

TITLE 10  
CHAPTER 7

**SPECIAL DEVELOPMENT STANDARDS**

SECTION:

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**10-7-1: PURPOSE:** The purpose of this Chapter is to apply additional development standards to areas with wetlands or riparian areas and potential problem areas, such as natural hazards or soils which are particularly subject to erosion, landslide or seasonal surface water. Compliance with these standards is required in order to obtain a permit. The standards are intended to eliminate the danger to the health, safety or property of those who would live in potential problem areas and the general public and to protect areas of critical environmental concern; areas having scenic, scientific, cultural, or biological importance; and significant fish and wildlife habitat as identified through Goal 5: Open Spaces and Scenic, Historic, and Natural Resources, and Goal 17: Coastal Shorelands. (Amended Ord. No. 10, Series 2009)

**10-7-2: IDENTIFICATION OF WETLANDS & RIPARIAN AREAS & POTENTIAL PROBLEM AREAS:**

At minimum, the following maps shall be used to identify wetlands and riparian areas and potential problem areas:

- A. "Hazards Map", Florence Comprehensive Plan Appendix 7.
- B. "Soils Map", Florence Comprehensive Plan Appendix 7. (Ord. 625, 6-30-80)
- C. "Beaches and Dunes Overlay Zone." See Chapter 19 for overlay zone requirements. Where conflicts exist between that chapter and this one, the more restrictive requirements shall apply.
- D. 2013 City of Florence Significant Wetlands Map and 2013 City of Florence Significant Riparian Reaches Map in Appendix A of the 2013 Florence Area Wetlands and Riparian Inventory (2013 Inventory) and in the 2013 City of Florence Significant Wetlands and Riparian Corridors Plan (2013 Plan), in Comprehensive Plan Appendix 5.
- E. Other information contained in the plan or adopted by reference into the plan, or more detailed inventory data made available after adoption of the plan may also be used to identify potential problem areas. (Amended Ord. No. 10, Series 2009)

**10-7-3: DEVELOPMENT STANDARDS FOR POTENTIAL PROBLEM AREAS:** The following standards shall be applied to development in potential problem areas unless an approved Phase I Site Investigation Report or an on-site examination shows that the condition which was identified in the Comprehensive Plan or Overlay Zoning Map does not in fact exist on the subject property. These standards shall be applied in addition to any standards required in the Zoning Districts, Comprehensive Plan, and to any requirements shown to be necessary as a result of site investigation. Where conflicts or inconsistencies exist between these Development Standards, City Code, and the Comprehensive Plan, the strictest provisions shall apply unless stated otherwise.

- A. Special Flood Hazard Area: All uses proposed in the flood area shall conform to the provisions of the National Flood Insurance Programs.

- B. River Cutbanks: No building shall be permitted within fifty feet (50') from the top of a river cutbank.
- C. Active Dune Advancing Edge: No building shall be permitted within one hundred feet (100') of the leading edge of an active dune, except by Planning Commission approval where it can be shown by accepted engineering practices or treatment, or a City approved mitigation plan that no significant sand hazards are likely to occur. Applicant shall demonstrate that the proposed or existing mitigation plan will minimize potential sand hazards to both the proposed development and to nearby properties. Applicant shall also demonstrate that the mitigation plan will have no significant adverse effects on the site, adjacent property, the City's sole source aquifer and wildlife. (Ord. 24, Series 2008)
- D. Ocean Flooding, Tidal Flooding, Tsunami: (See subsection A above, Special Flood Hazard Area).
- E. Slopes Greater than Twelve Percent: For development on or adjacent to steep slopes, a foundation and grading design prepared by a registered engineer and approved by the City and addressing drainage and revegetation.
- F. Active Dune Sands: Open sand will require primary vegetative stabilization as with grasses and secondary stabilization with any of a variety of shrubs and trees excluding noxious plants in conjunction with any development, except where vegetative stabilization is prohibited on the property of State or Federal agencies, and it can be shown by accepted engineering practices or treatment, or a City approved mitigation plan that no significant sand hazards are likely to occur. Applicant shall demonstrate that the proposed or existing mitigation plan will minimize potential sand hazards to both the proposed development and to nearby properties. Applicant shall also demonstrate that the mitigation plan will have no significant adverse effects on the site, adjacent property, the City's sole source aquifer and wildlife. Stabilization may be required prior to development in cases where there are large unstabilized areas.
- G. Brallier and Heceta Soils: In general these soils are not suitable for development. Should development occur, structures would be built on pilings or fill as designed by a registered engineer.
- H. Yaquina Soils and Wet Areas (except significant wetlands and riparian areas identified in the 2013 Wetland and Riparian Inventory, as amended): In areas with seasonal standing water, construction of a drainage system and/or placement of fill material shall be required according to plans prepared by a registered engineer and approved by the City. (Ord. 625, 6-30-80; amd. Ord. 669, 5-17-82) (Amended Ord. 10, Series 2009)

**10-7-4: DEVELOPMENT STANDARDS FOR WETLANDS AND RIPARIAN AREAS:**

- A. Purpose: Significant wetlands, and their related wetland buffer zones, and significant riparian corridors provide hydrologic control of floodwaters; protect groundwater and surface water quality; provide valuable fish and wildlife habitat, including habitat for anadromous salmonids; improve water quality by regulating stream temperatures, trapping sediment, and stabilizing streambanks and shorelines; and provide educational and recreational opportunities. It is recognized that not all resources will exhibit all of these functions and conditions.

