty of the physician or other appropriate hospital staff member approved to perform the specific procedure.
- Non-invasive evidence, such as clothing, may be collected and documented by the appropriate nursing or medical personnel. In some instances, evidence such as fingerprints and powder marks are collected by a law enforcement agent unless medical-legally contraindicated.

4. General Procedures

- The physical condition of evidence must be kept in its original state. The fewer people who handle objects, the less likely the chance of destroying the evidence, especially trace evidence such as fingerprints. Any procedure or occurrences, medical or otherwise, which alter the

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 9 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

original condition for any evidence must be carefully documented. Include person who altered condition, how condition was altered, and why.

- b. On any garments from victims of an assault, avoid cutting through any bullet holes, holes made by stab wounds, or tears. If clothing was worn during assault it should be saved. Patient should undress on white paper. Carefully fold stained clothing inward and avoid shaking out so hairs, fibers, or other evidence is not lost and stains are not in contact with the bag or other articles of clothing. Place each item of clothing in a separate, **CLEAN** paper bag, fold top over twice, staple and seal with label initialed by collector. Fold paper inward carefully and place in paper bag, seal and label. **DO NOT** use plastic bags.
- c. Extending wounds or washing areas around wounds may remove powder marks.
- d. Objects that are removed invasively for medical reasons must be carefully wrapped in a paper towel and placed in an appropriate container. Seal and label container with appropriate information.
- e. **All evidence must be clearly labeled with:**
 - Source/Item
 - Patient's name and health record number
 - Date and time of collection.
 - Legible signature of collector

Example

Item/Source: <u>One white T-shirt</u>
Removed from: <u>Jane Doe 1111-11-11</u>
On: <u>10-11-92</u> Time: <u>0130</u>
By: <u>Sally Smith, R.N.</u>

- f. Document in the medical record a description of the evidence, name of person who obtained it, date and time of recovery, and state that the object was given to Officer _____ of _____ agency by _____. Obtain badge number of officer.
- g. The individual responsible for collecting and documenting the evidence is responsible for its disposition. Evidence should be released directly to law enforcement authority after collection. Use Authorization to Release Medical Information Form # 1040 FM (see attached) to document release. If unable to immediately release evidence, it should be locked in a secure place that no one else has access to until authorities arrive. Document this on Medical Record.



KAISER PERMANENTE

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 10 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

G. PHYSICAL EXAM

1. General Principles.
 - a. Explain why and what you are going to do. The physical exam, like the history, can be a therapeutic modality for reassurance that the patient is OK, not just another invasion.
 - b. Take the time necessary to relax the patient. Acknowledge his/her anxiety.
 - c. Allow patient to feel as much control over his/her body as possible (choice of gown, examination position, etc.). Use gown and drapes to decrease feeling of vulnerability.
 - d. If acute traumatic assault, have nurse/rape advocate collect clothes per evidence collection.
 - e. Start at non-threatening areas of body first. Have patient assist exam--pull back labia, etc.
2. Pelvic Exam:
 - a. Draw picture:
 - Record Tanner Stage (I-V).
 - Description of hymen. Suggestions for inclusion would be symmetry, vascularity, smoothness, shape of hymenal ring, tags, scars, synechiae, mounds, clefts, knobs, injuries, labial adhesions, estrogenization effect, and diameter as measured horizontally, and vertically, in mm. (For Tanner Stages II and up, it is more appropriate to describe as: "Admits one finger with difficulty," or "easily admits one large adult speculum," etc.).
 - Similarly describe the posterior fourchette, vestibule, labia, anus, perineum, thighs, buttocks.
 - b. Record if there has been post-assault bathing, douching, or change of clothing.
 - c. Specimens collected as part of the patients medical treatment, such as laboratory tests, should be sent to the facility lab for processing. These tests will not be released without the proper authorization as outlined under the medical records policies. Blood alcohols are an exception and the Blood Alcohol policy must be followed.
3. Completion of Crime Lab Kit(s)
 - a. Every specimen must be clearly labeled with:
 - Item/Source
 - Patient's name and health record number
 - Date and time of collection.
 - Legible signature of collector



KAISER PERMANENTE

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 11 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

- b. **Inside the Sexual Assault Evidence Kit is an instruction sheet for hospital personnel. Follow the instruction sheet carefully.** Additional copies of the instruction sheet are included at the back of this policy. You may also need the small kits labeled "Additional" and "Standards" which have extra envelopes, swabs, and smears. Kits are available from State Crime Lab, 229-5017.
- c. **Listed below are the levels of evidence, the steps for completion, and the kits that are used.** Included in the steps are additional lab tests that may be performed at Kaiser Permanente labs as part of the patients medical treatment. "Standards" and "Additional Evidence Procedures" are optional depending on circumstances.

Sexual Assault Kit:

Necessary:

(Steps 1 & 2)

Collection of clothing (see: Evidence Collection, (page 8 & 9))

Necessary: (Step 3)

Use Woods Lamp to examine skin and hair for semen. Semen fluoresces dark green. If found:

- a. Swab fluorescent areas with 2 saline-moistened swabs.
- b. Use 1 swab to prepare a smear; then rapidly cool-air dry swab.
- c. Place this swab and smear in appropriately identified envelope, seal, initial, and label, for State Crime Lab.
- d. Take 1 swab immersed in 0.5 ml of saline for a wet mount with a miscellaneous lab slip for: "motile/non-motile sperm," to Kaiser hospital lab. Identify source of specimen on slip. (Physician may examine wet mount with Lab Tech if available.) Indicate on medical record that specimen was taken to Lab, time, and by whom.

NOTE: This specimen does not go to State Crime Lab. The results of the test should be indicated on the Evidence Collection form in the rape kit. The lab requisition with results will be placed in patient's medical record as per normal procedure. The State Crime Lab performs its own test for sperm on the slide sent to them. They use the Kaiser lab results for comparison.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 12 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

Necessary: (Step 4)

If post -pubertal:

- a. Comb pubic area. With patient sitting down or in stirrups. Place paper towel under buttocks, have patient or nurse comb pubic hair area beginning at Mons and moving downward toward the towel.
- b. Place comb, loose hairs, and any foreign debris in the envelope provided. Seal, initial, label for State Crime Lab.

**Necessary:
(Steps 5 & 6)**

Vaginal (Yield decreases greatly after 72 hours, but can be positive up to 7 days post assault):

- a. Obtain 5 swabs from posterior pool.
- b. Smear the vaginal fluid onto glass slide provided.
- c. Dry, label, initial, and place slide in the holder for State Crime Lab.
- d. Take 1 swab immersed in 0.5 ml of saline for a wet mount with a miscellaneous lab slip for: "motile/non-motile sperm," to Kaiser hospital lab. Identify source of specimen on slip. (Physician may examine wet mount with Lab Tech if available.) Indicate on medical record that specimen was taken to Lab, time, and by whom.

NOTE: This specimen does not go to State Crime Lab. The results of the test should be indicated on the Evidence Collection form in the rape kit. The lab requisition with results will be placed in patient's medical record as per normal procedure. The State Crime Lab performs its own test for sperm on the slide sent to them. They use the Kaiser lab results for comparison.

- e. Resaturate other 4 swabs (if possible), air-dry, and place in envelope provided. Seal, initial, label for State Crime Lab.

Necessary: (Step 7)

The Crime Lab Information Form located inside the kit is to be filled out by the requesting police agency. Assist the officer with any needed information for this form.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 13 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

Additional Evidence Kit

Additional: (Step 1)
Optional

If more than 6 hours post assault at time of exam or if patient has
douched or bathed, cervical swabs are more accurate than vaginal
swabs:

- a. Collect 2 cervical swabs
- b. Prepare a smear
- c. Dry both swabs and the smear
- d. Place smear in holder and place both swabs in
appropriately identified envelope. Seal, initial, and
label for State Crime Lab.

Additional: (Step 2)
Optional

If oral area involved (up to six hour post-assault):

- a. Swab mouth (gums, under tongue, and posterior pharynx) with 3
saline-moistened swabs.
- b. Using 2 of the swabs prepare a smear. Cool air-dry the smear;
label, initial, for State Crime Lab.
- c. Dry these 2 swabs, and place in appropriately identified
envelope. Seal, initial, and label for State Crime Lab.
- d. Place third swab in 0.5 ml of saline for wet mount
for motile/non-motile sperm exam. Send to Kaiser
Permanente lab, with label and initials.

Additional: (Step 3)
Optional

If the rectum is involved (up to 7 days post-assault):

- a. Obtain 3 saline-moistened cotton swabs from the rectum. This is
superior to washing, but if washings are absolutely necessary,
use maximum of 2 cc normal saline.
- b. Prepare a smear and label for State Crime Lab.
- c. Dry 2 swabs and place in appropriately identified
envelope, seal, initial, label for State Crime Lab.
- d. Place 1 swab in 0.5 ml of saline. Label, initial, and send
immediately to Kaiser Permanente lab for motile/non-motile
sperm exam.



KAISER PERMANENTE

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
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ROOM, BKMC & KSMC; CHIEFS OF
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DEPARTMENT OF PEDIATRICS

Additional: (Step 4)
Optional

If bite marks/bruises present:

- a. These should be photographed, with and without measuring devices next to the bite/bruise.
- b. Apply water-moistened swab to bites (or any reddened area if the history is compatible) to obtain assailant's saliva. The neck and breasts of females and the back shoulders of males may be additional sites and should be swabbed especially if reddening appears in these areas.
- c. Cool-air dry, initial, label and place in appropriately identified envelope; seal for the State Crime Lab.

Standards Evidence Kit

Only if requested by Law enforcement agency.

Standards: (Step 1)
Optional

Pull or comb 12 hairs from various areas on the head. Place in envelope provided, seal, initial and label for State Crime Lab.

Standards: (Step 2)
Optional

Pull 10-12 pubic hairs from various areas of the pubic region. Place in envelope provided, seal, initial and label for State Crime Lab.

Standards: (Step 3 & 4)
Optional

Saliva and blood for genetic markers: These may be obtained at a later date, if necessary, if patient has reached his/her limits of tolerance.

- a. Blood: In the state of Washington, send a purple-topped tube. In the state of Oregon, send a red-topped tube and purple topped tube (included in "Standards Kit"). Label and initial for State Crime Lab.
- b. Saliva: Saturate enclosed filter paper with patient's saliva and air dry. Do not touch with your fingers. Place in labeled envelope, seal, initial and label for State Crime Lab.

4. Medical exam Labs: (at Kaiser Permanente labs)

- a. Send labeled GC plates and Chlamydial cultures from involved body orifices. If history is uncertain include rectal and pharyngeal cultures.
- b. In acute assaults, these cultures are baselines, and need to be repeated in 5-7 days. In a chronic or distant-time- period assault, they may be the only cultures necessary.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

SUBJECT: NORTHWEST REGION PROTOCOL FOR
EVALUATION OF SEXUAL ABUSE AND
SEXUAL ASSAULTS

Number S-8

Issued 3/92

Page 15 of 16

Reviewed 11/92, 1/93, 1/94

Revised 11/92, 1/93, 1/94

Procedure Review Responsibility

COORDINATORS OF CAAC, EMERGENCY
ROOM, BKMC & KSMC; CHIEFS OF
EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

- c. If possible herpetic lesions: do herpes cultures/typing.
- d. If dysuria or discharge, send wet mount for trich/clue cells/KOH.
- e. Blood for baseline VDRL. (This may be omitted in acute assaults of pre-pubertal children.) This must be repeated in eight weeks.
- f. HIV studies only indicated in chronically abused children, where the perpetrator is high risk, (homosexual, an IV drug abuser, or known HIV positive)

H. PREGNANCY PROPHYLAXIS

1. Consider post-coital contraception:
 - a. If vaginal penetration occurred (within 24 hours ideally though up to 72 hours acceptable).
 - b. If the patient is menarcheal (though conception can occur before menarche).
 - c. If the patient is without contraception.
 - d. Risk assessment – as to mid cycle or not – is not warranted, and all rape victims should be offered pregnancy prophylaxis. Do baseline pregnancy test first. Such post-coital contraception is **not recommended** if there has been previous unprotected intercourse during this menstrual cycle, or if patient compliance with taking medication and follow-up is uncertain. The patient should be informed that taking estrogen could possibly result in an increased risk to the fetus if pregnancy occurs; however no such effects have ever been reported. Termination of pregnancy is also available as an option if the patient does not desire hormonal intervention.
 - e. Give Ovral 28: 2 tablets now, and 2 tablets in 12 hours. A less-desirable option is Ovcon 50: 2 tablets now and 2 tablets in 12 hours. Warn of GI side effects.
2. Sexually Transmitted Disease Prophylaxis. This is not given routinely, but is only indicated if there is high parental or patient anxiety, exposure to known disease or multiple assailants, probability of poor follow-up, or high-risk life style. Ideally, this should cover for Chlamydia also but this is difficult in children who cannot tolerate tetracycline. Standard gonorrhea treatment for age as indicated. (One dose oral Suprex is now approved for GC Tx, administration of which may be easier for patient to tolerate than IM Ceftriaxone).

I. DISCHARGE CARE

1. Discharge care occurs after CSD/police have established discharge plans.
 - a. Reinforce that patient is physically intact and not responsible for abuse/assault.
 - b. Reinforce availability of medical staff/social work and if problems or worries arise. Give phone numbers they may call for assistance.

KAISER PERMANENTE NORTHWEST REGION

Standard Protocols

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EMERGENCY MEDICINE, BKMC & KSMC;
DEPARTMENT OF PEDIATRICS

2. Follow-up Medical Care:

- a. **Children** seen for non-acute abuse will be instructed to call for a clinic appointment with regular pediatrician or family practitioner in one week. At that time, repeat GC cultures can be done. Eight weeks later, indicated serum and/or saliva genetic markers and VDRL may be drawn. Mention the availability of counseling or therapy, if social work has not already done so. CSD has a more complete list, but some of the other agencies for children include:

The Parry Center	234-9591
Lutheran Family Services	231-7480
CSD	731-3100
Elahan Center for Family Living	(Vancouver) 696-0383
Children's Home Society	(Vancouver) 695-1325

- b. **Adults with acute abuse** will be given a return clinic appointment with primary care provider in one week. At that time, repeat GC cultures can be done. Eight weeks later, as indicated, serum and/or saliva genetic markers and VDRL may be drawn. Mention the availability of counseling or therapy, if social work has not already done so.

J. HOSPITALIZED CHILDREN

1. If admitted with a diagnosis of sexual abuse:
 - a. Give private room.
 - b. If on non-pediatric service, consult Child Abuse Assessment Team or House pediatrician when admitted, so as to minimize the number of interviews and exams.
 - c. If on the Pediatric service involve Pediatric social worker (on the weekdays), or the on-call hospital Social Worker other times. Pediatric Social Worker should notify CAAC Coordinator of admission.
 - d. Assign one primary nurse. However, this nurse is for support only. Avoid repetitive interrogations of child/parents.
2. If a patient is admitted with other diagnoses, and a suspicion of abuse is raised by nursing staff or physician, or if history of abuse becomes evident during a hospital stay, notify the Child Abuse Assessment Team (or House) Pediatrician and Pediatric Social Worker, if a minor. If an adult, notify the hospital Social Worker and attending physician.



KAISER PERMANENTE

Additional Supplies That May be Needed For Collection of Evidence

1. Clean paper bags large enough to hold items of clothing, if clothing is pertinent to assault/abuse.
2. White paper for victim to stand on while undressing if clothing pertinent to assault/abuse.
3. Preprinted labels that may be affixed to containers holding evidence. These should include:
 - Source/Item
 - Patient's name and health record number
 - Date and time of collection
 - Legible signature of collector
4. White paper - if pubic combing necessary, to place under buttocks for collection of evidence.
5. Specimen tubes and saline for preparation of swabs for wet mount.

**Algorithm for MA1's, Appointment Clerks, PBX,
For Referral of Victims of Sexual Assault/Abuse**

Appointment clerks, MA-1's, and Operators will refer parents/patients who call in or present for care to a Triage/Advice Nurse for immediate evaluation at the following locations:

1. Monday-Friday 8 a.m. - 4:30 p.m.

- Longview/Kelso 8 a.m.- 8:30 p.m. (10 am. - 5:30 p.m. on Saturday) 206-636-2400
- Salem 8:00 a.m. - 9 p.m. (8:30 a.m. - 5 p.m. Saturday) Skyline 378-7850
 - a) Children - Age 14 and under – Advice Nurse at the Medical Office they are calling or presenting to for care
 - b) Adults or Children - Age 15 and older
Advice Nurse at the Medical Office where they are normally seen.

If they do not have a primary clinic then refer to:

Bess Kaiser Medical Center Triage Nurse, 285-9321, Ext. 4106

OR

Kaiser Sunnyside Medical Center Urgent Care Advice, 652-2880

2. After Medical Office Hours, Weekends and Holidays

- Longview/Kelso—10 a.m. - 5:30 p.m. on Saturday 206-636-2400
- Salem—8:30 a.m. - 5 p.m. Saturday Skyline 378-7850

All other phone calls should be referred to the: Regional Phone Advice RN

Medical Advice - Tie Line 731-6641

Pediatric Advice - Tie Line 731-6630

After 8 p.m. all calls to 731-6650

Patients (adults or children) who **PRESENT** to the Urgent Care Clinic or the Emergency Department at either BKMC or KSMC will be referred directly to the Triage RN.

County Guidelines for Treatment of Victims of Sexual Assault/Abuse

County: Clackamas

Date: 2/20/92

Contact: Sharon O'Shea

Title: Director of Victim Assistance

Phone: 655-8616

1. Q: What agency/office should be notified first when a victim presents for care and requests notification:
911? Sheriff/Police? RVA?
A: ***911 – Ask for Sheriff/Police***
Q: Is this the same for minors?
A: ***Yes***
RVA/Victim Assistance - 24 hour crisis number - when not reporting to police.
2. Q: Will the agency we notify then notify other agencies or persons as appropriate or should we?
EG., CSD, Rape Victim Advocate?
A: ***The police will unless family members, then CSD will.***
3. Q: Is there other information that you will need at time of initial notification other than what is listed here?
A: ***No***
 - Type of incident
 - Where incident occurred/Jurisdiction of where crime occurred
 - Time of incident
 - Victim's name
 - Age of victim
4. Does the county cover the cost of treatment for the victim? Is there a maximum amount? What is covered?
A: ***Forensic exam for evidence only - ORS. 147.375.***
5. Does the county provide for follow-up care or counseling for the victim/victims family?
A: ***No. Can apply for crime victim's compensation, which takes some time. They help fill out paperwork. Advocate is provided free of charge.***
6. If specimens are obtained using sexual assault evidence kit, who shall be responsible for taking evidence and transporting to the state crime lab? Will this be done at completion of exam so we will not have to be responsible for storing evidence?
A: ***Police take immediately if the police have been called.***
7. If the incident occurs on a weekend, holiday, or during other non-business hours does it alter any of the County's procedures?
A: ***No, but may be difficult contacting CSD***
No change for police procedure or Victim Assistance.

County Guidelines for Treatment of Victims of Sexual Assault/Abuse

County: Clark

Date: 2/10/92

Contact: Sgt. Rayburn

Title: Det. Supervisor

Phone: 699-2426

1. Q: What agency/office should be notified first when a victim presents for care and requests notification: 911? Sheriff/Police? RVA? Is this the same for minors?

A: **911**

In addition: minors under 16, Children's Protective Services - 206-696-6678

2. Q: Will the agency we notify then notify other agencies or persons as appropriate or should we? EG., CSD, Rape Victim Advocate?

A: ***They will notify. Someone will call or respond back to Kaiser as soon as possible. If no response:***

CPS (206) 696-6678

Advocacy Program - 737-6002

3. Q: Is there other information that you will need at time of initial notification other than what is listed here?

- Type of incident
- Where incident occurred
- Time of incident
- Victim's name
- Age of victim

A: ***Short synopsis and suspect if known.***

4. Q: Does the county cover the cost of treatment for the victim? Is there a maximum amount? What is covered?

A: ***Supply all rape kits. No costs for victims, the state covers the cost.***

5. Q: Does the county provide for follow-up care or counseling for the victim/victims family?

A: ***1. Social Services Liaison, Marleen Watkins, 737-6002***

2. Child Abuse Intervention Center - Lt. Mike Davidson, 737-6002, age 16 and under for violent sexual or physical abuse.

6. Q: If specimens are obtained using sexual assault evidence kit, who shall be responsible for taking evidence and transporting to the state crime lab? Will this be done at completion of exam so we will not have to be responsible for storing evidence?

A: ***Police take to crime lab when finished.***

7. If the incident occurs on a weekend, holiday, or during other non-business hours does it alter any of the County's procedures?

A: ***Adult - No***

Child - May have difficulty contacting CPS.

Advocacy Program hours are 8-5, M-F; may be able to contact through sheriff's office - 699-2211.

County Guidelines for Treatment of Victims of Sexual Assault/Abuse

County: Multnomah

Date: 2/10/92

Contact: Meredith Morrison

Title: Victim Advocate

Phone: 248-3222

1. Q: What agency/office should be notified first when a victim presents for care and requests notification:
911? Sheriff/Police? RVA? Is this the same for minors?
A: **911**
2. Q: Will the agency we notify then notify other agencies or persons as appropriate or should we?
EG., CSD, Rape Victim Advocate?
A: ***Ask them to respond back with a call to let you know if someone will be coming to interview victim and when.***
911 dispatcher usually sends a uniformed officer who then calls for a detective and advocate.
3. Q: Is there other information that you will need at time of initial notification other than what is listed here?
 - Type of incident
 - Where incident occurred
 - Time of incident
 - Victim's name
 - Age of victimA: **NO**
4. Q: Does the county cover the cost of treatment for the victim? Is there a maximum amount? What is covered?
A: ***If victim has no other resources or insurance, the county will pay up to \$175 for a medical exam. Victim's Assistance will not cover evidentiary exam.***
5. Q: Does the county provide for follow-up care or counseling for the victim/victims family?
A: ***We give referrals - STD, testing, counseling***
6. Q: If specimens are obtained using sexual assault evidence kit, who shall be responsible for taking evidence and transporting to the state crime lab? Will this be done at completion of exam so we will not have to be responsible for storing evidence?
A: ***Police are responsible - should take at completion of exam.***
7. Q: If the incident occurs on a weekend, holiday, or during other non-business hours does it alter any of the County's procedures?
A: **No**

County Guidelines for Treatment of Victims of Sexual Assault/Abuse

County: Washington

Date: 2/10/92

Contact: Aida Iranzo

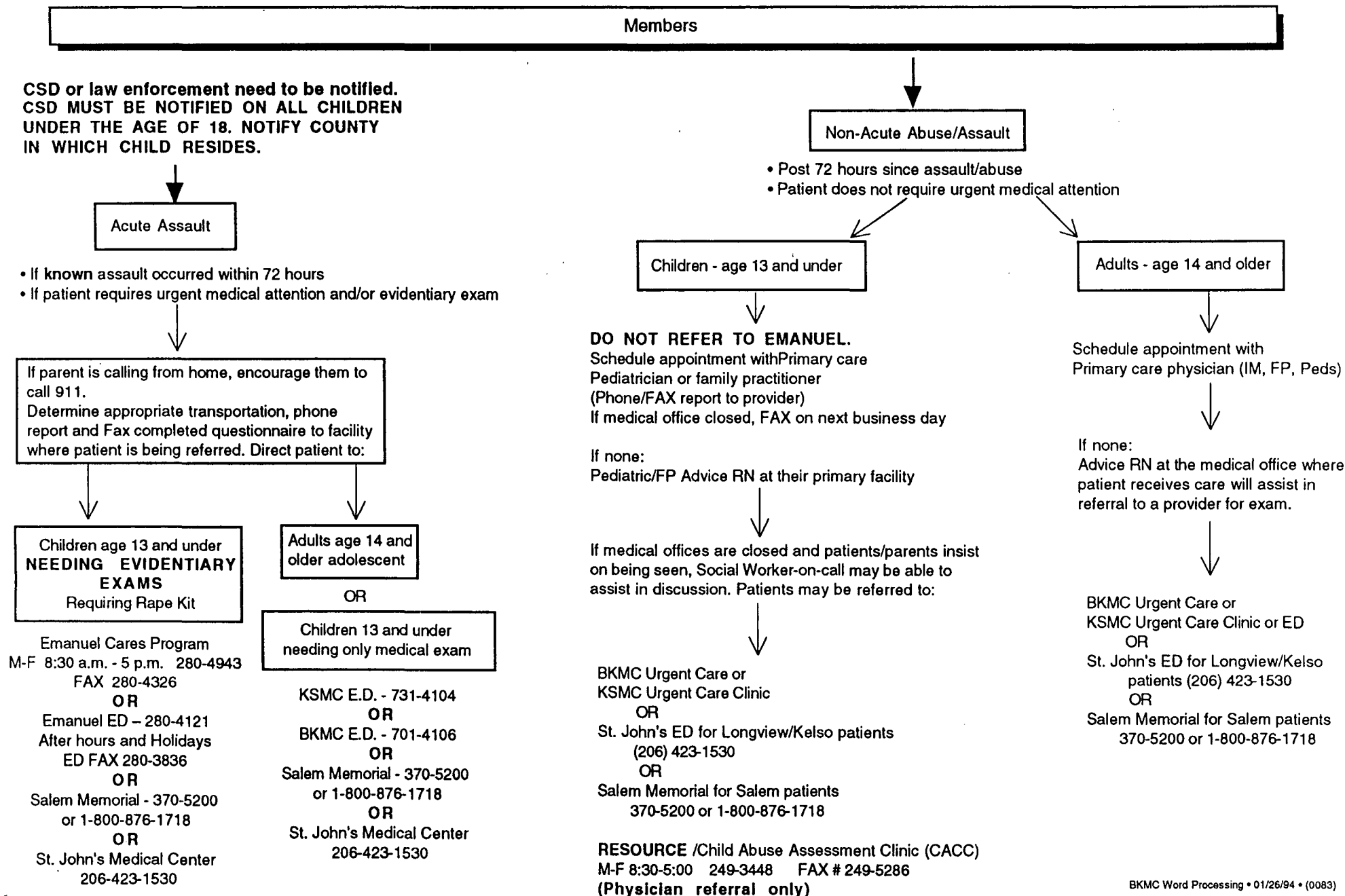
Title: Deputy DA - Washington Co.

Phone: 693-4520

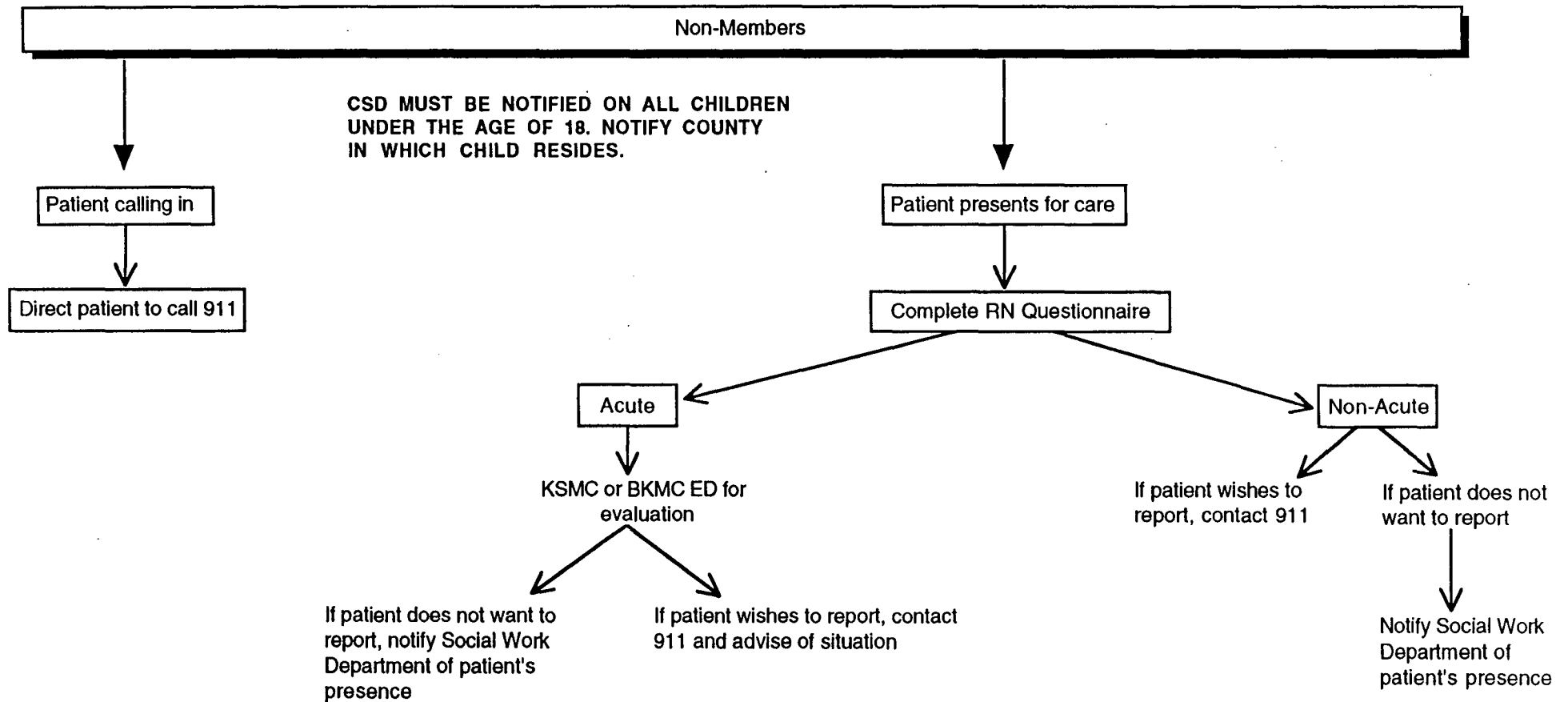
1. Q: What agency/office should be notified first when a victim presents for care and requests notification:
911? Sheriff/Police? RVA? Is this the same for minors?
A: *RVA and CSD if familial (648-8951)*
2. Q: Will the agency we notify then notify other agencies or persons as appropriate or should we?
EG., CSD, Rape Victim Advocate?
A: *Yes, they will make a determination as to who should be notified. Kaiser should always call CSD (648-8951) if a minor is involved.*
Aileen Spencer - Victim's Assistance Contact
Marilyn Oatfield - Rape Advocate (646-5311 or 235-5333)
3. Q: Is there other information that you will need at time of initial notification other than what is listed here?
 - Type of incident
 - Where incident occurred
 - Time of incident
 - Victim's name
 - Age of victimA: *All of the above plus history of injuries*
4. Q: Does the county cover the cost of treatment for the victim? Is there a maximum amount? What is covered?
A: *If police officer requests a rape kit exam, the exam using kit will be paid for, otherwise the victim may apply for assistance through the Crime Victim's Compensation Fund (takes quite awhile, \$100 deductible)*
5. Q: Does the county provide for follow-up care or counseling for the victim/victims family?
A: *Victim's Assistance does referrals. CSD also does referrals.*
6. Q: If specimens are obtained using sexual assault evidence kit, who shall be responsible for taking evidence and transporting to the state crime lab? Will this be done at completion of exam so we will not have to be responsible for storing evidence?
A: *Police officer will wait for evidentiary specimens.*
7. Q: If the incident occurs on a weekend, holiday, or during other non-business hours does it alter any of the County's procedures?
A: *Yes - Call 911.*

Algorithm for RN's Referral For Victims of Sexual Abuse And Sexual Assaults

1. Complete RN Evaluation Questionnaire to determine if acute or non-acute assault has occurred.
2. If acute, CALL 911 or Children's Services



Algorithm for RN's Referral For Victims of Sexual Abuse And Sexual Assaults



Physician, police/sheriff/CSD, Social Worker will discuss/decide which medical facility will provide medical evaluation and treatment.

Patient should not be referred out of facility prior to these discussions.



Kaiser Foundation Health Plan of the Northwest • Kaiser Foundation Hospitals

Initial RN Evaluation/Triage for Possible Victims of Child Sexual Abuse/Assault

Name _____

HR# _____

DOB _____

Age _____

☐ Yes ☐ No

Today's Date _____

Kaiser Member _____

A. Please PRINT when completing this form.

☐ Walk-in ☐ Regional Phone Advice

R.N. Completing Form: _____ Facility: _____ Time: _____

Name of Parent/Legal Guardian: _____

Address: _____

Home Phone: _____ Work Phone: _____

If no phone, message phone number where parent can be reached: _____

Name of person who lives at message number: _____

Name of person calling/bringing child if different than above: _____

Relationship to child: _____

1. Brief statement: Why do they believe child has been abused? Any statement/words child has said regarding abuse/assault: _____

2. Date of assault/abuse: _____ Time of assault/abuse: _____

3. Location where assault/abuse occurred: County: _____ State: _____

Street address/location of assault if known: _____

B. REFER TO EMANUEL FOR EVIDENTIARY EXAM ONLY IF THE FOLLOWING ARE PRESENT

Only children 13 years of age and younger, who have been acutely assaulted/abused within the previous 72 hours, with the presence of physical evidence to be collected by use of a rape kit, should be referred to Emanuel Hospital & Health Center for an evidentiary exam.

4. Has patient bathed: ☐ Yes ☐ No or changed clothing: ☐ Yes ☐ No since assault/abuse?

• Caregiver should be instructed not to bathe child or change clothing if they haven't already done so.

• Is there physical evidence or a high index of suspicion that any of the following body fluids are present for collection?

Semen ☐ No ☐ Yes (Where on child) _____

Saliva ☐ No ☐ Yes (Where on child) _____

Blood ☐ No ☐ Yes (Where on child) _____

Refer to Emanuel if semen or saliva or blood is present or suspected.

☐ If child referred to Emanuel ER, FAX copy to 280-3836.

Emanuel - CARES M-F 8:30 a.m. to 4:30 p.m. , Phone: 280-4943

C. DUTY TO REPORT SUSPECTED CHILD ABUSE

OR and WA statutes require any public or private official having reasonable cause to believe that any child with whom the official comes in contact has suffered abuse shall immediately report or cause a report to be made.

Report made to Children's Services Division ☐ No ☐ Yes _____

Report made to law enforcement ☐ No ☐ Yes _____

Report made by: _____

☐ Always FAX a copy to CAAC Coordinator, Tie Line 710/3580 or 249-5286 to ensure case follow-up.

Signature of R.N. _____

Date _____

CONTINUED ON REVERSE FOR ADDITIONAL ASSESSMENT INFORMATION



Kaiser Foundation Health Plan of the Northwest • Kaiser Foundation Hospitals

Initial RN Evaluation/Triage for Possible Victims of Child Sexual Abuse/Assault

Name _____

HR# _____

DOB _____

D. Date: _____ Assessment continued. Symptoms/concerns as reported by: _____

5. Physical signs/symptoms present?

Vaginal bleeding	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Time/date noticed _____
Vaginal discharge	<input type="checkbox"/> No	<input type="checkbox"/> Yes	If present, color _____ for how long _____
Vaginal pain	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Time/date c/o _____
Genital bruising	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
Rectal bleeding	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Time/date noticed _____
Urethral discharge	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
Rectal pain	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Time/date c/o _____

6. Concerning behaviors?

If yes, briefly describe/how long present:

Bedwetting or wetting pants	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Encopresis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Nightmares/fears	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Sexualized play/masturbation	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Other changes in behavior	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Signature of R.N. _____

Date _____

E. RN TRIAGE FOR KAISER MEDICAL EXAMINATION FOR SUSPECTED CHILD SEXUAL ABUSE

If a rape kit is not indicated, and the child needs only a physical examination and possible STD testing, the child should be examined at a Kaiser Permanente medical facility. Urgent medical symptoms may indicate need for same day examination. In the presence of nonacute symptoms/behaviors, assist in scheduling child for follow-up appointment at child's primary Kaiser Permanente medical office.

Please refer to algorithm to determine most appropriate locations for evaluation.

Name of RN/MD referring: _____

Location: _____ Tie Line/Ext.: _____

Date: _____ Time: _____

☐ **REFERRED TO EMANUEL**

Monday-Friday 8:30 am - 4:30 pm - contact Cares directly 280-4943.

Name of contact: _____

After hours/holidays - contact Emanuel ED Triage RN 280-4121.

☐ Copy of this 2 page report FAXed to Emanuel*

M-F Cares FAX 280-4326

After hours/holidays ED FAX 280-3836

☐ Notified 911 of referral patient to Emanuel (including location of alleged offense).

Date: _____ Time: _____

☐ If acute, Emergency Services Transfer Form completed.

☐ **REFERRED TO BK OR KSMC ED: (circle one) BK 701-4106 KSMC 731-4106**

☐ Copy FAXed to BK or KSMC* BK 701-6137 KSMC 731-2777

☐ 911 notified if age 14 and under OR if 15 and older and wants to report. Include location of alleged offense.

Date: _____ Time: _____

☐ **REFERRED TO OTHER: _____**

☐ Copy FAXed to* _____

(See Regional Phone Directory for number)

Date: _____ Time: _____

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR



Eileen Chase, M.S.N.
Clinical Nurse Specialist - Women's Health

Department NURSERY/NICU

Issued 1/88

Page 1 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

5055 N. Greeley Ave.

Portland, OR 97217-3591

503-735-2715

I. IDENTIFICATION OF SUBSTANCE ABUSING MOTHERS IN PRENATAL CLINICS, LABOR AND DELIVERY, AND NURSERY

A. All high risk women presenting in labor to Labor and Delivery should have a urine drug test.

B. HIGH RISK MOTHERS

1. Good history with direct questioning about drugs, starting in the prenatal clinics.
2. Poor, sporadic or no prenatal care.
3. Needle marks.
4. Previous history of substance abuse or participation in substance abuse program, or significant other with such a history.
5. Prostitution.
6. Unexpected premature labor: severe fetal distress--indicating intrauterine withdrawal.
7. IUGR
8. Abrupton
9. Congenital anomalies (including chromosomal)

C. Diagnosis

1. On mothers with any of the above factors, a urine screen **MUST** be obtained. If a patient refuses urine testing record this in the chart and refer to Nursery Social Worker and/or the Neonatologist if the suspicion is high.
2. If positive history and/or drug test, refer to Nursery Social Worker.
3. If there is a strong medical indication, our Kaiser Alcohol Drug Recovery Services can do **INPATIENT** consults, though they cannot themselves provide outpatient treatment programs for welfare patients (see pages 16-18).
4. Remember, prevention--a drug free pregnancy--is better than detection. However, immediate cessation of opiates may not be safe in pregnancy: sudden withdrawal may be harmful to the baby.

D. High Risk Infants

1. Symptoms
 - a. Seizures (up to four weeks postnatally)

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Department NURSERY/NICU

Issued 1/88

Page 2 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

-
- b. Hyper (activity, tone, acusia)
 - c. High pitched cry, rub marks on skin
 - d. Irritability, wakefulness, severe "colic" (one to four days for opiates, six to twelve days for phenobarb and valium, four to six weeks for cocaine)
 - e. Poor weight gain, poor suck
 - f. Diarrhea, vomiting
 - g. Excess sweating, tearing, nasal discharge, sneezing
 - h. Tachypnea
 - i. Dyspnea, tachycardia
 - j. Neonatal stroke or other vascular accidents (ileal atresia, etc.)
 - k. Fever
2. Since positive maternal urine test proves fetal exposure, it is preferred to infant test. We are in the process of educating CSD to this fact. Testing a baby's urine is: (a) hard to get (many excoriated, painful infant perineums result); (b) additional hospitalization is incurred awaiting results; (c) infants are frequently negative with known maternal drug use.
3. Do infant urine test if mother is in the above category and has not had a test within one week of delivery, and/or if infant has the above signs or symptoms and mother's test has not been done or will not be available prior to probable discharge. If mother's urine is negative but has been obtained without direct observation, some physicians may elect to do a screen on the baby also. Informed consent is advisable, but not mandatory.
- a. Some physicians may want to obtain parental consent. If parent refuses, document in chart and consider court approval if information is important to child's diagnosis or management.
 - b. Send 15 cc of urine (no soapy prep). Consecutive urines are okay and should preferably be the first voided. Label this "Perinatal Drug Abuse Screen." With present methods, false positivity is less than 1% if CONFIRMING tests are used.
 - c. Remember that a negative test does not indicate there was no prenatal exposure, nor does it rule out withdrawal syndrome.
 - d. Documentation may be helpful to:
 - 1) Predict type and timing of withdrawal syndromes, i.e., cocaine 4-6 weeks later;
 - 2) Help CSD treatment plan (but remember we report patients, not urine screens);
 - 3) Confront patient to help her get treatment.

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

Department NURSERY/NICU

Issued 1/88

Page 3 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

- e. Information can be shared discreetly with medical staff, but is confidential except if used in the first report of suspected child abuse/neglect.

II. MANAGEMENT OF INFANTS WITH PRENATAL SUBSTANCE ABUSE

- A. Infants with positive prenatal history, positive urine tests, or strong clinical suspicion of narcotic abuse shall remain a minimum of four days for observation, education, and Social Service disposition. Babies with mothers only using cocaine, crack, or marijuana may go home before these 4 days if all points of protocol have been completed.
- B. Obtain urine drug screen per Protocol I, D., 3.
- C. Assess infants by Finnegan's Abstinence Score Sheet every 4 hours until discharge, or until discontinued by a physician. It is to be noted that these scores fluctuate markedly from hour to hour. While Finnegan is more appropriate for a narcotic withdrawal, high scores may reflect cocaine EFFECT in the first week of life. Equally important is to document maternal/infant interactions in the chart.
- D. Enteric precautions until hepatitis B surface antigen (one day turnover) and AIDS screen (7-10 days turnover) are back. If hepatitis B surface antigen status cannot be obtained until over 24 hours of age, HBIG may be given if IV drug abuse likely. Hepatovax may be held until HB SAG status is known.
- E. Rooming in is to be encouraged unless medically unstable.
- F. Notify Nursery Social Worker (or on nights or weekends, notify the ER Social Worker). Please let them know about new cases, dispositions, and report any positive urine drug tests.
 - 1. All babies will be logged with CPS and also get CHN (Community Health Nurse) referral.
 - 2. Explain to parents that CSD logging must be filed now but action taken by CSD in the future depends on factors parents can control, i.e., keeping follow-up appointments, entering drug treatment, cooperation with CHN, future drug use, etc.
 - 3. Treatment program should be initiated in the hospital. Kaiser Alcohol and Drug Recovery Services consultation may be obtained even on welfare patients if it is "medically indicated." ADRS, however, cannot do long-term treatment, but can skillfully guide high risk drug abusers to help.
- G. One Pediatrician or Allied Health professional will be assigned to the mother and will do all daily discussions with her. The patient should not be transferred on Monday mornings, weekends, etc. If this is not possible, try to involve the family Pediatrician.

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

Department NURSERY/NICU

Issued 1/88

Page 4 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

-
- H. Give parents the Parent Letter, Signs of Withdrawal sheet, and How to Comfort Withdrawing Infant sheet. These are ideally given by the physician and should be done prior to the Social Work assessment.
 - I. Prepare early for disposition joint staffing conference with primary nurse, CHN nurse, mother and her significant other, Pediatrician, Social Service, and drug treatment counselor. Topics to include are hospital course, SIDS, CSD report, withdrawal symptoms early and late, substance abuse treatment plan, follow-up well baby visits, CHN visits, contraception.
 - J. If mother is on over 25 mg methadone per day or possibility of ongoing drug use is likely, breastfeeding is strongly discouraged. The baby should be fed frequently—babies in withdrawal may need 150-200 calories/kg/day to gain weight. Parents should be informed that even one time use of cocaine by breastfeeding mothers has resulted in infant seizures and even a death. It is not clear, however, whether breastfeeding in HIV antibody positive mothers should be contraindicated or should be encouraged. We discourage breastfeeding in HIV positive mothers.
 - K. If withdrawal score is less than 13, use pacification and TLC techniques—holding, cuddling, swathing, dark room, minimal noise, small frequent feeds, pacifier.
 - 1. Drug treatment of opiate withdrawal is to be discouraged (Chasnoff in his large series over a 2-year period of time did not treat one infant with drugs).
 - a. If score consistently more than 13 for 6 hours, CONSIDER Paragoric 0.03 cc/kg every 3 hours 15 minutes before feeds.
 - b. Effect is seen by one to two hours after second dose.
 - c. Increase to 0.06 cc/kilo (then to 0.1/kilo/dose) if no improvement in score.
 - d. The goal is not to have a calm, sedated baby but to avoid seizures, weight loss, and diarrhea.
 - e. When score consistently is less than 10 (usually 3-7 days after treatment starts), taper Paragoric every 3 hours dose by 0.01 cc/kg each day. One to three weeks is usually required.
 - f. Tachypnea and tachycardia often persist even with treatment.
 - g. Do not send home on any drug unless to an ideal foster home. Even foster parents are reluctant to taper medications because they then have to see increased withdrawal symptoms in their charges.
 - 2. If seizures, use phenobarb 20 mg/kg IM as a loading dose, then 5 mg/kg/day p.o. Treatment is wise for two months.

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

Department NURSERY/NICU

Issued 1/88

Page 5 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

3. For cocaine withdrawal, oral phenobarbital is probably better. For a withdrawal score consistently more than 13, use 3 mg/kg/day; for score over 15 use 4 mg/kg/day; for score over 19 use 5-6 mg/kg/day. These are best given every 4 hours orally. Taper by 0.5 mg/kg/day as tolerated after the score is less than 10.

L. Schedule return visits in Pediatrics for 2-5 days.

M. Send copy of Social Service summary to the OPD physician and, when indicated, to CSD (this letter is ideally signed by the Nursery physician before sending).

III. PARENT LETTER

Dear Parent,

A baby who is exposed to drugs (including alcohol) while growing in your womb is born with a greater risk of having these problems:

- Drug withdrawal
- Birth defects
- Exposure to hepatitis or AIDS
- Sudden Infant Death Syndrome (SIDS)

To give your baby better care, the doctors, nurses, and the Social Worker in the newborn nursery here at Kaiser Permanente have put together a care plan to meet your baby's special needs.

Your baby will need to stay in the hospital for at least 96 hours (4 days). We need to watch your baby for withdrawal symptoms and help your baby if those symptoms happen.

Withdrawal symptoms usually are seen by the second to the fourth day of life, though some symptoms may be seen up to six (6) weeks after birth.

A urine sample from you and your baby is sent to the laboratory for a drug screen. The reason for the urine screen is to identify substances in the baby's system in order to manage his/her care better. Everyone in the nursery will watch your baby closely for symptoms of withdrawal using the withdrawal score sheet. This score sheet helps the doctor decide when your baby may need medication to ease the withdrawal effects.

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Department NURSERY/NICU

Issued 1/88

Page 6 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

Attached to this letter is a list of the most common signs of withdrawal and some suggestions on ways to comfort a drug-withdrawing infant (see pages 3 and 4). We start doing some of these comfort measures while your baby is in the nursery. Wrapping your infant securely in a soft blanket and holding him/her a lot makes a difference. Feeding more often offers extra calories because your baby has higher energy needs. Gentle and tender loving care is the most important part of therapy for these babies who are often tense and irritable, more so than other babies. We want to help you to learn ways to comfort your baby in order for you to make a difference in how your baby gets through this difficult period.

It is important for you to know that exposing your baby to drugs while in your womb, particularly narcotics and possibly cocaine, has placed your infant at a greater risk for Sudden Infant Death Syndrome (SIDS). Doctors do not know exactly what the chances are. One way of lowering these chances is to avoid cigarette smoking. We want you to know what YOU can do to make a safer environment for your baby.

You will meet a Medical Social Worker who will talk with you about your history and about what drug and alcohol treatment programs can offer you if you choose to get some help. An Alcohol and Drug Recovery Services counselor will probably visit you in the hospital. We understand drug use or addiction is one of the most difficult and painful problems people face today. We hope you will consider this decision carefully.

The Social Worker will talk with you about who in your community can truly be a help to you in being the parent you want to be for your baby.

She will contact a Community Health Nurse to make discharging your baby from the hospital easier. The Community Health Nurse will visit you and your baby at home and answer your questions about your infant.

Once your baby is stable, the health team (doctor, nurse, Community Health Nurse, Social Worker) will meet with you to talk about discharge plans so that you and your baby can receive follow-up care when you leave the hospital.

Sincerely,

The Health Care Team

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

Department NURSERY/NICU

Issued 1/88

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Page 7 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

SIGNS OF NEONATAL DRUG WITHDRAWAL

- W Wakefulness
- I Irritability, severe colic
- T Trembling, temperature problems
- H Hyperactivity, high-pitched persistent cry, painful sensitiveness to sound, exaggeration of reflexes, increased muscle tone

- D Diarrhea, sweating, disorganized suck, difficulty comforting
- R Rub marks, rapid or difficult breathing, runny nose
- A Apneic attacks (forgets or stops breathing)
- W Weight loss or failure to gain weight
- A Arterial closure (stroke, seizures)
- L Lacrimation (tearing)

WAYS TO COMFORT A DRUG-WITHDRAWING BABY

1. Wrap your baby in a soft blanket (to help them feel secure).
2. Keep the lights dim (to increase stimulation).
3. Drape the bed with a blanket/sheet (decrease stimulation).
4. Keep the noise level low (decrease stimulation).
5. Play soft, "soothing" music (decrease stimulation, to increase relaxation).
6. Hold your baby frequently (to offer security).
7. Feed your infant frequently (to ease abdominal pain, to give extra calories).
8. Use a pacifier (to satisfy the need to suck).
9. Use unstarched, soft blankets/sheets to cover the bed (to prevent scrapes and rub marks).
10. Hold your baby firmly when he/she is held (to offer security).
11. Rock gently (to soothe).
12. Speak softly (to soothe/relax).
13. Gently massage your baby's back/arms/legs (to help relax).
14. Avoid bouncing/rapid patting (too much stimulation).

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Department NURSERY/NICU

Issued 1/88

Page 8 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

15. Place your baby on his/her stomach on a beachball and rock gently (to ease abdominal pain).
16. Hold your baby with his/her stomach on your shoulder (to ease abdominal pain).
17. Use a Snuggly or front pack to secure your baby to you and to offer comfort.
18. If our baby is on medication, give the medication on time.
19. Plan for child care so that you can have some break or relief from the extra energy you are giving to your baby. Plan rest for yourself.
20. STAY CALM!! Your baby will sense if you are tense, angry, or upset and may become worse.
21. ASK FOR HELP WHEN YOU NEED IT!!!

SOME SUBTLE SIGNS THAT YOUR BABY MAY BE OVER-STIMULATED:

Avoiding eye contact, becoming tense, sucking on hands/fingers, frowning, grimacing, yawning.

