BEFORE THE BOARD OF COUNTY COMMISSIONERS

FOR MULTNOMAH COUNTY, OREGON

ORDINANCE NO. 931

An Ordinance deleting Flood Hazard regulations contained in MCC 11.15.6301 through 11.15.6323 and amending the Significant Environmental Concern regulations for streams and Grading and Erosion Control regulations and adding to Chapter 29 and amending the Flood Hazard regulations to be in compliance with the standards of the National Flood Insurance Program.

(Language in ~~strikethrough~~ is to be deleted; underlined language is new)

Multnomah County Ordains as follows:

Section I. Findings

(A) The Flood Hazard Areas of Unincorporated Multnomah County are subject to periodic inundation which can result in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(B) These flood losses are caused by the inundation of buildings and services unable to withstand water infiltration and other flood related damage. Flood damage can be prevented or reduced by proper anchoring, construction materials and raising of buildings above the flood level. By amending the Flood Hazard regulations, Multnomah County will be in compliance with the standards specified in the National Flood Insurance Program administered by FEMA. The County's compliance will allow property owners in unincorporated Multnomah County to continue to participate in the National Flood Insurance Program.

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(C) On January 4, 1999 the Planning Commission held a work session on the amendments to the Flood Hazard regulations. A public hearing was held before the Planning Commission on February 1, 1999 and the Planning Commission found that by amending and implementing the Flood Hazard and Significant Environmental Concern regulations, the County will be protecting human life, private property and structures, minimizing public costs for rescue and relief efforts associated with flooding and maintaining the County's ability to participate in the National Flood Insurance Program.

Section II. Deletion of the Flood Hazard Regulations from Chapter 11.15.6301 through 6323.

(A). Repeal section ~~MCC.15.6301 through .6323~~.

Section III. Addition and Amendment of the Flood Hazard Regulations to Chapter 29 Building Codes.

29.600 Purposes

The purposes of the Flood Hazard Standards are to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas and to allow property owners within unincorporated Multnomah County to participate in the National Flood Insurance Program.

29.601 Definitions

For the purpose of this subchapter, the following definitions shall apply:

Alteration. To modify, change or make different.

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Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the areas shown within 100-year flood boundary as identified on the Flood Boundary and Floodway Maps and the Flood Insurance Rate Maps as published by the Federal Emergency Management Agency (FEMA) and any watercourse.

Elevation Certificate. The document used to certify the FIRM Zone and base flood elevation of the development area of a property, and to determine the required elevation or floodproofing requirements of new and substantially improved structures.

Encroachment. To fill, construct, improve, or develop beyond the original bank line of the watercourse. Bank stabilization or restoration of a watercourse which does not protrude beyond the original banks line is not considered an encroachment by this subdistrict.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Recreational Vehicle. A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, self-propelled or permanently towable by a light duty truck and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

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Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

1. Before the improvement or repair is started; or

2. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition *substantial improvement* is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The costs to repair must be calculated for full repair to "before-damage" condition, even if the owner elects to do less. The total costs to repair include both structural and finish materials and labor.

3. Substantial Improvement does not, however, include either:

a. The portion of any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by local building officials and which are the minimum necessary to assure safe living conditions or

b. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

Watercourse. Natural and artificial features which transport surface water. Watercourse includes a river, stream, creek, slough, ditch, canal, or drainageway.

29.602 Areas Affected

(A) The provisions of MCC 29.600 – 29.611 shall apply to all areas within the 100-year flood boundary as identified on the Flood Boundary and Floodway Maps and the Flood Insurance Rate Maps as published by the Federal Emergency Management Agency (FEMA) and any watercourse as defined by MCC 29.601.

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(1) These maps may be periodically revised or modified by FEMA in accordance with prescribed procedures pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 92-234). In order to employ the best available information and maintain compliance with Federal Flood Insurance Program regulations, Multnomah County shall utilize any such revisions or modifications upon their effective date.

(2) On the Multnomah County Zoning Map, all areas depicted as being Flood Fringe (FF), Floodway (FW) or Flood Hazard (FH) with this ordinance are repealed from requiring a Flood Hazard Permit.

29.603 Permits

(A) No structure, dwelling or manufactured home shall be erected, located, altered, improved, repaired or enlarged and no other new development including but not limited to grading, mining, excavation and filling shall occur on lands within the 100-year flood boundary unless a Floodplain Development Permit specifically authorizing the proposal has been obtained from Multnomah County.

1. Improvements to a structure, dwelling or mobile home, which does not require a land use permit, grading permit or building permit, are exempted from obtaining a Flood Hazard Permit.

