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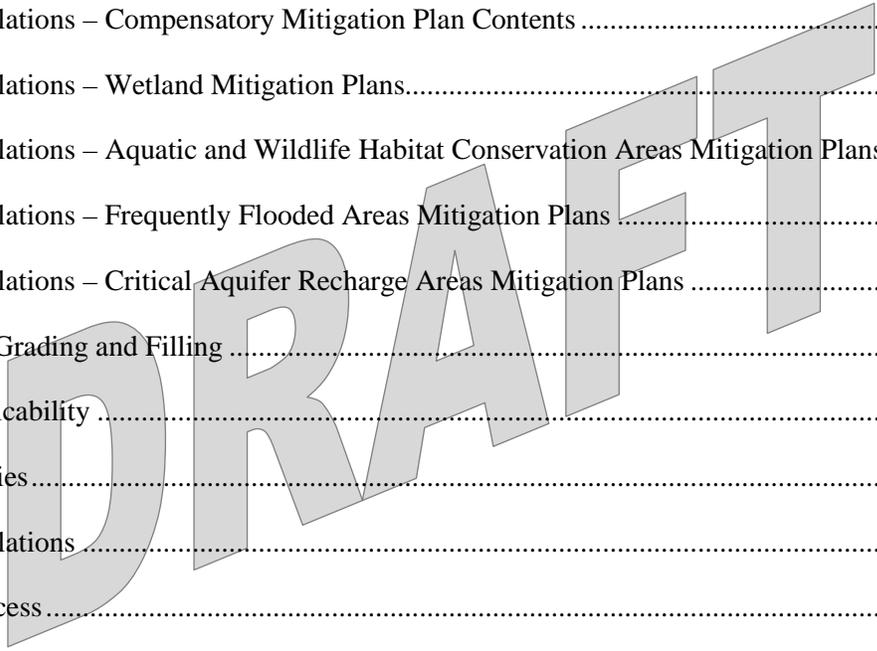
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Chapter 4 General Policies and Regulations

Note to Users: The policies and regulations in this chapter apply to all uses and developments in all shoreline environment designations, including uses/developments that are exempt from shoreline permit requirements. The policies and regulations are not listed in order of priority. Additional policies and regulations that apply to specific shoreline uses and developments are described in Chapter 3.

4.1 Archaeological, Historical, and Cultural Resources

4.1.1 Applicability

1. All new uses and developments shall comply with the applicable policies and regulations for protection of archaeological, historical, and cultural resources or areas of significant cultural heritage as defined in Chapter 7.

4.1.2 Policies

1. Sites and resources having known or suspected archaeological, historic, or cultural value should be protected. These sites/resources are important, non-renewable resources and many are in danger of being damaged or lost because of ongoing development. Wherever possible, sites should be permanently preserved for scientific study and/or public observation.
2. Proposed development on or adjacent to an identified archaeological, historic, or cultural site should be designed and operated to be compatible with continued protection of the archaeological, historic, or cultural site.
3. The location of historic, cultural, and/or archaeological sites/resources should not be disclosed to the general public unless adequate provisions can be put in place to ensure long-term protection and preservation of such sites/resources.

4.1.3 Regulations

1. All shoreline use and development proposals shall be reviewed to determine if they have the potential to impact historic, cultural, and/or archaeological sites/resources. The Administrator shall consult with the Washington State Department of Archeological and Historic Preservation and if there is evidence that the proposed project is located within five hundred (500) feet of such a site/resource, the Administrator shall:
 - a. Notify and inform potential affected Tribes and the Washington State Department of Archaeology and Historic Preservation of the proposed activity including timing, location, scope, and resources affected; and
 - b. Require the proponent to provide a Cultural Resource Site Assessment prior to development to determine the presence of archaeological, historic, or cultural resources. The Administrator can waive this requirement if the proposed development activities do not include any ground disturbance and will not impact a known archaeological, historic, or cultural site/resource.
2. When a Cultural Resource Site Assessment required by this section identifies the presence of archaeological, historic, or cultural resources, a Cultural Resource Management Plan shall be required. The plan shall assess the archaeological, historic, or cultural site/resource; analyze

- potential adverse impacts caused by the proposed activity; and recommend measures to prevent adverse impacts.
3. Cultural Resource Site Assessments and Cultural Resource Management Plans required by this section shall be prepared by a professional archaeologist or historic preservation professional, as applicable. The project proponent shall be responsible for any professional service fees associated with the assessment or plan.
 4. The Administrator may reject or request revision of the conclusions reached in a Cultural Resource Site Assessment or Cultural Resource Management Plan when it can demonstrate that the assessment is inaccurate or does not fully achieve the polices of this section.
 5. Excavation for archaeological investigations or data recovery may be permitted when conducted by a professional archaeologist or qualified historic preservation professional in accordance with applicable state laws.
 6. Where public access is provided to any private or publicly owned building or structure of archaeological, historic, or cultural significance, a Public Access Management Plan shall be developed in consultation with the Washington State Department of Archaeology and Historic Preservation and affected Tribes. The project proponent shall be responsible for any professional service fees associated with the access plan.
 7. If any site/object of possible archaeological, historic, or cultural interest is inadvertently discovered during any new shoreline use or development, the project proponent shall immediately stop work and comply with all of the following measures:
 - a. Notify the County Community Development Department and the Washington State Department of Archaeology and Historic Preservation;
 - b. Prepare a Cultural Resource Site Assessment to determine the significance of the discovery and the extent of damage to the resource;
 - c. Distribute the Cultural Resource Site Assessment to the Washington State Department of Archaeology and Historic Preservation and affected Tribes for a 30-day review to determine the significance of the discovery;
 - d. Maintain the work stoppage until the Administrator and above-listed agencies or governments have reviewed the site assessment and determined that work can proceed; and
 - e. Prepare a Cultural Resource Management Plan pursuant to this section if the Administrator determines that the site is significant.
 8. Upon inadvertent discovery of human remains, the project proponent must immediately notify the County Sheriff, Coroner, and Washington State Department of Archaeology and Historic Preservation.
 9. In the event that unforeseen factors constituting an emergency, as defined in RCW 90.58.030, necessitate rapid action to retrieve or preserve archaeological, historic, or cultural resources, the Administrator shall notify the State Department of Ecology, the State Attorney General's Office, potentially affected Tribes, and the State Department of Archaeology and Historic Preservation within 10 days of such action.

4.2 Buffers and Vegetation Conservation

4.2.1 Applicability

Buffers, as defined in Chapter 7, help protect people and property from natural hazards that are present on some shorelines. Buffers also protect shorelines from the adverse effects of adjacent land use and development. All shoreline uses and developments shall comply with the buffer policies and regulations in this section.

4.2.2 Policies

1. To protect the ecological and aesthetic qualities of the shoreline environment and minimize risks associated with flooding, erosion, channel migration, landslides, storm surges, and other natural events and processes, new shoreline uses and developments should be separated and set back from the from the edge of the water.
2. Protect and support preservation and restoration of shoreline buffers composed of predominantly woody vegetation along all shorelines to:
 - a. Protect the health and sustainability of the many fish and wildlife species that depend on the County's lakes, rivers, and marine waters for food, cover, breeding, resting, rearing, and other essential life functions.
 - b. Provide clean water for recreation, fishing, shellfish production, and other beneficial uses.
 - c. Protect people and property from hazards associated with floods, landslides, erosion, migrating river channels, tsunamis, and other natural processes or events.
 - d. Minimize the costs that the public would have to bear to protect properties in hazardous areas or to repair damages associated with floods and other hazards.
 - e. Maintain the aesthetic values that natural and scenic shorelines provide.
 - f. Ensure no net loss of shoreline ecological functions.
3. Buffers should be preserved in a predominantly natural and undisturbed state except that reasonable accommodation should be made for views, pedestrian access, and water-related use/development when it is otherwise consistent with this Program.
4. Development proposals that involve extensive vegetation removal to create views or expansive lawns should not be allowed. Property owners should not assume that an unobstructed view of the water is guaranteed.
5. The goals of preserving and restoring vegetation along shorelines should be balanced with the need to accommodate preferred shoreline uses and developments and provide views of the shoreline.
6. New developments and uses should be designed to minimize tree removal and vegetation clearing. Existing trees and shrub cover should be preserved, and where feasible, restored, to provide wildlife habitat, maintain water quality, and ensure soil and slope stability.

4.2.3 Regulations – Shoreline Buffers

1. New uses and developments shall be located landward of the shoreline buffers shown in Table 2-3 (see Figures 4-1 through 4-5 for a graphical representation of the buffer for each designation—figures do not have show all possible buffer permutations) unless this Program specifically allows the use/development within the shoreline buffer. Uses/ development may also be subject to additional buffers prescribed in Section 4.3 of this Program due to presence of wetlands, Type F, Np, or Ns streams, habitats for federally listed threatened or endangered species, or landslide hazard areas. In such cases, the landward-most buffer shall apply.
2. The shoreline buffer on Lake Sutherland shall be 35 feet measured in all directions from the ordinary high water mark.
3. The shoreline buffer on the Dungeness River shall be equivalent to the width of the mapped channel migration zone, or at least 150 feet landward from the ordinary high water mark, whichever is greater.
4. The shoreline habitat buffer shown in Table 2-3 shall apply to all parcels within shoreline jurisdiction, except those parcels covered by the buffer requirements in subsections 4.2.3.2 and 4.3.3.3 above. The shoreline habitat buffer shall be measured landward in all horizontal directions from the ordinary high water mark of the shoreline water body (lake, river, or marine water), provided that where there is a legally established, paved roadway present, the buffer will end on the waterward side of the road and will not extend to the landward area.
5. The shoreline safety buffer shown on Table 2-3 shall be measured as follows:
 - a. For parcels located on the Strait of Juan de Fuca shoreline – the safety buffer shall be measured from the top of the bluff if, according to Washington Coastal Atlas and/or the WDNR, it is designated as a landslide hazard area, unstable slope, unstable slope–recent slide, unstable slope–old slide, or if mapped in the March 2012 Inventory and Characterization report as feeder bluff or exceptional feeder bluff;
 - b. For parcels along rivers with a mapped channel migration zone (including but not limited to Morse Creek, Elwha River, Indian Creek, Salt Creek, Pysht River, Lyre River, East Twin River, West Twin River, Deep Creek, Clallam River, Hoko River, Little Hoko River, Herman Creek, Sekiu River, North Fork Sekiu River rivers) the safety buffer shall be measured from the ordinary high water mark within the channel migration zone.
6. The Administrator will evaluate each development proposal to determine if it qualifies as major new development or minor new development according to the following criteria:
 - a. Minor New Development: applies only to single-family development or low intensity, water-dependent recreational use/development on existing lots of record, unless the lots is part of a subdivision where specific development standards or buffers were required as part of the plat. Divisions of land creating new lots for residential or other development are not considered minor development because they intensify development pressures along the shoreline. Minor new development must meet all of the following criteria:
 - i. Total clearing/land disturbance within shoreline jurisdiction of up to the lesser of fifteen percent (15%) of parcel area or twenty thousand (20,000) square feet, provided that a minimum of two thousand five hundred (2,500) square feet shall be allowed; and

- ii. Impervious area (including structures) within shoreline jurisdiction up to the lesser of five percent (5%) of the total parcel area or six thousand five hundred (6,500) square feet, provided that a minimum of two thousand (2,000) square feet shall be allowed; and
 - iii. Cumulative footprint area of less than four thousand (<4,000) square feet for all structures on the parcel.
 - b. Major New Development: Any development that does not qualify as minor new development; any subdivision.
- 7. Buffer Condition: Shoreline habitat and safety buffers shall be maintained in a predominantly well vegetated and undisturbed condition defined as an average density of at least 150 woody stems per acre or fifty five percent (55 %) areal cover of woody vegetation. The vegetated areas shall comprise at least eighty percent (80%) of the buffer area. The remaining twenty percent (20%), or at least fifteen (15) linear feet of the water frontage, whichever is greater, may be retained as lawn for active use.
- 8. Habitat Buffer Averaging: The Administrator may approve, without a shoreline variance, a reduction in the shoreline habitat buffer widths prescribed in Table 2-3 through buffer averaging. Approval of a reduced/averaged habitat buffer shall be contingent upon all of the following:
 - a. Total area of buffer remains the same and the buffer meets the stem density and/or percent cover targets defined in 4.2.3.8 above. The Administrator shall require planting or enhancement of the buffer to meet the stated density and/or cover targets if the existing vegetation conditions of the buffer do not meet the density and/or cover targets;
 - b. Applicant provides a habitat management plan prepared by a qualified biologist showing the significant adverse effects on habitat functions have been avoided, minimized or otherwise mitigated;
 - c. The reduced portion of the buffer cannot exceed forty percent (40 %) of the buffer length (shore frontage) (in other words, in a one hundred [100] foot long segment of frontage, the reduced buffer could up to forty [40] feet long);
 - d. The reduced portion of the buffer can only be twenty five percent (25%) narrower than the standard buffer (in other words, if the standard buffer is one hundred [100] feet wide, the reduced portion must be at least seventy five [75] feet wide); and
 - e. The critical area requirements of Section 4.3 are met.
- 9. Safety Buffer Averaging – Marine Shorelines: The Administrator may approve, without a shoreline variance, a reduction in the shoreline safety buffer widths prescribed in Table 2-3 through buffer averaging. In no instances shall the safety buffer be reduced to less than fifty (50) feet. Approval of a reduced/averaged safety buffer shall be contingent upon all of the following:
 - a. Total area of buffer remains the same and the buffer meets the stem density and/or percent cover targets defined in subsection 4.2.3.8 above. The Administrator shall require planting or enhancement of the buffer to meet the stated density and/or cover targets if the existing vegetation conditions do not meet the density and/or cover targets.
 - b. The reduced buffer width:

- i. For a traditional single family residence – equivalent to the estimated annual rate of erosion times seventy five (75) plus allowance for bank recession equal to largest documented landslide in the vicinity; or
 - ii. For a mobile/motor home or travel trailer that is not used as a primary residence – equivalent to the estimated the estimated annual rate of erosion times 50 plus allowance for bank recession equal to largest documented landslide in the vicinity.
 - c. The reduced portion of the buffer cannot exceed forty percent (40 %) of the buffer length (shore frontage) (in other words, in a one hundred [100] foot long segment of frontage, the reduced buffer could up to forty [40] feet long).
 - d. For marine bluffs mapped as landslide hazard area, unstable slope, unstable slope–recent slide, unstable slope–old slide, feeder bluff or exceptional feeder bluff– Applicant provides a geotechnical report prepared by a licensed Engineering Geologist containing all of the following information:
 - i. Medium and long-term quantitative erosion rates and description of the methods used to quantify the erosion rate (past erosion rates over a minimum of 40 years or as far back as earliest available aerial photos, and a projection of future rates over the next several decades).
 - ii. A drainage plan that shows that upland drainage (i.e., runoff) will be properly managed so as not to exacerbate slope instability.
 - iii. Review of Washington Coastal Atlas and WDNR landslide hazard maps concerning stability of the site and land adjacent to the site.
 - iv. Analysis of slope stability and mechanisms for slope failure in the vicinity, including discussion of types, likely instigating factors, and general sizes of past landslides in the area.
 - v. Evidence of landslide activity such as: a mid-slope bench or low bank in an area of high banks, a slight seaward bow in an otherwise straight shoreline, a seaward bow of the cobble/boulder beach lag, lateral elevation changes (uplift) on the beach or subtidal, tilted silt or peat beds exposed among beach gravels, benches on which the vegetation is of a uniform age, areas with jack-strawed trees, groups of trees with kinked trunks-particularly conifers, a bowl-shaped indentation in the bluff edge or hummocky topography on the bluff face.
 - vi. Location of the intersection of the projected failure plane and the bluff top.
 - vii. Angle of repose of the upper bluff and distance for bluff to "lay back" without threatening the residence.
 - e. Geologist's estimate of when the residence would be undermined (to include allowance for bank recession equal to largest documented landslide in the vicinity).
10. Safety Buffer Averaging – River Shorelines: The Administrator may approve, without a shoreline variance, a reduction in the shoreline safety buffer widths prescribed in Table 2-3 through buffer averaging. In no instances shall the safety buffer be reduced to less than fifty (50) feet. Approval of a reduced/averaged safety buffer shall be contingent upon all of the following:
 - a. Total area of buffer remains the same and the buffer meets the stem density and/or percent cover targets defined in subsection 4.2.3.8. The Administrator shall require

