Ordinance No.1494

AN ORDINANCE OF THE TOWN OF STEILACOOM, PIERCE COUNTY, WASHINGTON, REPEALING THE FORMER SHORELINE MANGEMENT PROGRAMS AND ADOPTING A NEW SHORELINE MANAGEMENT PROGRAM

WHEREAS, the Shoreline Management Act (Chapter 90.58 RCW, hereafter SMA) finds that shorelines of the state are among the most valuable and fragile of our natural resources; and

WHEREAS, the SMA requires that local governments prepare, and the state adopt, Shoreline Master Programs (SMPs) for designated shoreline of the state; and

WHEREAS, the Town of Steilacoom (Town) adopted its first SMP by Ordinance 991 on September 1, 1987; and

WHEREAS, new state guidelines require that all jurisdictions review and update their Shoreline Master Programs (WAC 173-26); and

WHEREAS, the Washington State Department of Ecology (Ecology) is required to review and adopt those local Master Programs that meet the guidelines; and

WHEREAS, in 2009 Ecology provided a grant to the Town of Steilacoom to help undertake the SMP update; and

WHEREAS, the Steilacoom Planning Commission began its work on the Town's Shoreline Master Program Update in 2009 and, after numerous public meetings and hearings, produced a Proposed SMP in May, 2012, which was slightly revised in August 2012; and

WHEREAS, the Steilacoom Town Council held a public hearing on the Planning Commission's recommendation and related documents on September 18, 2012; and

WHEREAS, the Town Council approved Town Resolution 1115 approving the Proposed SMP with certain amendments for submittal to the State Department of Ecology for review and approval; and

WHEREAS, the Department has considered the Proposed SMP along with related documents, and has approved the Proposed SMP conditioned on the revision of certain items; and

WHEREAS, the Department has also made recommendations to the Town Council for certain additional modifications to the Proposed SMP; and

WHEREAS, the Town Council considered the Department's required and recommended changes at a public hearing on April 16, 2013, and determined that the changes are in the best interests of the public, with one slight alteration; and

WHEREAS, the Council finds that the description of the Town's Critical Areas Ordinance in the Appendix should include reference to Ordinances 1308 and 1616 in addition to Ordinance 1485 as proposed by the Department; and

WHEREAS, the Council finds that the language of the vegetation conservation section should be clarified; and

WHEREAS, the Council has transmitted its revised language for the Appendix and the Vegetation Conservation section to the Department, and that the Department has concurred with that language in a letter dated May 29, 2013; and

WHEREAS, the Council finds that the following ordinance complies with the Shoreline Management Act (Chapter 90.58 RCW) and with the Shoreline Master Program Guidelines (Chapter 173-26 WAC) and is in the interests of the citizens of the Town of Steilacoom:

NOW THEREFORE BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF STEILACOOM, PIERCE COUNTY, WASHINGTON:

Section 1. Repeal. Ordinance 991 (1987), the Steilacoom Shoreline Master Program, is hereby repealed.

Section 2. Adoption of New Shoreline Master Program. A new chapter 16.08 of the Steilacoom Municipal Code to be known as the Shoreline Master Program is adopted as follows:

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Part 7 - Appendix
Appendix A – Critical Areas Ordinance (Steilacoom Municipal Code Chapter 16.16), effective September 28, 2012, consisting of Ordinance 1308, adopted October 5, 2004 and amended by Ordinance 1616, adopted January 6, 2009, and Ordinance 1485, adopted September 18, 2012.

Part 1 – Title and Purpose

16.08.010 Title
This chapter shall be known as the Town of Steilacoom Shoreline Master Program, hereafter referred to as the Master Program.

16.08.020 Authority.
The Master Program is adopted in accordance with the Shoreline Management Act (Chapter 90.58 RCW) and the state Shoreline Guidelines (Chapter 173-26 WAC). Where these regulations require that public access be provided, the requirement shall be construed to be limited to the extent of the lawful and constitutional authority of the Town to require public access or to require the easement, fee ownership or interest requested.

16.08.030 Purpose
The purpose of this Master Program is to:
A. Promote the public health, safety, and general welfare of the community;
B. Guide future development in the shorelines of the Town in a positive, effective, and equitable manner;
C. Achieve no net loss to the ecological functions of the Town's shorelines; and
D. Assume and carry out the responsibilities and policies of the Shoreline Management Act, Revised Code of Washington (RCW) 90.58.

16.08.040 Shoreline Elements
The following elements have been considered in the preparation of this Master Program for the Town of Steilacoom. The goals and objectives established for these elements provide the basis for policies and regulations included under the general use requirements of this Master Program.

A. Shoreline Use Element

(1) Goal:

(a) To consistently manage the shoreline and adjacent areas through policies that provide for recreation, public access, transportation and navigation-related

facilities, commercial development and residential development in a manner that protects, promotes and enhances the shoreline environment of Steilacoom.

(2) Policies
(a) Land use patterns will locate activities and development in areas of the shoreline that are compatible with adjacent uses, habitat and ecological systems.
(b) Like or similar uses should be clustered.
(c) Any development proposal should be encouraged to provide for increased public access and increased recreational opportunities.

B. Economic Development Element

(1) Goal:
(a) To provide for economic development by guiding the optimum siting and design of commercial, port, transportation and industrial facilities and any other development dependent on a shoreline location, while ensuring compatibility with environmental goals

(2) Policies
(a) Commercial, port and industrial facilities on shorelines should locate in those areas with existing nonresidential uses
(b) Commercial, transportation, port and industrial facilities should provide physical and visual access to the shoreline
(c) Commercial, transportation, port and industrial facilities should be aesthetically pleasing with the surrounding area
(d) Commercial, transportation, port and industrial facilities should enhance or improve the shoreline
(e) Commercial, transportation, port and industrial facilities should be water-dependent, water-related, or provide an opportunity for water-enjoyment uses by the public

C. Public Access Element

(1) Goal
(a) To provide for public access to shoreline areas in a manner that does not adversely affect the shoreline while protecting citizen rights and public safety
(b) To visually and functionally enhance Puget Sound shoreline access points within Steilacoom for the benefit of the public.

(2) Policies
(a) Development in the shoreline should be sited, designed and constructed to maximize public use and access to the shoreline
(b) Access to the shoreline should include access from the water side of the shoreline where feasible
(c) Publicly owned areas within the shoreline should provide public access

D. Circulation Element

(1) Goals

(a) To provide for safe and convenient streets, parking areas, paths and transportation facilities
(b) To assure efficient movement of pedestrian and vehicular traffic with a minimum disruption to the shoreline environment

(2) Policies
(a) Development or improvement of transportation facilities in routes in the shoreline area should utilize existing corridors as much as possible
(b) Development or improvement of transportation facilities in the shoreline area should increase public access to the shoreline area
(c) Development or improvement of transportation facilities in the shoreline area should provide safe, convenient and efficient methods of public access
(d) Development or improvement of transportation facilities in the shoreline area should be coordinated with the shoreline use element

E. Recreation Element

(1) Goal
(a) To provide for the preservation and expansion of recreation opportunities in the shoreline areas

(2) Policies
(a) Recreational development should preserve, enhance or create scenic views and vistas
(b) The Town should actively work to acquire any shoreline areas that may be used for potential recreation areas or public access
(c) The shoreline should be linked by a system of paths, trails and bikeways, and walkways

F. Conservation Element

(1) Goal
(a) To preserve and restore natural shoreline resources including scenic vistas, views, beaches, wildlife, estuaries, habitats and any other ecological functions

(2) Policies
(a) The Town should implement siting criteria, design standards and best management practices through the use of best available science to ensure the long term preservation and enhancement of unique shoreline features, natural resources, and fish and wildlife habitat.
(b) The Town should establish a procedure to designate areas where there is an opportunity to restore and enhance the natural shoreline for the benefit of fish and wildlife habitat.
(c) The Town should assure no net loss of shoreline ecological functions during permit review and approval for shoreline uses and development.

G. Historical/Cultural Element

(1) Goal:

(a) To identify, protect and restore shoreline areas, buildings and sites having historical, cultural, educational or scientific values.

(2) Polices
(a) The Town should provide a process to identify, protect and restore buildings, sites, and other shoreline areas that have historic, cultural, scientific or educational value
(b) Shoreline areas within the Steilacoom Historic District should be developed in accordance with the Historic Preservation regulations of Steilacoom Municipal Code Chapter 2.14.

H. Urban Design Element

(1) Goal
(a) To provide planning and design standards within the shoreline area which complement and reflect the image and character of the Town as a whole

(2) Policies
(a) Building and development within the shoreline should complement the historic image and design of the Town
(b) Shoreline areas within the Steilacoom Historic District should be developed in accordance with the Historic Preservation regulations of Steilacoom Municipal Code Chapter 2.14.

I. Flood Hazard Management Element

(1) Goal
(a) To protect the Town of Steilacoom from losses and damage created by flooding along Puget Sound and Chambers Creek

(2) Policies:
(a) The Town should seek regional solutions to flooding problems through coordinated planning with state and federal agencies, other appropriate interests, and the public.
(b) The Town should ensure that flood hazard protection projects have a positive environmental benefit that emphasizes long-term solutions over short-term solutions.

16.08.050 Definitions

The following definitions, along with those in Chapter 90.58 RCW, and Chapter 173-26 WAC, shall govern the terms of this Master Program. If any definition contained herein conflicts or differs from definitions contained in Chapter 90.58 RCW or Chapter 173-26 WAC, the wording in the state law or regulation shall prevail. All other terms not defined shall have their ordinary dictionary definition.

Accessory building and accessory structure. The terms "accessory building and "accessory structure" as used in this Master Program shall have the same meanings as

those terms are defined in the Town Zoning Ordinance, SMC §18.08.070 and §18.08.880, respectively.

Accretion. Natural accretion is the buildup of land by the action of the forces of nature by deposition of water- or airborne material. Artificial accretion is a similar buildup of land due to human activity, such as the accretion formed by a breakwater, or beach fill deposited by mechanical means. As used in this Master Program, "accretion" means both natural and artificial accretion.

Activity. An occurrence associated with a use; the use of energy toward a specific action or pursuit. Examples of shoreline activities include, but are not limited to, fishing, swimming, boating, dredging, fish spawning, or wildlife nesting.

Adjacent Lands. Lands adjacent to the lands within the shoreline jurisdiction.

Agriculture. Agriculture includes agricultural uses and practices including, but not limited to producing, breeding, growing or increasing agricultural products or crops. As used in this Master Program, "agriculture" includes agricultural activities, agricultural products, agricultural equipment, agricultural facilities and agricultural lands, all as defined in WAC 173-26-020.

Appurtenance. An "appurtenance" as used in this Master Program shall have the same meaning as that term is defined in WAC 173-27-40(2)(g). An appurtenance is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the ordinary high water mark and the perimeter of a wetland. Normal appurtenances include a garage, deck, driveway, utilities, fences, installation of a septic tank and drain field and grading for an exempt, new single family residence which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark.

Aquaculture. Aquaculture means the culture or farming of fish, shellfish, or other aquatic plants and animals. Aquaculture does not include the harvest of wild geoduck associated with the state managed wildstock geoduck fishery.

Associated Wetlands. Those wetlands that are in proximity to and either influence, or are influenced by tidal waters or a lake or stream subject to the Shoreline Management Act.

Average grade level. "Average grade level" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure: In the case of structures to be built over water, average grade level shall be the elevation of the ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure.

Boat Launch or Ramp. Graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.

Boating Facility. A boating facility includes boat launch ramps, covered moorage, dry boat storage and marinas. The term excludes docks serving four or fewer single-family residences.

Bulkheads. Walls installed at or near, and parallel to, the ordinary high water mark whose sole purpose is to contain and prevent the loss of soil by erosion, wave, or current action. Bulkheads are used to protect banks by retaining soil at the toe of the slope, or by protecting the toe of the bank from erosion and undercutting.

Channel Migration Zone. The area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

Conditional Use, Shoreline. A use, development, or substantial development that is classified as a conditional use or is not classified within the Master Program.

Critical areas. Critical areas are as defined under chapter 36.70A RCW and include the following areas and ecosystems:
(a) Wetlands;
(b) Areas with a critical recharging effect on aquifers used for potable waters;
(c) Fish and wildlife habitat conservation areas;
(d) Frequently flooded areas; and
(e) Geologically hazardous areas.

Critical resource areas. Critical resource areas include critical saltwater and freshwater habitats as used in WAC 173-26-221and additional shoreline and shoreland areas identified by the Town of Steilacoom that warrant special protection necessary to achieve no net loss of ecological functions.

Critical Saltwater Habitat. Critical saltwater habitats include kelp beds; eelgrass beds; spawning and holding areas for forage fish; subsistence, commercial and recreational shellfish beds; mudflats; intertidal habitats with vascular plants, and areas with which priority species have a primary association.

Development, Shoreline. Development means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this Master Program at any state of water level.

Dock. A dock is a fixed or floating platform structure anchored in and/or floating upon a water body and connected to land to provide moorage or landing for waterborne vessels and/or water-dependent recreation uses.

Dredging. Dredging is the removal or displacement of earth such as gravel, sand, mud, or silt from lands covered by water. Lands covered by water include stream beds and wetlands. Dredging is normally done for specific purposes or uses such as maintaining navigation channels, constructing bridge footings, or laying submarine pipelines or cable.

Dredge spoil is the material removed by dredging.

Dredge spoil disposal is the depositing of dredged materials on land or into water bodies for the purpose of either creating new or additional lands or for disposing of the material in an acceptable manner.

Ecological Functions or Shoreline Functions. The work performed or the role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem.

Emergency. Emergency is an unanticipated and imminent threat to public health, safety, or the environment and that require immediate action within a timeframe too short to allow full compliance with the provisions of this Master Program. Emergency construction does not include development of new permanent protective structures where none previously existed.

Enhancement. Enhancement is the alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects.

Exemption. Certain specific developments as listed in WAC 173-27-040 are exempt from the definition of substantial developments and are therefore exempt from the Substantial Development Permit (SDP) process of the SMA. Although exempt from the SDP process, these developments must otherwise comply with the applicable provisions of the Shoreline Management Act and this Master Program.

Fair Market Value. "Fair market value" of a development is the open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment, or materials.

Feasible. "Feasible" as used in this Master Program shall have the same meaning as that term is defined in WAC 172-26-020(15). In order to be feasible, an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions: (a) The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results; (b) The action provides a reasonable likelihood of achieving its intended purpose; and (c) The action does not physically preclude achieving the project's primary intended legal use.

Ferry System. As used in this Master Program, the term "ferry system" refers to ferry vessels, docks, terminal buildings, loading lanes and parking areas.

Flood Control. Flood control means any undertaking for the conveyance, control, and dispersal of floodwaters caused by abnormally high direct precipitation or stream overflow.

Floating Home. A single-family dwelling unit constructed on a float, that is moored, anchored, or otherwise secured in waters, and is not a vessel, even though it may be capable of being towed.

Floodway. For the purposes of this Master Program means the area established as such in Federal Emergency Management Agency flood insurance rate maps.

Hydric Soil. Hydric soil means soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper soil horizon(s), thereby influencing the growth of plants.

In-stream structure. "In-stream structure" means a structure placed by humans within a stream or river waterward of the ordinary high-water mark that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

Landfilling. The addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

Low Impact Development (LID) Technique. A stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of onsite natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

Marina. A marina is a public or private facility providing boat moorage space, fuel or other commercial services to boat operators.

Native Vegetation. Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site constitute native vegetation. Examples include trees such as Douglas Fir, western hemlock, western red cedar, alder, big-leaf maple, and vine maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

Nearshore. The estuarine/delta, marine shoreline and areas of shallow water from the top of the coastal bank or bluffs to the water at a depth of about 10 meters relative to Mean Lower Low Water. The nearshore extends landward into the tidally influenced freshwater heads of estuaries and coastal streams.

Nonresidential Development. Nonresidential development includes the activities involved in commerce, industry, wholesale, retail, service and business trade and public uses not regulated elsewhere in this Master Program.

Nonwater-oriented Uses. Those uses that are not water-dependent, water-related, or water-enjoyment.

Normal maintenance. Normal maintenance includes interior and exterior repairs and incidental alterations. As used in this Master Program "normal maintenance and repair" shall have the same meaning as those terms are described in WAC 173-27-040(2) (b) and SMC 16.08.120(2). Normal maintenance and repair may include, but is not limited to, painting, roof repair and replacement, plumbing, wiring and electrical systems, mechanical equipment replacement and weatherization. Incidental alterations may include construction of nonbearing walls or partitions.

Normal protective bulkhead common to single-family residences. A "normal protective" bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the ordinary high water mark for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion. A normal protective bulkhead is not exempt if constructed for the purpose of creating dry land. When a vertical or near vertical wall is being constructed or reconstructed, not more than one cubic yard of fill per one foot of wall may be used as backfill. When an existing bulkhead is being repaired by construction of a vertical wall fronting the existing wall, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings. When a bulkhead has deteriorated such that an ordinary high water mark has been established by the presence and action of water landward of the bulkhead then the replacement bulkhead must be located at or near the actual ordinary high water mark. Beach nourishment and bioengineered erosion control projects may be considered a normal protective bulkhead when any structural elements are consistent with the above requirements and when the project has been approved by the department of fish and wildlife.

Ordinary High Water Mark (OHWM) on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department: PROVIDED, that in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water.

Pier. A structure that projects over, and is raised above the water but is attached to land, and that is used for boat moorage, swimming, fishing, public access, float plane moorage, or similar activities requiring access to deep water.

Public Access. Public access is the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations.

Primary Structure. A primary structure is the structure associated with the principle use of the property. It may include single family residential appurtenant structures (such as garages, attached decks, driveways, utilities, and septic tanks and drainfields) that cannot feasibly be relocated. It does not include structures such as tool sheds, gazebos, greenhouses, or other ancillary residential improvements that can feasible be moved landward to prevent the threat of erosion.

Residential Development. Residential development includes single-family residences, multi-family structures, and the creation of new residential lots through land subdivision. New over-water residences, including houseboats and floating homes, are prohibited.

Restoration. Restoration is the reestablishment or upgrading of impaired ecological processes or functions. This may be accomplished through measures including but not limited to re-vegetation, removal of intrusive structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the area to pre-European settlement conditions.

Revetment. Facing of stone, concrete, etc., built to protect a scarp, embankment, or shore structure against erosion by waves or currents. The principal features of a revetment are: 1) heavy armor layer, 2) filter layer, and 3) toe protection.

Sediment. The fine-grained material deposited by water or wind.

Setback. As used in this Master Program, "setback" means the distance between a building or structure and the ordinary high water mark. Setbacks shall be the greater of the depth of the required vegetation conservation area, or that required by the zoning ordinance, SMC Title 18.

Shorelands or shoreland areas means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet; and all wetlands and deltas associated with the streams, lakes, and tidal waters that are subject to the provisions of this Master Program; the same to be designated as to location by the Department of Ecology.

Shoreline Jurisdiction means all "shorelines of the state" and "shorelands" as defined in RCW 90.58.030.

Shoreline Master Program or Master Program. The comprehensive plan for the use of a described area, and the regulations for use of the area including maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020. As provided in RCW 36.70A.480, the goals and policies of a shoreline master program for a county or city approved under chapter 90.58 RCW shall be considered an element of the county or city's Comprehensive Plan. All other portions of the Shoreline Master Program for a county or city adopted under chapter 90.58 RCW, including use regulations, shall be considered a part of the county or city's development regulations.

Shoreline Modifications. Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, pier, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, application of chemicals or significant vegetation removal.

Shorelines. "Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes. Shorelines meeting these criteria within the Town of Steilacoom consist of the Puget Sound shoreline between the OHWM and the line of extreme low tide and the portion of Chambers Creek and Chambers Bay within Town limits.

Shorelines of Statewide Significance. "Shorelines of the State" that meet the criteria for "Shorelines of Statewide Significance" contained in RCW 90.58.030(f). Within the Town of Steilacoom, the entire length of Puget Sound lying seaward from the line of extreme low tide is a shoreline of statewide significance.;

Shorelines of the State. This term includes both "shorelines" and "shorelines of statewide significance."

Soft-shore stabilization. Soft-shore stabilization is a type of shore erosion control that relies on a combination of natural material such as gravels, bobbles, boulders, logs and other large woody debris, and native vegetation to provide shoreline stability. This type of stabilization replaces concrete seawalls, bulkheads, and rip-rap (hard structures) and allows for the enhancement and restoration of shoreline ecological functions.

Streams. Any portion of a channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state including areas in which fish may spawn, reside, or through which they may pass, and tributary waters with defined beds or banks, which influence the quality of fish habitat downstream. This definition includes watercourses that flow on an intermittent basis or which fluctuate in level during the year and applies to the entire bed of such watercourse whether or not the water is at peak level. This definition does not include irrigation ditches, canals, stormwater run-off devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans.

Substantial Development. Substantial development means any development of which the total cost or fair market value exceeds $6,416.00, or any development which materially interferes with the normal public use of the water or shorelines of the state. The dollar threshold referenced in this subsection shall be adjusted for inflation by the Office of Financial Management every five years, as specified in RCW 90.58.030(3)(e) and WAC 173-27-040 as now or hereafter amended.

Water-dependent Use. A use or portion of a use which cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations.

Water-enjoyment Use. A recreational or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

Water-oriented Use. A use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

Water Quality. The physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this Master Program, the term "water quantity" refers only to development and uses regulated under this Master Program and affecting water quantity, such as impermeable surfaces and storm water handling practices. Water quantity, for purposes of this Master Program, does not mean the

withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through RCW 90.03.340.

Water-related Use. A use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because: (a) The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or (b) The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Wetlands. 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 adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, 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, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. Identification of wetlands and delineation of their boundaries pursuant to critical areas provisions in this Master Program shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the Town meeting the wetland designation criteria in that procedure are subject to the provisions of the Master Program.

Variance. Variance means to grant relief from the specific bulk, dimensional or performance standards set forth in this Master Program and not a means to vary a use of the shoreline.

Vegetation Conservation. Vegetation conservation includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species.

Vegetation Conservation Area. The Vegetation Conservation Area refers to either the building setback area, or a designated area in new developments.

16.08.060 Administration

A. The Town Administrator or designee is the Shoreline Administrator (hereafter Administrator), and is vested with authority to:

1. Administer the Master Program;
2. Grant exemptions from Shoreline Substantial Development Permits as provided herein;

3. Grant revisions to Shoreline Substantial Development Permits, Shoreline Variance and Shoreline Conditional Use Permits as provided herein;
4. Determine compliance with RCW 43.21C, the State Environmental Policy Act; and
5. Adopt rules that are necessary and appropriate to carry out the provisions of this Master Program.

B. The Administrator's duties and responsibilities include:
1. Making administrative decisions and interpretations of the policies and regulations of this program and the Shoreline Management Act;
2. Developing and proposing amendments to this Master Program to more effectively and equitably achieve its goals and policies;
3. Seeking remedies for violations of this Master Program, the provisions of the Shoreline Management Act, or the conditions of Substantial Development, Conditional Use Permits and exemptions issued by the Town;
4. Forwarding shoreline permits to Washington State Department of Ecology for Ecology action;
5. Drafting staff reports providing analysis and recommendations for approval, conditional approval, or denial of applications for development to the Town Council and Hearing Examiner as appropriate; and
6. Reviewing emergency actions for compliance with the Master Program.

C. The Town Council's duties and responsibilities include:
1. Holding public hearings and issuing approval, conditional approval, or denial of applications for Shoreline Substantial Development Permits and Shoreline Conditional Use Permits as provided herein.
2. Holding public hearings to consider amendments to the Master Program.

D. The Hearing Examiner's duties and responsibilities include:
1. Holding public hearings and issuing approval, conditional approval, or denial of applications for Shoreline Variance as provided herein.

E. Regulation of development of private property in this Master Program shall be consistent with all relevant constitutional and other legal limitations including limitations contained in chapter 82.02 RCW and RCW 43.21C.060 on the regulation of private property.

16.08.070 Applicability

A. The regulations of this Master Program apply to all shorelines of the state within the Town and to the waters and underlying land of the Puget Sound extending to the middle of Puget Sound from the shoreline of the Town between the northern and southern limits of the Town and 200 feet landward of such waters, along with lands necessary for buffers for critical areas under RCW 90.58.030(2)(d)(ii).

B. All proposed uses and development, as defined in this Master Program, occurring within the shoreline jurisdiction shall comply with this Master Program and Chapter 90.58 RCW.

C. Uses and development regulated by this Program are subject to applicable provisions of the Steilacoom Municipal Code, the Steilacoom Comprehensive Plan, the Washington State Shoreline Management Act (Chapter 90.58 RCW), Growth Management Act (Chapter 36.70A RCW), State Environmental Policy Act (Chapter 43.21C RCW), and other local, state and federal laws and regulations.

D. Project proponents are responsible for complying with all applicable laws prior to commencing any use, development, or activity.

E. The Master Program policies and regulations shall apply in addition to other Town regulations. Where the regulations of the Master Program conflict with other regulations, the regulations that provide more shoreland and shoreline protection, as determined by the Town, shall apply.

F. Non-conforming uses and improvements within the shoreline jurisdiction shall be subject to this Program and applicable sections of the zoning ordinance.

G. The Town's Critical Areas Ordinance, Chapter 16.16 SMC is adopted as a part of the Master Program. The provisions of Chapter 16.16 SMC shall apply to any use, alteration or development within the shoreline jurisdiction whether or not a shoreline permit or written statement of exemption is required.

H. Uses and developments within the shoreline jurisdiction that meet the Reasonable Use Exception provisions of SMC 16.16.140 require a Shoreline Variance in accordance with this Master Program.

I. The exemptions and partial exemptions listed in sections SMC 16.16.120 and 16.16.130 shall not apply within the shoreline jurisdiction. Such activities may require a Shoreline Substantial Development Permit, Shoreline Variance, or Shoreline Conditional Use Permit unless the Master Program and RCW 90.58.030(3)(e) specifically indicates the activity is exempt from the Shoreline Substantial Development Permit requirements.

16.08.080 Master Program Review and Update

A. This Master Program shall be periodically reviewed as necessary to reflect changing local circumstances, new information or improved data, and changes in State statutes and regulations.

B. The Town's Community Development Department shall annually issue a written report to the Town Council documenting all project review actions in shoreline areas. The first report shall be issued in May, 2013.

C. The Town shall evaluate the cumulative effects of authorized development on shoreline conditions in conjunction with the review of the Master Program as required by RCW 90.58.080. This evaluation may involve a joint effort by the Town, state resource agencies, affected Indian tribes, and other parties. The evaluation shall result in a public written report to the Town Council and the Department of Ecology.

16.08.090 Amendments to Master Program

Any of the provisions of this Master Program may be amended as provided for in RCW 90.58.120 and .200 and Chapter 173.26 WAC. Amendments to the Master Program do not become effective until approved by the Department of Ecology. Proposals for shoreline environment redesignation, for example amendments to the shoreline maps and descriptions, must demonstrate consistency with the criteria set forth in WAC 173-26-211(4) and the designation criteria in this Master Program.

16.08.100 Enforcement

A. Cease and Desist Order.

(1) The Administrator is authorized to issue a cease and desist, or stop work, order if an activity being undertaken on the shorelines of the state is in violation of this Master Program or Chapter 90.58 RCW. The cease and desist order shall contain:

a) A description of the specific nature, extent, and time of violation and the damage or potential damage; and

b) A notice that the violation or the potential violation cease and desist or, in appropriate cases, the specific corrective action to be taken within a given time. A civil penalty under subsection B may be issued with the order.

(2) Effective date. The cease and desist order issued under this section shall become effective immediately upon receipt by the person to whom the order is directed

(3) Compliance. Failure to comply with the terms of a cease and desist order can result in enforcement actions including, but not limited to, the issuance of a civil penalty.

B. Civil Penalties.

(1)The Administrator is authorized issue a civil penalty to any person who fails to conform to the terms of a Substantial Development Permit, Conditional Use Permit or Variance issued under this Master Program, who undertakes a development or use on shorelines of the state without first obtaining a permit, or who fails to comply with a cease and desist order issued under this Master Program. The Administrator is authorized to work with the Department of Ecology to impose a joint fine.

(2) Notice of Correction. Prior to issuance of a fine, the Administrator shall provide a notice of correction in writing to the person engaging in the activity. The notice of correction shall include:

(a) A description of the condition that is not in compliance and a specific citation to the applicable code section or condition of approval as appropriate;
(b) A statement of what is required to achieve compliance;
(c) The date by which the Town of Steilacoom requires compliance to be achieved;
(d) Notice of the means to contact any technical assistance services provided by the Department of Ecology or others; and
(e) A notice that a request to extend the time to achieve compliance for good cause may be filed with the Administrator, and the time frame for making that request.

(3) Amount of penalty. The penalty shall not exceed one thousand dollars for each violation. Each permit violation or each day of continued development without a required permit shall constitute a separate violation.

(4) Aiding or abetting. Any person who, through an act of commission or omission procures aids or abets in the violation shall be considered to have committed a violation for the purposes of the civil penalty.

(5) Notice of penalty. A civil penalty shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same. The notice shall describe the violation, approximate the date(s) of violation, and shall order the acts constituting the violation to cease and desist, or, in appropriate cases, require necessary corrective action within a specific time.

(6) Application for remission or mitigation. Any person incurring a penalty may apply in writing within thirty days of receipt of the penalty to the Town for remission or mitigation of such penalty. Upon receipt of the application, the Administrator may remit or mitigate the penalty only upon a demonstration of extraordinary circumstances, such as the presence of information or factors not considered in setting the original penalty.

(7) Appeal. Persons incurring a penalty under this section may appeal the determination to the Town Council within 30 days of the notice of penalty or determination on an application for remission or mitigation.

C. Criminal Penalties

(1) In addition to incurring civil liability under subsection B, any person found to have willfully engaged in activities on the shorelines of the state in violation of the provisions of this Master Program shall be guilty of a gross misdemeanor, and shall be punished by a fine of not less than twenty-five nor more than one thousand dollars or by imprisonment in the county jail for not more than ninety days, or by both such fine and imprisonment. The fine for the third and all

subsequent violations in any five-year period shall be not less than five hundred nor more than ten thousand dollars.

Part 2 – Environmental Designations and Permitted Uses

16.08.200 Official Shoreline Environmental Designations Map

A. The location of the various shoreline environmental designations are shown on the official Shoreline Map of the Town of Steilacoom, which shall bear the title Shoreline Environment Designations, June 29, 2012, and is hereby made a part of this Master Program. It shall be on display in the community development department.

B. In the event of a mapping error, the Town will rely on the criteria contained in RCW 90.58.030(2) and WAC 177-32 pertaining to determination of shorelands, as amended.

C. Any portion of the shoreline not designated by the official map shall be automatically designated Urban Conservancy until such time as the Master Program is amended to properly classify the shoreline portion.

16.08.210 Shoreline Environmental Designations

A. The shoreline of the Town of Steilacoom is divided among the following five Environmental Designations, as illustrated on the official Shoreline Environment Map. The purpose of each designation is as follows.

1. Aquatic Environment (A).

a) Purpose. The purpose of the Aquatic Environment designation is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.

b) Application. The Town shall apply the Aquatic Environment designation to land that is waterward of the OHWM.

c) Aquatic Environment Management Policies

(1) The primary uses within the Aquatic Environment should be water dependent recreation and the Pierce County / Washington State ferry facilities.

(2) Permitted and conditional uses within the Aquatic Environment should be linked to allowed activities and uses on the adjoining shoreline.

(3) New over-water structures should be allowed only for water-dependent uses, public access, or ecological restoration.

(4) New over-water structures should be designed to be the minimum size necessary to support the structure's intended use in order to minimize impacts to the environment.

(5) In order to reduce the impacts of over-water structures, new facilities should be designed for multiple uses.

(6) New developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

(7) Uses that adversely impact the ecological functions of critical saltwater and freshwater habitats should not be allowed except where necessary to achieve

the objectives of RCW 90.58.020, and then only when their impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) as necessary to assure no net loss of ecological functions.

(8) Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

2. High Intensity Environment (HI)

a) Purpose. The purpose of the High Intensity Environment designation is to provide for intensive, water-oriented commercial and transportation use of the shoreline, while protecting existing ecological functions and restoring ecological functions in areas that have previously been degraded. The designation shall apply to the commercial area surrounding the Pierce County ferry dock.

b) Application. The Town shall apply the High Intensity Environment designation to lands that currently support high-intensity uses related to commerce, transportation or navigation; or are suitable and planned for high-intensity water-oriented uses.

c) High Intensity Environment Management Policies

(1) The primary use within the High Intensity Environment should be water-related commercial, recreation and the Pierce County ferry system.

(2) New development and redevelopment should encourage public access to the shoreline.

(3) The Town should seek opportunities for habitat restoration within this environment.

(4) Standards for density, setbacks, buffers, lot coverage limitations, shoreline stabilization policies and standards, vegetation conservation and restoration requirements, critical area protection, and water quality have been based upon the inventory and characterization report and existing use to promote no net loss of shoreline ecological functions.