BESS KAISER MEDICAL CENTER

IV. SOCIAL SERVICE SUMMARY/LETTER

TO:
FROM:

DATE:

This is a letter of referral on baby _____ born
at _____, to a _____ year old mother whose name is _____.
This mother received adequate/inadequate/no prenatal care at _____
(facility). By history, this mother used the following substances during her pregnancy:

SUBSTANCE	FREQUENCY
Alcohol	_____
Amphetamines	_____
Cocaine	_____
Heroin	_____
Marijuana	_____
Methadone	_____
PCP (angel dust)	_____

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

Department NURSERY/NICU

Issued 1/88

Page 9 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Other _____

The infant's urine was positive/negative for the following drug(s): _____

The infant has shown the following signs and symptoms which we attribute to the effects of prenatal drugs:

Placental abruption

Small for gestational age (undergrown)

Congenital deformities

Symptoms of withdrawal

Withdrawal requiring treatment with _____

Unexpected fetal distress

Unexpected premature onset of labor

Other: _____

Other high risk factors include: gonorrhea, syphilis, AIDS, hepatitis, hepatitis carrier status

History of drug use for _____ years

Drug treatment: none/refusal/leaving

Unsuccessful drug treatment _____

Other persons in the home using drugs

Lack of support persons

Unplanned pregnancy, attempted abortion, adoption

Previous Children's Services Division involvement

Previous termination of parental rights

Previous involvement with law enforcement

Homeless or unstable living conditions

History of drug sales or prostitution

Incomplete/inadequate education; illiterate

Parental indifference to SIDS in infant

Parental failure to cooperate with medical staff

Parent/infant interaction difficulties

a. Negative comments about baby

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

Department NURSERY/NICU

Issued 1/88

Page 10 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

- b. Overt anger towards infant
- c. Unwillingness to hold, name, feed baby
- d. Avoids eye contact or cuddling baby
- e. Feeds mechanically, bottle props, inadequate amounts
- f. Wants early or AMA discharge of infant
- g. Does not visit or phone about infant if baby must remain hospitalized

One published study has demonstrated that children raised by alcohol or drug addicted parents have a 40% risk of abuse or neglect.

We believe that this infant requires a particularly stable home environment and the parent(s) may have difficulty providing this. The baby may be at high risk for child abuse and neglect. Please call the Nursery and/or the Social Worker at the hospital if you have any questions.

The Neonatal Health Care Team

V. SUBSTANCE ABUSE CHECK LIST

INFANT'S CHART

Nursery

- _____ Urine for drug test obtained and sent to Lab.
- _____ Urine test refused, refusal recorded in chart and referral to Social Work made.
- _____ Referral to Social Work made.
- _____ Symptoms of withdrawal observed and documented.
- _____ Finnegan's Abstinence Score Sheet.
- _____ Breastfeeding (yes or no).
- _____ Pediatrician has talked with parent(s).
- _____ Substance Abuse Packet given to parent.
- _____ HBsAG status.
- _____ HIV status.

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Department NURSERY/NICU

Issued 1/88

Page 11 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

- _____ HBIG or Hepatovax given.
- _____ Primary OPD physician assigned.
- _____ CSD referral made.
- _____ CHN referral made.
- _____ Appointment given for 2-5 days.
- _____ Discharge planning complete.
- _____ Summary letter sent to OPD Pediatrician.
- _____ Summary letter sent to CSD.

This is not a permanent part of the medical record.

ALCOHOL DRUG RECOVERY SERVICES SUBSTANCE ABUSE IN PREGNANCY PROTOCOL

A. New Mothers Identified as Requiring a Consult by ADRS

1. Consult will be initiated by the Social Work Department as soon as patient is identified. Social Worker will inform patient of the consult and request patient to have husband or significant other, if possible, present at the consult.
2. Notify ADRS counselor when patient is able to be seen.
3. ADRS counselor will be available at KSMC on Mondays and Thursdays from 9 a.m. until 11 a.m. for consultations, staffings and inservices. ADRS counselor will be available at BKMC on Mondays and Thursdays from 1:30 p.m. to 3:30 p.m.
4. Mothers discharged from the hospital before ADRS counselor can be available for consultation will be asked to return to the hospital by hospital personnel during consultation time.
5. ADRS counselor will interview patient for one-half hour to one hour assessment and results will be charted in the inpatient medical chart.
6. ADRS counselor will have a legal authorization form signed by patient to release alcohol/drug treatment information to Children's Services Division at the time of the consultation.
7. ADRS counselor will initiate an ADRS file and chart inpatient consultation for all patients except welfare patients.

BESS KAISER MEDICAL CENTER/AREA

Department Protocols

SUBJECT: SUBSTANCE ABUSE IN PREGNANCY,
PROTOCOL FOR

Department NURSERY/NICU

Issued 1/88

Page 12 of 12

Reviewed 10/88, 10/89, 10/90, 3/91, 3/92

Revised 10/90, 3/92

Review Responsibility

COORDINATOR NURSERY/NICU;
COORDINATOR THIRD FLOOR;
COORDINATOR LABOR AND DELIVERY

B. New Mothers Identified as Chemically Dependent

1. Since ADRS is unable to provide treatment services to welfare patients, they will be seen for an assessment and referred to appropriate services.
2. Kaiser members will be assessed and referred to ADRS for an intake appointment or other appropriate outside agency.
3. If patient refuses an appointment, DNAs a subsequent appointment at ADRS, or enters treatment at ADRS, the hospital Social Worker will be notified.
4. The hospital Social Worker will notify CSD, if appropriate, when the patient fails to follow through with treatment recommendations.
5. The ADRS counselor will make a "second chance" follow-up telephone contact to patient to offer treatment.
6. Once patient has kept an appointment at our clinic, we will assume responsibility for CSD contacts.
7. ADRS counselor will track patient through treatment for research purposes.

[illegible]

Daily average score _____

SIGNS AND SYMPTOMS		SCORE	AGE IN HOURS																									
High-pitched cry	2																											
Continuous high-pitched cry	3																											
Sleeps less than 1 hour after feeding	3																											
Sleeps less than 2 hours after feeding	2																											
Sleeps less than 3 hours after feeding	1																											
Hyperactive Moro Reflex	2																											
Markedly hyperactive Moro Reflex	3																											
Mild tremors when disturbed	1																											
Marked tremors when disturbed	2																											
Mild tremors when undisturbed	3																											
Marked tremors when undisturbed	4																											
Increased muscle tone	2																											
Generalized convulsion	5																											
Frantic sucking of fists	1																											
Poor feeding	2																											
Regurgitation	2																											
Projectile vomiting	3																											
Loose stools	2																											
Watery stools	3																											
Dehydration	2																											
Frequent yawning	1																											
Sneezing	1																											
Nasal stuffiness	1																											
Sweating	1																											
Mottling	1																											
Fever - less than 101°	1																											
Fever - greater than 101°	2																											
Respiratory rate over 60/min	1																											
Respiratory rate >60 with retractions	1																											
Excoriation of nose	1																											
Excoriation of knees	1																											
Excoriation of toes	1																											

**OREGON HEALTH SCIENCES UNIVERSITY CHILD ABUSE AND NEGLECT
POLICIES & PROCEDURES**

Suspected Child Abuse and Neglect:

Oregon State Law (ORS 418.740 to 418.775) requires that any public or private official including physicians (including interns and residents), registered nurses, licensed practical nurses, psychologists, clergy and social workers, among others are all responsible for immediately reporting SUSPECTED child abuse to a law enforcement agency or Children's Services Division. The 5 reportable areas of child abuse are: 1) Physical abuse (drug exposed/affected infants), 2) Neglect, 3) Emotional abuse (mental injury or emotional maltreatment), 4) Sexual abuse and exploitation, and 5) Threat of Harm.

In cases of SEVERE child abuse, including severe physical abuse, head injuries, broken bones, sexual assault, and burns, 9-1-1 **MUST** be called. The case should be identified as serious child abuse.

Drug affected/exposed infants:

Any infant born at OHSU, or any mother who delivers at OHSU, who 1) tests positive for illegal drugs or alcohol, or 2) who demonstrates drug withdrawal/or drug affected symptoms **MUST** be reported to CSD. Where the social situation is highly suggestive of drug use, refer to OHSU Drug Policy.

IF YOU ENCOUNTER A CASE OF SUSPECTED CHILD ABUSE AND NEGLECT YOU MUST DO THE FOLLOWING:

1. Immediately call the Multnomah County HOTLINE - 238-7555 or CSD in the county the child resides in. (see Appendix A for surrounding County phone numbers). You will need to provide the full names of the child and parents, their address and the child's birthdate.
2. Contact a member of the OHSU Rosenfeld Center for the Study and Treatment of Child Abuse and Neglect.

	<u>beeper</u>	<u>office #</u>	<u>coverage area</u>
Mary Steinberg, M.D.	1403	7300	Pediatrics
Vard Miller, MSW	1450	4382	Peds OPC
Wendy Palmrose, MSW	0130	8547	14A/PICU
Sherrienne Okawa, MSW	0116	4489	PICU/13A/BMTU
Jennifer Talney, MSW	0120	8691	MBU/Women's Cl
Judy Schwarz, MSW, LCSW	0258	5473	MBU/Women's Cl
Lirenda Haak, MSW	1103	8546	INC/NICU
Jo St. Clair	0191	8591	FP
Laurie Burke, MSW, ACSW	1645	5375	ER
Jan Ryan, MSW	1321	5508	Float

After hours please call the operator and ask for the "On-Call" Social Worker to be paged

Adequate Consultation

The Oregon Health Sciences University Rosenfeld Center (494-7300) and/or a designated social worker **MUST** be notified whenever a case of possible abuse or neglect is admitted to the hospital or seen in the outpatient clinics or emergency room. This includes drug-affected infants born here. The Rosenfeld Center is available for consultation or assistance with any case of suspected abuse, including complex or psychosocial failure to thrive, drug affected infants, medical neglect or sexual abuse.

Other consultations, such as neurosurgery, orthopedics, psychiatry, medical psychology, pediatric surgery, should be obtained as is appropriate for the individual case. Any infant admitted with CNS dysfunction or injury should have a formal ophthalmologic evaluation.

MEDICAL ASSESSMENT OF SUSPECTED CHILD ABUSE AND NEGLECT

History

A hallmark feature of child abuse is an injury or physical condition that does not fit the explanation offered. An accurate history of illness or injuries in cases of child abuse and neglect may be difficult to elicit, as there may be defensive or deceptive explanations for a child's condition. Document verbatim the caretakers statements. If possible, obtain a history from the child. Discrepancies or a changing of explanations may be a valuable clue that abuse has occurred.

If the child is brought in by a social service agency or law enforcement, a very minimal history may be available. It is always important to obtain past medical history, and in these situations, a review of the child's medical records may be the sole source of information. Make note of prior illnesses and injuries, immunization status, emergency room visits and clinic visits. Compile a growth chart.

Physical Examination

Always obtain accurate measurements of height, weight and head circumference. If possible, ascertain the child's developmental level. A complete examination is indicated, including assessment of the teeth, oropharynx, hair, eyes, skeletal tissues, genitalia, neurologic status, and skin. A skin map should be used to document placement and extent of bruising, scars or other dermal findings. The color, size, shape, location and clarity of margins of findings such as bruises or bite marks should be carefully recorded. The Rosenfeld Center has a 35mm camera available for photo documentation of injuries, or contact Medical Photography (4-8040) to assist you with photographing of injuries.

Laboratory Work and X-rays

If bruising is present, obtain coagulation studies, including CBC, platelets, PT and PTT.

A skeletal survey is of value in infants and children (generally those <2yrs.) who are unable or unwilling to localize pain. In older children, use of x-rays should be determined by the presence of deformity, swelling, pain or a particular historic event. A bone scan should be considered in situations where there is a possibility of recent or subtle fractures, particularly in very young infants.

In cases of complex or psychosocial failure to thrive, the history and physical exam are the most useful tools in determining the etiology of the growth failure. A minimum of blood tests and x-rays should be done on these babies. If hospitalized, clearly document the infant for child's growth response and behavior around feeding. Consider consultation or referral to the multi-disciplinary "Feeding Clinic".

Sexual Abuse

Cases of sexual abuse seem to arouse anxiety and fear on everyone's part whenever and wherever they are encountered. These anxieties can be allayed by approaching the evaluation in a systematic manner. Arrange for non-emergent cases to be seen by appointment, not as Emergency Room or walk-in patients. Cases of acute sexual assault in which the alleged incident has occurred within the last 72 hours must be seen immediately. Any child who has been allegedly assaulted in Multnomah County should be referred to the Emanuel Hospital Emergency Room.

First, obtain a careful history of the allegations or concerns, as well as a thorough past medical history. Document all statements made by caretakers, child and examiner. Do not ask "leading questions".

Perform a complete physical examination, including growth parameters, developmental level, pubertal status, and emotional state. Internal exams (i.e, pelvic exam with speculum or vaginoscopy) should be limited in pre-pubertal girls to those who present with vaginal bleeding, recent violent assault with penetration, retained foreign body, or persistent vaginal discharge. These children usually need to be sedated or given general anesthesia in order to accomplish an internal examination. (The Department of Obstetrics and Gynecology has been extremely helpful and available for cases of such nature.) In general an assessment of the external genitalia, including labia majora, labia minora, clitoris, urethra, vestibule, vaginal orifice (horizontal and vertical width in mm), hymenal tissue, posterior fourchette and anus is sufficient.

Standard cultures for bacteria as well as a culture (NOT Direct Fluorescent Antibody) for chlamydia should be done on all victims. A wet prep may reveal yeast, trichomonas or clue cells. The mouth, vagina and anus all require culturing. A blood test for syphilis

should be routinely obtained. Screening for HIV should be done based on the profile of the victim, assailant, and nature of the abuse.

Keep in mind that each child may react differently to the genital exam, and may completely reject attempts to obtain cultures. It is **UNACCEPTABLE** to forcibly restrain these children who in many cases have already been victimized. An exam under anesthesia or with sedation, or even scheduling frequent visits in an attempt to reassure the child is preferable.

Analysis and Impression

State the diagnosis clearly and simply. Address the probability that injuries occurred as explained, and state the reasons any injuries or physical condition would be consistent with non-accidental injuries.

In many cases of sexual molestation, there is no physical evidence; use caution in eliminating the possibility of molestation based on a normal exam.

Obtaining a Court or Protective Custody Hold

Medical decisions (such as the need for hospitalization, obtaining various tests, or consults) rest entirely with the health care provider, **NOT** Children's Services Division or Law Enforcement Agencies. These agencies can be of assistance in ensuring the temporary safety of a child. To obtain a "court hold" on a child who resides in Multnomah County call the Juvenile Court at 248-3460. (See Appendix B for surrounding counties). In a crisis situation a 9-1-1 Officer can be called to place a "protective custody hold" on a child.

Transfer Cases

As a tertiary care center, OHSU sees children from throughout the State and Pacific Northwest. If a victim of child abuse and neglect arrives on transfer at OHSU for care, it is the responsibility of the primary health care provider to ensure a report to authorities in the child's county of resident has been made. The Rosenfeld Center staff can provide assistance with this process.

S.C.A.N. (Suspected Child Abuse and Neglect) Team Meetings

Health care providers frequently encounter problematic cases involving issues of child welfare. The Rosenfeld Center S.C.A.N. Team meets every other week, on Wednesday from 12noon - 1:00pm in 14B-62, and provides a forum for reviewing complex, difficult cases. Any OHSU clinic or health care provider is encouraged to use this resource for assistance with decision making in difficult situations.

Teaching Activities:

Basic lectures on child abuse and neglect and sexual abuse are given every 3 months as part of the Child Health Curriculum. These lectures are open to the OHSU community. The S.C.A.N. meeting on Wednesdays also provide an excellent opportunity to learn about the dynamics of child abuse and neglect.

Review of Policy and Procedures

A mandatory review of the University's Child Abuse and Neglect Procedures and Policy will occur annually. Review will include an update of the policy and procedures and distribution to all departments providing health care to children.

APPENDIX A

To Make A Child Abuse Report:

Multnomah County 238-7555 - Child Protective Services, 24 hrs/day
or 911

Washington County 648-8951 - Children's Services Division, days 8-5
or 648-8731 - Washington County Sheriff, days 8-5
648-8680 or 911 - Washington County - evenings,
weekends, holidays

Clackamas County 653-3140 - Children's Services Division, days 8-5
or 655-8211 - Clackamas County Sheriff 24 hrs/day
or 238-7555 - HOTLINE - after hours/weekend/holiday

Clark County, Washington 1-206-696-6678 - Protective Services
24 hrs/day

All other areas - Call authorities in Multnomah County

APPENDIX B

To obtain temporary legal custody of a child whose parents threaten to remove him/her from the hospital, call authorities in the county in which the child resides:

Multnomah County	days	248-3460 - Juvenile Court
	nights	248-3489 - Juvenile Detention
	or	911

Washington County	days	648-8951 - Children's Services Division
	nights	648-8805 - Juvenile Detention
	weekend/	648-8680 - Washington Co. Sheriff
	holiday	

Clackamas County	days	655-8342 - Juvenile Court
	nights	655-8211 - Sheriff

Clark County, Washington	1-206-696-6678 - Protective Services 24 hr/day
--------------------------	---

All other areas - Call authorities in Multnomah County.

June 28, 1994

MEMORANDUM

TO: Emmy, CARES Program

FROM: Christine Lolich, R.N.
Emergency Department

RE: Sexual assault - pediatrics policy reporting violence
or abuse to police

I have reviewed both policies. I have copied our updated sexual assault policy, which is really the same as the old one, but has slight revisions since implementing in 1990. There is also an appendix which I do not see on your old copy. Looks good to me. Jan may want some changes. The policy for reporting looks good, no changes needed.

These policies are correct and we will be able to continue using them for the next few years, unless we choose to change the age of child sexual assault or add more for ED or CARES. Until that time we can share with the other agencies we work with.

Thank you.

Emanuel Hospital & Health Center

A Lutheran-Affiliated Center of Caring & Excellence



Policy & Procedure

POLICY NUMBER: N700-3210/3910-001-3

EFFECTIVE DATE: _____

LAST REVIEW DATE: 8/89

LAST REVISION DATE: 5/92

NEXT REVIEW DATE: _____

Virginia M Posey
Nurse Manager

Jim Jager
Director

SUBJECT: REPORTING OF VICTIMS OF VIOLENCE OR ABUSE TO POLICE

POLICY:

Patients who appear or are suspected to be victims of violence shall be reported to the appropriate law enforcement agency. Personnel shall notify such agencies by calling 911, except in the case of child neglect/abuse, where there is no immediate danger to patient be called to Child Protective Service. 911 cases include, but are not limited to:

1. All motor vehicle accidents occurring on city streets with injuries involved if the police were not at or called to the scene.
2. All wounds resulting from acts of violence with a weapon such as a knife or gun.
3. All DOA's resulting from other than natural causes.
4. All cases of suspected abuse - child or elderly.
5. All cases of suspected sexual assault - child or adult.

PROCEDURE

POINTS OF EMPHASIS

1. When calling to report give the following information if available:
 - a. Names & addresses of the child & his/her parents or other persons responsible for his/her care.
 - b. Patient's age.
 - c. Nature & extent of the problem.
 - d. Any other information helpful in establishing cause & identity of perpetrator.

SUBJECT: REPORTING OF VICTIMS OF VIOLENCE OR ABUSE TO POLICE

2. Admit to hospital if further evaluation is needed and/or family is not cooperative. In danger of eminent further injury or being removed from the hospital by suspected abuser. Police to take report in ED. Security may be contacted to assist with problems regarding limitation, restriction, or removal of visitors.
3. In the case of child sexual assault or abuse:
 - a. Contact the CARES program for physician consult regarding any patient needing admission or has been admitted to the hospital. The CARES MD will consult only; DO NOT admit patient under the CARES MD's name.
 - b. Child Abuse Response & Evaluation Services (CARES) is available for follow-up as appropriate.
 - c. Emergency Department nurse saves patient registration form of all suspected or rule out child abuse/sexual abuse. Give to ED person assigned for Quality Assurance.
 - d. Appropriate follow-up reporting will be handled as possible through the Suspected Child Abuse Network (SCAN) team.
 - e. Document all phone calls, arrivals, & names of investigative personnel. On ED Treatment Record. See attached example.
 - f. Refer to policy "Children's Services Division Investigative Cases", when child is admitted to the hospital. Found in Pediatric Nursing manual.
4. Indicators of a child or elder's potential need for protection:
 - a. Physical abuse
 - 1) Unexplained bruises (in various stages of healing), welts, human bite marks, bald spots.
 - 2) Unexplained burns, especially cigarette burns or immersion burns (glove like).
 - 3) Unexplained fractures, lacerations or abrasions.

SUBJECT: REPORTING OF VICTIMS OF VIOLENCE OR ABUSE TO POLICE

4.b. Physical neglect

- 1) Abandonment
- 2) Unattended medical needs
- 3) Consistent lack of supervision
- 4) Consistent hunger, inappropriate dress, poor hygiene.
- 5) Lice, distended stomach, emaciated

c. Sexual abuse

- 1) Torn, stained or bloody underclothing
- 2) Pain or itching in genital area
- 3) Difficulty walking or sitting
- 4) Bruises or bleeding in external genitalia
- 5) Venereal disease
- 6) Frequent urinary or yeast infections

REFERENCES

Child Abuse Reporting Law, ORS 418.740 to 418.775.

Children's Services Division, Department of Human Resources, State of Oregon (1986). Child Abuse and Neglect Statistics, pp. 5-7.

Bays, Dr. Jan. Director of CARES Unit, Head of SCAN Team, Emanuel Hospital & Health Center.

Griswold, Judy. Supervisor, Child Abuse Hot Line..

Lolich, Christine. Staff RN, Emergency Department. SCAN Team member, ED Child Abuse resource person, Emanuel Hospital & Health Center.

TO: EH Emergency Room Staff
After Hours Clinic Staff

FROM: Jan Bays, MD

RE: Potential child abuse cases in the ER and AHC

Some questions have arisen about cases of possible child abuse presenting to the ER, and when the CARES staff will see these patients.

(1) A SMALL MINORITY of CASES of ABUSE PRESENTING to the ER or AHC NEED TO BE SEEN AS TRUE EMERGENCIES. These include:

- (a) visible injuries which need to be documented before they fade,
- (b) life threatening injuries which require treatment and possible admission,
- (c) cases requiring a rape exam (sexual contact within the last 72 hours which may have left evidence of semen and/or sexual contact producing injuries),
- (d) cases where the child is in ongoing danger if returned home.

If these emergency cases present in the ER during CARES operating hours which the ER staff is not comfortable handling alone, or which are acute rape cases, please call CARES at x 4943 and we will arrange to see the patient or have a staff member come to the ER. If emergency cases present in the ER outside of CARES hours, call the hospital operator and ask for the on-call person for child abuse emergencies.

At times it is prudent to admit the child for evaluation during daylight hours, when CSD, law enforcement and hospital social work are more available. At times admission may be necessary to ensure protection of the child.

(2) MOST CASES of ALLEGED/POSSIBLE ABUSE PRESENTING to the ER, AFTER HOURS CLINIC and to PRIVATE PHYSICIANS ARE NOT TRUE EMERGENCIES.

Commonly these involve complaints of red bottoms, sexualized behavior, vague disclosures by the child, parental over-anxiety, or custody disputes.

We do NOT see these cases at CARES. We schedule cases which are pre-screened (by CSD, law enforcement, physicians or therapists) and in which there is fairly clear information indicating abuse. We are booked 3 weeks ahead of time at CARES. A full evaluation (requiring 3 hours of direct patient-contact time and 6-8 hours total staff time) costs \$ 750.

The non-emergent cases can be referred back their private physicians to be examined, or seen for a "reassurance exam" in the ER. If the child makes a clear disclosure of abuse, or the exam appears to be abnormal, please refer to CARES.

If there are no disclosures by the child, or if the exam seems normal, the family may call CARES for information on what to do next, but we will probably not see them directly. We may help refer them for counseling.

To us it is analogous to cases of chest or belly pain which come to the ER or AHC. Only a few are referred, after screening, to specialists like cardiologists or gastroenterologists.

At times the CARES physician will not be available due to subpoenas for court, nationwide conferences, or other emergency cases. A CARES consultation should always be available by telephone. It is our plan to provide training to all ER and AHC physicians so child abuse cases can be handled comfortably in all settings.

The CARES Program together with the District Attorney's office, the state crime lab, and law enforcement, recently provided 6 hours of training to ER staff. If I can be of help in providing more training to ER or After Hours staff, please let me know.

- (3) Cultures done in the ER will be followed up in ~~the ER~~ by ER staff.
Cultures done at CARES will be followed up by CARES staff.

Emanuel Hospital & Health Center

A Lutheran-Affiliated Center of Caring & Excellence



Policy & Procedure

POLICY NUMBER: N700-3210-015-3
EFFECTIVE DATE: 10/22/90
LAST REVIEW DATE: _____
LAST REVISION DATE: 5/6/92
NEXT REVIEW DATE: _____
nm Posey
Nurse Manager
Adelle G. Himmelle
Director

SUBJECT: RAPE/ALLEGED SEXUAL ASSAULT - PEDIATRICS

PURPOSE: The management of sexual assault in children will vary depending on the time since the alleged assault and the injuries with which the child presents. The ED nurse shall be the patient advocate and attempt to minimize any additional trauma the patient and family may suffer because they have sought treatment. The following procedure shall be followed as the historical circumstances dictate. Emanuel Hospital will be the designated rape contract center for children thru 14 years of age.

SUPPORTING DATA: Appendix A, B, C and D

RESPONSIBLE PARTY: ED M.D.'s
ED R.N.'s

PROCEDURE:

1. The triage nurse will direct the patient to appropriate services. Children might present with law enforcement officers or with their guardians or parents.
 - a. Weekdays: CARES staff will provide examinations, treatment, and videotape interview for child sexual assault cases 8:30 a.m. to 5:00 p.m. The triage nurse shall contact CARES Program (280-4943) to arrange an appointment or referral. Emergency cases, in which sexual assault has occurred in the last 72 hours, will be seen by CARES on the same day. Non-emergent cases will be seen at CARES by appointment.
 - b. After hours or weekends: Children coming to the ED with emergency cases (see above) will be treated in the ED as per emergency protocol and referred to CARES for follow-up. Children whom the assault history is greater than 72 hours previous or the history is unclear, may need more detailed interview and physical evaluation to determine if evidence collection is warranted. The child abuse specialist is available for consultation (Beeper # 323-1381).
 - c. The triage nurse will direct the child/family and law enforcement to social worker office until primary nurse can be designated. The clerk may register the patient in this office.

2. A primary nurse will maintain continuity of care thereafter. The primary nurse will assure patient privacy as further information is obtained and the child abuse checklist is initiated. (Appendix A)
3. Take patient and family to ED treatment room #2 or #3. Obtain vital signs, height and weight of child. Police, if present, may stand in hall on the other side of room curtain to obtain any appropriate information given by child during the physical and exam. Ask child if they want parent in the room during the exam. DO NOT TAKE OFF THE CLOTHES.

EMERGENCY EXAM:

1. No nursing history will be taken. The physician will take only a brief history. The full history, taken with anatomically correct dolls will be done by the CARES program.
2. During the exam - take off only half the clothing at a time. Top half first, then bottom half.
 - a. Physician may use only those parts of the state crime lab kit that are appropriate, considering the age of the patient and the type of assault. DO NOT forcibly examine the child.
 - b. Allow the patient to feel as much control of his/her body during the exam. Verbalize an understanding of his/her anxiety. Explain procedures and their purpose to the patient.
 - c. Fold exam paper and place in bag and give to police officer. This is done only if recent assault/rape, clothing has not been changed, and patient has not had bath.
3. The nurse will assist in obtaining laboratory specimens. The nurse's responsibility - to label specimen's carefully, air dry specimens with cool fan for 15 minutes, (fan is available in Room 6) then give labeled specimens to police for state crime lab, maintaining chain of evidence.
4. Treat injuries and take cultures as indicated.

State lab smears are obtained on any child that questionable ejaculation has occurred.

Other cultures such as: gonorrhea (gc), chlamydia, wet mount or gram stain (gs), are done as warranted by patient history, such as vaginal discharge or if child is sexually active.

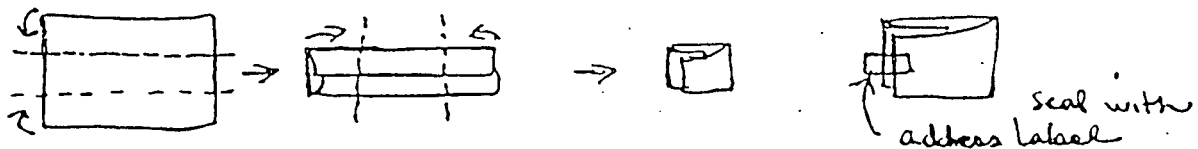
INSTRUCTIONS FOR RAPE EXAM IN CHILDREN

NEEDED:

- Standard rape kit
- Additional evidence rape kit
- Standards (seldom used)
- Plain white paper
- Forceps
- Paper bags
- Small dacron or cotton swabs
- Drying rack
- Woods lamp
- Lots of addressograph labels

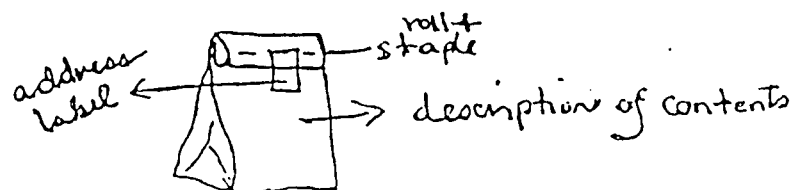
CLOTHING:

1. Only if the clothing is what was worn during the assault should it be saved.
2. Lay down two sheets of table paper on the floor. Have the child stand on them and undress. The top piece of table paper should be folded in thirds (see below), sealed and saved. The bottom piece is thrown away.



3. Put each item of clothing in a separate paper, NOT plastic, bag. Fold the top over twice and staple closed. Seal with addressograph label initialed by collector. Label as to what is inside:

"One white T-shirt removed from Jane Doe at 0130 on 2/3/90 by Sally Smith, R.N."



4. Inspect child all over for fibers, hairs, pubic hairs, plant material, etc. Pick off any foreign matter and place in the center of a plain sheet of white paper. Fold over in thirds (see above), seal and label:

"Loose hairs from lower abdomen of Jane Doe, 0130 on 2/3/90 by Sally Smith, R.N."

WOODS LAMP:

Use the Woods lamp held about 1-2 inches from the skin to inspect the child from hair to toes. If any fluorescence is seen, use a water-moistened swab to collect the material. Swab vigorously. Dry, label and seal in an envelope.

PUBIC HAIR COMBINGS:

Only if the child has pubic hair, comb it and place comb, loose hair and foreign material in envelope. Seal and label.

SWABS:

Collecting swabs for evidence will take precedence over swabs for cultures. We can schedule the child to be seen in a few days at CARES for cultures to be done.

Use a water-moistened swab for each area. (Do not use a gauze as this dilutes the specimen too much).

Areas to swab: inner thighs
perianal area
paravaginal area
inside anus (2 swabs)
vagina (4 swabs requested, but not easy!)
*bit marks or any area sucked on
*under tongue and along gums

* if appropriate by history

Label, dry in rack, seal in labeled envelopes.

Not necessary to do a wet mount to look for motile sperm.

BLOOD WORK:

RPR and HIV can be done at this time or at repeat exam at CARES.

PHOTOGRAPHY:

If there are bruises or marks which need to be photographed, have this done by the police immediately. Bruises can fade completely in 24 hours.

APPENDIX A
CHILD ABUSE CHECKLIST

DATE: _____

TIME: _____

YOUR NAME: _____

AGENCY CALLING: _____

CHILD'S NAME: _____

DOB: _____

CHIEF COMPLAINT: _____

	<u>YES</u>	<u>NO</u>
SEXUAL ASSAULT < 72 HOURS (PLEASE BE SURE OF TIME)	_____	_____

ADVOCATE CALLED	_____	_____
-----------------	-------	-------

CARE GIVER INSTRUCTED - NO BATHS, OR CHANGE OF CLOTHES	_____	_____
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POLICE BRINGING	_____	_____
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PARENTS COMING	_____	_____
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WHEN WILL THEY ARRIVE: _____

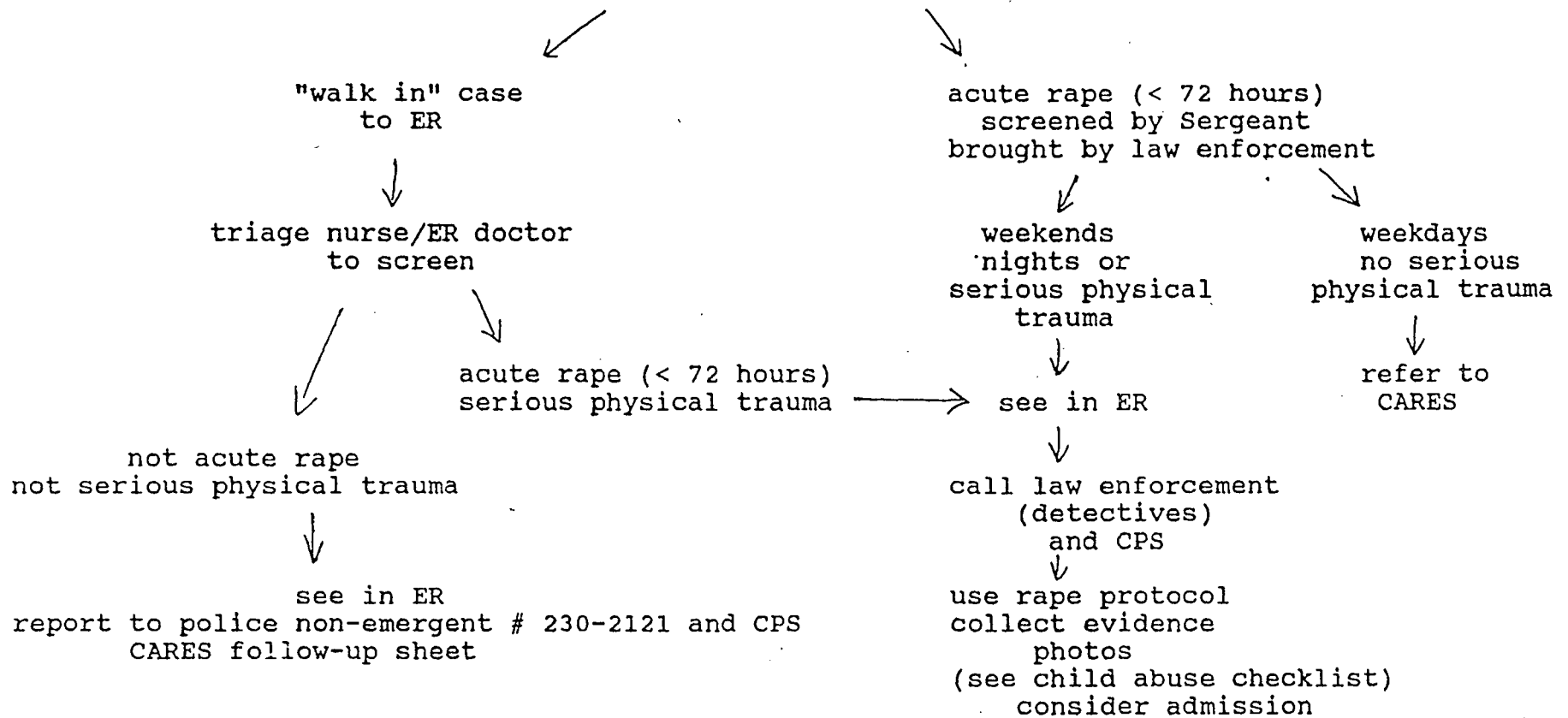
APPROVED BY SERGEANT	_____	_____
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COPY OF MEDICAL RECORD SENT TO CARES	_____	_____
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REMEMBER: IF > 72 HOURS, THEY CAN COME IN FOR GENERAL CHECKUP.
OTHERWISE, THEY NEED REFERRAL TO CARES - EXT. 4943

PLEASE LEAVE COMPLETED SHEET IN CHILD ABUSE DRAWER

CHILD SEXUAL ASSAULT CASE
(Also serious physical abuse)



APPENDIX C

Child Protective Services

Multnomah County 280-7555
Clackamas County 653-3140
Washington County 648-8951

Columbia County

Law Enforcement

Portland Police 796-3434
Clackamas County Sheriff 655-8218
Washington County Sheriff 648-8700
Multnomah County Sheriff 255-3600
Columbia County Sheriff

CHILDREN BROUGHT BY LAW ENFORCEMENT FOR ACUTE SEXUAL ASSAULT

Emanuel Hospital will be the designated rape contract center for acute sexual assault in children under 14 years of age. Criteria for acute rape exam include:

All cases will be screened by the Sex Crimes Sergeant or appropriate detail sergeant before referral for an acute rape exam, to ensure that only appropriate cases are referred to Emanuel Hospital. If inappropriate cases (vague history, no sexual contact last 72 hours) are sent in, we will clarify with the referring sergeant.

1. **TIME:** The alleged sexual contact must have occurred within 72 hours of the time of the physical examination.
2. **SYMPTOMS:** An emergency exam may be appropriate if there is a history of genital or anal bleeding or of ejaculation on the child within the last 72 hours. The child should not bathe and clothing worn at the time of the assault should be brought in with the child.
3. **AGE:** Children will be seen up to age 14 years. Older children will be seen in the adult rape contract center. Special circumstances will be considered (eg. retarded, deaf, disabled children).
4. Emergency room appointments will be for exams only. Full scale interviews will be done at CARES, by law enforcement, or C.S.D. The ED physician should ask the child a few questions (who, what, when, where) about the assault if the child is willing to give a history.

Scheduling appointments:

Weekdays between 8 AM and 5 PM: the CARES Program will make emergency appointments. Call 280-4943.

Weekends and nights after 5 PM: the Emanuel Hospital emergency room will do emergency rape exams. Call 280-4121.

Whenever possible, give preference to scheduling emergency appointments during the daytime through CARES. For example, if detectives contact a child victim at 5 AM, an appointment can be made at CARES at 8 AM.

Consultation: The following physicians have been trained in doing sexual abuse examinations and are available for consultation: Jan Bays, Paul Thomas, Leila Keltner. (Beeper # 323-1381)

SUBJECT: CHILD SEXUAL ASSAULT CASES - PEDIATRICS

PROCEDURE:

Weekdays: CARES staff will provide examinations and videotaped interviews for child sexual assault cases on weekdays, 8:30 AM to 5 PM. If a child is brought to the ED on a weekday for sexual assault, ED staff should contact the CARES Program (280-4943) to arrange an appointment or appropriate referral. Emergency cases, in which assault has occurred in the last 72 hours, will be seen at CARES the same day. Non-emergency cases will be seen at CARES by appointment.

After-Hours or weekends: Children coming to the emergency room after hours or on the weekend will fall into two categories:

- a. Walk-in cases
- b. Children brought by law enforcement for acute rape examinations.

WALK-IN CASES

1. When a child is brought to the ED with a complaint of possible sexual assault, the triage nurse/ED physician will determine whether sexual assault has occurred within the last 72 hours. If sexual assault HAS occurred within 72 hours or if the child has acute genital/anal injuries, the case should be handled as in the protocol for Acute Rape/Alleged Sexual Assault.
2. If sexual assault has NOT occurred in the last 72 hours, or the history is unclear, the child should be evaluated by ED staff. The child abuse specialist (Beeper # 323-1381) is available for consultation.
3. If the ED evaluation reveals abuse, the ED staff should document history, physical findings and lab data. It may be appropriate to refer the family to the CARES program for follow-up/advice. A copy of the ED report should be forwarded to CARES and/or a telephone call made to CARES the following morning to facilitate appropriate follow-up. Call 280-4943 during business hours.

Follow-up information can be obtained by calling CARES 280-4943.

4. Admission to the Pediatric in-patient ward may be appropriate for significant burns, physical injuries, fractures, head injuries, and significant genital or anal injuries.
5. If the ED evaluation reveals abuse, law enforcement and child protective services in the county where the incident occurred should be notified.

July 5, 1994

This is the current protocol according to Alice Cross, R.N., Mt. Hood Hospital and Medical Center.

MOUNT HOOD MEDICAL CENTER**PROCEDURE**

EFFECTIVE DATE: May 1978

AUTHORIZED BY: Emergency Services Committee

REVISION/REVIEW DATE: 5/79; 4/83; 5/84; 2/86; 4/87;
10/88; 12/89; 1/91; 3/92; 4/93 *2/94*
SO/K

UNITS PRIMARILY AFFECTED: Emergency Department

SUBJECT: **EMERGENCY DEPARTMENT NURSING
MANAGEMENT OF VICTIMS OF CHILD ABUSE**

OBJECTIVE:

1. To assist in the protection of children by complying with the laws of the State of Oregon (ORS 418.740 - ORS 418.715).
2. To provide care, support and intervention for the child who is possibly battered or abused.
3. To recognize and report to Children's Protective Services and/or other law enforcement agencies all suspected cases of child abuse.
4. To offer help to the possible offender, i.e., parent/caretaker.

REPORTING:

The emergency department personnel have the responsibility morally and legally to give utmost attention to the physical and mental problems presented by a victim of child abuse regardless of the origin or perpetrator. It is not our purpose to judge these situations but to pass the information to the proper authorities for investigation and follow-up and possibly secure a temporary safe environment for the individual and/or individuals involved.

The Oregon State Law Senate Bill 65 provides immunity for any medical persons reporting suspected cases and has the option of prosecuting any medical persons for deliberately avoiding the responsibility or withholding child abuse information. The nursing personnel share the burden of the responsibility equally with the physician and must aid in the decision-making process.

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 2.**

Suspected child abuse must be reported to one of two authorities:

- 1. The Children's Protective Service, or**
- 2. The law enforcement agency having jurisdiction over the child abuse victim.**

The two agencies share the report which eliminates the necessity of reporting to both. To notify the police call 911. To notify Children's Protective Services, call:

238-7555 (24 hours)	Multnomah County Child Abuse Hotline
653-3140 (8A-5P)	Clackamas County
238-7555 (after 5P)	Clackamas County

The physician or nurse caring for the child should be the one initiating the report.

QUALIFIED CONSENTORS FOR MINORS ("minor" means a person under age 18):

- 1. Parents - "Parent" means a legal guardian, natural parent or adoptive parent if the minor has been legally adopted.**
- 2. Emancipated Minor - This is a person over 16 years of age who has been issued a decree of emancipation after application to the juvenile court.**
- 3. Married Persons - Married persons have arrived at the age of majority upon their being married according to the law.**

Such minors may enter into contracts legally and these contracts will be as binding as though that person were 21 years of age and such contracts may be enforced as law without disaffirmance at age 21. However, it is provided that unless parents sign such contracts, parents cannot be held under the contract for the hospital bill or cost of medical treatment.

- 4. Minors may give consent to some procedures.**

At any age:

- A. A minor has a right to treatment for venereal disease without parental consent. If parents do not consent, they are not liable for payment of the care rendered. A physician cannot disclose information to the parents without minor consent.**

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 3.**

- B. Any physician may provide birth control and services to any person without regard to the age of such person.

At age 15 or older:

- A. A minor may give consent to hospital care, medical or surgical diagnosis or treatment by a physician licensed by the State of Oregon, and dental or surgical treatment by a dentist licensed by the State of Oregon.
- B. General law prevails as to payment for care extended and parents would be responsible for fees for necessary care.
- C. Disclosure without minor's consent and without liability: A hospital and any physician or dentist (ORS 109.640) may advise the parent of any such minor of such care, diagnosis or treatment or the need for any treatment without the consent of the patient.

5. Parents and guardians must give their consent to some procedures.

If a minor is not of sufficient age to consent to procedures stated above, a parent or court-appointed guardian must give consent for him/her; If one of these persons cannot be found to give consent, an adult individual having previously assumed the obligations of a parent may give consent to all of them except termination of pregnancies. The consent of the latter should be considered temporary if the parents can later give consent, even after the emergency care has been given.

Consents for minors who are living away from home while attending school, and who are unaccompanied by parents, shall be obtained in the same manner as above. Authorized pre-written consents may be available for some of these patients.

Oregon law gives immunity from liability to health care facility/workers for issue of services for minor children regardless of whether parents are married, unmarried or if the consenting parent is a custodial parent of the minor. We are not responsible to determine which parent has custody or if that matches who is authorizing treatment.

6. Emergency

When a minor is brought to or admitted to a hospital and is in need of

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 4.**

emergency medical treatment ("emergency treatment" means any situation requiring immediate medical attention) a physician may determine the need and proceed with treatment (from Legal Manual for Oregon Hospitals).

7. Consent for Medical Treatment of Foster Children

In a situation where emergency medical treatment is necessary and it is not practical to obtain a consent for treatment from the child-caring agency, the child's parent or the child's legal guardian, ORS 418.307 permits a physician, dentist or responsible official of a hospital to provide emergency treatment if in his/her medical judgement prompt action is reasonably necessary to avoid unnecessary suffering or discomfort or to effect a more expedient cure.

(The Children's Services Division is aware of some hospital physicians requesting signed consents from foster parents before treating a foster child in a medical emergency. Foster parents do not have authority to sign medical consents as they are usually not the legal guardians of a foster child.)

8. Court Order

- A. When the parents or guardians are unavailable for consent to medical or surgical treatment.
- B. When the parents will not consent to medical or surgical treatment and such treatment is necessary to preserve the life or health of a minor.
- C. When the child is a "John/Jane Doe."
- D. Document on the patient's chart the steps taken to contact the next of kin, guardian or other responsible person.

PROCEDURE:

RESPONSIBLE PARTY:

**Emergency Department
Personnel**

PROCEDURE:

1. Assessment

In the event that abuse is suspected during a routine assessment of a child's illness or injury, this must be relayed to the physician on duty, as soon as possible.

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 5.**

A. Types of Abuse

1) **Physical abuse - Bruises, welts, burns, bizarre-shaped lesions, multiple injuries, various stages of healing with X-ray confirmation of fractures, etc.**

2) **Physical neglect - Failure to provide food, shelter, medicine, etc., to such a degree that a child's health and safety are endangered.**

Symptoms: Failure to thrive, developmentally delayed, dull eyes, signs of malnutrition, etc.

3) **Emotional abuse - Continuing pattern of rejecting, terrorizing, ignoring, isolating or corrupting a child, or any action, statement, written or non-verbal message which is serious enough to make a child believe s/he is in danger of being abused.**

Symptoms: Sudden involuntary withdrawal when approached without warning; passively submits to pain or frightful hospital situations; anger and aggressive action when faced with anxiety; extremely compliant or over-active.

4) **Verbal abuse - Rarely seen in the emergency department, but possible.**

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 6.**

- 5) Sexual abuse - Any sexual contact in which a child is used to sexually stimulate another person, including but not limited to rape, sodomy, incest and/or sexual penetration with a foreign object.
- 6) Sexual exploitation - Including prostitution, pornography and contributing to the delinquency of a minor.

B. Examination

- 1) Undress child.
- 2) Take vital signs.
- 3) The physician performs a gentle, thorough examination with the nurse in attendance.
- 4) Document objectively all areas of abnormal observation.

C. Obtain Nursing History

- 1) Suspect a problem if the incident is not in true relation with the injury.
- 2) Get any pre-admission charts from the medical records department for possible comparison.
- 3) Offenders may include babysitters, siblings, etc., which may precipitate parents to bring the child in for treatment.

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 7.**

2. Treatment

- A. In accordance with immediate physical needs.**
- B. May include admission to the hospital to ensure a safe environment and segregation from further harm.**

3. Documentation on Patient's Record

- A. All observations of the patient's condition should be documented in an objective, accurate manner.**
- B. Contact of the Children's Protective Services should be documented, including the time and name of representative.**
- C. Contact of law enforcement agency, if applicable, should be documented, including the time and name of assigned officer.**
- D. Photographs may be taken to further document the physical condition of the patient at the time of evaluation and treatment. Consent for photographs to be taken is covered by the conditions for patient admission consent form.**
- E. Chain of Evidence**

When medical evidence is offered in court it is essential that the district attorney be able to demonstrate that s/he is using the same evidence that was collected during the medical examination of the patient. S/he must therefore be able to identify all those

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 8.**

who handled the evidence and account for each step in the process of collection, storage, transportation and delivery. In order that this "chain of evidence" be completely traceable, it is essential that as few people as possible actually touch the evidence.

The person collecting the evidence will hand it directly to the nurse, who after sealing the canister deposits it directly with "security" (either the police officer or the refrigerator). Proper chain of evidence sealing consists of placing all evidence in the provided canister and sealing it with tape; the date, time and name of the person sealing the canister should be affixed in such a manner that the information covers both the canister itself and the sealing tape. This should then be refrigerated and remain as is until handed over to the proper authority.

4. Overall Patient and Family Management

A. Common Behaviors of Abusive Parents/Caretakers

- 1) Over-reaction - Inappropriate "clinging," not wanting to leave the child alone with personnel.
- 2) Under-reaction - Detached.
- 3) Parental attempt to reinforce negative self-image.
- 4) Brings children in often with minor problems (subconscious attempt to seek help).

**Mount Hood Medical Center
Emergency Department Procedure
Emergency Department Nursing Management
of Victims of Child Abuse
Page 9.**

- 5) **Parent-child relationship appearing abnormal.**
- B. **A tactful and empathetic attitude should be projected by hospital personnel.**
- C. **Privacy should be provided for the patient and family.**
- D. **Discussion of the situation will be held to a minimum in the department and the patient's confidential rights upheld outside the confines of the hospital.**
- E. **A list of resources available in the community that provide or arrange for evaluation and care for victims of abuse and family members is maintained in the emergency department.**

Referral Agencies:

- 1) **Metro Crisis - 223-6161**
- 2) **Children's Services Division - 238-7555**
- 3) **Boys' and Girls' Aid Society - 222-9661**
- 4) **Morrison Center - 232-0191**
- 5) **C.A.R.E.S. - 280-4943**
- 6) **Parents Anonymous - 238-8818; toll free 1-800-345-5044**
- 7) **Lutheran Family Services - 231-7484**
- 8) **Echo's Network - 281-8185**

July 5, 1994

Pat Bowman of Children's Services Division contacted both Portland Adventist and Woodland Park Hospital and confirmed these are their current protocols. They do not need revision.

Ed

PORTLAND ADVENTIST MEDICAL CENTER
ADMINISTRATIVE POLICY

*Renew
and call*

SUBJECT

Child Abuse Examination and Reporting

Page 1 of 1

December 5, 1985

Revised January 9, 1986

PHILOSOPHY

O.R.S. 418.740 through 418.775 requires reporting of identified or suspected cases of child abuse. For purposes of this law, child abuse includes neglect which leads to physical harm and/or any physical injury to a child caused by other than accidental means. Occasionally in the course of treating conditions, Emergency Room and/or other hospital staff come in contact with situations and conditions that in their professional opinion must be reported under the State of Oregon statutes. Examination and testing is often necessary to establish the basis for reporting these examinations. This testing, when required and instigated by hospital staff, should be done discreetly, so as not to unnecessarily upset family members, and not increase the financial burden to patient, parents, or the responsible party.


POLICY

When a physician or hospital staff member finds evidence that arouses suspicions of child abuse, under Oregon Law, it must be investigated. Any testing or examination needed to verify or investigate injuries or evidence of child abuse must be carried out to establish the need for reporting to proper authorities. Positive findings of testing, examination, or other evidence of child abuse must be reported to the Child Protective Services for Multnomah County (238-7555).

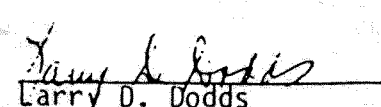
These examinations and tests, when performed as a secondary investigation and not as a diagnostic procedure for the primary patient problem, will be carried out at no charge to the patient, parents or responsible party. Hospital contract physicians (i.e. Emergency Room Physicians) will not charge for these examinations or services.

The Emergency Services staff will be responsible for notifying all departments involved in child abuse investigation examinations and identifying which tests and/or examinations are to be done at no charge under this policy.

The no-charge portion of this policy will not be in effect if the patient is brought into the Emergency Room or the hospital specifically or primarily for injuries that are a result of child abuse or to be examined specifically for suspected child abuse.