(B) Alterations, modifications or relocations to any watercourse as defined in MCC 29.601 are subject to a Flood Hazard permit and the Watercourse Relocation requirements of MCC 29.609.

1. Regular maintenance of ditches and dikes within the Sauvie Island Drainage District is exempted from obtaining a Flood Hazard Permit.

29.604 Exemption from Development Standards.

The following are exempt:

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(A) Land may be exempted from the requirements of MCC 29.606 upon review and approval by the Director of an acceptable elevation survey, certified by a State of Oregon Registered Professional Engineer or Land Surveyor, which demonstrates that the entire subject parcel is at least one foot above the base flood level.

(B) The reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Historic Sites Inventory may be permitted without regard to the requirements of MCC 29.606.

(C) Forest practices conducted under the Forest Practices Act.

29.605 Application Information Required.

An application for development subject to a Floodplain Development Permit shall include the following:

(A) A map showing the property line locations, the boundaries of the 100 year floodplain on the parcel, roads, and driveways, existing structures, watercourses and the location of the proposed development(s), topographic elevations for the proposed development and areas of grading or filling required for the project.

(B) Detailed construction drawings showing compliance with the development standards specified in MCC 29.606. A licensed engineer or architect shall stamp the plans and include a statement that the plans meet the requirements of MCC 29.606.

(C) An elevation certificate signed by a Registered Professional Land Surveyor, Engineer or Architect. The certificate shall be accompanied by a plan of the property which shows the location and elevation of a benchmark on the property.

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(D) A written narrative specifying building materials and methods that will be utilized to comply with the requirements of the Floodplain Permit.

(E) Evidence that the applicant has obtained, when necessary, prior approval from those Federal, State and/or local governmental agencies with jurisdiction over the proposed development.

29.606 Development Standards

The following standards shall apply to all new construction, substantial improvement or other development in areas within the 100-year flood boundary:

(A) All Structures.

(1) All new construction and substantial improvement shall:

(a) Comply with Oregon State Building Codes.

(b) Have the electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(c) Use materials resistant to flood damage.

(d) Using methods and practices that minimize flood damage.

(e) For areas that are fully enclosed below the lowest floor and that are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

1. Designs for meeting this requirement must either be certified by a registered professional engineer or architect and must meet or exceed the following minimum criteria:

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a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

b. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(B) Residential Structures.

New construction and substantial improvement of any residential structure, including manufactured homes, shall:

(1) Have the lowest floor, including basement, elevated to at least one foot above the base flood level as indicated on the Elevation Certificate. For purposes of this section, an unfinished garage (either attached or detached) may be considered a non-residential structure.

(2) Be placed on a permanent foundation and shall be anchored to resist flotation, collapse and lateral movement by providing tie downs (anchor bolts, seismic tie-downs) and anchoring as specified in OAR 814-23-005 through 080 and State of Oregon 1 and 2 Family Dwelling Specialty Code, as appropriate to the construction type.

(3) Conduct an as-built elevation survey of the lowest floor. This survey shall be completed by a State of Oregon Registered Professional Engineer or Land Surveyor and must certify that the structure's lowest floor was elevated to at least one foot above the base flood level.

(a) The as-built elevation survey shall be submitted to Multnomah County Land Use Planning prior to occupancy of the structure.

(b). Prior to issuance of a building permit or start of development, a performance bond or cash deposit of $1000.00 shall be required to assure that the

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as-built elevation survey is submitted. The deposit/bond may be used to obtain the elevation survey, without notice, if it is not completed and submitted prior to occupancy of the dwelling. The performance bond or cash deposit shall be released upon submittal of the as-built elevation survey, unless utilized to obtain compliance.

(C) Nonresidential Structures.

New construction and substantial improvement of any commercial, industrial or other non-residential structure shall:

(1) Have the lowest floor including basement, elevated at least one foot above the base flood level; or, together with attendant utility and sanitary facilities, shall:

(a) Be floodproofed such that the structure, including the attendant utility and sanitary facilities, shall be substantially impermeable to the passage of water to an elevation at least one foot above the base flood level; and

(b) Have structural components capable of withstanding hydrostatic and hydrodynamic loads, effects of buoyancy, flood depths, pressures, velocities and other factors associated with the base flood; and

(c) Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied.

(2) Provide an as-built elevation survey of the lowest floor completed by a State of Oregon Registered Professional Engineer or Land Surveyor certifying that the structure's lowest floor was elevated to at least one foot above the base flood level; or submit a stamped documentation by a State of Oregon Registered Professional Engineer certifying the structure has been built in compliance with MCC 29.606(C)(1)(a) though (c).

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(a) The as-built elevation survey or stamped documentation shall be submitted to Multnomah County Land Use Planning prior to occupancy of the structure.