(5) Full use of existing urban areas is required before expansion of intensive development is allowed.

3. Medium Intensity Environment (MI)

a) Purpose. The purpose of the Medium Intensity Environment designation is to recognize and provide for existing commercial and industrial use of the shoreline, while protecting existing ecological functions and restoring ecological functions in areas that have previously been degraded. The designation shall apply to the commercial and industrial areas within Chambers Bay and the marina area at Saltar's Point.

b) Application. The Town shall apply the Medium Intensity Environment designation to lands that currently support medium-intensity uses related to commerce or industry; or are suitable and planned for commerce or industry.

c) Medium Intensity Environment Management Policies

(1) The primary uses within the Medium Intensity Environment should be water oriented commercial, recreation and industrial.

(2) In order to decrease stormwater runoff, new development within the environment should be encouraged to use low impact development techniques including reduced impervious surfaces.
(3) The Town should seek opportunities for habitat restoration within this environment.
(4) Standards for density, setbacks, buffers, lot coverage limitations, shoreline stabilization policies and standards, vegetation conservation and restoration requirements, critical area protection, and water quality have been based upon the inventory and characterization report and existing use to promote no net loss of shoreline ecological functions.
(5) Full use of existing urban areas is required before expansion of intensive development is allowed.

4. Shoreline Residential Environment (SR)
a) Purpose. The purpose of the Shoreline Residential Environment designation is to accommodate residential development and accessory structures that are consistent with this Master Program. This designation shall apply to shorelines that do not meet the criteria for Urban Conservancy and that are characterized by single-family or multifamily residential development or are planned and platted for residential development.
b) Application. The Town shall apply the Shoreline Residential Environment designation to land that currently supports predominantly single-family or multifamily residential development or is planned and/or platted for residential development.
c) Shoreline Residential Environment Management Policies
(1) The primary use within the Shoreline Residential Environment should be residential and recreation.
(2) Development and redevelopment within this environment should encourage public access and joint use of community recreational facilities.
(3) In order to decrease stormwater runoff, new development within the environment should be encouraged to use low impact development techniques including reduced impervious surfaces.
(4) Standards for density, setbacks, buffers, lot coverage limitations, shoreline stabilization policies and standards, vegetation conservation and restoration requirements, critical area protection, and water quality have been based upon the inventory and characterization report and existing use to promote no net loss of shoreline ecological functions.

5. Urban Conservancy Environment (UC)
a) Purpose. The purpose of the Urban Conservancy Environment designation is to protect and restore relatively undeveloped or unaltered shorelines to maintain open space, floodplains, or habitat, while allowing a variety of compatible uses. This designation shall apply to shorelines that retain important ecological functions, even if partially altered. These shorelines are suitable for low intensity development, uses that are a combination of water related or water-enjoyment uses, or uses that allow substantial numbers of people access to the shoreline.

The designation shall apply to the area surrounding the Cliff Avenue Waterway, the area surrounding the Fifth Street Waterway, Sunnyside Beach, Saltar's Point Beach, and the area between the commercial and industrial development in Chambers Bay.

b) Application. The Town shall apply the Urban Conservancy Environment designation to land that is appropriate and planned for development that is compatible with maintaining or restoring of the ecological functions of the area; or land is suitable for water-related or water-enjoyment uses; or land that is open space, flood plain or other sensitive areas that should not be more intensively developed; or land that has potential for ecological restoration; or land that retains important ecological functions, even though partially developed; or land that has the potential for development that is compatible with ecological restoration.

c) Urban Conservancy Environment Management Policies

(1) The primary use within the Urban Conservancy Environment should be water oriented recreation.

(2) Development and redevelopment within this environment should encourage retention and restoration of near shore habitat.

(3) Public access and recreation should be implemented whenever feasible and significant ecological impacts can be mitigated.

(4) Standards for density, setbacks, buffers, lot coverage limitations, shoreline stabilization policies and standards, vegetation conservation and restoration requirements, critical area protection, and water quality have been based upon the inventory and characterization report and existing use to promote no net loss of shoreline ecological functions.

(5) Water-oriented uses will be given priority over non-water oriented uses.

B. Any shoreline areas annexed to the Town shall be designated Urban Conservancy until the Master Program is revised to include the area.

16.08.220 Permitted Uses and Modifications Within the Shorelines

A. The following table summarizes the permitted, conditionally permitted and prohibited uses and shoreline modifications by Shoreline Environment. All permitted and conditionally permitted uses and modifications are subject to the provisions of this Master Program, the underlying zone and state regulations. The symbols used are:

P = Permitted - Permitted uses require Shoreline Substantial Development Permits or Shoreline Exemption statements, and may require other permits required by the Steilacoom Municipal Code and/or other regulatory agencies.

C = Conditional Use - Conditional uses require Shoreline Conditional Use Permit and may require other permits required by the Steilacoom Municipal Code and/or other regulatory agencies.

X = Prohibited – Prohibited uses are not allowed.

B. Shoreline Variances are not shown below. Shoreline Variances are available to grant relief from specific bulk, dimensional or performance standards in this Master Program under certain circumstances, not to authorize shoreline uses and activities.

C. Conflicts between uses allowed or prohibited in this Master Program and uses allowed or prohibited in the Zoning Ordinance, Title 18 SMC, shall be resolved in favor of the more restrictive use standard.
D. All permitted and conditional uses in the Aquatic Environment are only allowed if the use is also allowed in the adjacent upland environment.

Use or Modification	Aquatic	High Intensity	Medium Intensity	Shoreline Residential	Urban Conservancy
Agriculture (16.08.700)	X	X	X	X	X
Aquaculture (16.08.710)	C	X	C	X	X
Boating Facilities- Boat ramps (16.08.720)	P	P	P	X	C
Boating Facilities- Covered moorage (16.08.720)	X	X	X	X	X
Boating Facilities- Dry boat storage (16.08.720)	X	X	P	X	X
Boating Facilities- Marinas (16.08.720)	P	P	P	X	X
Breakwaters, jetties & weirs (16.08.950)	C	C	C	C	X
Commercial – water oriented (16.08.750)	C	P	P	X	X
Commercial- non-water oriented (16.08.750)	X	C	C	X	X
Dredging (16.08.900)	C	C	C	C	X

Fill & Grading (16.08.910)	C	C	C	C	C
Flood Control Projects (16.08.540)	C	C	C	C	C
Forest Practices (16.08.700)	X	X	X	X	X
Groins (16.08.950)	X	X	X	X	X
Habitat & Natural Systems Enhancement Projects (16.08.940)	P	P	P	P	P
Industrial (16.08.750)	X	X	P	X	X
In-stream structures (16.08.920)		P	P	P	P
Land Subdivision (16.08.730)	X	P	P	P	P
Mining (16.08.740)	X	X	X	X	X
Parking (16.08.760)	X	P	P	P	P
Piers & Docks (16.08.930)	P	P	P	P	C
Recreation – water oriented (16.08.770)	C	P	P	P	P
Recreation – non-water oriented (16.08.770)	X	P	P	C	X

Residential - Houseboats & floating homes (16.08.780)	X	X	X	X	X
Residential - Multi-family and mixed commercial/ residential use (16.08.770)	X	P	P	X	X
Residential - Single family and accessory structures (16.08.770)	X	X	X	P	P
Shoreline stabilization - Hard (16.08.950)	P	P	P	C	C
Shoreline stabilization - Soft (16.08.950)	P	P	P	P	P
Signs (16.08.790)	X	P	P	P	P
Solid waste disposal (16.08.960)	X	X	X	X	X
Transportation – Bicycle & pedestrian paths (16.08.800)	X	P	P	P	C
Transportation- Ferry system (16.08.800)	P	P	X	X	X
Transportation – Railroads (16.08.800)	P	P	P	P	P

Transportation – Streets (16.08.800)	C	P	P	P	P
Unclassified Uses (16.08.810)	C	C	C	C	C
Utilities – aboveground (16.08.820)	C	C	C	C	C
Utilities – underground (16.08.820)	C	P	P	P	P

Part 3- Permits and Process

16.08.300 Permit Requirements - General

A. A permit is required for substantial development within the shoreline jurisdiction, unless a specific exemption applies.

B. Based on the provisions of this Master Program, the Administrator shall determine if a Substantial Development Permit, a Shoreline Conditional Use Permit and/or a Shoreline Variance is required for each proposed development.

C. A Substantial Development Permit is not required for exempt development. An exempt development requires a statement of exemption pursuant to SMC 16.08.320 and may require a Shoreline Variance from Master Program provisions and/or a Shoreline Conditional Use Permit.

D. All uses and development shall be carried out in a manner consistent with the Steilacoom Municipal Code, this Master Program and Chapter 90.58 RCW (the Shoreline Management Act) regardless of whether a Substantial Development Permit, Statement of Exemption, Shoreline Variance, or Shoreline Conditional Use Permit is required.

E. When a development or use is proposed that does not comply with the bulk, dimensional and/or performance standards of this Master Program, such development or use may only be authorized by approval of a Shoreline Variance, even if the development or use does not require a Substantial Development Permit.

F. Any development or use listed as a Shoreline Conditional Use and all unlisted uses must obtain a Shoreline Conditional Use Permit even if the development or use does not require a Substantial Development Permit.

G. Issuance of a Statement of Exemption, Shoreline Substantial Development Permit, Shoreline Variance, or Shoreline Conditional Use Permit does not constitute approval of any other Town, state, or federal laws or regulations.

H. All shoreline permits or statements of exemption issued for development or use within the shoreline jurisdiction shall include written findings documenting compliance with bulk and dimensional policies and regulations of this Master Program. Conditions may be attached to the approval as necessary to assure consistency with this Master Program and Chapter 90.58 RCW. The conditions may include a requirement to post a performance financial guarantee assuring compliance with permit requirements, terms and conditions. The guarantee shall be in an amount to reasonably assure the Town that permitted improvements will be completed within the time stipulated.

I. Permits required under this Master Program shall be processed consistent with the provisions of Title 14 SMC, the criteria in this Master Program, and the following provisions.

1. The public comment period shall be a minimum of thirty days, except as set forth in subsection (3) below.

2. All notices shall include a statement that any person desiring to submit written comments concerning an application, or desiring to receive notification of the final decision concerning an application as expeditiously as possible after the issuance of the decision, may submit the comments or requests for decisions to the Town within thirty days of the last date the notice is to be published pursuant to this subsection. The Town shall forward, in a timely manner following the issuance of a decision, a copy of the decision to each person who submits a request for the decision.

3. (a) An application for a substantial development permit for a limited utility extension or for the construction of a bulkhead or other measures to protect a single family residence and its appurtenant structures from shoreline erosion shall be subject to the following procedures:

(i) The public comment period under subsection (1) of this section shall be twenty days. The notice provided under subsection (1) of this section shall state the manner in which the public may obtain a copy of the Town decision on the application no later than two days following its issuance;

(ii) The Town shall issue its decision to grant or deny the permit within twenty-one days of the last day of the comment period specified in (i) of this subsection; and

(iii) If there is an appeal of the decision to grant or deny the permit to the Town Council, the appeal shall be finally determined within thirty days.

(b) For purposes of this section, a limited utility extension means the extension of a utility service that:

(i) is categorically exempt under Chapter 43.21C RCW for one or more of the following: Natural gas, electricity, telephone, water, or sewer;

(ii) Will serve an existing use in compliance with this Master Program, and

(iii) Will not extend more than twenty-five hundred linear feet within the shorelines of the state.

J. No permit shall be approved unless the proposed development is consistent with the provisions of this Master Program, Chapter 90.58 RCW (the Shoreline Management Act) and the rules and regulations adopted by the Department of Ecology to implement the Shoreline Management Act.

K. An application shall be approved if it meets the criteria for issuance herein or approved with conditions if the application as conditioned can meet the criteria for issuance herein. The application shall be denied if it does not substantially comply with criteria imposed by this Master Program and the Shoreline Management Act.

16.08.310 Substantial Development Permit

A. No person shall undertake substantial development, as defined by RCW 90.58.030, on the shorelines of the state without first obtaining a Substantial Development Permit from the Town Council, unless the use or development is specifically identified as exempt under SMC 16.08.320.

B. The Town Council shall only issue a Substantial Development Permit when the development proposed is consistent with the policies and procedures of RCW.90.58; the provisions of WAC 173-27; and this Master Program.

16.08.320 Shoreline Exemptions

A. The Administrator is hereby authorized to approve or deny requests for a statement of exemption from the Shoreline Substantial Development Permit requirement for uses and developments within shorelines that are specifically listed in RCW 90.58.030 and WAC 173-27-040. The statement shall be in writing and shall indicate the specific exemption of the Master Program that is being applied to the development, and shall provide a summary of the Administrator's analysis of the consistency of the project with this Master Program and the Shoreline Management Act. The list below is a summary of common exemptions that may occur within Town shorelines; a complete list of exemptions is provided in WAC 173-27-040.

Exempt developments include:

1. Any development of which the total construction cost or fair market value, whichever is higher, does not exceed the dollar threshold established by the Office of Financial Management pursuant to WAC 173-27-040, and does not materially interfere with public use of the water or shorelines of the state. For purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state;

2. Normal maintenance or normal repair of existing structures or developments, including damage by accident, fire, or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition within a reasonable period after decay or partial destruction except where repair causes substantial adverse effects to the shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance,

and the replacement does not cause substantial adverse effects to shoreline resources or environment;

3. Construction of a normal protective bulkhead common to single family residences. A "normal protective bulkhead" is constructed at or near the ordinary high water mark to protect a single family residence and is for protecting land from erosion, not for the purpose of creating dry land. Where an existing bulkhead is being replaced, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings;

4. Emergency construction necessary to protect property from damage by the elements. Flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not an emergency;

5. Construction, installation, or modification of navigational aids such as channel markers and anchor buoys;

6. Construction on shorelands by an owner, lessee, or contract purchaser of a single family residence for his/her own use or for the use of his/her family, which residence does not have a building height that exceeds 35 feet from average grade and meets all requirements of the Steilacoom Municipal Code (SMC) and this Master Program;

7. Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of one or more single and multi-family residences. A dock is a landing and moorage facility for watercraft and does not include recreational decks, storage facilities or other appurtenances. This exception applies if either : (A) in salt waters, the fair market value of the dock does not exceed two thousand five hundred dollars; or (B) in fresh waters, the fair market value of the dock does not exceed ten thousand dollars, but if subsequent construction having a fair market value exceeding two thousand five hundred dollars occurs within five years of completion of the prior construction, the subsequent construction will be considered a substantial development for the purposes of this Master Program;

8. The marking of property lines or corners, when such marking does not significantly interfere with the normal public use of the surface waters;

9. Any project with certification from the Governor pursuant to Chapter 80.50 RCW;

10. Watershed restoration projects as defined in WAC 173-27-040. The Town shall review the projects for consistency with the Master Program in an expeditious manner and shall issue its decision along with any conditions within forty-five (45) days of receiving all materials necessary to review the request for

exemption from the applicant. No fee may be charged for accepting and processing requests for exemption for watershed restoration;

11. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this Master Program, if:

a. The activity does not interfere with the public use of the surface waters;
b. The activity will have no significant adverse impact on the environment including but not limited to fish, wildlife, fish or wildlife habitat, water quality and aesthetic values; and
c. The activity does not involve the installation of any structure and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity.

B. When a development meets the exemption criteria listed in this section or WAC 173-27-040, and is subject to a U.S. Army Corps of Engineers Section 10 or Section 404 Permit, a copy of the Shoreline Exemption shall be sent to the Department of Ecology.

C. Before issuing a Shoreline Exemption, the Administrator shall review this Master Program to determine if the proposed development requires a Shoreline Variance and/or a Shoreline Conditional Use Permit.

16.08.330 Shoreline Variance

The purpose of a variance is to grant relief to specific bulk or dimensional requirements set forth in the Master Program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of this Program would impose unnecessary hardships on the applicant or diminish the policies set forth in RCW 90.58.020. Variances from the use regulations of this Master Program are prohibited.

A. The Hearing Examiner is authorized to approve a Shoreline Variance from the performance standards of this Master Program only when all of the criteria enumerated in WAC 173-27-170 are met.

B. A Shoreline Variance should be granted in circumstances where denial of the permit would thwart the policies enumerated in RCW 90.58.020.

C. In all instances, the applicant must demonstrate that extraordinary circumstances exist and the public interest will not suffer substantial detrimental effect.

D. The applicant for a Shoreline Variance must demonstrate that the variance meets the criteria in WAC 173-27-170.

E. Proposals that require a Critical Area Reasonable Use Permit pursuant to SMC 16.16.140 shall be processed as a Shoreline Variance.

F. Prior to approval of any Shoreline Variance, the Hearing Examiner shall consider the cumulative environmental impacts of previous, existing, and possible future requests for like actions in the area. The total effects of approved Shoreline Variances should remain consistent with the policies of RCW 90.58.020 and shall not produce significant adverse effects to the shoreline ecological functions, processes, or other users.

G. Before making a determination to approve a Shoreline Variance, the Hearing Examiner shall consider issues related to the conservation of valuable natural resources and the protection of views from public lands.

H. Shoreline Variance requests related to the vegetation conservation standards in section 16.08.610 of this SMP and based on the applicant's/proponent's desire to enhance the view from the subject development may be granted where there are no likely detrimental effects to existing or future users, critical areas, other features or shoreline ecological functions and/or processes, and where reasonable alternatives of equal or greater consistency with this Program are not available. The shoreline variance criteria referenced in A above shall also be met.

I. A Shoreline Variance shall not be granted when it would allow a greater height or lesser shoreline setback than what is typical for the area immediately surrounding the development site.

J. A variance issued per SMC 18.28.030 shall not be construed to mean approval of a Shoreline Variance from Shoreline Master Program use regulations.

K. An issued Shoreline Variance does not provide relief from the variance requirements under SMC 18.28.030.

16.08.340 Shoreline Conditional Use Permit

The purpose of a Shoreline Conditional Use Permit is to allow greater flexibility in the application of the use regulations of the Master Program in a manner consistent with the policies of RCW 90.58.020.

A. The Town Council shall issue Shoreline Conditional Use Permits only when all the criteria enumerated in WAC 173-27-160 are met.

B. Shoreline Conditional Use Permits should be granted in a circumstance where denial of the permit would result in a conflict with the policies enumerated in RCW 90.58.020.

C. In authorizing a Shoreline Conditional Use, special conditions may be attached to the permit by the Town Council or by the Department of Ecology to minimize the effects of the proposed use. Uses that are specifically prohibited by the Master Program may not be authorized with the approval of a Shoreline Conditional Use Permit.

D. In the granting of all conditional use permits, consideration shall be given to the cumulative impacts of additional requests for like actions in the area. For example, if

conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

16.08.350 Application Process

A. Application form. Complete applications for a Substantial Development Permit, Shoreline Variance, and a Shoreline Conditional Use Permit shall include all information required by the Department of Ecology in WAC 173-27-180. The Administrator shall provide forms for applications for Substantial Development Permits, Shoreline Variances, and Shoreline Conditional Use Permits.

B. Burden of Proof. It is the applicant's responsibility to provide proof that the proposed development is consistent with the permit criteria requirements.

C. Decision. The Administrator shall issue a notice of decision, pursuant to SMC 14.16.060, at the conclusion of the permit process. The Administrator shall also transmit the final decision, including findings and conclusions to the Department of Ecology and State Attorney General pursuant to RCW 90.58.140(6).

D Department of Ecology Review of permits.

1. After the issuance of a Shoreline Variance or Shoreline Conditional Use Permit, the Administrator shall file the permit with the Department of Ecology for its approval, approval with conditions, or denial.
2. The Department of Ecology will issue its decision on a Shoreline Variance or Shoreline Conditional Use Permit as specified in WAC 173-27-200.
3. Upon receipt of the Department of Ecology's decision, the Administrator shall notify those interested persons having requested notification of such decision.

16.08.360 Local Appeals

There are no administrative appeals for shoreline permit decisions made by the Town Council or Hearing Examiner. Decisions of the Administrator may be appealed to the Town Council pursuant to SMC 14.24.030.

16.08.370 Appeals to State Shoreline Hearings Board

A. Appeals of the final decision of the Town Council or Hearing Examiner with regard to shoreline management shall be governed by the provisions of RCW 90.58.180.

B. Appeals to the Shoreline Hearings Board of a decision on a Shoreline Substantial Development Permit, Shoreline Variance or Shoreline Conditional Use Permit may be filed by the applicant/proponent or any aggrieved party pursuant to RCW 90.58.180.

C. The effective date of the Town's decision shall be the date of filing with the Department of Ecology as defined in RCW 90.58.140.

1. For decisions on permits other than those described in subsection (2), the "date of filing" as used in this section refers to the date of actual receipt by the Department of Ecology of the Town's decision.
2. For conditional use permits or variances approved by the Town, the "date of filing" means the date the decision of the Department of Ecology is transmitted by the department to the Town.
3. For decisions involving a shoreline substantial development permit and approval of either a shoreline conditional use permit or variance, or both, the "date of filing" has the same meaning as defined in subsection (2).

16.08.380 Initiation of Development

A. Development pursuant to a Shoreline Substantial Development Permit shall not be authorized until twenty one (21) days after the date of filing of the Town's decision with the Department of Ecology.

B. Development for which a Shoreline Variance or Shoreline Conditional Use is required shall not begin and shall not be authorized until twenty one (21) days after the date of filing of the Department of Ecology's decision with the Administrator, or after all appeal proceedings before the Shoreline Hearings Board have terminated.

16.08.390 Permit Timelines

A. The time requirements of this section shall apply to all substantial development permits and to any development authorized pursuant to a variance or conditional use permit. Construction activities shall be commenced or, where no construction activities are involved, the use or activity shall be commenced within two years of the effective date of a Substantial Development Permit.

B. Upon a finding of good cause, based on the requirements and circumstances of the project proposed and consistent with the policy and provisions of the Master Program and state regulations, the Town Council may adopt different time limits for the commencement of construction or action during the processing of a Substantial Development Permit.

C. The Administrator may authorize a single extension of the date of commencement of an approved Shoreline Substantial development Permit for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record on the Substantial Development Permit and to the Department of Ecology.

D. Authorization to conduct development activities authorized by an approved Shoreline Substantial Development Permit shall terminate five years after the effective date. However, the Administrator may authorize a single extension for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record and to the Department of Ecology

E. The effective date of a substantial development permit shall be the date of filing as provided in RCW 90.58.140(6). The permit time periods in this section do not include the time during which a use or activity was not actually pursued due to the pendency of administrative appeals or legal actions or due to the need to obtain any other government permits and approvals for the development that authorize the development to proceed, including all reasonably related administrative or legal actions on any such permits or approvals.

F. Revisions to permits may be authorized after original permit authorization has expired. The purpose of such revisions shall be limited to authorizations of changes which are consistent with WAC 173-27-100 and SMC 16.08.400 and which would not require a permit for the development or change. If the proposed change constitutes substantial development then a new permit is required. This procedure shall not be used to extend the original permit time requirements or to authorize substantial development after the time limits of the original permit.

G. The Administrator shall notify the Department of Ecology in writing of any change to the effective date of a permit with an explanation of the basis for approval of the change. Any change to the time limits of a permit other than those authorized by RCW 90.58.143 as amended shall require a new permit application.

16.08.400 Revision to Permits

A. A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, this Master Program or 90.58 RCW. Changes that are not substantive in effect do not require a permit revision.

B. Applicants for permit revision shall submit detailed plans and text describing the proposed changes. Revisions to Substantial Development Permits and Conditional Use Permits shall be reviewed and approved or denied by the Town Council following the procedures for the issuance of the original permit. Revisions to Shoreline Variances shall be reviewed and approved or denied by the Hearing Examiner following the procedures for the issuance of the original permit.

C. The Town Council or Hearing Examiner, as appropriate, may approve the revision only if the proposed changes are within the scope and intent of the original permit, and are consistent with this Master Program and 90.58 RCW.

(1) "Within the scope and intent of the original permit" means all of the following:

(a) No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred square feet or ten percent from the provisions of the original permit, whichever is less;

(b) Ground area coverage and height may be increased a maximum of ten percent from the provisions of the original permit;

(c) The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of this Master Program except as authorized under a variance granted as the original permit or a part thereof;
(d) Additional or revised landscaping is consistent with any conditions attached to the original permit and with the applicable Master Program;
(e) The use authorized pursuant to the original permit is not changed; and
(f) No adverse environmental impact will be caused by the project revision.

D. Revisions shall be processed in accordance with WAC 173-27-100.

Part 4- General Provisions

16.08.500 Archaeological and Historic Resources
Archaeological and historic resources include those recorded with the State Historic Preservation Office, those listed in Chapter 2.14 SMC, and those inadvertently unearthed during development. Archaeological sites are also subject to Chapter 27.44 RCW (Indian graves and records) and Chapter 27.53 RCW (archaeological sites and records) and Chapter 25-48 WAC (archaeological excavation and removal permit).

A. Policy
The Town shall endeavor to prevent the destruction of or damage to any site having historic, cultural, scientific, or educational value as identified by the appropriate authorities, including affected Indian tribes and the State Department of Archaeology and Historic Preservation.

B. Regulations
1. All shoreline permits issued in areas documented to contain archaeological resources shall include a requirement that the area be inspected or evaluated by a professional archaeologist in coordination with the affected Indian tribes.
2. All shoreline permits shall include a condition to immediately stop work and notify the Town, the State Department of Archaeology and Historic Preservation, and affected Indian tribes if archaeological resources are uncovered during excavation.

16.08.510 Building Setbacks, Bulk, Height and Lot Dimensions
This section identifies the minimum distance that a new shoreline use or new development must be setback from the Ordinary High Water Mark (OHWM) to protect shoreline functions and processes. Building and structure setback means the minimum distance a building or structure is place behind (landward from) the OHWM, and establishes an area adjacent to a shoreline that separates and protects the area from adverse impacts associated with adjacent land uses.

A. Policies
1. New shoreline uses and developments should be located sufficiently land ward of the marine shoreline to ensure the safety and stability of the proposed

development and protect the waterbody from potential adverse effects of development.

2. Building setbacks and vegetation conservation areas should be used to ensure no net loss of shoreline ecological functions and preserve the existing character of the shoreline consistent with the applicable Shoreline Environment Designation in SMC 16.08.210.

B. Regulations

1. The following table summarizes the minimum building setbacks from the Ordinary High Water Mark (OHWM) by Shoreline Environmental designation.

2. Critical area buffers may increase building setbacks. When critical area buffers and building setbacks from OHWM overlap, the buffer or setback furthest landward from the OHWM applies.

3. Building height, bulk dimensions, street, rear, and side yard setbacks, maximum lot coverage, minimum lot frontage and lot dimensions are regulated under the zoning ordinance, Title 18 SMC. In no case shall the height of any structure exceed 35 feet from the average grade without a shoreline variance.

4. The following table shall be used in conjunction with the written provisions for each use.

MINIMUM BUILDING & STRUCTURE SETBACK FROM ORDINARY HIGH WATER MARK				
	High Intensity	Medium Intensity	Shoreline Residential	Urban Conservancy
BOATING FACILITIES				
On shore structures	0 feet	0 feet	----	25 feet
Launch Ramps	0 feet	0 feet	----	0 feet
NON-RESIDENTIAL DEVELOPMENT				
Water-dependent , Water-related and water-enjoyment uses	0 feet	25 feet	---	----
Non-water-oriented uses	25 feet	80 feet	---	---

RECREATION DEVELOPMENT				
Water-dependent, and water-related development	0 feet	0 feet	0 feet	0 feet
Water -enjoyment development	10 feet	10 feet	10 feet	10 feet
Non-water oriented development	25 feet	25 feet	75 feet	---
	High Intensity	Medium Intensity	Shoreline Residential	Urban Conservancy
RESIDENTIAL DEVELOPMENT				
Single family	---	---	100 feet, or 50 feet from the top of a geological hazard area, whichever is greater –see note 1	100 feet, or 50 feet from the top of a geological hazard area, whichever is greater –see note 1
Multi-family/mixed use	25 feet	25 feet	---	---
TRANSPORTATION				
Streets & Railroads	See note 2	See note 3	170 feet – see note 1	25 feet
Pathways & Bicycle paths	25 feet - see note 4	25 feet - see note 4	25 feet - see note 4	25 feet - see note 4
Ferry System	0 feet	---	---	---
UTILITIES				
Utilities	See note 5	See note 6	25 feet - See note 6	50 feet - See note 6
OTHER				
All other buildings and structures not listed above	25 feet	25 feet	25 feet	25 feet
NOTES				
Note 1. Reductions in setbacks for primary residential structures and streets require a shoreline variance, but in no case shall the setback from OHWM be less than 50 feet.				

Note 2. Improvements such as asphalt pavement associated with existing streets and railroads may be expanded within the existing rights-of-way landward unless such expansion is not feasible.
Note 3. Improvements such as asphalt pavement associated with existing streets and railroads may be expanded within the existing rights-of-way landward unless such expansion is not feasible. New streets to service the former mill site may be created perpendicular to Chambers Creek Road, but not parallel within the shoreline jurisdiction. Chambers Creek Road may be realigned to be further inland as part of a shoreline restoration/enhancement project.
Note 4. Pathways and bikeways are permitted within existing rights-of-way. Spurs off of pathways & bikeways to provide direct access to the shoreline may encroach into the setback provided that there is no net loss of shoreline function.
Note 5. Utilities shall be placed within existing rights-of-way as far landward as is feasible.
Note 6. Utilities shall be placed within new or existing rights-of-way as far landward as is feasible.

16.08.520 Critical Areas – General

Critical areas include the following areas and ecosystems: wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas.

A. Policies

1. Regulation of critical areas within the shoreline jurisdiction should be consistent with the goals and policies of the Shoreline Management Act and this Master Program.
2. Regulation of critical areas within the shoreline jurisdiction should provide a level of protection that assures no net loss of shoreline ecological functions necessary to sustain shoreline natural resources.

B. Regulations

1. Subject to the exceptions listed below, the Town's Critical Areas regulations in Chapter 16.16 SMC, codifying Ordinance 1308, adopted October 5, 2004 and amended by Ordinance 1616, adopted January 6, 2009, and Ordinance 1485, adopted September 18, 2012 are incorporated by reference, except that permit, nonconforming, appeal and enforcement provisions shall be governed by this Master Program and not Chapter 16.16 SMC.
2. In the event development or performance standards in Chapter 16.16 SMC are inconsistent with standards and requirements in this Master Program, the provisions most protective of the resource shall govern.
3. Development applications that are processed according to the Public Agency and Utility exceptions under SMC 16.16.130 or the Reasonable Use Exception of SMC 16.16.140 shall be processed as a shoreline variance according to the provisions of this Master Program and WAC 173-27.

4. Development activities that would otherwise qualify for an exemption from a critical areas permit under SMC 16.16.120 shall comply with this Master Program. Such activities may require a Shoreline Substantial Development Permit, Shoreline Variance, or Shoreline Conditional Use Permit unless specifically exempt from Shoreline Substantial Development Permits under this Master Program and RCW 90.58.030(3)(e).
5. Applications for variances under SMC 16.16.300 and SMC 16.16.680 shall be processed as shoreline variances according to the provisions of this Master Program and Chapter 173-27 WAC.
6. The provisions of Chapter 16.16 SMC shall apply to any use, alteration, or development within the shoreline jurisdiction whether or not a shoreline permit or written exemption is required.
7. Within the shoreline jurisdiction, the regulations of Chapter 16.16 SMC shall be liberally construed together with this Master Program to give full effect to the objectives and purposes of this Master Program and the Shoreline Management Act.
8. In order to ensure consistent treatment of critical areas, lands necessary for buffers of critical areas within the shoreline jurisdiction shall be included within the Town's shoreline jurisdiction pursuant to RCW 90.58.030(2)(d)(ii).
9. Applicants for shoreline permits and exemptions shall demonstrate, through best available science, how their proposed activity will protect hydrologic connections between water bodies, water courses, and associated wetlands.

16.08.530 Critical Areas - Critical Saltwater Habitats

Critical saltwater habitats include kelp beds; eelgrass beds; spawning and holding areas for forage fish; subsistence, commercial and recreational shellfish beds; mudflats; intertidal habitats with vascular plants, and areas with which priority species have a primary association.

A. Policy

1. The Town should protect critical saltwater habitat by limiting construction in such areas.
2. The Town should cooperate with federal, state and tribal authorities on critical habitat management plans.

B. Regulations

1. Docks, bridges, utility crossings and other structures shall not intrude into or over critical saltwater habitats unless all of the following are demonstrated:
   a. The public need for the structure is clearly demonstrated.
   b. Alternative sites or alignments are not feasible or would entail unreasonable or disproportionate costs.
   c. The structure, including mitigation, will result in no net loss of shoreline environmental function.
   d. The project, including mitigation, is consistent with the state's interest in resource protection and species recovery.

2. The Town shall consult all federal, state and tribal entities with jurisdiction and/or expertise in reviewing any activity that may intrude into a critical saltwater habitat.
3. Applicants for overwater and nearshore developments in marine and estuarine environments shall provide an inventory of the site and adjacent beach sections to assess the presence of critical saltwater habitats and functions. The methods and extent of the inventory shall be consistent with accepted research methodology.