The purpose of this Subsection (FCC 10-7-4) is to protect significant wetlands, wetland buffer zones, and significant riparian corridors in order to:

1. Implement the goals and policies of the Comprehensive Plan;
2. Satisfy the requirements of Statewide Planning Goal 5 and ensure consistency with adopted City Stormwater requirements in Florence City Code Title 9 Chapter 5;
3. Safeguard the City's locally significant wetland and riparian areas, especially the flood control and water quality functions these areas provide for the community;

4. Safeguard fish and wildlife habitat;
5. Safeguard water quality and natural hydrology, to control erosion and sedimentation, and to reduce the adverse effects of flooding;
6. Safeguard the amenity values and educational opportunities for City's wetlands and riparian areas for the community; and
7. Improve and promote coordination among Federal, State, and local agencies regarding development activities near wetlands and riparian areas.

B. Applicability:

1. Affected Property: The procedures and requirements of the Significant Wetland and Riparian Area Standards:
  - a. Apply to any parcel designated as having a Significant Goal 5 Wetland or Significant Goal 5 Riparian Corridor, and Significant Wetland Buffer Zones, as defined in FCC Title 9 Chapter 5 and FCC Title 10 Chapter 2. Significant Goal 5 wetlands and significant riparian corridors are mapped in Appendix A of the 2013 Inventory and Tables 2.1 and 2.2 and the Significant Wetland and Riparian Reaches Maps in the 2013 City of Florence Significant Wetlands and Riparian Corridors Plan (2013 Plan), as amended, in Comprehensive Plan Appendix 5, which is adopted into this Code by reference.
  - b. Apply in addition to the stormwater standards in FCC 9-5-3-3-F (incorporated herein) and the standards of the property's zoning district, except that the required setbacks in this subsection are not in addition to the required setbacks in the underlying zone. Where conflicts exist between this subsection and the underlying zoning district, this subsection shall apply.
2. Applicability to properties adjacent to the side channel of Munsel Creek (Reach RMC- Cs in the 2013 Inventory). These properties are subject to special setback reductions and provisions, as set out below, due to the unique development patterns and history of the area. These special provisions are supported by, and explained in, the Economic, Social, Environmental, and Energy (ESEE) Analysis and Limited Protection Program (ESEE Analysis) in Chapter 3 of the 2013 City of Florence Significant Wetlands and Riparian Corridors Plan in Appendix 5 of the Comprehensive Plan. The ESEE Analysis is adopted as part of the Comprehensive Plan and is incorporated herein by reference.
3. Applicability to public facilities in significant wetlands. Public facilities (transportation, water, wastewater, and stormwater) that are included in the City's Public Facility Plan, as amended, are exempt from the requirements of this subsection provided that permitted uses are designed and constructed to minimize intrusion into the riparian area; disturbed areas are replanted with native vegetation; and all required federal and state permits are obtained. This exemption is authorized by the ESEE Analysis in Appendix 5 of the Comprehensive Plan. See Section, "Exemptions," below.

C. Activities Subject to Standards and Requirements: Activities subject to the Special Development Standards in this subsection shall include the following, unless specifically exempted by Code:

1. Partitioning and subdividing of land;
2. New structural development;
3. Exterior expansion of any building or structure, or increase in impervious surfaces or storage areas;

4. Site modifications including grading, excavation or fill (as regulated by the Oregon Department of State Lands and the Army Corps of Engineers), installation of new above or below ground utilities, construction of roads, driveways, or paths, except as specifically exempted in the section “exemptions” below;
5. The cutting of trees and the clearing of any native vegetation within a Significant Wetland, Wetland Buffer Zone, or Riparian Corridor beyond that required to maintain landscaping on individual lots existing on the effective date of this title.

D. Exemptions:

1. Only the following uses and activities in significant riparian corridors or wetland buffer zones are exempt from these Significant Wetland and Riparian Area Standards, provided: the uses and activities are designed and constructed to minimize intrusion into the buffer zone; disturbed areas are replanted with native vegetation; and all required federal and state permits are obtained:
  - a. Replacement of lawfully created existing structures with structures in the same location that do not disturb additional wetland buffer zone or significant riparian surface area. All Coast Village structures existing on September 5, 2013 are grandfathered and qualify as “lawfully created existing structures” for purposes of this subsection. This provision supersedes the provisions for non-conforming structures in FCC 10-8.
  - b. Installation or maintenance of public and private facilities and utilities (such as transportation, water, wastewater, and stormwater, electric, gas, etc.) in riparian areas.
  - c. The sale of property.
  - d. Temporary emergency procedures necessary for the safety or protection of property.
  - e. All water-related and water-dependent uses as defined in the Definitions in the Florence Code Title 10 Chapter 2.
  - f. Removal of non-native vegetation and replacement with native plant species.
  - g. Removal of vegetation necessary for the development of water-related or water-dependent uses.
  - h. Public facilities identified in the City’s Public Facility Plan, in Appendix 11 of the Comprehensive Plan, as amended, that are installed in significant wetlands, provided that the facilities are designed and constructed to minimize intrusion into the wetland; disturbed areas are replanted with native vegetation; and all required federal and state permits are obtained.

E. Agency Review: Decisions made by the City of Florence under this title do not supersede the authority of the state or federal agencies which may regulate or have an interest in the activity in question. It is the responsibility of the land owner to ensure that any other necessary state or federal permits or clearances are obtained. In particular, state and federal mitigation requirements for impacts associated with approved water-related or water-dependent uses may still be required.

F. General Development Standards and Requirements: When development is proposed that is subject to these standards, the property owner is responsible for the following. Figure 1 below is a cross section illustrating terms used in the discussion of wetland and riparian setbacks defined in Oregon Statewide Planning Goal 5.