ValGene Devitt
Vice President

APPROVED


Larry D. Dodds
President

Distribution
Leadership

0403e

PORTLAND ADVENTIST MEDICAL CENTER
EMERGENCY DEPARTMENT

PROCEDURE

PROCEDURE FOR: Reporting Child Abuse

PURPOSE

1. Recognize battered or abused child
2. Prevent further injury to child by intervening
3. Help abusive parent

SPECIAL INSTRUCTIONS

Child abuse law in the State of Oregon makes it mandatory for nurses to report a suspected child abuse. He/she is given immunity under the law from prosecution. A child may bring legal action of negligence against a nurse who fails to report suspected child abuse

1. Suspected Abuse:
 - a. Abuse may be considered when a child has/is:
 - 1) Unexplained injuries
 - 2) Injuries not mentioned in history
 - 3) Multiple injuries
 - 4) Injuries in different stages of healing
 - 5) History of repeated fractures
 - 6) Unable to be consoled
 - 7) Wary of physical contact with adults
 - 8) Evidence of sexual abuse
 - 9) Serious burns (especially on the palms of the hands, buttocks or backs of child's legs)
2. Types of Child Abuse:
 - a. Physical
 - 1) Bruises and welts most common
 - 2) Stab wounds and lacerations
 - 3) Fractures
 - 4) Failure to thrive

NOTE: Shaking of the child can cause a subdural hemorrhage which is now thought to be a major unrecognized cause of brain damage.
 - b. Environmental deprivation
 - c. Psychological
 - d. Sexual
3. Children who may be at risk at birth:
 - a. Premature infants
 - b. Unwanted or unplanned baby
 - c. Baby of addicted parents
 - d. Baby in a family with a previous history of abuse
 - e. Twins or triplets
 - f. Baby with anomaly
 - g. Babies who fail to bond

SPECIAL FORMS

Child Abuse Medical Work-up - SW 334

CONTENT

1. Get a medical history that includes:
 - a. Reason for referral for medical treatment
 - b. Circumstances under which the symptoms developed
 2. Obtain physical assessment by performing a medical examination
 - a. Write a careful, clear description of all bruises and injuries
 - b. If possible, take photographs to document injuries
 - c. Obtain appropriate diagnostic studies
 - 1) X-rays
 - 2) Blood analysis (include clotting studies)
 3. Obtain consultation from available services:
 - a. Mandatory notification of PAMC Social Worker, who will notify CSD
 4. Obtain physician order for admission of any child who is a suspected victim of child abuse
- NOTE: Admitting the child allows for adequate time to investigate. It is not the responsibility of the medical or nursing staff to decide who abused the child. Do not accuse or confront the parents.

DOCUMENTATION

1. Emergency Department Record
 - a. Date and time
 - b. Reason for medical treatment
 - c. Physical findings
 - d. Referral time and name of Social Worker
 - e. Full signature and title

PORTLAND ADVENTIST MEDICAL CENTER**DEPARTMENT: Social Work****Policy: 732****Date: November '91****Page: 1 of 2****SUBJECT: CHILD ABUSE PROCEDURE**

PHILOSOPHY: In accordance with state statutes governing child abuse reporting (ORS 418.740), social work will report all incidents of child abuse to Child Protective Services (CPS) of the Children's Service Division (CSD).

POLICY:

Social work is the conduit for interviewing and reporting of suspected child abuse.

A. ORS 418.740 defines a "child" as an unmarried person who is under 18 years of age.

B. ORS 418.740 defines child abuse as one or more of the following:

1. Physical injury
2. Any mental injury to the child
3. Sexual exploitation
4. Negligent treatment
5. Sexual abuse
6. Threatening harm to a child

Reporting of child abuse grants immunity from civil and criminal liabilities to physicians, and persons reporting child abuse in good faith and within reasonable grounds.

Social work is on-call 24 hours to respond to child abuse reporting. Hospital employees must consult with a nursing supervisor or the Emergency Department before seeking consultation with social work during non business hours.

PROCEDURE:

1. Obtain a detailed history of how injury and related incident occurred. First review patient's chart, consult with MD and RN and collateral information source, i.e. hospital employee or person in community reporting. Do not meet with family prior to obtaining this information.
2. Assessment and written evaluation to be made by social work incorporating abuse history (if available), detailed history of current injury, parent-child relationship as observed, family constellation, psychosocial stress factors, and precipitating events.
 - A. See Addendum A regarding interviewing and documentation protocol.
3. Provide emotional support to parent/guardian. If parent/guardian is alleged offender, it is imperative for the interviewer to communicate with objectivity and compassion.
4. Social worker to immediately contact CPS (Multnomah County CSD) to report findings. CPS provides a 24 hour hot line - 238-7555. If victim resides in another county, Protective Services will assist in identifying that county's hot line phone number.

Page: 2
Policy: 732
Social Work

5. Act as a liaison between hospital and community. Continue to update nursing and MD regarding on-going developments.
6. Protective services will contact the Portland Police or County Sheriff if it appears patient is at risk to return to parent/guardian. In consult with the police and social work, Protective Services will determine whether or not patient should transfer into protective custody i.e., relatives home or emergency foster care. Protective Services will make these necessary arrangements.
7. Accessing Court Hold - MD may request continued hospitalization for the victim/patient. The patient can remain hospitalized voluntarily (parent/guardian permission) or by court mandate.
8. Court hold is to be obtained if parent rejects voluntary hospitalization and/or attempts to remove the child. If this occurs, the action described below must be initiated immediately.
 1. Notify security (code 55).
 2. Contact Multnomah County Sheriff for assistance (PAMC security cannot stop a patient from leaving AMA).
 3. Contact Donald B. Long Home (Multnomah County Juvenile Court) and request assistance from a counselor. During non-business hours ask for the on-call counselor (emergency). The counselor has access to a judge under both circumstances. The judge will request specific detailed facts from social work, MD, nursing, police and Protective Services before issuing a hold.
9. Court Hearing - under most circumstances a court hearing will be scheduled on the first business day after the initiation of a court hold. Parents/guardian are to be informed of this procedure, i.e. time and date provided if available or to contact the Juvenile Court in a.m. of business day (parent/guardian responsibility).
10. ORS Statutes - Addendum B
11. CSD access to medical records Addendum C. PAMC has an obligation to make records available to CSD when an investigation is being conducted following a report of child abuse. Records which are provided should be confined to those reasonably related to the investigation of the reported abuse.



John M. Custer, Director

Origin: Feb '78
Revised: Sep '82, Nov '91
Approved:
Reference:

WOODLAND PARK HOSPITAL

Emergency Department ABUSED CHILD

I. POLICY:

When dealing with the possibility of child abuse (i.e., physical, emotional, neglect or sexual) one is required to make an accurate assessment and to proceed with the appropriate care of the child. When indicated, proceed by reporting to proper authorities for adequate protection of the child, and to bring the abusive adult into contact with needed help and counseling.

II. GENERAL INFORMATION:

A. National Reporting Laws:

1. When dealing with a suspected case of child abuse or neglect of unmarried children under 18 years of age, there is a mandate to report any injury to provide protection for the child and bring the abusive parent or caretaker into contact with needed help.
2. There is an exemption from liability for any professional person reporting suspected child abuse.

III. DEFINITION:

Any act or omission or commission that endangers or impairs the child's physical or emotional health and development. Child abuse includes: physical assault, nutritional neglect, drug abuse (poisoning or drugging), medical care neglect, sexual exploitation, safety neglect, corporeal punishment, and emotional assault.

IV. INDEX OF SUSPICION:

- A. Parents describe an accident that does not explain the injuries.
- B. Each parent has a different version of the accident.
- C. Parents are vague about the circumstances of the accident.
- D. Parents claim the infant (under 6 months of age) inflicted the injury on himself.
- E. The parents blame the accident on baby sitter, neighbors, brothers, sisters. In this case, try to speak with this other person.
- F. Parent has waited a significant period of time before reporting the accident.
- G. There are repeated injuries, or ingestion of toxins.
- H. Scattered history of many accidents, doctors, moves or hospitals.
- I. Child appears scrawny, undernourished, dehydrated, severe diaper rash.
- J. Injuries on several surface areas.
- K. Imprint of object on skin, e.g., belt buckle, iron, electrical wires, spoon.
- L. Injuries mostly located on head or face.
- M. Injuries found on physical exam and x-ray not reported by parents.
- N. Old fractures found on x-ray.

V. POSSIBLE INJURIES TO BE AWARE OF:

A. Assessment of the Child:

1. Any child who presents with an injury should have an overall general assessment including genitalia and then a detailed assessment of the local site. A general assessment will increase chances of detecting associated or previous injuries.
 - a. bruises and welts, and soft tissue swelling
 - b. abrasions and bizarre shaped lesions
 - c. burns ("punched out" appearance from cigarettes, burns of the perineum, buttocks, and hands and feet from being dunked into scalding water)
 - d. dislocations and fractures, lacerations and contusions around the mouth from forceful feeding and limited motion of extremities with loss of function and tender painful areas.
 - e. subdural hematomas and other head injuries manifesting in convulsions and coma.
2. Valid criteria for identifying a case of suspected abuse.
 - a. multiple injuries, clustered and on different body surfaces
 - b. multiple lesions in different stages of healing
 - c. injuries that reflect the outline of an object or mode of infliction
 - d. skull fractures, 80% of which are linear and the others depressed
 - e. skeletal injuries are one of the most reliable signs of abuse - obtain an entire skeletal film series (with physician's order) on children under 5 years of age. Any set of 2 or more fractures in various stages of healing are usually non-accidental. Fractures under age 1 should be suspect unless definite documented history is available.
3. Look for signs of neglect.
 - a. look for failure to thrive syndrome - impaired weight gain, and linear growth especially under three years of age.
 - b. observe for unusually poor hygiene or failure to seek medical help when needed.
 - c. the child's behavior must also be assessed. He/she may manifest rather typical behavior that correlates with physical signs of possible abuse, and behavior should carefully be watched and noted.
 - 1) there is usually no protest when the parent leaves the room
 - 2) the child may be lethargic, just lying there rather like a discarded object
 - 3) children under 6 tend to be excessively passive while those over 6 are apt to be excessively aggressive
 - 4) abused children tend to be constantly alert for danger and to draw back from physical contact

4. When sexual abuse is suspected, proper handling is vital to the child's well-being.
 - a. inspect genitalia visually for signs of injury. Generally pelvic exam is only indicated if there is pain, bleeding, or definite suspected vaginal penetration.
 - b. appropriate collection of evidence is covered in the rape policy

VI. PROCEDURE:

A. Care of the Abused/Neglected Child After Diagnosis:

1. First priority is obviously to instigate proper care of injured child.
2. Always admit the child to hospital if there is any question that he will be returned to an unsafe environment.

B. Helping the Abusive Adult:

1. Taking a history:

- a. Do not alienate the parents, making them hostile and defensive.
 - b. Try to be tolerant and non-judgmental.
 - c. Show an attitude of caring, concern and understanding.
 - d. Avoid "taking sides" with the child.
 - e. Get as much detail as possible.
 - f. Record the parents' exact words. Recounting details reduces anxiety for most parents but will produce anxiety if the injury is not accidental.
 - g. Note and record the parents' behavior toward the child; they often have flat affect or decreased concern for the child's injury or are angry toward the child for being injured.
 - h. It is important to note anything that appears to interfere with the parent or informant's behavior - ETOH, drug misuse, or signs of mental illness.
 - i. Are the injuries consistent with the child's age and development capability?
 - j. Does the set of injuries constitute a known syndrome of child abuse?
 - k. Are the findings consistent with the explanation offered?
2. After diagnosis is made, a conference must be held with the parents or accompanying adult to explain the findings and why it must be reported.
 3. Every attempt should be made to include the hospital social worker on the conference so he/she can follow-up with proper referral. If social service is available then the Emergency Department's responsibilities end there.
 4. If Social Services is not available, there are community resources available.

WOODLAND PARK HOSPITAL
Emergency Department
ABUSED CHILD

C. Reporting of suspected child abuse cases.

1. Call the 24 hour hotline 238-9555 they will complete the proper forms. We will no longer be filling out reports, just a phone call.

D. Also see Hospital Policy L-3

Revised 1979,82,83
KJS/KJS

REV. BY 66772

MAR 1985
RECEIVED

APRIL 82

APRIL 1985

**WOODLAND PARK HOSPITAL
EMERGENCY DEPARTMENT**

Suspected Child Abuse

I. Policy

It is the policy of this facility to comply with the Oregon State Statutes (ORS 418.740 through 218.775) to provide and cooperate with the law enforcement officials in the reporting and documentation of any suspected victim of child abuse/neglect.

Any physician, nurse, dentist, social worker, psychologist, pharmacist or clergyman having reasonable cause to believe that a child (unmarried person under the age of 18 years) has died or has had physical injury inflicted, other than by accidental means, or is found to be suffering from physical neglect or sexual abuse, shall report such incident or cause a report to be made to the proper law enforcement agency.

Anyone participating in good faith in the making of a report and who has reasonable grounds for the making shall have immunity from any liability, civil or criminal. Any such participant shall have the same immunity with respect to participating in any judicial proceeding resulting from such report.

II. Definition

A. Suspected Child Abuse

1. Neglect which leads to physical harm. Negligent treatment or maltreatment of a child, including, but not limited to, the failure to provide adequate food, clothing, shelter or medical care. However, any child who is under care or treatment solely by spiritual means pursuant to the religious beliefs or practice of the child or the child's parent or guardian shall not, for this reason alone, be considered a neglected or maltreated child under this section.
2. Any physical injury to a child which has been caused by other than accidental means, including any injury which appears to be at variance with the explanation given of the injury.
3. Sexual molestation, referring to all inappropriate sexual activity between adult and child or between other siblings and the child. This area also includes sexual exploitation, including but not limited to, contributing to the sexual delinquency of a minor (as defined in ORS Chapter 163) and allowing, permitting, encouraging or hiring a child

to engage in prostitution, as defined in ORS Chapter 167.

4. Any mental injury to a child, which shall include only observable and substantial impairment of the child's mental or psychological ability to function, caused by cruelty to the child with due regard to the culture of the child.

III. Procedure

When a physician or hospital staff member finds evidence that may be suspicious of child abuse, under Oregon law, it must be investigated. Any testing or examination needed to verify or investigate injuries or evidence of child abuse must be carried out to establish the need for reporting to the Child Protective Services for Multnomah County (238-7555) as soon as possible.

- A. Accurately observe and document your assessments of the child.
 1. Describe all physical/objective assessments; ie., bruises, lacerations, locations, etc.
 2. Observe and document the parent/adult child interaction.
 3. Discuss all observations with the physician, remembering the right of the parents and patient confidentiality.
 4. Attempt to remain non-judgmental. The nurses' role is to protect the child and support the parents.
 5. The nurse should assist the parents in obtaining help. Their exposure to health care personnel may be crucial in accepting further assistance.
 6. Exams and testing, when performed as an investigative tool, will be carried out at no charge to the patient, the parents or responsible party.
- B. Document the name of the person the child abuse report was called to and the time. If the police are notified, chart the name of the police officer, department and city or county, and the time.
- C. After a conclusion is reached, a conference must be held with the parents or accompanying adult to explain the findings and why it must be reported.
- D. Every attempt should be made to include the hospital social service worker. If one is not available, the C.A.R.E.S. may be contacted at 280-4943. Child Abuse Response and Evaluation Services is a program of Emanuel Hospital and Multnomah County District Attorney's Office to minimize the trauma to the child, while maximizing the evidentiary gathering.

CC/1993

**WOODLAND PARK HOSPITAL
EMERGENCY DEPARTMENT**

RECOGNITION OF CHILD ABUSE CHECKLIST

I. PURPOSE

To alert individuals to the possible presence of child abuse or maltreatment. The list is not all-inclusive, nor does the presence of a single indicator provide child mistreatment.

II. GUIDELINES - FACTORS RELATED TO CHILD ABUSE

A. Child-Related Factors

1. An injury unexplained or inadequately explained by the history given
2. Evidence of repeated injuries
3. Injuries that are not mentioned in history
4. Characteristic radiographic changes to long bones
5. Evidence of sexual abuse or molestation
6. Evidence of dehydration and/or malnutrition without obvious cause
7. Evidence that child has been given inappropriate food, drink and/or drugs
8. Evidence of overall poor care
9. Unusual tearfulness
10. Child was a premature infant, is a twin, has a physical defect, or has been a "difficult" child to care for
11. Child is seen as "different" or "bad" by the parents
12. Child "takes over" and tries to care for parents' needs

B. Parent-Related Factors

1. Presents a history that cannot or does not explain the injury
2. Presents contradictory or inconsistent history
3. Gives a history of repeated injury
4. Projects cause of injury onto a sibling or third party
5. Gives specific "eyewitness" history of abuse
6. Is reluctant to give information
7. Reveals inappropriate awareness of seriousness of situations (either over-reaction or under-reaction)
8. Continues to complain about irrelevant problems unrelated to the injury
9. Has delayed unduly in bringing child for care
10. Refuses consent for further diagnostic studies
11. Hospital "shops"
12. Cannot be located
13. Shows detachment from the child
14. Has unrealistic expectations of the child
15. Shows evidence of loss of physical or emotional control, or fear of losing such control

16. Has no one to "bail" her/him out when "uptight" with the child
17. Has been reared in an atmosphere lacking a consistent parenting figure
18. Personally is misusing drugs or alcohol
19. Is psychotic or psychopathic

C. Family Situation-Related Factors

1. Continuous friction in the home
2. Marital discord
3. Broken home, divorce, and frequent remarriages
4. Recent or recurrent crises
5. Loss of support of relatives, friends, community
6. Recent or recurrent relocation of living quarters
7. Immature parents
8. Mental retardation of parents
9. Mentally ill parents
10. Excessive drinking or addiction to drugs
11. Overly severe control and discipline, physical or psychological
12. Failure to give constructive discipline for the child's proper development of good character, conduct, and habits
13. Criminal environment of parents; encouragement of delinquency in child
14. Incestuous sex relations
15. Promiscuity and prostitution
16. Harsh and improper language
17. Failure to give good adult example
18. Failure to inculcate value system in guidance and care of children (lack of moral training)
19. Failure to offer motivation and stimulation toward learning and receiving an education in keeping with child's ability and intelligence

III. PHYSICAL INDICATORS

A. Physical Abuse

1. Unexplained skin lesions (bruises on various parts of the body, in different stages of healing)
2. Lesions in different body areas reportedly from the same injury
3. Lesions that have distinctive patterns (such as an injury inflicted by a belt buckle or an extension cord)
4. Unexplained burns (such as cigar or cigarette burns on hands, feet, back, or buttocks, or rope burns)
5. Burns that have a distinctive pattern (such as from an iron or radiator)
6. Burns that are reportedly secondary to accidental immersion in hot water or scalding (i.e.; pattern of burn)
7. Unexplained lacerations to face, mouth, eyes or external genitalia
8. Evidence, on exam, of old fractures
9. Bite marks

- B. **Physical Neglect**
 - 1. Poor hygiene, inappropriate clothing
 - 2. Fatigue, listlessness, consistent hunger
 - 3. Lack of supervision
 - 4. Obvious medical/physical problems that have been unattended
 - 5. Ingestion of noxious substances
- C. **Sexual Abuse**
 - 1. Pain or itching in the genital area
 - 2. Bruises or bleeding in the perineal area
 - 3. Venereal disease, especially in preadolescent age group
 - 4. Difficulty in sitting or walking
 - 5. Pregnancy
- D. **Emotional Deprivation or Maltreatment**
 - 1. Conduct disorders (fighting in school)
 - 2. Habit disorders (rocking, sucking fingers)
 - 3. Neurotic behavior (speech disorders, sleep problems)
 - 4. Psychoneurotic reactions (phobias, hysterical reactions)

IV. **BEHAVIORAL INDICATORS**

- A. **Physical Abuse**
 - 1. Inappropriate/wary of adult contacts
 - 2. Fear of parents
 - 3. Report of injury by parents
 - 4. Fear of returning home
 - 5. Behavioral extremes
- B. **Physical Neglect**
 - 1. Delinquency (antisocial behavior)
 - 2. Constantly falling asleep in class
 - 3. Report of no supervision or no caretaker
- C. **Sexual Abuse**
 - 1. Sexual behavior or knowledge inappropriate for age
 - 2. Reports of sexual assault by caretaker
 - 3. Unwillingness to allow examination
 - 4. Delinquent or runaway
- D. **Emotional Deprivation or Maltreatment**
 - 1. Overly adaptive behavior
 - 2. Developmental delays
 - 3. Extremes of behavior
 - 4. Suicide attempts or gestures

V. PHYSICIAN'S INDEX OF SUSPICION**A. History**

1. Parent's story is at variance with clinical findings
2. Histories vary according to intake person (e.g.; clerk, nurse, resident, social worker -- each obtaining different variations of the episode)
3. Parents are reluctant to give information
4. Parents respond inappropriately to the severity of the injury
5. If abuse is mentioned, blame for the injury is usually placed upon a third, often unknown, party
6. Social histories involve multiple family problems (psychosocial, financial, drug and/or alcohol abuse, etc.)
7. Medical history reveals no medical reason for, or does not correlate with, the child's present condition

B. Physical Exam

1. Signs of general neglect, malnutrition, failure to thrive, or inappropriate behavior for age
2. Skin lesions (such as bruises, burns, soft tissue swelling, abrasions, or hematomas) that may be new or old, healed injuries
3. Symptoms of drug withdrawal in an infant
4. Unexplained convulsions or coma
5. Evidence of bone injury and/or fractures or dislocation of bones

C. Radiologic Evidence

1. Subperiosteal hemorrhages
2. Epiphyseal separations
3. Periosteal shearing
4. Metaphyseal fragmentation
5. Healed fractures or calcifications

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX E

Investigative Checklist

*Criminal Child Abuse Investigative Checklist***1. REVIEW AND NOTE AVAILABLE INFORMATION**

- _____ How and by whom reported
- _____ CPS report/caseworker and action taken to date
- _____ Police reports
- _____ Medical exam or autopsy/findings/name of doctor
- _____ Witness statements
- _____ Prior reports concerning this child
- _____ Prior reports/complaints/convictions concerning this suspect
- _____ Records check (local, state, FBI) re: suspect

2. CONTACT CHILD VICTIM

- _____ Note vital statistics: DOB, height, weight, etc.
- _____ Note home address, school/grade attended
- _____ Note any known disabilities
- _____ Note observations of physical appearance
- _____ Note demeanor, emotions displayed
- _____ Take photos of injuries
- _____ Make referrals to counseling and other support services

Victim Interview

(To be done whenever possible)

- _____ Explain your role
- _____ Elicit background information, put child at ease, assess developmental/intellectual level
- _____ Determine whether medical exam has occurred
- _____ Determine child's expectations, fears, desired consequences
- _____ Provide information and let child know how to contact you

Obtain Detailed Description of Abuse

- _____ Name of offender and relationship to victim (family, friend, stranger, etc.)
- _____ Physical description of offender
- _____ When abuse occurred
 - _____ Once or more than once
 - _____ How often
 - _____ Child's age at time
 - _____ First incident
 - _____ Most recent incident
 - _____ Time of day/duration
 - _____ Association with other events
 - _____ Recollection of individual incidents
- _____ Location(s) of abuse (state, county, city, building, room, other)
- _____ Any corroborative details: specific descriptions of clothing, furniture or other items, of other people nearby, of tv shows on at time, of child's feelings at time of abuse, etc.
- _____ Enticements, bribes, gifts, promises, explanations, threats, intimidation by offender
- _____ Elements of secrecy
- _____ Offender's words during abuse
- _____ Whether victim has diary/journal
- _____ Whether victim has correspondence from offender
- _____ Whether victim gave correspondence or other items to offender
- _____ Whether other witnesses present

_____ Where other family members were
 _____ Whether other victims seen/known
 _____ Victim's attitude toward offender then/now—close, loving, hostile, fearful, etc.
 _____ First person victim told about abuse and his/her reaction
 _____ If applicable, why victim delayed in disclosing
 _____ Others victim told and reactions
 _____ Drugs used by offender or given to victim
 _____ Alcohol used by offender or given to victim
 _____ Prior abuse (physical or sexual) of victim
 _____ By this offender
 _____ By anyone else

Add for Sexual Abuse

_____ Clarify child's terms for anatomy
 _____ Note child's exact words describing abuse
 _____ Nature of abuse
 _____ Oral/vaginal/anal contact
 _____ Fondling/penetration
 _____ Made to perform sex acts on offender
 _____ Use of pornography (films, magazines, pictures)
 _____ Use of foreign objects, sexual devices, contraceptives, lubricants
 _____ Whether photos taken of victim
 _____ Whether victim saw photos of other children
 _____ Clothes on or off—victim *and* offender
 _____ Pain, bleeding or discharge
 _____ Offender's behavior/words during and after sex acts
 _____ Whether child saw/felt ejaculation
 _____ Description of any unusual physical characteristics of offender—scars, tatoos, birth-
 marks, etc.
 _____ Description of offender's genitals—pubic hair (color), penis (erect/flaccid, circumcised or
 not), or any other unusual or unique features
 _____ If offender ejaculated, where—in child's mouth/vagina/rectum, elsewhere on child's
 body, on bedding/carpet/clothing, etc.
 _____ Did child wipe self or offender clean it up—if so, with what and where is it

Add for Physical Abuse

_____ Any weapons used: description and location
 _____ Child's explanation for specific injuries
 _____ Reason (if known) for offender's use of force—punishment, anger, etc.
 _____ Whether offender violent toward others
 _____ Whether child has had prior medical problems or treatment and if so, when and what

3. MEDICAL EXAMINATION OF VICTIM

_____ Find out if exam already done; if so,
 _____ When
 _____ By whom conducted
 _____ Who sought medical attention for child
 _____ If not already done, arrange as soon as possible
 _____ Obtain consent to acquire medical reports; arrange for legible copies
 _____ Interview doctor and other involved medical personnel and determine how to contact in
 future
 _____ Document any statements made by victim

- _____ Note any special procedures used
 - _____ Colposcope _____ Photos
 - _____ Toluidine blue dye _____ Photos
 - _____ Proctoscopy or anoscopy
 - _____ CAT scan
 - _____ X-rays/skeletal survey
 - _____ Screen for blood disorders/clotting studies
 - _____ Consultation with/referral to other experts
 - _____ Other
- _____ Collect any physical evidence gathered by doctor
 - _____ Specimens and samples
 - _____ Photos
 - _____ Child's clothing worn during assault
- _____ Arrange for necessary crime lab analysis
 - _____ Presence of sperm, acid phosphatase, P30
 - _____ Blood/serology analysis
 - _____ Hair comparison
 - _____ Fiber comparison
 - _____ Other

Medical Evidence/Observations Consistent with Sexual Abuse

- _____ Evidence of violence anywhere on body
 - _____ Bleeding, bruises, abrasions
 - _____ Bite marks
 - _____ Broken bones
 - _____ Other
- _____ Positive results for presence of semen
 - _____ Fluorescence with Wood's Lamp
 - _____ Motile/non-motile sperm
 - _____ Positive acid phosphatase or P30
- _____ Pregnancy
- _____ Sexually transmitted disease present
 - _____ Gonorrhea
 - _____ Syphilis
 - _____ Chlamydia trachomatis -
 - _____ AIDS
 - _____ Herpes
 - _____ Trichomonas vaginalis
 - _____ Venereal warts
 - _____ Nonspecific vaginitis
 - _____ Pubic lice
 - _____ Any vaginal/penile discharge
 - _____ Other
- _____ Itching, irritation or trauma of any kind in genital or anal area
- _____ Foreign debris in genital or anal area
- _____ Vaginal area injury/findings
 - _____ Enlarged vaginal opening in prepubertal child (4-10 mm. or over)
 - _____ Posterior fourchette lacerations
 - _____ Other lacerations/scarring, and location
 - _____ Redness, focal edema or abnormalities (synechiae, changes in vascularity, etc.)
 - _____ Absent or thinned hymenal ring
 - _____ Laxity of pubococcygeus muscle—gaping vaginal opening

- _____ Anal area injury/findings
- _____ Reflex relaxation of anal sphincter
- _____ Positive wink reflex
- _____ Complete or partial loss of sphincter control
- _____ Lacerations, scarring, erythema
- _____ Fan-shaped scarring
- _____ Loss of normal skin folds around anus
- _____ Thickening of skin and mucous membranes
- _____ Skin tags
- _____ Gaping anus (over 15 mm.) with enlargement of surrounding perianal skin

Medical Evidence/Observations Consistent with Physical Abuse

- _____ Doctor's opinion regarding cause of child's death or injury as non-accidental
- _____ Delay or failure to seek medical treatment by child's parent(s)/caretaker(s)
- _____ History given inconsistent with severity, type or location of injury
- _____ History inconsistent with child's developmental level/ability to injure self
- _____ Different explanations of injury from different family members
- _____ Child fearful, unwilling to explain cause of injury
- _____ Change in details during history-taking or to different people
- _____ Current physical injury accompanied by signs of multiple prior injuries or neglect, e.g. malnutrition, lack of regular medical care, etc.
- _____ Parenting disorders apparent, e.g. alcoholism, drug abuse, psychotic behavior, etc.
- _____ Parent/caretaker irritated, evasive, vague, reluctant to give information
- _____ Doctor's opinion that child's injuries are consistent with battered child syndrome

Injuries Suspicious for Physical Abuse

Soft Tissue Injuries

Bruises, Abrasions, Welts and Lacerations

- _____ In location other than bony prominences, such as buttocks, lower back, genitals, inner thighs, cheeks, ear lobes, mouth, neck, etc.
- _____ Multiple bruises at different stages of healing over large area of body, especially if deep
- _____ Adult bite marks
- _____ Wrap-around, tethering or binding injuries
- _____ Neck, ankle or wrist circumferential injuries; rope burns
- _____ Injuries due to choking or gagging
- _____ Trunk encirclement bruising
- _____ Patterns/imprints/lacerations suggesting inflicted injury
- _____ Grab, pinch, squeeze or slap marks
- _____ Strap or belt marks
- _____ Looped cord marks
- _____ Imprints or lacerations from other objects—tattooing, punctures, whips, sticks, belt buckles, rings, spoons, hairbrush, coat hangers, knives, etc.

Internal or
Abdominal Injuries

- _____ History or severity of injury indicates child was pummelled, thrown or swung against wall or other object, kicked, or hit with blunt, concentrated force

- _____ Lack of history indicating auto accident or fall from high place
- _____ Internal/organ damage
 - _____ Ruptured or perforated liver
 - _____ Injuries to spleen
 - _____ Injuries to intestines
 - _____ Injuries to kidneys
 - _____ Injuries to bladder
 - _____ Pancreatic injury
 - _____ Other internal organs
- _____ External symptoms
 - _____ Nausea, vomiting
 - _____ Constipation
 - _____ Shock
 - _____ Blood in urine
 - _____ Swelling, pain, tenderness

Head Injuries

- _____ Multiple bruises/lumps on scalp
- _____ Hemorrhaging beneath scalp or hair missing due to hair pulling
- _____ Subdural hematomas (never spontaneous)
- _____ Suspect caused by violent shaking if:
 - _____ Bone chips at cervical vertebrae
 - _____ Compression fractures to ribs
 - _____ Damage to neck muscles and ligaments—child unable to turn head to side or up and down
 - _____ Spinal cord damage
 - _____ No skull fracture or external bruising or swelling
 - _____ Whiplash or shaken baby syndrome diagnosis
- _____ Suspect caused by abusive blunt force trauma if
 - _____ Skull fracture
 - _____ Scalp swelling and apparent bruising
 - _____ Parent/caretaker denies recent trauma, fall or other injury sufficient to account for injury or claims accidental force such as fall from couch, bed or crib which is insufficient to cause such injury
- _____ Subarachnoid or other intracranial hemorrhages with no sufficient “accidental” explanation
- _____ Skull fractures without history of significant “accidental” force
- _____ Injuries to eyes without sufficient accidental or other explanation
 - _____ Retinal hemorrhaging, especially if other evidence of non-accidental head trauma present
 - _____ Black eyes
 - _____ Detached retinas
 - _____ Petechia (small spots of blood from broken capillaries) or other bleeding in eye
 - _____ Cataracts
 - _____ Sudden loss in visual acuity
 - _____ Pupils fixed, dilated or unresponsive to light
 - _____ Eyes not tracking or following motion
- _____ Ear injuries without appropriate explanation
 - _____ Sudden hearing loss
 - _____ “Cauliflower” ear
 - _____ Bruising to ear or surrounding area

- _____ Petechia in ear
- _____ Blood in ear canal
- _____ Injuries to nose without appropriate explanation
 - _____ Deviated septum
 - _____ Fresh or clotted blood in nostrils
 - _____ Bridge of nose bent or swollen
- _____ Injuries to mouth without appropriate explanation
 - _____ Chipped, missing or loose teeth caused by blow to mouth
 - _____ Bruising in corners and lacerations of frenulum, of upper and lower lip, and of tongue—indicative of exterior gag
 - _____ Petechia inside nostrils, around nose, or near corners of mouth—could indicate manual suffocation if child has stopped breathing

Skeletal Injuries

- _____ Multiple fractures at different stages of healing
- _____ Repeated fractures to same bone
- _____ Spiral fractures (usually femur, tibia, forearm or humerus)
- _____ Rib fractures, especially in children less than 3
- _____ Bone chips in bones connecting at elbow or knee, caused by jerking and shaking (avulsion of the metaphyseal tips)
- _____ Growth plate separations caused by shaking—"bucket handle" and "corner" fractures
- _____ Injury to bone—bleeding and thickening/calcification—which is repeatedly hit but not broken (sub-periosteal proliferation—apparent on x-ray)
- _____ Fractures to bones not usually accidentally broken, such as scapula and sternum

Inflicted Burns

- _____ Child burned on unusual part of body—palms, soles, genitals, etc.
- _____ Parent/caretaker delays in seeking medical help
- _____ Multiple burns of different ages and different burn patterns
- _____ Symmetrical, patterned burn with sharp margins—no indication of child trying to get away (child held down or hot object deliberately applied)
- _____ Hot water burns
 - _____ Immersion/dipping burn—oval shape, usually buttocks and genital area
 - _____ Doughnut-shaped burn—surrounding buttocks (indicates child forcibly held down)
 - _____ Glove or stocking burn—immersion of hand or foot
 - _____ Even immersion lines, lack of splash burns (child prevented from thrashing around, trying to get out)
- _____ Contact burns
 - _____ Cigarette, cigar, match tip, pilot light flame burns—usually deep circular burns
 - _____ Imprint of object responsible for burn with sharp margins—usually deep and uniform burn:
 - _____ Stove burner (star, circular, coil shapes)
 - _____ Heating grate, radiator
 - _____ Iron
 - _____ Curling iron
 - _____ Heated knife or hanger
 - _____ Other

4. CONTACT OTHER WITNESSES

- _____ Determine *all* people with relevant information about victim or offender and obtain statements (complainant, victim's parents/caretakers, family members, friends, medical personnel, co-workers, teachers, CPS personnel, neighbors, therapists, etc.)
- _____ Note identifying information for each witness: DOB, address, phone, employment, relationship to victim and/or offender, marital status, etc.
- _____ Check for prior criminal record of witness
- _____ Note witness' demeanor and attitude toward victim and/or offender, and reaction to allegations
- _____ Determine degree of familiarity with victim and/or offender
- _____ Determine whether they witnessed any unusual or inappropriate behavior/contact between offender and victim or other children
- _____ Determine whether they know of or suspect any other children who were victimized or at risk
- _____ Determine whether they know of additional potential witnesses
- _____ Determine whether they can verify/refute *any* facts supplied by victim or offender
- _____ Awareness of any motives of victim or others to falsely accuse offender
- _____ Observation of any physical/medical symptoms in victim (see preceding list)
- _____ Observation or knowledge of *any* unusual behavior/behavior changes in victim before or after disclosure; some possibilities include:

Behavioral Extremes

- _____ Constant withdrawal, depression, suicide gestures/attempts or self-destructive behavior
- _____ Overly compliant or passive
- _____ Overly eager to please
- _____ Afraid to talk or answer questions in parent's/suspect's presence
- _____ Avoiding suspect or refusal to be with suspect
- _____ Fearful of a place—daycare, school, babysitter's, suspect's room, etc.
- _____ Fear of all males, all females or all adults
- _____ Wary of physical contact
- _____ Unusual self-consciousness, e.g. unwilling to change clothes for PE class or to participate in recreational activities
- _____ Constant fatigue, listlessness or falling asleep in class
- _____ Excessively self-controlled; never cries or exhibits curiosity
- _____ Frequent unexplained crying
- _____ Apprehensive when other children cry
- _____ Poor peer relationships or deterioration in existing friendships
- _____ Inability to concentrate
- _____ Unusual craving for physical affection
- _____ Unexplained or extreme aggressiveness, hostility, physical violence
- _____ Turning against a parent, relative, friend, etc.
- _____ Delinquency, including theft, assaultive behavior, etc.
- _____ Alcohol or drug use/abuse
- _____ Running away
- _____ Frequent absences/truancy from school
- _____ Early arrival, late departure and very few absences from school
- _____ Sudden increase or loss in appetite
- _____ Change in school performance or study habits
- _____ Compulsion about cleanliness—wanting to wash or feeling dirty all the time

Psychosomatic Symptoms

- _____ Headaches
- _____ Stomach aches
- _____ Rashes
- _____ Stuttering

Regressive Behavior

- _____ Return to accidents/bed-wetting
- _____ Baby talk, acting like a baby
- _____ Excessive clinging
- _____ Thumb sucking
- _____ Carrying blanket
- _____ Wanting to nurse
- _____ Otherwise acting younger than age

Sleep Disturbances

- _____ Bad dreams
- _____ Refusal/reluctance to sleep
- _____ Excessive sleeping
- _____ Sleep walking
- _____ Sudden fear of darkness
- _____ Other sleep pattern changes

Unusual Sexual Behavior or Knowledge

- _____ Acting out sexually with toys, other children
- _____ Excessive masturbation
- _____ French kissing
- _____ Sexually provocative talk
- _____ Seductive behavior toward adults
- _____ Preoccupation with sexual organs of self or others
- _____ Sexually explicit drawings
- _____ Sexual knowledge beyond norm for age

Other Behaviors

- _____ Dressed inappropriately for weather, e.g. *always* in long sleeves, etc.
- _____ Enuresis/encopresis
- _____ Pseudo-mature behavior
- _____ Extreme hunger
- _____ Sudden weight loss or gain
- _____ Personality disorders

5. INTERVIEW WITNESSES TO WHOM VICTIM MADE STATEMENTS

- _____ Cover all applicable areas in 4.
- _____ Determine exact circumstances of child's disclosure to them
 - _____ When and where statements made
 - _____ Who else present
 - _____ Words used by child
 - _____ Details provided by child

- _____ Incident precipitating disclosure, e.g. spontaneous disclosure, child responding to questions, etc.
- _____ Child's demeanor/emotional state
- _____ Child's attitude toward offender
- _____ Child's expressed concerns/fears
- _____ Witness' reaction to child

6. INTERVIEW COMPLAINANT (first reporter, if other than child)

- _____ Cover all applicable areas in 4. and 5.
- _____ Determine what caused them to report
 - _____ Child's disclosure, *or*
 - _____ Suspicions based on other factors without disclosure from child
- _____ Assess potential motives of complainant

7. INTERVIEW VICTIM'S PARENT(S)/CARETAKER(S)

- _____ Cover all applicable areas in 4., 5. and 6.
- _____ Determine child's medical and mental health history
 - _____ Obtain names of doctor(s)/therapist(s)
 - _____ Obtain consent to receive relevant medical records
- _____ Prior abuse of victim—when, where, who, action taken, results
- _____ Prior accusations of abuse by victim—when, where, who, action taken, results
- _____ Child's general personality/functioning—school performance, hobbies, friends, etc.
- _____ Child's normal schedule/routine
- _____ Verification of timing/events related by child
- _____ Suspect's access to victim (past and present)
- _____ Ongoing difficulties in family (e.g. divorce, custody or visitation disputes, arguments, etc.) and victim's awareness of/reaction to them
- _____ Determine whether supportive of victim

For physical abuse

- _____ When injury/sickness of victim first noticed
- _____ What they know or suspect about cause
- _____ Where child was/who with child for substantial time before and all times up to injury/sickness becoming apparent
- _____ Prior illnesses or injuries of child
- _____ Prior medical treatment of child and name of provider(s)
- _____ Suspect's responsibility, if any, for discipline of child; normal methods used
- _____ Action taken when noticed injury/sickness

For sexual abuse

- _____ Determine child's awareness of/exposure to sexual matters
 - _____ TV, movies, videos, magazines, etc.
 - _____ Observation of adults
 - _____ Talking to others—sex education in school, friends, personal safety curriculum
- _____ Determine sleeping arrangements (intrafamilial abuse)
- _____ Determine who bathed victim

8. INTERVIEW OTHER FAMILY MEMBERS OF VICTIM

- _____ Cover all applicable areas in 4., 5., 6. and 7.
 _____ Determine whether they saw/heard any direct or indirect evidence of abuse
 _____ Determine if they were ever victims

9. INTERVIEW SUSPECT'S SPOUSE, SIGNIFICANT OTHER OR OTHERS IN FAMILY/HOUSEHOLD

- _____ Cover all applicable areas in 4., 5., 6., 7. and 8.
 _____ Determine statements made by suspect
 _____ Suspect's reaction to allegation or explanation for it
 _____ Unusual behavior of suspect before or after allegation
 _____ Suspect's opportunity to abuse child—time with child, alone or otherwise
 _____ Relationship known/observed between victim and suspect
 _____ Whether suspect owns/owned/possessed items, clothes, etc. described by victim
 _____ Other children in contact with suspect
 _____ Prior arrests, accusations, convictions of suspect
 _____ Suspect's violence toward others
 _____ Suspect's employment—past and present
 _____ Suspect's residence—past and present
 _____ Prior marriages of suspect
 _____ All children/step-children of suspect
 _____ Suspect's physical and mental health
 _____ Prior illnesses/infections/treatment
 _____ Alcohol or drug abuse
 _____ Names of doctors/therapists seen
 _____ Description of witness' relationship with suspect
 _____ Description of witness' background—marital, employment, etc.
 _____ Whether suspect (or witness) keeps diary, journal, calendar, computer records, address book, etc.
 _____ Whether suspect has another residence, post office box, storage area, etc.
 _____ Unusual hobbies or interests of suspect

For Sexual Abuse

- _____ Sleeping arrangements in home
 _____ Children's bathing responsibilities in home
 _____ Distinctive anatomical features (if any) of suspect, e.g. scars, tatoos, birthmarks, etc.
 _____ Suspect's use (if any) of pornography, sexual aids or implements, birth control
 _____ Presence of sexually transmitted disease in suspect or witness
 _____ Strange/unusual/distinctive sexual practices or preferences of suspect

For Physical Abuse

- _____ Suspect's responsibility for child's discipline
 _____ Usual methods/frequency
 _____ Amount of force
 _____ Use of weapons/implements
 _____ Loss of control
 _____ Any expressions of frustration, disappointment or anger with child by suspect
 _____ Suspect's access to weapons/implements consistent with child's injuries

10. INTERVIEW SUSPECT

- _____ Advise of *Miranda* rights
- _____ Stress interested only in hearing and determining the truth
- _____ Obtain background, biographical information
 - _____ DOB
 - _____ Vital statistics: height, weight, etc.
 - _____ Past and present residences
 - _____ Past and present employment
 - _____ Marital status/prior marriages
 - _____ Number of, names, locations and ages of all children
 - _____ Mailing address(es), P.O. box(es)
 - _____ Neighborhood/community organizations or affiliations
 - _____ Hobbies and interests
 - _____ Magazine subscriptions, especially if sexually-oriented
- _____ Suspect's schedule and routine—e.g. work and leisure time, vacation time, etc.
- _____ Note suspect's demeanor and any changes during interview, e.g. angry, uncomfortable, vague, evasive, amused, unconcerned, etc.
- _____ Any indication of psychosis, mental health problems, alcohol or drug dependence, physical or medical problems
- _____ Suspect's familiarity with victim and victim's routine
 - _____ Acknowledgement/awareness of victim's age or any disabilities
 - _____ Acknowledgement of time alone with victim
- _____ Suspect's description of nature and quality of his relationship with victim
- _____ Suspect's description of victim
 - _____ "Problem child"
 - _____ "Special" child
 - _____ Good/bad
 - _____ Obedient/disobedient
 - _____ Smart/dumb
 - _____ Honest/dishonest ("pathological liar")
 - _____ "Bruises easy"
 - _____ "Clumsy"
 - _____ "Always/never in trouble"
 - _____ Unrealistic expectations of child
 - _____ Complaints about minor, irrelevant or unrelated problems with child
 - _____ Other
- _____ Suspect's description of ways of dealing with problems with child
- _____ Suspect's description of relationship with spouse, complainant, other important witnesses
- _____ Corroboration of *any* details supplied by victim
- _____ Suspect's explanation, *in detail*, of reasons for allegation of abuse
 - _____ Victim's motive to lie
 - _____ Motive of others to lie
 - _____ Details of "unintended" or "accidental" touching or injury
 - _____ Detailed explanation of how child initiated event
 - _____ Detailed explanation of injuries observed on child
 - _____ Explanation for why delayed or did not seek medical attention for injured child
 - _____ Extent and details of any abusive conduct suspect admits
- _____ Request names and locations of anyone who can corroborate information given by suspect
- _____ Request access to any items which could corroborate suspect's claims, e.g. calendar, work records, etc.
- _____ Request names of suspect's friends and co-workers; if someone you are aware of is left out by suspect, find out reason why
- _____ Ask suspect to verify he has told truth and whether he has anything else to say

11. SEARCH FOR/SEIZE PHYSICAL EVIDENCE*From Victim*

- _____ Photos of injuries/general appearance
- _____ Clothing worn at time of assault, especially if torn, bloody, etc.
- _____ Bedding, etc. which may contain evidence
- _____ Items received from suspect
- _____ Calendars, diaries, journals, etc.
- _____ Other

From Scene

- _____ Photos/diagrams
- _____ Take measurements of areas/items involved, especially in physical abuse cases with claim of accident or self-infliction of injury by child
- _____ Note surface child supposedly landed on in "fall" case, e.g. wood, concrete, carpeted, etc. and measure distance from child's supposed position to point of impact
- _____ In burn cases:
 - _____ Seize/photograph items consistent with pattern of contact burn
 - _____ Check water temperature at hot water heater and faucets in hot water burn cases
 - _____ Measure height of tub/sink and note what tub/sink (or other site of burn) is made of
 - _____ Test to determine surface temperature of items used to burn child and check for body residue on them
- _____ In criminal neglect cases:
 - _____ Note/document/photograph general appearance of home before "cleaned up" by suspect(s)
 - _____ Determine whether utilities on/working
 - _____ Determine availability/condition of food appropriate for child
 - _____ Determine condition of appliances (stove, refrigerator, etc.) and whether working
 - _____ Determine condition/safety of electrical and plumbing features
 - _____ Determine condition/cleanliness of sleeping areas and items, clothing for child, etc.

Any Applicable Relevant Evidence From Suspect, Suspect's Residence, Office, etc.

- _____ Use search warrant if necessary; *always* request consent
- _____ Photos to show suspect's appearance and/or unusual/distinctive physical features
- _____ Fingerprints
- _____ Hair, blood, saliva, semen, fingernail scrapings, dental impressions as applicable to facts
- _____ Handwriting exemplars, voice tapes
- _____ Clothing with potential evidentiary value
- _____ Occupancy papers
- _____ Phone records
- _____ Bank or credit card records
- _____ Work records
- _____ Drugs or alcohol
- _____ Pictures, negatives, videos, home movies of victim or other children
- _____ Camera and/or developing equipment
- _____ Weapons/implements used to threaten or injure child
- _____ Items left at suspect's or with suspect by child
- _____ Pornographic items (films, pictures, magazines, videos, etc.)
- _____ Sexual aids or devices
- _____ Computer records, journals, calendars, diaries, address books, etc.
- _____ Any unique/distinctive items described by victim (furnishings, pictures, clothing, lubricants, etc.)

12. UTILIZE ADDITIONAL INVESTIGATIVE TECHNIQUES AS APPROPRIATE

- _____ Obtain 911 tape
- _____ Wire tap orders/pen-registers
- _____ Undercover officer surveillance
- _____ Video surveillance
- _____ Polygraph or PSE of suspect
- _____ Special crime lab testing/analysis
- _____ Consultation with outside experts
- _____ Other

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX F

Multnomah County
School District Protocols

MEMORANDUM

TO: Helen Smith, Chair
Multnomah County District Attorney's Office

FROM: Barbara Neely, RN
Department of School Health Services
Multnomah Educational Service District

RE: Child Abuse Reporting Procedures for:
Portland Public Schools
Parkrose
Centennial
Gresham-Barlow (Now includes what used to be Orient and Damascus)
Corbett
Sauvie Island
David Douglas
Reynolds

DATE: July 6, 1994

Most of the policies have been reviewed within the last two years. None of the policies address the new revisions of the law that include mandatory reporting twenty-four hours/day. Richard Varvel, CSD, reviewed the policies and made comments that are highlighted.

A recommendation that all districts adopt a standard procedure/policy would seem to be feasible. The flow chart would be easy for school personnel to follow.