- planting or enhancement of the buffer to meet the stated density and/or cover targets if the existing vegetation conditions of the buffer are deficient.
- b. The reduced portion of the buffer cannot exceed forty percent (40%) of the buffer length (shore frontage) (in other words, in a one hundred [100] foot long segment of frontage, the reduced buffer could be up to forty [40] feet long).
 - c. Documentation by an experienced geologist, hydrologist or licensed civil engineer with at least five (5) years experience with fluvial systems of the Pacific Northwest, that:
 - i. The parcel on which the development is proposed is effectively protected (disconnected) from channel movement due to the existence of permanent levees or infrastructure such as roads and bridges constructed and maintained by public agencies; not all roads will be considered disconnection points; or
 - ii. There is minimal risk of channel migration during the next 75 years as indicated by the existing channel type, intact land cover (and low likelihood future alterations in land cover); stable surficial geology, low soil and potential; lack of evidence of likely avulsion pathways (include area upstream of, but proximate to, the site); low inundation frequency(ies). The assessment shall include review of all available data regarding historical channel locations at the site; identification of the site within a broader area.
 - d. The critical area requirements of Section 4.3 are met.
11. Preexisting lots or land divisions regulated by Title 29, Clallam County Land Division Code, for which geotechnical plans were previously prepared may be considered to have already complied with the requirements of subsections 4.2.3.10 and 4.2.3.11 unless new information such as recent geologic activity warrants a new report to be required; provided that any new stormwater best management practices that were not previously included as a part of the geotechnical report shall be incorporated.
12. Buffer Modification without Compensatory Mitigation: The Administrator may allow limited clearing, grading, thinning, and/or pruning in a shoreline buffer in accordance with this section. Such allowances shall not require compensatory mitigation provided that the amount and extent of buffer modification is the minimum necessary to accommodate the allowed use, the modification is located within pre-existing disturbed areas with low habitat value or within the 'active use' area prescribed in subsection 4.2.3.8, and modification will not impact a geologically hazardous area, and all other requirements of the Program are met. This requirement is meant to ensure that impacts are avoided and minimized to the extent possible:
- a. View Corridors: The Administrator may allow limited and selective tree removal, pruning, and/or limbing in the buffer to create a view of the shoreline when otherwise consistent with this Program, as long as the buffer condition following selective clearing conforms to the stem density and/or percent cover targets defined in 4.2.3.8. The removal, pruning, and/or limbing shall not require any ground-disturbing equipment and shall not materially alter soils or topography. The amount of clearing is limited to the criteria. The Administrator may approve a greater area or amount of clearing if the proponent provides a view clearance plan prepared by a qualified ecologist, forester, arborist, or landscape architect. The view clearance plan shall identify and describe the location and extent of the proposed tree removal, pruning, and limbing and shall demonstrate compliance with American National Standards Institute (ANSI) A300 Standards for Tree Care Operations (Tree, Shrub, and Other Woody Plant Management –

Standard Practices). For properties within designated landslide or erosion hazard areas, the Administrator may require review of the view clearance plan by an engineering geologist or geotechnical engineer to ensure that the proposed removal, pruning, and/or limbing will not cause or exacerbate hazards associated with soil or slope instability. The location and size of the view corridor shall be clearly defined on the site plan.

- b. **Private Pathways:** Private pathways which provide pedestrian access to the shoreline may be allowed within the buffer provided they are constructed of pervious material, are less than or equal to six (6) feet wide, and follow a route that minimizes erosion and gulying (e.g., a winding but direct path). Pathways may include a maximum of one private picnic / view platform, patio or landing within each private lot; the picnic / view platform, patio or landing shall be a maximum of 100 square feet in size and may be covered by a roof structure no more than 10 feet in height above the floor elevation of the structure. Pathways shall be located within view corridors and/or the active use zone, as indicated in 4.2.3.8, to the maximum extent practicable in order to minimize buffer disturbance. For properties within designated landslide or erosion hazard areas, the Administrator may require review by an engineering geologist or geotechnical engineer to ensure that the pathway will not cause or exacerbate hazards associated with soil or slope instability.
- c. **Hazard Tree Removal:** Removal of a hazard tree may be allowed in the buffer when trimming is not sufficient to address the hazard. Where the hazard is not immediately apparent to the Administrator, the hazard tree determination shall be made after Administrator review of a report prepared by a qualified arborist or forester.
- d. **Invasive Species Management:** Removing invasive, non-native shoreline vegetation listed on the Clallam County Noxious Weed List may be allowed in the buffer when otherwise consistent with this Program. The disturbed areas must be promptly revegetated using species native to western Washington. If the area of invasive removal exceeds 0.25 acre, the Administrator shall require a vegetation management plan prepared by a qualified ecologist, forester, arborist, or landscape architect. The vegetation management plan shall identify and describe the location and extent of vegetation management. The vegetation management plan shall describe the means of invasive species control. Use of herbicides within buffer areas, shall be limited to 'fish and wildlife friendly' herbicides approved by the Washington State Department of Fish and Wildlife; any proposed herbicide use must be detailed in a vegetation management plan. For properties within designated landslide or erosion hazard areas, the Administrator may require review of the vegetation management plan by an engineering geologist or geotechnical engineer to ensure that the vegetation management will not cause or exacerbate hazards associated with soil or slope instability. The location and size of the invasive species management area shall be clearly defined on the site plan.
- e. **Boat launches, docks, piers, and floats:** Boat launches, docks, piers, and floats accessory to an approved single-family residential development may be allowed in the buffer when they are consistent with the policies and regulations specified in Section 3.14.
- f. **Boathouses:** Boathouses accessory to an approved recreational development may be allowed in the buffer provided that all of the following criteria are met:
 - i. The boathouse is used to store watercraft and shall not be used as or converted to a dwelling unit. The Administrator shall require a notice on title indicating such; and
 - ii. The boathouse has a maximum footprint of three hundred (300) square feet and a maximum height of fifteen (15) feet above average grade; and

- iii. The primary doorway/entryway faces the water; and
 - iv. The structure is located entirely landward of the ordinary high water mark.
- g. **Pedestrian Beach Access Structures:** Pedestrian beach access structures accessory to an approved single family residential development may be allowed in the buffer when they are consistent with the policies and regulations specified in Section 3.13.
 - h. **Public Trails and Other Public Access Improvements:** Public trails and public access improvements may be allowed in the shoreline buffer when they are consistent with the policies and regulations in sections 3.7 and 3.13.
 - i. **Utilities and Essential Public Facilities:** Certain utilities and essential public facilities that meet the definition of water-dependent or water-related may be allowed in the buffer when they are consistent with the policies and regulations specified in Section 3.12.
13. **Buffer Modification with Compensatory Mitigation:** The Administrator may allow limited clearing, grading, thinning, and/or pruning and limited development of structures in a shoreline buffer to accommodate water-dependent and water-related shoreline uses or modifications in sections 3.2 (Aquaculture), 3.3 (Commercial and Industrial Development), 3.5 (Mining), 3.7 (Recreation), 3.9 (Restoration), 3.14 (Marinas), 3.15 (Dredging), 3.16 (Flood Control Structures), 3.17 (In-stream and In-water Structures), and 3.18 (Shoreline Stabilization), that meet all of the requirements of this Program. Such uses/ modifications require a location in, on or immediately adjacent to the water and may have adverse impacts on shoreline functions and processes. The Administrator shall require compensatory mitigation in accordance with the applicable provisions of Section 4.4 if the water-dependent or water-related use/modification has significant unavoidable adverse impacts on shoreline functions or processes.
14. **Common Line Buffer:** To ensure that new residential developments in densely platted areas have views of the shoreline that are similar, but not necessarily equivalent to, adjacent residences, the following regulations shall apply, as shown in Figures 4-6a and 4-6b:
- a. For a new residence on a vacant lot with legally established residences within fifty (50) feet on each side, the proposed residence shall be set back from the ordinary high water mark of the shoreline to a common line drawn between the nearest corners of each adjacent residence.
 - b. For a new residence on a vacant lot with a legally established residence within fifty (50) feet on one side, the proposed residence shall be set back from the ordinary high water mark of the shoreline to a line drawn between the nearest corner of the existing adjacent residence and the nearest applicable setback for the adjacent vacant parcel.
15. Parcels located in mapped channel migration zones, or landslide or erosion hazard areas shall not be eligible for the common line buffer option. The common line buffer option shall not be used to deviate from any wetland buffers required by this Program.
16. **Buffer Reduction Requiring a Variance:** Shoreline use and development proposals that do not meet the shoreline buffer requirements identified in this chapter shall require a shoreline variance in accordance with Chapter 5 of this Program.
17. **Uses Exempt from Buffer Requirements:** The buffer regulations in this section shall not apply to the following uses:

- a. Commercial forest practices when such activities are conducted according to the Washington State Forest Practices Act (RCW 76.09). When forest practices are associated with a conversion of forest lands to non-forestry uses, the buffer requirements shall apply.
 - b. Existing and ongoing agricultural activities occurring on agricultural lands. New agricultural activities proposed on land not currently in agricultural use must comply with the buffer regulations.
18. Vegetation Enchantment: When enhancing or restoring shoreline buffer vegetation, project proponents shall use native species approved by the County that are of a similar diversity, density, and type to that occurring in the general vicinity of the site prior to any shoreline alteration. The vegetation shall be nurtured and maintained to ensure establishment of a healthy and sustainable native plant community over time.

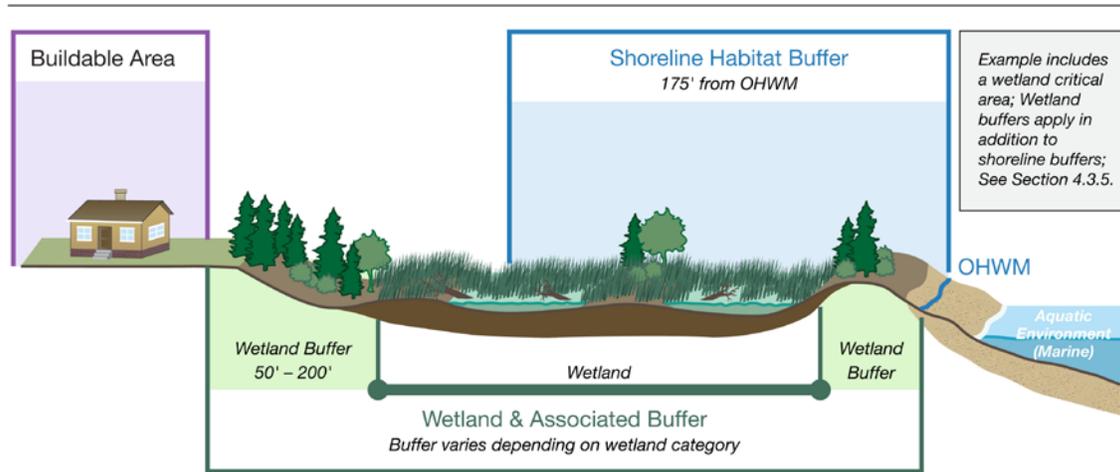
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Figure 4-1. Buffer widths for the Natural Designation

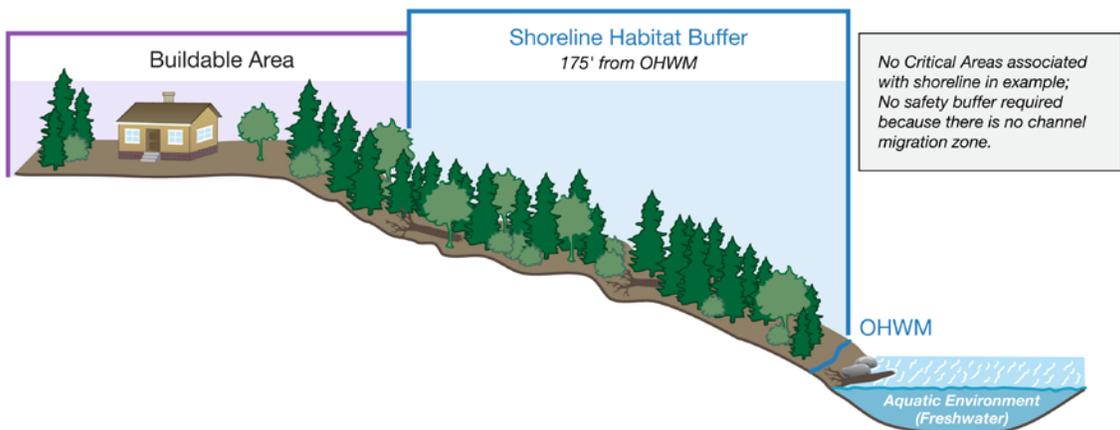
BUFFERS – See Table 2-3 for additional detail and Section 4.2.3 for standards

Habitat Buffer – extending landward from OHWM for both Marine and Freshwater Shorelines		Safety Buffer – applied to marine landslide hazard areas, feeder bluffs, exceptional feeder bluffs, and channel migration zones.	
Minor New Development, all existing lots	175	Freshwater Shorelines (for all parcels mapped within channel migration zones; measured from OHWM)	150 (Outside of the channel migration zone if buildable area exists – see Section 3.8.3)
Major New Development	175	Marine Shorelines (measured from the top of the bluff for areas mapped as landslide hazard area, feeder bluff or exceptional feeder bluff)	100 (150 for exceptional feeder bluff)
Land Divisions (150 ft minimum lot frontage for new lots)	175		

Marine Shorelines



Freshwater Shorelines



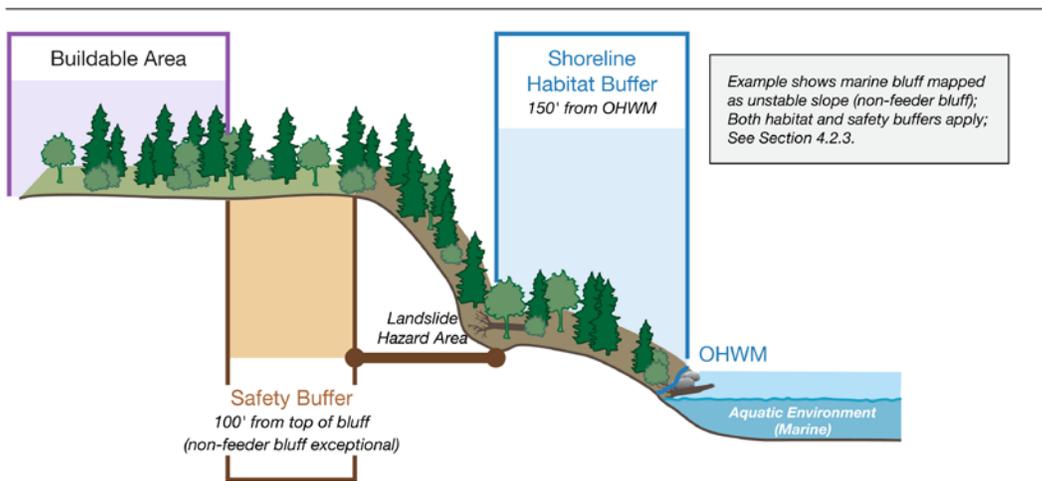
Additional requirements may apply in addition to those shown in table. Refer to Table 2-1 and 2-2 for which uses are allowed, prohibited or conditional. Refer to Chapters 3 and 4 for additional regulations pertaining to specific uses. Uses/development may also be subject to additional buffers due to presence of wetlands, small streams, habitats for federally-listed threatened or endangered species, landslide hazard areas, erosion hazard areas or other features. Refer to Section 4.2.3 for additional information.