16.08.540 Critical Areas - Flood Hazard Reduction

Flood hazard protection includes actions taken to reduce damage or hazards associated with flooding. Flood hazard provisions also apply to shoreline modification, shoreline uses and development that may increase flood hazards. Flooding is a natural process of rivers and streams.

A. Policies

1. Flood hazard reduction planning should occur early in the development of new projects.
2. Non-structural flood hazard reduction methods should be preferred over structural means, including restoration of more natural hydrological conditions.
3. Flood hazard planning should include all watershed plans, Chapter 16.16 SMC (the Critical Areas Ordinance) as incorporated into the Master Program, Chapter 13.50 (the stormwater management ordinance), and the National Flood Insurance Program.
4. Flood hazard protection measures should not result in a net loss of shoreline ecological function.
5. Development in flood plains should not significantly or cumulatively increase flood hazard or be inconsistent with a comprehensive flood hazard management plan adopted after 1994 and approved by the Department of Ecology pursuant to chapter 86.12 RCW.
6. New development or new uses in the shoreline jurisdiction, including the subdivision of land, should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway.

B. Regulations

1. New structural flood hazard reduction measures in shoreline jurisdiction shall be allowed only when the applicant can demonstrate by a scientific and engineering analysis that the structural measures are necessary to protect existing development, that nonstructural measures are not feasible, that impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss, and that appropriate vegetation conservation actions are undertaken consistent with this master program.
2. Applicants for all proposed flood hazard protection methods shall provide a mitigation analysis under SMC 16.08.590.

3. Flood hazard protection methods shall comply with the regulations in SMC 16.08.950, Shoreline Stabilization.
4. All approved flood hazard protection measures shall be designed, constructed and maintained to not result in a net loss of shoreline ecological function.
5. Structural flood hazard reduction measures shall be consistent with an adopted comprehensive flood hazard management plan approved by the Department of Ecology that evaluates cumulative impacts to the watershed system.
6. New structural flood hazard reduction measures shall be placed landward of the associated wetlands, and designated vegetation conservation areas, except for actions that increase ecological functions, such as wetland, riverine or floodplain restoration.
7. New structural public flood hazard reduction measures, such as dikes and levees, shall dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigable significant ecological impacts, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.
8. Removal of gravel for flood management purposes shall be consistent with an adopted flood hazard reduction plan and Department of Ecology regulations. Applicants for removal shall provide a biological and geomorphological study demonstrating that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of ecological functions, and is part of a comprehensive flood management solution.
9. When evaluating alternate flood control methods, the Town shall consider the removal and relocation of structures within flood prone areas.
10. Where feasible and appropriate, the Town shall consider the removal of artificial restrictions to natural channel migration, restoration of off-channel hydrological connections and returning river processes to a more natural state.

16.08.550 Critical Areas - Geological Hazards

Geological hazard areas are those areas which may not be suited to development consistent with public health, safety, or environmental standards, because of their susceptibility to erosion, sliding, earthquake or other geological events as designated by WAC 365-190-080(4).

The following regulations apply to geological hazard areas located within the shoreline jurisdiction, and are in addition to the regulations in Chapter 16.16 SMC.

A. Policies

1. Development of lands with geological hazard areas within the shoreline jurisdiction should not cause a foreseeable risk from geological conditions to people or improvements during the life of the development.
2. Development of lands with geological hazard areas within the shoreline jurisdiction should avoid the need for structural shoreline stabilization during the life of the development.

3. Development of lands with geological hazard areas within the shoreline jurisdiction should result in no net loss of ecological function.

B. Regulations

1. The Town shall not approve any development or the creation of any new lots that would cause a foreseeable risk from geological conditions to people or improvements during the life of the development.

2. In addition to the geotechnical engineering reports required by SMC 16.16.740 and SMC 16.16.750 as incorporated into the Master Program, the applicant for any development shall provide an evaluation of the future need for slope or shoreline stabilization.

3. Development in geologic hazard areas that would require structural shoreline stabilization shall not be allowed except when the applicant has demonstrated all of the following:

a. Structural stabilization is necessary to protect an allowed use.

b. No alternative locations are available for the allowed use.

c. The proposed stabilization structure or other measure is designed in strict compliance with SMC 16.08.950 and WAC 173-26-231.

d. The proposed stabilization structure is designed to achieve no net loss of ecological function.

4. Stabilization structures and other measures to protect existing primary residential structures within geological hazard areas may be allowed only when the applicant has demonstrated all of the following:

a. All alternatives to constructing the stabilization structure or other measure, including relocation or reconstruction of the residential structure, are not feasible or less expensive than the proposed stabilization measure.

b. The proposed stabilization structure or other measure is designed in strict compliance with SMC 16.08.950 and WAC 173-26-231.

c. The proposed stabilization structure or other measure is designed to achieve no net loss of ecological function.

16.08.560 Critical Areas - Wetlands

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 adapted for life in saturated soil conditions. The following regulations apply to wetland areas located within the shoreline jurisdiction, and are in addition to the regulations in Chapter 16.16.SMC.

A. Policies

Regulation of wetlands and wetland buffers within the shoreline jurisdiction shall achieve, at minimum, no net loss of wetland area functions, including lost time when the wetland does not perform the function.

B. Regulations

1. Identification of wetlands and delineation of their boundaries pursuant to critical areas provisions in this Master Program shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the Town meeting the wetland designation criteria in that procedure are subject to the provisions of this Master Program.
2. Notwithstanding the wording in SMC 16.16.410 as incorporated into the Master Program, allowed activities within wetlands may require a shoreline permit or authorization.
3. Proposals to alter wetlands or wetland buffer areas shall include the mitigation sequencing analysis of SMC 16.08.590. Any approved alteration to a wetland or wetland buffer area shall be based upon the wetland rating, scientific and technical information and the mitigation sequencing analysis, and shall demonstrate how no net loss of wetland area and function is to be achieved.
4. Standard buffers for wetlands shall be as set forth in SMC 16.16.430 as incorporated into the Master Program.
5. Mitigation for unavoidable impacts to wetlands and wetland buffers shall be as set forth in SMC 16.16.440 as incorporated into the Master Program.

16.08.570 Emergency Actions

An emergency is an unanticipated and imminent threat to public health, safety, or the environment and that requires immediate action within a timeframe too short to allow full compliance with the provisions of this Master Program. Emergency construction does not include development of new permanent protective structures where none previously existed.

A. Policy

The Town should review all actions taken on an emergency basis for consistency with this Master Program.

B. Regulations

1. Actions taken to address an emergency shall be reasonable under the circumstances, be designed to have the least possible impacts on shoreline ecological functions and processes; and be designed to comply with the provisions of this Master Program, to the extent feasible.
2. The party undertaking the emergency action shall notify the Town of the existence of the emergency and emergency action(s) as soon as possible, not to exceed one (1) working day following commencement of the emergency action.
3. Within seven (7) days following completion of emergency activity, the party shall provide the Town a written description of the work undertaken, site plan, description of pre-emergency conditions and other information requested by the Town to determine whether the action was permitted within the scope of an emergency action.
4. The Administrator shall evaluate the action for consistency with the provisions of WAC 173-27-040(2) (d) (exemptions from substantial development permits)

and determine whether the action taken, or any part of the action taken, was within the scope of the emergency actions allowed in this section.
5. The Administrator may require mitigation for impacts to shoreline ecological functions.
6. If the Administrator determines that the emergency action was not warranted, he or she may require that the party obtain a permit and/or require remediation of or mitigation for the actions taken.

16.08.580 Nonconforming Structures, Uses and Development

A. Structures that were legally established and are used for a conforming use but which are nonconforming with regard to setbacks, buffers or yards, area, bulk, height, or density may be maintained and repaired and may be enlarged or expanded provided that said enlargement does not increase the extent of nonconformity by further encroaching upon or extending into areas where construction or use would not be allowed for new development or uses.

B. Uses and developments that were legally established and are nonconforming with regard to the use regulations of this Master Program may continue as legal nonconforming uses. Such uses shall not be enlarged or expanded, except that nonconforming single-family residences that are located landward of the ordinary high water mark may be enlarged or expanded in conformance with applicable bulk and dimensional standards by the addition of space to the main structure or by the addition of normal appurtenances as defined in this master program upon approval of a Shoreline Conditional Use permit.

C. A use which is listed as a conditional use but which existed prior to adoption of this Master Program or any relevant amendment and for which a conditional use permit has not been obtained shall be considered a nonconforming use. A use which is listed as a conditional use in SMC 16.08.220 but which existed prior to the applicability of this Master Program to the site and for which a Shoreline Conditional Use permit has not been obtained shall be considered a nonconforming use.

D. A structure for which a Shoreline Variance has been issued shall be considered a legal nonconforming structure and the requirements of this section shall apply as they apply to preexisting nonconformities.

E. A structure which is being or has been used for a nonconforming use may be used for a different nonconforming use only upon the approval of a Shoreline Conditional Use permit. A Shoreline Conditional Use permit may be approved only upon a finding that:

1. No reasonable alternative conforming use is practical; and
2. The proposed use will be at least as consistent with the policies and provisions of the act and this Master Program and as compatible with the uses in the area as the preexisting use.
3. Conditions may be attached to the permit as are deemed necessary to assure compliance with the above findings, the requirements of the Master Program and

the Shoreline Management Act and to assure that the use will not become a nuisance or a hazard.

F. Any structure nonconforming as to height or setback standards that becomes damaged may be repaired or reconstructed; provided, that:

1. The extent of the previously existing nonconformance is not increased; and
2. The building permit application for repair or reconstruction is submitted within 180 days of the occurrence of damage or destruction.

G. If a nonconforming use is abandoned for 180 consecutive days, the nonconforming rights shall expire and any subsequent use shall be conforming. A use authorized pursuant to subsection (E) above shall be considered a conforming use for purposes of this section.

H. An undeveloped lot, tract, parcel, site, or division of land located landward of the ordinary high water mark which was established in accordance with SMC Title 17 and state subdivision requirements prior to the effective date of this Master Program but which does not conform to the present lot size standards may be developed if permitted by other Town land use regulations and so long as such development conforms to all other requirements of this Master Program.

I. Any non-conforming uses or structures which are not covered by RCW 90.58.270(5) or RCW 90.58.620, and not addressed in this Master Program must comply with WAC 173-27-080.

16.08.590 No Net Loss Standard and Mitigation Sequencing

State law requires that new uses and activities in the shoreline achieve no net loss of shoreline ecological function. Mitigation sequencing refers to the process to design a project or activity to have the least impact on the environment.

A. Policy

All uses, developments and shoreline modifications along the Town's shoreline shall be designed, located, sized, constructed and/or maintained to achieve no net loss of shoreline ecological functions.

B. Regulations

1. Mitigation sequencing shall apply to all applications for development within the shoreline jurisdiction.
2. The following mitigation sequencing guidelines are in order of preference, and shall be applied during the design, construction and operation of all developments:
   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 using appropriate technology or by taking affirmative steps 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.

In determining appropriate mitigation measures applicable to shoreline development, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

3. Failure to demonstrate that the mitigation sequencing standards have been met may result in permit denial. The Town may request necessary studies by qualified professionals to determine compliance with this standard and mitigation sequencing.

4. Maintenance activities shall be conducted in a manner that minimizes impacts to fish, wildlife, and their associated habitat and utilizes best management practices.

5. The Town shall consider alternative mitigation measures proposed by the applicant that may be less costly than those prescribed in this Master Program, provided that the alternatives are as effective in meeting the requirements of no net loss.

16.08.600 Public Access

Public access to the shoreline includes physical access to the shore, use of the water and view of the shoreline from adjacent properties.

A. Policies

1. Development in the shoreline should be sited, designed and constructed to maximize public use and access to the shoreline.
2. Access to the shoreline should include access from the water side of the shoreline where feasible.
3. Publicly owned areas within the shoreline should provide public access.

B. Regulations

1. Public access is required for all new shoreline development and uses, except for a single family residence or residential projects containing four (4) or fewer dwelling units. The requirement of public access to shorelines does not confer the right to enter upon or cross private property, except for dedicated and marked public easements.

2. Public access shall normally be provided on the property that is the subject of the application. The Town may approve off-site public access if there are unavoidable health or safety hazards to the public which cannot be prevented by any feasible means; or security requirements that cannot be satisfied through the application of alternative design features or other solutions; or unacceptable environmental harm, such as damage to fish spawning areas, that will result from

the public access that cannot be mitigated; or if a significant conflict between the proposed access and adjacent uses would occur and cannot be mitigated.
3. Examples of off-site public access include enhancing existing public access points, developing view points at nearby street ends, and improving or extending trail systems along the shoreline. The amount and type of off-site public access provided shall be commensurate with the size of the shoreline development or use.
4. Where appropriate, the Town may condition public access by limiting hours of use or using fences, terracing, hedges, or landscaping to separate uses and activities.
5. Public access sites shall be barrier free for the physically disabled where feasible.
6. Public access sites shall be connected directly to the nearest public street.
7. Public access sites shall be fully developed and available for public use at the time of occupancy or use of the development or activity.
8. Public access easements and permit conditions shall be recorded on the deed where applicable or on the face of a plat as a condition running with the land.
9. Signs indicating the access and hours of access, if limited, shall be constructed, installed, and maintained by the applicant in conspicuous locations at public access sites. Signs controlling or restricting public access may be approved as a condition of permit approval.
10. Development on or over the water shall be constructed as far landward as possible to avoid interference with views from surrounding properties to the shoreline and adjoining waters.
11. Public access shall be designed to prevent a net loss of shoreline ecological function.
12. Where a development or use will interfere with an existing public access, the development or use shall provide public access to mitigate this impact. Interference with public access may include blocking access or discouraging use of existing on-site or nearby public access.

16.08.610 Vegetation Conservation

Vegetation conservation refers to specific measures that are designed to protect existing native vegetation and/or restore or enhance native vegetation where such actions contribute to improved ecological functions.

A. Policies

1. Existing native vegetation landward of the OHWM should be retained to the extent feasible. The goals of preserving and restoring vegetation should be balanced with the need to accommodate preferred shoreline uses and developments and provide views of the shoreline.
2. Shoreline enhancement projects should include restoration of native vegetation.
3. Vegetation within critical areas should be managed in accordance with the Critical Areas Ordinance as incorporated into the Master Program.

4. Vegetation on Town-owned properties should be managed in accordance with the Urban Forestry Management Ordinance, the Critical Areas Ordinance and the regulations of this Master Program.
5. 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.
6. Development proposals that require extensive vegetation removal for purposes including, but not limited to creating views or expansive lawns should not be allowed. The Town should allow selective clearing for such purposes only when slope stability and ecological functions are not compromised. Trimming and pruning are preferred over removal of native trees and shrubs. Shoreline landowners may not be guaranteed an unobstructed view of the water.

B. Regulations

1. General

a. The Town shall allow limited and selective clearing for purposes including, but not limited to creating views or lawns when slope stability and ecological functions are not compromised. Techniques shall include pruning, windowing and other measures that preserve plant composition and structure. No more than twenty-five (25) percent of a single tree's leaf bearing crown may be removed and no more than twenty-five (25) percent of the canopy cover of any stand of trees may be removed for view preservation. If additional trimming is requested in subsequent years, the cumulative removal may not exceed 25% within any 4 year period.

b. Clearing invasive, non-native shoreline vegetation listed on the Pierce County Noxious Weed List is permitted. The disturbed areas must be promptly revegetated using native species.

c. When enhancing or restoring shoreline vegetation, project proponents shall use native species from the list maintained by Pierce 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.

d. The following uses and structures are permitted in the Vegetation Conservation Area without a variance:

i. Boating facilities accessory to a single-family residential development including piers, docks and floats;
ii. Pedestrian beach access structures, including stairs and stair towers;
iii. Public access trails and paths and structures for public access including but not limited to stairways, stair towers, piers, docks, or floats;
iv. Fences;
v. Retaining walls;
vi. Pathways;

vii. One (1) residential accessory structure provided that the structure does not exceed 200 square feet.

e. The above uses and structures are allowed in the Vegetation Conservation Area so long as they are designed to avoid and minimize the removal of native vegetation to the extent feasible.

2. New developments

a. New developments shall be designed to avoid and minimize the removal of native vegetation to the extent feasible.

b. New developments shall include a Vegetation Conservation Area that overlaps with and is the same in size and dimension as the building setback in SMC 16.08.510 to minimize the loss of ecological functions and processes of natural shoreline vegetation described in SMC 16.08.610 A. 5. Unless otherwise specified, all shoreline uses and developments, including preferred uses and uses exempt from permitting requirements, shall maintain the Vegetation Conservation Area as well-vegetated buffers to provide wildlife habitat, maintain water quality and ensure soil and slope stability.

c. Prior to granting a shoreline permit or determining that a proposed use/ development is exempt from permitting, the Town shall evaluate site development plans to assess vegetation impacts and identify opportunities for vegetation enhancement. As needed, the Town shall condition approval of new developments to ensure the following

i. Homes and other structures are placed in areas that require minimal removal of native trees and shrubs; and

ii. Established native forest stands are preserved to maintain slope stability and prevent surface erosion; and

iii. Areas that can be enhanced or restored using native woody species are replanted to improve ecological functions and mitigate the effects of the development. Native plant communities are preferred over non-native ornamental plantings because native plants have greater ecological value.

3. Maintenance

a. Maintenance, removal and trimming of vegetation within critical areas and their buffers shall be governed by the critical areas ordinance, Chapter 16.16 SMC as incorporated into the Master Program.

b. Maintenance, removal and trimming of vegetation within Town-owned properties within the shoreline jurisdiction shall be governed by the Urban Forestry Management Ordinance, Chapter 16.18 SMC.

c. Pruning and management of trees, shrubs, and other woody plants on non-Town owned or managed properties within the shoreline jurisdiction shall comply with Tree Care Industry Association standards. No more than 25% of the limbs on any single tree may be removed and no more than 25% of the canopy cover in any single stand of trees may be removed for view enhancement. Tree topping is prohibited.

4. Hazard trees

a. The Administrator shall determine whether a tree is a hazard tree. If not immediately obvious, the determination shall be made after review of a report by a qualified arborist or forester.
b. In order of preference, hazard trees may be converted to a habitat tree, thinned to remove the hazardous condition, pushed over and retained as large woody debris, or removed entirely. Complete removal is permitted only when pruning is not sufficient to address the hazard.

16.08.620 Water Quality

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, fish and wildlife species, and biotic communities.

A. Policies

1. The location, construction, operation, and maintenance of all shoreline uses and developments should maintain or enhance the quality of surface and ground water over the long term.
2. Shoreline use and development should minimize, through effective education, site planning and maintenance, the need for chemical fertilizers, pesticides, herbicides or other similar chemical treatments that could contaminate surface or ground water or cause adverse effects on shoreline ecological functions and values.
3. Appropriate buffers along all wetlands, streams and marine water bodies should be provided and maintained using low-maintenance techniques that reduce the need for herbicide and pesticide use.
4. Effective erosion control and water-runoff treatment methods should be provided for all shoreline development and use in accordance with Chapter 13.50 SMC
5. The Town should encourage the use of pervious materials and other low impact development techniques designed to reduce the volume of stormwater runoff.

B. Regulations

1. All shoreline uses and activities shall use effective erosion control methods during both project construction and operation. Erosion control methods shall comply with the current edition of the Department of Ecology's Stormwater Management Manual for Western Washington, applicable NPDES General Permit requirements, and the Stormwater Management provisions of Chapter 13.50 SMC.
2. Any building or structure within the shoreline jurisdiction that is served by an existing on-site sewage system which fails shall connect to the Town's sanitary sewage system if the lot on which the building is situated is within 300 feet of the centerline of a street or alleyway in which a sewer lateral is located pursuant to SMC 13.12.010. Owners of failing existing on-site sewage system on lots that do not meet the 300-foot requirement shall locate any replacement system as far

landward from the OHWM as possible and the replacement system shall be designed to meet all applicable water quality, utility, and health standards.
3. Any new on-site sewage systems within the shoreline jurisdiction shall be located as far landward from the OHWM as possible and shall be designed to meet all applicable water quality, utility, and health standards.
4. All materials that may come in contact with water 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 decking or other structural components 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.
5. Solid and liquid wastes and untreated effluents shall not be allowed to enter any ground water 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.
6. Low Impact Development (LID) techniques shall be incorporated where feasible.

Part 5- Shoreline Uses

16.08.700 Agriculture and Forestry
There are no agricultural lands or forestry operations in the shoreline jurisdiction.

A. Policy

Commercial agriculture and forestry are not compatible with the Town's shoreline environmental designations.

B. Regulation

New commercial agriculture and forestry operations are prohibited within the Town's shoreline jurisdiction.

16.08.710 Aquaculture
Aquaculture is the farming of food fish, shellfish or other aquatic plants or animals, and may include developments such as rearing pens, shore based structures, and shellfish rafts, as well as use of natural spawning and rearing areas.

A. Policies

1. Proposals for aquaculture activities should minimize adverse impacts on the Town's aesthetic values and views from upland properties.
2. Aquaculture activities, if permitted, should minimize any adverse effect on the shoreland environment, and all proposals should demonstrate no net loss of ecological functions.
3. Aquaculture should be conducted in a manner that controls pollution, avoids impacts on navigation and minimizes adverse impacts to fish and wildlife habitat.

4. Aquaculture involving significant risk of cumulative adverse effects on water quality, sediment quality, benthic and pelagic organisms, and/or wild fish populations through potential contribution of antibiotic resistant bacteria, or the escape of non-native species, or other adverse effects on Endangered Species Act-listed species should not be permitted.

5. The Town recognizes that potential locations for aquaculture are restricted, that technology associated with some forms of present-day aquaculture is still in its formative stages and experimental, and recognizes the need for some latitude in the development of this use as well as its potential impact on existing uses and natural systems.

B. Regulations

1. No aquaculture project shall be permitted in areas where it would adversely affect critical areas or critical resource areas.

2. Where allowed through a conditional use permit, all aquaculture projects shall provide a detailed operations plan demonstrating, through best available science, how the project will:

a. Achieve no net loss of ecological function consistent with the mitigation sequence described in WAC-173-26-201(2)(e) and SMC 16.08.590.

b. Ensure public access to publicly owned lands and waters and how that access will be maintained.

c. Address impacts from mooring, parking, noise, lights, litter, and other activities associated with the proposal.

3. All aquaculture projects shall be designed to ensure that suspended contaminated sediments are below state sediment standards at all times.

4. No aquaculture project shall conflict with navigation and other water-dependent uses.

5. Aquaculture shall be designed and located so as not to spread disease to native aquatic life, establish new nonnative species or significantly impact the aesthetic qualities of the shoreline.

6. All aquaculture projects shall include provisions to ensure proper management of upland uses to avoid degradation of water quality of existing shellfish areas. Development accessory to aquaculture planting and harvesting shall be located away from the water's edge, unless it requires a location in, over or adjacent to the water.

7. Commercial geoduck aquaculture shall be subject to the regulations contained in WAC 173-26-241.

16.08.720 Boating Facilities

Boating facilities generally include boat launch ramps (public and private), covered moorage, dry boat storage, and marinas. Boating facilities do not include docks serving four or fewer single family residences.

A. Boating Facilities Policies

1. Boating facilities should be located and designed to minimize adverse effects on the shoreline and, as much as possible, protect and enhance the shoreline environment.
2. Boating facilities should be designed and located so that adjacent fragile or unique natural and cultural features are preserved or enhanced.
3. Marinas should be located to minimize the consumption of limited shoreline areas.
4. Boating facilities should be located and designed such that their structure, features and operations will be aesthetically compatible with the areas affected and will not unreasonably impair shoreline views.
5. New public boating facilities shall be designed to accommodate public access and enjoyment of the shoreline location including walkways, viewpoints, restroom and recreational facilities.

B. Boating Facilities General Regulations

1. Boating facilities may be permitted only if:
   a. It can be demonstrated that the facility will not adversely impact fish or wildlife habitat areas or associated wetlands; and
   b. Adequate mitigation measures ensure that there is no net loss of the functions or values of the shoreline and habitat as a result of the facility.
2. New public boating facilities shall include adequate restroom facilities, parking spaces, and garbage and refuse containers including recycling bins.
3. Construction materials, including preservatives, surface treatments and hardware, shall be environmentally neutral materials approved for use in aquatic environments by the applicable state agencies.
4. Maintenance and repair of boating facilities shall be the minimum necessary to restore the facility to its original design, function, and capacity.
5. Boating facilities that include piers and/or docks shall comply with the regulations in SMC 16.08.930.
6. Moorage facilities shall be designed to protect against wakes caused by vessel traffic without the need for a breakwater where feasible.
7. New boating facilities shall be designed to not interfere with navigation rights.
8. Vessels shall not moor on waters of the state for extended periods except as allowed by applicable state regulations and unless a lease or permission is obtained from the state and impacts to navigation and public access are mitigated.

C. Boat Launch Ramp Regulations

1. Boat launch ramps shall be located on stable shorelines where water depths are adequate to eliminate or minimize the need for channel maintenance activities and on stable, non-eroding banks where the need for shore stabilization structures is minimized.
2. Ramp structures shall be placed near flush with the foreshore slope to minimize the interruption of geohydraulic processes.
3. Boat launch sites that are open to the public shall have adequate restroom facilities.

D. Dry Boat Storage Regulations

1. Only water-dependent aspects of dry-boat storage, such as boat hoists and boat launch ramps may be permitted within shoreline environment setbacks.
2. Boat launch ramps associated with dry boat storage shall be consistent with applicable requirements in this section.

E. Marinas Regulations

1. Marinas shall be located on stable shorelines where water depths are adequate to eliminate or minimize the need for channel maintenance activities and on stable, non-eroding banks where the need for shore stabilization structures is minimized.
2. Marinas shall be operated in a manner to preserve water quality and protect the public health and safety. An operational plan shall be submitted with the shoreline application and shall, at a minimum, demonstrate how the operator will provide:
   a. Adequate facilities and operational procedures for fuel handling and storage to prevent accidental spillage;
   b. Facilities, equipment, and procedures for the containment, recovery, and mitigation of spilled sewage, petroleum, and other hazardous materials;
   c. Signs located in areas easily visible to marina users; addressing the following:
      i. Regulations on handling and disposing of waste, sewage, or other toxic materials;
      ii. Regulations prohibiting the disposal of fish or shellfish wastes, scrap fish, viscera, or unused bait in or near the marina; and
      iii. The location of all public access facilities and pump out devices.
   d. Garbage or litter receptacles shall be located and sized to be convenient to marina users/visitor dock, including provisions for recycling waste;
   e. Safety equipment located on dock and pier facilities (e.g., life rings, hooks, and ropes);
   f. All pipes, plumbing, wires, and cables at or below ground and dock levels at the marina site;
   g. Adequate upland restrooms, available 24 hours per day, for use by any patron of the marina facility. The number and type of restrooms shall be determined based on the number of permanent and transient moorage slips within the marina.
   h. Adequate response to any additional issues raised during the application process.
5. Marina buildings shall conform to the height limitations contained in the zoning code, Title 18 SMC, and structures shall be limited to office, restroom, waste disposal and fueling facilities.
6. Boat maintenance activities shall only include routine repairs done by boat owners to keep their own boats in good repair.
7. Boat launching may occur in conjunction with a marina development only if sufficient parking is provided for launch vehicles.

F. Covered Moorage Regulations

1. Replacement of covered moorage facilities that have deteriorated due to exposure to the elements shall be designed to minimize overwater coverage.
2. New covered moorage is prohibited.

16.08.730 Land Subdivision

New lots may be created through the subdivision processes in SMC Title 17. Minimum lot sizes are regulated through the zoning ordinance in SMC Title 18.

A. Policies

1. New lots created in the shoreline jurisdiction should not result in a net loss of shoreline ecological function, nor an increase in the armoring of the shoreline.
2. Subdivisions of more than four lots should provide public access to the shoreline where feasible.

B. Regulations

1. New lots created through land subdivision shall not require structural flood hazard reduction measures, such as dikes, levees, or stream channel realignment, during the life of the development or use.
2. New lots created through land subdivision shall not require shoreline stabilization measures in order for reasonable development to occur, as documented in a geotechnical analysis of the site and shoreline characteristics.
3. Land subdivision of more than four lots shall provide public access as specified in SMC 16.08.600. Public access shall be depicted on the face of the recorded instrument.

16.08.740 Mining

Mining is the removal of sand, gravel, soil, minerals and other earth materials for commercial and other uses. There are no commercial mining operations in the shoreline jurisdiction.

A. Policy

Mining is not compatible with the Town's shoreline environmental designations.

B. Regulation

Mining is prohibited within the Town's shoreline jurisdiction.

16.08.750 Nonresidential Development

Nonresidential development includes the activities involved in commerce, industry, wholesale, retail, service and business trade.

A. Nonresidential Development Policies

1. Nonresidential development on the shoreline should provide physical and visual access to the shoreline, or other opportunities for the public to enjoy the shorelines of the state.

2. Multiple use nonresidential development which includes open space and recreation should be encouraged.
3. Nonresidential development should be aesthetically compatible with the surrounding areas.
4. Priority should be given to water-dependent and water-enjoyment development over other uses. Non-water oriented uses should be restricted.
5. Over-the water structures disrupt the natural environment by introducing shade, foreign materials and disturbance of the bed lands. Over-the-water nonresidential development should be limited to water-dependent uses, public access, or ecological restoration in order to minimize environmental harm from such structures.
6. Nonresidential development should include landscaping to enhance the shoreline area.
7. Industrial development and redevelopment should be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.

B. Nonresidential Development Regulations

1. Over-the-water construction for nonresidential uses is limited to water-dependent uses, public access and ecological restoration. Over-water structures shall:
   a. Be the minimum necessary size to support the structure's intended use.
   b. Be designed to minimize conflicts with surface navigation.
   c. Be designed to minimize obstruction of views of the shoreline from upland areas.
   d. Be designed to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
   e. Be designed to prevent degradation of water quality and alteration of natural hydrographic conditions.
2. All nonresidential development within the shoreline area shall provide for public visual and/or physical access to the shoreline. Where on-site public access is feasible, nonresidential development shall dedicate, improve, and provide maintenance for a pedestrian easement that provides area sufficient to ensure usable access to and/or along the shoreline for the general public.
3. All nonresidential loading and service areas shall be located on the upland side of the nonresidential activity or provisions shall be made to screen the loading and service areas from the shoreline.
4. All nonresidential development within shoreline jurisdiction shall assure no net loss of shoreline ecological functions.
5. Nonresidential development shall maintain a setback from the OHWM consistent with SMC 16.08.510.
6. Non-water oriented commercial and industrial development are prohibited unless part of a mixed use project that includes water-dependent uses and a significant public benefit such as providing public access or ecological restoration; or on property with severely restricted navigation where the commercial or industrial development includes a significant public benefit such

as providing public access or ecological restoration. Non-water oriented commercial and industrial development may be allowed if the site is physically separated from the shoreline by another property or public right of way.

16.08.760 Parking Areas

Commercial, industrial, transportation and recreational use of the shorelines all require parking areas as accessory to the main activity.

A. Parking Area Policies

1. Parking in shoreline areas should be located and designed to minimize adverse impacts including those related to stormwater runoff, water quality, visual qualities, public access, and vegetation and habitat maintenance.
2. Landscaping should consist of native vegetation in order to enhance the habitat opportunities within the shorelines area.

B. Parking Regulations

1. Parking for specific land use activities within the Town is subject to the requirements and standards set forth in SMC Title 18.
2. The location of parking areas in shorelands shall be located as far landward as feasible.
3. Parking shall be located on the landward side of the development unless parking is contained within a permitted structure. Where there is no available land area on the landward side of the development, parking shall extend no closer to the shoreline than a permitted structure.
4. Parking areas shall not be permitted over the water.
5. New parking areas are prohibited as a primary use within all shoreline environments.
6. New parking areas shall comply with all water quality standards in SMC 16.08.620.

16.08.770 Recreational Development

Recreational development, both public and commercial, provides opportunities for play, sports, relaxation, amusement or contemplation. It includes such activates as: scuba diving, hiking, canoeing, kayaking, sailing, photography, viewing and fishing. It also includes provision for parks, campgrounds, golf courses, and other outdoor recreation areas.

A. Policies

1. A variety of recreational experiences and activities should be encouraged to satisfy diverse recreational needs and demands. Shoreline recreational developments should be consistent with the Parks, Recreation and Open Space Element of the Comprehensive Plan.
2. The location and design of shoreline recreational developments should relate to local population characteristics, density and special activity demands.
3. Acquisition of potential shoreline areas for recreation or public access should be a priority.

4. Shoreline parks, recreation areas and public access points should be linked by hiking paths, bicycle paths, easements and/or scenic drives.
5. Recreational development should preserve, enhance or create scenic views and vistas. Development should be located, designed and operated to be compatible with the shoreline ecology.
6. All recreational developments should make adequate provisions for:
   a. Vehicular and pedestrian access, both on-site and off-site;
   b. Proper water, solid waste, and sewage disposal methods;
   c. Security and fire protection for the use itself and for any use-related impacts to adjacent private property;
   d. The prevention of overflow and trespass onto adjacent properties; and
   e. Buffering of such development from adjacent private property or natural areas.