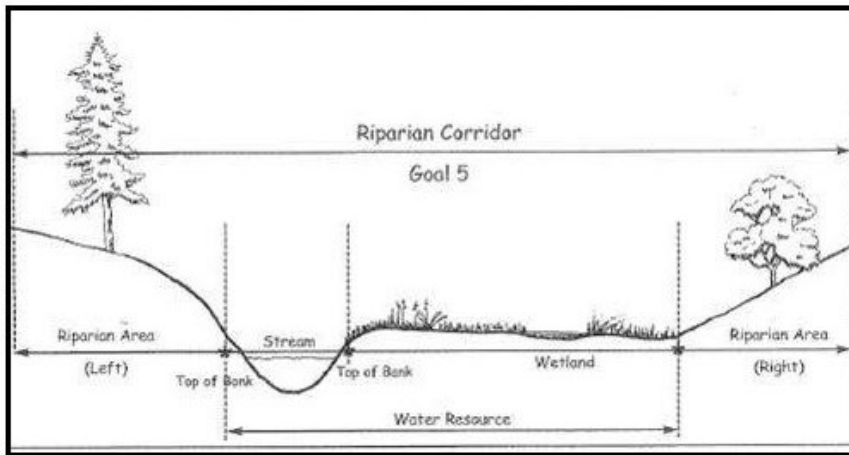


Figure 1: Downstream cross section illustrating terms used in Statewide Planning Goal 5. Source: *Urban Riparian Inventory and Assessment Guide*, Oregon Department of State Lands, 1998.

1. Determination of Significant Wetland and Riparian Area Boundaries.
  - a. For the purpose of showing the boundary of a significant wetland on a site plan, property owners may choose one of the following options:
    - i. Hire a Qualified Professional to do the delineation and have the delineation approved by the Oregon Department of State Lands (DSL); or
    - ii. Hire a Qualified Professional to do the delineation but do not request DSL approval of the delineation. The Qualified Professional must have performed prior wetland delineations that were approved by DSL; or
    - iii. If the site plan shows the proposed development is outside the 50 foot Stormwater Buffer Zone, the wetland boundaries shown on the adopted Local Wetland Inventory (LWI) Map can be used to determine the wetland boundary for this purpose.
  - b. For significant riparian corridors, the width of the corridor boundary is the “significant riparian width” in Table 2.2 of the 2013 City of Florence Significant Wetlands and Riparian Corridor Plan in Comprehensive Appendix 5.
  - c. For significant riparian corridors, the boundaries of the riparian corridor will be measured and shown on an approved site plan. The City shall maintain maps of regulated riparian areas, and make them available to the public. These maps will be used to identify the extent of the riparian area unless the applicant can demonstrate through detailed inventory information (including maps, photos, and Lane County aerial photos showing the location and species of vegetation growing in the disputed area) that the city’s maps are in error. For purposes of making these measurements, the following shall apply:
    - i. Riparian buffer zones are measured horizontally from the top of bank. The top of the bank is the highest point at which the bank meets the grade of the surrounding topography, characterized by an abrupt or noticeable change from a steeper grade to a less steep grade, and, where natural conditions prevail, by a noticeable change from topography or vegetation primarily shaped by the presence and/or movement of the water to topography not primarily shaped by the presence of water. Where there is more than one such break in the grade, the uppermost shall be considered the top of bank.

- ii. If the top of bank is not identifiable, the riparian buffer zones are measured horizontally from the line of ordinary high water. In a given stream, the line of ordinary high water is the line on the bank or shore to which seasonal high water rises annually and identified in the field by physical characteristics that include one or more of the following:
  - a. A clear, natural line impressed on the bank
  - b. Changes in the characteristics of soils
  - c. The presence of water-borne litter and debris
  - d. Destruction of terrestrial vegetation

If reliable water level data are available for 3 or more consecutive previous years, the line of ordinary high water can be considered the mean of the highest water level for all years for which data are available.

- 2. Preparation and submission of a site plan (vegetation clearing permits are also subject to the submission requirements in FCC Title 4 Chapter 6) that shows:
    - a. The wetland boundary or the top of bank of the riparian corridor,
    - b. The significant riparian corridor width or the wetland buffer zone,
    - c. The footprint of the proposed structure measured from the riparian corridor boundary or wetland buffer zone edges,
    - d. Any requested setback adjustments as measured from the edge of the wetland or riparian corridor boundary,
    - e. The type and location of dominant existing native plants that would be displaced, and
    - f. The type of native plants to be planted and the location where they will be replanted.
  - 3. It is prohibited to permanently alter a significant wetland by: the placement of structures or impervious surfaces; or by the removal of native vegetation; or by grading, excavation, placement of fill, or vegetation removal (other than perimeter mowing and other cutting necessary for hazard prevention), except as follows:
    - a. Where full protection of the Significant Wetland renders a property unbuildable, as defined in the definitions in Title 10 Chapter 2 of this Code; or
    - b. Public facilities identified in the City's Public Facility Plan, Appendix 11 of the Comprehensive Plan, as amended, may be installed in significant wetlands or riparian areas, provided that the facilities are designed and constructed to minimize intrusion into the wetland or riparian are; disturbed areas are replanted with native vegetation; and all required federal and state permits are obtained.
- G. Stormwater Quality: As provided in FCC 9-5-5-3-F and the Code Definitions in FCC 10-2, significant wetlands over ½ acre and significant streams are "sensitive areas" that shall be protected by a buffer zone of native, undisturbed vegetation. The outer boundary of the buffer shall be determined by a minimum 50-foot setback from the edge of the significant

wetland; for significant riparian areas, the buffer zone shall be the significant riparian width identified in the 2013 Inventory and 2013 City of Florence Significant Wetlands and Riparian Corridors Plan. The width and nature of protection required within the buffer may change as the Endangered Species Act and other state and federal regulations are promulgated. The City requires that the buffer width meet all state and federal requirements.

