

Chapter 2.10 Flood Plain District

Sections:

2.10.100	Purpose
2.10.200	General
2.10.300	Permitted Uses
2.10.400	Prohibited Uses
2.10.500	Review
2.10.600	Development Standards
2.10.700	Criteria of Approval
2.10.800	Conditions of Approval
2.10.900	Emergency Approval
2.10.1000	Post-Flood Substantial Damage Procedures
2.10.1100	Periodic Floodplain Inspections and Enforcement Actions

2.10.100 Purpose

- A. This zone intends to identify sections of the city subject to the hazards of 100 year periodic stream flooding as determined by the limits and extent of the Special Flood Hazard Area shown on Federal Emergency Management Agency (FEMA) Flood Insurance Map (FIRM) #41017C0245D, dated September 28, 2007 and associated Flood Insurance Study #19163CV000A, and any revision thereto, or more accurate studies, and to preclude future development or redevelopment that may suffer a loss of life or property in the subject area. Because the natural watercourse of waterways is dynamic and subject to change, the boundaries of the floodplain district may be revisited and adjusted, as necessary and warranted.
- B. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter in the areas designated by the studies referenced in 2.10.100.A. is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by human-made or natural causes. This Chapter does not imply that land outside the areas of special flood hazards or uses permitted within these areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the City, or any officer or employee of the City, for any flood damage that may result from reliance on this Chapter or any administrative decision lawfully made under this Chapter.
- C. It is the purpose of this Chapter to promote the public health, safety and general welfare, to maintain streams and floodplains in their natural state to the maximum extent possible so they reduce flood hazards, and to minimize public and private losses due to flood conditions in specific areas. The provisions of this Chapter are designed to:
1. Protect human life and health.
 2. Minimize expenditure of public money on 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 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 hazards.
 5. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard to minimize future flood blight areas.
 6. Provide information to potential buyers of property in areas of special flood hazard.
 7. Minimize the threat to persons, property and urban water quality from flooding and inadequate or improper drainage resulting from uncontrolled development or redevelopment of land to include filling, grading, excavation, removal; earthwork construction including berms and dikes; stockpiling of materials; or other alterations.
 8. Ensure that flood loss reduction measures under the National Flood Insurance Program (NFIP) are consistent with retaining natural floodplain functions.
 9. Ensure no net loss of hydraulic and geomorphic functions of floodplains.
 10. To balance the public interests with those of individual property owners in the designated areas.
 11. Allow the functions of the creek to continue, including erosion, deposition, and channel migration.
 12. To implement the policies of the City's Comprehensive Plan.
- D. In order to accomplish its purpose, this Chapter includes methods and provisions for:
1. Accurately determining the extent of areas of special flood hazard in the city and restricting uses in these areas.
 2. 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.
 3. Requiring that uses vulnerable to floods, including facilities which serve these uses, be protected against flood damage at the time of initial construction or relocated and possibly relocating uses outside of the floodplain.
 4. Controlling the alteration of natural flood plains, stream channels and protective barriers, which help accommodate or channel flood waters.
 5. Controlling filling, grading, dredging and other development, which may increase flood damage.
 6. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters in such a way as to drastically impede channel migration, or which may increase special flood hazards in other areas.

2.10.200 General

- A. This Chapter shall apply to all areas of special flood hazard within the City of Sisters and its urbanizable areas. These regulations shall supplement the

regulations of the underlying or applicable District. Where the regulations and permitted uses of an underlying district conflict with those of this zoning district, the more restrictive standards shall apply.

