

ORDINANCE BILL NO. 6 FOR 2010  
ORDINANCE NO. 1219

AN ORDINANCE AMENDING ORDINANCES 984 and 1171, SWEET HOME MUNICIPAL CODE CHAPTER 15.12, PERTAINING TO THE FLOOD HAZARD AREA REGULATIONS.

WHEREAS, the City of Sweet Home participates in the National Flood Insurance Program, and

WHEREAS, the federal and state regulations governing flood plain management have changed since adoption of Ordinance 984 and 1171, and

WHEREAS, the City of Sweet Home wishes to continue participation in the National Flood Insurance Program.

Now therefore, the City of Sweet Home does ordain as follows:

Section 1. Sweet Home Municipal Code 15.12.025 is added:

**15.12.025 METHODS OF REDUCING FLOOD LOSSES.** In order to accomplish its purposes, the following methods and provisions are included:

- A. 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;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- D. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas;
- E. Coordinating and supplementing the provisions of the State Building Code with local land use and development codes.

Section 2. Sweet Home Municipal Code 15.12.030 is amended by adding the following definitions:

**BELOW GRADE CRAWL SPACE.** An enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 feet 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 or storage of equipment or materials located within the area of special flood hazard.

**FLOOD INSURANCE RATE MAP (FIRM).** 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.

**FLOOD INSURANCE STUDY.** The official report titled *The Flood Insurance Study for Linn County, Oregon and Incorporated Areas* dated September 29, 2010 provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway

map, and the water surface elevation of the base flood.

**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.

**LOWEST FLOOR.** The lowest floor of the lowest enclosed area, including the 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.

**START OF CONSTRUCTION.** 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 or any work beyond the stage of excavation.

**STATE BUILDING CODE.** The codes as adopted by the City in Sweet Home Municipal Code Chapter 15.03.

**SUBSTANTIAL IMPROVEMENT.** Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50% 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.

**VARIANCE.** Means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited.

Section 3. Sweet Home Municipal Code 15.12.050 is amended to read as follows:

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled *The Flood Insurance Study for Linn County, Oregon and Incorporated Areas*, effective September 29, 2010 with accompanying Flood Insurance Maps are adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at Sweet Home City Hall, 1140 12<sup>th</sup> Avenue, Sweet Home, Oregon. The best available information for flood hazard area identification shall be the basis for regulations as set forth in 15.12.090 (B-1)

Section 4. Sweet Home Municipal Code 15.12.060 is amended to add the following:

**Severability.** If any section clause, sentence, or phrase of the ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

Section 5. Sweet Home Municipal Code 15.12.070 (C) shall be amended to read as follows;

Deemed neither to limit of repeal any other powers granted under State statutes and rules including state building codes.

Section 6. Sweet Home Municipal Code 15.12.120 (A-1) shall be amended to read as follows:

Review all development permits to determine that the permit requirements and conditions of the Chapter have been satisfied.

Section 7. Sweet Home Municipal Code 15.12.120 (C-1) shall be amended to read as follows:

Where base flood elevation data is provided through the Flood Insurance Study, FIRM or required as in § 15.12.120B, obtain and record the actual elevation of the lowest floor, including basement and below grade crawl spaces, of all new or substantially improved structures and whether or not the structure contains a basement.

Section 8. Sweet Home Municipal Code 15.12.120 (D-1) shall be amended to read as follows:

Notify adjacent communities, the State Department of Land Conservation and Development, and other appropriate state and federal agencies prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

Section 9. Sweet Home Municipal Code 15.12.130 (C-3) shall be amended to read as follows:

On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Department of Environmental Quality.

Section 10. Sweet Home Municipal Code 15.121.140 (E) Below Grade Crawl Spaces is added:

Below grade crawl spaces are allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*:

1. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings. Because of hydrodynamic loads, crawl space construction is not allowed in areas with flood velocities greater than five feet per second unless the design is reviewed by a qualified design professional such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
2. The crawl space is an enclosed area below the base flood elevation (BFE) and, as such, 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 be no more than one foot above the lowest adjacent exterior grade.
3. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawl space used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
4. Any building utility systems within the crawl space must be elevated above BFE or designed so that flood waters cannot enter or accumulate within the system components during flood conditions. Duct work, in particular, must either be placed above the BFE or sealed from flood waters.
5. The interior grade of a crawl space below the BFE must not be more than two feet below

- the lowest adjacent exterior grade.
6. The height of the below grade crawl space, measured from the interior grade of the crawlspace to the top of the crawl space foundation wall must not exceed four feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
  7. There must be an adequate drainage system that removes flood waters from the interior area of the crawl space. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
  8. The velocity of flood waters at the site should not exceed five feet per second for any crawl space. For velocities in excess of five feet per second, other foundation types should be used.
  9. Property owners should be advised that there may be increased insurance costs associated with below grade crawl spaces. There is a charge added to the basic policy premium for a below grade crawl space.

Section 11. Sweet Home Municipal Code 15.12.150 (B) is added:

B-3. Projects for stream habitat restoration may be permitted in the floodway provided:

1. The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023); and,
2. A qualified professional (a Registered Professional Engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and,
3. No structures would be impacted by a potential rise in flood elevation; and,
4. An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included as part of the local approval.

Section 12. Sweet Home Municipal Code 15.12.150 (C) Before Regulatory Floodway is added:

In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones A\_1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed 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 at any point within the community.

Section 13. Sweet Home Municipal Code 15.12.150 (D) is added:

New installation of manufactured dwellings are prohibited (2002 Oregon Manufactured Dwelling and Park Specialty Code). Manufactured dwellings may only be located in floodways according to one of the following conditions:

1. If the manufactured dwelling already exists in the floodway, the placement was permitted at the time of the original installation, and the continued use is not a threat to life, health, property, or the general welfare of the public; or
2. A new manufactured dwelling is replacing an existing manufactured dwelling whose original placement was permitted at the time of installation and the

replacement home will not be a threat to life, health, property, or general welfare of the public and it meets the following criteria:

- a. As required by 44 CFR Chapter 1, Subpart 60.3 (d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory structures, or property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge;
- b. The replacement manufactured dwelling and any accessory buildings or accessory structures (encroachments) shall have the finished floor elevated a minimum of 18 inches above the BFE as identified on the Flood Insurance Rate Map;
- c. The replacement manufactured dwelling is placed and secured to a foundation support system designed by an Oregon professional engineer or architect and approved by the City.
- d. The replacement manufactured dwelling, its foundation supports, and any accessory buildings, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties;
- e. The location of a replacement manufactured dwelling is allowed by Sweet Home Municipal Code Title 17; and
- f. Any other requirement deemed necessary by the City.

Section 14. Sweet Home Municipal Code 15.12.170 shall be amended by adding the following:

E. Upon consideration of the factors of Section D the City Council may attach such conditions to the granting of a Variance as it deems necessary to further the purposes of this Chapter.

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

PASSED by the City Council and approved by the Mayor this 27<sup>th</sup> day of July, 2010.

  
Mayor

ATTEST:

  
City Manager - Ex Officio City Recorder