B. Regulations

1. Areas containing valuable resources or critical areas shall be set aside for low impact recreation or restricted access.
2. Accessory use facilities that are not water-oriented, such as restrooms, commercial services, access roads, and parking areas shall be located landward of the ordinary high water mark. Water-dependent structures such as bridges and overwater viewing platforms may be permitted as a Shoreline Conditional Use.
3. All shoreline recreational development shall maintain and enhance features including critical areas, scenic views and aesthetic values.
4. Recreational facilities shall make adequate provisions, such as screening, buffer strips, fences, and signs, to prevent overflow onto adjacent private properties.
5. Proposals for recreational development shall include adequate facilities for water supply, sewage, and garbage disposal.
6.All public recreational development shall be located, designed and operated in a manner consistent with the purpose of the environment designation in which they are located and such that no net loss of shoreline ecological functions or ecosystem-wide processes results.

16.08.780 Residential Development

Residential development includes single-family residences, multifamily development and the creation of new residential lots through land division. Single-family residences are a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.

A. General

1. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities.
2. A Shoreline Substantial Development Permit is not required for construction of a single family residence by an owner, lessee, or contract purchaser for their own

use or the use of their family. Single family residential construction and accessory structures must otherwise conform to this Shoreline Master Program.
3. A Shoreline Variance or Shoreline Conditional Use Permit may be required for residential development for situations specified in this Master Program.
4. Uses and facilities associated with residential development, which are identified as separate use activities in this Master Program, such as land disturbing activities are subject to the regulations established for those uses in this section. Land disturbing activities may be exempted from the Shoreline Substantial Development Permit requirement, provided it is associated with an exempted single family residence and the activity is confined to the construction site and grading does not exceed 250 cubic yards, including grading for structures.

B. Policies

1. Residential development should be permitted only where there are adequate provisions for utilities, circulation and access.
2. Residential development should assure no net loss of shoreline ecological functions using mitigation sequencing in SMC 16.08.590. New subdivisions should be encouraged to cluster dwelling units in order to preserve natural features, minimize physical impacts, and provide for public access to the shoreline.
3. The density of development, lot coverage and height of structures should be governed by the Steilacoom Zoning Code and Building Code.
4. Residential developments should be designed so as to protect water quality, shoreline aesthetic characteristics, views and public access. Additionally provisions should be made for erosion control and landscaping.
5. In accordance with the Public Access requirements in SMC 16.08.600, new residential developments of more than four (4) dwelling units should provide dedicated and improved public access to the shoreline.
6. Over-the water structures disrupt the natural environment by introducing shade, foreign materials and disturbance of the bed lands. Residential development is not a water-dependent use, and therefore new over-water residential development and accessory uses should be prohibited.
7. Joint-use shoreline facilities and docks should be encouraged in all new subdivisions of more than four (4) dwelling units.
8. Accessory uses and structures should be designed and located to blend into the site as much as possible. Accessory uses and structures should be located landward of the principal residence when feasible.

C. Regulations

1. Residential development in shoreline areas shall comply with all applicable requirements of the Town including design standards.
2. All residential structures, accessory uses and facilities shall be designed to preserve views and vistas of the shoreline and Sound.
3. Prior to issuance of a building permit or other development approval the developer shall submit adequate plans for preservation of shore vegetation,

control of erosion during and after construction, and for replanting and landscaping after construction.
4. New residential development is prohibited waterward of the OHWM, and within setbacks defined for each shoreline environment designation unless a variance is obtained in accordance with section 16.08.330 of this Program.
5. New residential development shall assure no net loss of shoreline ecological functions.
6. New residential development shall not be approved if geotechnical analysis demonstrates that flood control or shoreline protection measures are necessary to create a residential lot or site area. New residential development shall be located and designed to avoid the need for structural shore defense and flood protection works.
7. If wetlands or other critical areas are located on the development site, clustering of residential units shall be required in order to avoid impacts to these areas in accordance with the Critical Areas Ordinance, Chapter 16.16 SMC, as incorporated into this Master Program.
8. Storm drainage facilities shall include provisions to prevent the direct entry of uncontrolled and untreated surface water runoff into receiving waters as specified in the Town's adopted Stormwater Manual.
9. New subdivisions and planned area developments of more than four (4) waterfront dwellings shall dedicate, improve, and provide maintenance provisions for a public access area along the shoreline for all residents of the development and the general public.
10. New residential development shall maintain a minimum building setback from the OHWM consistent with SMC 16.08.510.
11. One (1) accessory structure may be placed within the required shoreline setback without a variance provided that the structure does not exceed 200 square feet.
12. Houseboats, floating homes and live aboard boats are prohibited.

16.08.790 Signs
Signs are publically displayed boards or other means of notice whose purpose is to provide information, direction or advertising.

A. Policy
Signs in the shoreline area should comply with the regulations in Steilacoom Municipal Code Chapter 18.24.

B. Regulations
Plans and designs for signs shall be submitted for review along with the shoreline permit applications. Sign approval/disapproval shall be subject to any applicable chapters or section of the Steilacoom Municipal Code and the Building Code.

16.08.800 Transportation Facilities
Transportation facilities are those structures and developments that aid in land and water surface movement of people, goods and services. They include roads, land

highways, bridges and causeways, bikeways, trails, paths, railroad facilities, ferry systems, airports, bus shelters or other related facilities. The Town is prohibited from vacating any road which abuts a body of salt or fresh water except under the conditions outlined in RCW 35.79.035.

A. Policies

1. New transportation facilities should be located and designed to minimize damage or impact upon the shoreline environment and to result in no net loss of shoreline ecological functions.
2. New transportation facilities should include provision for the joint use of transportation corridors for roads, utilities and non-motorized forms of transportation, including bicycle and pedestrian use.
3. Abandoned or vacated road or railroad rights-of-way which offer immediate or potential opportunities for public access to the water or water-dependent use should be acquired and/or retained for such use.
4. Pedestrian and bicycle trails are encouraged.
5. New or expanded water-dependent transportation facilities should be located and designed to be compatible with adjoining non transportation uses in terms of noise, aesthetics, scale and other factors.
6. Water-dependent transportation facilities and uses located in the shoreline should provide or enhance public access unless public access would create a significant ecological impact, a human health or safety hazard or is otherwise infeasible due to inherent constraints of the property.
7. New or expanded water-dependent transportation development should protect existing shoreline ecological functions to the degree possible and restore impaired ecological functions and processes as feasible.

B. Regulations

1. Transportation facilities and services shall utilize existing transportation corridors whenever feasible.
2. Landfills for transportation facility development shall not be permitted in water bodies or on associated wetlands and beaches EXCEPT when all structure or upland alternatives have been proven infeasible and the transportation facilities are necessary to support uses consistent with this program.
3. Development, alternative use or vacation of road ends for any purpose in shoreline areas shall comply with the provisions of state law and this Master Program.
4. New transportation facilities in shoreline areas shall be located and designed to minimize or prevent the need for shoreline protective measures.
5. All transportation facilities in shoreline areas shall be designed, constructed, and maintained to prevent significant adverse environmental impact and to result in no net loss of shoreline ecological functions.
6. Transportation and primary utilities shall jointly use rights-of-way, where feasible.
7. Pedestrian and bicycle trails shall be developed in accordance with the standards in SMC 12.16.032 and 12.16.033, respectively.

8. Maintenance, expansion or replacement of the ferry dock shall also be governed by the provisions in SMC 16.08.930.
9. New or expanded water-oriented transportation uses or developments shall be designed to not have significant adverse impact on other shoreline uses, resources and/or values such as navigation, recreation and public access.
10. Expanded ferry system components, including ticketing, vehicle loading queue areas, and other accessory terminal facilities, shall be located landward of the OHWM wherever feasible.
11. New or expanded ferry system developments shall provide improved or new public access opportunities to the shoreline wherever feasible.
12. Minor commercial uses that are accessory and clearly incidental to an allowed water-oriented transportation use may be provided on publicly owned docks and piers (e.g., espresso stand or other food stand at ferry terminal) provided the minimum size requirement for the ferry use is not violated – see SMC 16.08.930(B)(2).

16.08.810 Unclassified Uses and Activities

Unclassified uses and activities are those that are not specifically identified or classified in this Master Program.

A. Policy

All unclassified uses and activities should be reviewed for impact to the shoreline environment and compliance with state law and this Master Program.

B. Regulations

1. A Shoreline Conditional Use Permit is required for all uses and activities proposed in the shoreline area that are not classified by provisions in this Master Program.
2. All Shoreline Conditional Use Permits shall ensure that the use or activity permitted shall be designed, constructed and maintained to result in no net loss of shoreline ecological function.

16.08.820 Utilities

Utilities are services and facilities that produce, transmit, carry, store, process or dispose of electric power, natural gas, water, sewage, communications, oil and the like. On-site utility features serving a primary use, such as a water, sewer or gas line to a residence, are considered part of the primary use.

A. Policies

1. Utilities should use existing rights-of-way and corridors whenever possible.
2. Utilities should be located, designed and constructed to protect water quality and flow, fish and wildlife habitats and other shoreline resources and to result in no net loss of shoreline ecological functions. Utilities should also be located so as not to interfere with scenic views.
3. New utility facilities should be located so as not to require extensive shoreline modifications.

4. Whenever possible, utilities should be placed underground or alongside or under bridges.
5. Existing utilities should not be used to justify more intense development.
6. New utility development should include public access to the shoreline, trail systems, and other forms of recreation, provided such uses will not unduly interfere with utility operations, endanger the public health, safety, and welfare, or create a significant and disproportionate liability for the owner.

B. Regulations

1. New utility development shall provide for compatible, multiple-use of sites and rights-of-way when feasible.
2. New utility production and processing facilities, such as power plants and sewage treatment plants that are not water-oriented shall not be allowed in the shoreline jurisdiction unless there is no feasible alternative site.
3. New utility transmission facilities, such as water and sewage system lines, interceptors, and pump, lift and odor control stations; electrical energy and communication lines and cables; and petroleum and gas pipelines are prohibited in the shoreline jurisdiction unless there is no feasible alternative route outside of the shoreline jurisdiction. New wireless communication facilities are regulated by Chapter 18.22 SMC.
4. New utility lines including electricity, communications, and fuel lines shall be located underground, except where infeasible.
5. Transmission and distribution facilities shall cross shoreline areas by the shortest most direct route feasible, unless such route would cause significant environmental damage. Development of pipelines and cables on tidelands, particularly those running parallel to the shoreline, are prohibited unless there is no other feasible alternative.
6. Utilities shall be located and designated so as to avoid the use of any structural or artificial shoreline modification.
7. Any new utility facility shall be designed, constructed and maintained to result in no net loss of shoreline ecological function.

Part 6- Shoreline Modifications

16.08.900 Dredging and Dredge Spoil Disposal

Dredging is the removal or displacement of earth such as gravel, sand, mud or silt and/or other materials or debris from any stream, river, lake or marine water body and associated shorelines and wetlands.

A. Policies

1. Dredging and dredge material disposal should be done in a manner which avoids or minimizes significant ecological impacts and impacts which cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.
2. Dredging operations should be planned and conducted to minimize interference with navigation; avoid creating adverse impacts on other shoreline

uses, properties, and ecological shoreline functions and values; and avoid adverse impacts to habitat areas and fish species.
3. Dredge spoil disposal in water bodies should not be allowed except for habitat improvement or approved open water dredge disposal sites.
4. Dredge spoil disposal on land should occur in areas where environmental impacts will not be significant.

B. Regulations

1. Dredging and dredge spoil disposal shall be permitted only where it is demonstrated that the proposed actions will not result in significant damage to water quality, fish, and other essential biological elements, and will not adversely alter natural drainage and circulation patterns, currents, or reduce floodwater capacities, or adversely impact properly functioning conditions for proposed, threatened, or endangered species or the functions and values of the shoreline and associated critical areas.
2. The Town shall condition all applications for dredging and dredge spoil disposal to include all feasible mitigating measures to protect habitats and to minimize adverse impacts such as turbidity, release of nutrients, heavy metals, sulfides, organic materials, or toxic substances, depletion of oxygen, disruption of food chains, loss of benthic productivity, and disturbance of fish runs and important localized biological communities. The Town may impose reasonable limitations on dredge spoil disposal operating periods and hours and may require buffer strips at land disposal sites.
3. Dredging within the shorelines shall be permitted only:
   a. For navigational purposes;
   b. In conjunction with a water-dependent use;
   c. As part of an approved fish and wildlife habitat improvement project;
   d. To improve flood control, water flow or water quality, provided that all dredged material shall be contained and managed so as to prevent it from reentering the water;
   e. In conjunction with a bridge, utility, navigational structure, or in-stream structure, for which there is a documented public need and where other feasible sites or routes do not exist.
4. Dredging of established navigation channels and basins shall be restricted to maintaining the previously dredged location, including depth and width.
5. Dredging for the purpose of establishing, expanding, or relocating or reconfiguring navigation channels and basins shall be allowed where necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided.
6. New development shall be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.
7. Dredging and dredge spoil disposal shall not occur in wetlands unless for approved maintenance or habitat enhancement.
8. When dredging is permitted, the dredging shall be the minimum necessary to accommodate the proposed use.

9. Dredged spoil material may be disposed at approved upland sites. If these upland sites are dry lands and fall within shoreline jurisdiction, the disposal of dredge spoils shall be considered landfill and must be consistent with all applicable provisions of this Master Program. Depositing dredge spoils within a water body shall be allowed only by Shoreline Conditional Use for wildlife habitat improvements.
10. Disposal of dredge material shall be done in accordance with the Washington State Department of Natural Resources Dredge Material Management Program.
11. Dredging waterward of the ordinary high-water mark for the primary purpose of obtaining fill material is prohibited, except when the material is necessary for the restoration of ecological functions as part of an approved habitat enhancement or cleanup project. When allowed, spoils must be placed waterward of the ordinary high-water mark. Habitat enhancement projects that include dredging or fill waterward of the OHWM shall be approved through a Shoreline Conditional Use Permit.

16.08.910 Fill and Grading

Fill or land fill is the placement by man of sediment, earth retaining structures, or other material (excluding solid waste) in an aquatic area to create new shorelands or on shorelands to raise the elevation of the land, or create dry land. Grading is the excavation or fill of material.

A. Policies

1. Fill should be allowed only when necessary to facilitate water-dependent and water-related uses consistent with this Master Program and the Steilacoom Comprehensive Plan.
2. Proposals for landfill operations should demonstrate that the operation will not be detrimental to the public interest, uses of the shoreline, or waterbody, public access, scenic views and public recreation.
3. Fills should be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.
4. The perimeter of the land fill should be designed to avoid or eliminate erosion and sedimentation impacts to the surrounding area.
5. Because fill can affect the ecology of the area surrounding the fill site, the amount of fill allowed should be the minimum necessary to provide for the proposed activity.
6. Grading should be consistent with the provisions of this Master Program, including, but not limited to, the regulations regarding critical areas, wetlands and their buffers, geologically hazardous areas, and shoreline vegetation.
7. Excess material resulting from grading should be disposed of in a manner that prevents the material entering into a waterbody through erosion or runoff. Where large quantities of plants are removed by vegetation control activities authorized under this section, plant debris should be collected and disposed of in an appropriate location located outside of the shoreline setback.
8. Areas disturbed by permitted grading should be stabilized with approved vegetation.

B. Regulations- Fill

1. Fill shall be permitted only where it is demonstrated that the proposed action will not:
   a. Result in significant damage to water quality, shellfish or wildlife habitat; or
   b. Adversely alter natural drainage and circulation patterns, currents or tidal flows, or
   c. Result in a net loss of shoreline ecological functions.
2. Pier or pile supports shall be utilized in preference to fill. Fill for approved road development in floodways or wetlands shall be permitted only if pile or pier supports are proven structurally infeasible. Where fill is permitted, the extent of fill shall be the minimum necessary to accommodate the proposed use.
3. Fills shall be permitted only when part of an approved site development plan. Speculative land fill is prohibited. Approved landfills will at a minimum possess the following characteristics:
   a. A method to prevent sedimentation from leaving the site;
   b. A method of controlling the composition of the fill material to prevent materials from reaching out onto adjacent property (is) or into receiving waters and creating a nuisance;
   c. A method of controlling the fill placement operations to ensure structural integrity of the fill so that a future purchaser will be protected from the need to undertake costly improvements to remedy latent site defects; and
   d. The placement of the material will not obstruct surface or subsurface drainage to or from adjacent properties.
4. Fills waterward of the ordinary high-water mark shall be allowed only when necessary to support:
   a. An approved water-dependent use;
   b. Public access;
   c. Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan;
   d. Disposal of dredged material considered suitable under, and conducted in accordance with, the Dredged Material Management Program of the Department of Natural Resources;
   e. Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible; or
   f. An approved mitigation action, environmental restoration, beach nourishment or enhancement project.
5. Fill materials shall be clean sand, gravel, soil, rock, or similar material. Use of polluted dredge spoils and sanitary land fill materials are prohibited. The property owner shall provide evidence that the material has been obtained from a clean source prior to fill placement.

C. Regulations- Grading

1. Grading shall comply with the regulations for site development permits in Chapter 13.70 SMC.

2. The grading must be the minimum necessary to accomplish the underlying reason for the grading.
3. Except as is necessary during construction, dirt, rocks and similar materials shall not be stockpiled on the subject property. If stockpiling is necessary during construction, it must be located as far as feasible from the waterbody and strictly contained to prevent erosion and runoff.
4. Grading is prohibited within the shoreline setback, except for the following:
   a. For the purpose of shoreline habitat and natural systems enhancement projects, setting back shoreline stabilization measures or portions of shoreline stabilization measures from the OHWM, or soft structural shoreline stabilization measures under a plan approved by the Town.
   b. As authorized by a valid shoreline permit or approval issued by the Town.
   c. Associated with the installation of improvements located within the shoreline setback or waterward of the OHWM, as permitted under this Master Program.
   d. Removal of invasive or noxious vegetation when disturbed areas are promptly revegeteted with native species.
   e. As performed in the normal course of maintaining existing vegetation on a lot associated with existing buildings, provided such work:
      i. Does not modify any drainage course.
      ii. Does not involve the importation of fill material, except as needed for mulch or soil amendment.
      iii. Does not involve removal of native vegetation or vegetation installed as part of an approved restoration or enhancement plan, unless approved by the Administrator when mitigation is provided.
      iv. Does not result in erosion of the shoreline or undermine stability of neighboring properties.
      v. Does not result in the compaction of existing soils in a manner that significantly decreases the ability of the soil to absorb rainfall.
      vi. Is the minimum extent necessary to reasonably accomplish the maintenance activity.
   f. Installation and maintenance of storm drainage improvements when supervised by the Department of Public Works.
   g. As necessary to maintain or upgrade the structural safety of a legally established structure.
   h. For exploratory excavations under the direction of a professional engineer licensed in the state of Washington, as long as the extent of the grading does not exceed the minimum necessary to obtain the desired information.

16.08.920 In-Water Structures and Construction

In-water work includes, but is not limited to the installation of new structures, repair of existing structures, restoration projects, and aquatic vegetation removal. In-water structures and activities are not subject to the shoreline setbacks established in SMC 16.08.510.

A. Policies

1. In-water construction should be designed to create as little disturbance to the water and surrounding area as possible.
2. In-water work should be designed to protect watershed functions and processes, with special emphasis on protecting and restoring priority habitats and species.

B. Regulations

1. In-water structures and activities shall be sited and designed to avoid the need for future shoreline stabilization activities and dredging.
2. In-water work shall be conducted in a manner that causes little or no siltation to adjacent areas. A sediment control curtain or other appropriate Best Management Practice shall be used in those instances where siltation is expected. BMPs shall be maintained in a functional manner during project installation.
3. Fresh concrete or concrete by-products shall not be allowed to enter the water at any time during in-water installation. All forms used for concrete shall be completely sealed.
4. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to perform the in-water work. All disturbed areas shall be protected from erosion using vegetation or other means and promptly restored to pre-construction condition when construction is complete.
5. Any trenches, depressions, or holes created below the OHWM shall be backfilled prior to inundation by high water or wave action.
6. Measurements shall be taken in advance and during construction to ensure that no petroleum products, hydraulic fluid, cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the lake during in-water activities. Appropriate spill clean-up materials must be on-site at all times, and any spills must be contained and cleaned immediately after discovery.
7. If at any time, as a result of in-water work, water quality problems develop, immediate notification shall be made to the Washington State Department of Ecology.

16.08.930 Piers and Docks

Piers and docks are structures which abut the shoreline and are used as a landing or moorage place for commercial and pleasure craft. Construction of such structures will require review and approval by the Washington State Department of Natural Resources, the Washington State Department of Fish and Wildlife, the US Army Corps of Engineers, and/or US Fish and Wildlife. The applicant is responsible for obtaining any necessary review or permit from any other agency with jurisdiction.

A. Policies

1. Multiple use and/or expansion of existing piers, wharves and docks should be encouraged over construction of new structures when possible.
2. Piers and docks should be designed to cause minimum interference with the public use of the water and shoreline area.

3. The design and placement of piers and docks should conserve or enhance water quality, and marine resource including fish and shellfish resources. The projects should provide for public access, docking, launching and recreational use.
4. Pier and dock design and construction should allow for a maximum of littoral drift and should minimize interference with basic geo-hydraulic processes.
5. New piers and docks may be permitted only if:
   a. It can be demonstrated that the new structure will not adversely impact critical resource areas or associated wetlands; and
   b. Adequate mitigation measures ensure that there is no net loss of the functions or values of the shoreline and habitat as a result of the new structure.

B. Regulations

1. New piers and docks shall be allowed only for water-dependent uses or public access. As used here, a dock associated with a single-family residence is a water-dependent use provided that it is designed and intended as a facility for access to watercraft and otherwise complies with the provisions of this section and WAC 173-26-231.
2. Water-related and water-enjoyment uses may be allowed as part of mixed-use development on over-water structures where they are clearly auxiliary to and in support of water-dependent uses, provided the minimum size requirement needed to meet the water-dependent use is not violated.
3. Proposals for piers or docks shall include a description of the proposed structure including its size, location, design and details of any shoreline stabilization or other modification required by the project. New pier or dock construction, excluding docks accessory to single-family residences, shall be permitted only when the applicant has demonstrated that a specific need exists to support the intended water-dependent uses.
4. Piers and docks shall be located, designed and sited to minimize as much as feasible any adverse environmental impacts, including potential impacts on: littoral drift, sand movement, water circulation, water quality, and impact on marine resources (see also section 16.08.530 B). Mitigation shall include measures to ensure no net loss of the functions and values of the shoreline and habitat.
5. The width and length of all docks and piers shall be the minimum necessary for the intended use. For all docks and piers in saltwater other than the ferry dock, the maximum dimensions are:
   (a) For single use structures, floats shall not exceed 8 feet in width and 30 feet in length;
   (b) Piers shall not exceed 6 feet in width; and
   (c) Ramps and gangways shall not exceed 4 feet in width.
   (d) Floats, vessels and anchor lines shall not ground on or rest on the substrate at any time.

6. Adequate facilities and procedures for receiving, storing, dispersing and disposing of gasoline, oil or other petroleum products and other hazardous materials shall be required for all new piers and docks.
7. Construction materials, including preservatives, surface treatments and hardware, shall be environmentally neutral materials approved for use in aquatic environments by the applicable state agencies.
8. Docks and piers shall be accessed from upland support areas through a ramp or gangway and walkway system.
9. Docks, ramps, piers, and walkways shall be grated or surfaced with light penetrable materials. To the extent feasible, structures shall be designed to minimize overwater coverage and avoid shading of aquatic vegetation. Consult with state and federal agencies with jurisdiction to determine the required amount and configuration of functional grating by dock component and any required in-water vegetation buffers.
10. Replacement of more than 50 percent of the surface of any overwater segment of a pier or dock within a 5-year period requires the segment surface be replaced with light penetrable materials, such as grating or translucent surfaces.
11. New residential development of two or more dwellings shall provide joint use or community dock facilities, when feasible, rather than individual docks for each residence.

16.08.940 Shoreline Habitat and Natural Systems Enhancement Projects
Shoreline habitat and natural systems enhancement projects include those activities undertaken for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.

A. Policy

The Town should encourage shoreline habitat and natural systems enhancement projects

B. Regulations

1. The following activities are allowed uses, subject to the proper permit, in all shoreline environmental designations. The primary purpose of such actions shall be the restoration of the natural character and ecological functions of the shoreline.
   a. Establishment or enhancement of native vegetation.
   b. Removal of non-native or invasive plants upland of the OHWM.
   c. Conversion of structural shoreline stabilization to non-structural stabilization
   d. Implementation of any activity identified in the Town's Shoreline Restoration Plan.
   e. Habitat enhancement projects that include dredging of fill waterward of the OHWM shall be approved through a Shoreline Conditional Use Permit.
2. In accordance with RCW 90.58.580, a Substantial Development Permit is not required for development on land that is brought under shoreline jurisdiction due to a shoreline restoration project. However, restoration projects are still required to comply with the regulations of this Master Program.

3. Projects taking place on lands that are brought into shoreline jurisdiction due to a shoreline restoration project that caused a landward shift of the OHWM may apply to the Town Council for relief from the SMP development standards and use regulations under the provisions of RCW 90.58.580. Any relief granted shall be strictly in accordance with the limited provisions of RCW 90.58.580, including the specific approval of the Department of Ecology.

16.08.950 Shoreline Stabilization

Shoreline stabilization includes actions taken to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, tides, wind, or wave action. These actions include structural and nonstructural methods.

Hard structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads. Soft structural stabilization includes beach enhancement, biotechnical vegetation measures, anchor trees, gravel placement and other actions. Nonstructural methods include building setbacks, relocation of the structure to be protected, groundwater management, planning and regulatory measures to avoid the need for structural stabilization.

Shoreline hardening through structural stabilization typically results in adverse impacts to shoreline ecological functions such as beach "starvation" (cut off of sediment); habitat degradation; sediment impoundment; exacerbation of erosion; groundwater impacts such as raising the water table on the landward side; hydraulic impacts caused by increased reflectivity of the shoreline and redirected wave energy back onto the beach; loss of shoreline vegetation; loss of large woody debris, a source of organic material and habitat; and restriction of channel movement and creation of side channels.

The Shoreline Management Act exempts the construction of a normal protective bulkhead common to single family residences from the Substantial Development Permit requirement. These structures are required to comply with all the prohibitions and development standards of this section. The developer must obtain a statement of exemption from the Town, or Conditional Use Permit where required in accordance with section 16.08.220(D), before commencing construction of a bulkhead.

A. Shoreline Stabilization Policies

1. New development should be located and designed to avoid the need for future shoreline stabilization to the extent feasible. New development on steep slopes or bluffs should be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis.
2. New development that would require shoreline stabilization which causes significant impacts to adjacent or down-current properties and shoreline areas should not be allowed.

3. The Town should only permit structural shoreline stabilization when necessary to protect existing primary structures, public infrastructure, and/or for essential public facilities when other alternatives are infeasible.
4. Proposals for shoreline modifications should be designed to protect life and property without impacting shoreline resources.
5. Soft-shore stabilization such as protective berms or vegetative stabilization is preferred over hard structural means such as concrete bulkheads or extensive revetments.
6. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions or soft-shore stabilization would not be able to withstand the erosive forces of the current and waves as determined by a licensed geotechnical expert or engineer.
7. Whenever feasible, the design of bank stabilization or protection works, when determined to be consistent with this Master Program, should provide for the long–term, multiple-use of shoreline resources and public access to public shorelines.
8. Publicly financed or subsidized shoreline stabilization projects should provide pedestrian access to the shorelines if feasible.
9. All flood protection measures should be placed landward of the natural flood boundary, including wetlands that are directly interrelated and inter-dependent with water bodies.
10. All loss of vegetation and wildlife habitat that occurs through construction and/or maintenance of shoreline modification developments should be mitigated.
11. Additions to or increases in size of existing shoreline stabilization measures should be considered new structures.
12, Where feasible, the Town should encourage removal of failing, harmful, unnecessary or ineffectual shoreline armoring, and restoration of shoreline ecological functions and processes using non-structural methods.
13. The Town should encourage and facilitate the voluntary relocation of existing developments that are located in erosion-prone or other hazardous areas when doing so will substantially reduce human health and safety hazards and improve ecological conditions.

B. Shoreline Stabilization Regulations

1. All new development, uses or activities within the shoreline area shall be located and designed to prevent or minimize the need for bank stabilization and flood protection works.
2. Shoreline stabilization or protection works shall provide for the long term, multiple-use of shoreline resources and public access to public shorelines where feasible. The design of such structures shall not reduce the volume and storage capacity of streams and adjacent wetlands or flood plains.
3. Geotechnical reports are required for all proposed shoreline stabilization projects with the exception of replacement structures as outlined in seven (7) below. Geotechnical reports shall include an analysis of the soils, substrate, and address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation.

4. All shoreline stabilization projects are subject to additional regulations for critical areas, vegetation conservation and public access under this Master Program.
5. All new shoreline stabilization projects shall be the minimum necessary to address the identified erosion impacts. New projects shall provide the mitigation analysis set forth in SMC 16.08.590.
6. New structural stabilization measures shall only be allowed under the following circumstances.

a. For projects designed to protect existing primary structures all of the following conditions must exist:

i. The geotechnical analysis provides conclusive evidence that the structure is in danger from shoreline erosion caused by tidal action, currents, or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of the need for a structural stabilization.

ii. The geotechnical analysis includes an analysis of on-site drainage issues, addresses drainage problems away from the shoreline edge, and provides evidence that proposed drainage solutions will not negate the need for structural shoreline stabilization.

iii. The geotechnical report confirms that there is a significant possibility that the structure will be damaged within three years as a result of shoreline erosion in the absence of hard armoring measures, or confirms that waiting until the need is that immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions. Where the geotechnical report confirms a need to prevent potential damage to a primary structure but the need is not as immediate as three years, the report may still be used to justify more immediate authorization to protect against erosions using soft measures.

iv. The erosion control structure will not result in a net loss of shoreline ecological functions.

b. For projects designed to protect new developments all of the following conditions must exist:

i. The geotechnical report confirms that the erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.

ii. Nonstructural measures, such as placing the development further from the shoreline for non-water dependent development, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. For non-water dependent development, the damage must be caused by natural processes, such as tidal action, currents, and waves.

iv. The erosion control structure will not result in a net loss of shoreline ecological functions.

c. For projects designed to restore ecological functions or hazardous substance remediation projects pursuant to Chapter 70.105D RCW all of the following conditions must exist:

i. Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

ii. The erosion control structure will not result in a net loss of shoreline ecological functions.

7. An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect existing principal uses or structures from erosion caused by currents, tidal action, or waves. "Replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

a. The replacement structure shall be designed, located, sized, and constructed to assure no net loss of ecological functions.

b. Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or the existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.

c. Where a net loss of ecological functions associated with critical saltwater habitats would occur by leaving the existing structure, it shall be removed as part of the replacement measure.

d. Non-structural or soft-shore stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high-water mark.

8. Use of refuse for the stabilization of shorelines is prohibited.

9. Publicly financed or subsidized shoreline erosion control measures shall not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. Where feasible, the design shall incorporate ecological restoration and public access improvements into the project.

10. New erosion control measures, including replacement structures, on feeder bluffs or other actions that affect beach sediment-producing areas shall be mitigated to avoid and, if that is not possible, to minimize adverse impacts to sediment conveyance systems.

11. Breakwaters, jetties and weirs located waterward of the ordinary high-water mark shall be allowed only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.

12. Where allowed as a conditional use, breakwaters, jetties, and seawalls shall meet all of the following criteria in addition to the other regulations in this section:

a. Breakwaters, jetties, and seawalls shall only be allowed when shown to be necessary for purposes of navigation or habitat enhancement; or when required to protect from strong wave action public water-dependent uses such

as a harbor, marina, or port that are located waterward of the existing shoreline.

b. Breakwaters, jetties, and seawalls shall only be allowed when adverse impacts on water circulation, sediment transport, fish and wildlife migration, shellfish, and aquatic vegetation can be effectively mitigated.

13. Open-pile, floating, portable, or submerged breakwaters, or several smaller discontinuous structures that are anchored in place, shall be preferred over fixed breakwaters.

14. Groins shall not be allowed within the shoreline jurisdiction.

16.08.960 Solid Waste Disposal

Solid waste disposal means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid or hazardous waste on any land area in the shoreline or in or near the water.

A. Policies

Solid waste disposal activities and facilities should not be located in shoreline areas because of the high risk of pollution of critical habitat areas.

B. Regulations

Solid waste disposal sites or facilities, and solid waste dumping or disposal or discharge are not permitted in shoreline areas.

Section 3: Severability

Should any section, subsection, paragraph, sentence, clause or phrase of this ordinance or its application to any person or situation be declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to any person or situation. The Town Council of the Town of Steilacoom hereby declares that it would have adopted this ordinance and each section, subsection, paragraph, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, paragraphs, sentences, clauses, phrases or portions be declared invalid or unconstitutional.