DEPARTMENT OF SCHOOL HEALTH SERVICES -- MULTNOMAH ESD

CLEVELAND HS*

Hosford MS
Sellwood MS
Abernethy
Brooklyn
Buckman
Duniway
Edwards
Grout
Lewis
Llewellyn

JEFFERSON HS*

Ockley Green MS
Tubman MS
Applegate Kenton
Beach King
Boise-Eliot Peninsula*
Chief Joseph Woodlawn
Faubion Vernon
Humboldt

LINCOLN HS*

West Sylvan MS
MLC (K-12)
Ainsworth
Bridlemile
Chapman
Skyline

ROOSEVELT HS*

George MS
Portsmouth MS
Astor
Ball
Clarendon
James John
Sitton

WILSON HS

Robert Gray MS
Jackson MS*
Capitol Hill
Hayhurst
Maplewood
Markham
Rieke
Smith
Stephenson

Consultation Services Only:

Serendipity
PCC SE Campus*
Centennial Mt. Hood Ctr*

BENSON HS

DAVID DOUGLAS HS*

Alice Ott MS
Floyd Light MS
Cherry Park
Gilbert Heights
Gilbert Park
Lincoln Park
Menlo Park
Mill Park
Ventura Park*
West Powellhurst

FRANKLIN HS*

MARSHALL HS*

Binnsmead MS*
Kellogg MS
Lane MS
Mt. Tabor MS
Arleta Marysville
Atkinson Richmond
Bridger Sunnyside
Clark Whitman
Creston* Woodmere
Glencoe Woodstock
Kelly Youngson
Lent

GRANT HS*

Beaumont MS
Fernwood MS
Alameda
Hollyrood
Irvington
Laurelhurst
Sabin

MADISON HS

Gregory Heights MS

Whitaker MS*
Jason Lee* Harvey Scott
Meek Vestal
Rice Wilcox
Rigler Voc. Village
Rose City Park

PPS Transitions

Holladay Center

CENTENNIAL HS

Centennial MS
Harold Oliver Intermediate*
Early Childhood Center
Harold Oliver Primary
Lynch Meadows
Lynch View
Lynch Wood
Pleasant Valley

GRESHAM-BARLOW

BARLOW HS*

GRESHAM HS

Clear Creek MS
Dexter McCarty MS
Gordon Russell MS
Damascus MS
West Orient MS
Deep Creek
East Gresham
Hall
Highland
Hollydale
Kelly Creek
North Gresham
Powell Valley
West Gresham

PARKROSE HS*

Parkrose MS
Prescott
Russell
Sacramento
Shaver

REYNOLDS

Hauton B. Lee MS

Reynolds MS*

Alder
Davis
Fairview
Glenfair
Hartley*
Margaret Scott
Sweetbriar
Troutdale
Wilkes

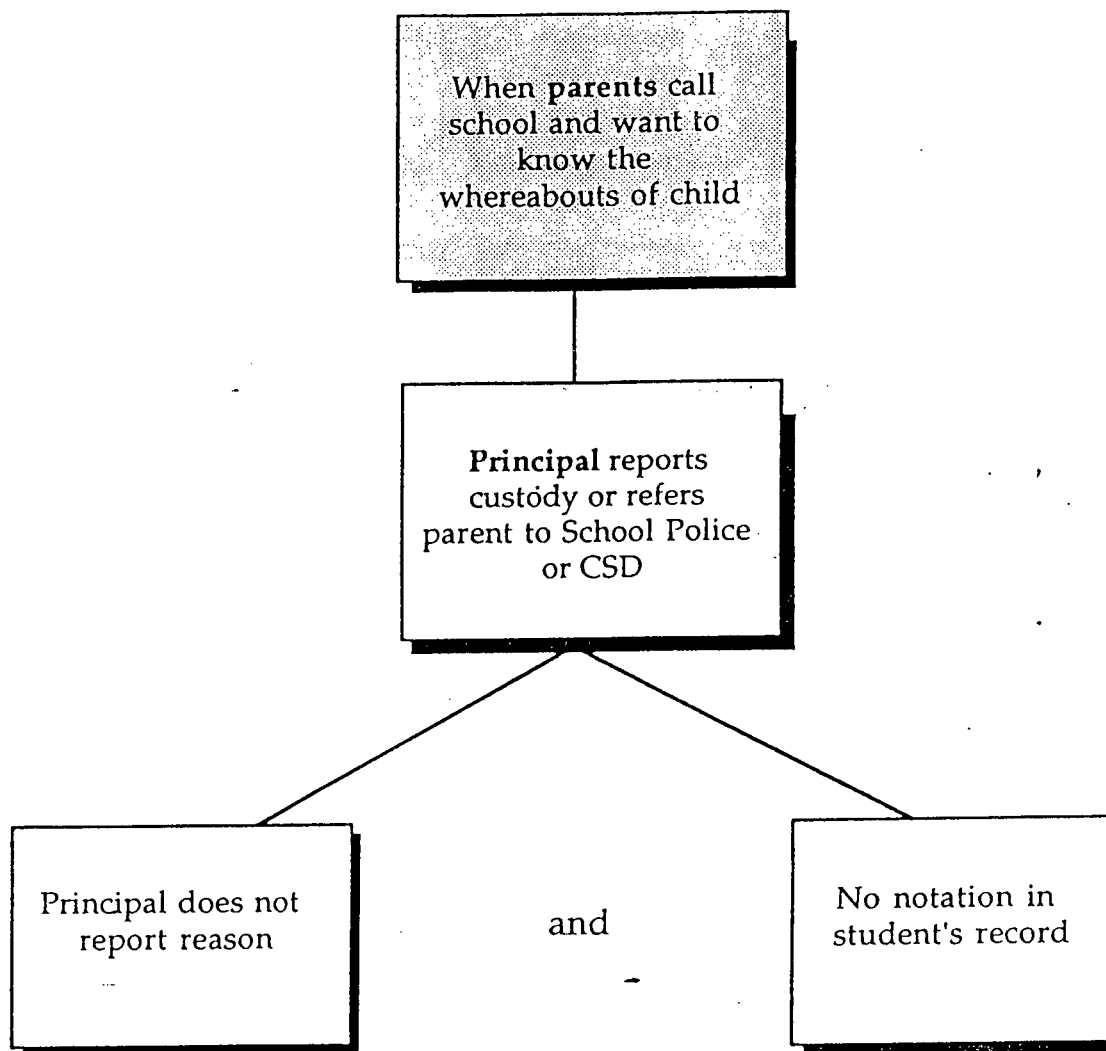
ESD--Helensview

Multnomah Middle School

Consultation Services Only:

Centennial HS*
Mt. Hood CC*

Responses to Parent Inquiry



CHILD ABUSE REPORTING FOR SCHOOL EMPLOYEES

Under Oregon State Law (~~4196.010~~^{4196.010}), all school employees must report or cause a report to be made to Children's Services Division or to Law Enforcement Agency (local or school police) when there is reasonable cause to believe that a child has been abused or that any person, including an adult or child, with whom the employee comes in contact has abused a child. Failure to report may result in a fine of up to \$1000.

Under ORS (~~4196.010~~^{4196.010}) mandatory reporters must comply with the ORS (~~4196.010~~^{4196.010}) twenty-four hours/day.

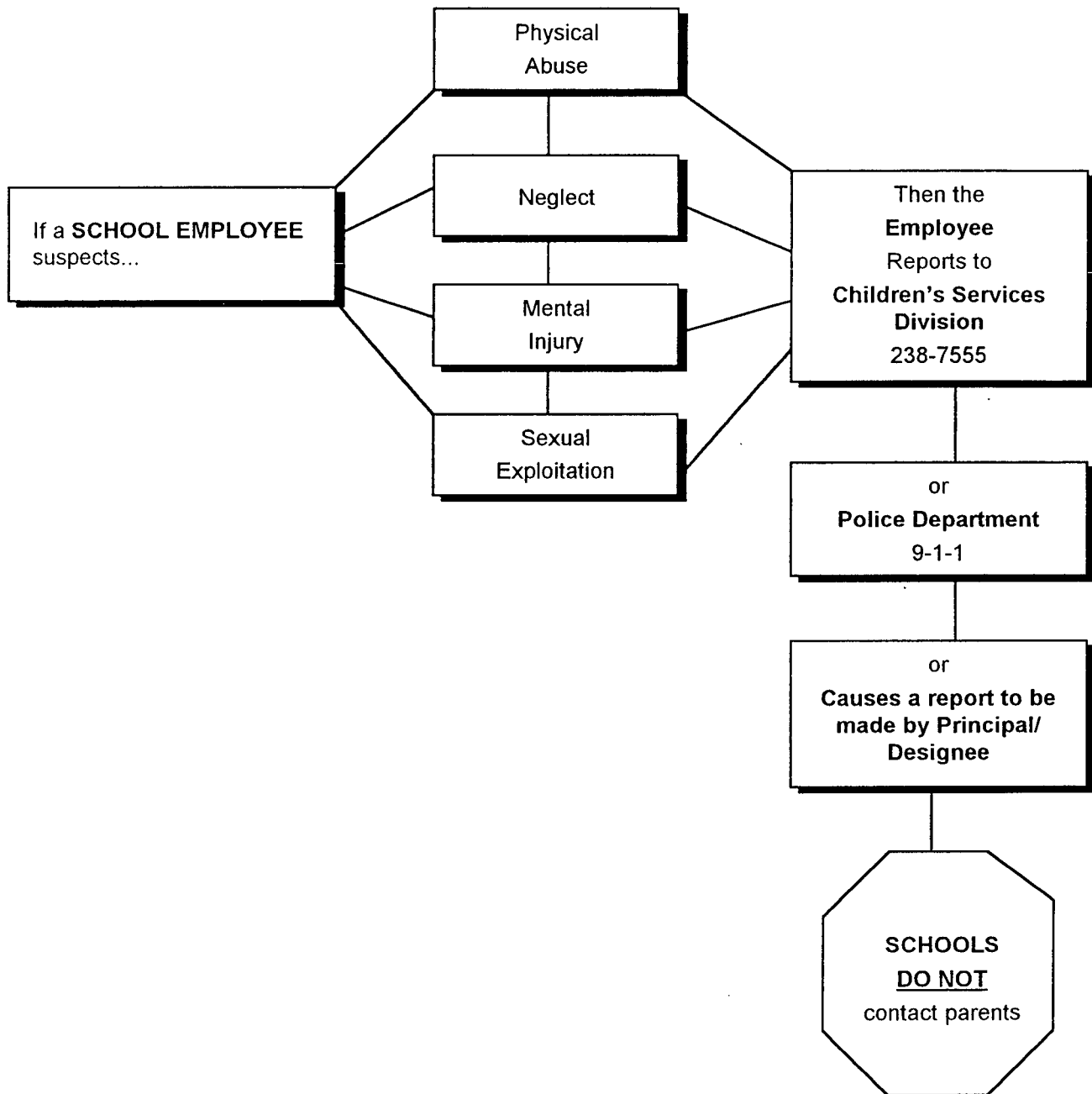
REPORTING PROCEDURES

1. A school employee who observes signs of physical abuse, signs of neglect, mental injury, and or becomes aware of sexual exploitation or suspects sexual exploitation, shall report the suspected physical abuse, neglect, or sexual exploitation to the Children's Services Division by calling 238-7555 or 731-3100 or the Police Department at 9-1-1. ALTERNATIVELY, the school employee who has observed the child abuse may cause such a report to be made by the school principal or principal-designee.
2. A school employee who has made a report of child abuse shall immediately submit a completed district child abuse referral form to the principal or the principal designee so the district will have a record that a child abuse report was made to the appropriate authorities. Such a report can occur either before or after the report to Children's Services Division.
3. Persons such as neighbors, relatives, or individual who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school principal. The principal will investigate the matter and call the Children's Services Division or appropriate Law Enforcement Agency to make the report.
4. In child abuse cases, the school should not contact the parents. The Law Enforcement investigator or Children's Services Division investigator has the responsibility of contacting the parents and will report back to the school as described in Items 6 and 9 which follow.
5. If, in the investigation of a case, a police officer or a Children's Services Division/Child Protective Services worker appears at the school to talk with a student, the principal/designee will secure the name, agency, badge identification number, and telephone number of the officer or worker. This information along with the name of the student and the time and date of the interview, should be

recorded. If the investigating officer or worker requests a private interview with the student, permission shall be granted.

6. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or Children's Services Division/Child Protective worker will determine what the next step will be and when parent contact will be made.
7. If a parent calls and asks for the whereabouts of his/her child, the principal will simply report the custody but not the reason and suggest the parent telephone the Law Enforcement Agency or Children's Services Division. The telephone number of the agencies will be given to the parent. No notation of the child having been taken into custody shall be placed in the student's record.
8. If a police officer or Children's Services Division/Child Protective Service worker responds to the school report and asks permission to talk to the student, the principal or designee shall honor this request after securing the name agency, badge identification, and telephone number of the officer or worker. Before the officer or worker leaves the building, find out whether or not the officer intends to contact the parents. If not, determine with the investigative agency who will make the contact with the parents.
9. The police and Children's Services Division/Child Protective Services shall inform the school about how the case is progressing by giving information about custody, court hearing, etc. The name and telephone number of the Children's Services Division/Child Protective Services worker shall be given to the principal /designee. If the principal has not heard from the appropriate agency about the reported case by the end of the school day, a call shall be made to the appropriate agency.
10. The school, in cooperation with Children's Services Division/Child Protective Services, will provide the necessary follow-up and support to the student and family as seems appropriate.

CHILD ABUSE REPORTING PROCEDURES



- Oregon law mandates all school employees to report suspected child abuse.
- When an employee reports suspected child abuse directly, the employee must also notify the school principal/designee in person or in writing.

Investigation Procedures

School Police Officer
Police Officer or Children Services
Division/CPS appear at school to
interview student

Principal secures and records the
following:

- Name of officer or worker
- Agency
- Badge #
- Telephone #
- Name of student
- Time of interview
- Date of interview

School personnel give detailed
information to officer/CPS/CSD
Worker

or CPS

Spice/CPS/CSD alone or with identified
school staff will interview the
student--Disabled or limited
English, office should involve ESL
or Sp.Ed. if severely disabled

*Changes in
wording*

Officer or worker will
determine next step

Officer or worker will make
contact with parent

Prioritizing Services to Children and Families

Children's Services Division • Department of Human Resources

LEVEL 1

Child Protection

- Child fatalities.
- Severe physical abuse.
- Abandoned or orphaned children and youth with no other resources.
- Life-threatening neglect.
- Child that is a severe danger to self; parent unwilling or unable to protect.
- Severe familial sexual abuse; perpetrator has access to child.
- Child in great danger due to caretaker actions or inactions.

Community Protection

- The child has committed a felony A person-to-person offense such as Murder or Rape.
- The child has committed a felony A property offense of either Arson 1 or Robbery 1.

LEVEL 2

Child Protection

- Frequent or sequential physical abuse; age 0-12.
- Child in imminent danger to harm others; age 0-12.
- Familial sexual abuse (other than severe); ages 0-12, ages 13-17 where child cannot be protected without intervention.

Community Protection

- The child has committed a felony B person-to-person or public order offense such as sex abuse.
- The child has committed a felony A property or substance drug/substance offense such as Burglary, Robbery 2 or Manufacture of a Controlled Substance (*).

LEVEL 3

Child Protection

- Severe emotional abuse; ages 0-12.
- Chronic neglect that could escalate to abuse; ages 0-12.
- Familial sexual abuse (other than severe); ages 13-17.
- Severely emotionally disturbed child needing residential treatment.
- MR/DD child needing residential treatment.

Community Protection

- The child has committed a felony C person-to-person or public order offense such as Criminally Negligent Homicide or Incest.
- The child has committed a felony B property offense or public order offense such as Compelling Prostitution, or drug/substance offense such as Delivery of a Controlled Substance (*).

LEVEL 4

Child Protection

- Moderate emotional abuse; ages 0-12.
- Severe emotional abuse; ages 13-17.
- Frequent or sequential physical abuse; ages 13-17.

Community Protection

- The child has committed an A misdemeanor person-to-person or public order offense such as Recklessly Endangering or Public Indecency.
- The child has committed a felony C property offense such as Forgery, Arson II, or public health decency or drug/substance offense such as Promoting Prostitution or Manufacture of a Controlled Substance. (Refer to schedule of Controlled Substances.

LEVEL 5

Child Protection

- Non-delinquent child who is a danger to property; ages 3-12.
- Mild physical abuse; ages 0-12.
- Mild emotional abuse; ages 0-12.
- Sex abuse victims needing treatment (unavailable in community); ages 0-12.

Community Protection

- The child has committed a misdemeanor B person-to-person offense such as Carrying a Concealed Weapon or public offense such as Prostitution.
- The child has committed a misdemeanor A property offense such as Criminal Trespass, Reckless Burning, or Manufacture of a Controlled Substance, or a public health/decency or drug/substance offense (*).

LEVEL 6

Child Protection

- Chronic, acting out, non-delinquent child; ages 3-12.
- Moderate emotional abuse; ages 13-17.
- Sex abuse victims needing treatment; (unavailable in community); ages 13-17.

Community Protection

- The child has committed a misdemeanor C person-to-person offense such as Sexual Misconduct.

LEVEL 7

Child Protection

- Chronic, acting out, non-delinquent child; ages 13-17.
- Chronic neglect; ages 13-17.

Community Protection

- The child has committed a misdemeanor C property offense such as Theft of Services or a status offense.

CHILD ABUSE/NEGLECT REPORT FORM

This form is only for reporting non-emergent/non-current allegations of child abuse and neglect. If you suspect current abuse or neglect where the child(ren) remain at risk, and/or when the victim is willing to talk to the authorities, call 238-7555 and make your report directly to a Hotline worker--or call local law enforcement.

Today's Date:	Reporting person's name, phone, relationship to victim: Name of person completing form, if different:		
Victim's Name:	DOB:	M/F:	Race:
Parents' Name and Address:			
Victim's current address:			
Allegation:			
Evidence, if any:			
Any specific statements made by victim:			
Alleged perpetrator: and current address:	Location of occurrence:	Date of occurrence (year/s)	
IMPORTANT: <u>ARE THERE ANY OTHER CHILDREN AT RISK FROM THIS PERPETRATOR, AND IF SO, WHAT IS THEIR LOCATION AND IDENTITY?</u>			

Return to: **Multnomah County Child Abuse Hotline, 2215 SE Morrison, Suite 224, Portland, OR 97214-2964**

Abusrpt.frm (03/94)

FILE IN NARRATIVE SECTION

CHILD ABUSE REPORTING PROCEDURES and RESOURCE MATERIALS, 1994-95

Portland Public Schools' Board of Education policy relating to child abuse reporting includes the following instructions to the Superintendent, principals and staff:

1. The Superintendent is directed to have child abuse presentations during the school year for all schools not having such presentations during the past two years.
2. All school administrators, teachers and aides who have not attended such presentations should view the child abuse reporting videotape.
3. Any new school administrator, aide or teacher hired henceforth in the Portland Public Schools, shall within six months of their employment, view such a presentation.

To assist the schools in meeting the requirements of Board policy relating to child abuse reporting, a step by step procedure is described and outlined in flow charts. A new edition of the videotape, "REPORTING CHILD ABUSE," and resource materials which can be used for staff presentations are identified.

School counselors/Child Development Specialists have participated in inservice training and are prepared to present further information on child abuse issues to accompany the District's videotape on reporting procedures. Counselors/Child Development Specialists can also be resource persons for staff members in planning support for students after a child abuse report has been made.

REPORTING PROCEDURES

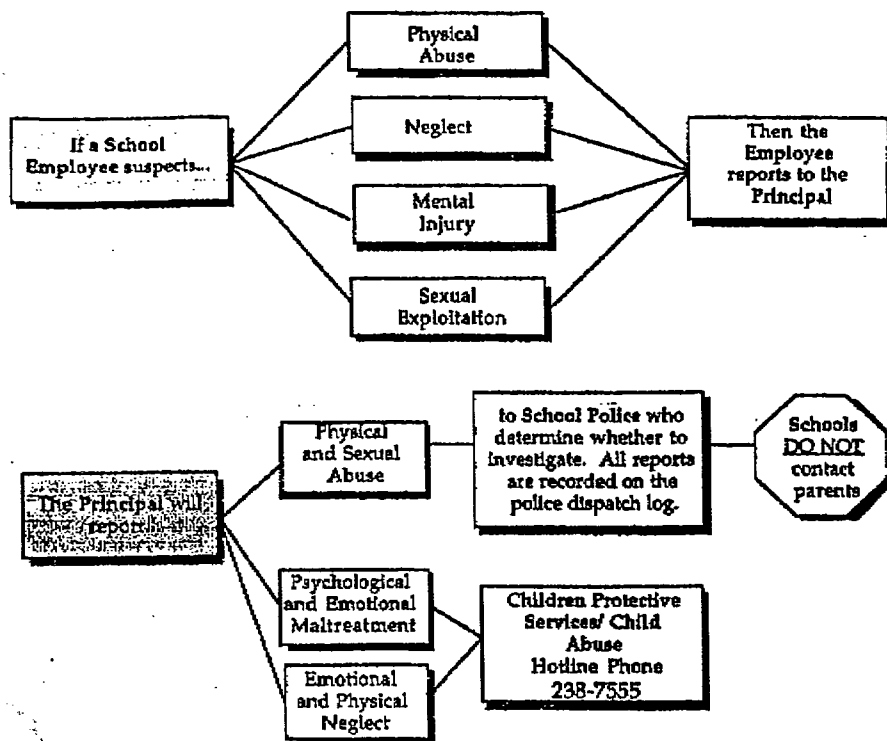
Portland Public Schools' Administrative Regulation 440.21 Student Welfare/Child Abuse was amended by the staff attorney in April, 1987. Please review your policy book to ensure it contains current information.

The child abuse reporting procedures to be followed by employees of the Portland Public Schools are listed below:

1. The school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspects sexual exploitation reports the facts to the principal.
2. The employee or principal will report the suspected physical or sexual abuse to the School Police immediately by calling 331-3307. The school employee who has observed the child abuse has the responsibility to make sure that it is reported to the School Police. If for any reason the principal is unavailable, the employee should make the report directly to the School Police and subsequently notify the principal of the report.
3. The employee or principal will report the suspected psychological/emotional maltreatment and emotional and physical neglect to the Childrens Protective Services Child Abuse Hotline by calling 238-7555.
4. Suspected child abuse should not be delegated to a third party such as the school counselor/CDS prior to reporting to the School Police. Counselors/CDS can be notified that a report has been made and can provide support help when the police investigation is completed.
5. MESD, Multnomah County Nurses and staff from other outside agencies are authorized to report directly to School Police, after which the principal is notified in person or in writing.

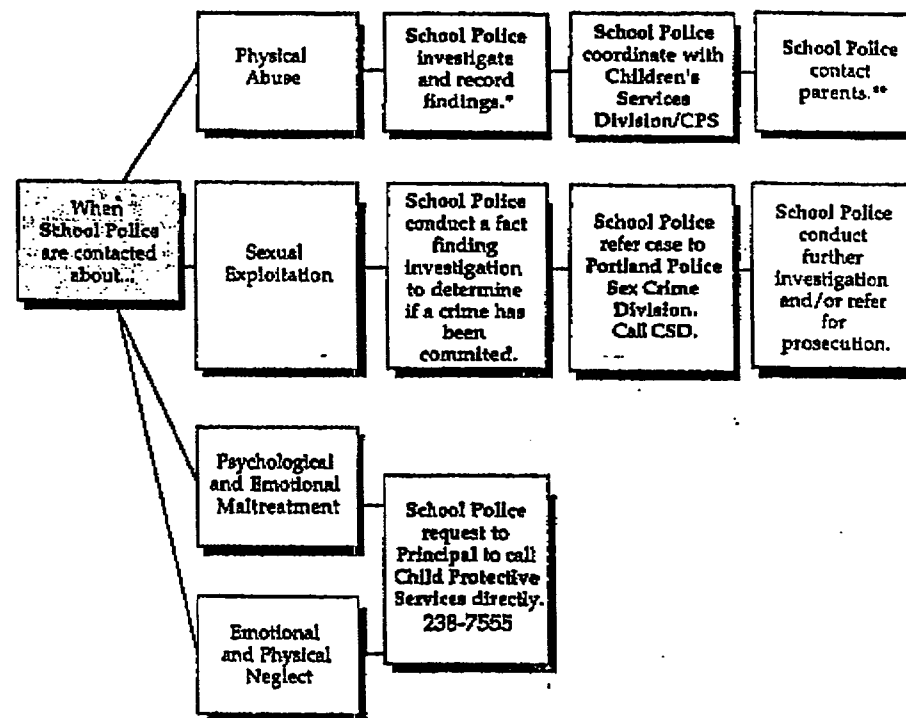
6. Persons such as neighbors, relatives or individuals who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school principal. The principal will call the School Police to make the report.
7. The School Police will call Children's Services Division/Child Protective Services at 238-7555 to report child abuse cases and to discuss who will do the initial follow-up. In most cases it will be the School Police. For cases of sexual exploitation, the School Police may arrange for a detective from the Portland Police Bureau Sex Crime Unit to conduct the initial investigation. In cases of psychological/emotional maltreatment and emotional and physical neglect, the CPS will follow up or make a report to be placed on file depending on the information provided. You may request information on what action will be taken.
8. In child abuse cases the school should not contact the parents. The School Police Department has the responsibility of contacting the parents and will report back to the school as described in Items 9 and 12 which follow.
9. If in the investigation of a case a School Police Officer or a Children's Services Division/Child Protective Services worker appears at the school to talk with a student, the principal will secure the name, agency, badge identification number and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview, should be recorded. If the investigating officer or worker requests a private interview with the student, permission should be granted. School personnel should be sure to give detailed information to the officer prior to his/her conducting the interview. If dealing with a handicapped student or limited English-proficient student the officer may wish to involve the Special Education or ESL teacher. In cases where an interpreter is needed, call ESL Bilingual Program, 280-5840.
10. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or worker will make the contact with parents.
11. If a parent calls and asks for the whereabouts of his/her child, the principal will simply report the custody but not the reason and suggest the parent telephone the School Police Department. No notation of the child having been taken into custody should be placed in the student's record.
12. If a Portland Police Officer, not a School Police Officer or a Children's Services Division/Child Protective Services worker, responds to the school report and asks permission to talk to a student, please honor this request. Because of the increase in child abuse cases, the School Police are not able to respond to all child abuse cases reported by school personnel. When this occurs, a Portland Police Officer is dispatched to the school. Before the officer leaves the building, find out whether or not the officer intends to contact the parents. If not, call the School Police Office to determine who should make the contact with the parents. Teachers should report hearsay to the principal and the principal will decide what to do.
13. The School Police and Children's Services Division/Child Protective Services have been asked to inform the school about how the case is progressing by giving information about custody, court hearings, etc. If the principal has not heard from the appropriate agency about a reported case by the end of the school day, a call should be made to the School Police Office to obtain the necessary information.
14. The school, in cooperation with Children's Services Division/Child Protective Services, will provide the necessary follow up and support to the student and family as seems appropriate.

Child Abuse Reporting Procedures



- Oregon law mandates all school employees to report suspected child abuse.
- The Portland Public School reporting procedures define that the school employee will report suspected child abuse to the school principal who will report to the school police. Principal will notify employee that the report was made.
- If for any reason the principal is unavailable, the employee should report directly to School Police.
- If the employee reports suspected child abuse directly to the school police, the employee must also notify the school principal in person or in writing.

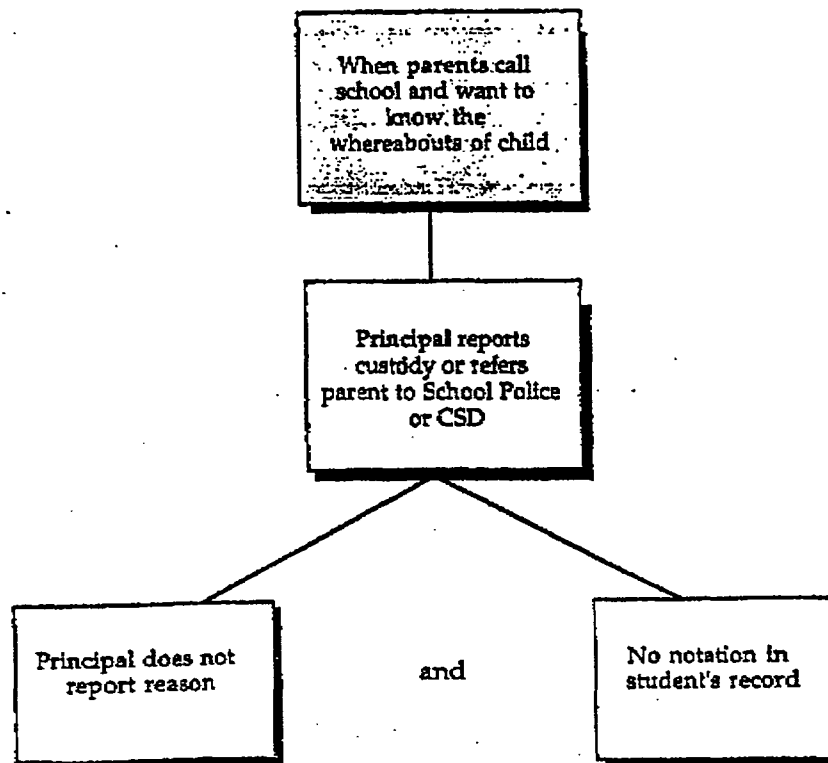
School Police Procedures In Response to Child Abuse Report



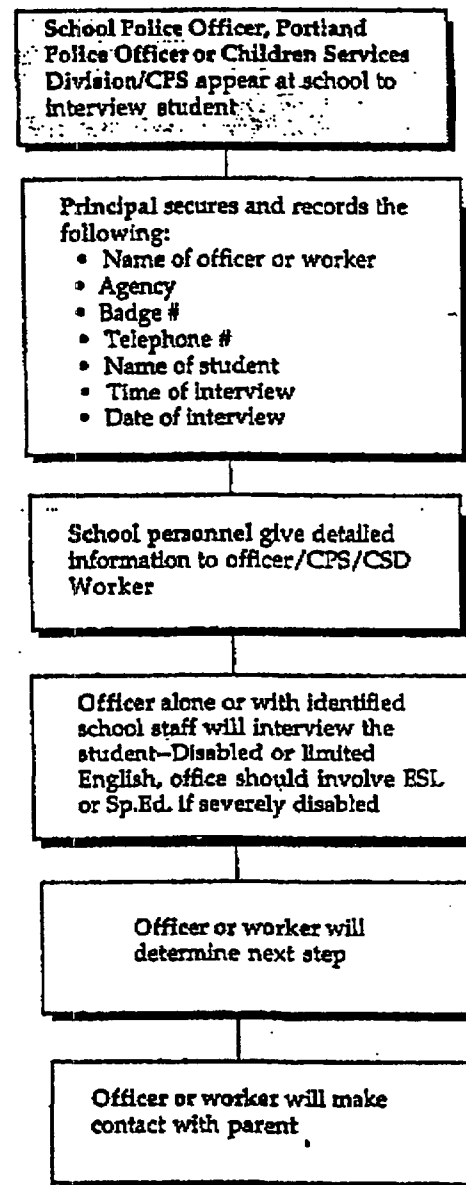
* See chart #5 for student to student abuse procedure

** School Personnel may call School Police for additional information.

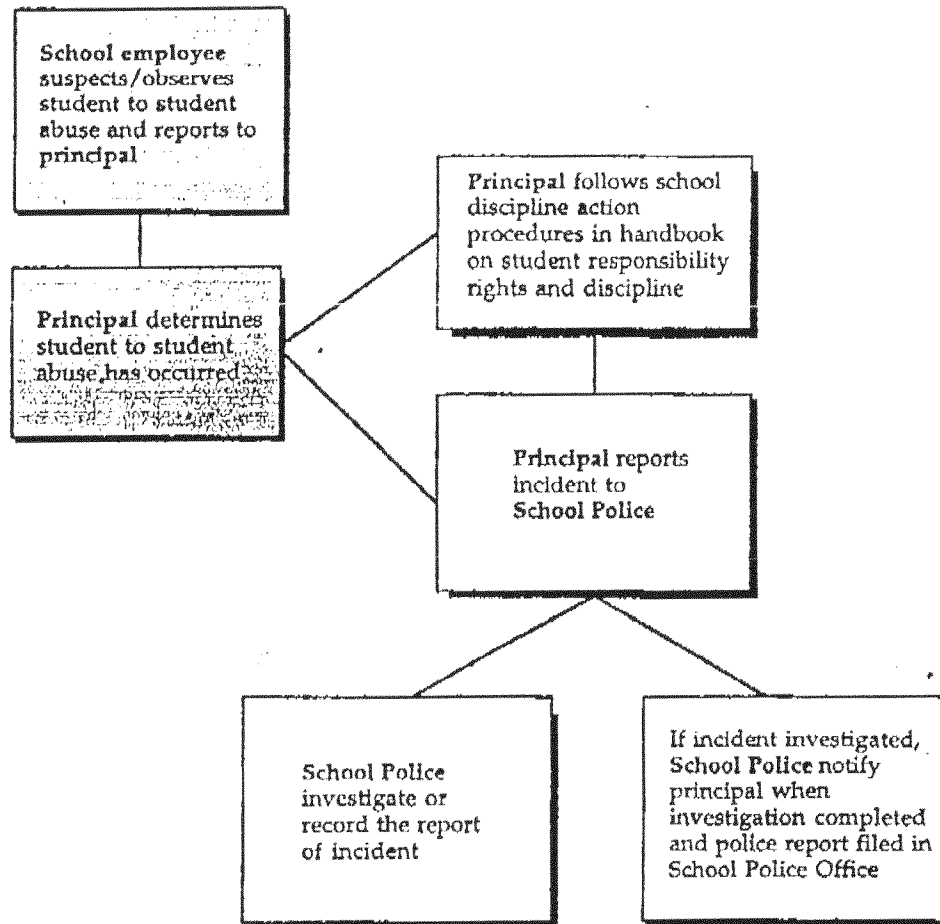
Responses to Parent Inquiry



Investigation Procedures



Student to Student Abuse Procedures



Student to Student Abuse is defined as physical abuse of another, but not mutual combat; may include the use of a weapon and sexual assault.

RESOURCES FOR STAFF PRESENTATIONS

VIDEOTAPE

- A new edition of the videotape "Reporting Child Abuse" was produced in June, 1993, and is available through the AV Library. The 1990 edition of "Reporting Child Abuse" is also available on request. Either videotape can be ordered like any other film. The viewing time is 16 minutes. These video tapes include information on child abuse issues relevant to all grade levels.

CALL NUMBER: V06493/TITLE: REPORTING CHILD ABUSE (1993)
CALL NUMBER: V03845/TITLE: REPORTING CHILD ABUSE (1990)

Schools that have not shown the videotape during the past two years will want to schedule it early for a faculty meeting. Schools that have shown the videotape during the past two years will want to notify new employees of opportunities to view the videotape.

A showing of the videotape has been arranged as part of the new teacher orientation Program coordinated by the PPS Personnel Department to be held:

THURSDAY, September 1, 1994

1:45 - 2:15 p.m.

Board Auditorium - BESC

Certified and classified staff are welcome. A second showing of the videotape will be scheduled for the second semester and will be announced at a later date.

- A video produced by the Committee For Children IDENTIFYING, REPORTING AND HANDLING DISCLOSURE OF THE SEXUALLY ABUSED CHILD can be borrowed from the Student Service Department, 280-5840, ext. 330, Carolyn Anderson.

BOOKLETS

- Recognizing and Reporting Child Abuse and Neglect - An Explanation of Oregon's Mandatory Reporting Law prepared by the Child Protective Service Program, Children's Services Division (revised 9/91). Copies are available upon request from the Student Services Department, 280-5840, ext. 330, Carolyn Anderson.
- Helping Children Heal - What School Personnel Need to Know and Child Abuse - What Oregon School Personnel Need to Know by Judith Burks. This excellent resource document describes responses to child abuse by the courts and gives helpful information for all staff in continuing to work with students. All school counselors and CDS have a copy of these booklets. Books may be borrowed from the Student Services Department, 280-5840, ext. 330, Carolyn Anderson.
- A bibliography of journal articles, ERIC documents, and books on the subject of child abuse and neglect has been prepared by PPS Professional Library. Call Student Services Department, 280-5840, if you wish to have a copy.

RESOURCES AND CURRICULUM MATERIALS FOR USE WITH STUDENTS

- For information on personal safety materials to use with elementary students call Child Development Specialist Coordinator, Rosy Taylor at 280-5840 ext. 332. The CDS Library has a variety of books, videotapes and kits available for check out, including:
 - Body Rights-(stories and activities for pre-kindergarten-1st grade)
 - Talking About Touching, A Personal Safety Curriculum-(activities and poster pictures for Pre-K-Kindergarten, 1st-3rd grades and 4th-5th grades)
 - Child Sexual Abuse: A Solution-(videotape or filmstrips for students K-6th grade, staff and parents)
- The American Red Cross program When I'm in Charge instructs elementary age students on prevention and safety tips when they are home alone. Information about this program can be obtained by calling Susan Osborn, American Red Cross, Oregon Trail Chapter at 284-1234, ext. 181.
- The following videos for grade levels 3 - 8 continue to be available through the AV Library:

COME IN FROM THE STORM:

 - #1 CHINA DOLL (Emotional Abuse) 10 minutes - CALL NUMBER V02759
 - #2 THE DIARY (Physical Abuse) 18 minutes - CALL NUMBER V02760
 - #3 THE NECKLACE (Sexual Abuse) 18 minutes - CALL NUMBER V02761
- The community Advocates program, Kids Can't: Confidence Building for Children, is a multi-faceted approach to child abuse prevention. For further information about the program contact Belle Bennett at 292-8587.

If you have any suggestions for materials which would be helpful to you, please contact the Student Services Department, 280-5840, ext. 334, Carolyn Sheldon.



PORTLAND PUBLIC SCHOOLS

531 S.E. 14th Avenue / Portland, Oregon 97214

Phone: (503) 280-5840

STUDENT SERVICES DEPARTMENT

Carolyn Sheldon
Assistant Director
Student Services

August, 1993

MEMORANDUM

TO: All Staff

FROM: Carolyn Sheldon, Assistant Director, Student Services

SUBJECT: CHILD ABUSE REPORTING PROCEDURES and RESOURCE MATERIALS, 1993-94

Portland Public Schools' Board of Education policy relating to child abuse reporting includes the following instructions to the Superintendent, principals and staff:

1. The Superintendent is directed to have child abuse presentations during the school year for all schools not having such presentations during the past two years.
2. All school administrators, teachers and aides who have not attended such presentations should view the child abuse reporting videotape.
3. Any new school administrator, aide or teacher hired henceforth in the Portland Public Schools, shall within six months of their employment, view such a presentation.

To assist the schools in meeting the requirements of Board policy relating to child abuse reporting, a step by step procedure is described and outlined in flow charts. A new edition of the videotape, "REPORTING CHILD ABUSE," and resource materials which can be used for staff presentations are identified.

School counselors/Child Development Specialists have participated in inservice training and are prepared to present further information on child abuse issues to accompany the District's videotape on reporting procedures. Counselors/Child Development Specialists can also be resource persons for staff members in planning support for students after a child abuse report has been made.

Carolyn Sheldon

CHILD ABUSE REPORTING PROCEDURES

1993-94 School Year

page two

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1. The school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspects sexual exploitation reports the facts to the principal.
2. The employee or principal will report the suspected physical or sexual abuse to the School Police immediately by calling 249-3307 or 248-5703. The school employee who has observed the child abuse has the responsibility to make sure that it is reported to the School Police. If for any reason the principal is unavailable, the employee should make the report directly to the School Police and subsequently notify the principal of the report.
3. The employee or principal will report the suspected psychological/emotional maltreatment and emotional and physical neglect to the Childrens Protective Services Child Abuse Hotline by calling 238-7555.
4. Suspected child abuse should not be delegated to a third party such as the school counselor/CDS prior to reporting to the School Police. Counselors/CDS can be notified that a report has been made and can provide support help when the police investigation is completed.
5. MESD, Multnomah County Nurses and staff from other outside agencies are authorized to report directly to School Police, after which the principal is notified in person or in writing.
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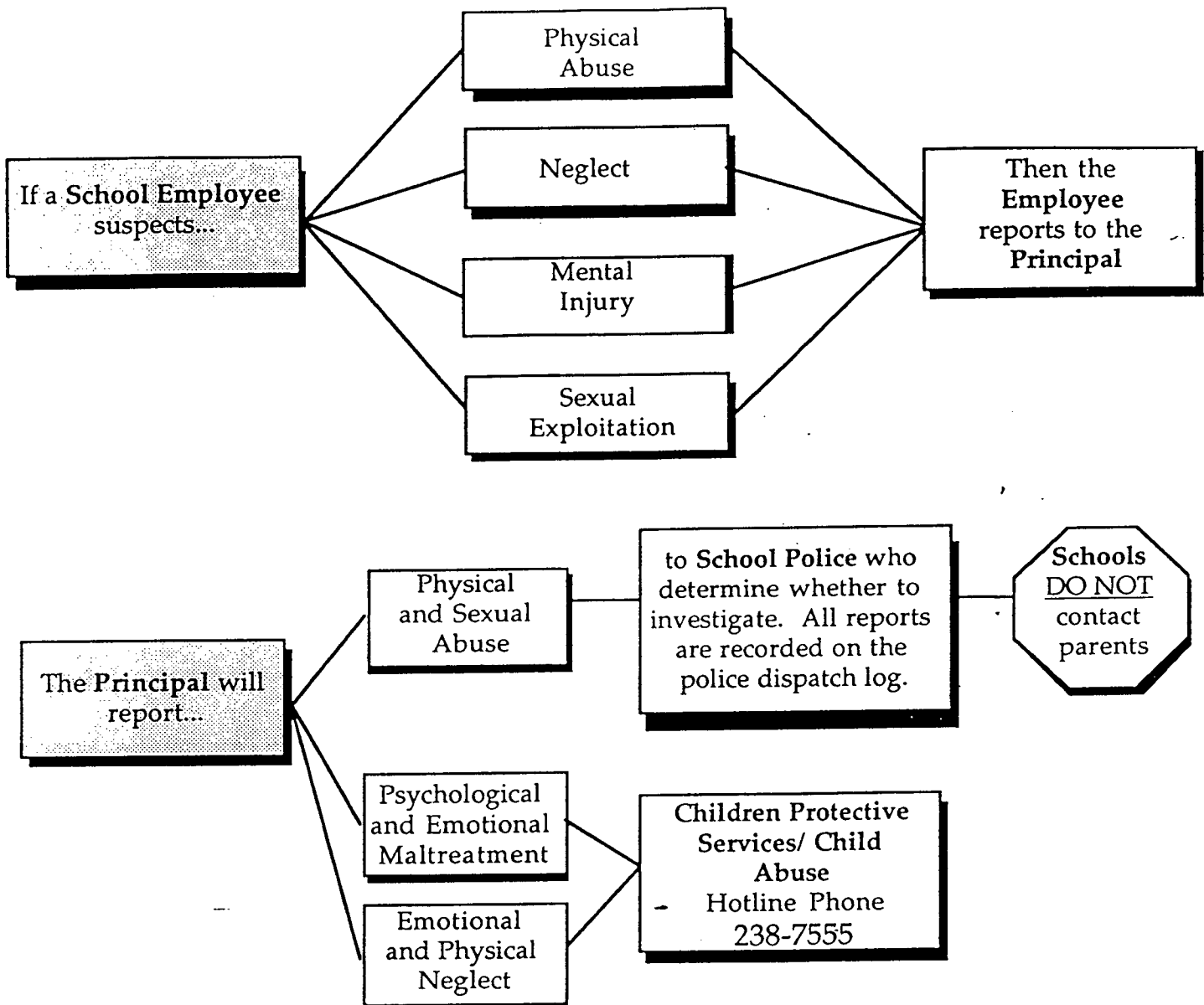
CHILD ABUSE REPORTING PROCEDURES

1993-94 School Year

page three

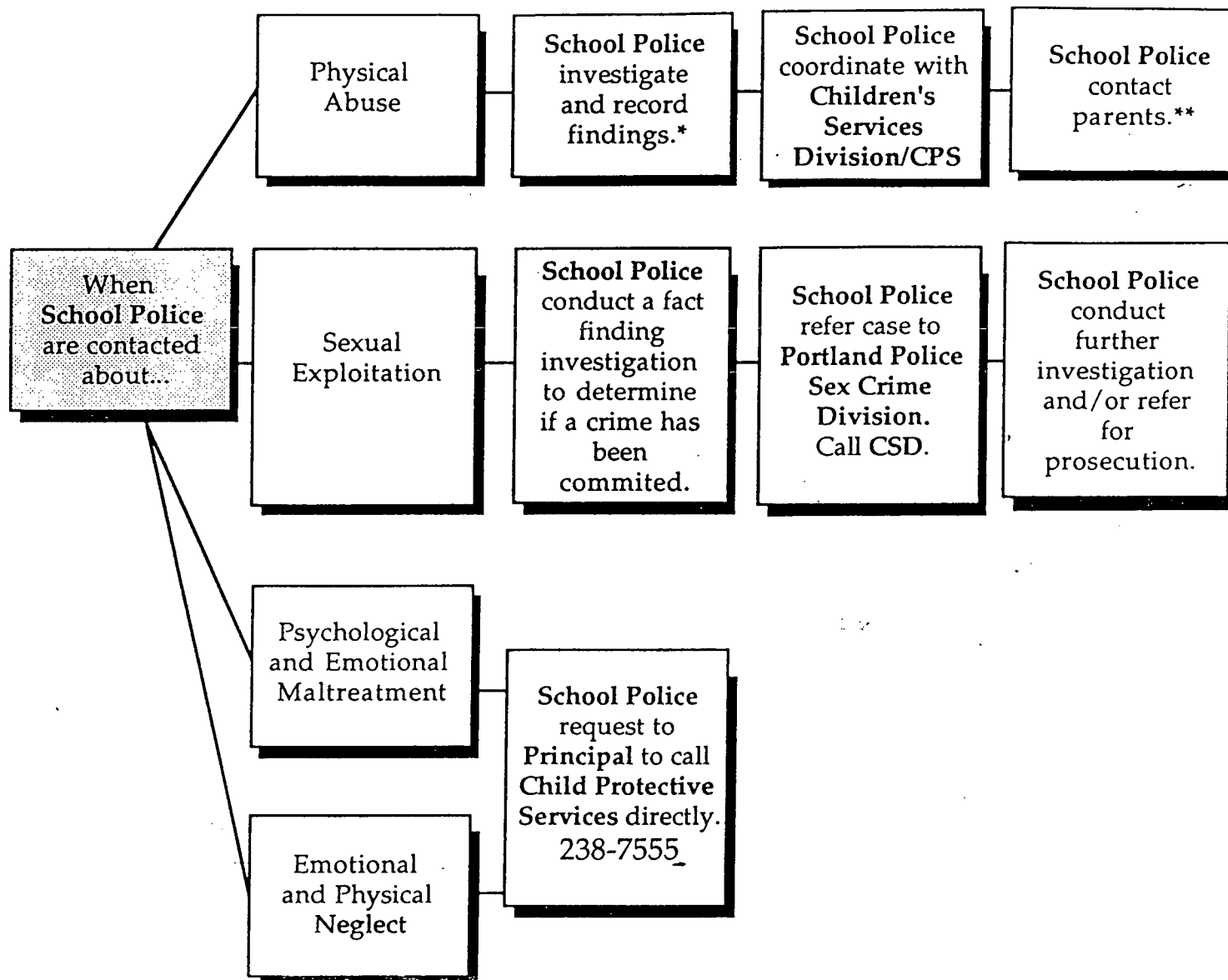
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OES
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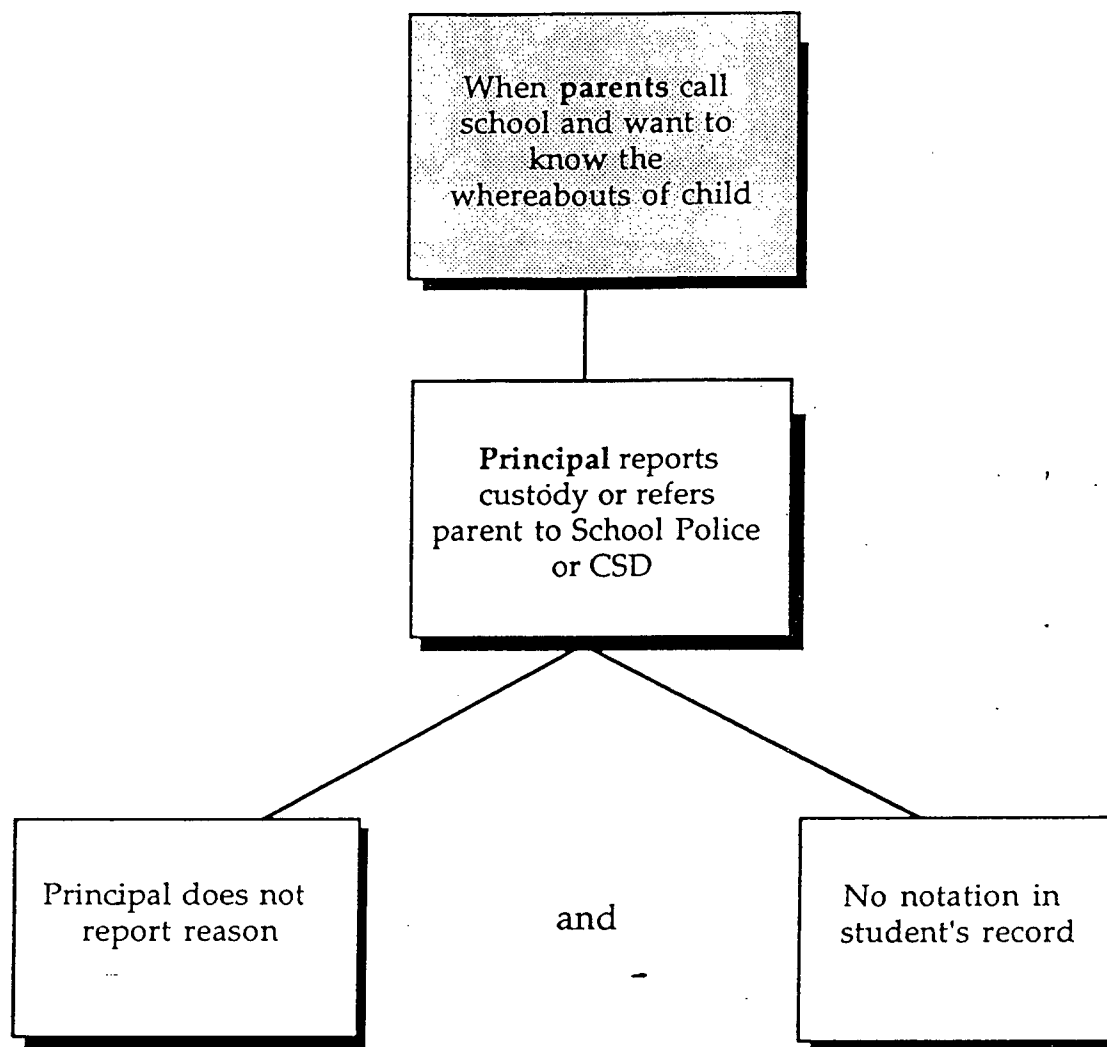
School Police Procedures In Response to Child Abuse Report



* See chart #5 for student to student abuse procedure

** School Personnel may call School Police for additional information.

Responses to Parent Inquiry



Investigation Procedures

School Police Officer, Portland Police Officer or Children Services Division/CPS appear at school to interview student

Principal secures and records the following:

- Name of officer or worker
- Agency
- Badge #
- Telephone #
- Name of student
- Time of interview
- Date of interview

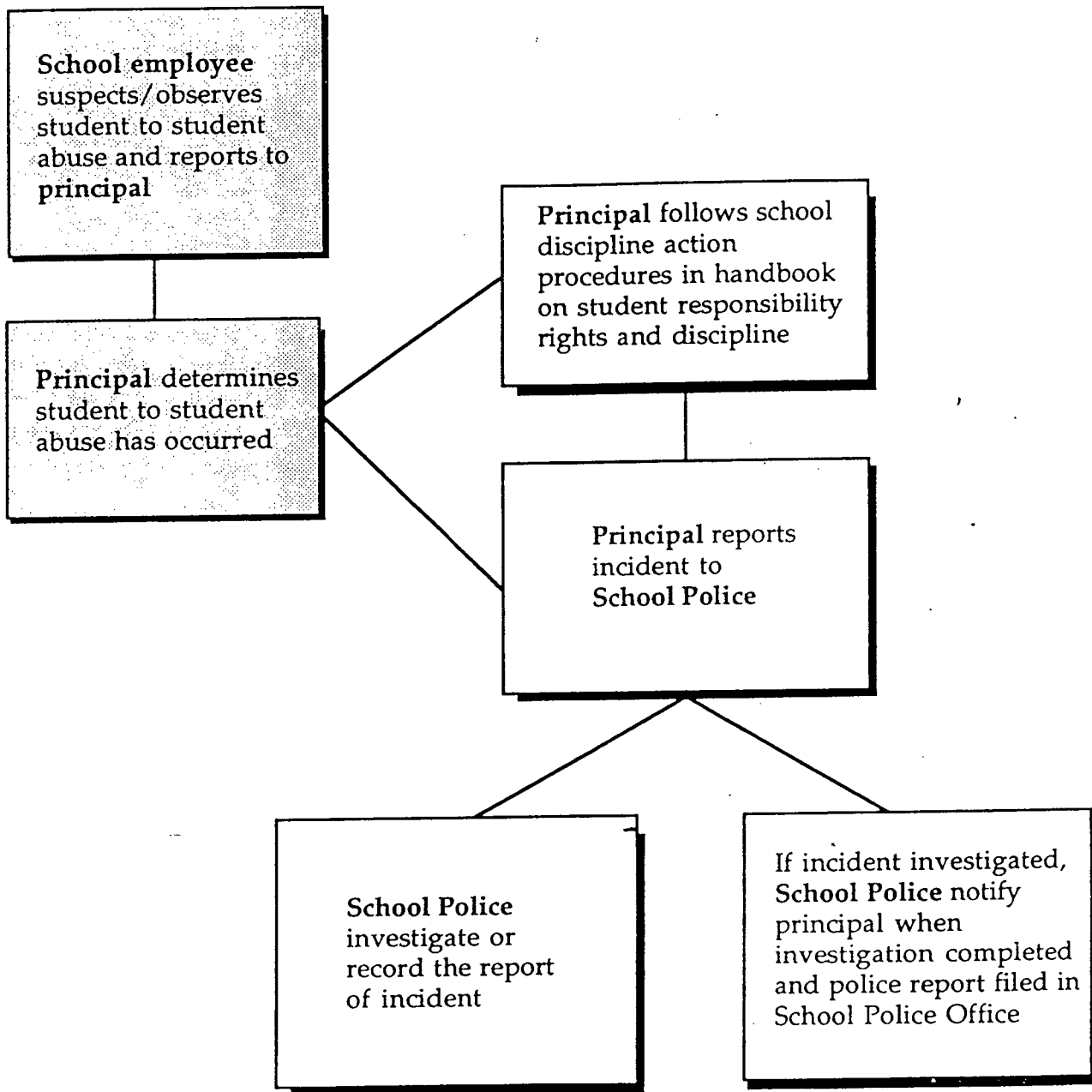
School personnel give detailed information to officer/CPS/CSD Worker

or CPS
Officer alone or with identified school staff will interview the student--Disabled or limited English, office should involve ESL or Sp.Ed. if severely disabled

Officer or worker will determine next step

Officer or worker will make contact with parent

Student to Student Abuse Procedures



Student to Student Abuse is defined as physical abuse of another, but not mutual combat; may include the use of a weapon and sexual assault.



