

## **ARTICLE 30**

### **(FP) Floodplain Overlay**

#### **SECTION 3.30.000 Purpose**

The flood hazard areas of Douglas County are subject to periodic inundation, resulting in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, impairment of the tax base, and adverse effects on the public health, safety and general welfare.

Flood losses are caused by:

1. The cumulative effect of obstructions in floodways causing increases in flood heights and velocities.
2. The occupancy of flood hazard areas by uses vulnerable to floods or hazardous to others which are inadequately elevated or otherwise protected from flood damages.

It is the purpose of this article to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The provisions of this article are designed to:

1. Protect human life and health;
2. Minimize expenditure of public money and costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. 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. 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. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

**SECTION 3.30.150 Methods of Reducing Flood Losses**

In order to accomplish its purpose, this article includes methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage; and
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

**SECTION 3.30.200 Definitions**

For the purpose of this article the following definitions shall apply:

**BELOW-GRADE CRAWLSPACE:** An enclosed area below the base flood elevation (BFE), and is not a basement. The crawl space must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of flood waters. The bottom of each flood vent opening can not be more than one (1) foot above the lowest adjacent exterior grade. Portions of the building below the BFE must be constructed with materials resistant to flood damage, including foundation walls, joists, insulation, or other materials that extend below the BFE. Building utility systems within the crawlspace must be elevated above BFE or be flood proof. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade, and must not exceed four (4) feet in height at any point.

**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 area of special flood hazard.

**EXISTING MANUFACTURED HOME PARK OR SUBDIVISION:** A manufactured home park or subdivision for which the construction of facilities for servicing the lot on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) are completed before the effective date of floodplain management regulations adopted by a community.

**EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION:**

Means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or pouring of concrete pads).

**EXTREME HAZARD SITE:** A site where any structure constructed on the site is likely to be destroyed during periods of regional flooding. Examples of building sites which may be in this category are:

- a. Sites with adjacent unstable streambanks.
- b. Sites with obvious streambank erosion.
- c. Sites where potential streambank erosion is eminent if existing vegetative cover is removed or destroyed.
- d. Sites on the outside of a curve in a stream, especially if gravel is being deposited on the inside of the curve.
- e. Sites across the stream from a prominent rock ledge or rock outcrop.
- f. Sites that may be dangerously affected by any channel obstruction at any stream stage.
- g. Sites which may be dangerously affected by wave action.
- h. Sites where structure may be undermined by any extreme natural cause.
- i. Sites where flood current velocities are sufficient to destroy structure or where flood debris carried by current is sufficient to destroy structure.
- j. Sites where water depth is above eight (8) feet in height.

**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.

**HIGH HAZARD SITE:** A site where any structure constructed on the site is likely to be heavily damaged during periods of regional flooding. Examples of building sites which may be in this category are:

- a. Sites which are likely to be undermined by surface water erosion, such as areas where substantial erosion or siltation is currently evident.
- b. Swampy areas which remain inundated for extended periods after regional floodwaters have receded, often found next to hills and/or are located on alluvial plains.

- c. Sites which are likely to be inundated by more than four (4) feet of floodwater and are also subject to either condition (a) or (b) above.

**LOW HAZARD SITE:** A site where only minor damage to the structure is likely to occur during periods of regional flooding. Examples of building sites which may be in this category are:

- a. Sites where no appreciable flood current is likely to occur.
- b. Sites where backup water will recede slowly as stream and/or tide recedes.
- c. Sites where damage done to a structure is mainly due to inundation.

Low hazard conditions exist only when the above conditions have not been exceeded and when regional floodwaters do not exceed eight (8) feet in height.

**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.

**MANUFACTURED HOME:** 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.

**MOBILE HOME:** Mobile Home means "manufactured home".

**MOBILE HOME PARK OR SUBDIVISION:** Any place where two or more mobile homes are located within 500 feet of one another on a lot, tract or parcel of land under the same ownership, the primary purpose of which is to rent or lease space or mobile homes for a charge or fee paid or to be paid for the rental, lease, or use of facilities or to offer space free in connection with securing the trade or patronage of such person.