Passed by the Town Council of Steilacoom on the 4 day of June 2013

Approved by the Mayor of the Town Steilacoom on the 4 day of June, 2013

APPROVED:

MAYOR, Ron Lucas

ATTEST:

CLERK-TREASURER, Paul Loveless

APPROVED AS TO FORM:

TOWN ATTORNEY, Lawrence E. Hoffman

Filed with the Town Clerk: June 4, 2013
Passed by the Town Council: June 4, 2013
Published: June 7, 2013
Effective Date: June 14, 2013

Part 7- Appendix A

Critical Areas Ordinance (Steilacoom Municipal Code Chapter 16.16), effective September 28, 2012, consisting of Ordinance 1308, adopted October 5, 2004 and amended by Ordinance 1616, adopted January 6, 2009, and Ordinance 1485, adopted September 18, 2012.

Chapter 16.16
Critical Areas

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Article II Wetlands
Article III Critical aquifer recharge areas
Article IV Frequently flooded areas
Article V Geologically hazardous areas
Article VI Fish and wildlife habitat conservation areas
Article VII Definitions

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16.16.010 Purpose

A. The purpose of this Chapter is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.

B. This Chapter is to implement the goals, policies, guidelines, and requirements of the Town of Steilacoom Comprehensive Plan and the Growth Management Act.

C. The Town of Steilacoom finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the Town of Steilacoom and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of flood waters, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical, archaeological, and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.

D. By limiting development and alteration of critical areas, this Chapter seeks to:

1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding;

2. Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species;

3. Direct activities not dependent on critical areas resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;

4. Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas; and

5. Reduce the cost of flood insurance and minimize public and private losses due to flood conditions in specific areas by provisions designed to; protect human life and health; minimize expenditure of public money and costly flood control projects; minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; minimize prolonged business interruptions; minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard; help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas; ensure that potential buyers are notified that property is in an area of special flood hazard; and ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

E. The regulations of this Chapter are intended to protect critical areas in accordance with the Growth Management Act and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.

F. This Chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this Chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.

G. The Town's enactment or enforcement of this Chapter shall not be construed for the benefit of any individual person or group of persons other than the general public. (Ord. 1616 §1, 2009: Ord. 1380 §2 (part), 2004).

16.16.020 Authority.

A. As provided herein, the Town Administrator is given the authority to interpret and apply, and the responsibility to enforce this Chapter to accomplish the stated purpose. The Town Administrator may delegate these functions and duties to appropriate Town personnel.

B. The Town of Steilacoom may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this Chapter. (Ord. 1380 §2(part), 2004).

16.16.030 Relationship to other regulations

A. These critical areas regulations shall apply as an overlay and in addition to zoning, subdivision, building codes and other regulations adopted by the Town.

B. Any individual critical area adjoined by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When any provision of this Chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this Chapter, that which provides more protection to the critical areas shall apply.

C. These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as adopted by the Town. Conditions required pursuant to this Chapter may be included in the SEPA review and threshold determination.

D. Compliance with the provisions of this Chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, Army Corps of Engineers Section 404 permits, National Pollution Discharge Elimination permits). The applicant is responsible for complying with these requirements, apart from the process established in this Chapter. (Ord. 1380 §2(part), 2004).

16.16.040 Administrative procedures. Critical area permits shall be processed as administrative approvals with notice in accordance with SMC 14.20.020. (Ord. 1380 §2(part), 2004).

16.16.050 Fees and costs

A. The Town Council shall establish fees for critical area permits and processes by resolution.

B. Unless otherwise indicated in this Chapter, the applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application. (Ord. 1380 §2(part), 2004).

16.16.060 Severability. If any clause, sentence, paragraph, section, or part of this Chapter or the application thereof to any person or circumstances shall be judged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered. The decision shall not affect or invalidate the remainder of any part thereof and to this end the provisions of each clause, sentence, paragraph, section, or part of this law are hereby declared to be severable. (Ord. 1380 §2(part), 2004).

16.16.070 Interpretation. In the interpretation and application of this ordinance, the provisions of this Chapter shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this ordinance, and shall be deemed to neither limit nor repeal any other provisions under state statute. (Ord. 1380 §2(part), 2004).

16.16.080 Jurisdiction – Critical areas.

A. The Town regulates all uses, activities, and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the best available science and the provisions herein.

B. Critical areas regulated by this Chapter include:

1. Wetlands as designated in Article II.
2. Critical aquifer recharge areas as designated in Article III.

3. Frequently flooded areas as designated in Article IV.
4. Geologically hazardous areas as designated in Article V, and
5. Fish and wildlife habitat conservation areas as designated in Article VI.

C. All areas within the Town of Steilacoom meeting the definition of one or more critical area, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter.

D. To support the intent of this Chapter and ensure protection of the functions and values of critical areas, the Town regulates all uses within 300 feet of, or that are likely to affect, one or more critical areas, consistent with the best available science and the provisions herein. (Ord. 1380 §2(part), 2004).

16.16.090 Protection of critical areas, Any action taken pursuant to this Chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with SMC 16.16.230, to avoid, minimize, and restore all adverse impacts. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas. (Ord. 1380 §2(part), 2004).

16.16.100 Best available science.

A. Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and shall give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

B. Best available science shall be consistent with the criteria established in WAC 365-195-900 through WAC 365-195-925. Nonscientific information may supplement scientific information as provided in WAC 365-195-905.

C. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Town Administrator shall 1) take a precautionary or a no-risk approach that strictly limits development and land use activities until the uncertainty is sufficiently resolved and 2) require application of an effective adaptive management program. Adaptive management programs shall meet the criteria set out in WAC 365-195-920. (Ord. 1380 §2(part), 2004).

16.16.110 Applicability.

A. The provisions of this Chapter shall apply to all lands, all land uses and development activity, and all structures and facilities in the Town, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the Town. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of this chapter.

B. The Town shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this Chapter, including, but not limited to, the following: building permit; clearing and grading permit; forest practices permit; conditional use permit; shoreline permits, exemptions, or variance; short subdivision; subdivision; planned area development; zoning variance; zoning code amendment and any other adopted permit or required approval not expressly exempted by this Chapter.

C. Approval of a permit or development proposal pursuant to the provisions of this Chapter does not discharge the obligation of the applicant to comply with the provisions of this Chapter. (Ord. 1380 §2(part), 2004).

16.16.120 Exemptions

A. **Exemption request.** Any person may submit a written request for exemption to the Town Administrator describing the proposed activity and identifying an exemption listed in this section. The Town Administrator shall review the request and approve or deny the exemption in writing.

B. **Exempt activities and impacts to critical areas.** All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. To be exempt from this Chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. **Exempt activities.** The following developments, activities, and associated uses are exempt from the provisions of this Chapter, provided that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements:

1. **Emergencies.** Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this Chapter.

The person or agency undertaking such action shall notify the Town within one (1) working day following commencement of the emergency activity. Within thirty (30) days, the Town Administrator shall determine if the action taken was reasonable in light of the emergency. Actions taken beyond the scope of an emergency action are subject to SMC16.16.330.

After the emergency, the person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and mitigation plan. Restoration and/or mitigation activities must be initiated within one (1) year of the date of the emergency, and completed in a timely manner.

2. **Operation, maintenance, or repair.** Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair.

3. **Passive outdoor activities.** Recreation, education, and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching.

4. **Forest practices.** Forest practices regulated and conducted in accordance with the provisions of Chapter 76.09 RCW and forest practices regulations, Chapter 222 WAC, and those that are exempt from Town's jurisdiction, provided that forest practice conversions are not exempt. (Ord. 1380 §2(part), 2004).

16.16.130 Exception – Public agency and utility

A. If the application of this Chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for an exception pursuant to this Section.

B. **Exception request and review process.** An application for a public agency or utility exception shall include a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW).

C. **Review and Decision.** The Town Administrator shall review the application and shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the public agency and utility exception criteria in Subsection (D) pursuant to SMC 14.20.010.

D. **Public agency and utility review criteria.** Public agency and utility exceptions shall be granted when all of the following criteria are demonstrated:

1. There is no other practical alternative to the proposed development with less impact on the critical areas.

2. The application of this Chapter would unreasonably restrict the ability to provide utility services to the public.

3. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site.

4. The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science.

5. The proposal is consistent with other applicable regulations and standards.

E. **Burden of proof.** The burden of proof shall be on the applicant to provide evidence in support of the application and to provide information sufficient for any required decision. (Ord. 1380 §2(part), 2004).

16.16.140 Exception – Reasonable use

A. If the application of this Chapter would deny all reasonable economic use of the subject property, the property owner may apply for an exception pursuant to this Section and SMC 14.08.050.

B. **Exception request and review process.** An application for a reasonable use exception shall include a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW) (SEPA documents). The Town Administrator shall prepare a recommendation to the Hearing Examiner based on

review of the submitted information, a site inspection, and the proposal's ability to comply with reasonable use exception criteria in Subsection (D).

C. **Hearing Examiner review.** The Hearing Examiner shall review the application and conduct a public hearing pursuant to the provisions of SMC 14.08.050. The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the reasonable use exception review criteria in Subsection (D).

D. **Reasonable use review criteria.** A reasonable use exception shall be granted if all of the following criteria are met:

1. The application of this Chapter would deny all reasonable economic use of the property.

2. No other reasonable economic use of the property has less impact on the critical area.

3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property.

4. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this Chapter, or its predecessor.

5. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site.

6. The proposal will result in no net loss of critical area functions and values consistent with the best available science.

7. The proposal is consistent with other applicable regulations and standards.

E. **Burden of proof.** The burden of proof shall be on the applicant to provide evidence in support of the application and to provide information sufficient for any required decision. (Ord. 1380 §2(part), 2004).

16.16.150 Allowed activities .

A. **Permits.** Allowed activities do not require critical area permits, however, they may require other permits or approvals. The Town Administrator may apply conditions to the other permit or approval to ensure that the allowed activity is consistent with the provisions of this Chapter to protect critical areas.

B. **Best management practices.** Allowed activities shall use best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. Best management practices shall ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. **Allowed activities.** The following activities are allowed:

1. **Permit requests subsequent to previous critical area review.** Development permits and approvals that involve both discretionary land use approvals (such as

subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) are allowed if all of the following conditions have been met:

a. The provisions of this Chapter have been previously addressed as part of another approval.

b. There have been no material changes in the potential impact to the critical area or buffer since the prior review.

c. There is no new information available that is applicable to any critical area review of the site or particular critical area.

d. The permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit or approval.

e. Compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured.

2. **Modification to existing structures.** Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer and does not increase the risk to life or property as a result of the proposed modification or replacement are allowed. Restoration of structures substantially damaged by fire, flood, or act of nature must be initiated within one (1) year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion.

3. **Activities within the improved right-of-way.** Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a Town authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater are allowed subject to the following:

a. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the right-of-way improvement, including disturbed areas.

b. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance.

4. **Minor utility projects.** Minor utility projects meeting the all the criteria below are allowed.

a. The activity involves the placement of a utility pole, street signs, anchor, vault or other small component of a utility facility.

b. The activity involves disturbance of an area less than 75 square feet.

c. The activity involves minor or short-duration impacts to critical areas.

d. The activity does not significantly impact the function or values of a critical area(s).

e. There is no practical alternative to the proposed activity with less impact on critical areas.

f. The project utilizes best management practices and restoration measures.

g. The activity will not result in the transport of sediment or increased stormwater.

5. **Public and private pedestrian trails.** Public and private pedestrian trails, except those in wetlands or fish and wildlife habitat conservation areas, or their buffers, are allowed if the following criteria are met:

a. The trail surface shall meet all other requirements including water quality standards set forth in SMC 13.50.

b. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas.

c. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.

6. **Select vegetation removal activities.** The following vegetation removal activities are allowed, provided that no vegetation shall be removed from a critical area or its buffer without approval from the Town Administrator:

a. The removal of the following vegetation with hand labor and light equipment:

i. Invasive and noxious weeds listed by the Pierce County Noxious Weed Control Board.

ii. English Ivy (*Hedera helix*)

iii. Himalayan blackberry (*Rubus discolor, R. procerus*); and

iv. Evergreen blackberry (*Rubus laciniatus*);

b. The removal of trees from critical areas and buffers that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property, provided that:

i. The applicant submits a report from a certified arborist, registered landscape architect, or professional forester that documents the hazard and provides a replanting schedule for the replacement trees.

ii. Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be removed or converted to wildlife snags.

iii. The certified arborist shall determine whether vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer.

iv. The landowner shall replace any trees that are removed with new trees at a ratio of two replacement trees for each tree removed (2:1) within one (1) year in accordance with an approved restoration plan. Replacement trees may be planted at a nearby location if it can be determined that planting in the same location would create a new hazard or potentially damage the critical area. Replacement trees shall be species that are native and indigenous to the site and a minimum of one (1) inch in diameter-at-breast height (dbh) for deciduous trees and a minimum of six (6) feet in height for evergreen trees as measured from the top of the root ball;

v. If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods or removal that will minimize impacts.

vi. Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the landowner prior to receiving written approval from Town of Steilacoom provided that within fourteen (14) days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this Chapter.

c. Measures to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act; Chapter 76.09 RCW, provided that the removed vegetation shall be replaced in-kind or with similar native species within one (1) year in accordance with an approved restoration plan.

d. Unless otherwise provided, or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited.

7. **Chemical applications.** Application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, are allowed in accordance with Department of Fish and Wildlife Management Recommendations, the regulations of the Department of Agriculture and the U.S. Environmental Protection Agency.

8. **Minor site investigative work.** Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation are allowed. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored; and

9. **Navigational aids and boundary markers.** Construction or modification of navigational aids and boundary markers are allowed.

10. **Authorized alteration of vegetation under the Urban Forestry Ordinance.** Management and alteration of vegetation on town-owned or leased properties conducted in accordance with the provisions of SMC 16.18.100 through 16.18.150 is allowed. (Ord. 1485 §1, 2012: Ord. 1380 §2(part), 2004).

16.16.160 Critical area pre-application meeting. Any person preparing to submit an application for development or use of land that may be regulated by the provisions of this Chapter may request a meeting with Town staff prior to submitting an application for development or other approval. At this meeting the potential applicant and Town staff shall discuss the requirements of this Chapter and attempt to identify potential concerns that might arise during the review process, in addition to discussing other permit procedures and requirements. (Ord. 1380 §2(part), 2004).

16.16.170 Review.

A. The Town Administrator shall review all applications for permits or authorizations subject to this Chapter and shall make an initial determination as to whether critical areas or buffers may be impacted by the proposal. The Town Administrator may conduct a site inspection and may use any available information deemed reliable, including but not limited to, Town critical areas maps; information and scientific opinions from appropriate agencies, including but not limited to the departments of Fish and Wildlife, Natural Resources, and Ecology; documentation from a scientific or other reasonable source; a finding by a qualified professional; or a reasonable belief by the Town Administrator that a critical area may exist on or adjacent to the site of the proposed activity. The applicant may provide a report from qualified professional to assist the Town Administrator.

B. **Determination**

The Town Administrator shall notify the applicant if critical areas are present and the type and general location of each critical area identified.

1. **Waiver.** The Town Administrator may waive the requirement for a critical area permit if the best available science shows that the proposed activity is unlikely to degrade the functions or values of critical areas affected by the proposed activity. A waiver may be granted if the Town Administrator finds there is substantial evidence that all of the following requirements will be met:

a. There will be no alteration of the critical area or buffer.

b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this Chapter.

c. The proposal is consistent with other applicable regulations and standards.

2. **Effect.** If no critical areas are present or a waiver is issued, the project may proceed to obtain other necessary permits or authorizations. If critical areas may be affected by the proposal, the applicant shall submit a critical area report for each of the critical areas identified.

C. **Reconsideration.** A determination regarding the apparent absence of one or more critical areas by the Town Administrator is not an expert certification regarding the presence of critical areas and the determination is subject to possible reconsideration and reopening if new information is received. (Ord. 1380 §2(part), 2004).

16.16.180 Mapping.

A. The approximate location and extent of critical areas are shown on the adopted critical area map. This map is a guide for the Town, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. It is a reference and does not provide a final critical area designation.

B. The exact location of a critical area's boundary shall be determined through the performance of a field investigation by a qualified professional applying best available science.

C. The Town, project applicants, and/or property owners and their agents may consult maps produced by federal, state, regional and county agencies to assist in determining the location of critical areas.

16.16.190 [Reserved]

16.16.200 Critical area reports – Requirements.

A. **Preparation by qualified professional.** Critical area reports shall be prepared by a qualified professional as defined herein.

B. **Best available science.** The critical area report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this chapter.

C. **Minimum contents.** At a minimum, the report shall contain the following:

1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested.

2. A copy of the site plan for the development proposal including:

a. A map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared.

b. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations

3. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site.

4. Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area.

5. A statement specifying the accuracy of the report, and all assumptions made and relied upon.

6. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development.

7. An analysis of site development alternatives including a no development alternative.

8. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 16.16.230 to avoid, minimize, and mitigate impacts to critical areas.

9. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with SMC 16.16.240, including, but not limited to:

a. The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area.

b. The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment.

10. A discussion of the performance standards applicable to the critical area and proposed activity.

11. Financial guarantees to ensure compliance.

12. Any additional information required for the critical area as specified in the corresponding chapter.

D. Unless otherwise provided, a critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Town Administrator. (Ord. 1380 §2(part), 2004).

16.16.210 Critical area report – Modifications to requirements.

A. **Limitations to study area.** The Town Administrator may limit the required geographic area of the critical area report as appropriate if:

1. The applicant, with assistance from the Town, cannot obtain permission to access properties adjacent to the project area; or

2. The proposed activity will affect only a limited part of the subject site.

B. **Modifications to required contents.** The applicant may consult with the Town Administrator prior to or during preparation of the critical area report to obtain Town approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.

C. **Additional information requirements.** The Town Administrator may require additional information to be included in the critical area report when determined to be necessary to the review of the proposed activity in accordance with this Chapter. Additional information that may be required, includes, but is not limited to:

1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site.
2. Grading and drainage plans.
3. Information specific to the type, location, and nature of the critical area.

(Ord. 1380 §2(part), 2004).

16.16.220 Mitigation requirements.

A. The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this Chapter, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical area report and SEPA documents, so as to result in no net loss of critical area functions and values.

B. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.

C. Mitigation shall not be implemented until after Town of Steilacoom approval of a critical area report that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical area report. (Ord. 1380 §2(part), 2004).

16.16.230 Mitigation sequencing. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:

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 using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts.

C. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project.

D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods.

E. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action.

F. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments.

G. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

H. Mitigation for individual actions may include a combination of the above measures. (Ord. 1380 §2(part), 2004).

16.16.240 Mitigation plan requirements. When mitigation is required, the applicant shall submit a mitigation plan as part of the critical area report. The mitigation plan shall include:

A. **Environmental goals and objectives** The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area.
2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed.
3. An analysis of the likelihood of success of the compensation project.

B. **Performance standards.** The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this Chapter have been met.

C. **Detailed construction plans.** The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration.
2. Grading and excavation details.
3. Erosion and sediment control features.
4. A planting plan specifying plant species, quantities, locations, size, spacing, and density.
5. Measures to protect and maintain plants until established.

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.

D. **Monitoring program.** The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years 1, 3, 5, and 7 after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document 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 five (5) years.

E. **Contingency plan.** The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

F. **Financial guarantees.** The mitigation plan shall include financial guarantees pursuant to SMC 16.16.360 to ensure that the mitigation plan is fully implemented. (Ord. 1380 §2(part), 2004).

16.16.250 Innovative mitigation

A. The Town may encourage, facilitate, and approve innovative mitigation projects that are based on the best available science. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this Section wherein one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:

1. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas.
2. The applicant demonstrates the organizational and fiscal capability to act cooperatively.
3. The applicant demonstrates that long-term management of the habitat area will be provided.
4. There is a clear potential for success of the proposed mitigation at the identified mitigation site.

B. Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios. (Ord. 1380 §2(part), 2004).

16.16.260 Permit. The Town shall issue a critical areas permit, subject to conditions of approval, if the proposal is consistent with the provisions of this Chapter and SMC 14.20.010. The Town's determination shall be based on the criteria of SMC 16.16.270. (Ord. 1380 §2(part), 2004).

16.16.270 Review criteria.

A. Any alteration to a critical area, unless otherwise provided for in this Chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

1. The proposal minimizes the impact on critical areas in accordance with SMC 16.16.230;
2. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
3. The proposal is consistent with the general purposes of this chapter and the public interest;
4. Any alterations permitted to the critical area are mitigated in accordance with SMC 16.16.240;
5. The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values; and
6. The proposal is consistent with other applicable regulations and standards.

B. The Town Administrator shall condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this Chapter.

C. Except as provided for by this Chapter, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in SMC 16.16.230 shall be denied. (Ord. 1380 §2(part), 2004).

16.16.280 Consolidation with other permits. Critical areas permits shall be consolidated with any other necessary decision regarding the applicant's proposal or other activity. If consolidated, the critical areas permit shall be issued by the highest decision maker under SMC 14.12.010. (Ord. 1380 §2(part), 2004).

16.16.290 Appeals. Any decision to approve, condition, or deny an application for a critical areas permit may be appealed as provided in Chapter 14.24 SMC. (Ord. 1380 §2(part), 2004).

16.16.300 Variances.

A. Variances from the standards of this chapter may be authorized by the Town in accordance with the procedures set forth in SMC Chapter 14.08.050. The Hearing Examiner shall review the request and make a written finding that the request meets or fails to meet the variance criteria.

B. **Variance criteria.** A variance may be granted only if the applicant demonstrates that the requested action conforms to all of the criteria set forth as follows:

1. Special conditions and circumstances exist that are peculiar to the land, the lot, or something inherent in the land, and that are not applicable to other lands in the same district.

2. The special conditions and circumstances do not result from the actions of the applicant.

3. A literal interpretation of the provisions of this Chapter would deprive the applicant of all reasonable economic uses and privileges permitted to other properties in the vicinity and zone of the subject property under the terms of this Chapter, and the variance requested is the minimum necessary to provide the applicant with such rights.

4. Granting the variance requested will not confer on the applicant any special privilege that is denied by this Chapter to other lands, structures, or buildings under similar circumstances.

5. The granting of the variance is consistent with the general purpose and intent of this chapter, and will not further degrade the functions or values of the associated critical areas or otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property.

6. The decision to grant the variance includes the best available science and gives special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat.

7. The granting of the variance is consistent with the general purpose and intent of the Steilacoom Comprehensive Plan and adopted development regulations.

C. **Conditions may be required.** In granting any variance, the Hearing Examiner may prescribe such conditions and safeguards as are necessary to secure adequate

protection of critical areas from adverse impacts, and to ensure conformity with this chapter.

D. **Time limit.** The Hearing Examiner shall prescribe a time limit within which the action for which the variance is required shall be begun, completed, or both. Failure to begin or complete such action within the established time limit shall void the variance.

E. **Burden of proof.** The burden of proof shall be on the applicant to provide evidence in support of the application and to provide information sufficient for any required decision. (Ord. 1380 §2(part), 2004).

16.16.310 Unauthorized critical area alterations and enforcement

A. When a critical area or its buffer has been altered in violation of this Chapter, all ongoing development work shall stop and the critical area shall be restored. The Town shall issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Chapter.

B. Requirement for restoration plan. All development work shall remain stopped until a restoration plan is prepared and approved by the Town Administrator. The plan shall be prepared by a qualified professional using best available science and shall describe how the actions proposed meet the minimum requirements described in Subsection C. The Town Administrator may seek expert advice in determining the adequacy of the plan, at the violator's expense. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

C. Minimum performance standards for restoration.

1. For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, all of the following minimum performance standards shall be met for the restoration of a critical area. If the violator can demonstrate that greater functional and habitat values can be obtained, the Town Administrator may modify these standards:

a. The historic structural and functional values shall be restored, including water quality and habitat functions.

b. The historic soil types and configuration shall be replicated.

c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration.

d. Information demonstrating compliance with the requirements in SMC 16.16.240 shall be submitted to the Town Administrator.

2. For alterations to flood and geological hazards, all of the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

a. The hazard shall be reduced to a level equal to, or less than, the pre-development hazard.

b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized.

c. The hazard area and buffers shall be replanted with native vegetation

sufficient to minimize the hazard.

D. **Site investigations.** The Town Administrator is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The Town Administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

E. **Penalties.** Any person, party, firm, corporation, or other legal entity convicted of violating any of the provisions of this Chapter shall be guilty of a misdemeanor. Each day or portion of a day during which a violation of this Chapter is committed or continued shall constitute a separate offense. Any development carried out contrary to the provisions of this Chapter shall constitute a public nuisance and may be enjoined as provided by the statutes of the state of Washington. The Town may levy civil penalties against any person, party, firm, corporation, or other legal entity for violation of any of the provisions of this Chapter. The civil penalty shall be assessed at a maximum rate of $1000 dollars per day per violation. (Ord. 1380 §2(part), 2004).

16.16.320 Critical area markers and signs.

A. The boundary at the outer edge of critical area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by state survey standards.

B. The boundary at the outer edge of the critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site.

C. The Town Administrator may modify these provisions as necessary to ensure protection of sensitive features or wildlife needs. (Ord. 1380 §2(part), 2004).

16.16.330 Recorded Notice

A. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal is submitted shall file a notice with the county records and elections division according to the direction of the Town of Steilacoom. The notice shall state the presence of the critical area or buffer on the property, the application of this Chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the land.

B. This notice on chapter shall not be required for a development proposal by a public agency or public or private utility:

1. Within a recorded easement or right-of-way.
2. Where the agency or utility has been adjudicated the right to an easement or right-of-way.
3. On the site of a permanent public facility.

C. The applicant shall submit proof that the notice has been filed for public record before the Town of Steilacoom approves any site development or construction for the property or, in the case of subdivisions, short subdivisions, and planned area developments, at or before recording. (Ord. 1380 §2(part), 2004).

16.16.340 Native growth protection areas

A. Unless otherwise required in this Chapter, native growth protection areas (NGPA) shall be used in development proposals for subdivisions, short subdivisions, and planned area developments to delineate and protect those contiguous critical areas and buffers listed below:

1. All landslide hazard areas and buffers.
2. All wetlands and buffers.
3. All habitat conservation areas.
4. All other lands to be protected from alterations as conditioned by project approval.

B. Native growth protection areas shall be recorded on all documents of record for all affected lots.

C. Native growth protection areas shall be designated on the face of the plat or recorded drawing in a format approved by the Town Attorney. The designation shall include the following restrictions:

1. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
2. The right of the Town of Steilacoom to enforce the terms of the restriction.

D. The Town of Steilacoom may require that any NGPA be included in a separate critical area tract. Each owner of a building lot within a development shall own an undivided interest in the tract with the ownership interest passing with the ownership of the lot, unless the Town Administrator approves an alternative ownership arrangement. Alternative arrangements include dedication to the Town, or ownership by an incorporated homeowner's association or other legal entity, such as a land trust, which ensures the ownership, maintenance, and protection of the tract. (Ord. 1380 §2(part), 2004).

16.16.350 Building setbacks. All building setback lines shall be in accordance with Chapter 18.16 SMC and shall be measured from the outside edge of established critical area buffers, or from the edges of all critical areas, if no buffers are required. Minor intrusions may be allowed into the setback if the Town determines that such intrusions will not negatively impact the wetland. The setback shall be identified on all site plans submitted by the applicant for approval. The following may be allowed in the building setback area:

A. Landscaping.

B. Decks less than 42 inches from finished grade.

C. Building overhangs, if such overhangs do not extend more than four feet into the setback area, but no closer than five feet from the property line.

D. Impervious ground surfaces, such as driveways and patios, provided that such improvements may be subject to water quality regulations as adopted in Chapter 13.50 SMC. (Ord. 1380 §2(part), 2004).

16.16.360 Security to ensure mitigation, maintenance, and monitoring

A. When required mitigation measures are not completed prior to final permit approval, such as final plat approval or final building inspection, the applicant shall post a performance bond or other security in a form and amount deemed acceptable by the Town to ensure completion of the mitigation. Applicants shall also post security to ensure maintenance and/or monitoring of required mitigation.

B. The security shall be in the amount of one hundred and twenty-five percent (125%) of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.

C. Securities shall be in the form of a surety bond, performance bond, maintenance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the Town Attorney.

D. Securities authorized by this Section shall remain in effect until the Town of Steilacoom determines, in writing, that the standards bonded for have been met. Securities shall be held by the Town of Steilacoom for a minimum of five (5) years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.

E. Depletion, failure, or collection of security funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

F. Public development proposals are not required to post securities if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

G. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within thirty (30) days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the Town may demand payment of any financial guarantees or require other action authorized by the Town code or any other law.

H. Any funds recovered pursuant to this Section shall be used to complete the required mitigation.

(Ord. 1380 §2(part), 2004).

16.16.370 Critical area inspections. Reasonable access to the site shall be provided to the Town, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period. (Ord. 1380 §2(part), 2004).

16.16.380 [Reserved]

16.16.390 [Reserved]

Article II Wetlands

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16.16.400 Identification and rating

A. **Identification and delineation of wetlands**. Identification of wetlands and delineation of their boundaries pursuant to this Chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the Town meeting the wetland criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Chapter. Wetland delineations are valid for five years; after such date the Town shall determine whether a revisions or additional assessment is necessary.

B. **Wetland ratings.** Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in *Washington State Wetlands Ratings System for Western Washington* (Ecology #04-06-025, or as revised and approved by Ecology) which contains the definitions and methods for determining whether the criteria below are met. Wetland rating categories shall be applied as the wetland exists at the time of the adoption of this Chapter or as it exists at the time of an associated permit application.

1. **Wetland rating categories**

a. **Category I.** Category I wetlands are (1) relatively undisturbed estuarine wetlands larger than 1 acre; (2) wetlands that are identified by scientist of the Washington Natural Heritage Program/DNR as high quality wetlands; (3) bogs; (4) mature and old growth forested wetlands larger than 1 acre; (5) wetlands in coastal lagoons; and (6) wetlands that perform many functions well (scoring 70 points or more). These wetlands are those that: (1) represent a unique or rare wetland type; or (2) are more sensitive to disturbance than most wetlands; or (3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (4) provide a high level of functions.

b. **Category II.** Category II wetlands are: (1) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre; (2) interdunal wetland larger than 1 acre; (3) disturbed coastal lagoons or (4) wetlands with moderately high level of functions (scoring between 51 and 69 points).

c. **Category III.** Category III wetlands are (1) wetlands with a moderate level of functions (scoring between 30 and 50 points) and (2) interdunal wetlands between 0.1 and 1 acres in size. Wetlands scoring between 30 and 50 points generally have

been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

d. **Category IV.** Category IV wetlands have the lowest levels of functions (scoring fewer than 30 points) and are often heavily disturbed. These are wetlands capable of being replaced, and in some cases be able to improve. Replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

2. **Illegal Modifications.** Wetland ratings shall not change due to illegal modifications made by the applicant or with the applicant's knowledge. (Ord. 1485 §2, 2012: Ord. 1380 §2(part), 2004).

16.16.410 Activities allowed in wetlands. The activities listed below are allowed in wetlands in addition to those activities listed in SMC 16.16.150 and do not require a permit, except where such activities result in a loss to the functions and values of a wetland or wetland buffer. These activities include:

A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland.

B. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

C. Drilling for utilities under a wetland provided that the drilling does not interrupt the groundwater connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the groundwater connection to the wetland or percolation of surface water down through the soil column is disturbed.

D. Enhancement of a wetland through the removal of non-native invasive species. Weeding shall be restricted to hand removal and weed material shall be removed from the site. Bare areas that remain after weed removal shall be re-vegetated with native plants at natural densities. (Ord. 1380 §2(part), 2004).

16.16.420 Critical area report – Additional requirements. In addition to the general critical area report requirements of SMC 16.16.200, critical area reports for wetlands must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. **Preparation by a qualified professional.** A critical area report for wetlands shall be prepared by a qualified professional who is a wetland biologist with experience preparing wetland reports.

B. **Area addressed in critical area report.** The following areas shall be addressed in a critical area report for wetlands:

1. The project area of the proposed activity.
2. All wetlands and recommended buffers within three hundred (300) feet of the project area.

3. All shoreline areas, water features, floodplains, and other critical areas, and related buffers within three hundred (300) feet of the project area.

C. **Wetland analysis.** In addition to the minimum required contents of SMC 16.16.200, a critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:

1. A written assessment and accompanying maps of the wetlands and buffers within three hundred (300) feet of the project area, including the following information at a minimum:

a. Wetland delineation and required buffers
b. Existing wetland acreage
c. Wetland category; vegetative, faunal, and hydrologic characteristics
d. Soil and substrate conditions
e. Topographic elevations, at two-foot contours
f. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year–drift lines, algal layers, moss lines, and sediment deposits).

2. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

3. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.

