

## Chapter 7 Critical Areas within Shoreline Jurisdiction

*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 functions. The County's existing critical areas ordinance, in CCC 27.12, applies to critical areas outside of shoreline jurisdiction.*

### 7.1 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 11. 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.

### 7.2 General Policies for all Critical Areas

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, storm surges, rising sea levels, 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.

### **7.3 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 physical evidence and other available information from credible sources and qualified professionals as outlines in this chapter. The location and extent of special flood hazard areas shall be based on mapping provided by the Federal Emergency Management Agency (FEMA)
4. 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, except that the location and extent of special flood hazard areas shall be based on mapping provided by the Federal Emergency Management Agency (FEMA). 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.
5. 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.
6. 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.
  7. 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.
  8. 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.
  9. Land Divisions: Land divisions in critical areas and/or buffers shall meet all of the following conditions and the policies and regulations in Section 3.8 (Residential) of this Program:
    - a. Proposals to create new lots for development shall demonstrate an adequate building envelope (including access and utilities) that is suitable for development and is not within a wetland, aquatic habitat conservation area, floodplain, or landslide hazard area or their buffers.
    - b. 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.

- c. 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.
- d. Regulated wetlands and wetland buffers may be included in the calculation of minimum lot area for proposed lots provided that other standards of this Program are met. Only fifty percent (50%) of the permanent open water area of regulated wetlands shall be used in calculating minimum lot area as required by Clallam County Code Title 33, Zoning, for the proposed lots. This provision shall not apply to the calculation of maximum residential density.
- e. Land below the ordinary high water mark of Type S, F, Np, Ns Waters shall not be permitted for use in calculating minimum lot area for the proposed lots.
- f. The building envelope, critical areas, and buffers shall be shown on the face of the final plat and/or site plan.
- g. New land divisions shall be surveyed by a professional land surveyor.

## **7.4 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. Definitive information about wetland size or presence requires a field inspection by a qualified professional. 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.

## 7.5 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 category as outlined in Table 7-1 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. When a wetland borders a shoreline waterbody, either above or below the ordinary high water mark, the wetland buffer shall be added together with the shoreline buffer in Section 6.3 buffer to determine the full set back distance.

**Table 7-1. Wetland Buffers for Wetlands in Shoreline Jurisdiction**

<b>Wetland Category</b>	<b>Standard Buffer Width</b>
Category I	200 feet
Category II	150 feet
Category III	75 feet
Category 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 one-hundred fifty (150) trees

and shrubs per acre or fifty five percent (55 %) areal cover of woody vegetation, unless this Program specifically allows alteration of the wetland 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.
  - a. Buffer Averaging: Wetland buffer widths shown in Table 7-1 may be reduced by the Administrator through buffer averaging. The averaging shall only be allowed when necessary to accommodate a single-family residential development or a water-dependent or water-related development in those limited instances when adherence to the standard buffer is infeasible or presents a substantial hardship because of site conditions, lot configuration or other circumstances. To ensure no net loss of buffer area, the buffer width may be reduced in one location and increased in another location to maintain the same overall buffer area. Residential subdivisions and non-water-dependent non-water-related developments shall not be eligible for wetland buffer averaging except through a shoreline variance. Proposals for buffer averaging shall not require a shoreline variance or compensatory mitigation if the following conditions are met: The minimum width of the buffer at any given point is at least seventy-five percent (75%) of the standard width per Table 7-1, 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;
  - c. 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 wetland, the reduced buffer area could be up to forty [40] feet long); and
  - d. The area that is added to the buffer to offset the reduction is well-vegetated as defined in Section 7.5.2 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.
4. Mitigation for Buffer Averaging: Prior to approving a request for wetland buffer averaging, 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.
5. 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.
6. 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.

## 7.6 Regulations – Wetland Protection Standards

1. New shoreline uses and developments shall be located, designed, constructed, and maintained to avoid wetland areas and their buffers. Impacts to wetlands and their buffers 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 8.3 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.

## 7.7 Regulations – Aquatic Habitat Conservation Area Designation and Mapping

*This section pertains to the subset of Fish and Wildlife Habitat Conservation Areas that are aquatic areas including Type S, 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.