- B. The areas of special flood hazard for the City and its urbanizable areas under the jurisdiction of this Code are identified through the use of the most accurate source of information, as determined by the Community Development Director or designee, based on the following:
1. Those areas identified as the Special Flood Hazard Area shown on Federal Emergency Management Agency (FEMA) Flood Insurance Map (FIRM) #41017C0245D, dated September 28, 2007 and associated Flood Insurance Study #19163CV000A, and any revision thereto (i.e. Letters of Map Change), or
 2. Areas of special flood hazard designated by the Community Development Director or designee, as susceptible to inundation of water from any source where the above-referenced maps have not identified any special flood areas; or
 3. Areas of special flood hazard not depicted on the Federal Emergency Management Agency (FEMA) Flood Insurance Map (FIRM) #41017C0245D, dated September 28, 2007 and associated Flood Insurance Study #19163CV000A, and any revision thereto, but shown to be within an area of special flood hazard by subsequent engineering, surveying, hydrologic, or other studies.
 4. Areas found to be outside the area of special flood hazard are regulated by the underlying district and not this Chapter. Areas inside the areas of special flood hazard are regulated by this Chapter.
- C. The flood insurance studies set forth above are hereby adopted by City Ordinance and filed with the Community Development Department. These studies, subsequent revisions, and additional engineering, surveying, hydrologic, or other studies denoting areas of special flood hazard shall form the basis for the administration and implementation of this Chapter. These studies are available for review at Sisters City Hall, 520 E Cascade Avenue, Sisters, Oregon.
- D. The following definitions apply to this Chapter and supersede conflicting definitions in the Development Code.
1. Area of special flood hazard – is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Insurance Rate Maps. Zone A may be refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.
 2. Base flood – the flood having a one percent chance of being equaled or exceeded in any given year. Base flood is the same as the “100-year flood”.
 3. Basement – any area of the building having its floor subgrade (below ground level) on all sides.

4. 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.
5. Elevated building – a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.
6. Flood Insurance Rate Map (FIRM) – an official map of a community on which the Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.
7. Flood plain – any land area susceptible to being inundated by water from any source.
8. Floodway – see regulatory floodway.
9. Lowest floor – 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 CFR 60.3.
10. 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 attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".
11. Recreational vehicle – means a vehicle which is built on a single chassis; 400 square feet or less when measured at the largest horizontal projection; designed to be 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.
12. Regulatory 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 a designated height. This term is the same as "floodway".
13. Structure – means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.
14. Squaw Creek – means the creek running through the City of Sisters, originating in the Three Sisters Wilderness and terminating in the Deschutes River above Lake Billy Chinook. Squaw Creek is the name used in the FEMA flood studies, but the name of the creek is now Whychus Creek.
15. 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.
16. Substantial improvement – means any reconstruction, rehabilitation, addition, or other improvement of a structure (including structural elements, interior

finishing elements like trim, utility service equipment, demolition, labor, overhead, and profit), the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. This term does not include either: 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 the local code enforcement official and which are the minimum necessary to assure safe living conditions, or any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

17. Whychus Creek – see Squaw Creek.

2.10.300 Permitted Uses

A. The land uses listed in Table 2.10.300.A are permitted in the Flood Plain District and in areas of special flood hazard as designated in 2.10.200, subject to the provisions of this Chapter. Only land uses that are specifically listed in Table 2.10.300.A, and land uses that are approved as "similar" to those in Table 2.10.300.A., may be permitted. The land uses identified as "Conditional Uses" in Table 2.10.300.A require Conditional Use Permit approval prior to development or a change in use, in accordance with Chapter 4.4. Applications for development within the Floodplain District shall be on an appropriate form provided by the Sisters Community Development Department, accompanied by the appropriate fee.