No land disturbing activities, structures, development and construction activities, gardens, lawns, application of chemicals, pet wastes, dumping of any kind of materials shall be permitted within the buffer zone, except as noted below:

1. Roads, pedestrian, or bike paths crossing the buffer from one side to the other in order to provide access to or across the sensitive area.
  2. A pedestrian or bike path constructed within a buffer and parallel to a sensitive area shall have the buffer widened by the width of the path if the path is constructed of impervious material.
  3. Pedestrian or bike paths shall not exceed 10-feet in width.
  4. Utility/service infrastructure construction (i.e., storm, sanitary sewer, water, phone, gas, cable, etc.) If approved by the City Manager or his/her designee.
  5. Measures to remove or abate hazards, nuisance, or fire and life safety violations as approved by the City.
  6. Enhancement of the riparian corridor for water quality or quantity benefits, fish, or wildlife habitat as approved by the City and other appropriate regulatory authorities.
  7. Water quality facilities planted with appropriate native vegetation may encroach into the buffer area as approved by the City and other appropriate authorities.
- H. Additional Statewide Planning Goal 5 exceptions: The following exceptions are in addition to the exceptions in G, above. Consistent with Statewide Planning Goal 5 [OAR 660-023-0090 (8) (a)], the permanent alteration of significant riparian areas by grading or the placement of structures or impervious surfaces is prohibited, except for the following uses, provided they are designed and constructed to minimize intrusion into the riparian area:
1. Water-related and water-dependent uses and removal of vegetation necessary for the development of water-related or water-dependent uses;
  2. Replacement of existing structures with structures in the same location that do not disturb additional riparian surface area; and
  3. Removal of non-native vegetation and replacement with native plant species.
- I. Removal of native vegetation: In accordance with Goal 5, removal of vegetation from a significant riparian corridor is prohibited, except as otherwise provided in these Wetland and Riparian Standards and in FCC 4-6-3 and for the following:
1. Removal of non-native vegetation and replacement with native plant species. The replacement vegetation shall cover, at a minimum, the area from which vegetation was removed, shall maintain or exceed the density of the removed vegetation, and shall maintain or improve the shade provided by the vegetation.
  2. Removal of vegetation necessary for the development of approved water-related or water-dependent uses or for the continued maintenance of dikes, drainage ditches, or other stormwater or flood control facilities. Vegetation removal shall be kept to the minimum necessary.

3. Trees in danger of falling and thereby posing a hazard to life or property may be removed, following consultation and approval from the Planning Director. If no hazard will be created, the Planning Department may require these trees, once felled, to be left in place in the Significant Wetland or Riparian Area.
4. The control or removal of nuisance plants should primarily be by mechanical means (e.g. hand-pulling). If mechanical means fail to adequately control nuisance plant populations, a federally approved herbicide technology for use in or near open water is the only type of herbicide that can be used in a Significant Riparian Corridor. Pre-emergent herbicides or auxin herbicides that pose a risk of contaminating water shall not be used. Herbicide applications are preferred to be made early in the morning or during wind-less periods at least 4 hours before probable rainfall. Any herbicide use must follow the label restrictions, especially the cautions against use in or near open water.

J. Special Provisions for the Munsel Creek Side Channel: The following special provisions apply to properties in the significant riparian corridor of the Munsel Creek Side Channel (Reach RMC-Cs in Table 2.2 of the 2013 City of Florence Significant Wetlands and Riparian Corridors Plan). These provisions are in addition to, or provide relief from, the other standards in this subsection, and where conflicts exist, this section shall prevail.

1. In addition to the other setback adjustments and Variances allowed by this subsection, a 50% setback adjustment to the required 50-foot significant riparian width for properties along the Munsel Creek Side Channel will be permitted in order to allow new or expanded development to build up to 25 feet from the top of bank of the creek, as long as any native plants disturbed by the development are replaced elsewhere in the buffer zone, subject to the following exceptions and procedures:
  - a. Properties in Florentine Estates PUD that were granted a reduced setback by the Planning Commission prior to October 5, 2013 are deemed to comply with the standards in this subsection and do not need to apply for this setback adjustment.
  - b. The setback adjustment for other affected properties shall be granted through the Type II Review process in 10-1-1-6-2.
  - c. The applicant shall be granted the setback reduction upon demonstration that any native vegetation displaced by the development shall be replanted in the remaining buffer zone (shrub for shrub, tree for tree, etc.)
  - d. The applicant is not required to retain a professional for this application but a qualified professional may help a property owner identify displaced native plants and show how they will be replanted. To provide technical assistance, the City will provide the applicant with a native plant guide. Staff from the Siuslaw Watershed Council and Soil and Water Conservation District are available to provide property owners with technical assistance with native plant identification and guidance on replanting.

K. Setback Adjustments: The following reductions in setbacks shall be allowed for properties affected by the significant wetland and riparian area standards as set out below:

1. Eligibility for setback adjustment. Property owners affected by these significant wetland and riparian corridor standards shall be eligible for setback adjustments as follows:
  - a. Single family dwellings: when the significant wetland or significant riparian corridor standard or requirement is such that no contiguous space exists outside the setback that allows for a dwelling unit at least 50 feet by 27 feet.