Figure 4-2. Buffer widths for the Resource Conservancy designation

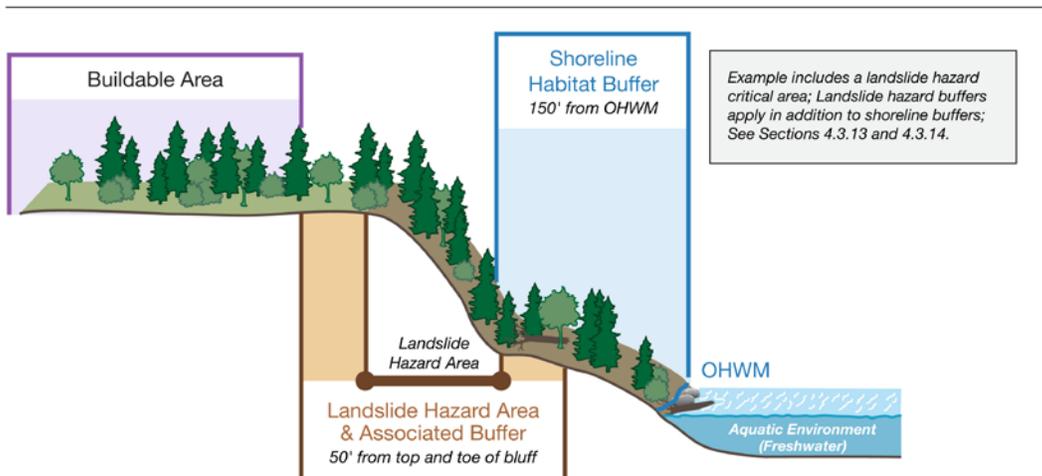
BUFFERS – See Table 2-3 for additional detail and Section 4.2.3 for standards

Habitat Buffer – extending landward from OHWM for both Marine and Freshwater Shorelines		Safety Buffer – applied to marine landslide hazard areas, feeder bluffs, exceptional feeder bluffs, and channel migration zones.	
Minor New Development, all existing lots	150	Freshwater Shorelines (for all parcels mapped within channel migration zones; measured from OHWM)	150 (Outside of the channel migration zone if buildable area exists – see Section 3.8.3)
Major New Development	150	Marine Shorelines (measured from the top of the bluff for areas mapped as landslide hazard area, feeder bluff or exceptional feeder bluff)	100 (150 for exceptional feeder bluff)
Land Divisions (150 ft minimum lot frontage for new lots)	150		

Marine Shorelines



Freshwater Shorelines



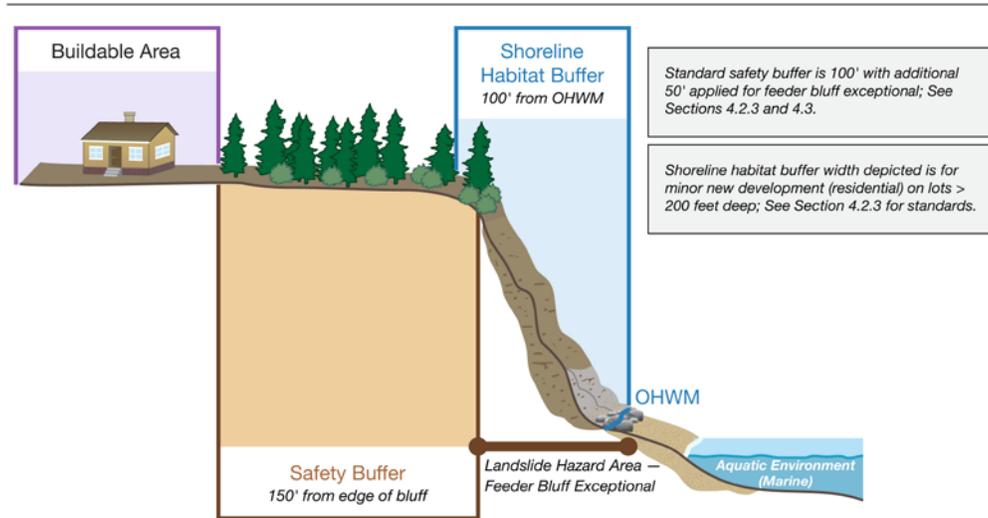
Additional requirements may apply in addition to those shown in table. Refer to Table 2-1 and 2-2 for which uses are allowed, prohibited or conditional. Refer to Chapters 3 and 4 for additional regulations pertaining to specific uses. Uses/development may also be subject to additional buffers due to presence of wetlands, small streams, habitats for federally-listed threatened or endangered species, landslide hazard areas, erosion hazard areas or other features. Refer to Section 4.2.3 for additional information.

Figure 4-3. Buffer widths for the Shoreline Residential - Conservancy designation

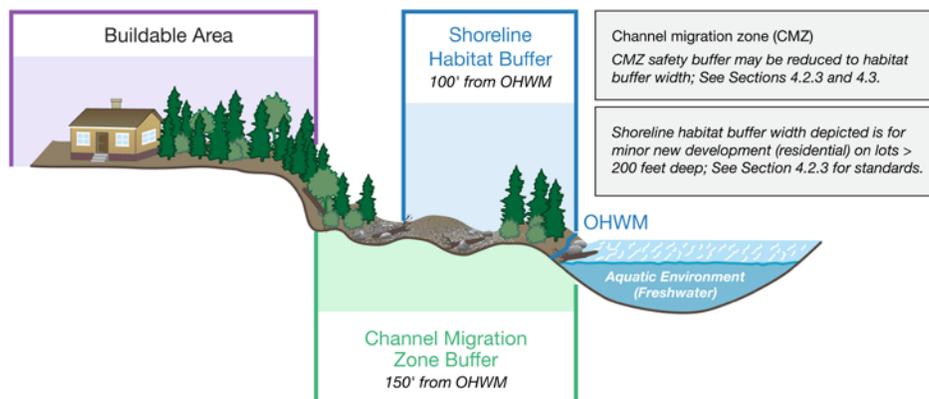
BUFFERS – See Table 2-3 for additional detail and Section 4.2.3 for standards

Habitat Buffer – extending landward from OHWM for both Marine and Freshwater Shorelines		Safety Buffer – applied to marine landslide hazard areas, feeder bluffs, exceptional feeder bluffs, and channel migration zones.	
Minor New Development, Existing lots < 200 ft depth from OHWM to rear lot line	100	Freshwater Shorelines (for all parcels mapped within channel migration zones; measured from OHWM)	150
Minor New Development, Existing lots > 200 ft depth from OHWM to rear lot line	125		
Major New Development	150	Marine Shorelines (measured from the top of the bluff for areas mapped as landslide hazard area, feeder bluff or exceptional feeder bluff)	100 (150 for exceptional feeder bluff)
Land Divisions (150 ft minimum lot frontage for new lots)	150		

Marine Shorelines



Freshwater Shorelines



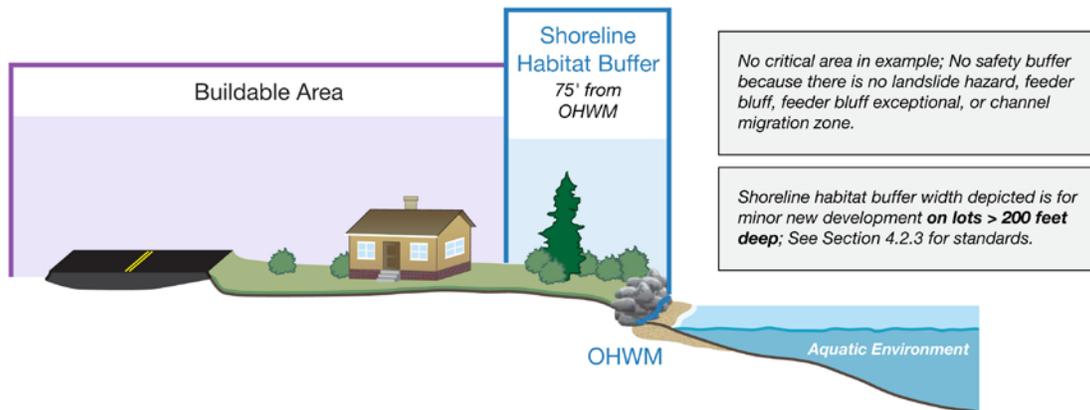
Additional requirements may apply in addition to those shown in table. Refer to Table 2-1 and 2-2 for which uses are allowed, prohibited or conditional. Refer to Chapters 3 and 4 for additional regulations pertaining to specific uses. Uses/development may also be subject to additional buffers due to presence of wetlands, small streams, habitats for federally-listed threatened or endangered species, landslide hazard areas, erosion hazard areas or other features. Refer to Section 4.2.3 for additional information.

Figure 4-4. Buffer widths for the Shoreline Residential - Intensive designation

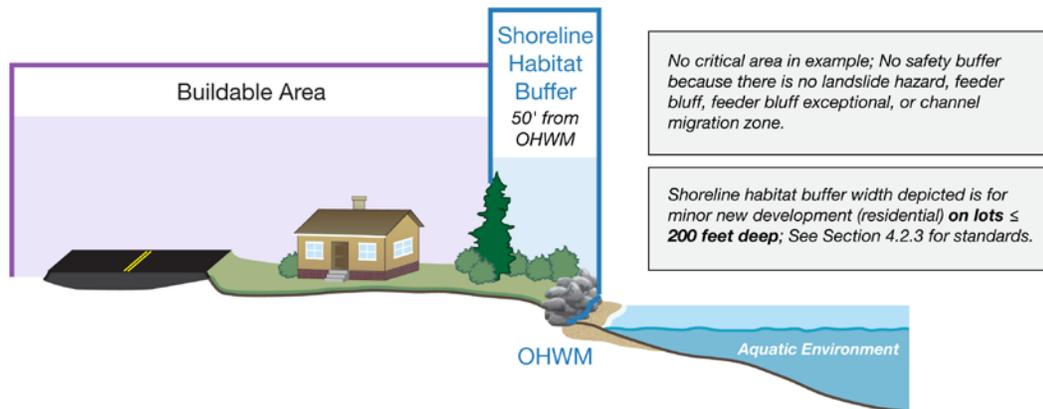
BUFFERS – See Table 2-3 for additional detail and Section 4.2.3 for standards

Habitat Buffer – extending landward from OHWM for both Marine and Freshwater Shorelines		Safety Buffer – applied to marine landslide hazard areas, feeder bluffs, exceptional feeder bluffs, and channel migration zones.	
Minor New Development, Existing lots < 200 ft depth from OHWM to rear lot line	50	Freshwater Shorelines (for all parcels mapped within channel migration zones; measured from OHWM)	150
Minor New Development, Existing lots > 200 ft depth from OHWM to rear lot line	75		
Major New Development	100	Marine Shorelines (measured from the top of the bluff for areas mapped as landslide hazard area, feeder bluff or exceptional feeder bluff)	100 (150 for exceptional feeder bluff)
Land Divisions	100		

Marine and Freshwater Shorelines – Lots > 200 Feet Deep



Marine and Freshwater Shorelines – Lots ≤ 200 Feet Deep



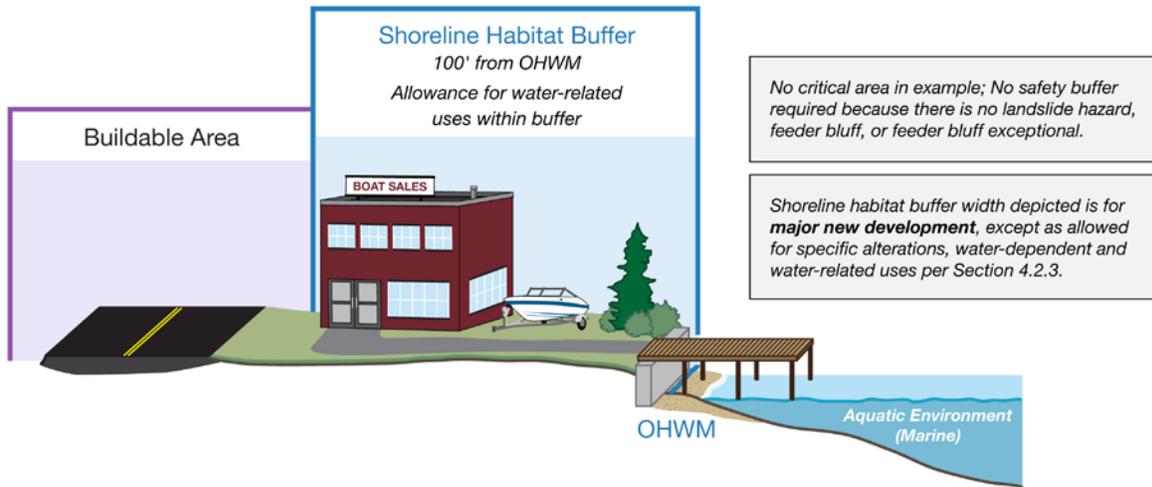
Additional requirements may apply in addition to those shown in table. Refer to Table 2-1 and 2-2 for which uses are allowed, prohibited or conditional. Refer to Chapters 3 and 4 for additional regulations pertaining to specific uses. Uses/development may also be subject to additional buffers due to presence of wetlands, small streams, habitats for federally-listed threatened or endangered species, landslide hazard areas, erosion hazard areas or other features. Refer to Section 4.2.3 for additional information.

