

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR COLUMBIA COUNTY, OREGON

In the Matter of Amending)
the Text of Section 1100, Flood)
Hazard Overlay Zone, and Deleting)
Section 1110, Flood District Use)
Permit of the Columbia County)
Zoning Ordinance)
_____)

ORDINANCE NO. 88-6

The Board of County Commissioners for Columbia County, Oregon ordains as follows:

SECTION 1. AUTHORITY.

This ordinance is adopted pursuant to ORS 203.035, 215.050 and 215.223.

SECTION 2. TITLE.

This ordinance shall be known as Ordinance No. 88-6.

SECTION 3. PURPOSE.

The purpose of this ordinance is to update the flood hazard provisions in the Columbia County Zoning Ordinance to conform with the requirements of the Federal Emergency Management Agency.

SECTION 4. ADOPTION.

Section 1100, Flood Hazard Overlay Zone, (consisting of Subsections 1101 through 1108) as it presently reads is deleted. Section 1100, Flood Hazard Overlay Zone, (consisting of Subsections 1101 through 1111) as shown in the attached amendment labeled Exhibit "A" and incorporated herein by this reference, is adopted in its place.

SECTION 5. DELETION.

Section 1110, Flood District Use Permit, of the Columbia County Zoning Ordinance is deleted.

SECTION 6. SEVERABILITY.

If any portion of this ordinance, including Exhibit "A", is for any reason held invalid by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent portion and such holdings shall not affect the validity of the remaining portion thereof.

SECTION 7. EMERGENCY.

This ordinance being immediately necessary to maintain the public welfare, health and safety, an emergency is declared to exist and this ordinance takes effect immediately upon its adoption.

REGULARLY PASSED AND ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS FOR COLUMBIA COUNTY, OREGON THIS 10th DAY OF August, 1988.

BOARD OF COUNTY COMMISSIONERS
FOR COLUMBIA COUNTY, OREGON

By: Michael J. [Signature]
Chairman

By: Wayne W. [Signature]
Commissioner

By: John A. [Signature]
Commissioner

Attest:

Cherie Maylan
Recording Secretary

First Reading: 08/10/88

Second Reading: 08/10/88

Effective Date: 08/10/88

EXHIBIT "A"

Section 1100 FLOOD HAZARD OVERLAY ZONE

1101 Purpose: It is the purpose of this ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions design:

- .1 To protect human life and health;
- .2 To minimize expenditure of public money and costly flood control projects;
- .3 To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- .4 To minimize prolonged business interruptions;
- .5 To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
- .6 To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- .7 To ensure that potential buyers are notified that property is in an area of special flood hazard; and,
- .8 To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

1102 Definitions:

- .1 "AREA OF SPECIAL FLOOD HAZARD" means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.
- .2 "BASE FLOOD" means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.
- .3 "DEVELOPMENT" means 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 area of special flood hazard.

- .4 "FLOOD" OR "FLOODING" means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (1) The overflow of inland or tidal waters and/or
 - (2) The unusual and rapid accumulation of runoff of surface waters from any source.
- .5 "FLOOD INSURANCE RATE MAP (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- .6 "FLOOD INSURANCE STUDY" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.
- .7 "FLOODWAY" means 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.
- .8 "LOWEST FLOOR" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance found at Section 5.2-1(2).
- .9 "MANUFACTURED HOME" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

- .10 "NEW CONSTRUCTION" means structures for which the "start of construction" commenced on or after the effective date of this ordinance.
- .11 "PRIMARY ZONE" means the underlying zone upon which the Flood Hazard Overlay Zone is superimposed.
- .12 "START OF CONSTRUCTION" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds nor occupied as dwelling units or not part of the main structure.
- .13 "STRUCTURE" means a walled and roofed building including a gas or liquid storage tank that is principally above ground.
- .14 "SUBSTANTIAL IMPROVEMENT" means 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:
- A. Before the improvement or repair is started, or
 - B. 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 way, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

1103 Application:

- .1 This zone shall apply to all areas of special flood hazards within the jurisdiction of Columbia County.