**NEW MANUFACTURED HOME PARK OR SUBDIVISION:** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the floodplain management regulations.

**ONE HUNDRED (100) YEAR FLOOD:** The flood having one percent chance of being equaled or exceeded in any given year. The term has the same meaning as "base flood" and "regional flood".

**RECREATIONAL VEHICLE:** for floodplain management purposes, the term recreational vehicle means a vehicle which is:

- a. built on a single chassis;
- b. 400 square feet or less when measured at the largest horizontal projection;
- c. designed to be self-propelled or permanently towable by a light duty truck; and
- d. designed primarily not for use as a permanent dwelling, but as a temporary living quarters for recreational, camping, travel, or seasonal use.

**SUBSTANTIAL DAMAGE:** means 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.

**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:

- 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 wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- (1) any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions; or
- (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

### **SECTION 3.30.210 Lands to Which This Article Applies**

This Article shall apply to all areas of flood hazard within Douglas County, and overlay the regulations of the underlying zoning district.

### **SECTION 3.30.220 Basis for Establishing Areas of Flood Hazard**

Areas of flood hazard for Douglas County are areas designated as special flood hazard areas (A Zones) or areas within a floodway.

Special flood hazard areas and floodways are identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Douglas County, Oregon and Incorporated Areas - Volume 1 and 2," dated February

17, 2010. This publication is used in conjunction with historic floodplain data found in the 1986 and 1996 Flood Insurance Study, Flood Insurance Rate Maps, and Flood Hazard Boundary Maps and in the series of orthophotos prepared by Spencer B. Gross and David C. Smith.

In addition, "Flood Profiles in the Calapooia Creek Basin, Oregon", an open-file report #82-439 of the U.S. Department of the Interior, Geological Survey, which was published in 1982, and "Floods on Selected Reaches of Elk Creek, Douglas County, Oregon", published by U. S. Geological Survey in 1971 shall be used with accompanying maps for identification of flood hazard areas and floodways for those portions of Calapooia Creek, Elk Creek and their tributaries in the study areas.

All of the above referenced publications, maps, orthophotos, and subsequent revisions or additions to those materials, are hereby adopted by reference and declared to be part of this ordinance in so far as they are consistent with the Federal Insurance Study. These publications, maps and orthophotos shall be kept on file with the Douglas County Planning Department.

These publications shall be used as the basis for determining which flood district applies to property. Where these publications fail to provide data sufficient to determine the applicable flood district, the applicable flood district shall be determined on the basis of the best available information. When base flood elevation has not been provided in accordance with this section, the Director may obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, State or other source, in order to administer the requirements of the floodplain overlay.

Areas of flood hazard shall also include any land area susceptible to inundation of water from any source where the above referenced maps have not identified any special flood areas.

### **SECTION 3.30.230 Compliance**

No structure shall hereafter be constructed, located, extended, converted or altered nor shall any land be developed, subdivided or partitioned without full compliance with the terms of this article and other applicable regulations.

### **SECTION 3.30.240 Abrogation and Greater Restrictions**

It is not intended by this article to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this article imposes greater restrictions, the provision of this article shall prevail.

### **SECTION 3.30.250 Interpretation**

In their interpretation and application, the provisions of this article shall be held to be minimum requirements and shall be liberally construed in favor of the governing body and shall not be deemed a limitation or repeal of any other powers granted by State Statutes. In cases where more than one flood district applies, the provisions of the more restrictive district shall prevail.

**SECTION 3.30.260 Warning and Disclaimer of Liability**

The degree of flood protection required by this article is considered reasonable for regulatory purposes. Larger floods can occur on rare occasions. The flood height may be increased by man-made or natural causes, such as log jams and bridge openings restricted by debris. This article does not imply that areas outside floodway and floodway fringe district boundaries or land uses permitted within such districts will be free from flooding or flood damages. This article shall not create liability on the part of Douglas County or any officer or employee thereof for any flood damages that may result from reliance on this or any administrative decision lawfully made thereunder.