Figure 4-5. Buffer widths for the Marine Waterfront designation

BUFFERS – See Table 2-3 for additional detail and Section 4.2.3 for standards

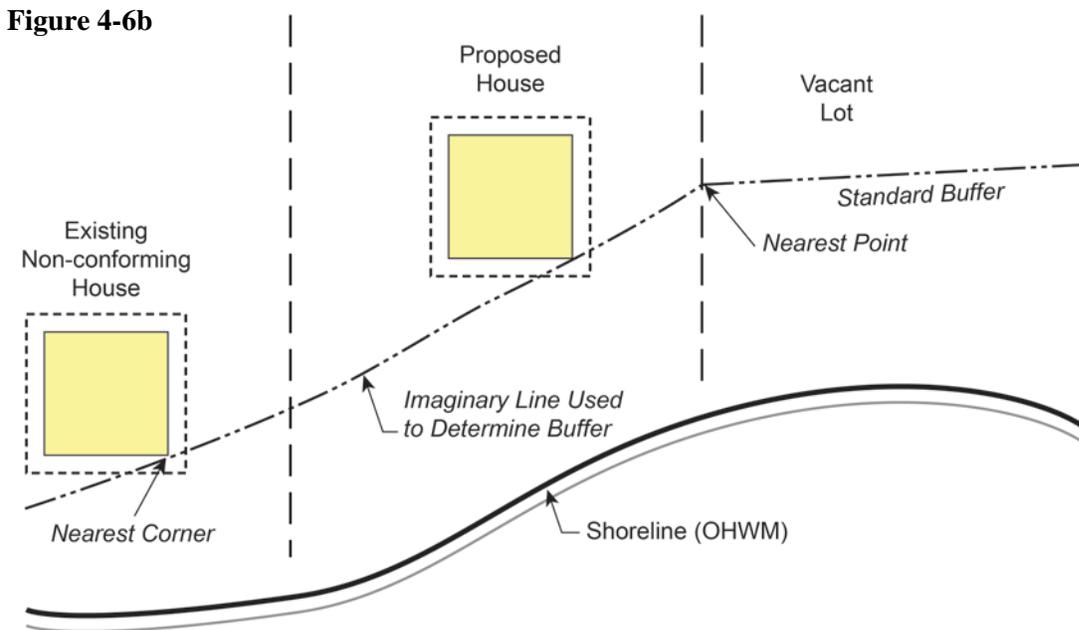
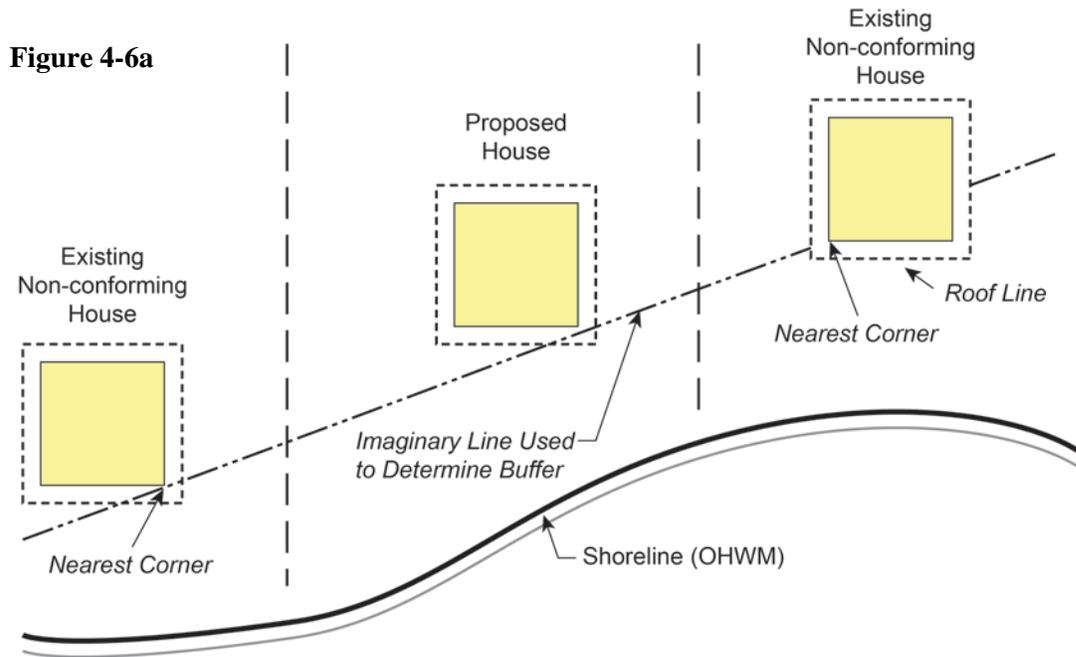
Habitat Buffer – extending landward from OHWM for Marine Shorelines		Safety Buffer – applied to marine landslide hazard areas, feeder bluffs, and exceptional feeder bluffs.	
Minor New Development, Existing lots < 200 ft depth from OHWM to rear lot line	50	Marine Shorelines (measured from the top of the bluff for areas mapped as landslide hazard area, feeder bluff or exceptional feeder bluff)	100 (150 for exceptional feeder bluff)
Minor New Development, Existing lots > 200 ft depth from OHWM to rear lot line	75		
Major New Development	100		
Land Divisions	100		

Marine Shorelines



Additional requirements may apply in addition to those shown in table. Refer to Table 2-1 and 2-2 for which uses are allowed, prohibited or conditional. Refer to Chapters 3 and 4 for additional regulations pertaining to specific uses. Uses/development may also be subject to additional buffers due to presence of wetlands, small streams, habitats for federally-listed threatened or endangered species, landslide hazard areas, erosion hazard areas or other features. Refer to Section 4.2.3 for additional information.

Figures 4-6 a and b. Common Line setbacks within shoreline jurisdiction.



4.3 Critical Areas

Note to Users: This section provides protection for critical areas, including critical saltwater and critical freshwater habitats, located within the jurisdictional limits of the Shoreline Management Act. In accordance with RCW 36.70A.480(4) critical areas within shoreline jurisdiction must be protected such that there is no net loss of shoreline ecological function. The County's existing critical areas ordinance, in CCC 27.12, applies to critical areas outside of shoreline jurisdiction.

4.3.1 Applicability

All new uses and developments shall comply with the applicable policies and regulations for protection of critical areas including critical saltwater and critical freshwater habitats, as defined in Chapter 7. Critical areas, including critical saltwater and critical freshwater habitats, within shoreline jurisdiction shall be regulated according to this Program and not Chapter 27.12 of Clallam County Code. Critical areas outside of shoreline jurisdiction shall be regulated by Chapter 27.12 of Clallam County Code and not this Program.

4.3.2 Policies

1. The beneficial functions of critical areas, including critical saltwater and critical freshwater habitats, within shoreline jurisdiction should be protected, and potential dangers or public costs associated with the inappropriate use of such areas should be minimized by reasonable regulation of uses/developments within, adjacent to, or directly affecting such areas.
2. To implement the policy stated above, it is the intent of this section to accomplish the following:
 - a. Classify, designate, and regulate critical areas according to the Growth Management Act requirements in RCW 36.70A.
 - b. Preserve, protect, manage, or regulate critical areas that have a direct or indirect effect on conserving fish, wildlife, other natural resources and values.
 - c. Conserve and protect the environmental attributes of Clallam County that contribute to the quality of life for residents of both Clallam County and the State of Washington.
 - d. Protect critical areas, including critical saltwater and critical freshwater habitats, and their functions by regulating use and development within these areas and on adjacent lands.
 - e. Guide development proposals to the most environmentally suitable and naturally stable portion of a development site.
 - f. Protect people and property from hazards associated with floods, landslides, erosion, migrating river channels, tsunamis, and other natural processes or events.
 - g. Minimize the costs that the public has to bear to protect properties in hazardous areas or to repair damages associated with floods and other hazards.
 - h. Reduce cumulative adverse environmental impacts to water availability, water quality, wetlands, aquatic and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas.
 - i. Promote harmonious co-existence between the critical areas and the ongoing use of pre-existing developments in and around critical areas.

- j. Maintain and protect both acreage and functions of regulated wetlands in Clallam County through general protection standards, enhancement, restoration, and creation.
- k. Protect water quality by controlling erosion, providing guidance in the siting of land uses and activities to prevent or reduce the release of chemical or bacterial pollutants into waters of the State, and maintaining stream flows and habitat quality for fish and marine shellfish.
- l. Conserve drainage features that function together or independently to collect, store, purify, discharge, and/or convey waters of the State.
- m. Maintain groundwater recharge and prevent the contamination of groundwater resources to ensure water quality and quantity for public and private uses and critical area functions.
- n. Promote the restoration of degraded critical areas and their buffers in order to regain lost ecological functions and values and improve the economic health and stability of Clallam County.

4.3.3 Regulations – General Regulations for all Critical Areas

- 1. This section and Program apply only to critical areas, including critical saltwater and critical freshwater habitats, within shoreline jurisdiction. Critical areas outside of shoreline jurisdiction shall be regulated by Chapter 27.12 of Clallam County Code and not this section or Program.
- 2. This Program and this section apply to activities that are exempt from the requirement to obtain a shoreline permit per RCW 90.58.030(3)(e) and activities listed as exempt in Clallam County Code 27.12.035.
- 3. Any land, water, or vegetation that meets the critical area designation criteria under this section shall be subject to the provision of this Program. The location and extent of critical areas within shoreline jurisdiction shall be identified based upon best available information from credible and qualified professional sources, which shall include, but are not limited to, the following:
 - a. Wetlands: Written recommendations, maps, or published reports from government agencies, including tribes, charged with wetland identification and management, or a biologist with wetlands ecology expertise and who is knowledgeable of wetland conditions within the North Olympic Peninsula Region, and who has professional experience demonstrated by a minimum of two years practical experience of delineating wetlands and wetland plant identification; and those individuals certified as Professional Wetland Scientists by the Society of Wetland Scientists.
 - b. Aquatic and Wildlife Habitat Conservation Areas: Written recommendations, maps, or published reports from government agencies, including tribes, charged with management of fish and wildlife resources, or a person with a master's degree in biological sciences or related field from an accredited college or university or a bachelor's degree and four years' experience as a practicing biologist.
 - c. Geologically Hazardous Areas: Written recommendations, maps, or published reports from government agencies, including tribes, charged with identification of geologic hazards, or by a geotechnical or civil engineer or engineering geologist licensed in the

State of Washington who is knowledgeable of regional geologic conditions and who has professional expertise in geologic hazard evaluation.

- d. Frequently Flooded Areas: Written recommendations, maps, or published reports from government agencies, including tribes, charged with the identification of flood control, or a civil engineer licensed in the State of Washington. The Administrator may allow a land surveyor licensed by the State of Washington to recommend designation of frequently flooded areas where base flood elevation data is available.
 - e. Critical Aquifer Recharge Areas: Written recommendations, maps, or published reports from government agencies, including tribes, charged with designation of geologic or water resources features, or a person(s) with a four-year degree in hydrology, hydrogeology, or related field from an accredited college or university and also having demonstrated experience in hydrogeologic assessment.
4. A qualified professional may dispute the location or extent of critical areas shown on maps or other information. The Administrator shall consider site-specific evidence provided by the qualified professional when determining the location and extent of critical areas on a parcel.
 5. Clallam County shall make available to the public maps or other databases, as appropriate, which show the general location, extent, and classification of regulated critical areas. This information shall be advisory and used by the Administrator in determining the applicability of the standards of this section to a particular location or development site. When additional information is required as to the location or extent of a critical area that may be affected by a proposed shoreline use or development, the Administrator may require additional information or may hire a qualified professional to gather the pertinent information at the proponent's expense.
 6. Notice on Title: Any property on which a development proposal is submitted shall have filed with the Clallam County Auditor:
 - a. A notice on title of the presence of the critical area and/or buffer;
 - b. A statement as to the applicability of this Program to the property; and
 - c. A statement describing possible limitations on actions in or affecting critical areas or buffers as approved by the Administrator. Clallam County shall record such documents and will provide a copy of the recorded notice to the property owner of record. Development proposals which are also defined as normal repair and maintenance of existing structures or developments, including but not limited to roof repair, interior remodeling, wood stove permits, etc., and on-site sewage disposal systems repairs or replacement, are exempt from this requirement.
 7. Temporary or Permanent Field Identification: Clallam County shall require temporary or permanent field markers delineating the critical area boundary and associated buffer prior to issuance of required permits for any development located within the jurisdiction of a regulated wetland, aquatic habitat conservation area, and landslide hazard area. The type of field markers to be used will be agreed to by the project proponent and the Administrator depending on site conditions and inspection requirements. Field markers shall be spaced at a minimum of every fifty (50) feet, unless alternative placement or spacing is authorized by the Administrator. The location of field stakes must be shown on all site plans and final plats associated with the development proposal. Field stakes shall remain in place until any required final inspections are completed and approved. Field markers may be waived by the

Administrator if an alternative to field staking achieves the same objective and is proposed and approved, or if the development activity is located at a sufficient distance so that impacts to the critical area are unlikely to occur.

8. Construction Fencing: When construction is proposed adjacent to a critical area or buffer, the buffers shall be temporarily protected with a highly visible and durable protective barrier, such as orange construction fencing, during construction to prevent access and protect the critical area and buffer, except where access into/ or through the critical area or buffer is expressly allowed by this Program. This requirement may be waived by the Administrator if an alternative to fencing which achieves the same objective is proposed and approved.
9. Signs: The Administrator shall require that the common boundary between a regulated wetland, aquatic habitat conservation area, or other critical area and associated buffer be identified using permanent signs as approved by the Administrator. In lieu of signs, alternative methods of identification may be approved when such methods are determined by the Administrator to provide adequate protection to the critical area and buffer.
10. Land Divisions: Land divisions in critical areas and/or buffers shall meet all of the following conditions and the conditions in Section 3.8 (Residential) of this Program:
 - a. All lots within the proposed land division contain at least one site, including access and utility locations, that is suitable for development and is not within a wetland, aquatic habitat conservation area, floodplain, or landslide hazard area or their buffers. A new lot or parcel may be created in a seismic hazard area as long as there is a note on the face of the plat which indicates the presence of a potential hazard and encourages the builder to have any structure designed by a civil engineer to withstand potential seismic activity.
 - b. All lots meet lot minimum lot area requirements specified by this Program and Clallam County Code Title 33, Zoning Code and other applicable provisions herein.
 - c. The buildable area, critical areas, and buffers shall be shown on the face of the final plat and/or site plan.
 - d. New land divisions shall be surveyed by a professional land surveyor.

4.3.4 Regulations – Wetland Designation, Delineation, Mapping, and Classification

1. Designation: Regulated wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Regulated wetlands generally include, but are not limited to, swamps, marshes, bogs, ponds, including their submerged aquatic beds and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990 (adoption date of Chapter 36.70A RCW, Growth Management Act) that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands created as mitigation and wetlands modified for approved land use activities shall be considered as regulated wetlands.
2. Mapping: The approximate location and extent of wetlands are shown on the County's critical area maps. These maps are advisory and do not provide definitive information about wetland

size or presence. The County shall update the maps as new wetlands are identified and as new information from credible sources becomes available.

3. **Delineation:** In accordance with RCW 90.58.380, wetlands shall be identified in accordance with the requirements of WAC 173-22-035. Unless otherwise provided for in this Program, all areas within the County meeting the criteria in the manual are hereby designated critical areas and are subject to the provisions of this section. The wetland boundary shall be identified and delineated by a biologist with wetlands ecology expertise within the North Olympic Peninsula Region, and who has professional experience in this occupation demonstrated by a minimum of two years' practical experience or is certified as a Professional Wetland Scientist by the Society of Wetland Scientists. This person shall field stake the wetland boundary and this line shall be surveyed by a professional land surveyor if the delineation is required for a land division pursuant to Clallam County Code Title 29.
4. **Classification and Rating:** Wetlands shall be rated based on categories that reflect the functions and values of each wetland. Wetland categories shall be based on the criteria provided in the Washington State Wetland Rating System for Western Washington (Ecology Publication No. 04-06-025 and revised editions), as determined using the appropriate rating forms contained in that publication. These categories are generally defined as follows:
 - a. **Category I Wetlands:** Category I wetlands are those wetlands of exceptional value in terms of protecting water quality, storing flood and storm water, and/or providing habitat for wildlife as indicated by a rating system score of 70 points or more on the Ecology rating forms. These are wetland communities of infrequent occurrence that often provide documented habitat for sensitive, threatened or endangered species, and/or have other attributes that are very difficult or impossible to replace if altered.
 - b. **Category II Wetlands:** Category II wetlands have significant value based on their function as indicated by a rating system score of between 51 and 69 points on the Ecology rating forms. They do not meet the criteria for Category I rating but occur infrequently and have qualities that are difficult to replace if altered.
 - c. **Category III Wetlands:** Category III wetlands have important resource value as indicated by a rating system score of between 30 and 50 points on the Ecology rating forms. These wetlands are relatively common.
 - d. **Category IV Wetlands:** Category IV wetlands are wetlands of limited resource value as indicated by a rating system score of less than 30 points on the Ecology rating forms. They typically have vegetation of similar age and class, lack special habitat features, and/or are isolated or disconnected from other aquatic systems or high-quality upland habitats.