PORTLAND PUBLIC SCHOOLS

531 S.E. 14th Ave. / Portland, Oregon 97214

Phone: (503) 280-6455

STUDENT SERVICES DEPARTMENT

Carolyn Sheldon
Assistant Director
Student Services

September 18, 1991

MEMORANDUM

TO: D.O.I.'s, Principals

FROM: John Lashley, Director, Administrative Support
Carolyn Sheldon, Assistant Director, Student Services
Judy Valjean, Director, Special Instruction/Student Services

SUBJECT: Child Abuse Reporting Clarifications

Several questions related to our PPS practices of reporting child abuse have surfaced. The following, hopefully, will provide the clarifications you have been seeking:

I. Student to Student Child Abuse

Student to student child abuse will be defined as assault. In our Handbook on Student Responsibilities, Rights and Discipline assault is defined as "physical abuse of another, but not mutual combat, may include the use of a weapon and sexual assault." The action levels in response to occurrence of assault include Level 4 (Expulsion, Reassignment/Referral) for Minor/First occurrence and Level 5 (Mandatory Expulsion) for Serious/Repeated occurrences. NOTE: The double asterisk signifies principals must refer incidents of assault to school police. Our current practice, when followed as outlined in the Handbook, will ensure that we are in compliance with the newest interpretation of child abuse which includes student to student abuse. The School Police will decide, based on the degree of assault, which incidents will be investigated.

II. Who is to report child abuse?

The August 1991 memo "Child Abuse Program and Reporting Procedures, 1991-92" outlines step by step PPS reporting responsibilities. School employees will report suspected child abuse to the principal and either the employee or the principal will report the child abuse information to the School Police. NOTE: Suspected child abuse should not be delegated to a third party such as the school counselor/CDS prior to reporting to the School Police. Counselors/CDS can be notified that a report has been made and can provide support help when the police investigation is completed.

It is a frustration that all reports of child abuse can not be investigated by the

School Police, Portland Police Department, Childrens Protective Services or CSD. This is a frustration that everyone shares. It will require more resources including personnel to provide the actual response system needed and this must be a goal for the future. At this time, we must continue to follow the legal mandate for PPS employees and report suspected child abuse according to the established PPS procedures.

III. Reporting of Probable Parental Drug Neglect

The Alcohol and Drug Policies adopted by the Board of Education on November 6, 1986 "require District personnel to notify a child welfare agency of probable parental drug neglect". Child neglect which is the result of, or related to, substance abuse by parents or children should be reported to the Childrens Protective Services Child Abuse Hotline by calling 238-7555. You may call the Alcohol and Drug Office at 280-5840, ext. 279 to consult about specific cases.

It is helpful to us for you to continue to identify your concerns related to the child abuse reporting. We will work toward making improvements based on your input.

jw

c: Matthew Prophet
Donald McElroy
Counselors
Child Development Specialists
School Nurses
Teen Clinic Supervisors



10 tent mps

PORTLAND PUBLIC SCHOOLS POLICE STANDARD OPERATING PROCEDURE

SUBJECT:

Investigations, Child Abuse

**D
A
T
E**

EFFECTIVE:

01-01-90

REVIEW:

01-01-92

SECTION:

J - 1.3

PURPOSE

To outline responsibility for taking child abuse reports.

DEFINITION

CHILD ABUSE: Any physical injury to a child which has been caused by other than accidental means, including any injury which appears to be at variance with the explanation given of the injury.

NEGLECT WHICH LEADS TO PHYSICAL HARM: Neglect generally refers to parental failure to provide the child with a minimum of food, shelter, health care, or education. Neglect that leads to physical injury is child abuse.

SEXUAL MOLESTATION: It should be assumed that the word "molestation" refers to the entire scope of inappropriate sexual activity between children and adults or between child and sibling.

CONTACT AGENCIES

Children's Protective Services (CPS)
815 N.E. Davis
Portland, OR 97232
Telephone: 238-7555 (24 hrs. a day)

Portland Police Bureau Special Service Team (PPB SSD)
Telephone: 796-3434

PROCEDURE

School Police Officers assigned to possible child abuse cases shall always initiate a written report.

When the responding officer determines the case is unfounded and the child has not been abused, he or she will write a Police Report.

In all cases when an officer has reasonable cause to believe that abuse or neglect has occurred, CPS will be immediately notified in accordance with ORS 418.755. A Crime Report will be written and when signs of injuries are visible, Polaroid photographs will be taken.

SUBJECT: Investigations, Child Abuse	SECTION J - 1.3
	PAGE 2 OF 3

When a child is not taken into custody, the officer assigned to investigate the case will still contact the parents to advise them of the findings, e.g., over-discipline, unfounded. If contact cannot be made prior to the end of the shift, the on-duty supervisor shall be notified. The supervisor will make arrangements to contact the parents on the following shift or leave a note at the residence advising them to call the School Police Office the following school day.

In all cases, when it is necessary to take custody of a child, CPS will be requested to arrange for a safe home for the child. The child's parents or guardian will be contacted by telephone. If contact cannot be made by a day-shift officer, the following shift will attempt to make contact. If contact still cannot be made, a note will be left at the residence. Any notification will advise the parents or guardian to appear in Juvenile Court the following day at 1330 hours for a hearing.

When children are taken into protective custody on a Friday or on a day preceding a holiday, the court hearing will be held on the next scheduled court day.

THE LOCATION OF THE SAFE HOME, IF REQUIRED, SHALL BE RECORDED ONLY IN THE OFFICER'S NOTEBOOK AND WILL NOT BE NOTED IN THE CRIME REPORT OR MADE KNOWN TO ANY PARENT OR GUARDIAN.

Whenever possible, any brothers or sisters who are in attendance at a School District #1 school will be interviewed as witnesses or possible additional victims.

Follow-up investigation of investigations at any place other than a School District #1 school will be made by PPB officers and CPS personnel. School Police officers are not to make such contacts without the express approval of a PPSP supervisor.

SEVERE CHILD ABUSE: The responding officer will conduct an investigation to determine if such conditions exist. If the child is found to need immediate medical attention, the PPSP office will be informed and the child transported to the nearest hospital. The officer will remain with the child until he or she can be transported to safe home or until a CPS worker arrives. The child will be released to the CPS worker upon their arrival. The PPSP office will notify CPS of the situation and request they respond to the hospital. An incident report will be written and forwarded to the Portland Police Bureau for follow-up and arrest of any suspects if necessary.

SEXUAL ABUSE: The School Police will respond. The responding officer will conduct a brief investigation (not an in-depth investigation) to determine if, in fact, a crime was committed. The officer will write a Special Report and the child taken into Protective Custody and transported to Portland Police Special Services Division (SSD). The officer will notify SSD and the PPSP office prior to leaving the school.

SSD will notify the parents, contact CPS and transfer victims to a safe home.

SUBJECT: Investigations, Child Abuse	SECTION J - 1.3
	PAGE 3 OF 3

SEXUAL ABUSE INVOLVING SCHOOL DISTRICT PERSONNEL: The School Police will respond and investigate cases involving School District personnel. Portland Police SSD will be notified immediately of the investigation and will assist upon request.

The responsibility for determining probable cause in a child abuse case rests with the responding officer. This responsibility exists even when a CPS worker is present. Information provided by the CPS caseworker can be used as a basis for determining probable cause.

DISTRIBUTION OF REPORTS

For all custody cases, copies of reports and photographs will be delivered to CPS prior to the end of the shift. An additional copy of the report will be delivered to the Juvenile Court prior to the end of the afternoon shift. PPB copies will be routed through routine channels.

For confirmed noncustody cases, reports will be sent to PPB through routine channels. Any photographs and a copy of the case report will be forwarded to CPS.

L. M. Lockett

L. M. Lockett
Office of the Chief



BUREAU OF POLICE
GENERAL ORDER
PORTLAND, OREGON



SECTION NO.: 640.40

DATE: March 20, 1988

SUBJECT: INVESTIGATIONS AND INTERVIEWS ON SCHOOL PROPERTY

REVISION #6

Index: Already Indexed

DEFINITION

City School: Any primary, middle or secondary school located in the city limits of Portland which is operated by School District #1, Multnomah County.

PURPOSE

To provide instructions for conducting investigations, interviews and arrests of students during school hours while on school property. The order also discusses the role of the Portland Public School Police.

PROCEDURE

When it is necessary to conduct an investigation or take a student or other person into custody at any school, the officer will attempt to keep the purpose of his presence confidential. Officers will determine the type of school, public or private, and will contact the person responsible for the premises before proceeding.

PRIMARY RESPONSIBILITY

The school district police have primary responsibility for criminal investigations on city school property. However, for certain crimes (listed below) PPB detectives will assume investigative responsibility.

Homicides: Homicides will be investigated by the Portland Police Bureau Detective Division, Homicide Detail.

Rapes and Sexual Abuse: INITIAL CONTACT AT THE SCHOOL WILL BE MADE BY A SCHOOL POLICE OFFICER. THE RESPONDING OFFICER WILL DETERMINE IF AN IMMEDIATE RESPONSE IS NEEDED BY THE PORTLAND POLICE BUREAU DETECTIVE DIVISION, SEX CRIMES DETAIL. IF AN IMMEDIATE RESPONSE IS NOT REQUIRED, THE SCHOOL POLICE OFFICER WILL WRITE THE REQUIRED REPORT. REPORT COPIES WILL BE FORWARDED TO THE CHILDRENS PROTECTIVE SERVICES DIVISION AND TO THE BUREAU'S SEX CRIMES DETAIL WHO WILL COMPLETE FOLLOW-UP INVESTIGATIONS AS REQUIRED.

Child Abuse: ALL CHILD ABUSE CASES WILL BE INITIALLY INVESTIGATED BY A SCHOOL POLICE OFFICER. COPIES OF ALL REPORTS WILL BE FORWARDED TO THE CHILDRENS PROTECTIVE SERVICES DIVISION AND ALL POLICE FOLLOW-UPS, IF REQUIRED, WILL BE MADE BY THE PORTLAND POLICE DETECTIVE DIVISION, SEX CRIMES DETAIL.

Controlled Substance Investigations: Cases involving the illegal sale or possession of controlled substances (ORS 475.005(2)) or large quantities of marijuana, will be conducted in CONJUNCTION WITH the Police Bureau Drug and Vice Division.

Portland Public School police and the appropriate Police Bureau investigative unit are responsible for coordinating investigations of other crimes not listed above.

INVESTIGATION AND INTERVIEWS ON SCHOOL PROPERTY

Bureau members may take any immediate police action and make any arrests necessary for crimes occurring on school property in their presence. However, responsibility for the case and follow-up investigations will be assumed by the school police (except for those crimes listed above).

REPORTS

The PORTLAND PUBLIC SCHOOL police will direct the original reports of all criminal and related investigations to the Portland Police Bureau and indicate distribution by marking the appropriate distribution box.

The Records Unit will forward copies of those police reports involving school district property to the PORTLAND PUBLIC SCHOOL police.

The Portland Police Bureau will forward reports of follow-up investigations to the school district police on a need-to-know basis.

POLICE CONTACTS ON SCHOOL PROPERTY

The school principal, or their representative, shall be contacted by officers before the officers make contact with a student attending school, unless the delay would provide the student an opportunity to escape.

Interviews with students at a school may be conducted in the presence of the principal and/or their representative, if they so elect. UPON THE REQUEST OF A STUDENT, OR IF THE OFFICER DETERMINES THAT THE CIRCUMSTANCES OF THE INVESTIGATION MAKE SUCH PRESENCE INAPPROPRIATE, THE STAFF MEMBER WILL NOT BE PRESENT.

An officer or investigator taking a juvenile into custody on school property will, when possible, notify the principal and the juvenile's legal guardian before leaving the school.


Officers responding to calls for service involving schools other than those in district #1 will be responsible for taking the appropriate action and writing the required reports. Otherwise, all other outlined procedures apply to private schools.

Richard D. Walker by Ape

RICHARD D. WALKER
Chief of Police

SEM/jbh

ORIGINATOR: Planning and Research



PORTLAND PUBLIC SCHOOLS

501 N. Dixon St. Portland Oregon 97227
Phone: (503) 491-3407
Mailing Address: P.O. Box 3407908 MO

PORTLAND PUBLIC SCHOOLS POLICE



Office of the Chief

July 18, 1989

John H. Barr
Acting Exec. Ass't.
Multnomah County Branch
Children's Services Division

RE: INTERAGENCY AGREEMENT
ROLE OF THE PORTLAND SCHOOL POLICE

1. The School Police office will receive calls from District personnel or CPS intake, concerning physical and sexual abuse.
2. School Police officers or dispatch will call the CPS hotline/intake to report physical & sexual abuse cases and to discuss initial investigation information.
3. Officers will respond to schools and conduct the initial interview with the abuse victim. The officer, after checking with CPS intake, will then make the appropriate referral.
4. It will be the responsibility of the investigating officer to notify the child's parents of the interview. If it is not in the best interest of the child to notify the parent or guardian, the approval of a supervisor must be obtained.
5. Cases of child neglect will be referred to CPS intake as information.
6. When requested and when the appropriate procedures have been followed, school police will respond to schools and assist CPS caseworkers when the protective custody of a child is needed.
7. All requests for field assistance, at schools, from CSD caseworkers will be referred to CPS intake for evaluation.
8. The school police training sergeant will co-ordinate training sessions involving CPS workers when necessary.
9. Recruit officers will receive an orientation on CSD functions as part of the training process.
10. School police will continue to maintain both formal and informal communications with CSD line staff and supervisors to further enhance relations between our two agencies.

I N T E R A G E N C Y A G R E E M E N T

The School Police and the Children's Services Division,
Multnomah County Branch agree to work together to report
and investigate the physical and sexual abuse of children.

The undersigned further agree that this Interagency Agreement
will continue in effect until it is either mutually re-
negotiated or terminated by one or both parties.

Mac Lockett

Mac Lockett, Chief
School Police
Portland Public Schools

09-19-89

Date

John H. Barr

John H. Barr, Acting Exec. Ass't.
Multnomah County Branch
Children's Services Division

9-21-89

Date

6.25 CHILD ABUSE

Because of their sustained contact with school-age children, school employees are in an excellent position to identify abused or neglected children and must accept both a moral and legal responsibility to report abuse to the proper authorities. For reporting purposes "abuse" means:

- (a) physical injury caused by other than accidental means;
- (b) mental injury to the child (418.740) resulting in observable and substantial impairment of the child's intellectual, psychological or emotional capacities;
- (c) sexual abuse including, but not limited to, rape, sodomy, sexual abuse, sexual penetration with a foreign object and incest, as those acts are defined in ORS Chapter 163;
- (d) sexual exploitation
 - contributing to the sexual delinquency of a minor, as defined by ORS Chapter 163;
 - allowing, permitting, encouraging or hiring to engage in prostitution as defined by ORS Chapter 167;
- (e) negligent treatment or maltreatment of a child (spiritual treatment solely through prayer via recognized church, allowed);
- (f) threatened harm to a child; subjecting a child to substantial risk of harm to the child's health or welfare.

Under ORS 418.750 any school employee having reasonable cause to believe that any child with whom the employee comes in contact in an official capacity has suffered abuse or that any person with whom the employee comes in contact in an official capacity has abused a child shall report or cause a report to be made. Failure to report may result in a fine of up to \$1,000. (ORS 418.740)

NOTE: Confidentiality of student records does not contradict disclosure of information required to be reported relative to child abuse. School employees are protected from civil and criminal liability when a child abuse report is filed in good faith based on reasonable grounds.

Indicators of Possible Abuse. Only the court can determine if child abuse has occurred. However, the nonmedical person can assume that when one or more of the following indicators are present a report should be made.

- * child states that another person caused the injury and that it was not an accident;
- * injury which seems to be at variance with the explanation given;
- * unusual or repeated bruises;
- * repeated cuts, punctures or broken bones;
- * undue fear of parents or others;
- * untreated injuries or conditions;
- * undernourished -- frequent reports of no breakfast or dinner;
- * apprehension with adults, fear of normal physical contact;
- * sudden unexplained changes in behavior;
- * frequent prolonged absences;
- * habitual inappropriate dress for weather conditions;
- * inappropriate explanation of child's condition by parent;
- * unusual confinement of child by parent;
- * unusual lack of understanding by parent of child's condition;

Reporting Process/Guidelines

1. Any school employee who suspects that a student has suffered abuse under the criteria established above shall report immediately to the building principal.
2. The principal shall make a determination that the severity of the problem warrants immediate action or an investigation is warranted.
3. An oral report shall be made immediately by telephone to the Portland Police Department for immediate action situations. All others will be referred to Childrens Services Division.

Portland Police Department - Phone # 911
Childrens Services Division - Phone # 238-7555

Reports shall contain the names and addresses of the child and the parents of the child or other persons responsible for care of the child, the child's age, the nature and extent of the abuse (including any evidence of previous abuse), the explanation given for the abuse and any other information which the person making the report believes might be helpful in establishing the cause of the abuse and the identity of the perpetrator.

The principal shall document all and report, i.e., individuals contacted, dates, times, etc.

4. School employees shall not contact the child's family or any other person to determine the cause of suspected abuse or neglect. In addition, state law requires that school employees not notify parents when Childrens Services Division or law enforcement personnel question a child on school premises, regarding child abuse or other matters.
5. In all cases the principal or designated representative must be notified prior to an investigation occurring on school premises. The principal shall advise the investigator(s) of the child's handicapping conditions, if any, prior to any interview with the affected child.
6. The school administrator or designated representative may, at the investigators' discretion, be present to facilitate the investigation. School staff members are not authorized to reveal anything that transpires during an investigation in which they participate. Information derived from an investigation shall not become part of a child's school record.
7. All records concerning reports of suspected abuse or neglect are confidential and may be released only to the investigating agency.

current

CORBETT SCHOOL DISTRICT NO. 39

Code: JHFE

Adopted: 6/15/88

REPORTING OF SUSPECTED CHILD ABUSE

Any school employee who has reasonable cause to believe that any child with whom he/she has come in contact has suffered abuse or neglect, as defined in state law, or that any adult with whom he/she is in contact has abused a child, will immediately notify his/her supervisor, the building principal or superintendent. A report will be made to the Children's Services Division or the local law enforcement agency.

The superintendent will implement such regulations as are necessary to accomplish the intent of this policy and to comply with state law. Copies of this policy and applicable state laws will be given to all school employees.

END OF POLICY

Legal References:

ORS 418.750-.755

418.762

AGO

CORBETT SCHOOL DISTRICT #39

CHILD ABUSE REPORTING PROCEDURES

Corbett School District #39

CHILD ABUSE REPORTING PROCEDURES

A. ORS 418.740 - 418.775 requires that if school personnel have reasonable cause to believe that child abuse has occurred, it shall be reported. Whether reasonable cause exists or whether "child abuse" has occurred is not always clear. If child abuse is suspected, follow these procedures.

B. Child abuse, without regard to who is the perpetrator, includes:

I. Physical injury caused by other than accident, including an "accidental" injury which is not adequately explained.

II. Mental injury resulting from cruelty.

III. Sexual molestation of any type including filming, taping or exhibition or other exploitation.

IV. Negligent treatment or maltreatment such as inadequate nutrition, clothing, shelter, medical care, etc.

V. Threatened harm resulting in substantial risk.

The child abuse reporting procedures to be followed by employees of the Corbett School District are listed below:

1. The school employee who becomes aware of or observes signs of physical abuse, neglect, mental injury, sexual exploitation or suspects sexual exploitation, reports the facts to the designee and principal.

2. The designee, or principal, if the designee is not immediately available, will report the suspected abuse, to the Oregon Children's Services Division (CSD) immediately, by calling 238-7555. The school employee who has observed the results of the child abuse has the responsibility to make sure that it is reported to the Children's Services Division.

3. Persons such as neighbors, relatives or individuals who wish to remain anonymous, who call the school to report suspected child abuse involving a student, will be referred to the designee or principal.

4. In child abuse cases, the school should not contact the parents. The Law Enforcement Investigator has the responsibility of contacting the parents and will report back to the school as described in items 6 and 8 which follow.

5. If in the investigation of a case, a police officer or a Children's Services Division/Child Protective Services (CSD/CPS) worker appears at the school to talk with a student, the designee/principal will secure the name, agency, badge identification number and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview, along with other pertinent data should be recorded on the "Child Abuse/Neglect Referral" form. If the investigating officer or (CSD/CPS) worker requests a private interview with the student, permission should be granted.

6. At the conclusion of the interview, the investigating officer or CSD/CPS worker will determine what the next step will be and *when* ~~the~~ parent contact should be made. The officer or CSD/CPS worker will make the contact with parents.

7. If a child is taken into custody and a parent calls and asks for the whereabouts of his/her child, the principal or his/her designee, will report the custody but not the reason and suggest the parent telephone the police department. No notation of the child having been taken into custody should be placed in the student's school record.

8. The police and CSD have been asked to inform the school about how the case is progressing by giving information about custody, court hearings, etc. If the designee or principal has not heard from the appropriate agency about a reported case by the end of the school day, a call should be made to the police to obtain the necessary information.

9. The school, in cooperation with CSD, will provide the necessary follow-up and support to the student and family as seems appropriate.

10. The designee will make the principal aware of a case which has been reported to CSD and the principal will make the designee aware of a case the principal reported.

CHILD ABUSE/NEGLECT REFERRAL

Person initiating this referral must: (1) Report incident, immediately, by telephone, to Children's Protective Services (CPS) at 238-7555. (2) Send completed referral form to CPS at 815 NE Davis, Ptld, 97232 and District Director of Student Services.

ALLEGED VICTIM: Interpreter Needed ☐ Yes ☐ No / Spec.Ed ☐ Yes ☐ No

Last Name	First	M.I.	Age	D.O.B.	M/F	School	Grade
-----------	-------	------	-----	--------	-----	--------	-------

Information Gathered: Date _____ Time _____

REFERRER'S SOURCE: Name _____ Position _____

PARENT/GUARDIAN:

Last Name	First	M.I.	Address	City	Phone
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OTHER CHILDREN IN FAMILY: (list additional on back)

Last Name	First	M.I.	Age	D.O.B.	M/F	School	Grade
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OTHERS IN HOUSEHOLD: (list additional on back)

Name	Age	Relationship
------	-----	--------------

SPECIFIC ALLEGATIONS: Be detailed and factual (where, when, people involved, people reporting)
 Note type of abuse (physical, sexual, emotional, neglect) AND indicators (see "Clues to Look for in Detection" in folder):
 Risk Level: ☐ Low ☐ Med ☐ High (see "Risk Assessment Factor Continuum and Worksheet" in folder)

ALLEGED PERPETRATOR IDENTIFICATION:

Last Name	First	M.I.	Address	City	Phone
Relationship to victim _____					
Does person have continued access to child? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure					

REPORTED TO CPS: Date _____ Time _____

NAME OF CONTACT AT CPS: _____

ACTION TAKEN BY CPS: _____

Are parents aware that a referral to CPS is being made? ☐ Yes ☐ No

POLICE INVOLVEMENT:

Date	Time	Officer's Name	Badge #	File #	Action Taken
Child taken into protective custody: <input type="checkbox"/> Yes <input type="checkbox"/> No					
SIGNATURE of police/CPS taking child: _____					

DO NOT FILE IN CHILD'S SCHOOL RECORD

White: CPS Supvsn./Pink: Dist. Dir. St. Serv./Yellow: Person filing rpt.

Centennial School District No. 28J

Code: JHFEAdopted: 2/13/91Readopted: 10/23/91

REPORTING OF SUSPECTED CHILD ABUSE

Any school employee who has reasonable cause or reasonable suspicion to believe that any child with whom he/she has come in contact has suffered abuse or neglect, as defined in state law, or that any adult with whom he/she is in contact has abused a child, will immediately notify the Children's Services Division or the local law enforcement agency. The school employee shall also immediately inform his/her supervisor, building principal or superintendent.

If a district employee is a suspected abuser, reporting requirements remain the same. In addition, the district will want to review any related policy procedures or collective bargaining language that may also apply.

The superintendent will implement such regulations as are necessary to accomplish the intent of this policy and to comply with state law. Copies of this policy and applicable state laws will be given to all school employees.

Staff may receive training to assist in identification of abuse and neglect.

END OF POLICY

Legal References:

ORS 418.740 - 418.755

ORS 418.762

ORS 418.770

ORS 418.990

Letter Opinion, Office of the Attorney General (May 25, 1984)

Letter Opinion, Office of the Attorney General (Aug. 18, 1986)

Post-It™ brand fax transmittal memo 7671		# of pages ▶
To <u>BARBARA Neely</u>	From <u>CAROL THORNBERRY</u>	
Co. <u>ESA</u>	Co. <u>Centennial</u>	
Dept.	Phone # <u>760 7990</u>	
Fax # <u>257-1519</u>	Fax # <u>760 7990</u>	

Centennial School District No. 28J

Code: JHFE-AR
Adopted: 5/2/86
Revised/Readopted:
2/13/91
Orig. Code: 5840

REPORTING OF SUSPECTED CHILD ABUSE

The following procedure shall be used to report suspected cases of child abuse:

I.

- a. Each school shall have a designee who will coordinate the reporting of information to Children's Services Division. Pursuant to the requirements of ORS 418.740 - 418.770, which require school participation in Multidisciplinary Child Abuse Teams, the designees shall be trained in communicating with children about potential abuse and in interagency coordination of abuse cases.
- b. School personnel shall immediately report the information to the designee and notify the principal.

II.

- a. Where a child has reported the abuse to school personnel so that no additional information is necessary, the designee should not require the child to repeat the information to the designee. The designee will call Children's Services Division and report the information. The designee shall notify the principal and the school personnel of action taken.
- b. Where a child's statements and/or physical condition are indicative of abuse but additional information is necessary to determine the school's obligation under the reporting laws, the designee will talk to the child to get additional information. If abuse may be indicated the designee will call Children's Services Division.
- c. Persons such as neighbors, relatives or individuals who call the school to report suspected child abuse involving a student, and who wish to remain anonymous, will be referred to a school administrator or designee who will direct them to call Children's Protective Services. Should the person refuse, the principal or designee will call Children's Protective Services.
- d. It is the legal responsibility of the personnel to whom the abuse was first reported to see that a report is made to Children's Services Division.

Investigation at School

- I. On request, the principal/designee will permit a law enforcement investigator, including a Children's Services Division investigator, to interview a child. The school administrator or a designee may, at the discretion of the law enforcement investigator, be present to facilitate the investigation.

(continued)

REPORTING OF SUSPECTED CHILD ABUSE - JHFE-AR (cont'd.)

The school administrator or designee shall not be present if the law enforcement investigator does not wish them to be. Nothing that transpires in the investigation nor the fact of an investigation may be noted in student records or revealed to anyone. Special needs for disclosure may be discussed with the staff attorney.

- II. Prior to an interview of a child by a law enforcement investigator, the principal/designee shall first verify the identity of the person by official ID card, badge, etc., and record the person's name, agency, business address, and phone number. This information shall be temporarily retained by the principal.
- III. If a police officer plans to take custody of the child, ask the police officer to sign your prepared custody record.
- IV. In the event the child is taken into custody, parent notification shall be accomplished through the law enforcement investigator only. In the event of interview only, the school shall not notify the parent unless the notification is approved by the law enforcement investigator. The principal/designee should discuss parent notification with the officer and urge that it occur promptly. If a parent calls and asks for the whereabouts of his/her child, simply report the custody but not the reason and suggest that the parent phone the law enforcement investigator.

Centennial

COMMUNITY SCHOOLS

March 28, 1991

Doug Beloof
Multnomah County Court House - 804
Victims Assistance Program
Portland, OR 97204

Dear Doug:

Enclosed are copies of the Policy and Administrative Rules
on Reporting of Suspected Child Abuse approved by the
Centennial Board of Directors on February 13, 1991.

Centennial School District is now ready for the training of
appropriate staff. Please contact me at 760-7990 for a
mutually convenient date.

Sincerely,



Levonne C. Sedgwick
Director Student Services

hl
encls.

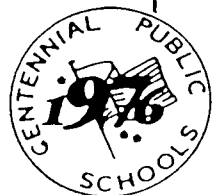
Centennial

SCHOOL DISTRICT
18135 S.E. BROOKLYN STREET
PORTLAND, OREGON 97236-1099
(503) 760-7990

LEVONNE SEDGWICK
Director - Student Services



CHS



Centennial School District No. 28J

Code: JHFE

Adopted: 2/13/91

REPORTING OF SUSPECTED CHILD ABUSE

Any school employee who has reasonable cause or reasonable suspicion to believe that any child with whom he/she has come in contact has suffered abuse or neglect, as defined in state law, or that any adult with whom he/she is in contact has abused a child, will immediately notify the Children's Services Division or the local law enforcement agency. The school employee shall also immediately inform his/her supervisor, building principal or superintendent.

The superintendent will implement such regulations as are necessary to accomplish the intent of this policy and to comply with state law. Copies of this policy and applicable state laws will be given to all school employees.

Staff may receive training to assist in identification of abuse and neglect.

END OF POLICY

Legal References:

ORS 418.740 - 418.755
ORS 418.762
ORS 418.770
ORS 418.990

Letter Opinion, Office of the Attorney General (May 25, 1984)
Letter Opinion, Office of the Attorney General (Aug. 18, 1986)

Centennial School District No. 28J

Code: JHFE-AR
Adopted: 5/2/86
Revised: 2/13/91
Orig. Code: 5840

REPORTING OF SUSPECTED CHILD ABUSE

The following procedure shall be used to report suspected cases of child abuse:

I.

- a. Each school shall have a designee who will coordinate the reporting of information to Children's Services Division. Pursuant to the requirements of ORS 418.740 - 418.770, which require school participation in Multidisciplinary Child Abuse Teams, the designees shall be trained in communicating with children about potential abuse and in interagency coordination of abuse cases.
- b. School personnel shall immediately report the information to the designee and notify the principal.

II.

- a. Where a child has reported the abuse to school personnel so that no additional information is necessary, the designee should not require the child to repeat the information to the designee. The designee will call Children's Services Division and report the information. The designee shall notify the principal and the school personnel of action taken.
- b. Where a child's statements and/or physical condition are indicative of abuse but additional information is necessary to determine the school's obligation under the reporting laws, the designee will talk to the child to get additional information. If abuse may be indicated the designee will call Children's Services Division.
- c. Persons such as neighbors, relatives or individuals who call the school to report suspected child abuse involving a student, and who wish to remain anonymous, will be referred to a school administrator or designee who will direct them to call Children's Protective Services. Should the person refuse, the principal or designee will call Children's Protective Services.
- d. It is the legal responsibility of the personnel to whom the abuse was first reported to see that a report is made to Children's Services Division.

Investigation at School

- I. On request, the principal/designee will permit a law enforcement investigator, including a Children's Services Division investigator, to interview a child. The school administrator or a designee may, at the discretion of the law enforcement investigator, be present to facilitate the investigation.

(continued)

REPORTING OF SUSPECTED CHILD ABUSE - JHFE-AR (cont'd.)

The school administrator or designee shall not be present if the law enforcement investigator does not wish them to be. Nothing that transpires in the investigation nor the fact of an investigation may be noted in student records or revealed to anyone. Special needs for disclosure may be discussed with the staff attorney.

- II. Prior to an interview of a child by a law enforcement investigator, the principal/designee shall first verify the identity of the person by official ID card, badge, etc., and record the person's name, agency, business address, and phone number. This information shall be temporarily retained by the principal.
- III. If a police officer plans to take custody of the child, ask the police officer to sign your prepared custody record.
- IV. In the event the child is taken into custody, parent notification shall be accomplished through the law enforcement investigator only. In the event of interview only, the school shall not notify the parent unless the notification is approved by the law enforcement investigator. The principal/designee should discuss parent notification with the officer and urge that it occur promptly. If a parent calls and asks for the whereabouts of his/her child, simply report the custody but not the reason and suggest that the parent phone the law enforcement investigator.

CENTENNIAL SCHOOL DISTRICT 28J

CHILD ABUSE AND NEGLECT REFERRAL

Person initiating this referral must (1) Report incident or cause to have reported within 48 hours, by telephone, to Children Services Division at 238-7555, then (2) Send completed referral form to Director, Student Services, who will activate a file and forward copy of referral to CSD.

PARENT(S)/GUARDIAN(S) IDENTIFICATION

Last Name _____ First _____ Middle _____

Address _____ City _____ Zip Code _____ Phone No. _____

Has oral report been submitted to C.S.D.?

☐ Yes ☐ No

Name of Contact _____

Date of Intake _____

Are parents aware that a referral to CSD is being made? ☐ Yes ☐ No

ALLEGED VICTIM

Spec. Ed ☐ Yes ☐ No

Last Name _____ First _____ M.I. _____ D.O.B. _____ M/F _____ Name of School _____ Grade _____

OTHER CHILDREN IN FAMILY

Last Name _____ First _____ M.I. _____ D.O.B. _____ M/F _____ Name of School _____ Grade _____

OTHERS IN HOUSEHOLD

Name _____ Relationship _____

FERRER'S IDENTIFICATION

Name of Referrer _____

☐ Principal ☐ Teacher ☐ Other (Specify) _____

Requests Confidentiality

☐ Yes ☐ No

TYPE OF CHILD ABUSE

Check all that apply

☐ Physical Abuse

☐ Neglect

☐ Sexual Abuse

☐ Medical Neglect

☐ Emotional Neglect/Abuse

☐ Sexual Exploitation

☐ Other (Explain/Describe) _____

SPECIFIC ALLEGATIONS - Please be detailed and factual (where, when, etc.)

ALLEGED PERPETRATOR IDENTIFICATION

Relationship to Victim

☐ Parent

☐ Foster Parent

☐ Parent Paramour

☐ School Staff

☐ Relative (Specify) _____

☐ Day Care

☐ Group Home

☐ Third Party

☐ Other (Specify) _____

Last Name _____ First Name _____

Address _____ City _____ Zip _____

Telephone Number _____ Access to Child ☐ Yes ☐ No

Referrer's Signature _____

Date _____

Principal/Designee Signature _____

Date _____

450-057

SEND ORIGINAL - Director Student Services

RETAIN A COPY AT BUILDING - DO NOT FILE IN CHILD'S SCHOOL RECORD

Gresham Grade School District No. 4Code: JHFEAdopted: 5/16/91**REPORTING OF SUSPECTED CHILD ABUSE**

Any school employee who has reasonable cause or reasonable suspicion to believe that any child with whom he/she has come in contact [REDACTED] has suffered abuse or neglect, as defined in state law, or that any adult with whom he/she is in contact has abused a child, will immediately notify the Children's Services Division or the local law enforcement agency. The school employee shall also inform his/her supervisor, principal or superintendent as soon as possible.

The superintendent will implement such regulations as are necessary to accomplish the intent of this policy and to comply with state law. Copies of this policy and applicable state laws will be given to all school employees.

Staff may receive information and assistance in identification of abuse and neglect.

END OF POLICY

Legal References:

ORS 418.740 - 418.755
ORS 418.762
ORS 418.770
ORS 418.990

Letter Opinion, Office of the Attorney General (May 25, 1984)
Letter Opinion, Office of the Attorney General (Aug. 18, 1986)

*To: BARBARA NEELY
Fr: Jim CARLISLE*

Handwritten note: ... at least

GRESHAM GRADE SCHOOL DISTRICT 4

Code: JHFE
Adopted 5/16/91

REPORTING OF SUSPECTED CHILD ABUSE

Any school employee who has reasonable cause or reasonable suspicion to believe that any child with whom he/she has come in contact in an official capacity has suffered abuse or neglect, as defined in state law, or that any adult with whom he/she is in contact has abused a child, will immediately notify the Children's Services Division or the local law enforcement agency. The school employee shall also inform his/her supervisor, principal or superintendent as soon as possible.

The superintendent will implement any regulations as are necessary to accomplish the intent of this policy and to comply with state law. Copies of this policy and applicable state laws will be given to all school employees.

Staff may receive information and assistance in identification of abuse and neglect.

END OF POLICY

Legal References:

ORS 418.740 - 418.755
ORS 418.762
ORS 418.770
ORS 418.990

Letter Opinion, Office of the Attorney General (May 25, 1984)
Letter Opinion, Office of the Attorney General (Aug. 18, 1986)



MICHAEL D. SCHRUNK, District Attorney for Multnomah County
• VICTIMS ASSISTANCE PROGRAM •

1021 S.W. 4th • Room 804 • Portland, Oregon 97204 • Telephone (503) 248-3222 • FAX (503) 248-3643

July 15, 1991

Dr. Zeno Katterle
Superintendent Gresham School Dist.
1331 NW Eastman Parkway
Gresham, Or. 97030

Dear Dr. Katterle:

Would you please send us a final copy of your policy and administrative rules for reporting suspected child abuse in the Gresham School District. Thank you in advance for your attention to this matter.

Very truly yours,

MICHAEL D. SCHRUNK

By Douglass E. Beloof
Director - Victims Assistance

DEB:ss



STUDENT/EMPLOYEE CRISES

CHILD ABUSE

Under Oregon State Law (ORS 418.750), all school employees must report or cause a report to be made to Children's Services Division or local law enforcement agency when there is reasonable cause to believe that a child has been abused or that any person, including an adult or child, with whom the employee comes in contact has abused a child. Failure to report may result in a fine of up to \$1,000.

Reporting Procedures

The child abuse reporting procedures to be followed by employees of the David Douglas Schools are listed below:

1. A school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspect sexual exploitation, shall report the suspected physical abuse, neglect or sexual exploitation to the Children's Services Division immediately by calling 238-7555 or 731-3100 or the police department at 9-911. Alternatively, the school employee who has observed the child abuse may cause such a report to be made by the school principal or principal/designee.
2. A school employee who has made a report of child abuse shall immediately submit a completed district child abuse referral form to the principal or the assistant superintendent so that the district will have a record that a child abuse report was made to the appropriate authorities. Such a report may occur either before or after the report to Children's Services Division.
3. Persons such as neighbors, relatives or individuals who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school principal. The principal will investigate the matter and call the Children's Services Division or appropriate police agency to make the report when sufficient evidence exists.
4. In child abuse cases, the school should not contact the parents. The law enforcement investigator has the responsibility of contacting the parents and will report back to the school as described in items 6 and 9 which follow.
5. If, in the investigation of a case, a police officer or a Children's Services Division/Child Protective Services worker appears at the school to talk with a student, the principal/designee will secure the name, agency, badge identification number, and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview, should be recorded. If the investigating officer or worker requests a private interview with the student, permission shall be granted.




STUDENT/EMPLOYEE CRISES

6. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or Children's Services Division worker will make the contact with parents.
7. If a parent calls and asks for the whereabouts of his/her child, the principal will simply report the custody but not the reason and suggest the parent telephone the police department. This name and phone number of the police officer or Children's Services Division worker should be given to the parent. No notation of the child having been taken into custody shall be placed in the student's record.
8. If a police officer or a Children's Services Division/Child Protective Services worker responds to the school report and asks permission to talk to a student, the principal or designee shall honor this request. Before the officer leaves the building, find out whether or not the officer intends to contact the parents. If not, determine with the investigative agency who will make the contact with the parents. In all cases, the principal shall get the name and phone number of the investigating officer of Children's Services Division/Child Protective Services worker.
9. The police and Children's Services Division/Child Protective Services shall inform the school about how the case is progressing by giving information about custody, court hearings, etc. If the principal has not heard from the appropriate agency about the reported case by the end of the school day, a call shall be made to the police to obtain the necessary information.
10. The school, in cooperation with Children's Services Division/Child Protective Services, will provide the necessary follow-up and support to the student and family as seems appropriate.
11. If the complaint regarding inappropriate sexual behavior by a district employee is made by a citizen of the district, a parent, a student, or by a fellow employee, the complaint should immediately be brought to the attention of the administrator responsible for that building or work site. That administrator should log the complaint and immediately notify the superintendent. After consultation, a preliminary investigation regarding the validity of the claim or complaint may proceed. If the complaint is made by a citizen of the district or a parent, Article 9G of the Teachers Collective Bargaining Agreement must be followed. If after the initial investigation, the complaint is determined to be substantive, the superintendent shall inform the board chairman and the appropriate agencies. The district may then proceed within the parameters of state statutes, the collective bargaining agreements, and board policy regarding discipline and evaluation.

~~ORS 418.715~~
~~ORS 418.990~~

new ORS's

November 20, 1991

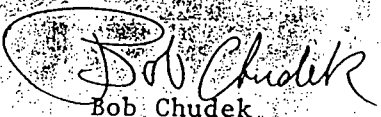

Doug Beloof
Director - Victims Assistance
804 County Court House
Portland, OR 97204

Dear Doug,

The attached child abuse reporting procedure was recently adopted in the David Douglas School District. We made a few changes based on teacher concerns regarding who makes the actual report of abuse. This procedure supersedes any that I have sent you previously.

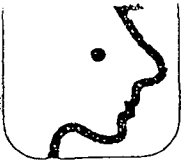
We are still interested in receiving training for our staff. Please contact me when you would like to schedule this training.

Sincerely,


Bob Chudek

enclosure

DBELOOF/TXTANGIE



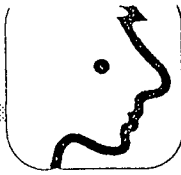
CHILD ABUSE

Under Oregon State Law (ORS 418.750), all school employees must report or cause a report to be made to Children's Services Division or local law enforcement agency when there is reasonable cause to believe that a child has been abused or that any person with whom the employee comes in contact has abused a child. Failure to report may result in a fine of up to \$1,000.

Reporting Procedures

The child abuse reporting procedures to be followed by employees of the David Douglas Schools are listed below:

1. A school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspect sexual exploitation, shall report the suspected physical abuse, neglect or sexual exploitation to the Children's Services Division immediately by calling 238-7555 or 731-3100 or the police department at 9-911. Alternatively, the school employee who has observed the child abuse may cause such a report to be made by the school principal or principal/designee.
2. A school employee who has made a report of child abuse shall immediately notify the principal or the assistant superintendent so that the district may make a record of the fact that a child abuse report was made to the appropriate authorities. Such a report may occur either before or after the report to Children's Services Division.
3. Persons such as neighbors, relatives or individuals who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school principal. The principal will investigate the matter and call the Children's Services Division or appropriate police agency to make the report when sufficient evidence exists.
4. In child abuse cases, the school should not contact the parents. The law enforcement investigator has the responsibility of contacting the parents and will report back to the school as described in items 6 and 9 which follow.
5. If, in the investigation of a case, a police officer or a Children's Services Division/Child Protective Services worker appears at the school to talk with a student, the principal/designee will secure the name, agency, badge identification number, and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview, should be recorded. If the investigating officer or worker requests a private interview with the student, permission shall be granted.



STUDENT/EMPLOYEE CRISES

6. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or Children's Services Division worker will make the contact with parents.
7. If a parent calls and asks for the whereabouts of his/her child, the principal will simply report the custody but not the reason and suggest the parent telephone the police department. This name and phone number of the police officer or Children's Services Division worker should be given to the parent. No notation of the child having been taken into custody shall be placed in the student's record.
8. If a police officer or a Children's Services Division/Child Protective Services worker responds to the school report and asks permission to talk to a student, the principal or designee shall honor this request. Before the officer leaves the building, find out whether or not the officer intends to contact the parents. If not, determine with the investigative agency who will make the contact with the parents. In all cases, the principal shall get the name and phone number of the investigating officer of Children's Services Division/Child Protective Services worker.
9. The police and Children's Services Division/Child Protective Services shall inform the school about how the case is progressing by giving information about custody, court hearings, etc. If the principal has not heard from the appropriate agency about the reported case by the end of the school day, a call shall be made to the police to obtain the necessary information.
10. The school, in cooperation with Children's Services Division/Child Protective Services, will provide the necessary follow-up and support to the student and family as seems appropriate.
11. If the complaint regarding inappropriate sexual behavior by a district employee is made by a citizen of the district, a parent, a student, or by a fellow employee, the complaint should immediately be brought to the attention of the administrator responsible for that building or work site. That administrator should log the complaint and immediately notify the superintendent. After consultation, a preliminary investigation regarding the validity of the claim or complaint may proceed. If the complaint is made by a citizen of the district or a parent, Article 9G of the Teachers Collective Bargaining Agreement must be followed. If after the initial investigation, the complaint is determined to be substantive, the superintendent shall inform the board chairman and the appropriate agencies. The district may then proceed within the parameters of state statutes, the collective bargaining agreements, and board policy regarding discipline and evaluation.

ORS 418.740 to ORS 418.775
ORS 418.990

REYNOLDS
SCHOOL
DISTRICT

POLICY NUMBER: 7190

DATE PRINTED: 9-1-92

CHILD ABUSE AND REPORTING OF CHILD ABUSE

ORS 418.740 - 418.755 requires if school personnel have reasonable cause to believe that child abuse has occurred, it shall be reported. Whether reasonable cause exists or whether "child abuse" has occurred is not always clear.

Child abuse, without regard to who is the perpetrator, includes:

1. Physical injury caused by other than accident, including an "accidental" injury which is not adequately explained.
2. Mental injury resulting from cruelty.
3. Sexual molestation of any type including filming, taping, or exhibition or other exploitation.
4. Negligent treatment or maltreatment such as inadequate nutrition, clothing, shelter, medical care, etc.
5. Threatened harm resulting in substantial risk.

The following procedure shall be used to report suspected cases of child abuse:

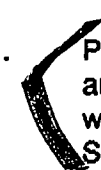

- 1a. Each school counselor will coordinate the reporting of information to Children's Services Division. Pursuant to the requirements of ~~ORS 418.740-418.750~~ which require school participation in Multidisciplinary Child Abuse Teams, the designee shall be trained in communicating with children about potential abuse and interagency coordination of abuse cases.
- 1b. School personnel shall immediately report the information to the counselor and notify the principal.
- 2a. Where a child has reported the abuse to school personnel so that no additional information is necessary the counselor should not require the child to repeat the information to the counselor. The counselor will call Children's Services Division and report the information. The counselor shall notify the principal and the school personnel who reported the case of the action taken.
- 2b. Where a child's statements and or physical condition are indicative of abuse but additional information is necessary to determine the school's obligation under the reporting laws, the counselor will talk to the child to get additional information. If abuse may be indicated the counselor will call Children's Services Division.
- 2c. It is the legal responsibility of the personnel to whom the abuse was first reported to see that a report is made to Children's Services Division.

Investigation at School:

1. *CSD also* On request, the principal or counselor will permit a law enforcement investigator, including a Children's Services Division investigator, to interview a child. ~~A school administrator or the counselor may, at the discretion of the law enforcement investigator, be present to facilitate the investigation.~~ ORS 418.760. The school administrator or the counselor shall not be present if the law enforcement investigator does not wish them to be. ORS 418.760. Nothing that transpires in the investigation nor the fact of an investigation may be noted in student records or revealed to anyone. Special needs for disclosure may be discussed with the school district's attorney.
- on CSD* 2. Prior to an interview of a child ~~by a law enforcement investigator,~~ the principal or the counselor shall first verify the identity of the person by official ID card, badge, etc., and record the person's name, agency, business address, and phone number. This information shall be temporarily retained by the principal.
- CSD* 3. If a police officer plans to take custody of the child, ask the police officer to sign your prepared custody record.
- CSD* 4. In the event the child is taken into custody, parent notification shall be accomplished through the law enforcement investigator only. In the event of interview only, the school shall not notify the parent unless notification is approved by the law enforcement investigator. The principal/counselor should discuss parent notification with the officer and urge that it occur promptly. If a parent calls and asks for the whereabouts of his/her child, simply report the custody but not the reason and suggest that the parent phone the law enforcement investigator.

Reporting Procedures:

The child abuse reporting procedures to be followed by employees of the Reynolds School District are listed below:

1. The school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspects sexual exploitation reports the facts to the school counselor and the principal.
2. The counselor, or the employee or the principal if the counselor is not immediately available, will report the suspected physical abuse, neglect or sexual exploitation to the Children's Services Division immediately. The school employee who has observed the child abuse has the responsibility to make sure that it is reported to the Children's Services Division.
- 2* 3.  Persons such as neighbors, relatives or individuals who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school principal. The principal may call Children's Services Division to make the report.
- 2* 4.  In child abuse cases the school should not contact the parents. The Law Enforcement Investigator has the responsibility of contacting the parents and will report back to the school as described in items 6 and 9 which follow.
5. If in the investigation of a case a police officer or a Children's Services Division/Child Protective Services worker appears at the school to talk with a

student, the principal or counselor will secure the name, agency, badge identification number and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview should be recorded. If the investigating officer or worker requests a private interview with the student, permission should be granted.

6. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or CSD worker will make the contact with the parents.
7. If a parent calls and asks for the whereabouts of his/her child, the principal will simply report the custody but not the reason and suggest the parent telephone the police agency doing the investigation or CSD. No notation of the child having been taken into custody should be placed in the student's record.
8. If a police officer, or a Children's Services Division/Child Protective Services worker, responds to the school report and asks permission to talk to a student, permission should be granted.
9. The police and Children's Services Division/Child Protective Services have been asked to inform the school about how the case is progressing by giving information about custody, court hearing, etc. If the principal has not heard from the appropriate agency about a reported case by the end of the school day, the principal should call the agency to obtain the necessary information.
10. The school, in cooperation with Children's Services Division/Child Protective Services, will provide the necessary follow-up and support to the student and family as seems appropriate.