- b. For the Munsel Creek side channel: the “required setback” for the purpose of eligibility for the setback adjustment is the reduced setback allowed in subsection “J” above.
  - 2. If the required setback or standard for the significant wetland or riparian corridor is such that no contiguous space exists outside the setback that allows for a dwelling unit at least 50 feet by 27 feet, then a primary dwelling, this size or less, shall be permitted to intrude into the setback area in accordance with the standards of this subsection. Any Code requirements of the applicable zoning district (such as required garages) that would necessitate intrusion into additional riparian area shall not apply.
  - 3. If the proposed primary dwelling will be more than 20 feet from a significant wetland or stream, the adjustment application shall use the Type II Review process in FCC 10-1-1-6-2.
  - 4. If a proposed primary dwelling will be built within 20 feet of a significant wetland or stream, a Hardship Variance from the Planning Commission shall be required in accordance with Florence City Code Title 10 Chapter 5.
- L. Hardship Variances: A variance to the provisions of this subsection shall be granted by the Planning Commission in accordance with the procedures in Florence City Code Title 10 Chapter 5 only as a last resort and is only considered necessary to allow reasonable economic use of the subject property. The property must be owned by the applicant and not created after the effective date of this title.
  - 1. Eligibility. An application for a hardship variance from the provisions of this subsection shall be available upon demonstration of the following conditions:
    - a. Siting of a primary dwelling 50 feet by 27 feet or less requires intrusion into the significant wetland buffer zone or significant riparian corridor within 20 feet of a significant wetland or stream; or
    - b. Strict adherence to the applicable standards or requirements of this subsection would effectively preclude a use of the parcel that could be reasonably expected to occur in the zone and that the property owner would be precluded a substantial property right enjoyed by the majority of landowners in the vicinity.
    - c. Due to unique circumstances and historic development patterns outside the control of the property owners, the Variance fee for this application shall be waived for affected Coast Village properties.
  - 2. The following additional standards shall apply:
    - a. Demonstration that the intrusion into the setback must be the minimum necessary;
    - b. Demonstration that any native vegetation displaced by the development will be replanted in the remaining significant wetland buffer zone or riparian corridor. The applicant is not required to retain a professional for this application but a qualified professional may help a property owner identify displaced native plants and show how they will be replanted. To provide technical assistance, the City will provide the applicant with a native plant guide; staff from the Siuslaw Watershed Council and Soil and Water Conservation Service are also available to provide property owners with technical assistance with native plant identification and guidance on replanting.

- c. Permanent alteration of the Significant Wetland or Riparian Area by an action requiring a variance is subject any mitigation requirements imposed by federal and state permitting authorities.
- d. In granting a Variance, the Planning Commission shall impose conditions of approval that address all of the following criteria:
  - i. The site plan and application shall document the location of the impact, the existing conditions of the resource prior to the impact, and detailed planting plan for the approved setback area with dominant native plant species and density, and a narrative describing how the impacted resource will be replaced and approved setback area restored.
  - ii. Invasive vegetation shall be removed from, and native vegetation planted in, the approved setback area, with a minimum replacement ratio of 1:1 for the impacted area.
  - iii. Herbicides and pesticides not approved for use in buffer zones or riparian areas is prohibited in the approved setback area.
  - iv. All vegetation planted within the approved setback area shall be native to the region. In general, species to be planted shall replace those impacted by the development activity, i.e. trees must replace trees, brush must replace brush, and, within reason, like plants must replace like plants (i.e., dominant plant species).
  - v. Trees shall be planted at a density not less than the density in place prior to development.
  - vi. The property owners will work with available federal, state, and local agencies, such as the Siuslaw Watershed Council, the Siuslaw Soil and Water Conservation District, Oregon Department of Fish and Wildlife (ODFW), Department of State Lands (DSL), Salmon Trout Enhancement Program (STEP) to implement practices and programs to restore and protect the riparian area.

M. Significant wetland and riparian corridor enhancement incentives:

1. Enhancement of Significant Wetland Buffer Zones or Riparian Corridors is encouraged, including: riparian or in-channel habitat improvements, non-native plant control, and similar projects which propose to improve or maintain the quality of a Significant Wetland or Riparian Area; however, no enhancement activity requiring the excavation or filling of material in a wetland or jurisdictional stream shall be allowed unless all applicable State and Federal permits have been granted.
2. Incentives shall be provided to improve the continuity of Significant Riparian Corridors in situations where lots would be rendered unbuildable by the setback, as defined in the Definitions in FCC Title 10 Chapter 2. Such incentives may include: reducing the required front yard setback, alternative access, vacating right-of-way, property line adjustments, re-orientation of lots, transfer of development rights (if feasible), and density bonuses, among others. The resulting development will conform, to the maximum extent practical, to the general development patterns in the vicinity of the affected lot.
3. These incentives may also be provided to properties that are severely impacted by the setback when doing so will result in enhancement of the significant wetland, wetland buffer zone, or significant riparian corridor.

- N. Inventory Map Corrections: The Planning Director may correct the location of a wetland or riparian boundary shown on the Local Wetland and Riparian Areas Inventory Maps when it has been demonstrated by a property owner or applicant that a mapping error has occurred and the error has been verified by DSL. Wetland delineations verified by DSL shall be used to automatically update and replace the City's Local Wetland Inventory mapping. No variance application shall be required for map corrections where approved delineations are provided.

#### **10-7-5: DEVELOPMENT STANDARDS FOR TSUNAMI HAZARD OVERLAY AREAS**

- A. Purpose. The purpose of the Tsunami Hazard Overlay Zone is to increase the resilience of the community to a local source (Cascadia Subduction Zone) tsunami by establishing standards, requirements, incentives, and other measures to be applied in the review and authorization of land use and development activities in areas subject to tsunami hazards. The standards established by this section are intended to limit, direct and encourage the development of land uses within areas subject to tsunami hazards in a manner that will:

1. Reduce loss of life;
2. Reduce damage to private and public property;
3. Reduce social, emotional, and economic disruptions; and
4. Increase the ability of the community to respond and recover.

Significant public and private investment has been made in development in areas which are now known to be subject to tsunami hazards. It is not the intent or purpose of this section to require the relocation of or otherwise regulate existing development within the Tsunami Hazard Overlay Zone. However, it is the intent of this section to control, direct and encourage new development and redevelopment such that, over time, the community's exposure to tsunami risk will be reduced.

- B. Definitions. Terms used in this subsection are defined within FCC 10-2-13.

- C. Applicability of Tsunami Hazard Overlay Zone. All lands identified as subject to inundation from the Extra Extra Large (XXL) magnitude local source tsunami event as set forth on the applicable Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the requirements of this section.

- D. Uses. In the Tsunami Hazard Overlay Zone, except for the prohibited uses set forth in FCC 10-7-5-E, all uses permitted pursuant to the provisions of the underlying zone may be permitted, subject to the additional requirements and limitations of this section.