(b) Prior to issuance of a building permit or start of development, a performance bond or cash deposit of $1000.00 shall be required to assure that the as-built elevation survey or stamped documentation is submitted. The bond/deposit may be used to obtain the elevation survey or documentation, without notice, if it is not completed and submitted prior to occupancy or use of the structure or development. The performance bond or cash deposit shall be released upon submittal of the as-built elevation survey or stamped documentation, unless utilized to obtain compliance.

(D) On Site Waste Disposal Systems, Wells, Water Systems and Sewer Systems.

All new and replacement water and sewer systems, including on-site waste disposal systems, shall be designed to:

(1) Minimize infiltration of floodwaters into the system;

(2) Minimize discharge from systems into floodwaters;

(3) Avoid impairment or contamination during flooding.

(E) Recreational Vehicles in Campground or Recreational Development

Recreational vehicles utilized on sites within Zones A1-A30, AH and AE on the community's FIRM shall either:

(1) Be on the site for fewer than 180 consecutive days, or

(2) Be fully licensed and ready for highway uses, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

(3) Meet the requirements of section 29.606(A) and (B).

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29.607 Floodway Requirements

In areas identified as floodway on the Flood Boundary and Floodway Maps, the following restrictions, in addition to the requirements of MCC 29.606, shall apply:

(A) No development shall be permitted that would result in any measurable increase in base flood levels.

(1). Encroachment into the floodway is prohibited, unless a detailed step backwater analysis and conveyance compensation calculations, certified by a Registered Professional Engineer, are provided which demonstrates that the proposed encroachment will cause no measurable increase in flood levels (water surface elevations) during a base flood discharge.

29.608 Procedure When Base Flood Elevation Data is Not Available.

(A) For the purposes of administering MCC 29.606 in areas where detailed base flood elevation data has not been provided by FEMA, the Land Use Planning Division shall obtain, review and utilize any base flood elevation and floodway data available from federal, state or local sources to assure that the proposed construction will be reasonably safe from flooding and may exercise local judgment based on historical data.

(B) In areas where detailed base flood elevation data has not been provided by FEMA, all proposals for subdivisions or other new developments greater than 50 lots or five acres, whichever is less, shall provide detailed base flood elevation data and floodway data.

29.609 Watercourse Relocation & Alteration

Prior to approving any relocation, encroachment or alteration of a watercourse, the Land Use Planning Division shall provide mailed notice of the proposal to adjoining

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communities and to the Department of Land Conservation and Development Floodplain Coordinator. Copies of such notice shall also be provided to the Federal Insurance Administration.

(A) No relocation, encroachment or alteration of a watercourse shall be permitted unless a detailed hydraulic analysis, certified by a Registered Professional Engineer, is provided which demonstrates that:

(1) The flood carrying capacity for the altered or relocated portion of the watercourse will be maintained;

(2) The area subject to inundation by the base flood discharge will not be increased;

(3) The alteration or relocation will cause no measurable increase in base flood levels.

29.610 County Records.

Multnomah County or its designee shall obtain and maintain on file the actual elevation (in relation to NGVD) of the lowest floor, including basement, of all new or substantially improved structures in areas subject to the provisions of this Section.

(A) For all new or substantially improved floodproofed structures in areas subject to the provisions of this Section, Multnomah County shall obtain and maintain on file the actual elevation (in relation to NGVD) of the floodproofing and shall also maintain the floodproofing certifications required pursuant to MCC 29.606(C)(1)(b)-(d).

Section IV. Modification of the Significant Environmental Concern Regulations

MCC 11.15.6428 (D)(1): Design Specifications

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The following design specifications shall be incorporated, as appropriate, into any developments within a Stream Conservation Area:

(1) A bridge or arched culvert which does not disturb the bed or banks of the stream and ~~are of the minimum width necessary to allow passage of peak winter flows~~ which maintains the existing flood carrying capacity for the altered portion of the stream shall be utilized for any crossing of a protected streams.

Section V. Modification of the Grading and Erosion Control Regulations

MCC 29.305(A)(1)(d): The proposed drainage system shall have adequate capacity to bypass all sheet flow through the development ~~existing upstream flow~~ from a storm of ten-year design frequency and maintain the existing flood carrying capacity of all watercourses passing through the property;

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MCC 29.305(A)(1)(e): Fills shall not encroach on natural watercourses or constructed channels unless measures are approved which will adequately handle ~~the displaced streamflow for a storm of ten year design frequency~~ the existing flood carrying capacity for the altered portion of the stream;

ADOPTED this 15th day of April, 1999, being the date of its second reading before the Board of County Commissioners of Multnomah County.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Beverly Stein, Chair

REVIEWED:

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