1104 Basis for Special Flood Hazard Areas

- .1 The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "the Flood Insurance Study for Columbia County, Oregon and Incorporated areas, "dated October 22, 1987, with accompanying Flood Insurance Maps is hereby adopted by reference and declared to be part of this ordinance. The Flood Insurance Study is on file at the Columbia County Department of Land Development Services office, County Courthouse, St. Helens, Oregon.

1105 Development Permit

- .1 A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 1104. The permit shall be for all structures allowed by the underlying zone, including manufactured homes, as set forth in the "Definitions", and for all development including fill and other activities, also set forth in the "Definitions".

1106 Administration

- .1 The Land Development Services Administrator, or his designee, is appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.
- .2 Duties of the Administrator shall include, but not be limited to, reviewing all development permits to determine:
 - .A That the permit requirements of this ordinance have been satisfied.
 - .B That all necessary permits have been obtained from those Federal, State, or local government agencies from which prior approval is required.
 - .C If the proposed development is located in the floodway, assure that the encroachment provisions of Section 5.3(1) are met.
- .3 When base flood elevation data has not been provided in accordance with Section 1104, Basis for Special Flood Hazard Areas, the Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 1109, Specific Standards, and 1110 Floodways.

4. Where base flood elevation date is provided through the Flood Insurance Study or required as in Section 1106.3, the Administrator will obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
- .5 For all new or substantially improved floodproofed structures, the Administrator will:
 - .A Verify and record the actual elevation (in relation to mean sea level), and
 - .B Maintain the floodproofing certifications required in Section 1109.2.A(3).
- .6 The Administrator will maintain for public inspection all records pertaining to the provisions of this ordinance.
- .7 For alteration of water courses the Administrator shall:
 - .A Notify adjacent communities and the Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - .B Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

1107

Interpretation of Firm Boundaries

The Administrator shall make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of Section 60.6 of the rules and regulations of the National Flood Insurance Program (44 CFR 59-76).

1108 General Standards

.1 Anchoring

- .A All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- .B All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas: guidebook for addition techniques).

.2 Construction Materials and Methods

- .A All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- .B All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- .C Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

.3 Utilities

- .A All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- .B New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and,
- .C On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

.4 Subdivision Proposals

- .A All subdivision proposals shall be consistent with the need to minimize flood damage;
- .B All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- .C All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and,
- .D Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

.5 Building Permit Review

- .A Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (Section 4.3-2), Applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

- 1109 Specific Standards

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Sections 1104 or 1106.3, the following provisions are required:

.1 Residential Construction

- .A New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.
- .B Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize

hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

- (1) 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.
- (2) The bottom of all openings shall be no higher than one foot above grade.
- (3) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

.2 Nonresidential Construction

.A New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- (1) be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- (2) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- (3) be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 1106.5.
- (4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in 1109.1.8.

- (5) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

.3 Manufactured Homes

- .A All manufactured homes to be placed or substantially improved within Zones A1-30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection 1108.1.B.

- B. New mobile home parks and subdivisions; substantial improvements to a mobile home park or subdivision; expansions to existing mobile home parks and subdivisions and individual lots or parcels to support a mobile home, shall provide that:

- (1) Pads or lots are elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the flood surface elevation.

- (2) No mobile home shall be placed in a floodway, except in an existing mobile home park or subdivision.

1110

Floodways

- .1 Located within areas of special flood hazard established in Section 3.2 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- .B If Section 1110.1.A is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 1108 thru 1111.

1111

Standards for Shallow Flooding Areas (AO Zones)

- .1 Shallow flooding areas appear on FIRM's as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:
 - .A New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified).
 - .B New construction and substantial improvements of nonresidential structures within AO zones shall either:
 - (1) have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified); or
 - (2) together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in Section 1109.2.A(3).
 - .C Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.