## 7.8 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 7-2 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 Tables 6-1 and 6.2

**Table 7-2. Aquatic Habitat Conservation Area Buffers for Type S, F, Np, and Ns Waters**

Aquatic Habitat Conservation Area	Buffer Width
Type S Waters	See Table 2-3
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 trees and shrubs per acre or fifty five percent (55 %) areal cover of trees and shrubs, unless this Program specifically allows alteration of the buffer. Alterations that are not associated with an allowed use or development shall be prohibited. Buffer conditions for Type S waters shall be consistent with Section 6.3 of this Program.
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 S waters may be reduced through averaging in accordance with Section 6.4 of this Program. Buffer widths for Type F, Np, and Ns Waters may be reduced by the Administrator through buffer averaging in accordance with this section. The buffer averaging shall only be allowed when necessary to accommodate a single-family residential development or a water-dependent or water-related development in those limited instances when adherence to the standard buffer is infeasible or presents a substantial hardship because of site conditions, lot configuration or other circumstances. To ensure no net loss of buffer area, the buffer width may be reduced in one location and increased in another location to maintain the same overall buffer area. Residential subdivisions and non-water-dependent non-water-related developments shall not be eligible for buffer averaging except through a shoreline variance. 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 seventy-five percent (75%) of the standard width per Table 7-2, 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 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 stream/lake, the reduced buffer area could be up to forty [40] feet long); and
  - d. The area that is added to the buffer to offset the reduction is well-vegetated and meets the density and/or cover targets in Section 7.8.2. 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.
5. Mitigation for Stream Buffer Averaging or Reduction: Prior to approving a request for buffer averaging, 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.
  6. 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.
  7. 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.

## **7.9 Regulations – Aquatic Habitat Conservation Area Protection Standards**

1. The Program in its entirety shall constitute the protection standards for Type S Aquatic Habitat Conservation Areas.
2. New shoreline uses and developments shall be located, designed, constructed, and maintained to avoid impacts on Type F, Np and Ns Waters and their buffers. 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.
3. 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 8.3 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.

4. The Administrator may impose conditions on any new shoreline uses 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.

## **7.10 Regulations – Class I and II Terrestrial Habitat Conservation Areas Designation and Mapping**

1. Designation: Class I Terrestrial Habitat Conservation Areas shall include the following:
  - a. Habitats for species classified as Endangered, Threatened, Sensitive or Candidate under state or federal law which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These species/habitats are documented in maps or databases available to Clallam County and its citizens.
2. Designation: Class II Terrestrial Habitat Conservation Areas shall include the following:
  - a. Priority species not classified as Endangered, Threatened, Sensitive or Candidate under federal or state law; and
  - b. Priority habitats with unique or significant value to a diverse assemblage of species as designated by Washington Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a successional stage (e.g., old-growth forest), or a specific habitat feature (e.g., cliffs); 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 terrestrial 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 terrestrial habitat conservation areas are identified and as new information becomes available.

## **7.11 Regulations – Class I and II Terrestrial Habitat Conservation Areas Protection Standards**

1. Class I Terrestrial Habitat Conservation Areas: All development within the jurisdiction of designated Class I terrestrial habitat conservation areas shall adhere to the following standards:

- a. New uses and development on sites with known locations of Class I terrestrial habitat conservation areas or sites adjacent to known locations of Class I terrestrial habitat conservation areas 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 terrestrial 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; analyze the effect of the proposed development, activity or land use change upon the wildlife species and habitat identified for protection; and provide 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 terrestrial habitat conservation areas, except when a habitat management plan sets forth additional measures; provided that buffer requirements or related standards set forth by federal or state laws shall prevail over the requirements in this section.
2. All major new development within Class II terrestrial habitat conservation areas may require a HMP meeting the requirements specified in Section 7.11.1 above. The requirement for an HMP shall be determined during the SEPA threshold determination on the project and/or by the Administrator.

## **7.12 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 because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. The following shall be designated as landslide hazards and are subject to the requirements of this section:
  - a. Areas of historic failures, such as:
    - i. Those areas delineated by the United States Department of Agriculture Natural Resources Conservation Service as having a significant limitation for building site development;

- ii. Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the Department of Ecology Washington coastal atlas; or
  - iii. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington department of natural resources.
- b. Areas with all three of the following characteristics:
- i. Slopes steeper than fifteen percent;
  - ii. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
  - iii. Springs or groundwater seepage.
- c. Areas that have shown movement during the holocene epoch (from ten thousand years ago to the present) or which are underlain or covered by mass wastage debris of this epoch;
- d. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
- e. Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;
- f. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones. Channel migration zones are 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. The County maintains a set of maps showing the approximate location and extent of known channel migration zones as determined by the Department of Ecology, or in the case of the Dungeness River, by the Jamestown S'Klallam Tribe.
- g. Areas that show evidence of, or are at risk from snow avalanches;
- h. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
- i. Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.
3. Classification - Erosion Hazard Areas: Areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. Erosion hazard areas may also include coastal erosion areas. These areas are mapped in the Washington state coastal atlas available from the Department of Ecology.

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 Section 7.12.4.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 the Building and Construction Code, Chapter 21.01 CCC.
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.