**SECTION 3.30.270 Required Permits**

1. A permit shall be obtained before construction or development begins within any area of flood hazard established in §3.30.500. Application for such permit shall be filed with the appropriate agency of government having jurisdiction over such development. Applications required by the Director shall include the following information:
  - a. Elevation in relation to mean sea level or NAVD 88, whichever is applicable, of the lowest floor (including basement) of all structures;
  - b. Elevation in relation to mean sea level or NAVD 88, whichever is applicable, to which any structure has been floodproofed;
  - c. Where required, certification by a registered professional engineer or architect that criteria specified in §3.30.450, 3.30.460 and 3.30.520 have been met;
  - d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development;
  - e. Plot plan drawn to scale showing the nature, location and dimensions and elevation referenced to mean sea level, or NAVD 88, whichever is applicable, of the area in question including existing and proposed structures, fill, storage of materials, and drainage facilities. Applicants shall submit certification by an Oregon registered professional engineer or land surveyor of the site's ground elevation and whether or not the development is located in a flood hazard district. If so, the certification shall include which flood hazard district applies, the location of the floodway at the site, and the 100 year flood elevation at the site. A reference mark shall be set at the elevation of the 100 year flood at the site. The location, description, and elevation of the reference mark shall be included in the certification; and
  - f. Any other information required by the Director.

2. When base flood elevation data has not been provided by "The Flood Insurance Study for Douglas County, Oregon," the Director shall obtain, review and reasonably utilize any base flood elevation data available from a Federal, State or other source, in order to administer this article.
3. All building and mobile home placement permits shall also be reviewed to determine the flood hazard for the proposal. Where elevation data is not available, permits shall be reviewed to assure that the proposed construction will be reasonably safe from flooding. Reasonableness shall be determined on the basis of the best available information on flood conditions affecting the land. The best available information may include but shall not be limited to the use of historical data, high water marks, etc.
4. No new construction, substantial improvements or other development (including fill) shall occur within the 100-year flood district where no floodway has been established unless an Oregon registered professional engineer certifies to the Director or other agency which requires a permit for the proposed development that the cumulative effect of the proposed development and anticipated development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot.

### **SECTION 3.30.280 Designation of Administrator**

The Director shall administer and implement this article by granting or denying development permit applications in accordance with its provisions. The Director shall:

1. Review all development applications to determine that the permit requirements of this ordinance have been satisfied.
2. Review all development applications to determine that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
3. Ensure that all provisions of this article are met.

#### Information to be Obtained and Maintained

4. 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 (as built elevation), and whether or not the structure contains a basement.
5. For all new or substantially improved floodproofed structures:
  - a. verify and record the actual elevation (in relation to mean sea level); and
  - b. maintain the floodproofing certifications required in §3.30.270.

6. Maintain for public inspection all records pertaining to the provisions of this ordinance.

#### Alteration of Watercourses

7. Notify adjacent communities and the Department of State Lands prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration and the Department of Land Conservation and Development.
8. Require that a program of periodic inspection and maintenance be provided with the altered or relocated portion of said watercourse so that the flood carrying capacity of the watercourse is not diminished.

#### Interpretation of Flood Hazard Boundaries

9. Make interpretation where needed, as to exact location of the boundaries of 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 as provided in §2.060.4. of this ordinance.
10. Alleged errors of any requirement, decision or determination made by the Director in the enforcement or administration of this article can be appealed pursuant to §2.400 of this ordinance.

### **SECTION 3.30.300 Variance Procedure**

Requests for variances to any standard, procedure or requirement of this article can be filed pursuant to §2.060.1 of this ordinance.