Table 2.10.300.A	
Land Uses Permitted in the Flood Plain District	
Permitted Uses:	Conditional Uses:
<p>A. Permitted uses below are allowed assuming fill is not added to the area of special flood hazard, and flood heights are not increased as a result of the permitted use:</p> <ol style="list-style-type: none"> 1. Open space, excluding farming activities that require ground breaking. 2. Portions of a residential use that do not contain structures, such as lawn, garden or play areas. 3. Existing camping facilities, providing that waste disposal sites are not within the area subject to the hazards of 100-year periodic stream flooding. 4. Repair or remodel of an existing structure within its existing footprint, including buildings damaged by fire or other casualties. 	<ol style="list-style-type: none"> 1. Crossings by transportation facilities and utility lines. 2. Parks, trails and pervious multi use paths. 3. Water-dependent uses, such as fish enhancement projects. 4. Restoration or enhancement of the stream bank, and bank stabilization projects. 5. A new single-family dwelling elevated without placement of fill on existing lots with less than 2,000 sq. ft. of land outside the 100-year flood plain as determined by site specific engineering, surveying, and hydrologic studies. 6. Expansion of existing dwellings in the 100-year flood plain.

<p>5. Removal of noxious weeds.</p> <p>6. Replacement of non-native vegetation with native vegetation.</p> <p>7. On-going activities such as lawn and garden maintenance.</p> <p>8. Removal of hazardous trees.</p> <p>9. Normal maintenance of existing public utilities and facilities.</p>	<p>7. Land divisions. All new lots created in the Flood Plain District must result in a minimum of 2,000 sq. ft. of land area outside of the area of special flood hazard to serve as a building envelope.</p>
---	--

B. Similar use determinations shall be made in conformance with the procedures in Chapter 4.8 - Interpretations.

2.10.400 Prohibited Uses. The following uses and activities are prohibited within the Flood Plain District or special flood hazard area, except as allowed in Table 2.10.300.A.:

- A. New dwellings on existing lots within areas of special flood hazard where 2,000 sq. ft. of area outside the area of special flood hazard is available for building.
- B. New construction, including accessory buildings, is prohibited.
- C. Clear cutting, scraping with motorized equipment, removal of root systems, or removal of native vegetation on stream banks.
- D. Any encroachment during construction.
- E. New impervious surfaces.
- F. Removal of native vegetation on stream banks excluding trimming of no more than approximately 25% of the vegetation.
- G. New clearing, grading, filling, land-disturbing activity or other “development”, other than for the purpose of replacing non-native vegetation with native vegetation, and for other restoration work that may be approved by the local administrator.
- H. Septic tanks and drain fields, dumping of any materials, hazardous or sanitary waste landfills, and receiving areas for toxic or hazardous waste or other contaminants.
- I. Subdivision and partitioning of land for residential purposes is prohibited if land is located entirely within the Flood Plain District or area of special flood hazard. All new lots created in the Flood Plain District or area of special flood hazard must result in a minimum of 2,000 sq. ft. of land area outside of the area of special flood hazard to serve as a building envelope.
- J. Modification of the stream channel, except for where necessary for bank stabilization and/ or fish habitat enhancement projects.
- K. Developments that would result in a rise of flood heights in the FEMA regulatory floodplain.

2.10.500 Review

- A. Development proposals within the Flood Plain District shall be reviewed under Type II procedure. Development approval within the Flood Plain District shall be obtained before construction or development begins within any area of special flood hazard as established by 2.10.200 of this Chapter. Approval shall be required for all structures, stream bank erosion control or enhancement projects, and development.
- B. Review Procedures. The Community Development Director shall administer this Chapter in consultation with the Building Official and the Public Works Director. They shall:
1. Review all development applications to determine that the application requirements of this Chapter have been satisfied.
 2. When base flood elevation data has not been provided by the Federal Emergency Management Agency (FEMA) Flood Insurance Map (FIRM) #41017C0245D, dated September 28, 2007 and associated Flood Insurance Study #19163CV000A, and any revision thereto, the City Engineer shall obtain, review and utilize any base flood elevation data and floodway data available from a Federal, State or other source in order to administer this Chapter.
 3. Where base flood elevation data is provided through the Flood Insurance Study or as specified in 2.10.200, 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.
 4. Maintain for public inspection all records pertaining to the provisions of this Section.
 5. Notify adjacent communities and the Division of State Lands prior to any alteration or relocation of a watercourse, and submit evidence of this notification to the Federal Emergency Management Agency.
 6. Require that a program of periodic inspection and maintenance be provided with the altered or relocated portion of a watercourse so that the flood carrying capacity of the watercourse is not diminished.
 7. 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).
- C. Floodplain development applications shall include the following information and be processed as follows:
1. A topographic survey is required for all lots or parcels subject to the land use permit. The survey in relation to mean sea level shall be established and stamped by a licensed surveyor or engineer depicting the 100-year flood plain in relation to site topography, structures, and proposed developments. Calculations used to determine the 100-year flood plain shall be provided.
 - a. If the 100-year flood plain on the subject lots or parcels is different than the 100-year flood plain depicted on the City's adopted FIRM maps, the applicant shall receive a Letter of Map Amendment (meets and bounds