4. Functional evaluation for the wetland and adjacent buffer using a local or state agency staff-recognized method and including the reference of the method and all data sheets.

5. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:

i. Existing and proposed wetland acreage
ii. Vegetative and faunal conditions
iii. Surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas
iv. Relationship within watershed and to existing water bodies
v. Soil and substrate conditions, topographic elevations
vi. Existing and proposed adjacent site conditions
vii. Required wetland buffers (including any buffer reduction and mitigation proposed to increase the plant densities, remove weedy vegetation, and replant the buffers
viii. Property ownership
ix. Associated wetlands and related wetlands that may be greater than 300 feet from the subject project.

6. A scale map of the development proposal site and adjacent area. A discussion of ongoing management practices that will protect wetlands after the project site has been developed; including proposed monitoring and maintenance programs.

7. A bond estimate for the installation (including site preparation, plant materials and installation, fertilizers, mulch, stakes) and the proposed monitoring and maintenance work for the required number of years.

D. **Additional Analysis.** When appropriate, the Town Administrator may also require the critical area report to include an evaluation by the Washington Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

E. **Affidavit of Applicant.** If the development proposal site contains or is within a wetland area, the applicant shall submit an affidavit, which declares whether the applicant has knowledge of any illegal alteration to any or all wetlands on the proposed site and whether the applicant previously had been found in violation of this ordinance. If the applicant has been found previously in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the jurisdiction. (Ord. 1380 §2(part), 2004).

16.16.430 Performance standards – General requirements.

A. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.

B. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this Chapter.

C. **Category I wetlands.** Activities and uses are prohibited in Category I wetlands, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this Chapter.

D. **Category II and III wetlands.** The following standards shall apply to activities in Category II and III wetlands:

1. Water-dependent activities may be allowed where there are no practicable alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas.

2. Non water-dependant activities and uses are prohibited, the presumption being that alternative locations are available, unless the applicant demonstrates that:

a. The basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less adverse impact on, a wetland on another site or sites in the general region

b. All alternative designs of the project as proposed, that would avoid or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible.

E. **Category IV wetlands.** Activities and uses that result in unavoidable and necessary impacts are permitted in Category IV wetlands and associated buffers in accordance with an approved critical area report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the acreage and loss functions will be provided under the terms established under SMC 16.16.440.

F. **Wetland buffers**

1. **Standard buffer widths.** The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate, then the buffer width shall be increased or the buffer planted to maintain the standard width. Required standard wetland buffers, based on wetland category and land use intensity, are as follows:

Table1. Width of buffers needed to protect Category IV wetlands

Wetland Characteristics	Buffer Widths by Impact of Land Use
Score for functions less than 30 pts	Low - 25 ft Moderate – 40 ft High – 50 ft

Table 2. Width of buffers needed to protect Category III wetlands

Wetland Characteristics	Buffer Widths by Impact of Land Use
Moderate level of function for habitat (score for habitat 20 - 28 pts.)	Low - 75 ft Moderate – 110 ft High – 150 ft
Not meeting above criteria	Low - 40 ft Moderate – 60 ft High – 80 ft

Table 3. Width of buffers needed to protect Category II wetlands

Wetland Characteristics	Buffer Widths by Impact of Land Use	Additional Measures
High level of function for habitat (score for habitat 29 - 36 pts.)	Low - 150 ft Moderate – 225 ft High – 300 ft	Maintain connectivity to other natural areas.
Moderate level of function for habitat (score for habitat 20 - 28 pts.)	Low - 75 ft Moderate – 110 ft High – 150 ft	
High level of function for water quality improvement and low for habitat (score for water quality 24 - 32 pts.; habitat less than 20 pts.)	Low - 50 ft Moderate – 75 ft High – 100 ft	No additional discharges of untreated runoff.

Estuarine	Low - 75 ft Moderate – 110 ft High – 150 ft	
Not meeting above criteria	Low - 50 ft Moderate – 75 ft High – 100 ft	

Table 4. Width of buffers needed to protect Category I wetlands

Wetland Characteristics	Buffer Widths by Impact of Land Use	Additional Measures
Natural Heritage Wetlands	Low - 125 ft Moderate – 190 ft High – 250 ft	No additional discharges of surface water. No septic systems within 300 ft. Restore degraded parts of buffer.
Bogs	Low - 125 ft Moderate – 190 ft High – 250 ft	No additional surface discharges. Restore degraded parts of buffer. Forested Buffer size to be based on score for habitat functions or water quality functions If forested wetland scores high for habitat, need to maintain connectivity to other natural areas. Restore degraded parts of buffer.
Estuarine	Low - 100 ft Moderate – 150 ft High – 200 ft	
High level of function for habitat (score for habitat 29 -36 pts.)	Low – 150 ft Moderate – 225 ft High – 300 ft	Maintain connectivity to other natural areas. Restore degraded parts of buffer.
Moderate level of function for habitat (score for habitat 20 - 28 pts.)	Low – 75 ft Moderate – 110 ft High – 150 ft	
High level of function for water quality	Low – 50 ft Moderate – 75 ft	No additional discharges of untreated runoff.

improvement (24 – 32 pts.) and low for habitat (less than 20 pts.)	High – 100 ft	
Not meeting any of the above criteria	Low – 50 ft Moderate – 75 ft High – 100 ft	

2. **Measurement of wetland buffers.** All buffers shall be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated areas are considered buffers. Lawns, walkways, driveways and other mowed or paved areas are not buffers.

3. **Increased wetland buffer widths.** The Town Administrator shall require increased buffer widths in accordance with the recommendations of an experienced, qualified professional wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

a. A larger buffer is needed to protect other critical areas, including habitat for priority species.

b. If the buffer is based on the score for its ability to improve water quality rather than other criteria, then the buffer should be increased by 50% if the slope is greater than 30%.

c. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to project the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not less than 3 feet on center for shrubs and 8 feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered "inadequate" and will need to be enhanced through additional native plantings and (if appropriate) removal of non-native plants when: (1) non-native or invasive plant species provide the dominant cover, (2) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (3) enhancement plantings in the buffer could significantly improve buffer functions.

4. **Wetland buffer width averaging.** The Town Administrator may allow modification of the standard wetland buffer width in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths to either improve wetland protection or allow reasonable use of a parcel. Averaging shall not occur in conjunction with reductions of buffer widths under Subsection 5.

a. Averaging may be permitted to improve wetland protection when all the following conditions are met, as demonstrated by a qualified professional wetland scientist:

1. The wetland has significant differences in characteristics that affect its habitat functions; and

2. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland, and decreased adjacent to the lower-functioning area of habitat or less sensitive portion of the wetland; and

3. The total area contained in the buffer after averaging is equal to the area required without averaging; and

4. The buffer width at its narrowest point is never less than 75 percent (75%) of the standard width.

b. Averaging may be permitted to allow reasonable use when all the following conditions are met, as demonstrated by a qualified professional wetland scientist:

1. There are no feasible alternatives to the site design that could be accomplished without buffer averaging; and

2. The averaged buffer will not result in a degradation of the wetland's functions; and

3. The total area contained in the buffer after averaging is equal to the area required without averaging; and

4. The buffer width at its narrowest point is never less than 75 percent (75%) of the standard width.

5. Reductions in buffer widths. The Town Administrator may allow buffer widths for high-intensity land uses to be reduced to those for moderate intensity impacts in accordance with an approved critical area report and the best available science on a case-by-case basis under the following conditions.

a. For wetlands that score moderate or high for habitat (20 points or more) the width of a wetland buffer may be reduced if

1. There is a relatively undisturbed vegetative corridor at least 100 feet wide between the wetland and any other priority habitat as determined by the Washington State Department of Fish and Wildlife. The corridor shall be protected for the entire distance between the wetland and the priority habitat by a conservation easement or similar device; and

2. Measures to minimize the impacts of different uses on wetlands, as set forth in Table 5 below are applied to the proposed use.

b. For wetlands that score low for habitat (less than 20 points) the width of a wetland buffer may be reduced if measures to minimize the impacts of different uses on wetlands, as set forth in Table 5 below are applied to the proposed use.

Table 5. Measures for Reduction of Buffer Widths

Type of Use	Type of Disturbance	Example of Measure to Minimize Disturbance
Residential, commercial, parking lots	Lights	Direct lights away from wetland
Residential, industrial, commercial	Noise	Locate noise generating activity away from

		wetland
Residential, industrial, commercial, landscaping, agricultural, parking lots, roads	Toxic runoff (not adequate to protect threatened or endangered species)	Route all new runoff away from wetland Covenants limiting use of pesticides Integrated pest management
Impermeable surfaces, lawns, tilling	Change in water regime	Infiltrate or treat, detain, and disperse new runoff into buffer
Residential	Pets	Plant dense vegetation around buffer, such as rose, hawthorn etc.
Residential	Human disturbance	Plant buffer with impenetrable natural vegetation appropriate for region
Tilling	Dust	Best Management Controls for dust

6. **Buffer consistency.** All mitigation sites shall have buffers consistent with the buffer requirements of this Chapter.

7. **Buffer maintenance.** Except as otherwise specified or allowed in accordance with this Chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. Removal of invasive non-native weeds is required for the duration of the mitigation security

8. **Buffer uses.** The following uses may be permitted within a wetland buffer in accordance with the review procedures of this chapter; provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

a. **Conservation and restoration activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

b. **Passive recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

i. Walkways and trails, provided that those pathways that are generally parallel to the perimeter of the wetland shall be located in the outer twenty-five percent (25%) of the buffer area, and constructed with a surface that does not interfere with the permeability. Raised boardwalks utilizing non-treated pilings area may be acceptable.

ii. Wildlife viewing structures; and

iii. Fishing access areas down to the water's edge that shall be no larger than 6 feet.

c. **Stormwater management facilities.** Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer twenty-five percent (25%) of the buffer of Category III or IV wetlands only, provided that:

i. No other location is feasible.

ii. The location of such facilities will not degrade the functions or values of the wetland.

Stormwater management facilities are not allowed in buffers of Category I or II wetlands.

G. **Signs and fencing of wetlands**

1. **Temporary markers.** The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be conspicuously marked in the field. Markings are subject to inspection by the Town Administrator prior to commencement of permitted activities. Temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent signs.** The Town Administrator may require installation of permanent signs along the boundary of a wetland or buffer as a condition of any permit or authorization pursuant to this Chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post, or another non-treated material of equal durability, and be approximately 12 inches by 18 inches in size. Signs must be posted at an interval of one per lot or every fifty (50) feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the Town Administrator:

Protected Wetland Area
Do Not Disturb
Contact Town of Steilacoom
Regarding Uses and Restrictions

b. The provisions of subsection (a) may be modified as necessary to assure protection of sensitive features or wildlife.

3. **Fencing**

a. The Town Administrator may require installation of permanent fencing at the edge of the wetland buffer as a condition of any permit or authorization pursuant to this Chapter when fencing will prevent future impacts to the wetland.

b. The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on site.

c. Fencing installed as part of a proposed activity or as required in this Subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat. (Ord. 1380 §2(part), 2004).

16.16.440 Performance standards – Compensatory Mitigation requirements.

A. Requirements for compensatory mitigation

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans*

(Version 1), Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised.

2. Mitigation ratios shall be consistent with Subsection G of this section.

B. Mitigation Sequencing. Mitigation shall be required in the following order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of an action.
2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
4. Reduce or eliminating the impact over time by preservation and maintenance operations.
5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
6. Monitor the required compensation and take remedial or corrective measures when necessary.

C. Mitigation for lost or affected functions. Compensatory Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost, except when:

1. The lost wetland provides minimal functions as determined by a site-specific function assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or
2. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

D. Preference of mitigation actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

1. Restoration. Restoring wetlands on upland sites that were formerly wetlands.
2. Creation. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of non-native introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.
3. Enhancement. Enhancing significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.
4. Preservation. Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or

enhancement, provided that a minimum of 1:1 acreage replacement is provided by re-establishment or creation.

a. Preservation of high-quality, at risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

i. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species.

ii. There is no net loss of habitat functions within the watershed or basin.

iii. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost.

iv. The impact area is small (generally <½acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland).

b. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

E. Type and location of mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be either in-kind and on-site, or in-kind and within the same stream reach, sub-basin, or drift cell. Mitigation actions shall be conducted within the same sub-drainage basin and on the site as the alteration except when the all of the following apply:

1. There are no reasonable on-site or in-subdrainage basin opportunities or on-site and in-subdrainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, potential to mitigate riparian fish and wildlife impacts (such as connectivity).
2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
3. Off-site locations shall be in the same sub-drainage basin unless:

a. Established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or

b. Credits from a state certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank's certification.

F. Mitigation timing.

1. Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
2. The Town Administrator may authorize a one-time temporary delay, up to one-hundred-twenty (120) days, in completing minor construction and landscaping

when environmental conditions could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the mitigation plan. The justification must be verified and approved by the Town of Steilacoom and include a financial guarantee.

G. Wetland Mitigation ratios

1. **Acreage replacement ratios.** The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement	Preservation
Category I: Bog, Natural Heritage site	Not considered possible	6:1	Case by case	10:1
Category I: Mature Forested	6:1	12:1	24:1	24:1
Category I: Based on functions	4:1	8:1	16:1	20:1
Category II	3:1	6:1	12:1	20:1
Category III	2:1	4:1	8:1	15:1
Category IV	1.5:1	3:1	6:1	10:1

2. **Increased replacement ratio.** The Town Administrator may increase the ratios under the following circumstances:

a. Uncertainty exists as to the probable success of the proposed restoration or creation;

b. A significant period of time will elapse between impact and replication of wetland functions;

c. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or

d. The impact was an unauthorized impact.

3. **Reduced ratios for rehabilitation and enhancement**. Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or re-establishment. See Table 1a or 1b, *Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance--Version 1*, (Ecology Publication #06-06-011a, Olympia, WA, March 2006 or as revised).

H. **Wetland mitigation banks**

1. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
   a. The bank is certified under Chapter 173-700 WAC;
   b. The Town Administrator determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
   c. The proposed use of credits is consistent with the terms and conditions of the bank's certification.
2. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.
3. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

I. Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards

1. Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in SMC 16.16.200 and SMC 16.16.420.
2. Compensatory Mitigation Report. The report must include a written report and plan sheets that meet the guidance set out in *Wetland Mitigation in Washington State– Part 2: Developing Mitigation Plans (Version 1)* (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised).

J. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development. (Ord. 1485 §3, 2012: Ord. 1380 §2(part), 2004).

16.16.450 Performance standards – Subdivisions. The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

A. Land that is located wholly within a wetland or its buffer may not be subdivided.

B. Land that is located partially within a wetland or its buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:

1. Located outside of the wetland and its buffer; and
2. Meets the minimum lot requirements of Titles 17 and 18 SMC.

C. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the Town Administrator determines that

no other feasible alternative exists and when consistent with this chapter. (Ord. 1380 §2(part), 2004).

16.16.460 [Reserved]
16.16.470 [Reserved]
16.16.480 [Reserved]
16.16.490 [Reserved]

Article III Critical Aquifer Recharge Areas

Sections:

16.16.500 Critical aquifer recharge areas designation
16.16.510 Critical area report – Additional requirements
16.16.520 Performance standards – Specific uses
16.16.530 Uses prohibited from critical aquifer recharge areas
16.16.540 [Reserved]
16.16.550 [Reserved]
16.16.560 [Reserved]
16.16.570 [Reserved]
16.16.580 [Reserved]
16.16.590 [Reserved]

16.16.500 Designation. The Town of Steilacoom is wholly located within an aquifer recharge area as defined by Clover/Chambers Creek Aquifer Basin Boundary, and the 10-year wellhead protection areas as identified by the Tacoma-Pierce County Health District. (Ord. 1380 §2(part), 2004).

16.16.510 Critical area report – Additional requirements. In addition to the general critical area report requirements of SMC 16.16.200, critical area reports for critical aquifer recharge areas must meet the requirements of the Tacoma-Pierce County Health District for hydrogeologic assessments. An aquifer recharge area critical area report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer, who is licensed in the state of Washington and has experience in preparing hydrogeologic assessments. (Ord. 1380 §2(part), 2004).

16.16.520 Performance standards – Specific uses

A. **Storage tanks.** All storage tanks proposed to be located in a critical aquifer recharge area must comply with Town building code requirements and must conform to the following requirements:

1. **Underground tanks.** All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

a. Prevent releases due to corrosion or structural failure for the operational life of the tank;

b. Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and

c. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

2. **Aboveground tanks.** All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

a. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

b. Have a primary containment area enclosing or underlying the tank or part thereof; and

c. A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.

B. **Vehicle repair and servicing**

1. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.

2. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the Washington Department of Ecology prior to commencement of the proposed activity.

C. **Residential use of pesticides and nutrients.** Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.

D. **Use of reclaimed water for surface percolation or direct recharge.** Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the state departments of Ecology and Health.

1. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in Chapter 90.46.080(1) and Chapter 90.46.010(10) RCW. The Washington Department of Ecology may establish additional discharge limits in accordance with Chapter 90.46.080(2) RCW.

2. Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.

E. **State and federal regulations.** The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute – Regulation – Guidance
Above Ground Storage	Chapter 173-303-640 WAC

Activity	Statute – Regulation – Guidance
Tanks	
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Washington Department of Ecology WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303-182 WAC
Hazardous Waste Generator (*Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)*	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (Washington Department of Ecology 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (Washington Department of Ecology, 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18-015 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, Washington Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture

(Ord. 1380 §2(part), 2004).

16.16.530Uses prohibited from critical aquifer recharge areas. The following activities and uses are prohibited in critical aquifer recharge areas:

A. **Landfills.** Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, woodwaste, and inert and demolition waste landfills;

B. **Underground injection wells.** Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells;

C. **Mining**

1. Metals and hard rock mining.

2. Sand and gravel mining, prohibited from critical aquifer recharge areas determined to be highly susceptible or vulnerable.

D. **Wood Treatment Facilities.** Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

E. **Storage, processing, or disposal of radioactive substances.** Facilities that store, process, or dispose of radioactive substances; and

F. **Other prohibited uses or activities**

1. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;

2. Activities that would significantly reduce the recharge to aquifers that are a source of significant baseflow to a regulated stream; and

3. Activities that are not connected to an available sanitary sewer system, prohibited from critical aquifer recharge areas associated with sole source aquifers. (Ord. 1380 §2(part), 2004).

16.16.540 [Reserved]
16.16.550 [Reserved]
16.16.560 [Reserved]
16.16.570 [Reserved]
16.16.580 [Reserved]
16.16.590 [Reserved]

Article IV Frequently Flooded Areas

Sections:

16.16.600 Designation of frequently flooded areas
16.16.610 Critical area reports – Additional requirements
16.16.620 Warning and disclaimer of liability
16.16.630 Performance standards – Basic requirements
16.16.640 Performance standards – Specific uses
16.16.650 Performance standards – Areas of shallow flooding
16.16.660 Performance standards – Coast high hazard areas
16.16.670 Uses prohibited from frequently flooded areas

16.16.680 Variances – Additional considerations for frequently flooded areas
16.16.690 [Reserved]

16.16.600Designation of frequently flooded areas

A. **Frequently flooded areas.** Frequently flooded areas include:

1. **Areas identified on the flood insurance map.** Those areas of special flood hazard identified by the Federal Emergency Management Agency's *Flood Insurance Study for Town of Steilacoom,* dated January 19, 1982, with an accompanying Flood Insurance Rate Map (FIRM) and any revisions thereto. The Flood Insurance Study and FIRM are hereby adopted by reference, declared part of this Chapter, and are available for public review at the Town Public Works Building, 1030 Roe Street, Steilacoom. The best available information for flood hazard areas identification as outlined in subsection C shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under subsection C. The areas identified as special flood hazard on the flood insurance map are also designated on the Town critical areas map.

2. **Areas identified by the Administrator.** Those areas of special flood hazard identified by the Town Administrator based on review of base flood elevation and floodway data available from federal, state, county, or other valid sources when base flood elevation data has not been provided from the Federal Insurance Administration.

B. **Use of additional information**. The Town Administrator may use additional flood information that is more restrictive or detailed than that provided in the Flood Insurance Study to designate frequently flooded areas, including data on channel migration, historical data, high water marks, photographs of past flooding, location of restrictive floodways, maps showing future build-out conditions, maps that show riparian habitat areas, or similar information.

C. **Flood elevation data.** When base flood elevation data is not available through the Federal Emergency Management Agency, the Town Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a reliable source, in order to administer this Chapter.

D. **Use of flood insurance map.** The flood insurance map is to be used as the regulatory map for the Town of Steilacoom, project applicants, property owners and the public. The map is a minimum designation of frequently flooded areas. The Town shall utilize the most recent flood insurance map available as the basis for regulation.

E. **Maintenance of records.** In all designated frequently flooded areas, the Town Administrator shall obtain and record the as-built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. The Town Administrator shall also maintain for public inspection all records of floodplain hazards, certificates of flood proofing, and flood elevation data. (Ord. 1450 §2, 2009: Ord. 1380 §2(part), 2004).

16.16.610 Critical area report – Additional requirements. In addition to the general critical area report requirements of SMC 16.16.200, critical area reports for frequently flooded areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. **Preparation by a qualified professional.** A frequently flooded areas report shall be prepared by a qualified professional who is a hydrologist or engineer, licensed in the state of Washington with experience in preparing flood hazard assessments.

B. **Areas to be addressed**. The following areas shall be addressed in a critical area report for frequently flooded areas:

1. The site area of the proposed activity;
2. All areas of a special flood hazard area, as indicated on the flood insurance map(s) within two hundred (200) feet of the project area; and
3. All other flood areas indicated on the flood insurance map(s) within two hundred (200) feet of the project area.

C. **Flood hazard assessment.** A critical area report for a proposed activity within a frequently flooded area shall contain a flood hazard assessment including the following site- and proposal-related information at a minimum:

1. **Site and construction plans.** A copy of the site and construction plans for the development proposal showing:

a. Floodplain (100-year flood elevation), 10- and 50-year flood elevations, floodway, other critical areas, buffers, and shoreline areas;

b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;

c. Clearing limits; and

d. Elevation of the lowest floor (including basement) of all structures, and the level to which any non-residential structure has been floodproofed.

2. **Watercourse alteration.** Alteration of natural watercourses shall be avoided, if feasible. If unavoidable, a critical area report shall include:

a. **Extent of watercourse alteration.** A description of and plan showing the extent to which a watercourse will be altered or relocated as a result of proposal;

b. **Maintenance program required for watercourse alterations**. A maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished; and

c. **Compliance documentation.** Information describing and documenting how the proposed watercourse alteration complies with the requirements of Article VI of this Chapter, the Town Shoreline Management Program, and other applicable state or federal permit requirements.

D. **Information regarding other critical areas.** Potential impacts to wetlands, fish and wildlife habitat, and other critical areas shall be addressed in accordance with the applicable sections of this Chapter. (Ord. 1380 §2(part), 2004).

16.16.620 Warning and disclaimer of liability. The degree of flood protection required by this Article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Town of Steilacoom, any officer or employee thereof, or

the Federal Insurance Administration for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder. (Ord. 1380 §2(part), 2004).

16.16.630 Performance standards – General requirements. The following standards shall be adhered to in all frequently flooded areas, except as otherwise provide for in this Chapter.

A. **Development permit.** A development permit shall be obtained before land is altered or a new use is commenced within a frequently flooded area. For application of this Article, development shall include any man-made alteration to land, including but not limited to buildings, structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials within the area of special flood hazard.

B. **All other necessary permits.** The Town Administrator shall verify that all necessary permits have been obtained from those governmental agencies from which prior approval is required by federal, state, or local law including Section 404 of the Federal Water Pollution Control Act Amendment of 1972 and the Endangered Species Act of 1973.

C. **Before regulatory floodway.** In areas where the base flood elevation is provided, but where a regulatory floodway has not been designated, new construction, substantial improvements, or other development, including fill, shall not be permitted within zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

D. **Areas without base flood elevation data.** Where base flood elevation data is not available (A and V zones) and there is insufficient data available from federal, state, or other sources, the Town Administrator shall determine the base flood elevation using approved engineering methods and historical data, such as high water marks, photographs of past flooding, and other available information. If there is insufficient data available for the Town Administrator to make a determination of the base flood elevation and standards requiring a base flood elevation cannot be implemented, the Town Administrator shall require measures that ensure the proposed structures will be reasonably safe from flooding. At a minimum, the base flood elevation should be set at least two (2) feet above the highest adjacent grade to avoid higher flood insurance rates.

E. **Construction materials and methods**

1. **Structures shall be located outside the floodplain**. All structures, utilities, and other improvements shall be located on the buildable portion of the site out of the floodplain unless there is no buildable site area out of the floodplain. For sites with no buildable area out of the floodplain, structures, utilities, and other improvements shall be placed on the highest land on the site, oriented parallel to flow rather than perpendicular, and sited as far from the watercourse and other critical areas as possible. If the Town Administrator detects any evidence of active hyporheic exchange on a site, the development shall be located to minimize disruption of such exchange.

2. **Methods that minimize flood damage**. All new construction and substantial improvements shall be constructed using flood resistant materials using methods and practices that minimize flood damage.

3. **Utility protection**. Electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

F. **Elevation certificate following construction.** Where the base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in SMC 16.16.600, the applicant shall obtain and record the actual (as-built) elevation (in relation to mean sea level), of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. The elevation certificate shall be completed by a surveyor licensed in the state of Washington and shall be submitted to the Town of Steilacoom for recording.

G. **Anchoring**

1. **Anchoring requirement**. All new construction and substantial improvements within the floodplain shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

2. **Manufactured homes**. All manufactured homes placed within the floodplain must be anchored to prevent flotation, collapse, or lateral movement and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

H. **Fill and grading.** Fill and grading within the floodplain shall only occur upon a determination from a qualified professional that the fill or grading will not block side channels, inhibit channel migration, increase flood
hazards to others, or be placed within a channel migration zone, whether or not the Town has delineated such zones as of the time of the application. (Ord. 1450 §3, 2009: Ord. 1380 §2(part), 2004).

16.16.640 Performance standards – Specific uses. Specific uses shall adhere to the following relevant standards, in addition to the general standards of SMC 16.16.630. Subsections (A) through (D) apply where base flood elevation data is provided through the Flood Insurance Study or required through SMC 16.16.600; Subsections (E) through (G) apply to all frequently flooded areas.

A. **Residential construction**

1. **Must be above base flood elevation**. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one (1) foot or more above the base flood elevation.

2. **Areas below the lowest floor**. Fully enclosed areas below the lowest floor that are subject to flooding shall only be allowed when designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided;
b. The bottom of all openings shall be no higher than one (1) foot above grade; and
c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
B. **Manufactured homes must be elevated.** All manufactured homes to be placed or substantially improved shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one (1) foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
C. **Recreational vehicles.** Recreational vehicles are required to either:
1. Be on the site for fewer than one hundred eighty (180) consecutive days; or
2. Be fully licensed and ready for highway use on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
3. Obtain a development permit and meet the requirements, including elevation and anchoring, for manufactured homes.
D. **Nonresidential construction**
1. **Above base flood elevation.** New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot (1) or more above the base flood elevation, or, together with attendant utility and sanitary facilities, shall:
a. Be floodproofed so that below one (1) foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Subsection based on their development and/or review of the structural design, specifications, and plans. Such certification shall be provided to the Town Administrator in accordance with SMC 16.16.600(E). Following construction of the structure, certifications shall be submitted to the Town that record the actual (as-built) elevation to which the structure was floodproofed.
d. Non-residential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in SMC 16.16.640(A)(2).
e. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level.
2. **Areas below the lowest floor**. Fully enclosed areas below the lowest floor that are not floodproofed shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:

a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided;

b. The bottom of all openings shall be no higher than one (1) foot above grade; and

c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

E. **Utilities**

1. **Infiltration of flood waters.** All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.

2. **Sanitary sewage systems.** New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

3. **On-site waste disposal systems.** On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. New on-site sewage disposal systems are prohibited pursuant to SMC 16.16.670 (C).

F. **Subdivision proposals**

1. All subdivisions and short subdivisions shall:

a. **Minimize flood damage.** Subdivisions and short subdivisions shall be designed to minimize or eliminate flood damage and impacts to floodplain functions and values. Public utilities and facilities that are installed as part of such subdivisions, such as sewer, gas, electrical, and water systems, shall be located and constructed to also minimize flood damage and impacts to floodplain functions and values. Subdivisions should be designed using natural features of the landscape and should not incorporate flood protection changes.

b. **Have adequate drainage.** Subdivisions and short subdivisions shall have adequate natural surface water drainage in accordance with SMC 13.50 to reduce exposure to flood hazards; and

c. **Show flood areas on plat maps.** Subdivisions and short subdivisions shall show the 100-year floodplain, floodway, and channel migration zone on the preliminary and final plat and short plat maps and designate such areas as "no build," when applicable.

3. **Detailed base flood elevation data.** Where detailed base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for all subdivision proposals regardless of size, and other proposed developments which contain at least 50 lots or five (5) acres, whichever is less.

G. **Alteration of watercourses.** Alteration of natural watercourses shall be avoided, if feasible. If unavoidable, the following provisions shall apply to the alteration:

1. **Habitat regulations.** Watercourse alterations shall only be allowed in accordance with the provisions of Article VI of this Chapter.

2. **Blockage.** Watercourse alteration projects shall not result in blockage of side channels.

3. **Notification.** The Town of Steilacoom shall notify adjacent communities, the state departments of Ecology and Fish and Wildlife, and the Federal Insurance Administration about the proposed watercourse alteration at least thirty (30) days prior

to permit issuance, and submit evidence of such notification to the Federal Insurance Administration.

4. **Maintenance of alterations.** The applicant shall maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. Maintenance shall be bonded for a period of five years, and be in accordance with an approved maintenance program. (Ord. 1450 §4, 2009: Ord. 1380 §2(part), 2004).

16.16.650 Performance standards – Areas of shallow flooding. Uses in areas of shallow flooding shall adhere to the following standards, in addition to the general standards of SMC 16.16.630 and relevant specific standards of SMC 16.16.640.

A. **Residential structures.** New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, one (1) foot or more above the depth number specified in feet on the flood insurance map or at least two (2) feet if no depth number is specified.

B. **Nonresidential structures.** New construction and substantial improvements of nonresidential structures within AO zones shall either:

1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site one (1) foot or more above the depth number specified on the flood insurance map or at least two (2) feet if no depth number is specified; or

2. Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Subsection based on their development and/or review of the structural design, specifications, and plans. Following construction of the structure, certifications shall be submitted to the Town that record the actual (as-built) elevation to which the structure was floodproofed.

C. **Drainage paths.** All development shall include adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

D. **Recreational vehicles.** Recreational vehicles placed on sites within AO Zones on the flood insurance map(s) shall meet the requirements of this Article, as well as all other Town regulations. (Ord. 1380 §2(part), 2004).

16.16.660 Performance standards – Coastal high hazard areas. Uses in all coastal high hazard areas, Zones V1-30, V and VE on the Town FIRM map, shall adhere to thefollowing standards, in addition to the general standards of SMC 16.16.630 and relevant specific standards of SMC 16.16.640.

A. All new construction shall be located landward of the reach of mean high tide.

B. All new construction and substantial improvements shall be elevated on pilings and columns so that:

1. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated one (1) foot or more above the base flood level; and

2. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent (1%) chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

C. **Design certification.** The structural design, specifications, and plans for a proposed activity within a coastal high hazard area shall be developed or reviewed, and certified by a registered professional engineer or architect that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the standards of this Section.

D. **Elevation certification.** The applicant shall provide the Town Administrator with the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1-30 and VE, and whether or not such structures contain a basement. The Town Administrator shall maintain a record of all such flood elevation information.

E. **Space below lowest floor and obstruction.** The space below the lowest floor of all new construction and substantial improvements shall be either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this Section, a breakaway wall shall have a design safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of twenty (20) pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

1. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Maximum wind and water loading values to be used in this determination shall each have a one percent (1%) chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

F. **Use of breakaway walls.** If breakaway walls are utilized, such enclosed space shall be used solely for parking of vehicles, building access, or storage, and shall not be used for human habitation.

G. **Manufactured homes**

1. All manufactured homes to be placed or substantially improved within Zones V1-30, V or VE on the Town's FIRM map on sites:

a. Outside of a manufactured home park or subdivision;

b. In a new manufactured home park or subdivision;

c. In an expansion to an existing manufactured home park or subdivision; or
d. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood;
shall meet the standards of SMC 16.16.660 A through F and SMC 16.16.670 E.
2. All manufactured homes to be placed or substantially improved on other sites in an existing manufactured home park or subdivision within Zones V1-30, V or VE on the Town's FIRM map shall meet the requirements of SMC 16.16.640.

H. **Recreational Vehicles.**

All recreational vehicles placed on sites within Zones V1-30, V or VE on the Town's FIRM map must either:

1. Be on the site for fewer than one hundred eighty (180) consecutive days; or
2. Be fully licensed and ready for highway use on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
3. Meet the requirements of SMC 16.16.630 (A) and SMC 16.16.660 A through F and SMC 16.16.670 E. (Ord 1450 §5, 2009: Ord. 1380 §2(part), 2004).