4.3.5 Regulations – Wetland Buffers

1. **Buffer Widths:** Buffers shall be established and maintained to protect all regulated wetlands. The standard wetland buffer width shall be determined according to the regulated wetland rating as outlined in Table 4-1 below. The buffer shall not be altered except as authorized by this Program; provided that such alterations meet all other standards for the protection of regulated wetlands. All buffers are measured from the regulated wetland edge as marked in the field.

Table 4-1. Wetland Buffers for Wetlands in Shoreline Jurisdiction

Wetland Type	Standard Buffer Width
Class I	200 feet
Class II	150 feet
Class III	75 feet
Class IV	50 feet

2. **Wetland Buffer Condition:** Buffers shall be maintained in a predominantly well-vegetated and undisturbed condition defined as an average density of at least 150 woody stems per acre or fifty five percent (55 %) areal cover of woody vegetation, unless this Program specifically allows alteration of the buffer. Alterations that are not associated with an allowed use or development shall be prohibited.
3. **Multiple Buffers:** In the event that buffers for any shorelines and/or critical areas are contiguous or overlapping, the landward-most edge of all such buffers shall apply.
4. **Buffer Averaging:** Wetland buffer widths shown in Table 4-1 may be reduced by the Administrator through buffer averaging. With buffer averaging, the buffer width is reduced in one location and increased in another location to maintain the same overall buffer area. Proposals for wetland buffer averaging shall not require a shoreline variance or compensatory mitigation if the following conditions are met:
 - a. The minimum width of the buffer at any given point is at least fifty percent (50%) of the standard width per Table 4-1, or thirty five (35) feet, whichever is greater; and
 - b. The net buffer area (acreage) after averaging is the same as the standard buffer area without averaging; and
 - c. The area that is added to the buffer to offset the reduction is well-vegetated as defined in 4.3.5.2 above.
5. **Buffer Reduction:** On sites that lack well-vegetated buffers as defined in 4.3.5.2 above, the Administrator may approve a proposal for wetland buffer reduction. Proposals for wetland buffer reduction on such parcels shall not require a shoreline variance as long as the following conditions are met:

- a. The minimum width of the reduced buffer is at least seventy five percent (75%) of the standard width per Table 4-1; and
 - b. The reduced portion of the buffer cannot exceed forty percent (40%) of the buffer length (in other words, in a one hundred [100] foot long segment of buffer, the reduced buffer could up to forty [40] feet long); and
 - c. The reduced buffer area is planted and enhanced to meet the minimum vegetation density and/or cover targets in 4.3.5.2 above. Plantings shall consist of species native to western Washington.
6. Mitigation for Buffer Averaging: Prior to approving a request for buffer averaging or reduction, the Administrator shall ensure the development is designed to separate and screen the wetland from impacts such as noise, glare, vegetation trampling, etc. The site design shall consider the varying degrees of impacts of different land uses. For example, parking lots, store entrances, and roads generally have higher noise and glare impacts than the rear of the store. Site screening should take advantage of natural topography or existing vegetation, wherever possible. Where natural screening is not available, berms, landscaping, and structural screens should be implemented (e.g., orient buildings to screen parking lots and store entrances from critical areas). Landscaping shall be consistent with Chapter 33.53 Clallam County Code.
 7. Increased Wetland Buffers: The Administrator may increase wetland buffer zone widths, not to exceed three hundred (300) feet, for a development project on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values. Such determination shall be based on site-specific and project-related conditions which include, but are not limited to:
 - a. Wetland sites with known locations of endangered or threatened species for which a habitat management plan indicates a larger buffer is necessary to protect habitat values for such species; or
 - b. The adjacent land is susceptible to severe erosion, and erosion control best management practices will not effectively prevent adverse wetland impacts.
 8. Buffer for Wetland Mitigation Sites: Any wetland that is created, restored, or enhanced as compensation for an approved wetland alteration shall have the standard buffer required for the category of the created, restored, or enhanced wetland.

4.3.6 Regulations – Wetland Protection Standards

1. New shoreline uses and developments shall be located, designed, constructed, and maintained to avoid wetland areas. Impacts to wetlands shall be prohibited except when all of the following conditions are met:
 - a. The use or development is specifically allowed by this Program; and
 - b. All reasonable measures have been taken to avoid adverse effects on wetland functions and values; and
 - c. Compensatory mitigation is provided, in accordance with section 4.4 of this Program, for all adverse impacts that cannot be avoided; and
 - d. The amount and degree of alteration are limited to the minimum needed to accomplish the project purpose.

2. The Administrator may impose conditions on new shoreline use and developments as needed to preserve or, if feasible, increase the acreage, quality, function, and/or values of regulated wetlands within Clallam County. Specific conditions shall include, but not be limited to, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; using environmentally favorable construction materials; foregoing construction of accessory structures; directing lights away from the wetland; preserving native vegetation; and other reasonable measures needed to maintain the following wetland functions and values:
 - a. **Drinking Water:** Ability of a wetland to recharge, maintain, and/or enhance surface or groundwater resources that yield potable water in sufficient quantities to be economically useful.
 - b. **Floodflow Desynchronization:** Ability of a wetland to retain/detain floodwaters in the upper watershed, reducing the severity of flooding.
 - c. **Groundwater Recharge:** This wetland function is significant but not in the context that wetlands act as the major locations of groundwater recharge to aquifers. Although some wetlands do provide a significant amount of groundwater recharge, the large areas of river alluvium and unconsolidated glacial deposits and, in the Sequim-Dungeness Valley, the irrigation network are much more regionally significant. Rather, groundwater recharge is significant because wetlands in contact with the aquifer are most susceptible to carrying pollutants to the aquifer. Conversely, if managed properly, such wetlands could assist in the treatment of pollutants already carried in the drinking water aquifer.
 - d. **Nutrient Removal/Transformation:** Ability of a wetland to retain or transform inorganic phosphorus and/or nitrogen into their organic forms, or transform nitrogen into its gaseous form, on either a net annual basis or during the growing season. This can reduce excess nutrients and algal blooms in downstream surface waters.
 - e. **Sediment/Toxicant/Bacterial Retention:** Ability of a wetland to retain suspended solids and chemical contaminants such as pesticides, pathogens, and heavy metals absorbed to them, on a net annual basis.
 - f. **Seawater Intrusion Prevention:** Wetlands can act as the boundary between the unconfined aquifer and the marine environment. Loss of water supply or drainage of wetlands will likely increase seawater intrusion to unconfined aquifers supplying drinking water to coastal inhabitants.
 - g. **Streamflow/Channel Maintenance:** Wetlands that provide detention or groundwater discharge can supply a significant proportion of streamflow during summer and fall. These areas regulate the amount and timing of stream energy and therefore are crucial to defining the shape of stream channels.
 - h. **Temperature Maintenance:** Wetlands can provide thermal refuges during winter and summer months due to influence from springs or contact with the unconfined aquifer. During summer months, wetlands with this function are important as fish habitat for salmonids; during winter months, these wetlands provide waterfowl habitat by maintaining ice-free conditions.
 - i. **Water/Food Availability:** The ability of a wetland to provide surface water and foraging resources for migratory and resident species.

- j. Habitat: The quality and availability of areas for breeding, nesting, feeding, and resting for wetland-dependent and wetland-associated species.

4.3.7 Regulations – Aquatic Habitat Conservation Area Designation and Mapping

This section pertains to the subset of Aquatic Habitat Conservations Areas that are not shorelines of the state—namely Type F, Np, and Ns Waters. These stream types correspond to the typing system used in the Forest Practices Act, which is different from the typing system in the County’s critical areas code. The SMP in its entirety constitutes the policies and regulations for Type S Waters, which by definition are shorelines of the state.

1. Designation and Classification: Aquatic habitat conservation areas include:
 - a. Those streams and lakes which meet the criteria for Type S, F, Np and Ns waters, as defined in the water type classifications in the forest practices rules in WAC 222-16.
 - b. Aquatic habitats recognized by federal or state agencies for federal and/or state listed endangered, threatened and sensitive species documented in maps or databases available to Clallam County and its citizens and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.
2. Mapping: The approximate location and extent of aquatic habitat conservation areas are shown on the County’s critical area maps. These maps are to be used as a guide and do not provide definitive information about aquatic habitat conservation areas size or presence. The County shall update the maps as new aquatic habitat conservation areas are identified and as new information becomes available.

4.3.8 Regulations – Aquatic Habitat Conservation Area Buffers

1. Buffer Widths: Buffers shall be established and maintained to protect regulated aquatic habitat conservation areas as shown in Table 4-2 below. The buffer shall not be altered except as authorized by this Program. Buffer distances shall be measured from the ordinary high water mark (OHWM) or from the top of the bank where the OHWM cannot be identified unless otherwise specified by this Program. The standard width of the buffer zone for Type S Waters shall be as shown in Table 2-3.

Table 4-2. Aquatic Habitat Conservation Area Buffers for Type F, Np, and Ns Waters

Aquatic Habitat Conservation Area	Buffer Width
Type F Waters	100 feet
Type Np Waters	80 feet
Type Ns Waters	50 feet

2. Buffer Condition: Aquatic habitat conservation area buffers shall be maintained in a predominantly well-vegetated and undisturbed condition defined as an average density of at least 150 woody stems per acre or fifty five percent (55 %) areal cover of woody vegetation,

unless this Program specifically allows alteration of the buffer. Alterations that are not associated with an allowed use or development shall be prohibited.

3. **Multiple Buffers:** In the event that buffers for any shorelines and/or critical areas are contiguous or overlapping, the landward-most edge of all such buffers and setbacks shall apply.
4. **Buffer Averaging:** Buffer widths for Type F, Np, and Ns Waters may be reduced by the Administrator through buffer averaging. With buffer averaging, the buffer width is reduced in one location and increased in another location to maintain the same overall buffer area. Proposals for buffer averaging shall not require a shoreline variance or compensatory mitigation if the following conditions are met:
 - a. The minimum width of the buffer at any given point is at least fifty percent (50%) of the standard width per Table 4-3, or thirty five (35) feet, whichever is greater; and
 - b. The net buffer area (acreage) after averaging is the same as the standard buffer area without averaging; and
 - c. The area that is added to the buffer to offset the reduction is well-vegetated and meets the density and/or cover targets in 4.3.8.2.
5. **Buffer Reduction:** On sites that lack well-vegetated buffers, as defined in 4.3.8.2 above, the Administrator may approve a proposal for buffer reduction. Proposals for buffer reduction shall not require a shoreline variance as long as the following conditions are met:
 - a. The minimum width of the reduced buffer for Type F, Np and Ns Waters is at least seventy five percent (75%) of the standard width per Table 4-2; and
 - b. The reduced portion of the buffer cannot exceed forty percent (40%) of the buffer length on the development property (in other words, in a one hundred [100] foot long segment of buffer, the reduced buffer could be up to forty [40] feet long); and
 - c. The reduced area is planted and enhanced with native trees, shrubs, and groundcover to meet the vegetation cover and/or density requirements in 4.3.8.2 above.
6. **Mitigation for Stream Buffer Averaging or Reduction:** Prior to approving a request for buffer averaging or reduction, the Administrator shall ensure the development is designed to separate and screen the wetland from impacts such as noise, glare, vegetation trampling, etc. The site design shall consider the varying degrees of impacts of different land uses. For example, parking lots, store entrances, and roads generally have higher noise and glare impacts than the rear of the store. Site screening should take advantage of natural topography or existing vegetation, wherever possible. Where natural screening is not available, berms, landscaping, and structural screens should be implemented (e.g., orient buildings to screen parking lots and store entrances from critical areas). Landscaping shall be consistent with Chapter 33.53 Clallam County Code.
7. **Increased Buffers:** The Administrator may increase buffer widths for Type F, Np and Ns Waters, not to exceed three hundred (300) feet, for a development project on a case-by-case basis when:

- a. The site has known locations of endangered or threatened species for which a habitat management plan indicates a larger buffer is necessary to protect habitat values for such species; or
 - b. The site is located within landslide or erosion hazard area and there are atypical conditions which indicate that the standard buffer may not adequately protect the aquatic habitat conservation area.
8. Buffer for Aquatic Habitat Conservation Area Mitigation Sites: Any Type F, Np, or Ns Water that is created, restored, or enhanced as compensation for an approved alteration shall have the standard buffer required for the category of the created, restored, or enhanced aquatic habitat conservation area.

4.3.9 Regulations – Aquatic Habitat Conservation Area Protection Standards

1. New shoreline uses and developments shall be located, designed, constructed, and maintained to avoid impacts on Type F, Np and Ns Waters. Impact avoidance measures shall include, but not be limited to, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; using environmentally favorable construction materials; foregoing construction of accessory structures; directing lights away from the water body; preserving native vegetation; and other reasonable measures.
2. New uses and developments may be allowed in Type F, Np and Ns Waters and/or their buffers, as specified in this Program, when all reasonable measures have been taken to avoid adverse effects on species and habitats; when compensatory mitigation is provided, in accordance with section 4.4 of this Program, for all adverse impacts that cannot be avoided; and the amount and degree of the alteration are limited to the minimum needed to accomplish the project purpose:
3. The Administrator may impose conditions on any new shoreline use and developments in Type F, Np and Ns Waters and their buffers as needed to:
 - a. Preserve natural flood control, stormwater storage, and drainage or stream flow patterns;
 - b. Control siltation, protect nutrient reserves, and maintain stream flows and stream quality for fish and marine shellfish;
 - c. Prevent turbidity and pollution of streams and fish or shellfish bearing waters; or
 - d. Preserve and protect habitat adequate to support viable populations of native wildlife in Clallam County.

4.3.10 Regulations – Class I and II Wildlife Habitat Conservation Areas Designation and Mapping

1. Designation: Class I Wildlife Habitat Conservation Areas shall include the following:
 - a. Habitats recognized by federal or state agencies for federal and/or state listed endangered, threatened and sensitive species documented in maps or databases available to Clallam County and its citizens and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. This includes known locations of nests,

rookeries, or other breeding areas for species of concern recognized by local, state, and federal public agencies having jurisdiction over such species.

- b. Habitats targeted for preservation by federal, state, and/or local government which provide fish and wildlife habitat benefits, such as important waterfowl areas identified by the U.S. Fish and Wildlife Service.
2. Designation: Class II Wildlife Habitat Conservation Areas shall include the following:
 - a. Priority habitats not classified as Class I for state listed candidate and monitor species documented in maps or databases available to Clallam County and its citizens, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.
 - b. Priority habitats not classified as Class I may include wetlands, aquatic conservation areas, marine bluffs, stream ravines, caves, cliffs, islands, meadows, old-growth/mature forest, snag-rich areas, talus slopes, urban natural open space, and those land and water areas identified as significant habitat corridors under the Clallam County Comprehensive Plan, Clallam County Code Title 31.
 3. Mapping: The approximate location and extent of Class I and II habitat conservation areas are shown on the County's critical area maps. These maps are to be used as a guide and do not provide a definitive critical area designation. The County shall update the maps as new wildlife habitat conservation areas are identified and as new information becomes available.