LOMA or equivalent) from FEMA prior to the city approving development. Applications shall be considered incomplete until the city receives evidence a LOMA has been obtained.

2. A site plan drawn to scale showing the nature, location and dimensions and elevation referenced to mean sea level of the area in question, including existing and proposed structures and/or expansions, fill and removal, areas proposed for enhancement, storage of materials and drainage facilities. A cross section drawn to scale is also required, illustrating depths and proposed materials. This site plan shall include, at a minimum, existing and proposed site contours in relation to the base flood elevation, existing and proposed structures, drainage facilities, and an explanation of how anticipated erosion will be dealt with during and after construction of the use.
3. A letter of review from appropriate State and Federal agencies that the proposal has been reviewed by the agency. Agencies include, but are not limited to, the Division of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife.
4. A narrative describing why it is necessary to conduct the proposed use in the Flood Plain District.
5. The elevation of the lowest floor and of any basement floor for any dwelling unit or structure;
6. The elevation to which the structure is to be flood proofed, if applicable;
7. A description of the extent to which any watercourse will be altered or relocated as a result of proposed development and an explanation of how the flood carrying capacity within the altered or relocated portion of any watercourse will be maintained.
8. Certification by a registered professional engineer or architect that the flood proofing methods for any structure meet the flood proofing criteria established by the Federal Emergency Management Agency and within this Chapter.
9. Other elements or information requested by the Community Development Director or designee, which will assist in the evaluation of the proposed development and conformance with the applicable criteria.

2.1.600 Development Standards. The following standards apply to all development and land divisions within the Flood Plain District or area of special flood hazard in the City and its urbanizable areas.

- A. In all areas of special flood hazard within the City and its urbanizable area as determined in 2.10.200. where base flood elevation data has been provided, the following provisions apply to all new and reconstructed structures:
 1. Setbacks.
 - a. The purpose of setback requirements is to not encroach upon Whychus Creek and to protect structures from erosion and flooding while also allowing an economic use of the land.
 - b. The setback standards herein are to be used in combination with setback standards of the underlying district, with the more restrictive setbacks superseding the less restrictive setbacks.

- c. All portions of new structures shall be sited within a distance of 1/2 the depth of the lot, away from the area of special flood hazard, measuring from the lot line opposite of the area of special flood hazard. The depth of the lot shall be determined by averaging the side lot lines. For example, if a lot is 150 ft. deep, all new structures shall be within 75 ft. of the lot line opposite to Whychus Creek. Setback standards of the underlying district apply in addition to this general setback standard.
 - d. Existing dwellings may be expanded, but not towards Whychus Creek. Existing setbacks from dwellings to Whychus Creek shall not be decreased as a result of expansions.
 - e. These setback requirements seek to decrease risks to structures from erosion and flooding. Where the literal application of the setback standards conflict with the purposes of this Chapter, a Class C Variance may be used to allow placement of new structures to achieve this Chapter's purposes.
2. Elevating.
 - a. All new residential structures must be elevated so that the lowest floor (including a basement) is elevated to one foot above the Base Flood Elevation.
 - b. Fill is not to be used to elevate structures as it reduces the flood carrying capacity of the flood plain.
 3. Flood proofing.
 - a. All new non-residential structures and improvements to non-residential structures must be elevated so the lowest floor is one foot above the Base Flood Elevation.
 4. Construction materials and methods.
 - a. Structures shall meet the following requirements and City's adopted building codes as they pertain to flood-resistant construction, with the more restrictive provisions applying.
 - b. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - c. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - d. 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.
 - e. Foundations. Foundations for all substantial improvements and manufactured homes subject to 18 inches or less of flood water during a 100 year flood shall be as specified in the City's adopted Building Safety Codes. Foundations for substantial improvements and manufactured homes not in a mobile home park or subdivision subject to 18 inches or more of flood water during a 100 year flood or located within a designated