16.16.670 Uses and activities prohibited from frequently flooded areas

A. **Critical facilities.** Critical facilities are prohibited from frequently flooded areas to prevent damage to such facilities, to avoid costs that will be incurred by the public, and to maintain functionality of such facilities during flood events. If such a prohibition is unreasonable, an allowance for critical facilities in frequently flooded areas with the following specific conditions:

1. Construction of new critical facilities shall be permissible within frequently flooded areas if no feasible alternative site is available.
2. Critical facilities constructed within frequently flooded areas shall have the lowest floor elevated three (3) feet or more above the level of the base flood elevation (100-year flood).
3. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into flood waters.
4. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

B. **Wells used for potable water.** Water wells shall be located on high ground and are prohibited from the floodway.

C. **On-site sewage disposal systems.** On-site sewage disposal systems are prohibited from the floodway, the channel migration zone, and the ten-year floodplain elevation.

D. **Construction in floodways**

Located within areas of special flood hazard established in SMC 16.16.600 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris, and increase erosion potential, the following provisions apply:

1. **New construction certification.** Encroachments, including new construction, substantial improvements, fill, and other development are prohibited within designated floodways unless certified by a registered professional engineer. Such certification shall demonstrate through hydrologic and hydraulic analyses, performed in accordance

with standard engineering practice that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge.

Small projects that are solely to protect or create fish habitat and designed by a qualified professional may be allowed without certification, if the Town Administrator determines that the project will not obstruct flood flows. Fish protection projects shall be reviewed on behalf of the Town of Steilacoom by a qualified professional in the field of hydraulics. Fish enhancement projects shall be required to meet the FEMA Policy on Fish Enhancement Structures in the Floodway.

2. **Residential construction and reconstruction.** Construction and reconstruction of residential structures is prohibited within designated floodways, except for:

a. Repairs, reconstruction, or improvements to a structure that do not increase the ground floor area; and

b. Repairs, reconstruction, or improvements to a structure, for which the cost does not exceed fifty percent (50%) 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.

Improvement to a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to ensure safe living conditions or to structures identified as historic places may be excluded from the fifty percent (50%).

3. If Subsections (1) and (2) above are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions.

E. **Construction in coastal high hazard areas**

1. Fill for structural support of buildings shall be prohibited in coastal high hazard areas.

2. Man-made alteration of sand dunes that would result in increasing the potential flood damage shall be prohibited in coastal high hazard areas. (Ord. 1450 §6, 2009: Ord. 1380 §2(part), 2004).

16.16.680 Variances – Additional considerations for frequently flooded areas

A. **Additional variance considerations.** In review of variance requests for activities within frequently flooded areas, the Hearing Examiner shall consider all technical evaluations, relevant factors, standards specified in this Chapter, and:

1. The danger to life and property due to flooding, erosion damage, or materials swept onto other lands during flood events;

2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the proposed use;

3. The importance of the services provided by the proposed use to the community;

4. The necessity to the proposed use of a waterfront location, where applicable, and the availability of alternative locations for the proposed use that are not subject to flooding or erosion damage;

5. The safety of access to the property in times of flood for ordinary and emergency vehicles;

6. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and

7. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems and streets and bridges.

B. Variances shall only be issued upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nuisances, fraud on or victimization of the public, or conflict with existing laws or ordinances. Unavoidable impacts to floodplain functions and values shall be mitigated in accordance with SMC 16.16. 230.

C. Variances shall not be issued within a designated floodway, if any increase in flood levels during the base flood discharge would result. (Ord. 1380 §2(part), 2004).

16.16.690 [Reserved]

Article V Geologically Hazardous Areas

Sections:

16.16.700 Designation of geologically hazardous areas
16.16.710 Designation of specific hazard areas
16.16.720 Classification of geologically hazardous areas
16.16.730 Activities allowed in geologically hazardous areas
16.16.740 Critical area report – Additional requirements for geologically hazardous areas
16.16.750 Critical area report – Additional requirements for specific hazards
16.16.760 Performance standards – General requirements
16.16.770 Performance standards – Erosion and Landslide hazards
16.16.780 [Reserved]
16.16.790 [Reserved]

16.16.700 Designation of geologically hazardous areas

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. The following types of geologically hazardous are:

A. Erosion hazard
B. Landslide hazard
C. Seismic hazard
D. Other geological hazards, including mines, volcanoes, and tsunamis
E. Other geological events, including mass wasting, debris flows, rock falls, and differential settlement. (Ord. 1380 §2(part), 2004).

16.16.710 Designation of specific hazard areas

A. **Erosion hazard areas.** Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard.

B. **Landslide hazard areas.** Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Example of these may include, but are not limited to the following:

1. Areas of historic failures, such as:

a. Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building site development;

b. Those areas mapped by the Washington Department of Ecology (*Coastal Zone Atlas*) or the Washington State Department of Natural Resources (slope stability mapping) as unstable (U or class 3), unstable old slides (UOS or class 4), or unstable recent slides (URS or class 5); or

c. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources;

2. Areas with all three of the following characteristics:

a. Slopes steeper than fifteen percent (15%);

b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

c. Springs or ground water seepage.

3. Areas that have shown movement during the Holocene epoch (from ten thousand years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;

4. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

5. Slopes having gradients steeper than eighty percent (80%) subject to rock fall during seismic shaking;

6. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;

7. Areas that show evidence of, or are at risk from snow avalanches;

8. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

9. Any area with a slope of forty percent (40%) or steeper and with a vertical relief of ten (10) or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least ten (10) feet of vertical relief.

C. **Seismic hazard areas.** Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake

damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:

1. The magnitude of an earthquake;
2. The distance from the source of an earthquake;
3. The type of thickness of geologic materials at the surface; and
4. The type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table.

D. **Other hazard areas.** Geologically hazardous areas shall also include areas determined by the Town Administrator to be susceptible to other geological hazards, including mines, volcanoes, and tsunamis, or geological events including mass wasting, debris flows, rock falls, and differential settlement. (Ord. 1380 §2(part), 2004).

16.16.720 Classification of geologically hazardous areas

All geologic hazard areas should be classified according to the following categories for each geologic hazard type.

A. Known or Suspected Risk. Documentation or projection of the hazard by a qualified professional exists.

B. Unknown Risk. Documentation or projection of the lack of hazard by a qualified professional exists, or data are not available to determine the presence or absence of a geologic hazard. (Ord. 1380 §2(part), 2004).

16.16.730 Activities allowed in geologically hazardous areas

The following activities are allowed in geologically hazardous areas pursuant to SMC 16.16.150 and do not require submission of a critical area report:

A. **Erosion and landslide hazard areas.** Except as otherwise provided for in this Article, only those activities approved and permitted consistent with an approved critical area report in accordance with this Chapter shall be allowed in erosion or landslide hazard areas.

B. **Seismic hazard areas.** The following activities are allowed within seismic hazard areas:

1. Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
2. Additions to existing single-story residences that are 250 square feet or less; and
3. Installation of fences.

C. **Other hazard areas.** The Town Administrator may allow the following activities within other geologically hazardous areas, if the activity will not increase the risk of the hazard:

1. Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
2. Additions to existing residences that are 250 square feet or less; and

3. Installation of fences. (Ord. 1380 §2(part), 2004).

16.16.740 Critical area report – Additional requirements for geologically hazardous areas.

A. **Preparation by a qualified professional.** A critical areas report for a geologically hazardous area shall be prepared by an engineer or geologist, licensed in the state of Washington, with experience analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard.

B. **Area addressed in critical area report.** The following areas shall be addressed in a critical area report for geologically hazardous areas:

1. The project area of the proposed activity; and
2. All geologically hazardous areas within two hundred (200) feet of the project area or that have potential to be affected by the proposal.

C. **Geological hazards assessment.** A critical area report for a geologically hazardous area shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:

1. **Site and construction plans.** The report shall include a copy of the site plans for the proposal showing:

a. The type and extent of geologic hazard areas, and any other critical areas, and buffers on, adjacent to, within two hundred (200) feet of, or that are likely to impact the proposal;

b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;

c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and

d. Clearing limits.

2. **Assessment of geological characteristics.** The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:

a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;

b. A detailed overview of the field investigations, published data and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and

c. A description of the vulnerability of the site to seismic and other geologic events.

3. **Analysis of proposal.** The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties; and

4. **Minimum buffer and building setback.** The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.

D. **Incorporation of previous study.** Where a valid critical areas report has been prepared within the last five (5) years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical area report. The applicant shall submit a hazards assessment detailing any changed environmental conditions associated with the site.

E. **Mitigation of long-term impacts.** When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the pre-existing level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the pre-existing conditions following abandonment of the activity. (Ord. 1380 §2(part), 2004).

16.16.750 Critical area report – Additional technical information requirements for specific hazard. In addition to the general critical area report requirements of SMC 16.16.200 and SMC 16.16.740, critical area reports for geologically hazardous areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. **Erosion and landslide hazard areas.** In addition to the basic critical area report requirements, the technical information for an erosion hazard or landslide hazard area shall include the following information at a minimum:

1. **Site plan.** The critical area report shall include a copy of the site plan for the proposal showing:

a. The height of slope, slope gradient, and cross-section of the project area;

b. The location of springs, seeps, or other surface expressions of ground water on or within two hundred (200) feet of the project area or that have potential to be affected by the proposal; and

c. The location and description of surface water runoff features.

2. **Hazards analysis.** The hazards analysis component of the critical areas report shall specifically include:

a. A description of the extent and type of vegetative cover;

b. A description of subsurface conditions based on data from site-specific explorations;

c. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;

d. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

e. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred-year storm event;

f. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties.

g. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;

h. Recommendations for building siting limitations; and

i. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.

3. **Geotechnical engineering report**. The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:

a. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations and estimates of settlement performance;

b. Recommendations for drainage and subdrainage improvements;

c. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

d. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.

4. **Erosion and sediment control plan.** For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in Chapter 13.50 SMC.

5. **Drainage plan.** The technical information shall include a drainage plan for the collection, transport, treatment, discharge, and/or recycle of water prepared in accordance with Chapter 13.50 SMC. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area.

6. **Mitigation plans.** Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability.

7. **Monitoring surface waters.** If the Town Administrator determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the technical information shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the Town of Steilacoom.

B. **Seismic hazard areas.** In addition to the basic report requirements, a critical area report for a seismic hazard area shall also meet the following requirements:

1. The site map shall show all known and mapped faults within two hundred (200) feet of the project area or that have potential to be affected by the proposal.

2. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement).

3. A geotechnical engineering report shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented.

C. **Other geologically hazardous areas.** In addition to the basic requirements, the Town Administrator may require additional technical information to be submitted when determined to be necessary to the review the proposed activity and the subject hazard. Additional technical information that may be required, includes, but is not limited to:

1. **Site plan.** The site plan shall show all hazard areas located within two hundred (200) feet of the project area or that have potential to be affected by the proposal; and

2. **Hazards analysis.** The hazards analysis shall include a complete discussion of the potential impacts of the hazard on the project area and of the proposal on the hazard. (Ord. 1380 §2(part), 2004).

16.16.760 Performance standards – General requirements.

A. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:

1. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;

2. Will not adversely impact other critical areas;

3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions; and

4. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.

B. **Critical facilities prohibited.** Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative. (Ord. 1380 §2(part), 2004).

16.16.770 Performance standards – Erosion and Landslide hazard areas

Activities on sites containing erosion or landslide hazards shall meet the standards of SMC 16.16.760 and the specific following requirements:

A. **Buffer requirement.** A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the Town Administrator to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of and concurrence with a critical area report prepared by a qualified professional.

1. **Minimum buffer.** The minimum buffer shall be equal to the height of the slope or fifty (50) feet, whichever is greater.

2. **Buffer reduction.** The buffer may be reduced to a minimum of ten (10) feet when a qualified professional demonstrates to the Town Administrator's satisfaction that the reduction will adequately protect the proposed development, adjacent developments, and uses and the subject critical area.

3. **Increased buffer.** The buffer may be increased where the Town Administrator determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

B. **Alterations.** Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a hazards analysis is submitted and certifies that:

1. The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;
2. The development will not decrease slope stability on adjacent properties; and
3. Such alterations will not adversely impact other critical areas.

C. **Design standards.** Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this Chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:

1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the Town Building Code.
2. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;
3. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;
4. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
5. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
6. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
7. Development shall be designed to minimize impervious lot coverage.

D. **Vegetation retention.** Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited.

E. **Seasonal restriction.** Clearing shall be allowed only from May 1 to October 1 of each year. The Town may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions. Timber harvest, not including brush clearing or stump removal, shall be allowed pursuant to an approved forest practice permit issued by the Washington State Department of Natural Resources.

F. **Utility lines and pipes.** Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located above ground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density

polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior.

G. **Point discharges.** Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:

1. Conveyed via continuous storm pipe downslope to a point where there are no erosion hazards areas downstream from the discharge;

2. Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or

3. Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope.

H. **Subdivisions.** The division of land in landslide hazard areas and associated buffers is subject to the following:

1. Lots may be created that are designed so that future development of the lot will not impact the active landslide hazard area or its associated buffer. Each created lot shall contain a sufficient buildable area after all setbacks, buffers, other critical area restrictions, and other Town regulations are applied.

2. Access roads and utilities may be permitted within the landslide hazard area and associated buffers only if the Town determines that no other feasible alternative exists.

I. **Prohibited development.** On-site sewage disposal systems, including drain fields, are prohibited within erosion and landslide hazard areas and related buffers. (Ord. 1380 §2(part), 2004).

16.16.780 [Reserved]
16.16.790 [Reserved]

Article VI Fish and Wildlife Habitat Conservation Areas

Sections:

16.16.800 Designation of fish and wildlife habitat conservation areas
16.16.810 Local designation process
16.16.820 Critical area report – Additional requirements for habitat conservation areas
16.16.830 Performance standards – General requirements
16.16.840 Performance standards – Specific habitats
16.16.850 [Reserved]
16.16.860 [Reserved]
16.16.870 [Reserved]
16.16.880 [Reserved]
16.16.890 [Reserved]

16.16.800 Designation of fish and wildlife habitat conservation areas

A. Fish and wildlife habitat conservation areas include:

1. **Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association.**

2. **State priority habitats and areas associated with state priority species.**

3. **Habitats and species of local importance.**

4. **Commercial and recreational shellfish areas.** These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW.

5. **Kelp and eelgrass beds and herring and smelt spawning areas.**

6. **Naturally occurring ponds under twenty acres.** Naturally occurring ponds are those ponds under twenty (20) acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

7. **Waters of the state.** Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031 or WAC 222-16-030.

8. **Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.**

9. **State natural area preserves and natural resource conservation areas.** Natural area preserves and natural resource conservation areas are defined, established, and managed by the Washington State Department of Natural Resources.

10. **Areas of rare plant species and high quality ecosystems.** Areas of rare plant species and high quality ecosystems are identified by the Washington State Department of Natural Resources through the Natural Heritage Program.

11. **Land useful or essential for preserving connections between habitat blocks and open spaces.**

B. All areas within the Town of Steilacoom meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter and shall be managed consistent with the best available science, such as the Washington Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species. (Ord. 1380 §2(part), 2004).

16.16.810 Local designation process. Habitats and species may be nominated for local designation by any person. The nominator shall provide the Town Administrator with a complete application consisting of the following:

A. A report prepared by a qualified professional (biologist, botanist, or similar professions) with demonstrated expertise concerning the nominated species or habitat detailing all the following:

1. The danger of extirpation of the local population of the nominated species based on existing trends.

2. The recreation, commercial, game, tribal, or other special value of the nominated species or habitat.

3. Evidence that the long-term persistence of the species is dependent on the protection, maintenance, and/or restoration of the nominated habitat.

4. Evidence that protection by other county, state, or federal policies, laws, regulations, or non-regulatory tools is not adequate to prevent degradation of the species or habitat within the Town.

5. Evidence that, without protection, the species or habitat will likely be diminished over the long term.

6. Evidence that the area nominated to protect a particular habitat or species represents either high-quality native habitat or habitat that has a high potential to recover to a suitable condition and which is of limited availability, highly vulnerable to alteration, or provides landscape connectivity which contributes to the integrity of the surrounding landscape.

7. Specific habitat features sought to be protected (for example, nest sites, breeding areas, and nurseries), or whether the habitat or ecosystem is being nominated in its entirety.

8. Management strategies for the nominated species or habitats supported by the best available science, and where restoration of habitat is proposed, a specific plan for restoration.

B. The Town Administrator shall evaluate all complete applications for nomination according to the characteristics enumerated in subsection A and shall issue a staff report and recommendation to the Town Council based that evaluation. The Town Administrator may request independent review of the nomination from qualified professionals, including, but not limited to, the Washington State Departments of Ecology, Natural Resources and Fish and Wildlife during the evaluation.

C. Upon receipt of a staff report from the Town Administrator, the Town Council shall hold a public hearing and determine whether or not to designate a Habitat or Species of Local Importance. Notice for such hearing shall be as required by SMC 14.16.030.

D. Approved nominations will be subject to the provisions of this Chapter. (Ord. 1380 §2(part), 2004).

16.16.820 Critical area report – Additional requirements for habitat conservation areas. In addition to the general critical area report requirements of SMC 16.16.200, critical area reports for habitat conservation areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. **Preparation by a qualified professional.** A critical areas report for a habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat.

B. **Areas addressed in critical area report.** The following areas shall be addressed in a critical area report for habitat conservation areas:

1. The project area of the proposed activity;

2. All habitat conservation areas and recommended buffers within three hundred (300) feet of the project area; and

3. All shoreline areas, floodplains, other critical areas, and related buffers within three hundred (300) feet of the project area.

C. **Habitat assessment.** A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

1. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

2. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

3. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

4. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

5. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMC 16.16.230; and

6. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

D. **Additional information may be required.** When appropriate due to the type of habitat or species present or the project area conditions, the Town Administrator may also require the habitat management plan to include:

1. An evaluation by an independent qualified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;

2. A request for consultation with the Washington Department of Fish and Wildlife or the local Native American Indian Tribe or other appropriate agency; and

3. Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 1380 §2(part), 2004).

16.16.830 Performance standards – General requirements.

A. **Alterations.** A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this Chapter.

B. **Non-indigenous species.** No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.

C. **Mitigation and contiguous corridors.** Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

D. **Approvals of activities.** The Town Administrator shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffer zones;
2. Preservation of critically important vegetation and/or habitat features such as snags and downed wood;
3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
4. Seasonal restriction of construction activities;
5. Establishment of a duration and timetable for periodic review of mitigation activities; and
6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

E. **Mitigation and equivalent or greater biological functions.** Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

F. **Approvals and the best available science.** Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

G. **Buffers**

1. **Establishment of buffers.** The Town Administrator shall require the establishment of buffer areas for activities adjacent to habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife. Habitat conservation areas and their buffers shall be preserved in perpetuity through the use of native growth protection areas and critical area tracts in accordance with SMC 16.16.340.

2. **Seasonal restrictions.** When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

3. **Habitat buffer averaging.** The Town Administrator may allow the recommended habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the management recommendations issued by the Washington Department of Fish and Wildlife, only if:

a. It will not reduce stream or habitat functions;

b. It will not adversely affect salmonid habitat;

c. It will provide additional natural resource protection, such as buffer enhancement;

d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

e. The buffer area width is not reduced by more than twenty-five percent (25%) in any location.

H. **Signs and fencing of habitat conservation areas**

1. **Temporary markers**. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and verified by the Town Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent signs**. As a condition of any permit or authorization issued pursuant to this Chapter, the Town Administrator may require that applicant to install permanent signs along the boundary of a habitat conservation area or buffer.

a. Permanent signs shall be made of a metal face and attached to a metal post or another material of equal durability. Signs must be posted at an interval of one per lot or every fifty (50) feet, whichever is less and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the Town Administrator:

Habitat Conservation Area
Do Not Disturb
Contact Town of Steilacoom
Regarding Uses and Restriction

b. The provisions of subsection (a) may be modified by the Town Administrator as necessary to assure protection of sensitive features or wildlife.

3. **Fencing**

a. The Town Administrator shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Town Administrator shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

b. The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals are present or may be introduced on site.

c. Fencing installed as part of a proposed activity or as required in this Subsection shall be design so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts.

I. **Subdivisions.** The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

1. Land that is located wholly within a habitat conservation area or its buffer may not be subdivided.

2. Land that is located partially within a habitat conservation area or its buffer may be divided provided that the developable portion of each new lot and its access is located outside of the habitat conservation area or its buffer and meets the minimum lot size requirements of Title 18 SMC.

3. Access roads and utilities serving the proposed may be permitted within the habitat conservation area and associated buffers only if the Town of Steilacoom determines that no other feasible alternative exists and when consistent with this Chapter. (Ord. 1380 §2(part), 2004).

16.16.840Performance standards – Specific habitats.

A. **Endangered, threatened, and sensitive species**

1. No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable state or federal agency.

2. Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the Town. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.

3. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within eight hundred (800) feet or within one half mile (2,640 feet) and in a shoreline foraging area. The Town shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the habitat management plan by the Washington Department of Fish and Wildlife.

B. **Anadromous fish**

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

a. Activities shall be timed to occur only during the allowable work window as designated by the Washington State Department of Fish and Wildlife for the applicable species;

b. An alternative alignment or location for the activity is not feasible;

c. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;

d. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report, and

e. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.

2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized by the Town Shoreline Master Program, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

C. **Wetland habitats.** All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in Article II. If non-wetlands habitat and wetlands are present at the same location, the provisions of this Article or Article II, whichever provides greater protection to the habitat, apply.

D. **Riparian habitat areas.** Unless otherwise allowed in this Chapter, all structures and activities shall be located outside of the riparian habitat area.

1. **Establishment of riparian habitat areas**. Riparian habitat areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other and that are located adjacent to rivers, perennial or intermittent streams, seeps, and springs.

2. **Riparian habitat area widths.** Recommended riparian habitat area widths are detailed in Subsection 7. A riparian habitat area shall have the width recommended, unless a greater width is required pursuant to Subsection 3, or a lesser width is allowed pursuant to Subsection 4. Widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high water mark or from the top of bank, if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

3. **Increased riparian habitat area widths**. The recommended riparian habitat area widths shall be increased, as follows:

a. When the Town Administrator determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;

b. When the frequently flooded area exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the frequently flooded area;

c. When a channel migration zone is present, the riparian habitat area width shall be measured from the outer edge of the channel migration zone;

d. When the habitat area is in an area of high blowdown potential, the riparian habitat area width shall be expanded an additional fifty (50) feet on the windward side; or

e. When the habitat area is within an erosion or landslide hazard area, or buffer, the riparian habitat area width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

4. **Riparian habitat area width averaging**. The Town Administrator may allow the recommended riparian habitat area width to be reduced in accordance with a critical area report only if:

a. The width reduction will not reduce stream or habitat functions, including those of nonfish habitat;

b. The width reduction will not degrade the habitat, including habitat for anadromous fish;

c. The proposal will provide additional habitat protection;

d. The total area contained in the riparian habitat area of each stream on the development proposal site is not decreased;

e. The recommended riparian habitat area width is not reduced by more than twenty-five percent (25%) in any one location;

f. The width reduction will not be located within another critical area or associated buffer; and

g. The reduced riparian habitat area width is supported by the best available science.

5. **Riparian habitat mitigation.** Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same sub-drainage basin as the habitat impacted.

6. **Alternative mitigation for riparian habitat areas.** The performance standards set forth in this Subsection may be modified at the Town of Steilacoom's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected sub-drainage basin as a result of alternative mitigation measures.

7. Description of Riparian Areas and Recommended Habitat Area Widths

a. Puget Sound: Puget Sound is a Type 1 fish-bearing water, and an important habitat for both fish and wildlife. The Washington State Department of Fish and Wildlife identifies the area as important for waterfowl and shorebirds, as well as Chinook, coho, chum, pink, and sockeye salmon, and steelhead trout. Puget Sound is also regulated under the Shoreline Management Act.

The riparian habitat has been compromised by the railroad tracks that parallel the shoreline. Except for Sunnyside Beach Park, the Town's approximately 3 miles of Puget Sound shoreline are taken up with the Burlington Northern Santa Fe mainline. Areas along the mainline are generally defined by narrow, steep, sand and gravelly beaches located at the base of the rip-rap armored railroad bed. The construction and

armoring of the railroad has reduced the connectivity of near shore habitats with the upland, and has likely led to limitations on the near shore environment related to fish and wildlife habitat potential.

Along Sunnyside Beach Park, the railroad was built inland for approximately .25 miles. The beach at the park has also been armored, but has a gently sloping beach and appears to support a wider range of near shore habitat.

The riparian habitat area for Puget Sound is established from Mean Higher High Water to the edge of the railroad right of way.

b. Chambers Creek and Chambers Bay: Chambers Creek is a Type 1 fish-bearing water. It enters Puget Sound through Chambers Bay, at the extreme northern boundary of the Town. The bay is entirely influenced by tides. A fish trap/diversion dam just north of the Town limits serves as the boundary between freshwater and estuarine habitats.

Chambers Bay is an important habitat for both fish and wildlife. The Washington State Department of Fish and Wildlife identifies the area as important for waterfowl and shorebirds, as well as Chinook, coho, chum, pink, and sockeye salmon, and steelhead trout. Chambers Bay is also regulated under the Shoreline Management Act.

The riparian habitat has been compromised by the railroad bridge at the mouth of the bay, commercialization of the shoreline, and the upstream fish trap/diversion dam.

The south shore of Chambers Bay is zoned for commercial and industrial use. A private marina, a marine dry storage and the railroad bridge tender's office occupy the land at the western end of the bay. The eastern end is the Town's industrial area, site of a now closed paper mill. Chambers Creek Road skirts the bay, with a narrow strip of land between the road and the bay. A paved walking path is located across the road from the industrial area, between the road and the bay.

The riparian habitat area for Chambers Bay is established from Mean Higher High Water to the edge of the Chambers Creek Road right-of-way.

c. Fifth Street Waterway: The Fifth Street Waterway is the main drainage course for most of the western side of Steilacoom. The waterway provides an outlet for Farrell's Marsh, and runs in a ditch along Union Avenue, within the Jackson, Fourth and Fifth Street rights-of-way. The waterway is carried in pipes under Union Avenue, under Fifth Street at Jackson Street, and under Gove Street at Fourth Street. The waterway traverses northeasterly through private property and a steep ravine to Martin Street, where it passes under the street in a culvert and then empties into a small bay and Puget Sound within the Fifth Street right-of-way. The Fifth Street Waterway is has not been typed by the Department of Natural Resources. Fish habitat is available in the bay, but the Martin Street culvert blocks upstream migration. The waterway provides fresh water to Puget Sound, and serves as a wildlife corridor for small animals. A buffer area surrounding the waterway is necessary to provide shade to cool the water for downstream fish, and provide cover and forage area for animals.

The riparian habitat area width for the Fifth Street waterway is:

Between Martin Street and Gove Street, ten (10) feet;

Between Gove Street and Jackson Street, the width of the Fourth Street right-of-way; Between Fourth Street and Union Avenue, the width of the Jackson Street right-of-way; and

Between Jackson Street and Farrell's Marsh, ten (10) feet.

d. Chambers Street Waterway: The Chambers Street Waterway is a small drainage course through the center of Balch's Part of Steilacoom. The waterway provides an outlet for upland wetlands, and runs in a ditch from Nisqually Street to Lafayette Street. The waterway is carried in pipes under Starling and Rainier Streets, roughly following the now vacated Chambers Street right-of-way through private yards. The waterway is piped from Lafayette Street to Puget Sound.
The Chambers Street Waterway is has not been typed by the Department of Natural Resources. No fish habitat is available within the waterway. The waterway provides fresh water to Puget Sound, and may serve as a wildlife corridor for small animals. The portions of the waterway that are not piped have been landscaped by the adjoining landowners. A buffer area surrounding the waterway is necessary to provide shade to cool the water for downstream fish, and provide cover and forage area for animals.
The riparian habitat area for the Chambers Street waterway is ten (10) feet for those areas not currently piped.

e. Cedar Street Waterway: The Cedar Street Waterway is a small drainage course along the northern edge of Balch's Part of Steilacoom. The waterway provides an outlet for upland wetlands, and runs in a ditch from Sequalish Street to Cedar Street. The waterway is carried in pipes under Sequalish Street, Balch Street, and Steilacoom Boulevard. The waterway runs through a deep ravine between Steilacoom Boulevard and Cedar Street. The waterway is piped from Cedar Street to Puget Sound.

The Cedar Street Waterway is has not been typed by the Department of Natural Resources. No fish habitat is available within the waterway. The waterway provides fresh water to Puget Sound, and may serve as a wildlife corridor for small animals. The portions of the waterway that are not piped are largely vacant parcels. A buffer area surrounding the waterway is necessary to provide shade to cool the water for downstream fish, and provide cover and forage area for animals.
The riparian habitat area width for the Cedar Street Waterway is ten (10) feet for those areas not currently piped.

f. Shannon Street: The Shannon Street Waterway is a small drainage course in Bill's Addition to Steilacoom. The waterway provides an outlet for upland stormwater, and runs in a ditch in the Shannon Street right-of-way north from Lexington Street about 100 feet. The waterway is carried west in a stormwater structure across private property approximately 50 feet, where it is released and again flows north across private property. The waterway dissipates in sandy soil approximately 100 feet north of the Cincinnati Street right-of-way. The Shannon Street Waterway has not been typed by the Department of Natural Resources. No fish habitat is available within the waterway. The waterway may serve as a wildlife corridor for deer and small animals. A buffer area surrounding the waterway is necessary to provide cover and forage area for animals.

The riparian habitat area width for the Shannon Street Waterway is the Shannon Street right-of-way between Lexington Street and the stormwater structure; and ten (10) feet for the remainder of the waterway not currently piped.

g. Cliff Avenue Waterway: The Cliff Avenue Waterway is a small drainage course north of the Cormorant Passage development. The waterway provides an outlet for upland stormwater, and runs in a ravine within or near the vacated Cliff Avenue right-of-way. The waterway empties into Puget Sound directly.

The Cliff Avenue Waterway has not been typed by the Department of Natural Resources. No fish habitat is available within the waterway. The waterway may serve as a wildlife corridor for deer and small animals. A buffer area surrounding the waterway is necessary to provide shade to cool the water for downstream fish, and to provide cover and forage area for animals.

The riparian habitat area width for the Cliff Avenue Waterway is twenty-five (25) feet.

h. Garrison Springs Waterway: The Garrision Springs Waterway is a small waterway running across the industrial area on the north edge of Town. The waterway provides an outlet for upland spring and stormwater. The waterway is piped under the paper mill and into Chambers Bay.

The Garrison Springs Waterway has not been typed by the Department of Natural Resources. Fish habitat is available within the waterway, and it may serve as a wildlife corridor for deer and small animals upstream from the mill site. A buffer area surrounding the waterway is necessary to provide shade to cool the water for fish, and to provide cover and forage area for animals.

The riparian habitat area width for the Garrison Springs Waterway is twenty-five (25) feet for those portions not currently piped.

E. **Aquatic habitat.** The following specific activities may be permitted within a riparian habitat area, pond, lake, water of the state, and marine habitat or associated buffer when the activity complies with the provisions set forth in the Town Shoreline Management Program and subject to the standards of this Subsection. The standards that provide the most protection to protected habitat and species shall apply.

1. **Clearing and Grading.** When clearing and grading is permitted as part of an authorized activity or as otherwise allowed in these standards, the following shall apply:

a. Grading is allowed only between May 1 and October 1 of each year. The Town Administrator may extend or shorten the grading period on a case-by-case basis, determined on actual weather and soil conditions.

b. Filling or modification of a wetland or wetland buffer is permitted only if it is conducted as part of an approved wetland alteration.

c. The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, any soil disturbed shall be redistributed to other areas of the project area.

d. The moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.

e. Erosion and sediment control that meets or exceeds the standards set forth in SMC 13.50 shall be provided.

2. **Shoreline erosion control measures.** New, replacement, or substantially improved shoreline erosion control measures may be permitted in accordance with an approved critical area report that demonstrates the following:

a. Natural shoreline processes will be maintained. The project will not result in increased beach erosion or alterations to, or loss of, shoreline substrate within one-quarter (1/4) mile of the project area.

b. The shoreline erosion control measures will not degrade fish or wildlife habitat conservation areas or associated wetlands.

c. Adequate mitigation measures ensure that there is no net loss of the functions or values of intertidal habitat or riparian habitat as a result of the proposed shoreline erosion control measures.

d. The proposed shoreline erosion control measures do not result in alteration of intertidal migration corridors.

3. **Streambank stabilization.** Streambank stabilization to protect new structures from future channel migration is not permitted except when such stabilization is achieved through bioengineering or soft armoring techniques in accordance with an approved critical area report.