END OF POLICY 7190 - CHILD ABUSE AND REPORTING OF CHILD ABUSE

REFERENCES

FORMER NUMBER: 11.10.1.6

CONTRACTUAL:

LEGAL:

OTHER:

**Procedure for Reporting Child Abuse
Counselor/Administrator**

1. Counselor suspects abuse or has suspicion of abuse reported to him/her (from any source).
2. Counselor **immediately** informs an administrator in the building. The counselor investigates further as necessary and, if appropriate, phones CSD or the appropriate law enforcement agency.
 - If the accused is an employee of the district, the administrator shall contact the superintendent's office immediately after the protection of the child has been ensured.
3. Counselor begins to complete reporting form.
4. Counselor works as needed with any investigator who arrives at the building to investigate the report (continuing to complete pertinent information on reporting form).
5. Counselor notifies the administrator and the reporting employee of any action taken.
6. The administrator is responsible to see that a determination was made, a report to CSD was made if appropriate, and a copy of the report sent to the superintendent (marked confidential).
7. The employee who first reported the suspected abuse has the legal responsibility to see that a report was made to CSD. For that reason, the counselor will allow the reporting employee to view the bottom portion of the reporting form (for verification that a report was made) and for the employee's signature. The employee is also entitled to an explanation if it was determined that no report was required.

**Procedure for Reporting Child Abuse
District Employees not Assigned to Schools**

1. District Employee suspects abuse.
2. Employee immediately reports suspected abuse in person to the building administrator and/or counselor (who will immediately commence an investigation to determine if a report should be made with CSD).

If neither is available, the employee reports suspected abuse in person to his/her immediate supervisor who contacts the counselor or principal immediately.

If still not available, the supervisor contacts a central office administrator who will then arrange for an administrator to go to the building to temporarily take on the role of the building principal for reporting and follow-up procedures for as long as necessary.

3. The employee who first reported the suspected abuse to the counselor has the legal responsibility to follow-up the same day, or as soon as possible, to see that a report was made to CSD or the appropriate law enforcement agency. (if appropriate).
4. At the time of the follow-up, the reporting employee shall review the nonconfidential portions of the report form and place their signature on the form indicating their follow-up has been completed.

**Procedure for Reporting Child Abuse
School Building Employee**

1. School employee suspects abuse.
2. Employee notifies an administrator and reports suspected abuse to the counselor (who will immediately commence an investigation to determine if a report should be made with CSD).

If neither is available, the employee reports suspected abuse , in person, to the teacher-in-charge who contacts the counselor or principal immediately.

If still not available, the teacher-in-charge contacts a central office administrator who will then arrange for an administrator to go to the building to temporarily take on the role of the building principal for reporting and follow-up procedures for as long as is necessary.

3. The employee who first reported the suspected abuse to the counselor has the legal responsibility to follow-up the same day, or as soon as possible, to see that a report was made to CSD or the appropriate law enforcement agency (if appropriate).
4. At the time of the follow-up, the reporting employee shall review the nonconfidential portion of the report form and place their signature on the form indicating their follow-up has been completed.

PREVENTION OF CHILD MOLESTATION

1. When the building principal is notified that a student has witnessed a public incident of indecent exposure or other form of child molestation:
 - A. The building principal meets with the student immediately and verifies the legitimacy of the report. (Counselor follows this procedure if principal is out of the building.)
 - B. The building principal immediately notifies parent or guardian of the student.
 - C. The building principal notifies the appropriate law enforcement agency. When timing might make the difference between success or failure of apprehension of the suspect, (B.) and (C.) may occur simultaneously, one call being made by the principal and the other by a counselor.
 - D. It is important that all staff members - certified and classified - are aware that the principal must be notified immediately if a student reports such an incident to them.
 - E. It is also important that the law enforcement agency contact include a request from the school for follow-up information in case the suspect is apprehended.
2. Principal notifies the area Block Home supervisor.
3. Principal notifies staff members in the building, beginning with those outdoors on playground or bus duty.
4. Principal notifies a member of the executive administration. That executive administrator is responsible to see that the emergency telephone tree is activated, thus notifying all district administrators. Administrators make their own decisions about notifying staff members. For example, if a district mail or maintenance vehicle is in the area where the incident occurred, the director of operations may wish to inform personnel to watch for suspicious person or vehicle.
5. Principal drafts a letter to parents/guardians, a copy of which is sent home with every student **on the day the incident was reported** possible. The letter will include as much detail as possible on the incident - description of person, vehicle (if any), time and location. A letter should also be sent home with students when suspect is apprehended. Copy of each letter would be sent to District Superintendent; copy should also be retained in principal's file designated for this policy.



H75
REYNOLDS SCHOOL DISTRICT
ADMINISTRATION OFFICES
1424 N.E. 201ST AVENUE
TROUTDALE, OREGON 97060
FAX NO. 667-6932 or 661-6404 (503) 661-7200

STRESSING THE ABCs: ACADEMICS. BASICS. CREATIVITY

July 18, 1991

Michael D. Schrunk
District Attorney
1021 S. W. 4th Room 804
Portland, Oregon 97204

Dear Mr. Schrunk:

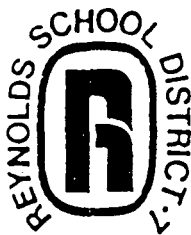
As requested in your July 15 letter, enclosed is a copy of the child abuse policy approved by the Reynolds Board of Education at its March 13, 1991, meeting. This is a replacement for a policy that was in effect.

Sincerely,

Hudson F. Lasher, Ed.D.
Superintendent

as

Enc.



*approved by the
Reynolds Board of Education
March 13, 1991*

116. 90-91

MEMO

February 8, 1991

To: Hud Lasher

From: John Deeder *JD*

Re: Child Abuse Policy

Attached you will find a Child Abuse Policy that I recommend the district adopt as a replacement for our current policy 11.10.1.6.

During the last session of the legislature a law was passed that required each county to establish a Multi-Disciplinary Child Abuse Team. District Attorney Mike Schrunk's office established Multnomah County's team. Each school district was required to participate on the team. Anita Harder represented our district on this team. The major charge to the team was to develop protocols to enhance and assist in the development and training of personnel involved in interviewing and investigating child abuse cases.

The policy I am recommending was developed by the Multi-Disciplinary Team at the county level and it contains the protocols required and clearly outlines the responsibilities of the school personnel in these cases. Each school district in the county is being asked to adopt this policy. I feel it is a good policy that does not make major changes in how we operate now, but clearly defines some of the up until now fuzzy issues our counselors and principals have had to deal with. If you have any questions or need additional information let me know.

11.10.1.6 Child Abuse and Reporting Of Child Abuse

- A. ORS 418.740 - 418.755 requires if school personnel have reasonable cause to believe that child abuse has occurred, it shall be reported. Whether reasonable cause exists or whether "child abuse" has occurred is not always clear.
- B. Child abuse, without regard to who is the perpetrator, includes:
 - 1. Physical injury caused by other than accident, including an "accidental" injury which is not adequately explained.
 - 2. Mental injury resulting from cruelty.
 - 3. Sexual molestation of any type including filming, taping, or exhibition or other exploitation.
 - 4. Negligent treatment or maltreatment such as inadequate nutrition, clothing, shelter, medical care, etc.
 - 5. Threatened harm resulting in substantial risk.
- C. The following procedure shall be used to report suspected cases of child abuse:
 - 1.
 - a. Each school counselor will coordinate the reporting of information to Children's Services Division. Pursuant to the requirements of ORS 418.740 - 418-770, which require school participation in Multidisciplinary Child Abuse Teams, the designee shall be trained in communicating with children about potential abuse and interagency coordination of abuse cases.
 - b. School personnel shall immediately report the information to the counselor and notify the principal.
 - 2.
 - a. Where a child has reported the abuse to school personnel so that no additional information is necessary the counselor should not require the child to repeat the information to the counselor. The counselor will call Children's Services Division and report the information. The counselor shall notify the principal and the school personnel who reported the case of the action taken.
 - b. Where a child's statements and/or physical condition are indicative of abuse but additional information is necessary to determine the school's obligation under the reporting laws, the counselor will talk to the child to get additional information. If abuse may be indicated the counselor will call Children's Services Division.
 - c. It is the legal responsibility of the personnel to whom the abuse was first reported to see that a report is made to Children's Services Division.

D. Investigation at School:

1. On request, the principal or counselor will permit a law enforcement investigator, including a Children's Services Division investigator, to interview a child. A school administrator or the counselor may, at the discretion of the law enforcement investigator, be present to facilitate the investigation. ORS 418.760. The school administrator or the counselor shall not be present if the law enforcement investigator does not wish them to be. ORS 418.760. Nothing that transpires in the investigation nor the fact of an investigation may be noted in student records or revealed to anyone. Special needs for disclosure may be discussed with the school district's attorney.
2. Prior to an interview of a child by a law enforcement investigator, the principal or the counselor shall first verify the identity of the person by official ID card, badge, etc., and record the person's name, agency, business address, and phone number. This information shall be temporarily retained by the principal.
3. If a police officer plans to take custody of the child, ask the police officer to sign your prepared custody record.
4. In the event the child is taken into custody, parent notification shall be accomplished through the law enforcement investigator only. In the event of interview only, the school shall not notify the parent unless the notification is approved by the law enforcement investigator. The principal/counselor should discuss parent notification with the officer and urge that it occur promptly. If a parent calls and asks for the whereabouts of his/her child, simply report the custody but not the reason and suggest that the parent phone the law enforcement investigator.

E. Reporting Procedures: The child abuse reporting procedures to be followed by employees of the Reynolds School District are listed below:

1. The school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspects sexual exploitation reports the facts to the school counselor and the principal.
2. The counselor, or the employee or the principal if the counselor is not immediately available, will report the suspected physical abuse, neglect or sexual exploitation to the Children's Services Division immediately. The school employee who has observed the child abuse has the responsibility to make sure that it is reported to the Children's Services Division.
3. Persons such as neighbors, relatives or individuals who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school principal. The principal may call Children's Services Division to make the report.
4. In child abuse cases the school should not contact the parents. The Law Enforcement Investigator has the responsibility of contacting the parents and will report back to the school as described in items 6 and 9 which follow.

5. If in the investigation of a case a police officer or a Children's Services Division/Child Protective Services worker appears at the school to talk with a student, the principal or counselor will secure the name, agency, badge identification number and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview, should be recorded. If the investigating officer or worker requests a private interview with the student, permission should be granted.
6. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or CSD worker will make the contact with parents.
7. If a parent calls and asks for the whereabouts of his/her child, the principal will simply report the custody but not the reason and suggest the parent telephone the police agency doing the investigation or CSD. No notation of the child having been taken into custody should be placed in the student's record.
8. If a police officer, or a Children's Services Division/Child Protective Services worker, responds to the school report and asks permission to talk to a student, permission should be granted.
9. The police and Children's Services Division/Child Protective Services have been asked to inform the school about how the case is progressing by giving information about custody, court hearing, etc. If the principal has not heard from the appropriate agency about a reported case by the end of the school day, the principal should call the agency to obtain the necessary information.
10. The school, in cooperation with Children's Services Division/Child Protective Services, will provide the necessary follow-up and support to the student and family as seems appropriate.



MICHAEL D. SCHRUNK, District Attorney for Multnomah County
• VICTIMS ASSISTANCE PROGRAM •

1021 S.W. 4th • Room 804 • Portland, Oregon 97204 • Telephone (503) 248-3222 • FAX (503) 248-3643

July 15, 1991

Dr. Hud Lasher
Reynolds School Dist.
1424 NE 201st
Troutdale, Or. 97060

Dear Dr. Lasher:

Would you please send us a final copy of your policy and administrative rules for reporting suspected child abuse in the Reynolds School District. Thank you in advance for your attention to this matter.

Very truly yours,

MICHAEL D. SCHRUNK

By Douglass E. Beloof
Director - Victims Assistance

DEB:ss

5000 STUDENTS

5700 PERSONAL HEALTH AND SAFETY

5716AR Child Abuse Reporting Procedures, Administrative Rule

The child abuse reporting procedures to be followed by employees of the Sauvie Island School District are listed below:

1. The school employee who observes signs of physical abuse, observes signs of neglect, observes mental injury, becomes aware of sexual exploitation or suspects sexual exploitation reports the facts to the Superintendent.
2. The employee or Superintendent/Principal will report the suspected physical abuse, neglect or sexual exploitation to the Multnomah County Police authority. The school employee who has observed the child abuse has the responsibility to make sure that it is reported to the Police.
3. Persons such as neighbors, relatives or individuals who wish to remain anonymous who call the school to report suspected child abuse involving a student will be referred to the school Superintendent/Principal. The Superintendent/Principal will call the Multnomah County Police to make the report.
4. The Multnomah County Police will coordinate with the Children's Services Division/Child Protective Services at 238-7555, and discuss who will do the initial follow-up on the report.
5. In child abuse cases the school should not contact the parents. The police authority or CSD/CPS has the responsibility of contacting the parents and will report back to the school as described in items 7 and 10 which follow.
6. If in the investigation of a case a police officer or a Children's Service Division/Children's Protective Services worker appears at the school to talk with a student, the Superintendent/Principal will secure the name, agency, badge identification number and telephone number of the officer or worker. This information, along with the name of the student and time and date of the interview, should be recorded. If the investigating officer or worker requests a private interview with the student, permission should be granted.
7. At the conclusion of the interview, the investigating officer or worker will determine what the next step will be and if parent contact should be made. The officer or

Administrative Rule 5716AR, continued

worker will make the contact with parents.

8. If a parent calls and asks for the whereabouts of his/her child, the Superintendent/Principal will simply report the custody but not the reason and suggest the parent telephone the County Police. No notation of the child having been taken into custody should be placed in the student's record.
9. If a Police Officer, not a Children's Services Division/Child Protective Services worker, responds to the school report and asks permission to talk to a student, please honor this request. Because of the increase in child abuse cases, the CSD/CPS may not be able to respond to all child abuse cases reported by school personnel. When this occurs, a County Police Officer may be dispatched to the school. Before the officer leaves the building, find out whether or not the officer intends to contact the parents. If not, call the CSD/CPS to determine who should make the contact with the parents.
10. The Police Department and Children's Services Division/Child Protective Services shall be asked to inform the school about how the case is progressing by giving information about custody, court hearings, etc. If the Superintendent/Principal has not heard from the appropriate agency about a reported case by the end of the school day, a call should be made to the Police to obtain the necessary information.
11. The school, in cooperation with the Children's Services Division/Child Protective Services, will provide the necessary follow-up and support to the student and family as seems appropriate.

END OF ADMINISTRATIVE RULE 5716AR

ADOPTED: April 12, 1990

REVISED:

LEGAL CITE: ORS 418.640, 418.760, 418.775 (Reference: Portland
Publ. Sch. Admin. Rule 440.21)



MICHAEL D. SCHRUNK, District Attorney for Multnomah County
• VICTIMS ASSISTANCE PROGRAM •

1021 S. W. 4th • Room 804 • Portland, Oregon 97204 • Telephone (503) 248-3222 • FAX (503) 248-3643

July 15, 1991

Mr. El Duane Wahtley
Sauvie Island School
14445 NW Charlton Rd.
Portland, Or. 97231

Dear Mr. Wahtley

Would you please send us a final copy of your policy and administrative rules for reporting suspected child abuse in the Sauvie Island School. Thank you in advance for your attention to this matter.

Very truly yours,

MICHAEL D. SCHRUNK

By Douglass E. Beloof
Director - Victims Assistance

DEB:ss

Riverdale School District 51J

Current
DRAFT

Code: JHFE

Adopted:

REPORTING OF SUSPECTED CHILD ABUSE

Any school employee who has reasonable cause or reasonable suspicion to believe that any child with whom he/she has come in contact has suffered abuse or neglect, as defined in state law, or that any adult with whom he/she is in contact has abused a child, will immediately notify the Children's Services Division or the local law enforcement agency. The school employee shall also immediately inform his/her supervisor, building principal or superintendent.

The superintendent will implement such regulations as are necessary to accomplish the intent of this policy and to comply with state law. Copies of this policy and applicable state laws will be given to all school employees.

[Staff may receive information and assistance in identification of abuse and neglect.]

END OF POLICY

Legal References:

ORS 418.740 - 418.755
ORS 418.762
ORS 418.770
ORS 418.990

Letter Opinion, Office of the Attorney General (May 25, 1984)

Letter Opinion, Office of the Attorney General (Aug. 18, 1986)

This is a draft copy of a proposed board policy. The school board is revising its policy. Policy adoption will not be until fall, 1991.

Mike Hower



MICHAEL D. SCHRUNK, District Attorney for Multnomah County
• VICTIMS ASSISTANCE PROGRAM •

1021 S.W. 4th • Room 804 • Portland, Oregon 97204 • Telephone (503) 248-3222 • FAX (503) 248-3643

July 15, 1991

Dr. Michele A. Howser
Superintendent
11733 SW Greyman Ave.
Portland, Or. 97219

Dear Dr. Howser:

Would you please send us a final copy of your policy and administrative rules for reporting suspected child abuse in the Riverdale School. Thank you in advance for your attention to this matter.

Very truly yours,

MICHAEL D. SCHRUNK

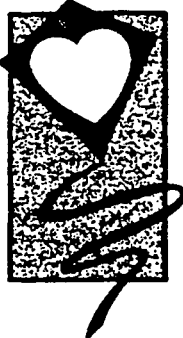
By Douglass E. Beloof
Director - Victims Assistance

DEB:ss

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX G

CSD Guidelines for
Juvenile Sexual Offender
Assessment and Treatment

	CHILDREN'S SERVICES DIVISION CLIENT SERVICES MANUAL I ISSUED BY: Child Welfare Program Office EFFECTIVE DATE: October 20, 1992	NUMBER: I-D.6.2 Transmittal Letter
		SECTION: D. Counsel/ Treatment Service
		SUBSECTION: 6. Family Sex Abuse Treatment
SUBJECT: 2. Juvenile Sexual Offender Assessment and Treatment		

To: G-7

Summary: These new administrative rules establish guidelines for a minimum level of intervention, while ensuring the most effective treatment of adjudicated sexual offenders. There are no funds attached to these guidelines. Comments received during the draft review process were considered by the Juvenile Sexual Offender Task Force and many of them were incorporated into the final version of the rules. Questions on the policy or funding should be directed to Ginger Newton (945-6634).

Forms:

CSD 993, "Consent for Physiological Assessment of Sexual Interests for Minors"
 CSD 987, "Release and Consent to Polygraph Examinations in Order to Assist
 Treatment for Minors"

These two new forms may be ordered using the automated GCICS system after November 2, 1992.


Filing Instructions:

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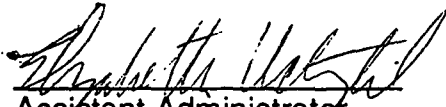
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Insert:

I-D.6.2, effective October 20, 1992.

	CHILDREN'S SERVICES DIVISION	NUMBER: I-D.6.2
	CLIENT SERVICES MANUAL I	SECTION: D. Counsel/ Treatment Service
	ISSUED BY: Child Welfare Program Office EFFECTIVE DATE: October 20, 1992	SUBSECTION: 6. Family Sex Abuse Treatment
SUBJECT: 2. Juvenile Sexual Offender Assessment and Treatment		

Interpretation: Family Sexual Abuse
Program Coordinator

Approval: 
Assistant Administrator,
Child Welfare Program Office


REFERENCES: CSD 993, "Consent for Physiological Assessment of Sexual Interests"
CSD 987, "Release and Consent to Polygraph Examinations In Order
To Assist Treatment"
Attachment 1, "Adjudicated Juvenile Sexual Offender
Case Planning Flow Chart"
Attachment 2, "Risk Assessment Profile"
Attachment 3, "Association for the Treatment of Sexual Abusers'
Guidelines for Use of the Penile Plethysmograph"

PURPOSE

412-60-100 Child sexual offenders characteristically begin their offending behaviors in early adolescence or younger. The sooner intervention can occur in this cycle, the better the offender can be taught to control his/her deviant actions. Because the treatment methods may be of an intrusive nature, these guidelines are set forth to help determine the appropriate type of treatment. This policy applies only to those who have been adjudicated for sex offenses.

DEFINITIONS

- 412-60-110 (1) "A.T.S.A."**
(2) "Aversion Therapy"
(3) "Behavioral Therapy"
(4) "Boredom Tapes"
(5) "Cognitive Therapy"
(6) "Covert Positive Reinforcement"
(7) "Covert Sensitization"
(8) "Deviant Sexual Fantasies"
(9) "Plethysmograph"
(10) "Polygraph"
(11) "Risk"

	CHILDREN'S SERVICES DIVISION CLIENT SERVICES MANUAL I ISSUED BY: Child Welfare Program Office EFFECTIVE DATE: October 20, 1992	NUMBER: I-D.6.2
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ELIGIBILITY FOR SERVICES

412-60-120 Children under the age of 18 years, in the care, custody, and control of Children's Services Division, who have been adjudicated for sex offenses.

ASSESSMENT

412-60-130 (1) Preliminary Assessment. Assessment for treatment planning of juveniles with sexually aggressive behaviors should proceed only after adjudication has occurred.

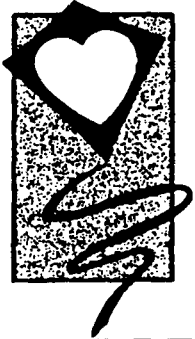
(a) The goals of sexual offender specific treatment are:

- (A) To stop sexually offending behavior;
- (B) To protect members of society from further sexual victimization;
- (C) To prevent other aggressive or abusive behaviors which the offender may manifest; and
- (D) To promote healthy sexual development.

(b) When juveniles have sexually assaulted family members within their own home, it is strongly recommended that the offending juvenile be placed outside the home in the least restrictive environment that allows for community safety, or where the assessment indicates. Offenders should not be placed in homes where other children may be endangered. They should be in settings where their behavior can be adequately monitored and controlled.

(c) For the purposes of treatment of sexually aggressive juveniles, it is essential to first evaluate and thoroughly assess each individual and determine the extent of the offending behavior. An assessment must include the following areas:

- (A) Victim statements;
- (B) History (family, educational, medical, psychosocial and psychosexual);
- (C) Progression of sexually aggressive behavior development over time;
- (D) Dynamics/process of victim selection;
- (E) Intensity of sexual arousal prior to, during, and after offense;
- (F) Use of force, violence, weapons;

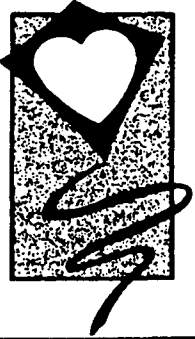
	CHILDREN'S SERVICES DIVISION	NUMBER: I-D.6.2
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- (G) Spectrum of injury to victim, i.e., violation of trust, fear, physical injury;
- (H) Sadism;
- (I) Disassociative process;
- (J) Fantasies: deviant or appropriate;
- (K) Ritualistic/obsessive behaviors;
- (L) History of assaultive behaviors;
- (M) Chronic/situational factors;
- (N) Sociopathy;
- (O) Personality disorders; affective disorders;
- (P) Attention deficit;
- (Q) Post traumatic stress behaviors;
- (R) Behavioral warning signs; identifiable triggers;
- (S) Thinking errors;
- (T) Locus of control, i.e. internal or external;
- (U) Ability to accept responsibility;
- (V) Denial or minimization;
- (W) Victim empathy, capacity for empathetic thought;
- (X) Family's denial, minimization, response;
- (Y) Substance abuse; juvenile sex offender and family;
- (Z) History of sexual victimization, physical, or psychological abuse;
- (AA) Family dysfunction; family strengths;
- (BB) Parental separation/loss;
- (CC) Masturbatory patterns;
- (DD) Impulse control;
- (EE) Paraphilias;
- (FF) Mental status/retardation/developmental disability;
- (GG) Organicity/neuropsychological factors;
- (HH) Number of victims.

(2) Assigning Risk Level. After an assessment has been completed, a determination should be made as to the risk level presented by the juvenile.

(a) Risk is defined as the potential for reoffending and for resisting or failing in treatment. Use Attachment 2, "Risk Assessment Profile," when determining the juvenile's risk level.

(b) The determination of risk for each adolescent offender should be a multidisciplinary decision involving the offender therapist, caseworker, CSD supervisor, juvenile department counselor and victim therapist.

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(c) If the juvenile presents low risk according to the "Risk Assessment Profile," treatment should proceed focusing on cognitive restructuring.

(d) For juveniles who exhibit moderate to high risk according to the "Risk Assessment Profile," assessment of deviant arousal patterns may be conducted using the penile plethysmograph for males and the photoplethysmograph for females. In addition, the juvenile should receive a disclosure polygraph examination. These tools should be used in addition to assessment criteria listed in OAR 412-60-130 to determine the treatment plan of choice. Under no circumstances should the results of these measurements be used in the courtroom setting or for any other reason except evaluation and monitoring of treatment. The plethysmograph should not be administered to prepubescent children.


(A) Use of the polygraph and plethysmograph should be made only with signed, informed consent of the offender and his/her parents/guardians using CSD form 993, "Consent for Physiological Assessment of Sexual Interests." This informed consent is to be used regardless of whether a court order requiring its usage exists or not.

(B) The polygraph and plethysmograph exam should be administered only by persons licensed or certified by their respective disciplines. The plethysmograph should be administered in a laboratory setting and in accordance with the "Association for the Treatment of Sexual Abusers' Guidelines for Use of the Penile Plethysmograph."

TREATMENT

412-60-140 (1) Treatment in specialized offense-specific peer groups is the treatment of choice, and must address aggressive and exploitive behaviors. The family should be a key part of the treatment planning. The treatment is to be geared toward the chronological and developmental needs of the offender. Treatment issues to be addressed for all risk categories include the following:

- (a) Substance abuse intervention;
- (b) Sex education;
- (c) Educational assessment for remedial or special education referrals;
- (d) Social skills training;
- (e) Assertiveness training;
- (f) Anger management;

	CHILDREN'S SERVICES DIVISION	NUMBER: I-D.6.2
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- (g) Victimization issues - (sexual, physical, and emotional) their own and their victims;
- (h) Family therapy;
- (i) Cognitive restructuring;
- (j) Values clarification;
- (k) Stress management;
- (l) Cycle recognition/self-intervention;
- (m) Relaxation/biofeedback.

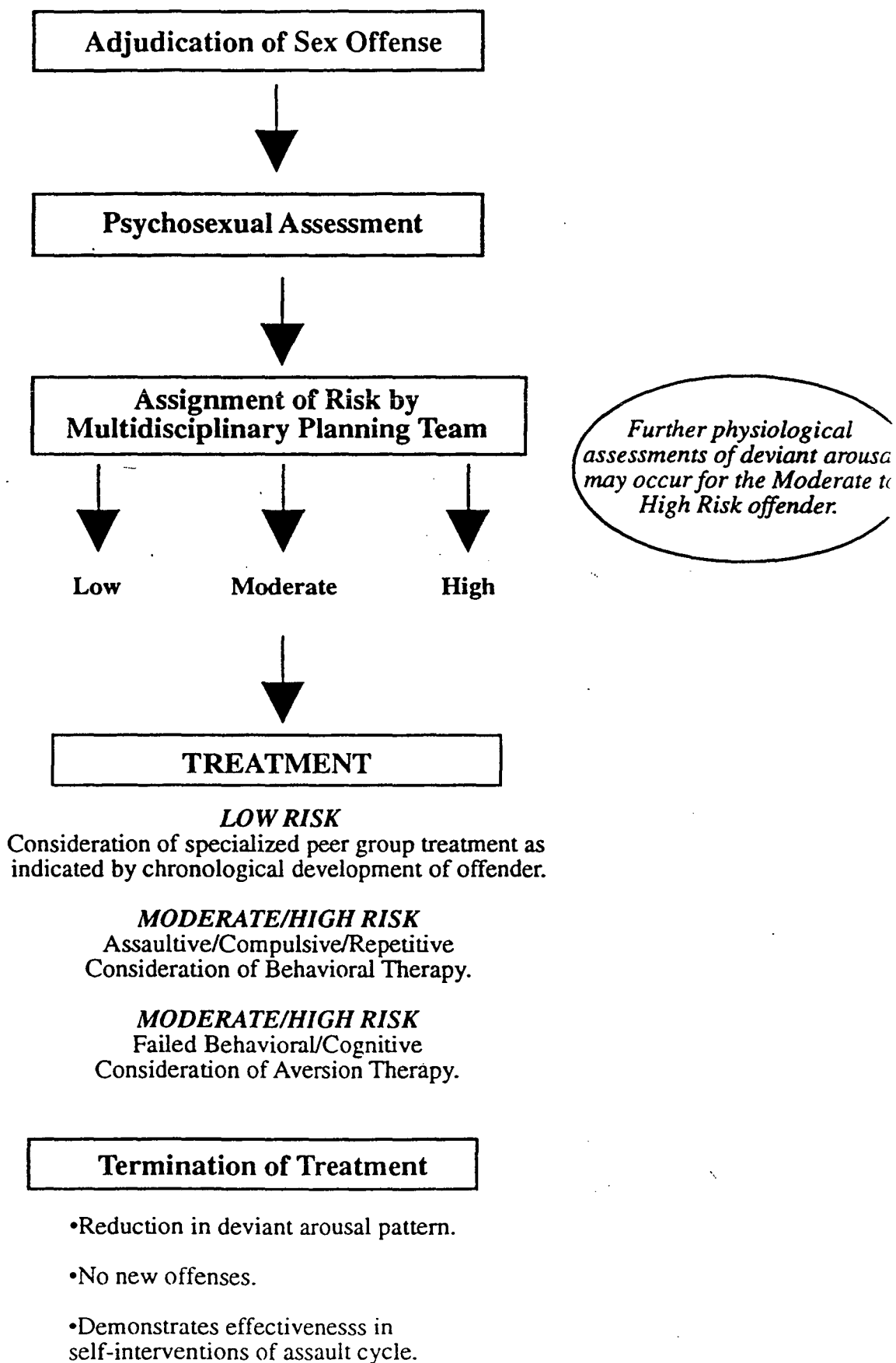
(2) In addition to the above, if the offender in the medium to high risk category demonstrates assaultive, compulsive, or repetitive acts of sexual offending, then behavioral therapy can be introduced. Also, behavioral therapy can be introduced after cognitive methods have failed.

(3) The decision to utilize aversion therapy should be discussed with the juvenile offender and his/her parent or guardian after other therapies have failed, and if, according to polygraph and plethysmograph examinations, the arousal patterns have not altered. The rationale for this choice should be documented in the case record. The CSD administrator or designee must then provide written consent to proceed. Should the parent/guardian or client refuse to sign, a review hearing should be requested to determine the course of action.

(4) Ongoing polygraph and plethysmograph testing should accompany behavioral therapy on a periodic basis to assess treatment progress. In order to graduate from treatment, the client must successfully "pass" a polygraph test which determines that they are not now offending, have disclosed all of their victims and offenses, and are exercising steps to successfully intervene in their offending cycle. Furthermore, they must also demonstrate reduction in deviant arousal patterns.

(5) Relapse prevention is an essential component to the juvenile's treatment plan. Whether he/she is placed in or out of the home, the primary parental figures, parole officer, or other significant figure in the juvenile's life should know and understand his/her assault cycle so as to support the offender in learning to intervene in his/her own cycle.

Adjudicated Juvenile Sexual Offender Case Planning Flow Chart



RISK ASSESSMENT PROFILE

Levels & Duration of Treatment		Client/Situation Profile
LOW RISK	1. COMMUNITY-BASED TREATMENT Including family therapy minimum 6 months	1. Sexual events isolated, opportunistic, exploratory, situational, non-violent with younger children 2. Prepubescent 3. No previous history of acting out behavior 4. Adequate social skills/socialization 5. Lack of sexual knowledge/experience 6. Adjudication 7. Safe to treat in community 8. Family able to support treatment 9. Must admit offense.
	2. COMMUNITY OUTPATIENT PROGRAM (offender in a foster home) including family therapy with family of origin Minimum 6 months	1. Sexual behavior with younger children affected through manipulation, enticement, entrapment 2. Poor social skills 3. No history of other serious acting out behavior 4. Low self-worth 5. Must admit to offense 6. Adjudication 7. Safe to treat in community
MODERATE RISK	3. DAY TREATMENT PROGRAM Maximum community safety with parents and care providers supervising offender Minimum 9 months Treatment up to 12 hours a day Supervised 24 hours a day Family therapy	1. Wide range of sexual offenses 2. Needs structured treatment yet capable of maintaining while living in community 3. Responsibility of crime must be acknowledged (especially if moving from a more secure placement) 4. Youth needs a viable family for support and supervision 5. Adjudication 6. Could be prepubescent, but not appropriate for behavioral assessment or treatment
	4. GROUP HOMES, CHILD CARE CENTERS 24 hour residential, community based care Family therapy Minimum 12 months	1. Sexual behavior with younger children affected through manipulation, enticement, entrapment 2. Poor social skills 3. Low self-worth 4. Moderate coercion used in offenses 5. Dysfunctional family, unable to supervise youth, supports denial, enables defensive behavior 6. Delinquent history 7. Adjudication 8. Same as above
HIGH RISK	5. CLOSED SECURE CUSTODY Secure locked environment Family therapy Minimum 12 months in campus Juvenile Sex Offender Program Paroled only after completion of treatment program	1. Mixture of incest, non-incest offenses 2. Extensive delinquent history 3. Failure in community-based programs 4. History of running away 5. Chaotic family, including much violence 6. Adjudication necessary 7. Force or violence used in commission of sexual assaults against peers, adults or children 8. History of numerous anti-social, acting-out behaviors 9. Uses primarily denial and projection as defenses 10. Majority sexually abused children 11. Feel inadequate, helpless, often use anger as major affective mode 12. Poor impulse control 13. Rigid value system 14. Dangerous to self or others 15. Psychiatrically disordered 16. Adjudicated

Adapted from The Oregon Report on Juvenile Sex Offenders, 1986.

GUIDELINES FOR USE OF THE PENILE PLETHYSMOGRAPH

ASSOCIATION FOR THE TREATMENT OF SEXUAL ABUSERS

Technological evolution continues to occur in the use of the penile plethysmograph.

As better stimulus material is acquired, accurate data retrieval is gained and more precise assessment methods and interpretation is developed, changes in this field will continue to take place.

As research continues to demonstrate the efficiency of such approaches, these approaches will be incorporated into the following guidelines.

When administering with juveniles, a first visit with parent or guardian to explain the procedure and see the equipment may be helpful.

PRELIMINARY PROCEDURES

(1) The examiner should gather supportive information, such as family history, criminal history, present life situation, legal status, sexual history, mental health contacts, and the reason for referral.

(2) Recent and past medical information should be obtained.

(3) It is the responsibility of the examiner to screen the client for contamination factors, such as drug use, medication, last sexual activity, emotional state, physical impairment, etc.

(4) Previous to the examination, the examiner should take precautionary steps to ensure that the examination will not be interrupted.

(5) No client with an active, sexually transmittable disease or parasite should be tested. Client should sign a disclaimer as to any knowledge of a current sexually transmitted disease.

LEGAL CONCERNS/INFORMED CONSENT

(1) Consent forms regarding the penile plethysmograph procedure should be read, signed and dated by the client.

(2) Release forms should be obtained for both incoming and outgoing informational sources.

(3) Raw data forms must provide information for retrieval of specific stimulus materials that were used in the assessment.

LAB EQUIPMENT

- (1) Plethysmograph equipment should provide either continuous chart paper readout, or with computerized equipment, a printed readout of response levels to each stimulus.
- (2) Equipment should be used as designed.
- (3) An arm chair or lounge chair with cleanable surface must be provided. A reclining lounge chair is preferable.
- (4) Disposable cover on the chair seat and on arms of chair is required for each client.
- (5) Mercury-in-rubber, Indium-Gallium, or Barlow gauges may be used and each gauge must be tested and calibrated before each use. Documentation of gauge calibration should be provided.
- (6) A calibration device or cone is required in 1/2cm increments with a minimal range of 6cm.
- (7) Security devices must ensure client's privacy, but must also include emergency entrance and exit with the safety of the client in mind.
- (8) Slide projector for visual material should be capable of projecting images spanning a 35 visual angle.
- (9) An intercom system should be used to provide communication between client and examiner.
- (10) Clinician must have protocol for fitting gauges, trouble shooting equipment, breakdowns and malfunctions.

LAB SETTING AND CLIENT SPACE REQUIREMENTS

- (1) Client space must be separated from the clinician's work area by at least an opaque partition, which is a minimum of seven feet high, to ensure client's privacy. A stationary wall is preferred to maintain maximum privacy.
- (2) Client space is recommended to be a size of approximately 7 feet by 8 feet in dimension. The minimal requirement for this space is 4 feet by 6 feet.
- (3) An intercom system must be used when client is in a stationary enclosure.
- (4) A means of maintaining constant room temperature must be provided. Temperature range should be maintained at a comfortable level.
- (5) Client room should have adequate ventilation and it is desirable to have adjustable lighting.
- (6) Sound deadening measures should be used in order to ensure that the client's space is as sound proof as possible.

(7) Security measures must be provided for the laboratory and stimulus material.

(8) It is recommended that a system or technique to determine stimulus attention is available so that the examiner can be assured the client is attending to the stimulus.

CALIBRATION PROCEDURE

(1) The penile plethysmograph should be initially calibrated and checked. Gauges should be checked and calibrated over at least 5 steps using an accurate calibration device prior to each assessment.

(2) Examiner must ensure that the mercury or Indium Gallium gauge must be stretched at least 10%, but not more than 30%, when placed on the penis (prior to any tumescence).

(3) Examiner should be cautioned to ensure sizing is within minimal and maximum strain.

FITTING THE TRANSDUCER

(1) For males, the penile transducer gauge should be placed at midshaft of the penis. For females, the vaginal transducer should be placed 2 inches into the vaginal opening facing frontally.

(2) Client should place on their own transducer in private.

(3) Examiner should assure that wiring has some slack next to the transducer or clinical error may result. Clothing should not touch penis or transducer.

(4) The examiner should ensure that sufficient arousal has been recorded to accurately interpret data.

STIMULUS MATERIAL

(1) Visual material:

(a) Visual material will include nude or clothed poses.

(b) Visual materials should represent all five Tanner's stages of maturation.

(c) Categories should include both sexes and be devoid of extraneous stimulus.

(d) The number of stimulus presentations must be based on client's problem. Stimulus duration should be consistent with published papers that have demonstrated validity. Currently 2 minute presentations are common.

(e) The examiner should be satisfied that detumescence has reached a sufficiently low level to proceed.

(2) Audio tapes:

(a) Categories of audio material should be sufficient to adequately evaluate potential problems of your client and reflect currently accepted methods as outlined in published and validated studies.

(b) Audio material must include a representative group of normal sexual activity, including both sexes.

(c) Typical audio tapes include fondling, consenting intercourse, coercive sex, rape, and assault with both children and adults of both sexes.

DOCUMENTING ASSESSMENT DATA

(1) Initial physiological assessments should only be interpreted in conjunction with a comprehensive psychological examination. Ongoing assessments can be interpreted by the therapist and/or examiner.

(2) Written reports should include:

- (a) A description of the method for collecting data.
- (b) The range of physiological responses exhibited by client.
- (c) Any indication of suppression or falsification.
- (d) An indication of the validity of the data and validity controls used.
- (e) The types of stimulus materials used.
- (f) Summary of highest arousal in each category.
- (g) Client emotional state.
- (h) Level of client cooperation.
- (i) Interpretation of data.
- (j) Effect of any medical condition, past or present, or arousal.

DISINFECTANT PROCEDURES

(1) Gauges will be disinfected prior to use, utilizing an accepted liquid immersible or other accepted laboratory disinfection procedures. Expiration date of disinfecting solution must be strictly adhered to. A log should be maintained to accomplish this.

(2) A disposable covering will be used for protection over the chair seat and arms of the chair.

(3) Client will place gauge in receptacle after use of the gauge and before leaving the testing room. Client will also dispose of protective coverings before leaving testing room.

(4) Clinician should use disposable gloves and antibacterial soap after contact with gauges. Any items or articles that have been in contact with the client should also be disinfected.

Modified 7/24/92.

Client Name: _____

Case #, P/L: _____

Consent For Physiological Assessment of Sexual Interests for Minors

I, _____, understand that I am being asked to participate in an assessment to evaluate my sexual interests. I will be questioned about my sexual history with details being asked about my current sexual behavior.

My sexual interests will be measured by recording my response while I view sexual slides or listen to recorded sexual materials. This material will be very explicit and will depict various forms of sexual behavior. While I view or listen to these materials, my sexual response will be measured by a small device. If I am a male, I will be asked to place a small apparatus around my penis. If I am a female, I will be asked to place a small instrument within my vaginal opening. These procedures are not uncomfortable or painful. I will attach or insert this device in the privacy of a separate room.

Because I haven't had this test before and because the person doing the test will be evaluating my responses, I may feel anxious, uncomfortable, depressed, nervous, or angry.

The benefit of such an assessment will be to identify what (if any) treatment is needed because of my sexual interests and arousal. The results of such an assessment will be shared with me by my therapist. The results may also be shared with my caseworker and juvenile department to report my progress in treatment.

All of my questions about the above assessment have been answered to my satisfaction by the person in charge of my evaluation. My signature indicates I have read, understand, and consent to all of the above.

Client Signature

Date

Parent/Guardian

Date

Witness Signature

Date

Behavior Technician Signature

Date

Client Name: _____

Case #, P/L: _____

Release and Consent to Polygraph Examinations in Order to Assist Treatment for Minors

I, _____, _____ years of age, understand that by
Name-First, MI, Last Age
signing this document, I agree to participate in polygraph examinations (commonly referred to as "lie detector tests") to assist the treatment of my sexually aggressive behaviors.

I understand that the polygraph exams will help to focus on my specific treatment issues, will help my therapist give me more thorough and complete treatment. No one has promised me any reward for taking the exams other than the benefits to my treatment. No one has threatened me in order to obtain my consent to the polygraph exams.

My therapist has explained the polygraph examination to me. I understand that a qualified polygraph examiner will ask me questions, that the polygraph will record data, and that the examiner will interpret the data to form an opinion about the truthfulness of my answers.

I understand employees of Children Service's Division who may review the results of my polygraph exam are required by law to report child abuse, and required to begin an investigation of child abuse if my answers in a polygraph exam give them reason to believe that I have abused a child. I understand that for that reason, the results of my polygraph exam may be the basis for a new investigation of child abuse.

I also understand that the results of my polygraph exams may not be used as evidence in an Oregon court proceeding that is governed by the Oregon Evidence Code.

I do hereby release and forever hold harmless the State of Oregon, its agents and/or employees from any claim arising out of my taking the polygraph exams.

My signature below indicates that I have read this form or it has been read to me and that all my questions about the polygraph examinations have been answered to my satisfaction.

Signature

Date

Parent or Guardian

Date

Witness

Date

MULTNOMAH COUNTY
MULTIDISCIPLINARY
CHILD ABUSE TEAM
PROTOCOLS

APPENDIX H

Red Flag Protocol



STATE OF OREGON

INTEROFFICE MEMO

TO: Branch Managers and Supervisors

DATE: September 28, 1993

FROM: Kay Toran

SUBJECT: Red Flag Case Protocol (effective October 1, 1993)

Enclosed is the final version of the Red Flag Case Protocol for the Metro Region. Please familiarize yourself with the changes and distribute to other staff members involved. Please note that the protocol involves staff other than CPS workers.

KT:ls

RED FLAG (HIGH RISK) CASE PROTOCOL

PURPOSE

The purpose of this "Red Flag" protocol is two fold. First is to identify those cases in which there is a high risk of a serious injury that could lead to a permanent impairment or death of a young child. Second, cases designated as "Red Flag" cases will receive special attention by Multi-Disciplinary Team (MDT) agencies to insure that such injuries do not occur.

DEFINITION

"Red flag" cases are designated high risk cases consisting of a child under the age of five years of age and having at least one factor present from each of categories A and B below.

A. Child Factors:

1. Medical/physical evidence of sexual abuse
2. The child has serious physical injury, defined as:
 - a. an injury which creates a substantial risk of death or which causes serious and protracted disfigurement, impairment of health or protracted loss of the functions of any bodily organ;
 - b. serious head trauma, broken bones, serious burns;
 - c. injuries, after initial medical treatment, that require a child to be admitted to a hospital
3. A child has been seriously neglected resulting in physical harm, i.e., serious injury, malnutrition, dehydration, anemia, serious gastric disorders, etc.; includes refusal or failure to obtain medical/psychological treatment which places child in serious jeopardy, desertion and abandonment.

B. Caretaker Factors:

1. History of previous serious abuse to a child or a child fatality, permanent planning services or termination of parental rights.
2. Caretaker not able or willing to protect child from risk, includes possible perpetrator access to child.
3. Caretaker has a diagnosis of chronic and debilitating mental illness.
4. Caretaker exhibits acute or chronic intellectual, emotional, behavioral or physical handicap.
5. Caretakers have a history of domestic violence.

IDENTIFICATION

"Red flag" cases will be designated at the regularly scheduled "red flag" forums held by each branch. Branches will schedule forums as often as needed, but as least twice each month.

PROCEDURE

All branches currently participate in the "red flag" forums. The following process is typical:

- Supervisors and workers schedule presentation.
- Presenter is requested to follow "Presentation Format" (See attachment #1).
- Recommendations from the forum are recorded, notes and recommendations are sent to the case worker, their supervisor and the MDT DDA (See attachment #2).
- Upon receipt of the recorded notes (See attachment #2), the MDT DDA will forward a copy of the recorded notes to the lead legal assistant for the Juvenile section of the DA's Office. The lead legal assistant shall mark the DA file and the DA tracking card with a red stamp stating "high risk". The lead legal assistant shall also ensure that the case is specially assigned to a DDA. The recorded notes shall be filed in the DA file. The MDT deputy shall keep a copy of all recorded notes in an alphabet file listed by child's name.

FORUM STAFFING AND REVIEWS

Standing members of the "red flag" forum are the Branch CPS Supervisor, Permanent Planning Supervisor, CPS Consultant and an identified support staff. Other involved staff and external parties will be invited to attend the forum at critical junctures.

At critical junctures "red flag" cases will be screened by the assigned service worker, their supervisor and the MDT/DDA to determine if a review by the branch committee is appropriate. Critical junctures include the following:

- 1st court hearing/adjudicatory hearing
- Before a court review hearing
- Birth of a sibling
- Before switching to unsupervised visits
- New live-in of custodial parent
- Case transfer from CPS to non-CPS workload
- New allegation
- New allegation after returning a child home
- New allegation on a sibling
- New reports of domestic violence in the home
- As needed based on professional expertise

The specially assigned DDA will be notified of and will participate in reviews at the following junctures:

- Prior to adjudicatory hearing
- Before returning the child home
- Case transfer from CPS to non-CPS case load
- As requested based on professional expertise
- Before court review hearings

PAPER FLOW/RECORDING

The Regional Transfer Narrative Form and the Case Transfer Time Line have been modified to incorporate the Red Flag Case protocol (See attachments #3 and #4). Each branch should replace its old Transfer Narrative Form and Case Transfer Time Line with the July 93 revision.

1. Worker responsible for case will notify appropriate support person when the case is given "Red Flag" status.
2. Clerk will input "RED FLAG CASE" on ICDB screen in comments section and affix a strip of solid bright red file folder labels with "RED FLAG CASE" on the inside back cover of the case file label.
3. When the Committee determines the case no longer meets "Red Flag" criteria, the worker responsible for the case will notify the appropriate clerk.
4. The clerk will remove the "RED FLAG CASE" statement from the ICDB screen and cover/remove strip of red file folder labels on the case file.
5. File case material in Narrative section of CSD Case Record.
6. "Red Flag" Cases are to be recorded on the Branch Tracking Form (See attachment #5).

HIGH RISK CASE PRESENTATION FORMAT

2 minutes Persons Involved
 - Family members
 - Key agencies and professional
 - Downtown an juvenile DDA's, other attorneys,
 - LEA

5 minutes Presenting Issues /P.S. Allegations
 - What brought the family to CSD?
 - Court involved?
 - Placement

5 minutes Case Synopsis / Issues Not Covered Above
 - Key historical events
 - Key relationship issues
 - Current case plan / Court orders
 - What does worker want from staffing

2 minutes Risk Factors (see CSD 955 and 955A)

10 minutes Case Activity Recommendations
 - Assessment recommendations
 - Treatment recommendations
 - Safety plan recommendations

5 minutes Permanence Issues
 - Fast track?
 - "Termination" DDA needed?

Is this a Red Flag / High Risk case? YES NO

Does this case need restaffing? YES NO

If so, by whom and when?

HIGH RISK CASE STAFFING MINUTES

September 2, 1993

Case name:
Child's name:
Case #:
Caseworker:
Supervisor:

RISK FACTORS:

CASE ACTIVITY RECOMMENDATIONS:

PERMANENCE ISSUES

IS THIS A RED FLAG/HIGH RISK CASE?

DOES THIS CASE NEED RESTAFFING?

IF SO, BY WHOM AND WHEN?

DATE SENDING SUPERVISOR GIVES "TRANSFER READY" FILE TO BRANCH SUPPORT STAFF: _____
(Sending supervisor fills in by hand.)

DATE RECEIVING SUPPORT STAFF OPENS PLAN TO NEW WORKER: _____
(Receiving support staff fills in by hand.)

**STATE OF OREGON
CHILDREN'S SERVICES DIVISION
SUBSTITUTE CARE/NON-SUBSTITUTE CARE TRANSFER NARRATIVE**

DATE INITIAL NARRATIVE COMPLETED _____
DATE TRANSFER NARRATIVE COMPLETED _____ September 27, 1993

CASE NAME _____ CASE #: _____ P/L _____
WORKER: _____ SENDING BRANCH: MIDTOWN

ICWA DETERMINATION: YES, ICWA APPLIES _____ NO, ICWA DOES NOT APPLY _____
(Yes OR No, documentation must be in file)

A. SIGNIFICANT PERSONS:
NAME RELATIONSHIP TELEPHONE/ADDRESS

B. CURRENT PLACEMENT(S) OF CHILD(REN):
(List individually if children are in separate placements.)

CHILD: _____
DATE OF INITIAL PLACEMENT: _____ DATE OF CURRENT PLACEMENT: _____
PROVIDER: ADDRESS TELEPHONE

Policy Ref: I-I.2
File: Narrative Section

Re: =
CSD: =
CDR: =
Date: September 27, 1993
Page: -^N-

CHILD: =
DATE OF INITIAL PLACEMENT: = DATE OF CURRENT PLACEMENT: =

PROVIDER: ADDRESS TELEPHONE

= = =

C.* BASIC CHILD(REN) INFORMATION
(Age, school, grade, medication.... * Need not be included if included in current 147B.)

=

D. SIGNIFICANT EVENTS PENDING / ONGOING:
(CRB, Court, medical apt, therapy... dates and times)

=

E. VISITATION PLAN

WHO VISITS, WHEN, WHERE...