In passing upon such applications, the Approving Authority shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding, debris, or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;

6. The availability of alternative locations, for the proposed use which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the Comprehensive Plan and floodplain management program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment and debris transported by the floodwaters and the effects of wave action, if applicable, expected at the site; and
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

Generally, variances may be issued for construction, development and substantial improvements to be erected on a parcel of land of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the 100 year flood level, providing the above items 1-11 have been fully considered. As the parcel size increases beyond one-half acre, the technical justification required for issuing the variance increases.

Upon consideration of the above factors and purposes of this article, the Approving Authority may attach such conditions to the granting of variances as he deems necessary to further the purposes of this article.

The Director shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

### **SECTION 3.30.310 Conditions for Variances**

1. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places of the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
2. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
4. Variances shall only be issued upon:

- a. A showing of good and sufficient cause;
  - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
  - c. A determination that the granting of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
5. Any applicant to whom a variance is granted shall be given written notice of the approval and any conditions of the variance. In cases where a variance is granted to allow construction with a lowest floor elevation below the 100 year flood elevation, applicant will also be notified, in writing, that the cost of flood insurance will be commensurable with the increased risk resulting from the reduced lowest floor elevation.

#### **SECTION 3.30.400 Provisions for Flood Hazard Reduction**

In areas of flood hazard, the provisions of §3.30.410 through 3.30.460 shall apply.

#### **SECTION 3.30.410 Anchoring**

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
2. All mobile homes shall be anchored in accordance with provisions set forth in §3.30.460.

#### **SECTION 3.30.420 Construction Materials and Methods**

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. 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.

#### **SECTION 3.30.430 Utilities**

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

2. New and replacement sanitary systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding:
  - a. The Sanitation Authority shall be notified when development requiring an on-site waste disposal system is proposed in an area of flood hazard.
  - b. The Sanitation Authority shall be responsible for carrying out the purposes of enforcing this provision.

### **SECTION 3.30.440 Subdivision and Partitioning Proposals**

1. All subdivision and partitioning proposals shall be consistent with the need to minimize flood damage.
2. All subdivision and partitioning proposals shall have public utilities and facilities such as sanitary and storm sewers, gas, electrical, and water systems located and constructed and maintained to minimize flood damage.
3. All subdivision proposals shall have adequate drainage to reduce exposure to flood damage, including returning water.
4. All partitions and subdivisions for nonresidential uses shall have the explanation "Not for residential use" printed on the face of the final survey map or plat.
5. No portion of any street or road surface in any subdivision shall be at an elevation less than one foot below the regional flood height. The road surface is that portion of a street or way available for vehicular traffic or where curbs are laid, the portion between curbs.
6. 100 year flood elevation data shall be provided and shown on final partition maps and subdivision plats. The boundaries of the 100 year floodplain and floodway must be shown on final subdivision plats and partition maps. Where no base flood elevation exists, base flood data must be provided by the applicant. Such base flood data shall be generated by a Registered Oregon Engineer and shall be consistent with the size and complexity of the development.
7. A permanent monument shall be established and maintained on land partitioned or subdivided, showing the elevation in feet above mean sea level. The location of such monument shall be shown on the final partition map or subdivision plat. (See Section 4.200 for exception.)

**SECTION 3.30.450 Nonresidential Construction**

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to a level at or above the regional flood height; or

1. Be floodproofed as provided in the State Structural Specialty Code, Appendix Chapter 31, 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; and
3. Be certified by a registered professional engineer or architect that the standards of this Subsection are satisfied. Such certifications shall be provided to the Official as set forth in §3.30.270.
4. Non residential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as provided in §3.30.455.