floodway shall be certified by an engineer to meet the following foundation requirements:

- i. Concrete footings sized for 1,000 p.s.f. soil pressure unless data to substantiate the use of higher values are submitted.
 - ii. Footings shall extend not less than 18 inches below the undisturbed natural grade or engineered fill and in no case less than the frost line depth.
 - iii. Reinforced concrete, reinforced masonry, or other suitably designed supporting systems to resist all vertical and lateral loads which may reasonably occur independently or combined.
- f. 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 flood-waters. Designs for meeting this requirement shall either be certified by an engineer or architect or shall meet or exceed the following minimum criteria:
- i. A minimum of two openings of equal size 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.
 - ii. The bottom of all openings shall be no higher than one foot above grade.
 - iii. Openings shall be located to allow unrestricted cross-flow of flood-waters through the enclosed area from one side to the other.
 - iv. Openings may be equipped with screens, louvers, or other coverings or devices if certified by an engineer or architect, provided that they permit the automatic entry and exit of flood-waters.
 - v. Be certified by an engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Chapter based on their development and/or review of the structural design, specifications and plans. The certifications shall be provided to the Building Official prior to approval of the foundation.
- g. Nonresidential structures that are elevated, not flood-proofed, shall meet the same standards for space below the lowest floor as specified in this Chapter.
- i. Elevating is not to be achieved by adding or building on fill.
- h. Anchoring. All substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- i. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

5. 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 systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into flood waters.
 - c. Existing on-site waste disposal systems shall be maintained located to avoid impairment to them or contamination from them during flooding.
6. Substantial damage and substantial improvement.
 - a. Any residential structure that has been substantially damaged from any cause, or will be substantially improved shall have the lowest floor, including basement, elevated to one foot above the base flood elevation and meet the requirements of this section.
 - b. Elevating is not to be achieved by adding or building on fill.
7. Manufactured Homes.
 - a. All manufactured homes that are substantially improved within the special flood hazard area as determined in 2.10.200.B or that have incurred substantial damage as the result of flood shall be elevated to a permanent foundation such that the lowest floor of the manufactured home is elevated to a height of one foot above the base flood elevation.
 - a. Elevating is not to be achieved by adding or building on fill.
 - b. All manufactured homes to be substantially improved on sites in an existing manufactured home park or subdivision within the special flood hazard area as determined in 2.10.200. that are not subject to the provisions of Subsection "a" above shall be elevated so that:
 - i. The lowest floor of the manufactured home is 1 ft. above the base flood elevation, or
 - ii. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.
 - iii. Elevating is not to be achieved by adding or building on fill.
 - c. Anchoring. All manufacture homes must 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.
8. Recreational vehicles.
 - a. Recreational vehicles which are located within the special flood hazard area as determined in 2.10.200. shall:
 - i. Be on the site for fewer than 180 consecutive days, or
 - ii. Be fully licensed and ready for highway use, or
 - iii. Elevated and anchored, and