=

____ PROVIDES TRANSPORTATION ON _____.
(Days 1 through 25, supervisor completes.)

____ PROVIDES TRANSPORTATION ON _____.
(Day 25 forward, supervisor completes.)

F. RESULTS OF SERVICE AND WORKER ACTIVITIES SINCE LAST NARRATIVE:

=

G. REASON FOR TRANSFERRING:

=

H. DATE(S) OF CONTACT(S):

=

Policy Ref: I-I.2
File: Narrative Section

Re: =

CSD: =

CDR: =

Date: September 27, 1993

Page: -^N-

I. OVERALL CASE RISK LEVEL; RED FLAG CASE? []

=

J. SENDING WORKER RESPONSIBLE FOR:

=

SUPERVISOR: _____ DATE __/__/__

=.TRN

09-27-93H:\Home\Prot\Forms\Transfer.nar

Policy Ref: I-I.2
File: Narrative Section

CASE TRANSFER TIMELINE

Worker Responsibility	Work Day	Work Day	Event Responsibility
<u>Sending Worker</u> Sending worker retains responsibility.	1	1	Sending supervisor gives "transfer ready" file to branch support staff.
		2	Sending support staff logs case out, puts it in courier service, E-mails case documents to receiving support staff.
		4	Receiving support staff logs case in, gives it to receiving supervisor.
<u>Both Workers</u> This is the period of case transition where sending and receiving workers share responsibility for case--for instance, both workers would attend special rates committee. Sending worker introduces new worker to family if appropriate. Workers negotiate coverage for visits, transportation, etc. New worker is responsible for any service initiated after day 15. Sending worker initiates Red Flag staffing.	15	15	Receiving supervisor assigns case to receiving worker no later than 10 working days after receiving it. The two supervisors will negotiate a time for any missing materials to be received. If that deadline is not met, the case is returned to the sending supervisor and the clock goes back to zero.
		16	Receiving support staff opens plan to new worker, e-mails case docs to new worker. By e-mail, receiving support staff notifies all branches with open plans and services, copy of notification to sending supervisor.
		17	Sending and other branches have 1 working day to close old plans and transfer services. If services not transferred, receiving support staff notifies branch office managers and they close plan and transfer services.
		25	Visitation, HSA support, etc. become responsibility of receiving branch.
		35	New branch and worker have responsibility for payments, case count, 308s, etc.
<u>Receiving Worker</u> End of transfer process. Receiving worker has total responsibility for case.			

EAST MULTNOMAH BARANCH
CHILDREN'S SERVICES DIVISIONRED FLAG CASES

	<u>CASE NAME</u>	<u>CASE #</u>	<u>CHILD'S NAME</u>	<u>ONGOING WORKER</u>	<u>DATE FLAGGED</u>	<u>TRANSFERRED TO</u>
1.	=	=	=	=	=	=
2.	=	=	=	=	=	=
3.	=	=	=	=	=	=
4.	=	=	=	=	=	=

PROTECTIVE SERVICE ASSESSMENT

Assessor:	=	Case Name:	=
Date:	=	CSD Case#:	=
Child(ren):	=		
I.C.W.A.: Yes	=	Tribe:	=
No		Tribal #:	=
TBD			

I. Problem/allegation:

=

II. Contracts/Interview

=

III. Background Information (family & collateral sources):

=

IV. Assessor Activities to Date:

=

V. Court Activity:

=

VI. Risk Level:

=

VII. Assessment Summary and Recommendations:

=

PROTECTIVE SERVICE ASSESSMENT

Worker:

Case Name:

Date:

Case Number:

Branch:

Child(ren):

I. Problem/Allegation

II. Contacts/Interviews:

III. Family Dynamics (optional):

IV. Assessment Decision:

MULTNOMAH COUNTY MULTIDISCIPLINARY CHILD ABUSE TEAM PROTOCOLS

APPENDIX I

Child Fatality Review
Membership and Protocols

CHILD FATALITY REVIEW TEAM MEMBERSHIP LIST

<u>AGENCY</u>	<u>MEMBER</u>
District Attorney	Helen Smith
Law Enforcement	
PPB	Jim Bellah
GPD	Jim Kalbasky
CSD	Alicia Hahn Richard Varvel
Multnomah County Health Division	Jan Wallinder
Multnomah County Juvenile Justice Division	Dorothy Cole
Emanuel Hospital - CARES	Jan Bays, MD
Kaiser Hospital	Linda Lorenz, MD
Medical Examiner	Karen Gunson, MD

We need to see if Barbara Neely will join us to represent the schools on this. Then we can add her name with a * and say she has agreed to join. **NOTE:** I called Barbara today, 8/5. She is out til 8/10. So I should know about this by then.

CHILD FATALITY REVIEW PROTOCOLS

PURPOSE

1. To review all child fatalities in Multnomah County selected by the medical examiner.
2. To identify issues related to preventability.
 - a. What agencies were involved with this child and/or family?
 - b. Was appropriate procedure followed in each agency dealing with child or family?
 - c. Were services offered, coordinated, followed up on?
 - d. Are there any procedures on the part of any agency which should be revised in light of what took place in this case?
 - e. Are there any community issues which might affect preventability?
3. To promote implementation of recommendations which arise from reviews.

MEMBERSHIP

CSD - Co-chair
District Attorney
Law Enforcement
Medical Examiner -Co-chair
Pediatrician
Health Department
Juvenile Department
Others at the discretion and invitation of team members

RECORDS

Each agency representative shall research agency records for information related to the fatality under review. Information will be shared verbally. It is not necessary for agency representatives to copy documents for all team members.

Any team member who is aware of any records which may be helpful to the review which are in the possession of a nonmember agency shall notify the CSD coordinator for the fatality review team. The CSD coordinator will contact the nonmember agency and invite a representative to attend the next meeting with that agency's records relative to the fatality in question.

Any records which cannot be obtained voluntarily shall be subpoenaed. It is the responsibility of the DA representative to prepare and serve subpoenas and to handle any legal issues associated with the subpoena.

MEETINGS

The Child Fatality Review team shall meet quarterly.

The medical examiner shall send a list of cases to be reviewed to the CSD coordinator, quarterly. The CSD coordinator shall distribute the list to member agencies far enough in advance of the meeting to allow time for research of the agency's records and preparation for the review.

Each agency representative shall be prepared to discuss any information that agency has with respect to a particular fatality. If the agency representative cannot attend the meeting, he/she shall arrange for a substitute to fill in from the agency.

Forms specified by the State Fatality Review Team shall be completed during the meeting by a person or persons designated by the team. The forms, with findings, shall be sent to the State Fatality Review Team by the CSD coordinator. Copies of the forms and findings for each case reviewed shall be retained by the CSD coordinator at the local CSD office.

In cases where the death is determined to have been preventable the issues related to preventability will be identified. The team will determine if there are any recommendations to address preventability for each case.

The team will also determine steps to be taken to implement any recommendations arising from the review.

CONFIDENTIALITY

All meetings of the child fatality review team are confidential. The meetings are not subject to the public meetings law, and the records shared are not subject to the public records law. Findings of the team may be made public through an agreement of members of the team when necessary to promote preventability.

DEATHS TO BE REVIEWED

The following categories shall be reviewed if the deceased is a child under 18 years of age:

1. All homicides, including deaths by gunshot wounds, stabbings, asphyxiations and blunt force trauma;
2. All suicides, including deaths by hanging, intentional drug overdoses, gunshot wounds or incised injuries;
3. All accidents including vehicular collisions, drownings and falls;
4. All deaths occurring under suspicious or unknown circumstances, including deaths designated as "undetermined manner of death" by the medical examiner;
5. All deaths occurring due to drug overdoses including illicit drugs, prescription medication and alcohol;
6. All deaths resulting from selected natural disease processes such as SIDS and meningitis to be determined by team members or the medical examiner.
7. Any other cases brought to the attention of the team.

MANNER IN WHICH CASES ARE TO BE IDENTIFIED

The medical examiner shall review all child deaths reported to the medical examiner's office and select those which fall into the above categories for review by team members.

APPENDIX D

MDT AGENDAS

July 1993 - June 1994

CARES/MDT MEETING

6-9-94
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:.

Charles C Woods

Helen Smith

Debbie Kernan - C.A.R.E.S.

Gummy Sloan - CARES

Doug LaBerg - (MCSO) PPB MDT/CAT

Dorothy Cole Juvenile Department

Sue Wuegan C+JW

Mary Rix Kaiser Permanente

Adelaidi Dunn - OHSU

Jill Miller - OHSU Medical Student

Cindy Eisenmeyer - CSO

John Richmond CSO

Linda Sklar Lane Child Advocacy Center

Nancy Woodard Lane Child Advocacy Center

Martha McLane Mult. Co. M.H.C.

Barbara Neely, RN MESO/SHS

Nancy Rottier PhD, Children's Program

John H. Bann CEO St. Johns

Pat Bowman, HHSU

Genie Brothers, Child + Adol Mental Health, Multnomah County

MDT AGENDA - June 9, 1994

1. Duty of Mandatory Reporters.

a. Continuation of last month's discussion about CARES requesting that parents call the Child Abuse Hotline. CSD Pat Bowman, CARES Emmy Sloan.

b. Mandatory Reporters are calling hotline anonymously and wanting to know if they have to report a specific situation.

Issues: 1) Parents give the hotline different information than they give CARES or other mandatory reporters. This can affect whether or not an investigation is initiated. When the mandatory reporter calls to verify whether or not their client reported, this creates additional work for the hotline.

2) It may be more traumatic to ask the parent to call the hotline than to have the mandatory reporter call.

3) ORS 419B.010 requires that a mandatory reporter "shall immediately report or cause a report to be made." Does referring a parent to the hotline satisfy this requirement?

4) Mandatory Reporters are asking the hotline for legal advice when they ask for an opinion as to whether or not they need to report.

2. CPS investigation of domestic violence threat of harm cases and accompanying physical abuse to children. DDA Woods.

Issue: Currently, field response varies significantly, should there be any standardized guidelines in how to approach these cases?

Example: 1) If a woman states she is going to get a restraining order, should CSD verify she does, in fact, obtain the restraining order before closing their case?

2) If a perpetrator has been arrested, should CSD verify that the victim appears at grand jury and testifies before closing their case?

Suggestion: Would these issues be worth exploring in depth at the monthly CPS Supervisors' meeting which the MDT DDAs and LEA also attend?

3. Future of MDT and the monthly meetings: Membership of team, length of meeting, content of meeting. Chair Helen Smith.

4. Parole and Probation's Sex Offender Listing. Who needs access to this list and how should they access it. DDA Woods.

5. Joint Investigations by CSD and LEA: Work together, communicate clearly. DDA Woods.

CARES/MDT MEETING

5-12-94

DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:.

Cheryl Leach, PPA

Nancy Kottler, Children's Program

Judy Snow (CST)

Persi Huseby ~~SEC~~ SEC

Joyce May MS4 (OHSU)

Mary Rix Kaiser Permanente

Nir Jain GRESHAM PD

Jebby Kernan, C.A.R.E.S.

Cindy Duncan PPB,

John Holly PPB

Bob Walliker PPB

Mary Ann CARES

Pat Gye MCSO

Mr. H. Lam CSO

Pat Bowman Hotline

Paul Drews CSD

Adelaide Jones OHSU

Helen Smith, DDA

Janet Pol

Cope

Dorothy Cale

for CT

Barbara Neely / SLS
MESD.

Martha McCune L.P.C.
mult. county mental health

Michelle DeShazo JGD

Cindy Eisenmeyer, CSO

Judy Phelan, DA's Office

MDT AGENDA - MAY 12, 1994

1. Filing JDH dependency petitions by CSD and DDAs. DDA Woods. Michelle DeShazer, JDH Lead Intake Counselor.

Issue: Developing the protocol that will allow CSD workers and DDAs to file dependency petitions under ORS 419B.230. Presently, although there is statutory authority to file petitions based upon information and belief, there is no mechanical process in place that allows CSD or DDAs to file petitions directly. Development of an efficient protocol can streamline the time required to file a petition and ease the burden on JDH's intake counselors.

2. Interviewing perpetrators before preliminary hearings. DDA Woods.

Issue: How best to accomplish the goal of interviewing suspects in a criminal investigation before they get an attorney at the preliminary hearing.

Example: 15-year-old girl gives clear disclosure of rape, sodomy and sex abuse by her father to PPSP. Child is taken into protective custody. CSD worker alerts MDT DDA that father likely to talk if interviewed properly and promptly. Det. Zahler interviews father at JDH before prelim and gets a complete confession.

Suggestions: For CAT Detective Team, DDA clerk can place all prelim information, including attached uniform police reports, in a specially marked box for CAT Team Sergeants. Sergeants can review knowing these are the cases where attorneys will be assigned and decide whether or not to use the "UP Detective" that day to do any immediate work, e.g., interview suspect, prepare search warrant, etc. This would catch cases Monday through Friday. What about the weekend when CAT Detectives who work Saturday and Sunday are assigned to general assignment? What about GPD, Troutdale and Fairview?

3. CARES requesting that parents call the Child Abuse Hotline before CARES appointments will be scheduled. CSD Pat Bowman, CARES Emmy Sloan.

Issues: 1) Are parents being frightened about the prospect of CSD involvement? Is there any tracking mechanism to ensure that someone follows-up if the parent does not call the CAH?

2) When should the LEA report be generated?

4. CSD preparing to begin a swing shift schedule among its CPS workers. Update by Paul Drews.

5. CAT subcommittee preparing plan for CAMI monies (Child Abuse Multidisciplinary Intervention Account). Update by Helen Smith.

CARES/MDT MEETING

April 14, 1994
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:.

Suzanne Rutter DDA

Judith Armatta -
OCADV

Charles Woods, DDA

Carolyn Chen

Nancy Rutter, Children's Program

Adelaide Muir - OHSU

Cindy Eisenmeyer, CSD

J.R. Fain - Gresham Police

Helen Smith, 4th DA

James Parent - Police/Pedestrian

Due Cook, CAH

Dorothy Cale - Juvenile Department

Mary Kitz - Kaiser Permanente

John Richmond CSD

Judy Thelan, DA's Office

BARBARA Neely DSHS/MESO

Bob Wallin, PPB

Pat Bowman, US

R Varvel, CSD

Maggie Khilnani

Erin Sloan - CARES

Sue Winegar CHN

MDT AGENDA - APRIL 14, 1994

1. CAMI ACCOUNT:

Helen Smith

Update of Child Abuse Multidisciplinary Intervention (CAMI) Account: Subcommittee of the Child Abuse Team to prepare a comprehensive plan describing how allocated dollars are to be used. DEADLINE: October 1, 1994. DDA Helen Smith, Judy Phelan, Staff Assistant to District Attorney Michael Schrunk. Hand out provided.

BACKGROUND: The 1993 Legislature established the CAMI account through an increase in the unitary assessment fees assessed on persons convicted of a crime, violation or infraction. The goal is to provide funding for the development of assessment centers, as described in ORS 418.790 through 418.792, as well as for the development and maintenance of Multidisciplinary Investigative Child Abuse Teams (ORS 418.745 through 418.747). Counties access the monies in the CAMI account by submitting a comprehensive plan describing the planned uses for the monies.

DISCUSSION:

1) The Multnomah County Commissioners' Resolution: review and explanation.

2) The appointment of representatives to serve on the subcommittee.

2) MDT NEWSLETTER

Helen Smith

3) MEETING LOCATION

The meeting room at 8th and Davis is no longer available, any suggestions

a. BASEMENT OF MORRISON ST

b. MIDTOWN BRANCH CSD

4) SHREDDING OF PAROLE AND PROBATION FILES OF SEX OFFENDERS AFTER CLOSURE. Set over from last meeting, case Clifford Burton. Suzanne Ritter, James Parent.

4) MEDICAL RECORDS

a. cooperation between LEA, hospitals and CSD to provide medical records in rapid fashion

b. are there protocols in place for the providing of medical records to substantiate abuse.

5) SCHEDULING OF DOCTORS FOR TESTIMONY IN TRIALS

a. agreement between hospitals/District attorneys office.

MDT AGENDA - March 10, 1994

1. Update on changes in mandatory reporter law. Handout of new law. DDA Woods.
2. Probation files of sex offenders: Shredding the file after closure. DDA Woods. S/o 4/1 4-14-94

Example: Perp: Clifford Burton, 7/8/53. In 1985, perp confessed to sexually abusing his three children: a daughter and two sons. Subsequently, he was convicted of Sodomy I and placed on 5-years probation. Mom and perp separated at that time.

In January 1994, perp told mom he had "custody papers" for daughter and mom let him take the daughter. He re-offended against the daughter and has been indicted for sexual abuse. A juvenile court petition is pending. The probation officer, Gary Wilbourne, was unable to give the DA's office any info about perp's past sex offender evaluations/psych evals etc. because the file was closed in 1990 and purged, i.e., shredded.

Issues: What are the current rules regarding shredding sex offender probation files?- Do these rules differ from county to county? (The above probation was in Oregon City). Is it possible to retain these files?

3. Protective Custody of children: How to avoid multiple interviews and reduce trauma. DDA Woods.

Example: Child discloses sex abuse to a school counselor. By the time the CAH is notified the child has returned home. The family's CSD history reveals that an older sibling, no longer in the home, had also complained about in-home sex abuse, but recanted after family pressure. The family is known to be closed, secretive, intimidating and very controlling of their children. LEA and a CPS immediate response worker go to the child's home to interview the child.

Issues: 1) Is it possible for LEA to take a child into protective custody based solely on the school counselor's report? Later, the child can be interviewed away from the home either by CARES/KAISER or LEA. Does the age of the child make a difference?

2) Should CPS seek a judicial warrant for removal of the child based on the child's disclosure to the school counselor?

3) If the above are not feasible, can the schools hold the child until CPS and LEA respond?

4. Supplies for children needed at CPS branches. DDA Woods.

Potential Donors: Jamie Tillman → Pat Bowman will contact

Laura Crumm w/Jr. League → Dorothy Cole will contact

March 10, 1994

M E M O R A N D U M

TO: Dorothy Cole
Pat Bowman

FM: Charlene Woods *CW*

RE: Contacting CASA Program and Junior League about supplies for children.

Dorothy and Pat, thanks for your offer of help. The following is a list of items that the CPS branches could use to assist working with children who are awaiting placements:

- * Children videos for the VCRs
- * Diapers
- * Handi-wipes
- * Safety gates for stairs, work areas
- * Non-perishable food items
- * Playpen
- * Time-out/sleeping mats for the floor
- * Assortment of clothing
- * Hygienic travel bag
- * Blankets
- * Books and other age appropriate activities. In particular, there is a need for items for older children.

THANKS!

Confidentiality Statement

MDT

2/10/94

Suzanne Ritter ODA

Chetree Woods ODA

Nancy Ritter Children's Program

Cezar Gallagher ESD

Emmy Sloan CARES

John Duncan PPB

Mary Rix Kaiser Permanente

Mary Stenberg OHSU

Bob Waller PPB

JOHN HOLLY PPB

Jane Winger CHD.

Adelaide Allen OHSU

Gregory Cole Juvenile Dept

David LaBuz MC50

Pat Bowman Home

Cathy Olson AM

Mult Co NPRO → 248-3366

Helen Smith DA's office

James Powell PPO

MDT AGENDA - February 10, 1994

1. Overcrowding of Foster Homes Endangering the Welfare of Children. DDA Ritter, CSD John Barr.

Background: The MDT Team has focused on the issue of overburdened foster homes. The catalyst focusing this review was the case of State v. Frey. In that case, a highly-regarded foster mom with a 17-year history with CSD, seriously burned a foster child. Subsequently, she was indicted for Assault I and Criminal Mistreatment I.

The foster mom had eight children of her own. At the time of the incident, she also had seven foster children in her home. Her home was certified for only two foster children. The extra children had all been placed on an emergency basis during the previous two to three weeks and were not supposed to remain in the home. Efforts were being made to find alternative placements; however, no placements had been found.

Issues: See Handout attached.

2. Under 12 Sex Offenders. Helen Smith.

3. Oregonian Article on MDT. Reporter Dan Hortch wants to spend time with the team. Helen Smith.

Keep agenda

Horner - intro -

Kaiser - cust. will appear -
OHSU - Pat Todd

MDT AGENDA - JANUARY 13, 1994

1. State v. Gonzales and hospital records. DDA Woods.

Medical records are no longer admissible in grand jury proceedings unless:

*The records custodian personally appears and testifies that the records are a true copy regularly kept as business records; or

*The physician who authored the report personally certifies the copy as a true copy.

Issue: Given this new law, which of the above options works best for each hospital? Who is the records custodian designated to receive personal service subpoenas?

2. Suspects subpoenaing Doctors during criminal investigation. DDA Woods.

Suspects in sex abuse cases, who are non-custodial parents, have begun subpoenaing CARES Doctors to domestic relations court while the criminal case is still under investigation. There is a concern that this could compromise the criminal investigation. If the medical report has been forwarded to LEA and a Detective has been assigned, notify the assigned Detective about the subpoena. Tom Williams of the City Attorney's Office states he will review these situations on a case by case basis with the assigned Detective. It is possible, that the City Attorney may move to quash the subpoena.

3. Statewide Sex Offender Meeting. James Parent.

248 - 3680

917 to 2 Snake River =
Sex Crimes

4. Foster Care Recap: Receiving Centers. Helen Smith and John Barr.

5. meeting time - 9:30 2/10/94.

Walliker - juv. case -

6. Greg - CARES rpt - specificity of diagnosis.
juv. dep. issue - vs -

7. Mark Wiener -

juv. - prech
access to
records
legis. fix

s/p.

CARES/MDT MEETING

12-23-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Charles G Woods

May Stenbeck
OABU

James Parent Rusk/Kidston
Bunny Stiles

Dorothy Cab, Juvenile Court

Adelaide Turner - OHSH

Benny Sloan - CARES

Long Opt - PPS

Lang Term GPD

N.R. Terin GPS

R Varvel CSD

Pat Bowman CPS

Bob Waller - PPB

John Horthy - PPB

Helen Smith DDA

John H. Bann CSO

MDT AGENDA DECEMBER 23, 1993

1. Handout on the Child Abuse Multidisciplinary Intervention (CAMI) Account. Need to update written protocols and agreements under ORS 418.747(2).
2. Training on legislative changes affecting CSD and Juvenile Court: January 11, 1994, 9a.m. to noon at Midtown Branch's upstairs conference room. Handout provided.
3. Foster Care Update: Recruitment and Retention.
4. Co-housing Update: New address:

2115 SE Morrison
Second Floor
Portland, OR 97214

Same phone numbers
5. 1994 MDT Meeting Schedule.

CARES/MDT MEETING

12-9-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Charles G. Woods
Pat Bowman, CPB

Heleen Smith
Cindy Eisenmeyer

Stacy Jones MCSO

Dorothy Cole MC Juvenile Department

Emmy Stone CAPS

Mary Rix Kaiser Permanente

Cathy Olsen in Mult Co Field Team

Bob Wilkin PPB

Wray/Galt PPB

David Gamasohi - PPB

Jicki Roberts OS CAT

Aue Winegar CHW.

Adelaide Hsu - OHSE

Connie Pollard - CSD

Robert Crawford - CSD

Gary Schwartz CSD

Richard Vaxtel CSD

John H. Sam CEO

Robert W. Virginia MSB OHSU

MDT AGENDA - December 9, 1993

1. Foster Care Placement Recap. Helen Smith. John Barr (Receiving Center Info).

2. Oregon Refugee Child Act. DDA Charlene Woods. Det. Yamasaki.

Det. Yamasaki recently met with the Asian Law Enforcement Advisory Council of Oregon (ALEACO). The Council discussed the Oregon Refugee Child Act and the possibility of providing training for LEA and CSD about the Act and cultural aspects of the Asian family.

Issues:

*Background of ALEACO. Did they have specific concerns about the Asian communities interaction with CSD and LEA?

*Is training already available through CSD?

3. CSD cross reporting to LEA when CSD's investigation uncovers possible criminal activity.

4. CPS Teleconference: Allegation v. Assessment: Rethinking the Role of Child Protective Services. Today at 11:30 a.m. at Midtown's conference room.

5. 1994 MDT meeting schedule. Helen Smith.

CARES/MDT MEETING

11-18-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Barbara Thompson	A/CP CSD
Nancy Rottier	Children's Program
Pat Bowman	A/CP
Pligi Huseby	SEC/CHU
Dorothy Cole	Juvenile Department
Sue Cook	Waverly Childrens Home
Wanda Duncan	PPB
Emmy Sloan	CARES
Phil Morgan	CSD
D. Lough	CSD
Peter Sturdevant	Parole/Probation Officer RE District MONT. CO. COMM. CORRECTIONS
Mike Leonard	" "
Carolyn Graf	CSD
Barbara Canlier	CSD
Eileen Hester	CSD
Connie Pollard	CSD
BOB CRAWFORD	CSD

Lynn Jenkins
Wm H. Barr
James Parent

CSD
CSD / ACP

Parade / Probation

Paul Drews
Helen Smith

CSD

DA's office

Jenny Stewart

CSD

Craig Felt

PPB

Larry Linn

School Police

Terry Jones

MC SO / CAT

Adelaide M

OHSM

Bob Walker

PPB

John Munn

PPB

Jane Anderson

CSD

MDT AGENDA - NOVEMBER 18, 1993

1. State v. Frey. DDA Woods, Dr. Jan Bays, CSD Barbara Thompson.

Facts: Foster mom has been indicted for Assault I and Criminal Mistreatment I for burning a two-year-old child, Eric Bernal. Eric had lived in Ms. Frey's home for most of his life and Ms. Frey and her husband planned to adopt Eric. Eric has classic hot water immersion burns on both his legs beginning from below his knees. Ms. Frey gave several differing versions of how Eric was injured. All of her versions are inconsistent with the medical evidence. *Settlement home -*

Ms. Frey has been a foster mom for 17 years. She is highly regarded as a competent, compassionate foster mom. She has eight children of her own. At the time of this incident, she also had seven foster children in her home. Her home is certified for only two foster children. The extra children had all been placed on an emergency basis during the previous two or three weeks and were not suppose to remain in the home. Mr. Frey told OHCI Barbara Thompson that she had been calling her certifier for two to three weeks asking for the children to be moved; however, no placements had been found.

- reconstruction of scene a problem.

Issues:

*Can family foster care continue to be the primary foster care resource for children who need placement? If not, what are the alternatives? What can members of the MDT team do as a team to address the fact that foster homes are overburdened? Are children being placed unnecessarily? *(Crim. cases / pol. ofc. placing - CSD not avail. to pol. at nite)*

*Given the current reality, can any steps be taken now to assist overloaded foster homes? For example, should there be regular out-of-home-care staffings to review homes that are identified as overloaded?

✓ 2. CPS Quarterly Teleconference. CSD John Barr. - *12/9 - 11:30-1:30 ish Midtown -*

✓ 3. Registering Sex Offenders. PPB Sgt. Bob Walliker. PO James Parent. Can probation officer's have sex offenders sign a document indicating that they have been informed about their legal responsibility to register? This will assist LEA and DDAs in the prosecution of sex offenders who fail to register.

*give example
write letter - Tamara / Frank Hall.
visiting in institution -
memo to DA re - can we arrest for failure
to register - Opinion on one case - try on
case by case - see how it goes in ct.
can deter. if I had been notified of duty
to reg. Parole files shredded -*

- ① Recruitment + retention
- ② Settlement homes
- ③ "Appropriate placement" - risk ass. tool -
on place. CSD avail after hrs -
- ④ CSD policy stmt re overloaded home +
removal on request.
- ⑤ Respite system
- ⑥ Staffings -
- ⑦ Publicize the problem + educating public.

does CSD
have #s??

CARES/MDT MEETING

10-28-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Charles G. Woods, DDA

Pat Bowman CSP

Barbara Thompson CSD

Bob Henry CSP

Dorothy Cole - Juvenile Department

Mary Rix Kaiser Permanente

George Yost PPB

Ann Maen Med Student

Adelaide Turner - OHSU

Mary Steinberg - OHSU

Sgt Terry Jones MCSO

Cindy Eisenmeyer - CSO

Suzanne C. Ritts DDA

Katy Gallagher - Mult Co Corrections

James Parent P+P

Helen Smith DDA

Emmy Shaw CARES

Jane Whinger CHA
Susan Spurr CHN

Geoffrey Hadlock OHSU - student

Judy Gurek CSD

Peter Sturdevant Parole/Prob. Mult. Co-comm. corrections

Mike Leonard Parole/Prob. MTNO

Don Richmond CSD - East

Heenan GPD

MDT AGENDA - October 28, 1993

1. PO Katie Gallagher

- *Sex offender probation officer network.
- *Accomplishments
- *Future Goals - Legislative Subcommittee.
- *Plan for Multnomah County POs to co-house.

*Risk Assessment Tools for weighing a sex offender's threat to the community. Can these tools be valuable to CPS in assessing the threat of harm of a convicted sex offender who has access to children?

*OFFENDER: Robert Taylor

OFFENDER'S GIRLFRIEND: Sharon Weyman. She has 3 children. No record with CSD. Offender Robert Taylor was living with her and her children against his probation conditions. His probation was revoked and he is serving a sentence which will expire May 1994.

ISSUE: Does CSD have a role in guaranteeing he does not resume living with Weyman and her children once his jail term expires and he is no longer on community supervision? Weyman and Taylor are in counseling with Ken Myers of Recovering Offenders.

2. Perp: Kevin Henderson, Juv.

V: Raymond Glass

Presenters: Dr. Steinberg, DDA Suzanne Ritter, CSD Pat Bowman and Barbara Thompson.

FACTS: Dr. Steinberg called the CAH on October 11, 1993 to report possible sex abuse of victim by perp while the victim was in daycare. The victim was in the daycare between 4/93 and 6/93. When Dr. Steinberg called, the CAH had no computer record of perp and neither did PPB. In fact, the perp had been adjudicated for 2 counts of Sodomy I on August 17, 1993 and a condition of his probation was that he could reside at home only if no other children present. The CAH had done a consult on August 30, 1993, regarding this same victim and had closed the consult as not CPS eligible b/c convictions did not show up in PPDS or LEDS.

ISSUES: 1) Why investigation not in PPDS? What is time lag between conviction and entry into LEDS?

2) How are consultations tracked if they're not in CAH computer?

3) Is there a way to increase coordination between juvenile court's info and CSD? For example, if a condition of probation is that mom stop having her daycare, shouldn't CSD be informed? How should this communication flow be managed?

3. NEXT MEETING NOVEMBER 18, 1993. ROOM?

CARES/MDT MEETING

10-14-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Chas G. Leed, DDA

Nancy Rottler Children's Program

Dorothy Cole - Juvenile Court

Larry Green G.P.D.

Richard Varvick CSD

Bob Walliken PPB

May Lix

Kaiser Permanente

Terry Jones MISO

Tom Jenkins

OHSV Student

Conz Rpt PPB

Andy Eisenmeyer, (SD)

Adelaide Min OTSG

Mary Steenberg

OHSV

Ermy Sloan

CARES

Jane Winger

CCH.

Larry Linne

School Police

Jeffrey Nacker

CPS/CSD hotline

John A. Barr

CSI

James Parent

Arde/Pedation

Helen Smith
Suzanne Rittler

DDA
DDA

1. "Consensual" sexual activity between juveniles and offenders who are more than three years older. Example facts: Dr. Lorenz sees a 13-year-old female for medical reasons and the child reports that she is sexually active with her 20-year-old boyfriend. As a mandatory reporter, Dr. Lorenz calls the child abuse hotline.

Questions:

-When does the hotline decide to write a 307? When does the hotline decide to do a NEF form instead? What is the practical significance of writing a 307 as opposed to a NEF form?

-When is a police report written? When is the case actively investigated by the CAT detectives? Who decides whether or not prosecution is appropriate? What factors are considered in deciding whether or not to prosecute?

2. Accessing medical reports and expertise in the investigation of child abuse cases.

Questions:

-Use of the SCAN review process. Can CSD, LEA and MDT DDA be informed of cases to be reviewed?

-In problematic cases, can LEA, CSD and the MDT DDA request assistance from the SCAN teams?

-What is the best way to access medical records when delay in getting the records is negatively impacting a child abuse investigation?

3. Courtesy Police Reports and CAH referrals to CARES.

Mom, who lives in Gresham, sees her 3-year-old daughter crying and stating: "The bad man hurt me mommy. . . he hurt me right here" pointing to her vaginal area. Mom takes the child to Mt. Hood Medical Center. A GPD Ofc responds, concludes the abuse likely happened in Portland and tells mom she must call PPB. Mom calls PPB who tells mom GPD should have a report on file because they responded to the hospital. Mom calls GPD who tells her there is no report on file and they refer her to CSD. Mom calls CSD who refers mom to CARES. Mom calls CARES and is told they can't help her without a police report. Finally, PPB takes a report four days after mom took child to the hospital.

Questions:

-Why didn't GPD take report?

-When does CAH decide to tell parent to call CARES v. taking a report and faxing it to the TRU unit?

4. Oregon Refugee Act. Does this law effect the way LEA investigates child abuse cases?

CARES/MDT MEETING

9-23-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Charles A. Woods

Eugene Ritter DDA

John H. Bar CSY

Kate Gallea Mult. Co Corrections

Aue Winegar CHN

Mary Steinberg MD OHSU

Laurie D. Smith MD OHSU

Adelaide Am. OHSU

Craig Pitt PRB

Margaret in Kaiser Permanente

Emmy Sloan CARES

Jan Bays CARES

LARRY LINNE SCHOOL POLICE

Bob Walker PRB

Michael P. Dowling Meso

Helen Smith

Joseph Naeck

Craig Reed, OHSU

James Paret Parole/Probation

Judy Grawd CS

September 23, 1993

MDT Agenda Items

1. Mary Rix, Kaiser.

Problem: The Child Sex Abuse Clinic's backlog for examining and interviewing children is growing. The clinic's goal is to see all children within three weeks after their referral to the clinic. To meet this goal, the clinic's 1994 budget will request funding for an additional part-time social worker interviewer.

Issues: 1) How does KAISER's backlog affect LEA and CSD investigations? Does CARES have a similar backlog? Would the MDT, LEA or CSD write a letter to Mary Rix supporting the budget request for an additional part-time interviewer?

2) Children missing scheduled appointments exasperates the backlog problem. When CSD is involved with a family that has a KAISER exam scheduled, what actions can CSD take to help ensure the family will make their appointment? Can this service also be offered to the CARES program?

2. DDA Charlene Woods.

Problem: When adolescents are assaulted by parents, the police often arrest the parent for Assault IV, but not Criminal Mistreatment I. The police also fail to place the child in protective custody. Consequently, the police investigation gets forwarded to the misdemeanor section of the DA's office where the case is not complained unless the victim, the child, calls requesting prosecution. Needless to say, the children aren't calling in. The criminal case is declined. The parent gets out of jail. No one has assessed the safety of the child.

Issues: 1) Training Uniform Officers. Can the family services unit get the word out? Is it possible for the MDT to prepare a training videotape to be played at all the roll calls?

2) Can the DA's office prepare a procedure to catch these cases that come in as misdemeanors but should be felonies? For example, can the clerical staff check the victim's date of birth on cases that are to be not complained because of lack of victim contact and ensure that a DDA sees cases involving children?

3. DDA Charlene Woods.
Child: Tyler Stahly
Perp: Glen Shuck, registered sex offender.

On March 8, 1990, Glen Shuck, the director of a day care program, was sentenced to 5-years formal probation after being convicted of three counts of Sex Abuse I involving three separate victims, boys ages five through eight. The PSI psychological evaluation describes the defendant as a person "grossly lacking in insight" who "harbors a tremendous amount of underlying anger and rage" and requires treatment and "very close surveillance" if he is not to reoffend.

On September 17, 1993, the CAH received a call that this man was having unsupervised contact with the above child. This allegation is being investigated. It was discovered, however, that the defendant's level of supervision went into the casebank system in June 1991 and that he was transferred to bench probation in April 1993 after his PO had requested early termination of his probation. The defendant stopped sex offender treatment at the time his case was transferred to the casebank system.

Issues: 1) Given the legislature's decision to increase the supervision period for sex offenders, is early termination of probation ever appropriate? If so, when?

2) Given that sex offenders always have probation conditions limiting their contact with children, is case bank supervision ever appropriate? If so, when? Is bench probation ever appropriate? If so, when?

3) The MDT has discussed team review of probation cases where the defendant plans to reunite with the victim and the victim's family or where the defendant desires contact with a new family with children. Is team review appropriate when the level of supervision is going to be reduced? Should the team develop a written protocol about such reviews?

4. DDA Helen Smith. Child Neglect.

CARES/MDT MEETING

9/9/93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Suzanne Ritts DA

Chloe Wood

Nancy Rotter Children's Program

Janice Vallin Children's Program

Pat Holly P.P.B.

Mary Rix Kaiser Permanente

Mary Steinberg MD OASH

Adelaide Turner - OTHSU

Ane Winegar RN.

Lucy Galt P.P.B.

Joseph Noecker hotline

JAMES PARENT PAROLE/PROBATION

Heley Smith DA's office

John H. Sam CSD

Andru B. Sward

September 9, 1993

MDT Agenda Items:

Prior agenda items revisited:

1. Domestic relations court and protection of child
 - a. Availability of attorneys for parents and children
 - b. Pro Se forms for unrepresented parties
2. Tolliver baby

New issues:

1. MAGGIE PHILLIPS

Charlene Woods and Judy Griswold

Scenario - Immediate Response, child has bump on head, child says he fell off bike, Ma insists that father abused child. Father refuses to do a parent child interaction as suggested by the MDT.

2. Child Neglect
Helen Smith

CARES/MDT MEETING

8/26/93

DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Suzanne Ritter MDT/RDA

Larry Keenan GPD.

Timothy Pitt PPB

Richard Varvel CSD.

Ralph Miller PPB

JAMES PARSONS PAROLE/PROB

Jobby Kernan CAREC intake

Emmy Sloan CARES

Wicky Hey CSD

Regi Huxley CHW

John V. Bann CSD

Pat Berman ~~CHW~~ CSD

Cindy Eisenmayer CSD

Henry Strubberg MDT/CL

August 26, 1993

MDT AGENDA ITEMS

SCENARIO:

PA
Non-custodial mother finds cigarette burns on child during visit. Father caused burns. Domestic Relations order provides for court ordered visitation. Mother calls police takes child to hospital and otherwise acts appropriately to protect child. Father not arrested and mother must return child to father or face contempt of court.

1. Does mother violate order and face jail? What should Hotline advise?
2. Does juvenile court get involved and grant temporary custody to CSD in interim based on father's threat of harm and mother's inability to protect because of legal impediment. Thus allowing mother to change custody in Domestic Relations Court? Is this a good use of juvenile Court and CSD?

8/12/93

DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Manselburg OHSU

Suzanne Ritter DDA

Nancy Ritter children's Program

Larry Herman - GRD

Pat Bowman UHS

David R. Hagler MCAC

R Varul CSD

Bob Healy CSD

Mickey Grey "

Barbara Thompson

John L. Lane CSD

Kangas PS

Rob Kelly medical student, OHSU

Mary Rix Kaiser Permanente

Genny Sloan CARES

Paul Sanders - Juv. Court

Helen J. Smith - DA

R. Kal. han. MSW OHSU

BONNIE CATRELL P.O. MTSE

August 12, 1993

MDT AGENDA ITEMS

1. Unexplained danger
CSD: Bonnie Baird -- OHCI

Danielle Tolliver -- 7 months old

5-21-93 Elevated Sodium level of 182, normal is 140.
Unexplained level of sodium chloride without associated
dehydration suggestive of ingesting sodium chloride.

6-14-93 Danielle found blue in bed by babysitter who did
CPR. Was felt by medical personnel to be either so called
hemorrhagic shock encephalopathy syndrome, or a near miss
SIDS.

Dr. Gunnar Waage, MD concerned because of 2 unexplained
unusual episodes in one month period.

2. House Bill #5061 MDT Funds
By: Emmy Sloan
Lt. Holly

CARES/MDT MEETING

7-22-93
DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Charles A. Woods	Bennett P.P.B.
Angie Keen G.P.D.	John Holly P.P.B.
Pat Bowman C.P.S.	Tracy Shaw CARES
R. W. Warrick C.P.S.	Jody Gervand C.S.D.
	John Richmond C.S.D.
Peggy Hresby C.H.W. SEC	Cindy Eisenmeyer C.S.D.
Adelaide Mun- O.H.S.U.	
Mary Ritz Kaiser Permanente	
Lucy Pitt P.P.B.	
Terry Jones M.C.S.O.	James Parent P.H.
J. Reeves	
Clark Sanders - Ju. Ct.	
Mercedes A. Ropy - Midtown C.S.D.	
Chuck Dunn	
Heleen Smith - DA's office	John A. Bane C.S.D.

July 22, 1993

MDT Agenda Items

1. Dad: Basil Panaretos
Children: Basil Jr., age 4; George, age 9 months.
CSD Chuck Dunn; DDA Charlene Woods

Dad is on his second marriage to a woman 19 years his junior. He started a second family with her to please her. He is often responsible for child care when his wife works or goes out in the evening. His adult daughters called the hotline to report:

- Dad violently shakes both boys;
- Dad hit Basil Jr. over the head with a toy and when Basil Jr. started crying Dad picked him up and shook him;
- When 9-month-old George was fussy, Dad shook him hard and yelled: "George go to sleep!"
- Dad has a history of depression and loses his temper easily.
- Dad has a gambling problem and lives beyond his means. His commercial real estate business is failing and he has been forced to take a second job.
- Dad complains about how he hates babysitting.

Dad refused services when contacted by CSD.

ISSUES:

- Should a petition be filed?
- What medical evidence should be gathered?

2. Dad: Todd Roses
Child: Ida Coyle
CSD: Mercedes Lopez, Cindy Eisenmeyer
DDA/AG: Charlene Woods/Nancy Simmons

Dad failed to protect his daughter from sex abuse by paternal grandpa. The child recently disclosed that her father also sexually abused her. The police investigation has not been completed. Dad's attorney is pushing for more supervised visits between dad and child and wants access to the police reports.

ISSUES:

- When is visitation between child and perp appropriate? How should the visitations be supervised? How should observations be documented?
- When is access to police reports appropriate?

3. SB 181: Consolidation of day care services into the employment department.
CSD: Pat Bowman/Richard Varvel.

ISSUES:

- Will CSD continue to certify, register or license day cares?
- Who will conduct investigations?

4. Repeated false reports to LEA. What follow-up is appropriate? CSD:
Pat Bowman.

CARES/MDT MEETING

7-8-93

DATE

We, the undersigned, are hereby notified that all information discussed in this meeting is confidential in nature and is not to be discussed with anyone outside of this meeting.

Those attending:

Mary Stenberg OHSU

Steve G. Woods

Nancy Rottner Children's Program

Bob Wallin PORTLAND POLICE

Michael Donohue Multnomah Co. S/O

~~Greg R. Tate~~ Clatsop County Corrections.

BONNIE J. GATRELL MULT County CORR - MTSE

JAMES PARKER MULT PARKER/PROB SOS PO

Nicky Gray A/C P CSD

Idni Richmond East CPS

Pandra Elske Midtown CPS

Sam Keenan CPD

Mary Lin Kanson Permanent

~~Gregory~~ PPS

Ermy Anne CARES

John Samuel CSD

Tam Bays CARES

Harrison OHSU MS4

Lee Winegar CTIN

Vicki Brumfield PPS

David YAMAJAK PPS

Beth Carpenter OSP

Selen Smith - DA'S OFFICE

July 8, 1993

MDT Agenda Items

1. Child: Almond Oliver
Dad: Alden Oliver

DDA Charlene Woods, CSD Pandra Elske, PO Dan Kestler.

Dad on probation for sexually abusing his stepdaughter, Teena Oliver. He is allowed supervised visits with his 8-year-old daughter, Almond Oliver. The supervisor is a 16-year-old stepbrother. Almond is acting out sexually, i.e., fondling the genitals of a 10-yr-old boy, lying on a bed naked requesting that the 3 boys present get on top of her, writing notes to a 4-yr-old boy wanting to have "sex with him." Visits have been stopped pending CSD's investigation. Dad passed a polygraph about sexual contact with Almond. Almond's former group leader feels Almond unlikely to make any disclosures.

2. Child: Cathianne Hartley

Child was raped by a family member within 72-hours of the law enforcement investigation.

Sgt. Bob Walliker. CSD Judy Griswald. Dr. Jan Bays. Det. Judy Brumfield. OSP Crime Lab Donna Scarpone.

Issues:

- Who is responsible for arranging for a rape kit?
- What type of evidence should be collected during the rape exam?
- If a court order is necessary, who should obtain that court order?
- What is the best way for LEA to reach a CSD worker if they are in the field?

3. "The Ice Cream Man Cometh". The Oregonian's feel good piece about an ice cream man who also happens to be a pedophile.

James Parent.

APPENDIX E

JOB DESCRIPTION FOR CSD PROTECTIVE SERVICES WORKER SCHOOL PILOT PROJECT

b. Describe the purpose of this position, and how it functions within this program.

To screen community referrals of child abuse or neglect to determine service eligibility and initiate field service and law enforcement agency action in abuse investigations.

To serve as the pivotal person within the system, this position defines protective services cases for the community and the agency. The worker will investigate allegations of abuse and then take appropriate action, such as: staffing cases with the school police officer, supervisor, multi-disciplinary team or the PS Consultants; completing with risk assessment with the assistance of school police, working with parents to provide a safety plan, placing children in protective custody and substitute placement if necessary, etc. This position is family focused and the propose is to protect the child through strengthening the family and assisting the parents to resolve the problems which underlie the child maltreatment. Efforts to preserve the family should be made prior to removal of a child at risk of immediate and substantial harm.

A Social Service Specialist in this position will participate directly in assisting the Portland School Police in screening and assessing allegations of child abuse and neglect.

State of Oregon

EXECUTIVE DEPARTMENT PERSONNEL DIVISION

POSITION DESCRIPTION

* * * PLEASE READ INSTRUCTIONS BEFORE COMPLETING THIS FORM * * *

This Position is:

- ☐ Management Service-Super.
☐ Management Service-Confid.
☐ Classified
☐ Unclassified
☐ Executive Service

SECTION 1. POSITION INFORMATION

a. Classification Title Social Service Specialist	b. Classification No. C66120	c. Effective Date 11/1/91	d. Position No. ██████████
e. Working Title Protective Service Specialist	f. Work Unit ██	g. Agency No. 412042	
h. Agency Name Children's Services Division	i. Employee Name ██	j. Work Location (City-County) ██	
k. <input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Limited Duration <input type="checkbox"/> Academic Year <input checked="" type="checkbox"/> Full Time <input type="checkbox"/> Part Time <input type="checkbox"/> Intermittent <input type="checkbox"/> Job Share			
l. FLSA <input type="checkbox"/> Exempt <input checked="" type="checkbox"/> Non-Exempt		m. Eligible for overtime pay <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION 2. PROGRAM/POSITION INFORMATION

a. Describe the program in which this job exists. Include program purpose, who's affected, size, and scope. Include relationship to agency mission.

Mandated ^{*}ORS 418.745 has the purpose to facilitate the use of protective social services to prevent further abuse, safeguard and enhance the welfare of abused children, and preserve family life when consistent with the protection of the child by stabilizing the family and improving parental capacity.

CPS program impacts on all Oregon families who have a child allegedly subjected to any of the following: 1) physical abuse; 2) mental injury caused by cruelty; 3) sexual abuse; 4) sexual exploitation; 5) neglect or maltreatment; 6) threatening harm of substantial risk to the child's health or welfare. Multnomah County receives an average of 300 allegations per month and this is one of four units responding. The mission of the agency is to provide services to Oregon families to help them strengthen the quality of life for their children. The unique feature of protective services is that the service is most often provided to families who do not voluntarily seek assistance. It is goal oriented, time-limited and structured.

The worker must have a solid understanding of child growth and development, family dynamics, and the trauma of separation both for children and parents. Worker must acquire and utilize specific knowledge and skills relative to child abuse and severe neglect. Knowledge of, and ability to utilize intra-agency and general community resources is essential. Skills in family counseling, interviewing, communications, both oral and written, parent-child relationship work, foster care planning, placement and supervision, as well as treatment planning must be soundly acquired and constantly refined.

b. Describe the purpose of this position, and how it functions within this program.

The cases come into the unit following the initial screening which has been done by an Intake or Child Abuse Hotline worker. Cases are then assigned to PS workers by the supervisor or designee. The PS worker investigate allegations of abuse and then takes appropriate action, such as: staffing cases with supervisor, multi-disciplinary team or the PS consultants; removing the child/ren if necessary; working with the parents to provide a child safety plan, etc. This

- consultants; removing the child/ren if necessary; working with the parents to provide a child safety plan, etc. This position is family focused and the purpose is to protect the child through strengthening the family and assisting the parents to resolve the problems which underlie the child maltreatment. Efforts to preserve the family should be made prior to removal of a child at risk of immediate and substantial harm. In those situations where the child must be removed temporarily, our purpose will be to return the child home as soon as possible.

A Social Service Specialist in this unit will participate in Multnomah County's immediate response efforts for children at high risk of physical or sexual abuse. For immediate response cases, a PS worker will go out to see the child/family on the same day the report comes into the Child Abuse Hotline, often going out with Law Enforcement, health professionals or treatment professionals.

ADD / REVISE

SECTION 3. DESCRIPTION OF DUTIES

List major duties. Note percentage of time these duties are performed. If this is an existing position, check which duties are new.

% of (x)

DUTIES

- I. Responsible for initiating assessment of allegations to determine child's safety in emergencies and within 7 (seven) calendar days in non emergent situations.
 - a. Validate through face-to-face client and collateral contacts evidence of abuse and or neglect or both.
 - b. Conduct sex abuse interviews when indicated using appropriate methods geared to age of child.
 - c. Use risk assessment continuum to help focus and clarify problem to determine level of risk at completion of assessment.
 - d. Initiate appropriate medical or psychological evaluations to help determine validity of allegations.
 - e. Complete assessment within 30 days and/or 60 days with supervisory approval for extension.
 - f. On completing the risk assessment, also complete needs assessment in order to develop a service agreement with client input and signature whenever possible.
 - g. Initiate court action when necessary and represent Children's Services Division at Juvenile Court and other required hearings.
 - h. Provide ongoing protective services to clients in accordance with the service plan agreement.
- II. Responsible for collateral contacts within and outside the agency (within parameters of confidentiality laws).
 - a. Within the agency such as: Homemaker Services, Intensive Family Services, Parent Training, Sex Abuse Group Treatment, etc.
 - b. Outside the agency such as: Law Enforcement, Mental Health, Medical and Psychological Services, District Attorney, Judicial Representative and other professional service providers.
- III. Continue to provide services to clients when PS cases are in transit to other programs until a new caseworker is assigned. Services in other programs will be provided according to the policies and procedures for those programs involved.
- IV. General Expectations.
 - a. Provide transportation for clients when needed.
 - b. Attend and actively participate in Unit and Branch meetings, screenings, individual case and/or supervisory conferences, as well as attend other appropriate meetings.
 - c. Caseload management.
 1. Narrate and record cases in accordance with guidelines for the program involved in the case.
 2. Adhere to Juvenile Court format and timelines for court reports.
 3. Be responsible for miscellaneous reports which are to be forwarded to other professionals when authorized such as case summaries, guardianship and home studies, 147's, court reports, etc.
 4. Be responsible for payment authorization documents for child placements, requests for medical card and clothing voucher and other documents when appropriate.
 5. Help maintain state cars operable by promptly reporting repairs.
 6. Accept an occasional added assignment made by the supervisor when necessary and other duties may be assigned as needed.
 - d. Desk management.
 1. Maintain calendar of activities at desk for easy reference by supervisor and worker of the day when needed.
 2. Maintain and use monthly status report for keeping simple statistics on cases and due dates for various deadlines.
 3. Maintain sufficient case notes at desk on each case to allow supervisor or worker of the day to obtain information and conduct case management in your absence.
 4. Provide accurate and timely information to support staff to facilitate completion of branch reports.

- e. Caseload and time management; miscellaneous: The Social Service Specialist worker is responsible for case management and service provision to all cases assigned according to priority of case needs as determined by agency policy, sound professional judgement, and consultation with supervisor.