**SECTION 3.30.455 Residential Construction**

1. New construction and substantial improvements of any residential structure shall have the lowest floor height, including basement, elevated to a minimum of one foot (1') above the base flood elevation.
2. Fully enclosed areas below the lowest floor 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. Designs for meeting this requirement shall be certified by a registered professional engineer or architect; or meet or exceed the following minimum criteria:
  - 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.
  - c. Openings may be equipped with screens, louvers, or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

**SECTION 3.30.460 Mobile Home Standards**

1. All mobile homes and additions thereto shall be anchored to resist flotation, collapse or lateral movement with more specific requirements as follows:

- a. Over-the-top and frame ties be provided at each corner of the mobile home. In addition, for mobile homes of fifty feet or less in length, there shall be one additional over-the-top tie and four additional frame ties equally spaced per side. For mobile homes greater than 50 feet long there shall be two additional over-the-top ties and five additional frame ties equally spaced per side.
  - b. All components of the anchoring system be capable of carrying a force of 4,800 pounds.
  - c. Alternative methods of anchoring may be utilized provided certification is provided by a licensed professional engineer or architect that the system is designed to withstand a wind force of ninety (90) miles per hour or greater.
2. As provided for in the Oregon Manufactured Dwelling and Park Specialty Code, manufactured dwellings located in a flood hazard zone (100 Year Flood District and Floodway District) are subject to the following:
- a. The finished floor shall be elevated a minimum of 18 inches above the Base Flood Elevation (BFE) as identified on the Flood Insurance Rate Map.
  - b. The manufactured dwelling stand or foundation shall be a minimum of 12 inches above the BFE unless openings are provided per FEMA Technical Bulletin 1-93.
  - c. Accessory buildings designed for residential occupancy being replaced in a floodway shall have the finished floor elevated a minimum of 18 inches above BFE as identified on the Flood Insurance Rate Map.
3. For: 1) new manufactured home parks and manufactured home subdivisions; 2) expansions to existing manufactured home parks and manufactured home subdivisions, and; 3) existing manufactured home parks and manufactured home subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds 50 percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced, the following standards shall apply:
- a. Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the manufactured home will be a minimum of 18 inches above the base flood elevation;
  - b. Adequate surface drainage and access for hauler are provided; and
  - c. In the instance of elevation on pilings, that;

- (1) lots are large enough to permit steps;
  - (2) piling foundations are placed in stable soil no more than 10 feet apart; and
  - (3) reinforcement is provided for pilings more than six feet above the ground level.
4. Recreational vehicles placed on sites within the floodplain shall also meet the placement requirements of 3 a. through c. of this section unless they either:
    - a. Be on the site for fewer than 90 consecutive days, or
    - b. Be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is 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.
  5. All manufactured homes to be replaced or substantially improved within the floodway shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is 18 inches above the base flood elevation and is securely anchored to an adequate foundation system. Manufactured homes placed in the floodway shall also comply with the provisions of §3.30.520.

### **SECTION 3.30.500 Establishment of Flood Districts**

Flood hazard areas of Douglas County are hereby divided into the following districts:

1. 100 Year Flood District.
2. Floodway District.

Criteria for determining district boundaries are set forth in §3.30.220.

### **SECTION 3.30.510 100 Year Flood District**

The following uses shall be permitted in the 100 Year District to the extent they are not prohibited by any other provision of this ordinance.

1. Structures and substantial improvements designed for human occupancy provided the lowest floor (including basement) elevation is one foot above the base flood elevation.
2. Other structures provided they are floodproofed or otherwise protected to an elevation at or above regional flood height.

3. Subdivision and partitioning of land provided that the development meets the standards set forth in §3.30.440 of this article.

### **SECTION 3.30.520 Floodway District**

In the Floodway District, the following restrictions shall apply:

1. Encroachments, including, but not limited to, fill, new construction, substantial improvements, and other development are not permitted unless an Oregon registered professional civil engineer certifies that such encroachments (and cumulative like encroachments) shall not result in any increase in flood levels during the occurrence of a regional flood.

If such certification is obtained, all construction development and substantial improvements shall comply with all applicable provisions of §3.30.400.

2. Subdivision and partitioning of land for residential purposes is prohibited if land is located entirely within the Floodway District.
3. Any mobile homes placed, or additions thereto shall conform to standards of §3.30.460 and 3.30.270.