- iv. Satisfy the review procedure of 2.10.500 of this Chapter.
- B. Regulatory floodway.
1. Development shall not encroach upon the FEMA regulatory floodway unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.
- C. Conditional Use Permits.
1. A conditional use permit in a Flood Plain District or area of special flood hazard shall not be approved unless all standards established by the Federal Emergency Management Agency and this Chapter have been met.
 2. A conditional use permit shall be based upon findings which relate to the property and existing and proposed structure(s) or development(s). They shall not pertain to the property owner, inhabitants, economic or financial circumstances.
- D. Subdivision and partition proposals, for properties not entirely within the Flood Plain District or area of special flood hazard shall have:
1. All new lots created result in a minimum of 2,000 sq. ft. of land area outside of the special flood hazard area to serve as building envelopes.
 2. Measures to minimize flood damage.
 3. Public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
 4. Adequate drainage provided to reduce exposure to flood damage.
 5. Measures to prevent erosion and where applicable, stream bank enhancement methods are incorporated into the subdivision design.

2.10.700 Criteria of Approval

- A. An application for development permit in the Flood Plain District or area of special flood hazard shall not be approved unless all standards established by this Chapter are addressed and findings are made by the Community Development Director or designee that each of the standards and criteria are satisfied. All proposals shall be evaluated according to the following criteria of approval:
1. The proposal does not reduce the effective base flood storage volume of the floodplain. Grading or any other activity which would reduce the effective storage volume shall be mitigated by creating compensatory storage on the site or off the site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time.
 2. The proposal minimizes threats to persons, property, and the natural flood carrying function of the area of special flood hazard.
 3. The proposal does not cause a net loss of hydraulic and geomorphic functions of the area of special flood hazard and associated waterways.

4. The proposal will not have the effect of increasing special flood hazards in other areas.
5. Stream bank erosion control and stream bank stabilization measures shall utilize the basic design guidelines and principles referenced in the report *Stream Bank Stabilization – Engineering Floodplain Report, City of Sisters, Whychus Creek,, Deschutes County, Oregon, July 2007, by PBS&J.*

2.10.800 Conditions of Approval. The Community Development Director or designee, upon review of the Flood Plain Review application, may require conditions of approval, including:

- A. Mitigation and/ or restoration, necessary to assure that the action will not degrade the area of special flood hazard's functions.
- B. Development of a plan for stream bank protection by a registered engineer or professional skilled in bio-engineering or stream bank enhancement.
- C. Consultation and review of plans by agencies including but not limited to such as the Oregon Department of Fish and Wildlife, Oregon Division of State Lands, U.S. Army Corps of Engineers, and Upper Deschutes Watershed Council.

2.10.900 Emergency Approval. In the case of an emergency, the Community Development Director or designee may issue development approval in writing.

- A. Emergency approval may be issued to protect existing stream bank or structures under immediate threat by flood or storm waters or for the prevention of channel changes that threaten immediate and significant loss of property.
- B. A representative of the City may inspect the project site to verify that an emergency condition exists and that the emergency action will not adversely impact water resources.
- C. Emergency approval shall be in effect for the time required to complete the authorized emergency action and shall not exceed 60 days.

2.10.1000 Post-Flood Substantial Damage Procedures

- A. Building inspectors from the City shall make post-flood inspections immediately after a flood event to determine damage to structures by the flooding.
- B. A list of damaged structures, which are not in compliance with the provisions of this Chapter, shall be reported to FEMA and the Oregon Department of Land Conservation and Development.
- C. The City shall notify affected property owners prior to submitting the damage report to FEMA.

2.10.1100 Periodic Floodplain Inspections and Enforcement Actions

City staff or its representatives shall make periodic inspections of floodplain areas both within the city limits and outside the city limits, but within the City's urban services area to establish that any activity involving the fill and/or removal of materials within the floodplain is being performed in compliance with an approved development permit. The staff shall prepare a field report listing non-complying conditions to be delivered to the Community Development Director. Upon receipt of the report, the Community

Development Director or designee shall proceed with enforcement actions including, but not limited to: the issuance of a Stop Work Order; the issuance of a citation; and the commencement of civil legal proceedings.