V. Training.

- a. Attend mandatory training when scheduled.
- b. Be responsible for self development by availing self of other relevant training offered.
- c. Read work related literature made available by the agency to enhance knowledge.
- d. Ensure specific knowledge base and information on interviewing young sex abuse victims.
- e. Ensure specific knowledge base and information on providing services to drug addicted babies.

✱

SECTION 4. ORGANIZATION CHARTNext Level
Class Title

Principal Executive G

Class Titles of those
directly supervised by
employee and the no. of
employees in each classBrief summary of
responsibilities of people
supervised.Supervisor's
Class Title

Principal Executive C

Employee's
Class TitleSocial Service
Specialist (1)Class Titles of
other jobs reporting
to the same
supervisor and
the number of
employees in
each classSocial Service
Specialist (10)Human Services
Assistant (2)**SECTION 5. WORKING CONDITIONS**

Describe special working conditions, if any, that are a regular part of this job. Include frequency of exposure to these condition.

Due to the demand of the position the 40 hour work week does require a flexible work schedule to meet the requirements of the position. Frequent communication with the Juvenile Court and other agencies. Desk in open work space subject to occasional high level of noise and interruptions. May be required during inclement weather to check on safety of child/ren. May be exposed to disease carrying children. May be exposed to foul smelling and filthy homes. Intermittently subjected to verbal abuse and assaultive threats made by angry and hostile clients. May at times have to work overtime, beyond prescribed work week. Critical decision making regarding child/ren safety. Follow through with emergencies and/or crisis situations as needed during supervisor or other staff absences.

SECTION 6. GUIDELINES

a. List any established guidelines to do this job, such as state or federal laws or regulations, policies, manuals, or desk procedures.

1. ORS 418.740 to 418.775, ORS 184.804, ORS 40.225, ORS 161.205, ORS 163, ORS 667.002, ORS 167, ORS 192.001 - 192.170, ORS 192.210 - 192.500
2. All administrative rules pertaining to Children's Services Division.
3. Protective Services Manual for procedures.
4. Juvenile Court Orders.



b. How are these guidelines used to perform the job?

These laws give Children's Services Division the legal framework and authority to intervene in a family to protect the child/ren's welfare, regardless of whether or not the family approves of or wants Children's Services Division involvement.

SECTION 7. WORK CONTACTS

With whom outside of co-workers in this work unit must this position regularly come in contact?

WHO CONTACTED**HOW****PURPOSE****HOW OFTEN**

Protective Service Clients
School Personnel
Medical Personnel
Court

Phone/Home/Office
Phone/In Person
Phone/In Person

Provide Protective Services
Collateral information
Involve legal system in
decision process

Daily
Daily

LEA

Community at large/Physicians P. a/Letters

To determine treatment needs

of clients.

CSD Personnel

Phone/In Person

Case consultation and treatment

SECTION 8. JOB-RELATED DECISION-MAKING *

Describe the kinds of decisions likely to be made by this position. Indicate effect of those decisions where possible.

1. Risk to child of further abuse.
2. Whether circumstances in the home warrant removing or allow leaving child in the home.
3. Decide whether an extended member of the family is an acceptable resource.
4. How quickly to respond to allegations.
5. What services to provide.
6. Whether parents are protecting children returned to their care.
7. When to terminate services.
8. Whether the allegation of child abuse/neglect is valid or not.

SECTION 9. REVIEW OF WORK

Who reviews the work of this position? (list classification title and position number.) How? How often? Purpose of the review?

Unit Supervisor or Principal Executive C

Circuit Court

Citizen Review Board

Multi-Disciplinary Team

Periodic Federal and State reviews/audits

SECTION 10. SUPERVISORY DUTIES

a. Which of the following supervisory/management activities does this job perform?

☐ Plans work ☐ Assigns Work ☐ Approves Work ☐ Responds to Grievances ☐ Disciplines/Rewards
☐ Recommends Hiring ☐ Hires ☐ Recommends Salary Adjustments ☐ Prepares and Signs Merit Rating

b. What percentage of time does this position perform these duties?

c. How many employees are directly supervised by this position? Through Subordinate Supervisors?

SECTION 11. ADDITIONAL JOB-RELATED INFORMATION

Any other comments that would add to an understanding of this position:

Training and/or experience in protective services including ability to assess family and community dynamics; to determine occurrence of abuse/neglect and extent of problem; ability to evaluate family treatment resources for appropriate disposition of case, ability to be confrontive in a negative atmosphere; ability to make judgement decision with limited information in a stressful situation; ability to communicate, interpret and synthesize information into a coherent written narrative; ability to verbally communicate with people of varying mental capacities that effect their ability to understand and process information; specialized ability to handle sensitive issues.

This position requires a broad understanding of community/public relations, and of working with a diversity of people and issues. It demands awareness of and sensitivity to problems and interests of persons with disabilities, and knowledge of and sensitivity to identity, cultural, and ethnic concerns in working with Black, Hispanic, Asian, and Native American Persons.

Date

Supervisor Signature

Date

Employee Signature

*** THIS POSITION FOR APPOINTING AUTHORITY ONLY ***

REQUIREMENTS: List any special recruiting requirements for this position: SPECIAL

AUTHORITY: If this position has authority to commit agency operating money, indicate in what area, how much (biennially) and type of funds: BUDGET

Signature Date Appointing Authority

BUDGET MODIFICATION NO. NOND 1(For Clerk's Use) Meeting Date SEP 22 1994Agenda No. R-211. REQUEST FOR PLACEMENT ON THE AGENDA FOR September 18, 199522 (Date)DEPARTMENT Auditor's Office

DIVISION _____

CONTACT Gary BlackmerTELEPHONE 248-3320

* NAME(S) OF PERSON MAKING PRESENTATION TO BOARD

Gary BlackmerSUGGESTEDAGENDA TITLE (to assist in preparing a description for the printed agenda)**Request for contingency money to conduct a review of the Sheriff's Office**

(Estimated Time Needed on the Agenda)

2. DESCRIPTION OF MODIFICATION (Explain the changes this Bud Mod makes. What budget does it increase? What do changes accomplish? Where does the money come from? What budget is reduced? Attach additional information if you need more space.)

☐ Personnel changes are shown in detail on the attached sheet

Board Resolution 94-113 directs the Auditor to contract for an independent operational analysis of the Multnomah County Sheriff's Office.

This BudMod requests \$75,500 for the Auditor's Office to cover the costs of consultants to perform this review.

3. REVENUE IMPACT (Explain revenues being changed and reason for the change)

none

BOARD OF
COUNTY COMMISSIONERS
1994 SEP - 8 PM 4:48
MULTNOMAH COUNTY
OREGON

4. CONTINGENCY STATUS (to be completed by Budget & Planning)

Fund Contingency before this modification (as of _____) \$ _____

Date

After this modification

Originated By

Date

Department Director

Date

Plan/Budget Analyst

Date

Employee Services

Date

Board Approval

Date

Deborah C. Boasted 9/22/94

NOND 1

BUDGET FY: _____

BUDGET FY:

5FBUDMOD2.WK3

Request for General Fund Contingency Transfer

1. Attachment to Bud Mod No. NOND 1 2. Amount requested from General Fund Contingency: \$75,500

3. Summary of request:

Board Resolution 94-113 directs the Auditor to contract for an independent operational analysis of the Multnomah County Sheriff's Office. These funds would be used to cover the costs of consultants to perform this review.

4. Has the expenditure for which this transfer is sought been included in any budget request during the past five years? **NO**

5. Why was this expenditure not included in the annual budget process?

The Board requested the review during the budget process and placed funds in contingency to cover the costs, with the intent that this transfer would occur.

6. What efforts have been made to identify funds from another source within the Department to cover this expenditure?

The staff resources of the Auditor's Office will supplement the efforts of the consultants but would not be sufficient to conduct the review.

Why are no other Departmental sources of funds available?

The County Auditor's annual budget does not contain sufficient funds to cover this magnitude of expenditure.

7. Describe any new revenue that this expenditure will produce, any cost savings that will result, and any anticipated payback to the contingency account.

The operational review is intended to identify any opportunities to reduce cost or improve operations in the Sheriff's Office. However, no estimates can be made at this time.

8. This request is for a (Quarterly _____, Emergency X) review

9. For emergency requests only: Describe in detail the costs or risks that would be incurred by waiting for the next quarterly review in justification of the emergency nature of this request.

The Board wishes the review to be completed in time for the results to be incorporated into the FY95-96 Budget process. However, delaying the transfer until the quarterly review would delay the review and prevent that possibility.

10. Attach any additional information or comments you feel helpful.


Signature of Department Head / Elected Official

9/8/94
Date



GARY BLACKMER
COUNTY AUDITOR
1021 SW 4TH AVENUE, ROOM 136
PORTLAND, OR 97204
(503) 248-3320

MULTNOMAH COUNTY OREGON

DATE: September 8, 1994

TO: Beverly Stein, Multnomah County Chair
Dan Saltzman, Commissioner, District 1
Gary Hansen, Commissioner, District 2
Tanya Collier, Commissioner, District 3
Sharron Kelley, Commissioner, District 4

FROM: Gary Blackmer, County Auditor

SUBJECT: Contingency fund transfer for operational review of Sheriff's Office

Recommendation/Action Requested

Transfer \$75,500 to the Auditor's Office to cover the cost of consultants to review the operations of the Multnomah County Sheriff's Office.

Background / Analysis

Resolution 94-113 states that the Board and Sheriff agree to an operational review of the Sheriff's conducted by consultants under the direction of the Auditor. During discussions the Board agreed to use contingency funds to pay for the review. The review will be performed by a team of experts selected by the Auditor and a hired project coordinator. The experts will study background information on the Sheriff's Office, conduct on-site reviews of Sheriff's operations, develop recommendations for improvement, and discuss those recommendations with managers in the Sheriff's Office. The report will be completed in late December or January.

Financial Impact

Reduction of Contingency by \$75,500. The report may recommend improvements which save money.

Legal Issues

not applicable

Controversial Issues

not applicable

Link to Current County Policies

In compliance with Resolution 94-113

Citizen Participation

not applicable

Other Government Participation

Managers from other criminal justice agencies may be contacted by consultants.

MEETING DATE: _____

AGENDA NO: _____

(Above Space for Board Clerk's Use ONLY)

AGENDA PLACEMENT FORM

SUBJECT: CONTINGENCY FUND TRANSFER FOR OPERATIONAL REVIEW OF MULTNOMAH COUNTY SHERIFF'S OFFICE

BOARD BRIEFING Date Requested: _____

Amount of Time Needed: _____

REGULAR MEETING: Date Requested: _____ 9-22-94

Amount of Time Needed: _____ 5-10 minutes, time certain not necessary

DEPARTMENT: _____ AUDITOR **DIVISION:** _____ NON-DEPARTMENTAL

CONTACT: _____ GARY BLACKMER **TELEPHONE #:** _____ 248-3320
BLDG/ROOM #: _____ 101/136

PERSON(S) MAKING PRESENTATION: _____ GARY BLACKMER

ACTION REQUESTED:

☐ INFORMATIONAL ONLY ☐ POLICY DIRECTION ☒ APPROVAL ☐ OTHER

SUMMARY (Statement of rationale for action requested, personnel and fiscal/budgetary impacts, if applicable):

TRANSFER \$75,000 TO THE AUDITOR'S OFFICE TO COVER THE COST OF CONSULTANTS TO REVIEW THE OPERATIONS OF THE MULTNOMAH COUNTY SHERIFF'S OFFICE.

BOARD OF
COUNTY COMMISSIONERS
1994 SEP - 8 PM 4: 48
MULTNOMAH COUNTY
OREGON

SIGNATURES REQUIRED:

ELECTED OFFICIAL: _____ 

OR

DEPARTMENT MANAGER: _____

ALL ACCOMPANYING DOCUMENTS MUST HAVE REQUIRED SIGNATURES

Any Questions: Call the Office of the Board Clerk 248-3277/248-5222

0516C/63

6/93

MEETING DATE: SEP 22 1994

AGENDA NO: R-23

(Above space for Board Clerk's Use Only)

AGENDA PLACEMENT FORM

SUBJECT: Revenue Contract Between Clackamas County and Community and Family Services Division, for Rent Assistance for Low Income/Homeless Households

BOARD BRIEFING Date Requested: _____

Amount of Time Needed: _____

REGULAR BRIEFING Date Requested: _____

Amount of Time Needed: 5 minutes

DEPARTMENT: _____ **DIVISION:** Community & Family Svcs

CONTACT: Lorenzo Poe/Rey España **TELEPHONE:** 248-3691

BLDG/ROOM: B161/2nd

PERSON(S) MAKING PRESENTATION: Lorenzo Poe/Rey España/Bill Thomas

ACTION REQUESTED:

☐ INFORMATIONAL ONLY ☐ POLICY DIRECTION ☒ APPROVAL ☐ OTHER

SUMMARY (Statement of rationale for action requested, personnel and fiscal/budgetary impacts, if applicable):

The Community and Family Services Division has received a revenue contract for \$9,340 from Clackamas County Department of Human Services. These funds pay for rent assistance to eligible Clackamas County households, through September 30, 1994.

In prior years, these funds were channeled through the emergency services clearinghouse. The clearinghouse functions were transferred from the community provider (American Red Cross) to the Division on July 1, 1994, at the request of the provider.

9/26/94 ORIGINALS TO CILLA MURRAY

SIGNATURES REQUIRED:

ELECTED OFFICIAL: _____

OR

DEPARTMENT MANAGER: Lorenzo Poe/RE

ALL ACCOMPANYING DOCUMENTS MUST HAVE REQUIRED SIGNATURES

Any Questions: Call the Office of the Board Clerk 248-3277/248-5222

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1994 SEP 13 PM 4:38
CLACKAMAS COUNTY
OREGON

CLACKAMAS COUNTY
COMMUNITY SERVICES



MULTNOMAH COUNTY OREGON

COMMUNITY AND FAMILY SERVICES DIVISION
ADMINISTRATIVE OFFICES
421 S.W. FIFTH AVENUE, 2ND FLOOR
PORTLAND, OREGON 97204
(503) 248-3691 / FAX (503) 248-3379
TDD (503) 248-3598

BOARD OF COUNTY COMMISSIONERS
BEVERLY STEIN • CHAIR OF THE BOARD
DAN SALTZMAN • DISTRICT 1 COMMISSIONER
GARY HANSEN • DISTRICT 2 COMMISSIONER
TANYA COLLIER • DISTRICT 3 COMMISSIONER
SHARRON KELLEY • DISTRICT 4 COMMISSIONER

TO: Board of County Commissioners
FROM: Lorenzo Poe, Director
Community and Family Services Division
DATE: September 9, 1994
SUBJECT: Revenue Contract from Clackamas County

SP/RC

I. Recommendation/Action Requested: The Community and Family Services Division recommends Board of County Commissioner approval of the revenue contract from Clackamas County, for the period July 1, 1994 through September 30, 1994.

This revenue contract is retroactive to the date set by the revenue source. It was received for processing on September 9, 1994.

II. Background/Analysis: The Community and Family Services Division has received a \$9,340 revenue contract from Clackamas County Department of Human Services, to pay for rent assistance for eligible households accessed through the emergency services clearinghouse. The contract, which allocates Clackamas County's FEMA allocation for emergency services, is for the last quarter of the federal fiscal year.

On July 1, 1994, the Multnomah County Community and Family Services Division transferred responsibility for administering the emergency services clearinghouse from a community provider (American Red Cross) to the Community Action Program, due to the provider's decision to terminate the operations. In prior years, both Clackamas and Washington County Community Action programs used the clearinghouse to administer their FEMA funds. With the transfer of operations to Multnomah County, these Counties have needed to come up with alternative service delivery mechanisms. Both Counties have transferred funds to Multnomah County to administer. Clackamas County has selected to transfer only its FFY 1993-94 allocation at this time.

III. Financial Impact: This contract increases County pass-through revenues by \$9,340.

IV. Legal Issues: none

V. Controversial Issues: none

VI. Link to Current County Policies: The contract reflects intergovernmental cooperation in emergency services provision.

VII. Citizen Participation: n/a

VIII. Other Government Participation: The contract is from Clackamas County.

clackrev.srs

MULTNOMAH COUNTY CONTRACT APPROVAL FORM

(See Administrative Procedures CON-1)

Contract # 103505

Amendment # _____

<p style="text-align: center;">CLASS I</p> <p><input type="checkbox"/> Professional Services under \$15,000</p>	<p style="text-align: center;">CLASS II</p> <p><input type="checkbox"/> Professional Services over \$15,000 (RFP, Exemption)</p> <p><input type="checkbox"/> PCRB Contract</p> <p><input type="checkbox"/> Maintenance Agreement</p> <p><input type="checkbox"/> Licensing Agreement</p> <p><input type="checkbox"/> Construction</p> <p><input type="checkbox"/> Grant</p> <p><input type="checkbox"/> Revenue</p>	<p style="text-align: center;">CLASS III</p> <p><input type="checkbox"/> Intergovernmental Agreement</p> <p><input checked="" type="checkbox"/> Intergovernmental Revenue Agreement</p> <p style="text-align: center;">APPROVED MULTNOMAH COUNTY BOARD OF COMMISSIONERS</p> <p>AGENDA # <u>R-23</u> DATE <u>9/22/94</u></p> <p style="text-align: center;"><u>DEB BOGSTAD</u> BOARD CLERK</p>
--	--	---

Department: _____ Division: Community & Family Services Date: September 9, 1994

Contract Originator: _____ Phone: _____ Bldg/Room: _____

Administrative Contact: Cilla Murray Phone: 248-3691-6296 Bldg/Room: 161/2nd

Description of Contract: Transfer of Clackamas County revenues to Multnomah County for rent assistance to eligible households living in Clackamas County, as accessed through the Emergency Services Clearinghouse operated by Multnomah County.

RFP/BID #: _____ Date of RFP/BID: _____ Exemption Expiration Date: _____

ORS/AR # _____ Contractor is ☐ MBE ☐ WBE ☐ QRF

<p>Contractor Name: <u>Clackamas County</u></p> <p>Mailing Address: <u>18600 S.E. McLoughlin Blvd</u> <u>Milwaukee, OR 97267-6723</u></p> <p>Phone: <u>(503)655-8640</u></p> <p>Employer ID# or SS#: _____</p> <p>Effective Date: <u>July 1, 1994</u></p> <p>Termination Date: <u>September 30, 1994</u></p> <p>Original Contract Amount: \$ _____</p> <p>Total Amt of Previous Amendments: \$ _____</p> <p>Amount of Amendment: \$ _____</p> <p>Total Amount of Agreement: \$ <u>9,340</u></p>	<p>Remittance Address (if different) _____</p> <p>Payment Schedule Terms</p> <p><input type="checkbox"/> Lump Sum \$ _____ <input type="checkbox"/> Due on Receipt</p> <p><input type="checkbox"/> Monthly \$ _____ <input type="checkbox"/> Net 30</p> <p><input checked="" type="checkbox"/> Other \$ <u>Per Invoice</u> <input type="checkbox"/> Other</p> <p><input type="checkbox"/> Requirements contract - Requisition Required</p> <p>Purchase Order No. _____</p> <p><input type="checkbox"/> Requirements Not to Exceed \$ _____</p> <p>Encumber: Yes <input type="checkbox"/> No <input type="checkbox"/></p>
---	--

REQUIRED SIGNATURES: Solange Poe /RE Date: 9/13/94

Purchasing Director: _____ Date: _____

County Counsel: [Signature] Date: 9/13/94

County Chair/Sheriff: [Signature] Date: September 22, 1994

Contract Administration: _____ Date: _____

VENDOR CODE				VENDOR NAME				TOTAL AMOUNT: \$			
LINE NO.	FUND	AGENCY	ORGANIZATION	SUB ORG	ACTIVITY	OBJECT/REV SRC	SUB OBJ	REPT CATEG	LGFS DESCIP	AMOUNT	INC DEC IND
01	156	010	1260			2075			FEMA	\$9,340	

If additional space is needed, attach separate page. Write contract # on top of page.

DISTRIBUTION: Contracts Administration, Initiator, Finance

clackrev.caf

INTERGOVERNMENTAL AGREEMENT
BETWEEN
CLACKAMAS COUNTY, OREGON
AND
MULTNOMAH COUNTY, OREGON

I. Purpose

This agreement is entered into between Clackamas County (COUNTY) and Multnomah County for the cooperation of units of local government under the authority of ORS 190.010.

This agreement provides the basis for a cooperative working relationship for the purpose of providing rental assistance to eligible applicants who meet the criteria of service as attached to this agreement as Exhibit 1, and to ensure non-duplication of service by the operation of a clearinghouse as mandated by the FEMA Program.

II. Scope of Work and Cooperation

A. Multnomah County agrees to:

1. Manage all operations of the identified clearinghouse, such as to ensure the non-duplication of services to eligible households.
2. Track by name, referring agency, and dollar amount paid all client services provided.
3. Ensure the timely payment of approved rental amounts to identified landlords.
4. Issue periodic reports outlining activities conducted as referred above.

B. The COUNTY agrees to:

1. Participate in the established clearinghouse forum during the period covered by this agreement.
2. Act as the coordinating agent in Clackamas County to ensure the proper use of forms and intake procedures.

III. Compensation

The COUNTY agrees to pay Multnomah County an amount not to exceed \$9,340 for the services outlined in Section II.A.

INTERGOVERNMENTAL AGREEMENT

Page 2

All requests for payment are subject to the approval of the COUNTY and will be submitted to:

Paul Coon
Clackamas County Social Services
PO Box 68369
Oak Grove, Oregon 97268

IV. Liaison Responsibility

John Pearson will act as liaison from Multnomah County for this project. Paul Coon will act as liaison from the COUNTY.

V. Special Requirements

- A. The COUNTY and Multnomah County agree to comply with all applicable local, state, and federal ordinances, statutes, laws and regulations.
- B. Multnomah County agrees to protect and save the COUNTY, its elected and appointed officials, agents, and employees while acting within the scope of their duties as such, harmless from and against all claims, demands, and causes of action of any kind or character, including the cost of defense thereof, arising in favor of Multnomah County's employees or third parties on account of personal injuries, death or damage to property arising out of services performed or omissions of services or in any way resulting from the acts or omissions of Multnomah County and/or its agents, employees, subcontractors, or representatives under this agreement.
- C. Record and Fiscal Control System. All payroll and financial records pertaining in whole or in part to this agreement shall be clearly identified and readily accessible. Such records and documents should be retained for a period of three (3) years after receipt of final payment under this agreement; provided that any records and documents that are the subject of audit findings shall be retained for a longer time until such audit findings are resolved.
- D. Access to Records. The COUNTY, the State of Oregon and the Federal Government, and their duly authorized representatives shall have access to the books, documents, papers, and records of Multnomah County which are directly pertinent to the agreement for the purpose of making audit, examination, excerpts, and transcripts.

INTERGOVERNMENTAL AGREEMENT

Page 3

E. This agreement is expressly subject to the debt limitation of Oregon Counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefor. Any provisions herein which would conflict with law are deemed inoperative to that extent.

VI. Amendment

This agreement may be amended at any time with the concurrence of both parties. Amendments become a part of this agreement only after the written amendment has been signed by both parties.

VII. Term of Agreement

This agreement becomes effective July 1, 1994 and is scheduled to terminate September 30, 1994.

This agreement is subject to termination by either of the parties when thirty (30) days' written notice has been provided.

Upon termination of this agreement, any unexpended balances of agreement funds shall remain with the COUNTY.

GOVERNMENTAL UNIT

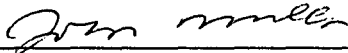


Beverly Stein
Multnomah County Chair

September 22, 1994

Date

Approved as to Content:



Division Director

9-7-94

Date

APPROVED MULTNOMAH COUNTY
BOARD OF COMMISSIONERS
AGENDA # R-23 DATE 9/22/94
DEB BOGSTAD
BOARD CLERK

CLACKAMAS COUNTY

Chair: Ed Lindquist

Commissioner: Judie Hammerstad

Commissioner: Darlene Hooley

Signing on Behalf of the Board:

Jono Hildner, Director
Department of Human Services

Date

REVIEWED:

LAURENCE KRESSEL, County Counsel for
Multnomah County, Oregon

By 
Laurence Kressel

9/13/94

ATTACHMENT A

FEMA 12-RENT ASSISTANCE
CLACKAMAS COUNTY RENT ASSISTANCE ELIGIBILITY GUIDELINES

FEMA funds can be used "once only limited emergency rent assistance to avoid eviction when no other resources or assistance exists."

CATEGORIES THAT CAN APPLY

- *Families with children (children 18 years of age and under).
- *Vulnerable adults, 45 years of age and over.
- *Disabled, both permanent and temporary.
- *Young, parenting, or pregnant teens as referred by the Youth Services Consortium of helping agencies as attached.

GUIDELINES

1. Legal 72-hour eviction notice.
2. Adult & Family Services emergency grant is a prior resource. (Applies only to families with children.)
3. Must have lived in the home for a minimum of 30 days.
4. 125% of poverty (net after taxes) and in financial crisis.

1=	\$767
2=	\$1,025
3=	\$1,283
4=	\$1,542
5=	\$1,800
6=	\$2,058
7=	\$2,317
8=	\$2,575

GUIDELINES FOR SERVING THE DISABLED

Single adults and childless couples who are not 45 years of age and over may be eligible if there is documented disability (written or telephone) and if they are in an emergency situation.

Appropriate verification of disability includes:

- Supplemental Security Income (SSI)
- Social Security Disability (SSD)
- Workman's Compensation
- General Assistance

Also eligible are individuals who have experienced the following medical situations that can be verified.

- A recent hospitalization;
- Verifiable pregnancy and in an emergency situation;
- A verified illness (statement or telephone call from doctor or employer);
- Individuals in alcohol or drug treatment programs;
- Individuals in emergency situations that are developmentally disabled (MRDD) and the chronic mentally ill (CMI) referrals.

SERVING HOMELESS FAMILIES AND INDIVIDUALS

Homeless families and individuals can be considered for the rent assistance program to pay the first month's rent under the following provisions:

- They meet the eligibility criteria of the Emergency Rent Assistance Program with the exception of the 72-hour eviction notice.
- There is a verifiable expectation that the individual will be able to assume full responsibility for paying their rent at the end of 30 days.
- In lieu of an eviction notice, the new landlord will be asked to complete a statement that the tenant is a first-time renter and the amount of the agreed upon rent.

OTHER ELIGIBILITY REQUIREMENTS

Rent assistance can be considered for the client to move to a new dwelling only if the current landlord refuses to accept rent owed to prevent eviction. Move-in costs, deposits, or past due rent cannot be considered. Late fees can be paid.

We will be able to pay one month's rent, or \$500, whichever is least. Rent payment is approved for 30 days from the date of the first contact with the landlord.

Clients living in subsidized housing are considered low priority. They may be served if the intake agency determines that there is an exceptional circumstance creating the financial emergency.

EMERGENCY DEFINED

Must be an emergency that is an urgent need due to circumstance beyond control of the client as opposed to a chronic financial problem.

- A decision to use income for purpose other than rent is not considered an emergency unless payment was related to an emergency (medicine, burial, etc.).
- If cash was stolen, clients are asked to make a police report. The name of the reporting officer should be included in the case record.
- If a large amount of money was used to pay a utility bill to prevent shut-off, leaving insufficient funds for rent, client should bring verification of utility payment or verify with the utility company payment was made.
- Car repair payments must have been necessary for work, job interview, medical appointments, etc., in order to constitute an emergency.
- Furniture payment is not considered an emergency.

BUDGET MODIFICATION NO.

DES #2

(For Clerk's Use) Meeting Date SEP 22 1994
Agenda No. R-24

1. REQUEST FOR PLACEMENT ON THE AGENDA FOR

(Date)

DEPARTMENT DES

DIVISION Assessment & Taxation - Tax Title

CONTACT Betsy Williams/Janice Druian

TELEPHONE 248-5012 / 248-3090

* NAME(S) OF PERSON MAKING PRESENTATION TO BOARD

Betsy Williams / Janice Druian

SUGGESTED

AGENDA TITLE (to assist in preparing a description for the printed agenda)

Reclassification of an Office Assistant II position in the Tax Title Unit of Assessment & Taxation to a Foreclosed Property Coordinator.

Estimated time needed on the agenda: 5-10 minutes

(Estimated Time Needed on the Agenda)

2. DESCRIPTION OF MODIFICATION

(Explain the changes this Bud Mod makes. What budget does it increase? What do changes

accomplish? Where does the money come from? What budget is reduced? Attach additional information if you need more space.)

☒ X

Personnel changes are shown in detail on the attached sheet

This Budget Modification reclassifies an Office Assistant II position in the Tax Title Unit of Assessment & Taxation Division to a Foreclosed Property Coordinator. The current Office Assistant II position has not been filled. The reclassified position will provide high level administrative/management support and staff assistance to the Tax Title Unit of Assessment & Taxation. This reclassification will have no budget impact -- it will be done within the Tax Title FY 1994-95 personal services budget. This can be accomplished through salaries savings since the new position is not expected to be filled before November 1, 1994.

3. REVENUE IMPACT

(Explain revenues being changed and reason for the change)

Reduces revenue to the Insurance Fund

CLERK OF
COUNTY COMMISSIONERS
1994 SEP 15 PM 1:22
MULTNOMAH COUNTY
OREGON

4. CONTINGENCY STATUS

(to be completed by Budget & Planning)

Fund Contingency before this modification (as of

Date

After this modification

\$

Originated By

Date

Department Director

Date

Plan/Budget Analyst

Date

Employee Services

Date

Board Approval

Date

PERSONNEL DETAIL FOR BUDGET MODIFICATION NO.

DES #2

5. ANNUALIZED PERSONNEL CHANGES

(Compute on a full-year basis even though this action affects only a part of the fiscal year (FY).)

FTE Increase (Decrease)	POSITION TITLE	BASE PAY Increase (Decrease)	ANNUALIZED Increase/(Decrease)		TOTAL Increase (Decrease)
			Fringe	Ins.	
(1.00)	Office Assistant II	(20,032)	(5,182)	(4,715)	(29,929)
1.00	Foreclosed Property Coordinator	31779	8218	3654	43651
0	TOTAL CHANGE (ANNUALIZED)	11747	3036	(1,061)	13722

6. CURRENT YEAR PERSONNEL DOLLAR CHANGES

(Calculate costs/savings that will take place in this FY; these should explain the actual dollar amounts being changed by this BudMod.)

Permanent Positions, Temporary, Overtime, or Premium	Explanation of Change	BASE PAY Increase (Decrease)	CURRENT FY Increase/(Decrease)		TOTAL Increase (Decrease)
			Fringe	Ins.	
(1.00)FTE	Office Assistant II	(20,032)	(5,182)	(4,715)	(29,929)
.67 FTE	Foreclosed Property Coordinator	21186	5478	2436	29100
TOTAL CURRENT FISCAL YEAR CHANGES		1154	296	(2,279)	(829)

REQUEST TO CREATE/RECLASSIFY A POSITION

1. List the proposed duties of the position (please do not copy from the class specification):

a.

SEE ATTACHED
NEW CLASSIFICATION

b.

c.

d.

e.

Use the reverse side or attached additional sheets, if needed.

2. State the proposed classification title:

FORECLOSED PROPERTY COORDINATOR

3. Is this a new position? ☒ Yes ☐ No

4. If this is an existing position, state the name of the incumbent:

N/A

5. Proposed effective date of change: 9/1/94

Hiring Manager: K. A. Juneberg

Date: 8/17/94

Department/Division:

Betsy Williams
8/17/94 M. C. G. S. J.

EMPLOYEE SERVICES DIVISION USE ONLY:

Action: ☐ Approved as submitted.

☐ Approved for classification title.

☐ Denied (for Reclassification Requests only).

Analyst Name:

Date:

FORECLOSED PROPERTY COORDINATOR
(Exempt/Classified)

DEFINITION

To coordinate administration of the County's tax foreclosure property program, including administering contract sales, under established policy and qualification guidelines; to administer a complex property distribution system that includes a repurchase program, distribution of property to governments and qualified nonprofit organizations, and public auctions; and to participate on inter- and intera-county policy development teams.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Tax Collection Manager.

Exercises functional and technical supervision over assigned permanent and clerical temporary staff.

EXAMPLES OF DUTIES - Duties may include, but are not limited to, the following:

Perform a variety of complex professional administrative and technical support functions relating to the management of foreclosed properties.

Serve as liaison in Tax Title matters on various committees involving other local governments, nonprofit agencies, citizens, and other county agencies.

Resolve title problems and other legal situations involving tax foreclosed properties.

Administer property inventory control and coordinate the timely disposition of foreclosed properties including requests from other government or housing sponsors for the transfer of property, and organizing/conducting property auction sales.

Prepare financial reports including revenue and expenditure projections, fiscal analysis of Tax Title Fund.

Analyze and research data including pertinent statutes, administrative rules, County ordinances and resolutions; prepare reports and proposals; attend Board Commission meetings and make presentations or answer questions relative to the Tax Title program.

Review and summarize account activity, make recommendations, prepare correspondence.

Assist with difficult collection and client situations which may require coordination with social service agencies, cancellation of contracts, and eviction from property.

FORECLOSED PROPERTY COORDINATOR

Page 2

EXAMPLES OF DUTIES (Continued)

Develop and review procedures for compliance with policies, ordinances, and statutes.

Recommend goals and objectives; assist in the development of policies and procedures involving foreclosed property activities.

Conduct periodic field inspection of foreclosed property.

May assign and review work of clerical staff and contribute input to performance evaluations.

Perform related duties as assigned.

QUALIFICATIONS

Knowledge of:

Principles, practices, and procedures involved in general real estate ownership and relative transactions including foreclosure processes.

Applicable federal, state, and local statutes and administrative rules relating to foreclosed property.

Basic accounting and financial record keeping and reporting.

Basic data processing; use of personal computer(s).

Principles of supervision and training.

Principles of project management.

Ability to:

Organize and implement a comprehensive property foreclosure program.

Establish and maintain cooperative, tactful, working relationships with diverse groups including the public.

Communicate clearly and effectively, both orally and in writing.

Analyze, research, and compile data and make recommendations.

Interpret statutes and apply them in making determination on foreclosed properties.

Maintain clear and concise records.

FORECLOSED PROPERTY COORDINATOR

Page 3

QUALIFICATIONS (Continued)

Ability to: (Continued)

Understand personal computer software applications.

Organize and communicate testimony with Elected and Nonprofit Officials.

Manage projects, including establishing goals, analyzing problems, establishing work plans, and establishing controls.

Experience and Training Guidelines:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three years of increasingly responsible experience involving real estate transactions including foreclosure processes. Governmental and accounting experience is desired.

AND

Training:

Equivalent to a Bachelor's degree from an accredited college with major course work in real estate, legal research, public or business administration, or a related field.

License:

Possession of, or the ability to obtain, an appropriate and valid Oregon driver's license.

JOB DESCRIPTION

FORECLOSED PROPERTY COORDINATOR

WORK UNIT: Tax Collection Section
REPORTS TO: Tax Collection Manager

DESCRIPTION OF JOB:

This position performs a variety of advanced/complex professional administrative and technical support functions relating to the management of foreclosed properties.

GENERAL DUTIES:

Serves as liaison in Tax Title matters on various committees involving other local governments, non-profit agencies, citizens and other county agencies.

Resolve title problems and other legal situations involving tax foreclosed properties.

Manage property inventory control and coordinate the timely disposition of foreclosed properties including requests from other government or housing sponsors for the transfer of property

Prepare financial reports including revenue and expenditure projections, fiscal analysis of Tax Title Fund

Coordinate and complete program related projects

Analyze and research data including pertinent statutes, administrative rules, County ordinances and resolutions; prepare reports and proposals; attend weekly BCC meetings and make presentations or answer questions relative to the Tax Title program

Review and summarize account activity, make recommendations, prepare correspondence

Assist with difficult collection and client situations which may require coordination with social service agencies or eviction from property

Review procedures for compliance with policies, ordinances and statutes

GENERAL DUTIES (Cont.)

May assign and review work of clerical staff and contribute input to performance evaluations

KNOWLEDGE OF:

Administrative and project management principles

Computers and database software

Basic accounting and financial record keeping/reporting

Applicable federal, state and local laws, codes and regulations

ABILITY TO:

Establish and maintain cooperative working relationships with diverse groups

Communicate clearly and effectively, both orally and in writing

Analyze/compile data and develop recommendations

PLEASE PRINT LEGIBLY!

MEETING DATE

09/22/94

NAME

PAVEL GOBERMAN

ADDRESS

620 SE. 174th Ave, #8

STREET

Portland, OR 97233

CITY

ZIP CODE

I WISH TO SPEAK ON AGENDA ITEM #

Health & Fitness

SUPPORT

OPPOSE

SUBMIT TO BOARD CLERK

PAVEL GOBERMAN

GET ENERGIZED!™

620 S.E. 174th Ave., #8,
Portland, OR 97233
(503) 252-3362

Dear Smart Managers:

Multnomah County,

09/22/94

What is more important than being healthy?

I have developed and opened the best, innovative, scientific, Russian/American *method of physical and mental fitness*, GET ENERGIZED!™, relaxation, self-massage, and exercise system (not aerobics, not Jazzercise). This workshop of fitness will relieve tension, headaches, and back pain. This method of fitness will also prevent disease, aging and Ergonomic diseases.

It is a ticket to good health and positive self image!

Very often, people have no time to exercise, don't like to exercise alone, and most of us aren't very disciplined exercisers. My goal is to help people be healthy, prevent work-related stress and help you save money spent on employee time-loss due to illness. This is also an accident and stress prevention program.

Since it is not convenient for many employees to drive to the exercise studio before, during or after their work day, I am offering to lead exercise classes for groups of employees -- any age, any shape -- at your worksite. I will also provide the exercise supplies for your groups.

My method of enjoyable exercise would take **5** minutes each day, as there is no need for a change of clothing. This program will pay large dividends to both you and your employees. Their mental and physical well-being will improve, they will boost their performance, and your savings on work-loss time for illness will diminish. You will see these results in a very short time. The benefit of this program is worth many thousands of dollars. The costs for this program are:

Organizations:	One 5 minute workout a day Every Day (M-F)	\$300/month
Individuals:	One 5 minute workout a day Every Day (M-F) Group of 15 or more	\$20/month

FIRST VISIT IS FREE - NO OBLIGATION!

My goal is to help people be healthy and help organizations make money. I look forward to hearing from you and developing a positive working relationship between your company and my program.

USE FITNESS FIRST; DOCTORS SECOND!
USE FITNESS NOW OR NURSING HOMES LATER!
PREVENTION, NOT CURE, IS THE KEY!

MY FITNESS PROGRAM IS THE BEST MEDICINE! IT IS NOT BORING; IT IS FUN!

Best Wishes,
GET ENERGIZED!™



Pavel Goberman
Founder/Instructor

What Is More Important Than Being Healthy?

Prevention, Not Cure Is The Key!

Use Fitness First and Doctors Second!

It Is Your Ticket To Good Health and Stop Aging!



Get Energized!™

**Unique Method of Physical
and Mental Fitness.**

(Relaxation, Self-Massage and Exercise.)

10 min. workout for indiv./5 min. for organiz. M-F

Pavel Goberman - Founder/Instructor

(503) 252-3362

Video Tape available



EXERCISES (Motivations for Exercises):

Prevent:

- 1) Accident; Injury;
- 2) Stress; Depression; Tension; Headache;
- 3) Illnesses; Diseases;
- 4) Overweight;
- 5) Hair loss; Wrinkles;
- 6) Ergonomic Diseases;
- 7) Back Pain;
- 8) Diabetes;
- 9) Aging; Slow down aging process. Old age is a disease;
- 10) Develop serious mental/health problem;

Reduce:

- 1) High Blood Pressure;
- 2) Back Problems;
- 3) Cholesterol;
- 4) Medical Bills;
- 5) Payments for Health Insurance; Reduce sick days;
- 6) Claims for Workers Compensation Insurance and Payments;
- 7) Wrinkles; Stress; Anxiety; Depression; Tension; Headache;
- 8) Requirements for insulin - fight Diabetes;

Increase:

- 1) Muscle Strength;
- 2) Flexibility;
- 3) Blood circulation; Energy and Sex energy;
- 4) Oxygen Consumption;
- 5) Physical and mental activity; Increase productivity;

Cut risks of:

- 1) Cancer;
- 2) Stroke; Heart attack;
- 3) Diabetes; 4) Headache; 5) AIDS;

Help in:

- 1) To be healthy; Helps you make money; Boost employee moral; Save money on pills and doctors;
- 2) Marriage; Better Romance;
- 3) Rejuvenate your body;
- 4) Build up customers; Build up business;
- 5) Get a good nights sleep;
- 6) Lose weight; 7) Proper posture; 8) Digestion;

Make:

- 1) Men - strong;
- 2) Women - elegant;
- 3) Body healthy, flexible.

Exercise is the best medicine! Prevention, Not Cure is the Key!

The body is designed for action, but don't over do.

Use Fitness Now or Will Use Pills, Doctors and Nursing Homes Later!

Prepared by Pavel Goberman GET ENERGIZED!™

The future TV Fitness Star

(503) 252-3362

PORTLAND, OR 97233

What Is More Important Than Being Healthy?

Health Problems? Back Problems? Headaches?
Problems in Sexual Life? Stress? Lonely?
Overweight? Wrinkles? Use Creams? Getting Older?
Spend Money on Creams, Pills, and Doctors?

Get Energized!™ can help you!

-relieves tension, stress, headaches, back pain; reduce
blood pressure; prevents diseases, aging, stroke,
cancer.



- Prevention, not cure is the key!
- Use Fitness First and Doctors Second
- Use Fitness Now or Will Use Doctors and Nursing Homes later!
- Rest Your Body and You Will Rust It!

"If a person in his/her young or middle age does not participate in physical activity, it is a 99% guarantee that he/she will later use pills, doctors, and nursing homes. I'm 57, excellent health, and use my fitness program because I'm thinking about 30 years ahead and do not want to be a 'walking, full of illnesses, piece of meat.' Take care!"

Pavel Goberman

It Is Your Ticket To Good Health

And Stop Aging!

Get Energized!™

unique method of physical and mental fitness (relaxation,
self-massage and exercise classes).

10 min. workouts, M - F

\$ **20.00** per month

No sweat, no need to change clothing.

Video tape available - 10 min.

Pavel Goberman

Founder/Instructor

(503) 252-3362

Also Available:

Personal Training and Organization Visit (5 min workout)

Fitness Should Be Fun, Says Russian Innovator

by Harry Welsberger
(602) 482-0505

Pavel Gberman is a compact bundle of constantly moving energy, a man with a 25-year-old body, 35-year-old face and 45-year-old hair.

Actually, the physical fitness teacher is 57. In an accent reminiscent of Russian comic Yakov Smirnoff, he claims his muscular but not bulky and obviously fit physique is the best endorsement that his way to total wellness really works.

His unusual approach defies the popular "No pain, no gain" philosophy. Its goals are: Fun, Easy, Quick. "When you finish you will feel energized and refreshed, not tired and sore," he promises.

Not of the "Do it until it hurts" school, he instead offers short "energy breaks," insisting, "After all, the idea is not to punish yourself but to feel good" by relaxing and relieving the stress of the day.

Although Gberman's total wellness-based program enhances muscle tone and promotes optimum body weight, big muscles and weight loss are not what it's about. His blend of relaxation, self-massage and exercise is tailored to the individual, man or woman, young or old. Gberman holds the Old World view that "man should be muscular and the woman should be elegant."

The native of the Soviet Ukraine came to the U.S. in 1980 from Vienna after leaving the USSR for the most basic reason: "Freedom." He was raised in a Moscow orphanage after his parents died in World War II.

Gberman came to Phoenix this year from Sacramento, Calif., attracted by the dry desert air which he says invigorates and promotes fitness of the whole person.

A life-long quest for physical fitness led Gberman to take from the Red Army's intensive physical training regimen, Russian "sport massage," extensive reading and study in both Russian and English and physical therapy classes in the U.S., to develop his program.

He stresses: "Movement Is Life. Not jarring, stressful movement but smooth movement that feels good to the body." Staying healthy, he says, "is more than just building muscle, not just working on one part of the body. It is more than exercise...but also breathing, relaxation, the posture. I say, no success without good health."

As for diet, "I don't tell people what to eat. I don't have to tell you. I myself eat meat. Again, it isn't only one thing; just diet or exercise. It is the total approach. With this, people don't need the doctors. Therefore I teach people to stay well so they don't have to pay to get well."

He shows that there's no need for elaborate, expensive weight machines or the costly gadgets peddled on TV to exploit Americans' obsession with fitness. Gberman demonstrates the many ways plain rubber straps can safely provide all the benefits of muscle resistance exercise. They can be used anywhere, while watching TV, in the bedroom or office for a minute or two to gently firm and invigorate.

Gberman's simple, inexpensive exercise aids also include a jump rope for aerobic stimulation (gentle or vigorous) and benefits to the internal organs. *Your desire* is all that's needed for prone stretching techniques.

Gentle, exertion levels, unlike many aerobics and Jazzercise classes, require no special clothing because one needn't work up a sweat to enjoy an energizing workout. This, and the short time required, are especially attractive to busy people on tight schedules.

He plans classes for people to learn how to apply his program toward enhancing success in all areas of life through optimum physical well-being. He says the small class setting (10 to 15) is often best since "It is easier to be in group than do it alone. The social aspect is very nice."

Gberman offers 10 to 15 minute sessions that people can fit in on the way to or from work, for morning energy or to refresh and relax them after work. He is currently looking for a convenient, accessible site without the elaborate facilities of a commercial health club. Daily Monday through Friday classes are \$20 per month with no initiation fee or contract obligation.

He also hopes that as his "no sweat" approach to total fitness becomes more widely known, to introduce "energy breaks" to companies whose employees may wish a healthful alternative to caffeine and nicotine-based coffee breaks. Industry has long known that physically fit workers are more productive, happier and satisfied, and take fewer paid sick days.

Gberman is convinced that his program negates all the reasons people use for not getting and keeping fit: "I don't have the time," "I don't like getting sweaty," "It's too hard," "I can't afford it."

To learn more about his "fun, easy, quick" way to total fitness, call him at (503) 252-3362 or contact Connections, 482-0505 (602)

Immigrant fitness impresario doesn't take 'nyet' for answer

What do you get when you combine Russian comic Yakov Smirnoff, exercise guru Jack LaLanne and American funnyman Rodney Dangerfield?

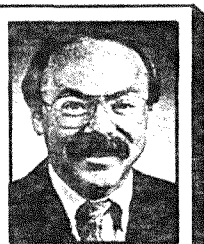
You get Pavel Goberman, a naturalized American physical fitness instructor from Ukraine who gets no respect in America.

Goberman has lived in Tacoma for a little less than two months, but he is no newcomer to the United States. Since arriving in 1980, Goberman has hung his hat in New York; St. Paul, Minn.; Boston; Ketchikan, Alaska, several locations in Oregon and California; Denver; Phoenix; Reno; Seattle and now Tacoma.

He keeps searching for the spot that will give him the opportunity to put his own fitness program to use for the betterment of people. So far, like an unknown vaudeville performer searching for that big break, he has collected more baggage stickers than good reviews, let alone success stories, but his enthusiasm never wanes.

"I don't want to do it for the money," he says with his thick accent that is a dead ringer for Smirnoff, minus the laugh. "I want to do it because I can do good for people."

Goberman is seeking companies that will let him



**Art
Popham**

Business
columnist

run daily eight-minute exercise programs for interested employees. He'll start by doing it for free until the company decides to commit. If he stays, the company will pay him \$300 per month total or the employees pay \$20 each.

"I call it 'Get Energized.' It will save money for employers," Goberman says. "Employees are healthier and more productive. There is less sick time and lower medical bills."

However, Goberman has a problem getting past receptionists to present his idea to management. That's where the lack of respect blocks him. He has had only one opportunity to offer his program in a work setting at Motorola in Phoenix, and that lasted only two days. Again, management wasn't involved in the final decision. Goberman never got that far, but at least it was further than usual.

"The receptionists are just performing their jobs," he philosophizes. "I don't blame them. I blame the managers. I would help them make money. If people like, I stay. If not, I'll go out."

Another problem seems to be Goberman's choice of prospective clients and the individuals he is approaching that reflect his naivete of U.S. business practices. He still seems to look to the state for his livelihood, as he had to do in his days in the former U.S.S.R.

For instance, he tried to sell the State of Washington his exercise program by directly contacting Gov. Booth Gardner. His polite rejection letter came from an assistant secretary. He tried to reach Pierce County Executive Joe Stortini — after

Stortini suffered a heart attack.

Goberman's list of business prospects includes The Frank Russell Co., the Sheraton Tacoma Hotel, MultiCare Medical and The Morning News Tribune. It's difficult to imagine our newsroom staff pausing during its hectic day to exercise en masse, even if it would raise productivity.

And maybe that's an even more basic problem. We Americans might know exactly what's best for us, but we seldom make it enough of a priority to do it. Besides, this is the land of the free where everyone chooses for himself, not some totalitarian system where all the workers exercise together, like, oh, say ... Japan?

Goberman's plan has merit, if he just can get some small business to say yes, achieve results and build on that foundation. Goberman is his own best advertisement — a happy, warm, youthful man with a robust upper body that reflects a lifetime of using his own program.

It's not as if he cannot withstand adversity until the right opportunity comes. This man has endured plenty of hardships. He grew up in a Moscow orphanage after his parents died in World War II. In adulthood, he ran afoul of the Soviet government and tried for three years to get a visa before finally being allowed to go to Vienna in 1979.

A year later, a cousin sponsored him to come to America. Knowing no English, he learned the language through a Comprehensive Employment and Training Act program. He has attended college and vocational schools throughout the United States to

gain training as a hydraulic and diesel mechanic, electronics technician, machinist and beekeeper. Having worked in all those fields, he has applied for a field supervisor job with the Department of Agriculture and has high hopes.

High hopes are one of Goberman's strong suits.

"I'm 54½, and I'm thinking what I'll be doing in 30 years. Look at Jack LaLanne. He's 77, and he's an example for the whole nation. When I'm 84½, I'll be in good health, flexible and full of energy.

"I want to have a 10-minute morning exercise show on TV. I've already shot an exercise video. I need to find the proper place at the proper time."

If I might be so bold as to dispense some free advice, Goberman ought to dump the idea of selling an in-business exercise program, working for the state or tending bees and focus on becoming a likable, barrel-chested Richard Simmons with a less-offensive, yet equally distinctive voice.

Stranger things have happened. This man has a genuine charismatic presence. If being of simple good cheer and an optimistic outlook carries enough weight, Pavel Goberman could become a TV exercise star. At least then, he'll get enough respect to get past those receptionists.

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(Art Popham has covered the South Sound for 15 years on radio and TV. His column appears Tuesdays, Thursdays and Saturdays. Call Art at 952-2522. Or write to him at 6716 Eastside Drive N.E., No. 24, Tacoma 98422.)

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PAVEL GOBERMAN is 57. He started to develop his program in the Russian's Red Army and finished it in the U.S.A.

"There is no one better than I am who can help people be healthy, feel good, young, prevent disease, aging, and save their money. No success without good health. Dreaming about good health will not help you. Self-discipline, participation, activity, movement will do. When people are young, or in the middle age, many of them don't think about wrinkles, nursing homes in the future. Do it, participate in fitness now. **Prevention, not cure, is the key. Use fitness first and doctors second.** We need exercise as food, as air. Walking is good, but is not enough. Sometimes at morning we feel soreness in the body, no spirit to stand up. This workout will help you. If I don't do my workout, I feel and think about myself as a 'walking piece of meat.' Take care."
 —Pavel Goberman

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