4.3.11 Regulations – Class I and II Wildlife Habitat Conservation Areas Protection Standards

1. Class I Wildlife Habitat Conservation Areas: All development within the jurisdiction of designated Class I wildlife habitat conservation areas shall adhere to the following standards:
 - a. New uses and development on sites with known locations of Class I wildlife species or sites adjacent to known locations of Class I wildlife species shall require a habitat management plan (HMP). The HMP shall meet all of the following requirements:
 - i. The HMP shall identify how the development impacts Class I or II wildlife habitat conservation areas. In the case of bald eagles, a bald eagle management plan approved by the Washington Department of Fish and Wildlife and meeting the requirements and guidelines of the bald eagle protection rules (WAC 232-12-292), as now or hereafter amended, shall satisfy the requirements for an HMP.
 - ii. The HMP shall contain a map prepared at a readable scale showing: the location of the proposed development site; the relationship of the site to surrounding topographic, water features, and existing and/or proposed building locations and arrangements; and a legend which includes a complete legal description, acreage of the parcel, scale, north arrows, and date of map revision.
 - iii. The HMP shall describe the nature and intensity of the proposed development; an analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat identified for protection; and a plan which identifies how the applicant proposes to avoid, minimize and/or compensate for any adverse impacts to wildlife habitats created by the proposed development.

- iv. The HMP shall be prepared by a qualified professional who has been educated in the field of wildlife biology or a closely related field, and has professional experience as a wildlife biologist.
- b. Buffers set forth by other critical area standards in this section have incorporated wildlife habitat and corridor protection measures and shall be considered the minimum to protect Class I wildlife species, except when a habitat management plan required in 4.3.11.1 sets forth additional measures; provided that buffer requirements or related standards set forth by federal or state laws or regulations shall prevail over the requirements in this section.
- 2. All new major development within Class II wildlife habitat conservation areas may require the filing of an HMP meeting the requirements specified in subsection 4.3.11.1 above. The requirement for an HMP shall be determined during the SEPA threshold determination on the project and/or by the Administrator.

4.3.12 Regulations – Geologically Hazardous Areas Designation, Classification, and Mapping

- 1. Designation: Lands classified as landslide, erosion or seismic hazards are hereby designated as geologically hazardous areas and are subject to the procedures and standards of this section.
- 2. Classification - Landslide Hazard Areas: Lands potentially subject to mass movement due to a combination of geologic, topographic, and hydrologic factors. The following shall be designated as landslide hazards and are subject to the requirements of this section:
 - a. Areas of historic, existing, or ongoing landslide activity as evidenced by downslope movement of a mass of materials including rock, soils, fills, and vegetation.
 - b. Glaciolacustrine silt and clays on terraces.
 - c. Slopes fifteen percent (15%) or steeper with a combination of slowly permeable silt and clay, interbedded sand and gravel, and sidehill springs or seeps from perched water tables.
 - d. Soils mapped and described by the Soil Survey of Clallam County, Washington, issued February 1987, as amended, classified as having a severe or very severe erosion hazard potential.
 - e. Planar slope forms sixty-five percent (65%) or steeper with vertical relief of ten (10) or more feet, except areas composed of consolidated rock.
 - f. Concave slope forms twenty-five percent (25%) or steeper with vertical relief of ten (10) or more feet, except areas composed of consolidated rock.
 - g. Any slopes greater than eighty percent (80%) subject to rockfall during seismic shaking.
 - h. Marine bluffs potentially unstable due to wave action or mass wasting and littoral dune systems which border the ordinary high water mark.
 - i. Ravines with a vertical relief of ten (10) or more feet in depth except areas composed of consolidated rock.
 - j. Channel migration zones: Areas within which the stream channel can reasonably be expected to migrate over time as a result of normally occurring hydrological and related

processes when considered with the characteristics of the river and its surroundings. Such hazards are characterized by abandoned channels, ongoing sediment deposition and erosion, topographic position, and changes in the plant community, age, structure and composition. These areas do not include areas protected from channel movement due to the existence of permanent levees or infrastructure improvements such as roads and bridges constructed and maintained by public agencies.

- k. Any area located on or adjacent to an active alluvial fan or debris flow, presently or potentially subject to inundation by debris or deposition of stream-transported sediments.
 - l. Slopes that are parallel or sub-parallel to planes of weakness, such as bedding planes, joint systems, and fault planes in subsurface materials.
3. Classification - Erosion Hazard Areas: Areas containing soils may experience significant erosion, including:
- a. Sloes forty percent (40%) or steeper with a vertical relief of ten (10) or more feet, except areas composed of consolidated rock.
 - b. Concave slope forms equal to or greater than fifteen percent (15%) with a vertical relief of ten (10) or more feet, except areas composed of consolidated rock.
 - c. Areas indentified in the Washington Coastal Atlas as erosion hazard areas.
4. Classification - Seismic Hazard Areas: Lands meeting the following classifications shall be designated as seismic hazard and are subject to the requirements of this section:
- a. Landslide hazard areas and materials.
 - b. Artificial fills especially on soils listed in subsection (c) below and areas with perched water tables.
 - c. Soil types described within the Clallam County Soil Survey as beaches, Mukilteo muck, Lummi silt loam, Sequim-McKenna-Mukilteo complex, and Tealwhit silt loam.
 - d. Other areas as determined by the Clallam County Building Official pursuant to 1997 Washington State Uniform Building Code, Chapter 18, as amended (County staff to verify this).
5. Mapping: Geologically hazardous areas shall be mapped whenever possible. These maps shall be advisory and used by the Administrator to provide guidance in determining applicability of the standards to a property. These maps shall be updated periodically as new information becomes available.

4.3.13 Regulations – Geologically Hazardous Area Buffers

1. Landslide Hazard Areas: Development on marine bluffs mapped as unstable slope, unstable slope–recent slide, unstable slope–old slide, feeder bluff and/or exceptional feeder bluffs and development within channel migration zones shall conform to the shoreline safety buffer requirements in subsection 4.2.3 of this Program. The shoreline safety buffer shall not be altered unless the alteration is specifically allowed by the Program. On all other landslide hazard areas, new uses and developments shall also maintain a minimum buffer of fifty (50) feet from the top, toe and all edges of all other landslide hazard areas for major or minor new

developments. The Administrator may approve, without a shoreline variance, a reduction in the buffer through buffer averaging contingent upon all of the following:

- a. Total area of buffer remains the same and the buffer meets the stem density and/or percent cover targets defined in Subsection 4.2.3.8. The Administrator shall require planting or enhancement of the buffer to meet the stated density and/or cover targets if the existing vegetation conditions of the buffer do not meet the density and/or cover targets;
 - b. The reduced portion of the buffer cannot exceed forty percent (40 %) of the buffer length;
 - c. The reduced portion of the buffer can only be twenty five percent (25%) narrower than the standard buffer; and
 - d. The other critical area requirements of Section 4.3 are met.
2. Erosion Hazard Areas: Development within erosion hazard areas shall require a temporary erosion and sediment control plan and permanent drainage plan, consistent with the Section 4.7 of this Program. This requirement may be waived by the Administrator upon determination that the proposal will not affect the erosion hazard area.

4.3.14 Regulations – Geologically Hazardous Areas Protection Standards

1. New shoreline uses and developments shall be located, designed, constructed, and maintained to avoid impacts to geologically hazardous areas. Impact avoidance measures shall include, but not be limited to, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; using environmentally favorable construction materials; implementing special drainage or runoff management practices; foregoing construction of accessory structures; preserving native vegetation; and other reasonable measures
2. New uses and developments may be allowed in geologically hazardous areas and/or their buffers only when specifically allowed by this Program and when all reasonable measures have been taken to avoid adverse effects on slope stability and protect human health and safety.
3. Critical facilities shall be prohibited in geologically hazardous areas and/or their buffers.
4. The Administrator's approval of a new use or development in a geologically hazardous area or buffer shall be contingent upon the findings of a geotechnical report prepared by either an engineering geologist, a geotechnical engineer, or a civil engineer licensed in the State of Washington, who is knowledgeable of regional geologic conditions and who has professional experience in landslide and/or seismic hazard evaluation. The geotechnical report shall certify that the proposed development will not adversely affect slope stability or impact adjacent properties or resources. Such certification shall be supported by clear documentation of all of the following:
 - a. Geologic conditions in the vicinity of the site;
 - b. The expected rate of erosion as determined through a robust erosion rate study;
 - c. Physical evidence of past erosion or landslide activity in the vicinity of the proposed development;

- d. The potential for long-term slope stability impacts during the next one hundred (100) or more years;
 - e. The development will not significantly increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;
 - f. Conclusions regarding the effect of the proposed development on soil and geologic conditions; and
 - g. Recommendations on how to adequately protect the proposed development and minimize risk of erosion or landslides.
5. The Administrator may impose conditions on any new shoreline use and developments in geologically hazardous areas and their buffers as needed to:
- a. Protect slope stability and minimize erosion, seismic, and/or landslide hazard risks;
 - b. Maintain natural sediment and erosion processes that are integral to the health and sustainability of freshwater and marine nearshore ecosystems;
 - c. Minimize the potential for property damage related to seismic events, erosion and/or landslides;
 - d. Protect human health and safety; and
 - e. Reduce public liabilities for damages associated with seismic events, erosion and/or landslides.

4.3.15 Regulations – Frequently Flooded Area Designation and Mapping

1. Designation and Mapping: All lands classified as floodway or special flood hazard areas in the Federal Emergency Management Agency report titled “The Flood Insurance Study for Clallam County” dated December 5, 1989, as now or hereafter amended, with accompanying Flood Insurance Rate and Boundary Maps, are designated as frequently flooded areas. The study and maps are on file at Clallam County. When base flood elevation data has not been provided in the Flood Insurance Study, the Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from the Federal Emergency Management Agency, Washington State Department of Ecology, or other qualified source. Where base flood elevation data and floodway delineation are not available either through the Flood Insurance Study or from a qualified source, historical data, high water marks, photographs of past flooding, etc., shall be used to determine base flood elevations. Frequently flooded areas shall not include those lands where a qualified professional determines that Flood Insurance Study maps are in error.

4.3.16 Regulations – Frequently Flooded Area Protection Standards

1. The standards of this Program, including this section, shall be considered sufficient to protect frequently flooded areas because the jurisdiction of the shoreline master program is coincident with the frequently flooded areas.
2. The standards of this section and other applicable provisions of this Program shall apply to all new uses and developments occurring within the floodplain, including flood control structures regulated in Section 3.16 of this Program.

3. Critical facilities shall be prohibited within areas designated as frequently flooded. Critical facilities include all facilities for which even a slight chance of flooding would be too great. Critical facilities include, but are not limited to: schools, hospitals, police, fire, emergency response installation, nursing homes, installations which produce, use or store hazardous materials or hazardous waste, pipelines which transmit oil and gas, municipal water and sewer facilities, and regional transportation facilities, such as airports, ports, railroads and major highways. Where linear critical facilities must cross frequently flooded areas, reasonable and practicable alternative alignments which minimize flood hazard shall be considered and preferred; any necessary crossing for linear critical facilities shall be elevated and/or flood-proofed, sited to minimize hazard and ecological impacts, and otherwise designed and maintained to minimize flood hazards.
4. Land Divisions – New land divisions containing frequently flooded areas shall be consistent with the requirement to minimize flood damage; shall have utilities and common facilities located and constructed to minimize flood damage; shall have adequate drainage provided to reduce exposure to flood damage; and where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for development proposals which contain at least fifty (50) lots or five (5) acres (whichever is less).
5. Land Disturbing Activities within Floodways: Land disturbing activities are prohibited within floodways unless certification by a civil engineer licensed in the State of Washington is provided demonstrating that such activities shall not result in more than a one-foot increase in flood levels during the occurrence of the base flood discharge. In the designated frequently flooded area, the cumulative effect of any land disturbing activity, where combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one foot at any point. Certification by a civil engineer licensed in the State of Washington who is qualified for flood assessment is required unless the Administrator determines that sufficient information is available to determine compliance.
6. Recreational Vehicles – Recreational vehicles placed within the special flood hazard area shall comply with all of the following conditions:
 - a. The recreational vehicle shall be located on the site for fewer than 180 consecutive days, be fully licensed and ready for highway use, be on its wheels or jacking system, be not obstructed (i.e., no blocking or skirting), be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions.
 - b. Any structures temporarily attached to recreational vehicles must comply with applicable provisions of this chapter.
 - c. Recreational vehicles shall not be located within critical area buffers required pursuant to this chapter.
7. Protection Standards for Structures in Frequently Flooded Areas – In addition to the critical area buffer requirements and other applicable protection standards of this Program and the standards set forth in Chapter [21.01](#) CCC, Clallam County Construction Code, as amended, the following conditions shall apply to structures constructed within designated frequently flooded areas.
 - a. Floodways – Consistent with RCW [86.16.061](#)(2)(a), as it applies, construction or reconstruction of residential structures is prohibited within designated floodways, except for: (i) repairs, reconstruction, or improvements to a structure which do not increase the

ground floor area; and (ii) repairs, reconstruction, or improvements to a structure, the cost of which does not exceed fifty (50) percent of the market value of the structure either, (i) before the repair, or reconstruction is started, or (ii) if the structure has been damaged, and is being restored before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes or to structures identified as historic places shall not be included in the fifty (50) percent.

- b. Residential, commercial and/or industrial buildings. Buildings are prohibited within special flood hazard areas unless constructed or placed on lots or parcels of land platted by a final plat approved and recorded prior to December 10, 1980, for the Dungeness and Elwha Rivers and the effective date **[INSERT DATE]** for all other special flood hazard areas. If a portion of the pre-existing lot lies outside the flood hazard area, building shall be directed to the nonhazard portion to the maximum extent feasible.

4.3.17 Regulations – Critical Aquifer Recharge Areas Designation, Mapping, and Classification

1. Designation: Critical aquifer recharge areas are geographical areas which contain hydrogeologic conditions that provide recharge to one or more aquifers that are a current or potential potable water source and, due to their geological properties, are highly susceptible to the introduction of pollutants, or because of special circumstances, have been designated by Clallam County as a critical aquifer recharge area in accordance with WAC 365-190-080. All lands and shorelands classified as having high aquifer recharge potential and aquifer susceptibility are hereby designated as areas with a critical recharging effect on aquifers used for potable water. Critical aquifer recharge areas may be designated due to special circumstances, including areas with a high level of susceptibility or vulnerability to contamination, or known wellhead protection areas for Class A water systems. A wellhead protection area is the surface and subsurface area surrounding a well or wellfield that supplies a public water system through which contaminants are likely to pass and eventually reach the water well(s) as designated under the Federal Safe Drinking Water Act.
2. Mapping: Critical aquifer recharge areas shall be delineated on maps available at the Clallam County Department of Community Development.
3. Classification: All Clallam County lands and shorelands shall be classified as having either a high, moderate, or low aquifer recharge potential. At a minimum, classification shall be based on soil permeability and recharge potential as described within the Soil Survey of Clallam County. Where adequate information is available, aquifer recharge potential shall be further classified based on the recharge potential of surficial geologic materials, presence or absence of restrictive layers, surface and groundwater monitoring data, wellhead protection areas, depth to groundwater, topography (i.e., slopes), and locally adopted groundwater protection plans and studies. Lands classified as having a high, moderate, or low aquifer recharge potential shall also be classified as having a high, moderate, or low susceptibility to contamination of an underlying aquifer, respectively. Based on these criteria, the potential for recharging aquifers or transmitting contaminants to the underlying aquifer is greatest where the aquifer is close to the ground surface, where ground surface slopes are minimal, and where the recharge potential of the soils and/or surficial geologic material is greatest.