- E. Prohibited Uses. Unless authorized in accordance with FCC 10-7-5-G, the following uses are prohibited in the specified portions of the Tsunami Hazard Overlay Zone:

1. In areas identified as subject to inundation from the Extra Extra Large (XXL) magnitude local source tsunami event as set forth on the Tsunami Inundation Map (TIM), the following uses are prohibited:
  - a. Hospitals and other medical facilities having surgery and emergency treatment areas.
  - b. Fire and police stations.
  - c. Structures and equipment in government communication centers and other facilities required for emergency response.
  - d. Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers.
  - e. Buildings for colleges or adult education schools with a capacity of greater than 500 persons.

f. Jails and detention facilities.

2. In areas identified as subject to inundation from the Medium (M) magnitude local source tsunami event as set forth on the Tsunami Inundation Map (TIM), the following uses are prohibited:

a. Tanks or other structures containing, housing or supporting water or fire- suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures.

b. Emergency vehicle shelters and garages.

c. Structures and equipment in emergency preparedness centers.

d. Standby power generating equipment for essential facilities.

e. Covered structures whose primary occupancy is public assembly with a capacity of greater than 300 persons.

f. Medical facilities with 50 or more resident, incapacitated patients.

g. Residential uses, including manufactured home parks, of a density exceeding 10 units per acre.

h. Hotels or motels with more than 50 units.

3. Notwithstanding the provisions of FCC 10-8, the requirements of this subsection shall not have the effect of rendering any lawfully established use or structure nonconforming.

F. Use Exceptions. A use listed in FCC 10-7-5-E may be permitted upon authorization of a Use Exception in accordance with the following requirements:

1. Public schools may be permitted upon findings that there is a need for the school to be within the boundaries of a school district and fulfilling that need cannot otherwise be accomplished.

2. Fire or police stations may be permitted upon findings that there is a need for a strategic location.

3. Other uses prohibited by FCC 10-7-5-E may be permitted upon the following findings:

a. There are no reasonable, lower-risk alternative sites available for the proposed use;

b. Adequate evacuation measures will be provided such that life safety risk to building occupants is minimized; and,

c. The buildings will be designed and constructed in a manner to minimize the risk of structural failure during the design earthquake and tsunami event.

4. Applications, review, decisions, and appeals for Use Exceptions authorized by this subsection shall be in accordance with the requirements for a Type III procedure as set forth in FCC 10-1-1-6-3.

G. Evacuation Route Improvement Requirements. Except single family dwellings on existing lots and parcels, all new development, substantial improvements and land divisions in the Tsunami Hazard Overlay Zone shall incorporate evacuation measures and improvements, including necessary vegetation management, which are consistent with and conform to the adopted Evacuation Route Plan. Such measures shall include:

1. On-site improvements:

- a. Improvements necessary to ensure adequate pedestrian access from the development site to evacuation routes designated in the Evacuation Route Plan in all weather and lighting conditions.
  - b. Frontage improvements to designated evacuation routes that are located on or contiguous to the proposed development site, where such improvements are identified in the Evacuation Route Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.
  - c. Where identified in the Evacuation Route Plan as the only practicable means of evacuation, tsunami evacuation structure(s) of sufficient capacity to accommodate the evacuation needs of the proposed development.
2. Off-site improvements: Improvements to portions of designated evacuation routes that are needed to serve, but are not contiguous to, the proposed development site, where such improvements are identified in the Evacuation Route Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.
  3. Evacuation route signage consistent with the standards set forth in the Evacuation Route Plan. Such signage shall be adequate to provide necessary evacuation information consistent with the proposed use of the site.
  4. Evacuation route improvements and measures required by this subsection shall include, at a minimum, the following:
    - a. Improved streets and/or all-weather surface paths of sufficient width and grade to ensure pedestrian access to designated evacuation routes in all lighting conditions;
    - b. Improved streets and paths shall provide and maintain horizontal clearances sufficient to prevent the obstruction of such paths from downed trees and structure failures likely to occur during a Cascadia earthquake; and
    - c. Such other improvements and measures identified in the Evacuation Route Plan.
  5. When it is determined that improvements required by this subsection cannot be practicably accomplished at the time of development approval, payment in lieu of identified improvements shall be provided in accordance with.

#### H. Tsunami Evacuation Structures

1. All tsunami evacuation structures shall be of sufficient height to place evacuees above the level of inundation for the XXL local source tsunami event.
2. Tsunami evacuation structures are not subject to the building height limitations of this chapter.

#### I. Flexible Development Option

1. The purpose of the Flexible Development Option is to provide incentives for, and to encourage and promote, site planning and development within the Tsunami Hazard Overlay Zone that results in lower risk exposure to tsunami hazard than would otherwise be achieved through the conventional application of the requirements of this chapter. The Flexible Development Option is intended to:
  - a. Allow for and encourage development designs that incorporate enhanced evacuation measures, appropriate building siting and design, and other features that reduce the risks to life and property from tsunami hazard; and
  - b. Permit greater flexibility in the siting of buildings and other physical improvements and in the creation of new lots and parcels in order to allow the full realization of permitted development while reducing risks to life and property from tsunami hazard.

2. The Flexible Development Option may be applied to the development of any lot, parcel, or tract of land that is wholly or partially within the Tsunami Hazard Overlay Zone.
3. The Flexible Development Option may include any uses permitted outright or conditionally in any zone, except for those uses prohibited pursuant to FCC 10-7-5-D.
4. Overall residential density shall be as set forth in the underlying zone or zones. Density shall be computed based on total gross land area of the subject property, excluding street right-of-way.
5. Yards, setbacks, lot area, lot width and depth, lot coverage, building height and similar dimensional requirements may be reduced, adjusted or otherwise modified as necessary to achieve the design objectives of the development and fulfill the purposes of this section.
6. Applications, review, decisions, and appeals for the Flexible Development Option shall be in accordance with the requirements for a Type III procedure as set forth in FCC 10-1-1-6-3.
7. Approval of an application for a Flexible Development Option shall be based on findings that the following criteria are satisfied:
  - a. The applicable requirements of sub-paragraphs 2 and 4 of this subsection are met; and
  - b. The development will provide tsunami hazard mitigation and/or other risk reduction measures at a level greater than would otherwise be provided under conventional land development procedures. Such measures may include, but are not limited to:
    - i. Providing evacuation measures, improvements, way finding techniques and signage at a level greater than required by subsection F of this section;
    - ii. Providing tsunami evacuation structure(s) which are accessible to and provide capacity for evacuees from off-site;
    - iii. Incorporating building designs or techniques which exceed minimum structural specialty code requirements in a manner that increases the capacity of structures to withstand the forces of a local source tsunami; and
    - iv. Concentrating or clustering development in lower risk portions or areas of the subject property, and limiting or avoiding development in higher risk areas.