### **7.13 Regulations – Geologically Hazardous Area Buffers**

1. Landslide Hazard Areas: Development on marine bluffs located along the Strait of Juan de Fuca and development within channel migration zones shall conform to the shoreline buffer requirements in Chapter 6 of this Program. The 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 maintain a minimum buffer of fifty (50) feet from the top, toe and all edges of all other landslide hazard areas. The Administrator may approve, without a shoreline variance, a reduction in the landslide hazard area buffer through buffer averaging contingent upon all of the following:
  - a. Total area of buffer remains the same and the buffer has at least one hundred fifty (150) trees and shrubs per acre or fifty-five percent (55%) aerial cover of trees and shrubs. 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 must be at least thirty-five (35) feet wide;
  - d. A geological report prepared by a qualified professional indicates that the development site will be stable for the life of the development, assumed to be at least seventy-five (75) years, even if the buffer is reduced;
  - e. The proposed development incorporates stormwater management best management practices to address drainage, runoff and other slope stability issues; and
  - f. The other critical area requirements of Chapter 7 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 5.4 of this Program. This requirement may be waived by the Administrator upon determination that the proposal will not affect the erosion hazard area.

## 7.14 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 and their buffers. 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.
6. Construction of commercial, industrial or any publicly owned buildings within a seismic hazard area shall require a geotechnical report by a qualified geotechnical engineer or engineering geologist licensed in the State of Washington in accordance with Section 7.14 of this Program. The results or conclusions of the evaluation shall be considered a condition of development approval.

## **7.15 Regulations – Frequently Flooded Area Designation and Mapping**

1. Designation and Mapping: All lands classified as floodway, floodplain or special flood hazard areas in the Federal Emergency Management Agency report titled “The Flood Insurance Study for Clallam County” dated February 23, 2001, 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. Special Flood Hazard Areas shall be delineated by engineering studies that meet the specifications 44 CFR § 65 and approved by FEMA and then adopted by Clallam County. The only method to alter data or maps related to special flood hazard areas is through an officially processed map change, through a physical map revision, a county-wide remapping, or a Letter of Map Change (LOMC) submitted to FEMA and approved. Qualified professionals may submit these studies to FEMA to alter the location of the Special Flood Hazard Areas through the Letter of Map Change (LOMC) process, with the concurrence of the Administrator.

## **7.16 Regulations – Frequently Flooded Area Protection Standards**

1. The standards of this Program, including this section, shall be implemented along with the International Building Code and Clallam County Code 21.01.040 to protect frequently flooded areas because the jurisdiction of the shoreline master program covers the full extent of the floodplain and is therefore 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 floodway, floodplain or special flood hazard areas, including flood control structures regulated in Section 4.4 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. Where base flood elevation data pertaining to a proposed development site is not available from an authoritative source, it shall be generated through studies provided by the development proponent in order to assess and mitigate flood risks.
5. 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.
6. 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 any 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 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.
7. Recreational Vehicles – Recreational vehicles placed within the frequently flooded areas 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 shoreline or critical area buffers required pursuant to this Program.
8. Protection Standards for Structures in Frequently Flooded Areas – In addition to the shoreline and critical area buffer requirements and other applicable protection standards of this Program and the standards set forth in Chapter [21.01](#) CCC, Clallam County 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 frequently flooded 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 (June 16, 1992) of the Clallam County Critical Areas Code, Chapter 27.12 CCC, for all other frequently flooded areas. If a portion of the pre-existing lot lies outside the frequently flooded area, building shall be directed to the nonhazard portion to the maximum extent feasible.

## **7.17 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.

## 7.18 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 5.4 of this Program 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 requirements in Section 7.18.2 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 8.3 of this Program.
5. Land divisions in critical aquifer recharge areas shall be evaluated for their impact on groundwater quality. The following measures may be required by the Administrator as a part of the review of the proposed land division based on site conditions after consideration of available data:
  - a. An analysis of the potential nitrate loading to the groundwater shall be required to assess the impact on groundwater quality.

- b. Alternative site designs, alternative sewage disposal system design (e.g., denitrification), phased development and/or groundwater quality monitoring shall be required to reduce contaminant loading where site conditions indicate that the proposed action will measurably degrade groundwater quality.
  - c. Open spaces shall be required on development proposals overlying areas highly susceptible to groundwater contamination.
  - d. Community/public water systems and community drainfields shall be required where site conditions indicate a high degree of potential contamination to individual wells from on-site or off-site sources.
  - e. Site work to create the lots does not create significant erosion or landslide hazard or reduce slope stability.
6. In designated critical aquifer recharge areas, utility facilities which carry oil, gas or any other hazardous substance as defined in Chapter 173-303 WAC shall provide hydrologic information in addition to spill prevention measures and an emergency spill management plan.
  7. New sewage and sludge disposal, except on-site sewage disposal systems releasing less than fourteen thousand (14,000) gallons per day and approved consistent with Chapter 246-272 WAC and local health codes, shall be prohibited in critical aquifer recharge areas within the shoreline jurisdiction. This standard does not apply to individual, on-site sewage disposal systems sited consistent with this Program and compliant with all local and state health regulations and maintenance requirements.