4.3.18 Regulations – Critical Aquifer Recharge Area Protection Standards

1. Protection standards for critical aquifer recharge areas have been incorporated into the water quality regulations in Section 4.7 and into the provisions for specific shoreline uses in

- Chapter 3. Such standards shall be considered the minimum necessary to protect critical aquifer recharge areas.
2. Aboveground/underground storage tanks or vaults for the storage of hazardous substances, animal wastes, sewage sludge, fertilizers, or other chemical or biological hazards or dangerous wastes as defined in Chapter 173-303 WAC, or any other substances, solids or liquids in quantities identified by the Clallam County Environmental Health Division, consistent with WAC 173-303, as a risk to groundwater quality, shall be designed and constructed so as to:
 - a. Prevent the release of such substances to the ground, groundwaters, or surface waters;
 - b. Be contained or enclosed by an impervious containment area with a volume greater than the volume of the storage tank or vault to avoid an overflow of the containment area;
 - c. Provide for release detection;
 - d. Provide written spill response and spill notification procedures to the local fire district;
 - e. Use material in the construction or lining of the storage containment area which is compatible with the substance to be stored to protect against corrosion or leakage, or otherwise designed in a manner to prevent the release or threatened release of any stored substance; and
 - f. Comply with Chapters 173-303 and 173-360 WAC.
 3. The Administrator may grant a waiver from one or more of the above requirements upon a finding that the aboveground storage activity would not create a significant risk to groundwater quality. Aboveground or underground storage facilities designed and maintained according to an approved plan from the Natural Resources Conservation Service or Clallam Conservation District are exempt from these requirements but remain under the jurisdiction of the County to ensure compliance with the protective features of this section and for enforcement purposes.
 4. The use of fertilizers, herbicides, pesticides or other chemicals for vegetation management within critical aquifer recharge areas shall adhere to best management practices to prevent impacts to water quality and water supply. Where the application of such chemicals covers five (5) or more acres, a mitigation plan shall be required pursuant to Section 4.4.8 of this Program.

4.4 Mitigation and No Net Loss

*Note: The policies and regulations in this section provide a framework for ensuring that impacts of shoreline use and development are mitigated to achieve no net loss. State rules in WAC 173-26-186(8) state: "Local master programs shall include regulations and mitigation standards ensuring that each permitted development **will not cause a net loss** of ecological functions of the shoreline... local government shall design and implement such regulations and mitigation standards in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property." It is important to note that the policies and regulations of the Program as a whole are structured to help achieve the no net loss requirement. This section outlines actions that apply to individual development projects. The County is preparing a restoration plan that will also help improve ecological functions such that there is a net gain overall. The County is also developing a specific approach and strategy to track the effects of shoreline development on a programmatic scale to ensure that the no net loss requirement is met. These efforts will be fully described in a separate No Net Loss Report.*

4.4.1 Applicability

No net loss means the maintenance of the aggregate total of the County's shoreline ecological functions over time. The no net loss standard requires that the impacts of shoreline use and/or development, whether permitted or exempt from permit requirements, be identified and mitigated on a project-by-project basis, so that as development occurs shoreline functions stay the same. No net loss also requires that the County and other entities implement restoration projects to improve ecological functions and processes since there may be some development impacts that cannot be fully mitigated.

Mitigation means measures taken to avoid, minimize, lessen, and/or compensate for adverse impacts of a development project. Mitigation, as defined in Chapter 7, includes the following steps in order of preference: (1) avoiding an impact altogether by not developing a project or parts of a project; (2) minimizing impacts by limiting the extent or magnitude of a project; (3) rectifying impacts by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating an impact over time by preservation and maintenance operations during the life of the project; (5) compensating for an impact by replacing or providing substitute resources or habitats; and (6) monitoring the mitigation and taking remedial action when necessary.

4.4.2 Policies

1. This Program should be implemented in a manner that achieves no net loss of shoreline ecological functions. In assessing the potential for new uses and developments to contribute to net loss of ecological functions, all of the following factors shall be taken into account:
 - a. The functions and processes at risk at each proposed development site; and
 - b. The effects that development could likely have on downstream, down-gradient, or down-drift resources; and
 - a. The cumulative effects that development would have when added to other past, present, and reasonably foreseeable future development; and
 - b. The likely effectiveness of proposed compensatory mitigation measures designed to offset adverse impacts of a given development action and/or use; and
 - c. The ability of any unmitigated development impacts to be offset through voluntary restoration actions.
2. Development proponents should seek the least environmentally damaging practicable alternatives for site design, construction, and maintenance. Uses and developments that cause the future ecological condition to become worse than current condition should be discouraged.
3. The County should work cooperatively with shoreline property owners and with other local, state, federal, and Tribal resource management agencies to monitor the effects of development and track gains and losses in ecological functions using a set of specific environmental indicators. Specific indicators that should be measured over time and compared to 2012 baseline levels include:
 - a. Percent of shoreland area mapped as feeder bluff (feed bluff, feeder bluff talus and feeder bluff exceptional);
 - b. Percent of feeder bluffs with armoring (percent classified as modified);

- c. Length of stream bordered by/confined by levees, excluding setback levees;
 - d. Number of overwater structures per mile of shore and number of overwater structures per mile of sediment transport zone;
 - e. Percent of aquatic area supporting submerged aquatic vegetation (kelp);
 - f. Percent closed canopy forest within two hundred (200) feet of the ordinary high water line; and
 - g. Percent impervious surface within two hundred (200) feet of the ordinary high water mark;
4. The County should use the checklist in Exhibit B to track new development proposals against the list of indicators in 4.4.2.3. Changes in indicators should be tracked and monitored at the shoreline reach and watershed scales.
 5. The County should work with other local, state, and federal regulatory agencies and resource management agencies to ensure that efforts to mitigate adverse impacts and restore degraded areas are successful and achieve beneficial ecological outcomes. This includes assisting applicants/proponents in planning, designing, and implementing projects to be consistent with the Program and working cooperatively with stakeholders to implement restoration projects that improve conditions overall.

4.4.3 Regulations – General Mitigation Requirements

1. Proponents of new shoreline use and development, including preferred uses and uses that are exempt from permit requirements, shall employ all reasonable measures to mitigate adverse impacts on shoreline functions and processes. Impacts can be mitigated if mitigation measures would not result in an extraordinary hardship and denial of reasonable use of the property.
2. Mitigation shall include the following actions in order of priority (referred to as the mitigation sequence):
 - a. Avoiding the impact altogether by not taking a certain action or parts of an action;
 - b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by adhering to the dimensional requirements, performance standards and design criteria in this Program and using other technologies or steps, as needed, to avoid or reduce impacts;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations;
 - e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
 - f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.
3. The Administrator shall first determine whether identified impacts have been avoided and secondly minimized. Unless otherwise stated, development proposals that do not fully

conform to the dimensional requirements, performance standards, and/or design criteria in this Program shall require compensatory mitigation to ensure no net loss at the project scale. The Administrator shall require compensatory mitigation for development proposals that:

- a. Do not fully conform to one or more of the dimensional requirements, performance standards, and/or design criteria in this Program; or
 - b. Require a variance or conditional use permit; or
 - c. Result in measureable damage, loss and/or displacement of a wetland, aquatic habitat conservation area, wildlife habitat conversation area, flood storage or conveyance area, or critical aquifer recharge area; or
 - d. Result in measureable damage, loss and/or displacement of kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sand lance; subsistence, commercial and recreational shellfish beds; mudflats; intertidal habitats with vascular plants; and areas with which priority species have a primary association.
4. Compensatory mitigation measures shall occur in the vicinity of the impact or at an alternative location within the same watershed or appropriate section of marine shoreline (e.g., reach or drift cell) that provides greater and more sustainable ecological benefits. When determining whether offsite mitigation provides greater and more sustainable benefits, the Administrator shall consider limiting factors, critical habitat needs, and other factors identified by the locally adopted shoreline restoration plan [insert date of adoption or resolution number], or an approved watershed or comprehensive resource management plan. The Administrator may also approve use of alternative mitigation practices such as in-lieu fee programs, mitigation banks, and other similar approaches provided they have been approved and sanctioned by the appropriate state, federal, and Tribal authorities.
5. To prevent cumulative impacts that could lead to a net loss of ecological functions, the Administrator shall consider the following factors when assessing whether individual development proposals are consistent with this Program:
- a. Current ecological functions and human factors influencing shoreline natural processes; and
 - b. Reasonably foreseeable future use and development of the shoreline; and
 - c. Beneficial effects of any established regulatory programs under other local, state, and federal laws; and
 - d. Mitigation measures implemented in conjunction with the proposed project to avoid, reduce, and/or compensate for adverse impacts.
6. The Administrator shall prohibit any use or development that will result in unmitigated cumulative impacts.
7. When compensatory mitigation plans are required pursuant to this Program, all of the following shall apply:
- a. The quality and quantity of the replaced, enhanced, or substituted resources shall be the same or better than the affected resources; and

- b. The mitigation site and associated vegetative planting shall be nurtured and maintained such that healthy native plant communities grow and mature over time; and
 - c. The mitigation shall be informed by pertinent scientific and technical studies, including but not limited to the Shoreline Inventory and Characterization Report, the Shoreline Restoration Plan, and other background studies prepared in support of this Program; and
 - d. The mitigation shall replace the functions as quickly as possible following the impacts; and
 - e. Mitigation activity shall be monitored and maintained to ensure that it achieves its intended functions and values; and
 - f. The Administrator shall require the applicant/proponent to post a bond or provide other financial surety equal to one hundred and fifty percent (150%) of the estimated cost of the mitigation to ensure the mitigation is carried out successfully. The bond/surety shall be refunded to the applicant/proponent upon completion of the mitigation activity and any required monitoring.
8. Compensatory mitigation plans shall be prepared by qualified professionals with education, training and experience in the applicable field:
- a. Wetland mitigation plans shall be prepared by a qualified professional who is educated/trained in wetland biology or a closely related field, and has demonstrated experience in mitigation plan design, implementation, and monitoring. The overall goal of any such mitigation plan shall be no net loss of wetland functions, acreage, and values.
 - b. Mitigation plans for impacts to aquatic and wildlife habitat conservation areas shall be prepared by qualified professional with education/training in wildlife biology or a closely related field, and professional experience in habitat mitigation plan design, implementation, and monitoring. Where this plan is required for the protection of eagle habitat, the eagle habitat management plan shall normally be prepared by the Washington State Department of Fish and Wildlife, as required under the Bald Eagle Management Rules. The Washington Department of Fish and Wildlife Priority Habitat and Species Management Recommendations, dated May 1991 or as thereafter amended, may serve as guidance for preparing mitigation plans to protect wildlife habitat conservation areas.
 - c. Mitigation plans for geologically hazardous areas shall be prepared by qualified professional who is either a geologist and a geotechnical engineer, a geotechnical engineer, or a civil engineer licensed in the State of Washington, who is knowledgeable of regional geologic conditions and who has professional experience in landslide and/or seismic hazard evaluation, mitigation plan design, implementation, and monitoring.
 - d. Mitigation plans for development within frequently flooded areas shall be prepared by a civil engineer licensed in the State of Washington.
 - e. Mitigation plans for impacts to critical aquifer recharge areas shall be prepared by person(s) with professional experience in mitigation plan design, implementation, and monitoring, hydrogeologic assessment, and professional experience in hydrogeology or a related field. The person(s) shall also be knowledgeable in the effect of the proposed development on groundwater quality and quantity.

9. The applicant shall pay for or reimburse the County for the costs incurred in the preparation of a mitigation plan and for the costs incurred by the County to engage technical consultants or staff for review and interpretation of data and findings submitted by or on behalf of the proponent. Technical assistance fees are required under Chapter 3.30 Clallam County Code, as now or hereafter amended.
10. When there is a conflict between the findings of a special report and the findings of the Administrator in review of the special report, the applicant or affected party may appeal such decisions of the Administrator pursuant to the procedures in this section and Chapter 26.10 Clallam County Consolidated Development Permit Process Code.

4.4.4 Regulations – Compensatory Mitigation Plan Contents

1. Compensatory mitigation plans required by this Program shall include the following information:
 - a. **Baseline Information:** A written assessment and accompanying maps of the following:
 - i. Impacted critical area including, at a minimum, existing wetland/stream acreage; vegetative, fauna and hydrologic characteristics; soil and substrate conditions; and topographic elevations.
 - ii. Mitigation site, if different from the impacted wetland site, including at a minimum: existing acreage; vegetative, faunal and hydrologic conditions; relationship within watershed and to existing water bodies; soil and substrate conditions; topographic elevations; existing and proposed adjacent site conditions; buffers; and ownership.
 - b. **Environmental Goals and Objectives:** The mitigation plan shall identify goals and objectives and include:
 - i. The purposes of the compensation measures including a description of site selection criteria, identification of compensation goals, identification of target evaluation species and resource functions, dates for beginning and completion, and a complete description of the structure and functional relationships sought. The goals and objectives shall be related to the functions and values of the original critical area or, if out-of-kind, the type of critical area to be emulated.
 - ii. A review of the available literature and/or experience to date in restoring or creating the type of critical area proposed. An analysis of the likelihood of success of the compensation project at duplicating the original resource shall be provided based on the experiences of comparable projects, if any. An analysis of the likelihood of persistence of the created or restored resources shall be provided based on such factors as surface and groundwater supply and flow patterns, dynamics of the ecosystem, sediment or pollutant influx and/or erosion, periodic flooding and drought, presence of invasive flora or fauna, potential human or animal disturbance, and previous comparable projects, if any.
 - c. **Performance Standards:** Specific and measureable criteria shall be provided for evaluating whether or not the goals and objectives of the mitigation plan are being achieved at various stages in the project and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, in-stream habitat conditions, species abundance and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.

- d. Detailed Construction Plans: Written specifications and descriptions of compensation techniques shall be provided, including the proposed construction sequence; grading and excavation details; erosion and sediment control features needed for construction and long-term operation; a planting plan specifying plant species, quantities, locations, size, spacing, and density; source of plant materials, propagules, or seeds; water and nutrient requirements for planting; where appropriate, measures to protect plants from predation; substrate stockpiling techniques and planting instructions; descriptions of water control structures and water-level maintenance practices needed to achieve the necessary hydroperiod characteristics; etc. These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome. The plan shall provide for elevations which are appropriate for the desired habitat type(s) and which provide sufficient tidal prism and circulation data.
- e. Monitoring Program: A program outlining the approach for monitoring construction of the compensation project and for assessing a completed project shall be provided. Monitoring may include, but is not limited to:
- i. Establishing vegetation plots to track plant establishment/survival, and changes in plant species composition and density over time;
 - ii. Using photo stations to evaluate vegetation community response;
 - iii. Measuring physical parameters such as wetland size, stream dimensions, channel characteristics, buffer width;
 - iv. Monitoring shallow groundwater levels to document hydrologic regimes/hydroperiods;
 - v. Sampling surface and subsurface waters to determine pollutant loading and changes from the natural variability of background conditions (pH, nutrients, heavy metals);
 - vi. Measuring base flow rates and stormwater runoff to model and evaluate water quality predictions, if appropriate;
 - vii. Measuring sedimentation rates, if applicable; and
 - viii. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity.
- f. Monitoring and Reporting: A monitoring report shall be submitted annually, at a minimum, documenting milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than two (2) years.
- g. Contingency Plan: Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.
- h. Performance Bonds and Demonstration of Competence: A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise of sufficient standing to successfully execute the compensation project shall be provided. A compensation project manager shall be named, and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the

project shall be provided, including educational background and areas of expertise, training and experience with comparable projects. In addition, bonds ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in the amount of one hundred and fifty percent (150%) of the expected cost of compensation and shall be effective for a period of no less than two (2) years nor greater than five (5) years after Administrator approval of successful completion of the mitigation plan. Administration costs incurred by Clallam County that are associated with bond administration and/or enforcement shall be paid for by the applicant.