**10-7-6: SITE INVESTIGATION REPORTS (SIR):**

- A. Areas identified in Section 2 and 3 above, are subject to the site investigation requirements as presented in "Beach and Dune Techniques: Site Investigation Reports by Wilbur Ternyik" from the Oregon Coastal Zone Management Association's *Beaches and Dunes Handbook for the Oregon Coast* (OCZMA Handbook), Appendix 18 of the Florence Comprehensive Plan as modified by the City of Florence. No development permit (such as building permit or land use permit) subject to the provisions of this Title may be issued except with affirmative findings that:
  1. Upon specific examination of the site utilizing a Phase I Site Investigation Report (the checklist from the OCZMA Handbook, as modified by the City of Florence), it is found that the condition identified on the "Hazards Map" or "Soils Map" or "Beaches and Dunes Overlay Zone" or other identified problem area does not exist on the subject property; or
  - 1-2. As demonstrated by the Phase II Site Investigation Report that harmful effects could be mitigated or eliminated through, for example, foundation of structural engineering, setbacks or dedication of protected natural areas. (Amended by Ord. No. 10, Series 2009)

Site investigation requirements may be waived where specific standards, adequate to eliminate the danger to health, safety and property, have been adopted by the City. This exception would apply to flood-prone areas, which are subject to requirements of the National Flood Insurance Program and other problem areas which may be adequately protected through provisions of the Building Code. (Ord. 669, 5-17-82)

B. Permit Fee: A fee to offset the cost of time required to investigate and prepare Findings may be set by Council Resolution.

C. General Requirements for Phase II Site Investigation Reports shall include at least the following information. Additional information, commensurate with the level of hazard and site conditions shall be submitted.

1. Identification of potential hazards to life, proposed development, adjacent property, and the natural environment which may be caused by the proposed development.
2. Mitigation methods for protecting the subject property and surrounding areas from each potential hazard.
3. Acceptable development density.
4. Identification of soils and bedrock types.
5. Identification of soil depth.
6. Water drainage patterns.
7. Identification of visible landslide activity in the immediate area.
8. History of mud and debris flow.
9. In areas prone to landslide, mudflow and where slopes exceed 25%, reports shall identify the orientation of bedding planes in relation to the dip of the surface slope.
10. Recommendations for removal, retention, and placement of trees and vegetation.
11. Recommendations for placement of all structures, on site drives, and roads.
12. Recommendations for protecting the surrounding area from any adverse effects of the development. (Amended by Ord. No. 10, Series 2009)

D. Specific Standards for Phase II Site Investigation Reports will be determined on the basis of the information provided in the Phase I Site Investigation Report. At a minimum, specific standards shall address the following (may include more than one category listed below):

1. The SIR Phase II - Geologic Report shall follow the "Guidelines for Preparing Engineering Geologic Reports in Oregon" as adopted by the Oregon State Board of Geologist Examiners or shall meet the requirements for Site Investigation Reports as required by the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS). The SIR Phase II – Geologic Report shall address the following:
  - a. An explanation of the site and scope of the study area (e.g. subdivision, by lot specific, or for public improvements)
  - b. An explanation of the degree the condition affects the property use in question;
  - a-c. An explanation of the measures to be employed to minimize detrimental impacts associated with the condition;

- d. An explanation of the condition-associated consequences the development and the loss-minimizing measures will have on the surrounding properties.
- 2. SIR Phase II dealing with Beach or Dune areas shall include the items as listed in the OCZMA Handbook, Implementation Techniques, Section III that begins on page 7.
  - a. Due to the sandy soils and the fragile nature of the vegetative covering, care shall be taken during any proposed construction in beaches and dune areas to minimize the amount of grading, excavation, removal of trees and other native vegetation in order to insure the stability of the soils.
  - b. All open sand area (pre-existing or newly created) shall be planted or stabilized as soon as practicable after construction is completed.
  - c. Using accepted re-vegetation techniques, sand areas shall be returned to their previous level of stability or to at least a conditionally stable level, following completion of construction. For large parcels or tracts, stabilization of the entire area may not be necessary as determined after consideration of a Site Investigation Report.
  - d. During extended construction periods, temporary sand stabilization measures shall be employed to minimize sand movement and erosion caused by the removal of groundcover and soil.
- 3. Slopes in the 12% to 25% range: Determine the presence of soil creep, fills, or signs of past instability. If hazards are present, engineering recommendations shall be provided. If conditions require recommendations for foundation construction outside of the Building Code (IBC), those recommendations shall be provided by an appropriately qualified professional engineer. If thorough examination of the site determines that no hazards are present, documentation by an appropriately qualified professional.
- 4. Slopes greater than 25%:
  - a. Subsurface exploration of areas above, below, and alongside known or suspected slides
  - b. Accurate identification and measurement of the limits of the slide mass
  - c. Identification of the stability of the slide mass and the mechanics of slide movement.
  - d. Identification of the orientation of bedding planes in relation to the dip of the surface slope
  - e. A site specific grading and erosion control plan for site stabilization and construction
  - f. The methodology for determining the site stabilization plan
  - g. Recommendation of suitable setbacks, keeping in mind the anticipated life of the structure or development.
- 5. Foredunes:
  - a. Identification of a surveyed mean high tide line
  - b. Determination of the ocean shore vegetation line