- i. Additional information as specified in Sections 4.4.5 through 4.4.9, as applicable.

4.4.5 Regulations – Wetland Mitigation Plans

1. The overall goal of a wetland mitigation plan shall be no net loss of wetland functions, acreage, and values.
2. To achieve no net loss, wetland impacts shall be replaced according to the minimum area ratios shown in Table 4-3. The Administrator may increase the ratios by twenty-five percent (25%) when there is a high likelihood that the proposed mitigation will be unsuccessful in fully replacing the wetland functions and values lost at the impact site. The Administrator shall solicit input from the Department of Ecology and the U.S. Army Corps of Engineers when assessing the likelihood of mitigation success.

Table 4-3. Wetland Mitigation Ratios

Type of Mitigation Activity	Minimum Replacement Ratio (area of replacement to area of impact)
Wetland restoration or creation	1.5:1
Wetland enhancement	3:1
Wetland preservation	8:1

3. Those persons proposing or required to compensate for wetland impacts shall show that the compensation project is associated with an activity or development otherwise permitted and that the restored, created, or enhanced wetland will be preserved in perpetuity by accomplishing the following:
 - a. Demonstrate sufficient scientific expertise, supervisory capability, and financial resources to carry out the project;
 - b. Demonstrate the capability for monitoring the site and to make corrections during this period if the project fails to meet projected goals; and
 - c. Protect and manage or provide for the protection and management of the compensation area to avoid further development or degradation.

4.4.6 Regulations – Aquatic and Wildlife Habitat Conservation Areas Mitigation Plans

1. Mitigation plans for impacts to habitat conservation areas shall include the following information in addition to the information listed in 4.4.4:
 - a. Description of buffer zones needed to protect the species/habitat;
 - b. Measures for preserving and/or restoring critically important habitat elements including plants and other features;
 - c. Limits on access to habitat areas, if needed;
 - d. Seasonal restrictions on construction activities;
 - e. Establishment of phased development requirements and/or a timetable for periodic review of the plan; and
 - f. Other information the Administrator determines is necessary to address the expected impacts of development.

4.4.7 Regulations – Frequently Flooded Areas Mitigation Plans

1. Mitigation plans for development within frequently flooded areas shall include the following information in addition to the information listed in 4.4.4:
 - a. Potential that materials may be swept during flooding onto other lands to the detriment of others;
 - b. Actual danger to life and property if flooding or erosion occurs;
 - c. Susceptibility of the proposed development and its contents to flood damage;
 - d. Availability of alternative locations for the proposed use which are not subject to flood or erosion damage;
 - e. Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - f. Safety of access to the property in times of flood for ordinary and emergency vehicles;
 - g. Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action at the site;
 - h. Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities;
 - i. Location and extent of storage area for floodwater which will be displaced by the proposed development; and
 - j. The risk to public and private property and public health, safety and welfare due to rising of water levels, shifting of stream channels (including related erosion) as well as costs to individuals and the general public for items which are not insured such as loss of productivity due to closed roads, risk to emergency response workers, loss of uninsured

property (cars, landscaping, etc.) and habitat damage as a result of loss of riparian zones and floodplain function.

4.4.8 Regulations – Critical Aquifer Recharge Areas Mitigation Plans

1. Mitigation plans for impacts to critical aquifer recharge areas shall include the following information in addition to the information listed in 4.4.4:
 - a. Geologic setting and soils information for the site and surrounding area;
 - b. Water quality data, including pH, temperature, dissolved oxygen, conductivity, nitrates, and bacteria;
 - c. Location and depth of perched water tables;
 - d. Recharge potential of facility site (permeability/transmissivity);
 - e. Hydrologic budget;
 - f. Local groundwater flow, direction and gradient;
 - g. Location, depth, and other water quality data on the three shallowest wells or springs located within one thousand (1,000) feet of the site;
 - h. Impacts on wellhead protection areas located within the development proposal;
 - i. Surface water locations within one thousand (1,000) feet of the site;
 - j. Discussion of the effects of the proposed project on groundwater quality and quantity;
 - k. Recommendations on appropriate mitigation, if any, to assure that there shall be no measurable exceedence of minimum state groundwater quality standards or measurable reduction in available quantity of groundwater;
 - l. Emergency management plan; and
 - m. Contaminant release detection.

4.5 Clearing, Grading and Filling

This section contains stormwater management and clearing and grading regulations that would apply to any/all development within shoreline jurisdiction.

4.5.1 Applicability

All new uses and developments shall comply with the applicable policies and regulations for clearing and grading as defined in Chapter 7.

4.5.2 Policies

1. Clearing, grading and filling activities within shoreline jurisdiction should be proactively controlled to address the problem of stormwater pollution.
2. Clearing, grading and filling should only occur in conjunction with an allowed use or development, unless otherwise allowed in this Program.

3. When allowed, Clearing, grading and filling should be conducted so that water quality, habitat, hydrology, natural erosion rates, and runoff/drainage patterns are not adversely affected.

4.5.3 Regulations

1. Clearing, grading and filling shall only be allowed as part of an approved shoreline use/development and shall be subject to the requirements of the primary use/development.
2. When allowed, clearing and/or grading shall be located, designed, and carried out in a manner that:
 - a. Minimizes land disturbance to the minimum necessary for the intended development; and
 - b. Utilizes mulch, vegetation, or other best management practices to minimize erosion from exposed soils during construction; and
 - c. Includes plans to revegetate or otherwise stabilize areas of exposed soil following construction; and
 - d. Blends in physically and visually with natural topography, so as not to interfere with appropriate use, impede public access, or degrade the aesthetic qualities of the shoreline; and
 - e. Does not impede net shore-drift toward sensitive marine environments such as spits, estuaries, and river deltas; and
 - f. Does not require shoreline armoring or stabilization to protect materials placed unless it is part of an approved shoreline restoration project and shoreline armoring or stabilization measures are needed to keep the material in place.
3. Fill materials placed within shoreline jurisdiction shall be from an approved source and shall consist of clean sand, gravel, soil, rock or similar material. The use of contaminated material or construction debris shall be prohibited.
4. Fill placed waterward of the ordinary high water mark of any water body shall only be permitted when alternatives are infeasible and when the filling/excavation is necessary to support one or more of the following activities:
 - a. Approved marinas, ports, and other water-dependent industries where upland alternatives or structural solutions including pile or pier supports are infeasible.
 - b. Development or maintenance of essential public infrastructure and facilities.
 - c. Federally mandated environmental cleanup activities required by the Model Toxics Control Act or the Comprehensive Environmental Response, Compensation, and Liability Act.
 - d. Maintenance of a lawfully established use or development.
 - e. Ecological restoration and enhancement projects benefitting water quality and/or fish and wildlife habitat.

- f. Public access and public water-oriented recreation projects benefitting substantial numbers of people.
 - g. Part of an approved shoreline stabilization, flood control, or in-stream structure project when consistent with this Program.
5. Excavation below the ordinary high water mark shall be considered dredging and shall be subject to Section 3.15 of this Program.
6. The following information shall be required for all proposals involving fill unless the Administrator determines that issues are adequately addressed via another regulatory review process:
- a. A description of the proposed use of the fill area; and
 - b. A description of the fill material, including its source and characteristics; and
 - c. A description of the method of placement and compaction; and
 - d. A description of the location of the fill relative to natural and/or existing drainage patterns; and
 - e. A description and map of the fill area and depth relative to the ordinary high water mark; and
 - f. A description of proposed means to control surface runoff; and
 - g. A temporary erosion and sediment control (TESC) plan.

4.6 Public Access

This section describes the policies and regulations for providing public access to public shorelines.

4.6.1 Applicability

Public access includes the ability of the general public to reach and enjoy the water's edge, to travel on the waters of the state, and to view water and the shoreline from adjacent locations. Physical public access means having the ability to physically touch or reach the water. Visual public access means having the ability to view the shoreline or water, but does not necessarily include physical access to the water's edge.

4.6.2 Policies

1. The goal of providing public access should be balanced with the need to protect ecological functions and preserve the rights of private property owners.
2. Existing physical and visual access sites/areas should be maintained to ensure the public's continued ability to enjoy the recreational and aesthetic qualities of the shoreline, unless the maintenance of such existing site is inconsistent with the policies and regulations of this Program.
3. The County should work with appropriate agencies and individuals to acquire lands that can provide physical and visual access to public waters for public use.

4. Public entities and private landowners should not be required to provide public access when such access is shown to be in appropriate due to reasons of safety, security, or adverse impacts to shoreline functions and processes.

4.6.3 Regulations

1. Commercial and industrial development and development by public entities, such as local governments, port districts, state agencies, and public utility districts, shall include physical or visual public access to public waters unless:
 - a. Unavoidable public health or safety hazards exist and cannot be prevented through reasonable means;
 - b. The use/development has inherent security needs that cannot be mitigated through reasonable design measures or other solutions;
 - c. The cost of providing the access, easement or an alternative amenity is disproportionate to the total long-term cost of the proposed development;
 - d. The public access will cause unacceptable environmental impacts that cannot be mitigated; or
 - e. The access would create significant, undue, and unavoidable conflicts with adjacent uses that cannot be mitigated.
2. To be exempt from the public access requirements in this section, the project proponent must demonstrate that all feasible alternatives have been considered, including:
 - a. Regulating access through means such as maintaining a gate or limiting hours of use; and
 - b. Separating uses and activities (using fences, hedges, landscaping, etc).
3. Public shoreline access provided by public road ends, public roads rights-of-way, public utilities and rights-of-way shall not be diminished by the County or neighboring property owners in accordance with RCW Chapter 36.87.130.4.

4.7 Water Quality and Water Management

4.7.1 Applicability

Water quality means the physical, chemical, and biological characteristics of water. Water quality is a measure of the condition of water relative to the requirements of humans and other species. Water quality is typically assessed in terms of specific standards for drinking water, shellfish harvest, recreation, fish production, and other beneficial uses.

Water management refers to the set of practices that are required to ensure there is adequate water to maintain stream flows and support domestic uses.

4.7.2 Policies

1. Shoreline uses and developments should incorporate best management practices, low impact development techniques, shoreline and critical area buffers, vegetation conservation, and other appropriate measures to achieve all of the following:

- a. Prevent the direct discharge of pollutants to surface and ground waters, including stormwater ditches.
 - b. Meet water quality standards and designated beneficial uses of surface waters.
 - c. Improve the quality of stormwater runoff, and thereby minimize impacts to surface and groundwater, protect human health, improve salmonid and other aquatic habitat, and reopen shellfish beds to harvest.
 - d. Reduce the speed and volume of stormwater flows to reduce flooding, prevent erosion, and maintain groundwater recharge.
 - e. Implement stormwater standards to mimic the natural hydrology as much as possible and reduce high flows resulting from future development/redevelopment.
 - f. Operate and maintain stormwater ditches, culverts, and ponds in a manner that ensures their longevity and effectiveness.
 - g. Raise public awareness of the societal value of water resources to encourage behavior that improves water quality.
 - h. Encourage removal of wood structures treated with creosote, copper, chromium arsenate or other hazardous substances.
2. Shoreline use and development should be designed to minimize the long-term need for chemical fertilizers, pesticides, herbicides, or other similar chemical treatments that could contaminate surface or groundwater or cause adverse effects on shoreline ecological functions and values.

4.7.3 Regulations

1. All shoreline uses and developments shall use effective temporary erosion and sediment control (TESC) methods during project construction. Project proponents shall submit a TESC plan for Administrator review and approval prior if they meet any of the following criteria:
 - a. Disturb seven thousand (7,000) square feet or more of land;
 - b. Result in slopes over twenty five percent (25%) and greater than five (5) feet in height;
 - c. Impound water exceeding a volume of one (1) acre-foot;
 - d. Result in the diversion of existing drainage courses; or
 - e. Involve clearing and grading in an erosion hazard area or on slopes steeper than twenty five percent (25%).
2. Developments that result in land disturbances of less than one (1) acre but that do not meet any other of the criteria in subsection 4.7.3.1 above are exempt from the TESC requirements if they can demonstrate to the Administrator that no significant increase in offsite runoff will be produced.
3. To protect water quality, shoreline uses and developments shall comply with the following standards based on the type and scale of the proposed development:

- a. Tier 1 Developments - Residential development with up to two thousand (2,000) square feet of new or replaced impervious surface: All new, replaced, and disturbed topsoil must be amended with organic matter, which shall not include biosolids (industrial, human, and/or hospital wastes) and shall be from a source approved by the Administrator. Roof runoff must be routed to a drywell or, if a dry well is not appropriate for site conditions, runoff must be dispersed to a vegetated area, a rain garden or bioswale, an infiltration system or permeable pavement. Project proponents must submit a one page drainage plan showing how stormwater runoff will be controlled and design standards implemented.
 - b. Tier 2 Developments - Single family residential development with more than 2,000 SF of new or replaced impervious surface, other residential development which disturbs more than seven thousand (7,000) square feet of land or generates two thousand (2,000) to five thousand (5,000) square feet of impervious surface, and all commercial development smaller than five thousand (5,000) square feet in size that do not use hazardous substances; all Tier 2 developments shall provide for on-site stormwater management controls, which must be provided according to the Clallam County Small Project Drainage Manual (**INSERT DATE [Not Yet Adopted- Only in Draft Form Presently]**). In addition to other requirements, all new, replaced, and disturbed topsoil must be amended with organic matter, which shall not include biosolids (industrial, human, and/or hospital wastes) and shall be from a source approved by the Administrator.
 - c. Tier 3 Developments - All industrial development; commercial and residential development which generates more new or replaced impervious surface than is allowed in Tier 2, converts three-quarters acre or more of native vegetation to lawn or landscaped areas, or converts 2.5 acres or more of native vegetation to pasture; and all commercial projects that use hazardous substances: A stormwater management site plan prepared by a licensed engineer must be prepared in accordance with the **INSERT DATE** Ecology Stormwater Management Manual for Puget Sound. In addition to other requirements, all new, replaced, and disturbed topsoil must be amended with organic matter, which shall not include biosolids (industrial, human, and/or hospital wastes) and shall be from a source approved by the Administrator.
4. To avoid water quality degradation by malfunctioning or failing septic systems located within shoreline jurisdiction, on-site sewage systems shall be located and designed to meet all applicable water quality, utility, and health standards.
 5. All building materials that may come in contact with surface waters shall be composed of non-toxic materials, such as wood, concrete, approved plastic composites, or steel that will not adversely affect water quality or aquatic plants or animals. Materials used for docks or similar structures shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave splash, rain, or runoff. Wood treated with creosote, copper chromium arsenate, or pentachlorophenol is prohibited in shoreline water bodies.
 6. Solid and liquid wastes and untreated effluents shall not be allowed to enter any groundwater or surface water or to be discharged onto land. The release of oil, chemicals, genetically modified organisms, or hazardous materials onto land or into the water is prohibited.
 7. Illicit non-stormwater discharges to the stormwater system are prohibited. This includes direct discharges of wastewater (e.g., from sinks, washing machines) to stormwater conveyance systems such as drainage ditches, and discharge of wastes from incidental sources such as spills from road accidents into stormwater drainage.