- c. Average annual rate that the shoreline is projected to migrate landward due to climate change (sea level rise, feet/year and increased storm intensity) and methodology used.
- d. Historic stability of beaches in the general area
- e. Life expectance of the structure
- f. Elevation of the structure
- g. Projected dune stabilization to protect site from wave action and methodology
- h. History and projection of ocean flooding and methodology

6. Properties along the Siuslaw River Estuary:

- a. Angle of repose for bluff material
- b. Mean high tide, and highest measured tide
- c. Extent of recent and historical cutbank, length of area and height of cut
- d. Area of wave overtopping and furnishing photographs or other evidence
- e. Current and historic stability of riverbank and rates of erosion in general area
- f. Projected rate of erosion and methodology
- g. Environmental resources present
- h. Impacts to be expected
- i. Description and photographs of current vegetation

7. Riprap or other Shoreland protective structures:

- a. Signed certification by the engineer or geologist that the protective structure shall withstand the life of the development that it is protecting; or with the property maintenance plan, the structure shall withstand the life of the development.
- b. Once the protective structure is competed the engineer or geologist shall provide a final summary that the protective structure was built according to the submitted plan.

8. Soils: The Site Investigation Report shall address the following development constraints for the soil types.

- a. Brallier - These are wetlands which should not be developed due to their resource value and severe development constraints.
- e.b. Dune Land - Development limitations on sand dunes can be slight to severe, depending on slope and whether adequate stabilization is done. These areas are superior to some of the other soil types in that there is no drainage problem. These areas are also known to include active sand dunes. Dune stabilization techniques should be addressed.

- c. Heceta - These are interdunal swales and deflation plains. The high water table and poor drainage make these soils generally unsuitable for development.
- d. Waldport - These are sand dunes which are covered with stabilization vegetation. Conditions are moderate to severe, depending on slope. The particular need here is to preserve existing vegetation and to stabilize soil which is disturbed.

Drainage is typically not a problem in areas with the following soil types. Areas with slopes greater than 12% should not be built on unless a site investigation determines the site to be buildable.

- a. Yaquina - These are somewhat poorly drained soils formed on an interdune position on old stabilized dunes. These areas are wet during the winter, but are better drained than Heceta. A site specific investigation would be required to determine location of swales and drainage channels.
- b. Netarts - These are old stabilized dunes. Soils are well-drained. The topography is undulating to hilly. Where slopes are less than 12% there are few development restrictions.
- c. Bohannon; Preacher/Bohannon/Slickrock - These areas have no restrictions except slope and suitability for forestland. They occur east of Munsel Lake Road in areas which are largely unbuildable due to slope. (Amended by Ord. No. 10, Series 2009)

#### **10-7-67: REVIEW AND USE OF SITE INVESTIGATION REPORTS**

- A. The Phase I Site Investigation Report shall be reviewed administratively through a Type II Review. If it is found that the condition identified on the "Hazards Map" or "Soils Map" or "Beaches and Dunes Overlay Zone" or other identified problem area does not exist on the subject property; no Phase II report is required and the Site Investigation process is terminated. If hazards are found to exist, a Phase II report and a Conditional Use Permit shall be required.

If a Phase II Site Investigation Report is required, the Phase II conclusions shall be submitted for Planning Commission review.

- B. Required Certifications and Inspections:

For any Phase II SIR submitted, the registered professional of record shall be required to:

1. Review final plans for development and submit a signed and stamped certification report that all recommendations have been incorporated into development plans.
  2. Review subgrade excavations and fills for structures and stormwater drainage and submit a signed and stamped certification report that construction is proceeding in accordance with approved plans.
  3. Perform interim inspections as necessary and a final inspection of the site and submit a signed and stamped certification report that the project as constructed complies with approved plans.
- C. Conditions of approval may be imposed and/or a bond may be required to be posted prior to issuance of permit to ensure that harmful effects such as erosion, sand encroachment, destruction of desirable vegetation including inadvertent destruction by moisture loss or root damage, spread of noxious weeds, damage to archaeological resources, are mitigated or eliminated.
  - D. Approval: The property owner shall record a Covenant of Release which outlines the hazard, restrictions and/or conditions that apply to the property and shall state, "The applicant recognizes

and accepts that this approval is strictly limited to a determination that the project as described and conditioned herein meets the land use provisions and development standards of the City Code and Comprehensive Plan current as of this date. This approval makes no judgment or guarantee as to the functional or structural adequacy, suitability for purpose, safety, maintainability, or useful service life of the project.”

E. Appeal: In the case of an appeal, the City shall hire a certified engineering geologist or other appropriate certified professional to review the Phase II Site Investigation Report. All costs incurred by the city to review the development shall be the responsibility of the applicant. (Ord. No. 10, Series 2009)

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Amended by Ordinance No. 15, Series 1988

Section 10-7-3-D corrected from the reference to C-2 to 10-7-3-B. (12/11/07) Section 10-7-3-E and H amended by Ord. No. 24, Series 2008

Amended by Ord. No. 10, Series 2009

Section 10-7-1 amended by Ord. No. 3, Series 2013, Exhibit B (effective 7-31-13)

Section 10-7-4 added with Ordinance No. 2, Series 2013 (effective 10-5-13) and all subsequent sections renumbered

Sections 10-7-3, 10-7-4, and 10-7-6 amended by Ord. No. 11, Series 2016 (effective 11/16/16)

Sections 10-7-5 amended and Sections 10-7-1, 10-7-2, 10-7-3, 10-7-4, 10-7-5, 10-7-6, and 10-7-7 modified by Ord. No. XX, Series 201X (effective XX/XX/XX)