4. **Launching ramps – Public or private.** Launching ramps may be permitted in accordance with an approved critical area report that has demonstrated the following:

a. The project will not result in increased beach erosion or alterations to, or loss of, shoreline substrate within one-quarter (1/4) mile of the site;

b. The ramp will not adversely impact critical fish or wildlife habitat areas or associated wetlands;

c. Adequate mitigation measures ensure that there is no net loss of the functions or values of intertidal habitat or riparian habitat as a result of the ramp; and

d. No alteration of intertidal migration corridors will occur as a result of the ramp.

5. **Docks.** Repair and maintenance of an existing dock or pier may be permitted in accordance with an approved critical area report subject to the following:

a. There is no increase in the use of materials creating shade for predator species or eelgrass;

b. There is no expansion in overwater coverage;

c. There is no new spanning of waters between three (3) and thirteen (13) feet deep;

d. There is no increase in the size and number of pilings; and

e. There is no use of toxic materials (such as creosote) that come in contact with the water.

6. **Roads, trails, bridges, and rights-of-way.** Construction of trails, roadways, and minor road bridging, less than or equal to thirty (30) feet wide, may be permitted in accordance with an approved critical area report subject to the following standards:

a. There is no other feasible alternative route with less impact on the environment;

b. The crossing minimizes interruption of downstream movement of wood and gravel;

c. Roads in riparian habitat areas or their buffers shall not run parallel to the water body;

d. Trails shall be located on the outer edge of the riparian area or buffer, except for limited viewing platforms and crossings;

e. Crossings, where necessary, shall only occur as near to perpendicular with the water body as possible;

f. Mitigation for impacts is provided pursuant to a mitigation plan of an approved critical area report;

g. Road bridges are designed according to the Washington Department of Fish and Wildlife *Fish Passage Design at Road Culverts*, 1999, and the National

Marine Fisheries Service *Guidelines for Salmonid Passage at Stream Crossings*, 2000; and

h. Trails and associated viewing platforms shall not be made of continuous impervious materials.

7. **Utility Facilities.** New utility lines and facilities may be permitted to cross watercourses in accordance with an approved critical area report, if they comply with the following standards:

a. Fish and wildlife habitat areas shall be avoided to the maximum extent possible;

b. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the water body and channel migration zone, where feasible;

c. The utilities shall cross at an angle greater than sixty (60) degrees to the centerline of the channel in streams or perpendicular to the channel centerline whenever boring under the channel is not feasible;

d. Crossings shall be contained within the footprint of an existing road or utility crossing where possible;

e. The utility route shall avoid paralleling the stream or following a down-valley course near the channel; and

f. The utility installation shall not increase or decrease the natural rate of shore migration or channel migration.

8. **Public flood protection measures.** New public flood protection measures and expansion of existing ones may be permitted, subject to the Town Administrator's review and approval of a critical area report and the approval of a Federal Biological Assessment by the federal agency responsible for reviewing actions related to a federally listed species.

9. **Instream structures.** Instream structures, such as, but not limited to, high flow bypasses, sediment ponds, instream ponds, retention and detention facilities, tide gates, dams, and weirs, shall be allowed only as part of an approved watershed basin restoration project approved by the Town Administrator and upon acquisition of any required state or federal permits. The structure shall be designed to avoid modifying flows and water quality in ways that may adversely affect habitat conservation areas.

10. **Stormwater conveyance facilities.** Conveyance structures may be permitted in accordance with an approved critical area report subject to the following standards:

a. No other feasible alternatives with less impact exist;

b. Mitigation for impacts is provided;

c. Stormwater conveyance facilities shall incorporate fish habitat features; and

d. Vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds in order to retard erosion, filter out sediments, and shade the water.

11. **On-site sewage systems and wells**

a. New on-site sewage systems and individual wells may be permitted in accordance with an approved critical area report only if accessory to an approved residential structure, for which it is not feasible to connect to a public sanitary sewer system.

b. Repairs to failing on-site sewage systems associated with an existing structure shall be accomplished by utilizing one of the following methods that result in the least impact:

i. Connection to an available public sanitary sewer system;

ii. Replacement with a new on-site sewage system located in a portion of the site that has already been disturbed by development and is located landward as far as possible, provided the proposed sewage system is in compliance with the Tacoma-Pierce County Health District; or

iii. Repair to the existing on-site septic system.

(Ord. 1380 §2(part), 2004).

Article VII Definitions

16.16.900 Definitions. Words not defined in this Chapter shall be as defined in the Steilacoom Municipal Code, the Washington Administrative Code, or the Revised Code of Washington. Words not found in either code shall be as defined in the Webster's Third New International Dictionary, latest edition. (Ord. 1450 §7, 2009: Ord. 1380 §2(part), 2004).

A

Active fault – A fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last 10,000 years, but faults may also be considered active in some cases if movement has occurred in the last 500,000 years.

Adaptive management – Adaptive management relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty.

Adjacent – Immediately adjoining (in contact with the boundary of the influence area) or within a distance that is less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:

A. On a site immediately adjoining a critical area;

B. A distance equal to or less than the required critical area buffer width and building setback;

C. A distance equal to or less than one-half mile (2,640 feet) from a bald eagle nest;[1]

D. A distance equal to or less than three hundred (300) feet upland from a stream, wetland, or water body;[2]

[1] Distance of 2,640 feet is based on the Washington Department of Fish and Wildlife's *Management Recommendations for Washington's Priority Species, Volume IV: Birds*, June 2000.

[2] Distance of 300 feet is based on maximum recommended riparian habitat area width from the Washington Department of Fish and Wildlife's *Management Recommendations for Washington's Priority Habitats: Riparian*, December 1997.

E. Bordering or within the floodway, floodplain or channel migration zone; or
F. A distance equal to or less than two hundred (200) feet from a critical aquifer recharge area.[3]

Advance mitigation – Mitigation of an anticipated critical area impact or hazard completed according to an approved critical area report and prior to site development.

Agricultural land – Land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, or livestock, and or that has been designated as long-term commercial significance for agricultural production.

Alluvial fan flooding – Flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport and deposition, and unpredictable flow paths.

Alteration – Any human induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation, or any other activity that changes the character of the critical area.

Anadromous fish – Fish that spawn and rear in freshwater and mature in the marine environment. While Pacific salmon die after their first spawning, adult char (bull trout) can live for many years, moving in and out of saltwater and spawning each year. The life history of Pacific salmon and char contains critical periods of time when these fish are more susceptible to environmental and physical damage than at other times. The life history of salmon, for example, contains the following stages: upstream migration of adults, spawning, inter-gravel incubation, rearing, smoltification (the time period needed for juveniles to adjust their body functions to live in the marine environment), downstream migration, and ocean rearing to adults.

Applicant – A person who files an application for permit under this Chapter and who is either the owner of the land on which that proposed activity would be located, a contract purchaser, or the authorized agent of such a person.

Aquifer – A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Aquifer, confined – An aquifer bounded above and below by beds of distinctly lower permeability than that of the aquifer itself and that contains ground water under sufficient pressure for the water to rise above the top of the aquifer.

[3] Distance of 200 feet is a suggested distance to ensure that activities within the critical aquifer recharge area are included under this Chapter, even when the exact boundaries of the critical aquifer recharge area are not known at the time of application.

Aquifer recharge areas – Areas that, due to the presence of certain soils, geology, and surface water act to recharge ground water by percolation.

Aquifer, sole source – An area designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply fifty percent (50%) or more of the drinking water for an area without a sufficient replacement available.

Aquifer susceptibility – The ease with which contaminants can move from the land surface to the aquifer based solely on the types of surface and subsurface materials in the area. Susceptibility usually defines the rate at which a contaminant will reach an aquifer unimpeded by chemical interactions with the vadose zone media.

Aquifer, unconfined – An aquifer not bounded above by a bed of distinctly lower permeability than that of the aquifer itself and containing ground water under pressure approximately equal to that of the atmosphere. This term is synonymous with the term "water table aquifer."

Area of shallow flooding – An area designated AO or AH Zone on the flood insurance map(s). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

Avalanche hazard – An area susceptible to a large mass of snow or ice, sometimes accompanied by other material, moving rapidly down a mountain slope.

B

Base flood – A flood event having a one percent (1%) chance of being equaled or exceeded in any given year, also referred to as the 100-year flood. Designations of base flood areas on flood insurance map(s) always include the letters A or V.

Basement – Any area of the building having its floor sub-grade (below ground level) on all sides.

Best available science – Current scientific information used in the process to designate, protect, or restore critical areas, which is derived from a valid scientific process as defined by WAC 365-195-900 through 925. Sources of best available science are included in *Citations of Recommended Sources of the Best Available Science for Designating and Protecting Critical Areas* published by the Washington State Department of Community, Trade and Economic Development.

Best management practices (BMPs) – Conservation practices or systems of practices and management measures that:

A. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;

B. Minimize adverse impacts to surface water and ground water flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands;
C. Protect trees and vegetation designated to be retained during and following site construction and use native plant species appropriate to the site for re-vegetation of disturbed areas; and
D. Provide standards for proper use of chemical herbicides within critical areas.

The Town of Steilacoom shall monitor the application of best management practices to ensure that the standards and policies of this Chapter are adhered to.

Biodiversity – The variety of animal and plant life and its ecological processes and interconnections – represented by the richness of ecological systems and the life that depends on them, including human life and economies.

Breakaway wall – A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

Buffer or buffer zone – An area that is contiguous to and protects a critical area which is required for the continued maintenance, functioning, and/or structural stability of a critical area.

C

Channel migration zone (CMZ) – The lateral extent of likely movement along a stream or river during the next one-hundred (100) years as determined by evidence of active stream channel movement over the past one-hundred (100) years. Evidence of active movement over the one-hundred (100) year time frame can be inferred from aerial photos or from specific channel and valley bottom characteristics. The time span typically represents the time it takes to grow mature trees that can provide functional large woody debris to streams. A CMZ is not typically present if the valley width is generally less than two (2) bankfull widths, if the stream or river is confined by terraces, no current or historical aerial photographic evidence exists of significant channel movement, and there is no field evidence of secondary channels with recent scour from stream flow or progressive bank erosion at meander bends. Areas separated from the active channel by legally existing artificial channel constraints that limit bank erosion and channel avulsion without hydraulic connections shall not be considered within the CMZ.

Coastal high hazard area – An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the flood insurance map(s) as Zone V1-30, VE, or V.

Compensation project – Actions necessary to replace project-induced critical area and buffer losses, including land acquisition, planning, construction plans, monitoring, and contingency actions.

Compensatory mitigation – Replacing project-induced losses or impacts to a critical area, and includes, but is not limited to, the following:
Restoration – Actions performed to reestablish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.
Creation – Actions performed to intentionally establish a wetland at a site where it did not formerly exist.
Enhancement – Actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.
Preservation – Actions taken to ensure the permanent protection of existing, high-quality wetlands.

Conservation easement – A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.

Critical aquifer recharge area – Areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

Critical areas – Critical areas include any of the following areas or ecosystems: Aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands, as defined in RCW 36.70A and this Chapter.

Critical area tract – Land held in private ownership and retained in an open condition in perpetuity for the protection of critical areas. Lands within this type of dedication may include but are not limited to, portions and combinations of forest habitats, grasslands, shrub steppe, on-site watersheds, 100-year floodplains, shorelines or shorelines of statewide significance, riparian areas, and wetlands.

Critical facility – A facility for which even a slight chance of flooding, inundation, or impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations that produce, use, or store hazardous materials or hazardous waste.

Critical species – All animal and plant species listed by the state or federal government as threatened or endangered.

Cumulative impacts or effects – The combined, incremental effects of human activity on ecological or critical areas functions and values. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis and changes to policies and permitting decisions.

D

Developable area – A site or portion of a site that may be utilized as the location of development, in accordance with the rules of this Chapter.

Development – Any activity upon the land consisting of construction or alteration of structures, earth movement, excavation, dredging, dumping, grading, filling, mining, paving, removal of any sand, gravel, or minerals, driving of piles, drilling operations, bulkheading, clearing of vegetation, or other land disturbance. Development includes the storage or use of equipment or materials inconsistent with the existing use, and storage of equipment or materials within the area of special flood hazard. Development also includes approvals issued by the Town of Steilacoom that binds land to specific patterns of use, including but not limited to, subdivisions, short subdivisions, zone changes, conditional use permits, and binding site plans. Development activity does not include the following activities:

A. Interior building improvements.

B. Exterior structure maintenance activities, including painting and roofing.

C. Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning, and weeding.

D. Maintenance of the following *existing* facilities that does not expand the affected area: septic tanks (routine cleaning); wells; individual utility service connections; and individual cemetery plots in established and approved cemeteries.

Development permit – Any permit issued by the Town of Steilacoom, or other authorized agency, for construction, land use, or the alteration of land.

E

Elevated building – A building that has no basement and its lowest elevated floor is raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

Emergent wetland – A wetland with at least thirty percent (30%) of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata.

Erosion – The process whereby wind, rain, water, and other natural agents mobilize and transport particles.

Erosion hazard areas – At least those areas identified by the U.S. Department of Agriculture National Resources Conservation Service as having a "severe" rill and inter-rill erosion hazard.

Exotic – Any species of plants or animals, which are foreign to the planning area.

F

Fish and wildlife habitat conservation areas – Areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created as designated by WAC 365-190-080(5). These areas include:

A. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;

B. Habitats of local importance, including but not limited to areas designated as priority habitat by the Washington Department of Fish and Wildlife;

C. Commercial and recreational shellfish areas;

D. Kelp and eelgrass beds; herring and smelt spawning areas;

E. Naturally occurring ponds under twenty (20) acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds;

F. Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington;

G. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

H. State natural area preserves and natural resource conservation areas; and

I. Land essential for preserving connections between habitat blocks and open spaces.

Fish habitat – Habitat that is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish that could be recovered by restoration or management and includes off-channel habitat.[4]

Flood or flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

Flood insurance map – The official map on which the Federal Insurance Administration has delineated the areas of special flood hazards and include the risk premium zones applicable to the community. Also known as "flood insurance rate map" or "FIRM."

Flood insurance study – The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

[4] See WAC 222-16-030(5)(h).

Floodplain – The total land area adjoining a river, stream, watercourse, or lake subject to inundation by the base flood.

Flood protection elevation – The elevation that is one (1) foot above the base flood elevation.

Flood resistant material – Materials designed to be resistant to the impacts associated with flooding and defined and described in detail in the Federal Emergency Management Agency's Technical Bulletin #2-93, dated April 1993 and FEMA publication FEMA-348, *Protecting Building Utilities from Flood Damage*.

Floodway – The channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the surface water elevation more that one (1) foot. Also known as the "zero rise floodway."

Forested wetland – A wetland with at least thirty percent (30%) of the surface area covered by woody vegetation greater than twenty (20) feet in height that is at least partially rooted within the wetland.

Formation – An assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

Formation, confining – The relatively impermeable formation immediately overlying a confined aquifer.

Frequently flooded areas – Lands in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance and attenuation functions, as determined by the Town Administrator in accordance with WAC 365-190-080(3). Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

Functions and values – The beneficial roles served by critical areas including, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical, archaeological, and aesthetic value protection, educational opportunities, and recreation. These beneficial roles are not listed in order of priority. Critical area functions can be used to help set targets (species composition, structure, etc.) for managed areas, including mitigation sites.

G

Geologically hazardous areas – Areas that may not be suited to development consistent with public health, safety, or environmental standards, because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-080(4). Types of geologically hazardous areas include: erosion, landslide, seismic, mine, and volcanic hazards.

Ground water – Water in a saturated zone or stratum beneath the surface of land or a surface water body.

Ground water management area – A specific geographic area or subarea designated pursuant to Chapter 173-100 WAC for which a ground water management program is required.

Ground water management program – A comprehensive program designed to protect ground water quality, to ensure ground water quantity, and to provide for efficient management of water resources while recognizing existing ground water rights and meeting future needs consistent with local and state objectives, policies, and authorities within a designated ground water management area or subarea and developed pursuant to Chapter 173-100 WAC.

Ground water, perched – Ground water in a saturated zone is separated from the underlying main body of ground water by an unsaturated rock zone.

Growth Management Act – RCW 36.70A and 36.70B, as amended.

H

Habitat conservation areas – Areas designated as fish and wildlife habitat conservation areas.

Habitats of local importance – These areas include a seasonal range or habitat element with which a given species has a primary association, and which, if altered may reduce the likelihood that the species will maintain and reproduce over the long-term. These might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alterations such as cliffs, talus, and wetlands. WAC 365-190-030

Hazard areas – Areas designated as frequently flooded areas or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geological condition.

Hazardous substances – Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or 173-303-100.

High intensity land use – Land uses which are associated with high levels of human disturbance or substantial habitat impacts including, but not limited to, medium- and high-density residential (more than one home per five acres), multifamily residential, some agricultural practices, and commercial and industrial land uses.

High quality wetlands – Those wetlands that meet the following criteria:
A. No, or isolated, human alteration of the wetland topography;
B. No human-caused alteration of the hydrology or the wetland appears to have recovered from the alteration;
C. Low cover and frequency of exotic plant species;
D. Relatively little human-related disturbance of the native vegetation, or recovery from past disturbance;
E. If the wetland system is degraded, it still contains a viable and high quality example of a native wetland community; and
F. No known major water quality problems.

Historic condition – Condition of the land, including flora, fauna, soil, topography, and hydrology that existed before the area and vicinity were developed or altered by human activity.

Hydraulic project approval (HPA) – A permit issued by the Washington Department of Fish and Wildlife for modifications to waters of the state in accordance with Chapter 75.20 RCW.

Hydric soil – A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the *Washington State Wetland Identification and Delineation Manual.*

Hydrologic soil groups – Soils grouped according to their runoff-producing characteristics under similar storm and cover conditions. Properties that influence runoff potential are depth to seasonally high water table, intake rate and permeability after prolonged wetting, and depth to a low permeable layer. Hydrologic soil groups are normally used in equations that estimate runoff from rainfall, but can be used to estimate a rate of water transmission in soil. There are four hydrologic soil groups:
Low runoff potential and a high rate of infiltration potential;
Moderate infiltration potential and a moderate rate of runoff potential;
Slow infiltration potential and a moderate to high rate of runoff potential; and
High runoff potential and very slow infiltration and water transmission rates.

Hydrophytic vegetation – Macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the *Washington State Wetland Identification and Delineation Manual.*

Hyporheic zone – The saturated zone located beneath and adjacent to streams that contains some portion of surface waters, serves as a filter for nutrients, and maintains water quality.

I

Impervious surface – A hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development or that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater.

In-kind compensation – To replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement "in-category."

Isolated wetlands – Those wetlands that are outside of and not contiguous to any 100-year floodplain of a lake, river, or stream and have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

Infiltration – The downward entry of water into the immediate surface of soil.

Injection well(s)

A. **Class I** – A well used to inject industrial, commercial, or municipal waste fluids beneath the lowermost formation containing, within one quarter (1/4) mile of the well bore, an underground source of drinking water.

B. **Class II** – A well used to inject fluids:

1. Brought to the surface in connection with conventional oil or natural gas exploration or production and may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as dangerous wastes at the time of injection;
2. For enhanced recovery of oil or natural gas; or
3. For storage of hydrocarbons that are liquid at standard temperature and pressure.

C. **Class III** – A well used for extraction of minerals, including but not limited to the injection of fluids for:

1. In-situ production of uranium or other metals that have not been conventionally mined;
2. Mining of sulfur by Frasch process; or
3. Solution mining of salts or potash.

D. **Class IV** – A well used to inject dangerous or radioactive waste fluids.

E. **Class V** – All injection wells not included in Classes I, II, III, or IV.

Inter-rill – Areas subject to sheet wash.

J

Joint Aquatic Resource Permits Application (JARPA) – A single application form that may be used to apply for hydraulic project approvals, shoreline management permits, approvals of exceedance of water quality standards, water quality certifications, coast guard bridge permits, Washington Department of Natural Resources use authorization, and U.S. Army Corps of Engineers permits.

L

Lahars – Mudflows and debris flows originating from the slopes of a volcano.

Land use, high intensity – See "High intensity land use."

Land use, low intensity – See "Low intensity land use."

Land use, moderate intensity – See "Moderate intensity land use."

Landslide hazard areas – Areas that are potentially subject to risk of mass movement due to a combination of geologic landslide resulting from a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope gradient, slope aspect, geologic structure, ground water, or other factors.

Low intensity land use – Land uses which are associated with low levels of human disturbance or low habitat impacts, including, but not limited to, passive recreation, open space, or forest management land uses.

Lowest floor – The lowest floor of the lowest enclosed area, including the basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, which is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this Chapter, i.e. provided there are adequate flood ventilation openings.

M

Manufactured home – A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

Manufactured home park or subdivision – A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mine hazard areas – Areas that are underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Factors that should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material.

Mitigation – Avoiding, minimizing, or compensating for adverse critical areas impacts. Mitigation, in the following sequential order of preference, is:

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 using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

C. Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project;

D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

E. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;

F. Compensating for the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

G. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

Moderate intensity land use – Land uses which are associated with moderate levels of human disturbance or substantial habitat impacts including, but not limited to, low-density residential (no more than one home per five acres), active recreation, and moderate agricultural land uses.

Monitoring – Evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems, and assessing the performance of required mitigation measures throughout the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features, including gathering baseline data.

N

Native vegetation – Plant species that are indigenous to the area in question.

Native growth protection area (NGPA) – An area where native vegetation is preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants and animal habitat;

Natural waters – Waters, excluding water conveyance systems that are artificially constructed and actively maintained for irrigation.[5]

Non-conformity – A legally established existing use or legally constructed structure that is not in compliance with current regulations.

Non-indigenous – See "Exotic."

O

Off-site compensation – To replace critical areas away from the site on which a critical area has been impacted.

On-site compensation – To replace critical areas at or adjacent to the site on which a critical areas has been impacted.

Ordinary high water mark (OHM) – That mark which is found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil has a character distinct from that of the abutting upland in respect to vegetation.

Out-of-kind compensation – To replace critical areas with substitute critical areas whose characteristics do not closely approximate those destroyed or degraded. It does not refer to replacement "out-of-category."

P

Perched ground water – See "Ground water, perched."

Permeability – The capacity of an aquifer or confining bed to transmit water. It is a property of the aquifer or confining bed and is independent of the force causing movement.

Porous soil types – Soils, as identified by the National Resources Conservation Service, U.S. Department of Agriculture, that contain voids, pores, interstices, or other openings which allow the passing of water.

Potable water – Water that is safe and palatable for human use.

Practical alternative – An alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and has less impacts to critical areas.

Primary association area – The area used on a regular basis by, is in close association with, or is necessary for the proper functioning of the habitat of a critical species. Regular basis means that the habitat area is normally, or usually known to

[5] See WAC 222-16-030(5)(d) and WAC 222-16-031(6)(d)

contain a critical species, or based on known habitat requirements of the species, the area is likely to contain the critical species. Regular basis is species and population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

Priority habitat – Habitat type or elements with unique or significant value to one or more species as classified by the Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.[6]

Project area – All areas within fifty (50) feet of the area proposed to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures. When the action binds the land, such as a subdivision, short subdivision, binding site plan, planned unit development, or rezone, the project area shall include the entire parcel, at a minimum.

Q

Qualified professional – A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and two years of related work experience.

A. A qualified professional for habitats or wetlands must have a degree in biology and professional experience related to the subject species.

B. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.

C. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

R

Recharge – The process involved in the absorption and addition of water to ground water.

Reclaimed water – Municipal wastewater effluent that has been adequately and reliability treated so that it is suitable for beneficial use. Following treatment it is no longer considered wastewater (treatment levels and water quality requirements are given in the water reclamation and reuse standards adopted by the state departments of Ecology and Health).

Recreation vehicle – A vehicle that is:

A. Built on a single chassis;

B. 400 square feet or less when measured at the largest horizontal projection;

C. Designed to be self-propelled or permanently towable by a light duty truck; and

[6] See WAC 173-26-020(34).

D. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Repair or maintenance – An activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

Restoration – Measures taken to restore an altered or damaged natural feature including:
A. Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and
B. Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

Rills – Steep-sided channels resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery. Rill erosion tends to occur on slopes, particularly steep slopes with poor vegetative cover.

Riparian habitat – Areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.[7]

River – See "Watercourse."

S

Scientific process – A valid scientific process is one that produces reliable information useful in understanding the consequences of a decision. The characteristics of a valid scientific process are as follows:
A. **Peer review.** The information has been critically reviewed by other qualified scientific experts in that scientific discipline.

[7] See Washington Department of Fish and Wildlife's *Management Recommendations for Washington's Priority Habitats – Riparian*, page 4, 1997.

B. **Methods.** The methods that were used are standardized in the pertinent scientific discipline or the methods have been appropriately peer-reviewed to ensure their reliability and validity.
C. **Logical conclusions and reasonable inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and are logically and reasonably derived from the assumptions and supported by the data presented.
D. **Quantitative analysis.** The data have been analyzed using appropriate statistical or quantitative methods.
E. **Context.** The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.
F. **References.** The assumptions, techniques, and conclusions are well referenced with citations to pertinent existing information.

Scrub–shrub wetland – A wetland with at least thirty percent (30%) of its surface area covered by woody vegetation less than twenty (20) feet in height as the uppermost strata.

Section 404 Permit – A permit issued by the U.S. Corps of Engineers for the placement of dredge or fill material or clearing in waters of the United States, including wetlands, in accordance with 33 USC § 1344. Section 404 permits may also be for endangered species consultation.
Require a consultation under Section 7 of the Federal Endangered Species Act *(note: check the appropriate reference for this)*.

Seeps – A spot where water oozes from the earth, often forming the source of a small stream. water by reason of the intrinsic nature of its operations. A use that can be carried out only on, in, or adjacent to water. Examples of water dependent uses include: ship cargo terminal loading areas; fishing;

Seismic hazard areas – Areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

Serviceable – Presently usable.

SEPA – Washington State Environmental Policy Act, Chapter 43.21C RCW.

Shorelines – All of the water areas of the state as defined in RCW 90.58.030, including reservoirs and their associated shorelands, together with the lands underlying them except:
A. Shorelines of statewide significance;
B. Shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second (20 cfps) or less and the wetlands associated with such upstream segments; and
C. Shorelines on lakes less than twenty (20) acres in size and wetlands associated with such small lakes.

Shorelines of the state – The total of all "shorelines," as defined in RCW 90.58.030(2)(d), and "shorelines of statewide significance" within the state, as defined in RCW 90.58.030(2)(c).

Shorelines of statewide significance – Those areas defined in RCW 90.58.030(2)(e).

Shorelands or shoreland areas – Those lands extending landward for two hundred (200) feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred (200) feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of Chapter 90.58 RCW.

Significant portion of its range – That portion of a species range likely to be essential to the long-term survival of the population in Washington.

Soil survey – The most recent soil survey for the local area or county by the National Resources Conservation Service, U.S. Department of Agriculture.

Special flood hazard areas – The land in the floodplain within an area subject to a one percent (1%) or greater chance of flooding in any given year. Designations of special flood hazard areas on flood insurance map(s) always include the letters A or V.

Special protection areas – Aquifer recharge areas defined by WAC 173-200-090 that require special consideration or increased protection because of unique characteristics, including, but not limited to:

A. Ground waters that support an ecological system requiring more stringent criteria than drinking water standards;

B. Ground water recharge areas and wellhead protection areas that are vulnerable to pollution because of hydrogeologic characteristics; and

C. Sole source aquifer status.

Sole source aquifer – See "aquifer, sole source."

Species – Any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

Species, endangered – Any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

Species of local importance – Those species of local concern due to their population status or their sensitivity to habitat manipulation, or that are game species.

Species, priority – Any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence as genetically viable population levels as classified by the Washington Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

Species, threatened – Any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

Stream – See "Watercourse."

Sub-drainage basin or subbasin – The drainage area of the highest order stream containing the subject property impact area. Stream order is the term used to define the position of a stream in the hierarchy of tributaries in the watershed. The smallest streams are the highest order (first order) tributaries. These are the upper watershed streams and have no tributaries of their own. When two first order streams meet, they form a second order stream, and when two second order streams meet they become a third order stream, and so on.

Substantial damage – Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

Substantial improvement – Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either: before the improvement or repair is started; or if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.
The term can exclude:
1) Any project for improvement of a structure to correct pre-cited existing violations of state or local health, sanitary, or safety code specifications which have been previously indentified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
2) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic places.

U
Unavoidable – Adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.[8]

[8] See RCW 90.84.010(9).

V

Volcanic hazard areas – Areas that are subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, mudflows, or related flooding resulting from volcanic activity.

Vulnerability – The combined effect of susceptibility to contamination and the presence of potential contaminants.

W

Water dependent – A use or portion of a use that cannot exist in a location that is not adjacent to the water, but is dependent on the ferry and passenger terminals; barge loading, ship building, and dry docking facilities; marinas, moorage, and boat launching facilities; aquaculture; float plane operations; surface water intake; and sanitary sewer and storm drain outfalls.

Water resource inventory area (WRIA) – One of sixty-two (62) watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

Water table – That surface in an unconfined aquifer at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the aquifer just far enough to hold standing water.

Water table aquifer – See "Aquifer, unconfined."

Water Typing System – Waters classified according to WAC 222-16-031 as follows:

A. **Type 1 Water** – All waters, within their ordinary high-water mark, as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, but not including those waters' associated wetlands as defined in Chapter 90.58 RCW.

B. **Type 2 Water** – Segments of natural waters that are not classified as Type 1 Water and have a high fish, wildlife, or human use. These are segments of natural waters and periodically inundated areas of their associated wetlands, which:

1. Are diverted for domestic use by more than one hundred (100) residential or camping units or by a public accommodation facility licensed to serve more than ten (10) persons, where such diversion is determined by the Washington State Department of Natural Resources to be a valid appropriation of water and only considered Type 2 Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by fifty percent (50%), or whichever is less;

2. Are diverted for use by federal, state, tribal, or private fish hatcheries. Such waters shall be considered Type 2 Water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality;

3. Are within a federal, state, local, or private campground having more than thirty (30) camping units: Provided, that the water shall not be considered to enter a

campground until it reaches the boundary of the park lands available for public use and comes within one hundred (100) feet of a camping unit;

4. Are used by fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish populations:
a. Stream segments having a defined channel twenty (20) feet or greater within the bankfull width and having a gradient of less than four percent (4%).

b. Lakes, ponds, or impoundments having a surface area of one (1) acre or greater at seasonal low water; or

5. Are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:
a. The site must be connected to a fish bearing stream and be accessible during some period of the year; and

b. The off-channel water must be accessible to fish through a drainage with less than a five percent (5%) gradient.

C. **Type 3 Water** – Segments of natural waters that are not classified as Type 1 or 2 Waters and have a moderate to slight fish, wildlife, and human use. These are segments of natural waters and periodically inundated areas of their associated wetlands which:
1. Are diverted for domestic use by more than ten (10) residential or camping units or by a public accommodation facility licensed to serve more than ten (10) persons, where such diversion is determined by the Washington State Department of Natural Resources to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type 3 Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by fifty percent (50%), whichever is less;

2. Are used by fish for spawning, rearing, or migration. The requirements for determining fish use are described in the State Forest Practices Board Manual, Section 13. If fish use has not been determined:
a. Waters having the following characteristics are presumed to have fish use:
i. Stream segments having a defined channel of two (2) feet or greater within the bankfull width in Western Washington; or three (3) feet or greater in width in Eastern Washington; and having a gradient of sixteen percent (16%) or less;

ii. Stream segments having a defined channel or two (2) feet or greater within the bankfull width in Western Washington; or three (3) feet or greater within the bankfull width in Eastern Washington; and having a gradient greater than sixteen percent (16%) and less than or equal to twenty percent (20%), and having greater than fifty (50) acres in contributing basin size in Western Washington or greater than 175 acres contributing basin size in Eastern Washington, based on hydrographic boundaries;

iii. Ponds or impoundments having a surface area of less than one (1) acre at seasonal low water and having an outlet to a fish stream;

iv. Ponds of impoundments having a surface area greater than one half (0.5) acre at seasonal low water.

b. The Washington Department of Natural Resources shall waive or modify the characteristics in (a) of this Subsection where:
i. Waters have confirmed, long-term, naturally occurring water quality parameters incapable of supporting fish;

ii. Snowmelt streams have short flow cycles that do not support successful life history phases of fish. These streams typically have no flow in the winter months and discontinue flow by June 1; or

iii. Sufficient information about a geomorphic region is available to support a departure from the characteristics in (a) of this Subsection, as determined in consultation with the Washington Department of Fish and Wildlife, Washington Department of Ecology, affected tribes, and interested parties.

D. **Type 4 Water** – All segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type 4 Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow. If the uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see *State Forest Practices Board Manual*, Section 23), then Type 4 Waters begin at a point along the channel where the contributing basin area is:
1. At least thirteen (13) acres in the Western Washington coastal zone (which corresponds to the Sitka spruce zone defined in Franklin and Dyrness, 1973);

2. At least fifty two (52) acres in other locations in Western Washington;

3. At least three hundred (300) acres in Eastern Washington.

E. **Type 5 Waters** – All segments of natural waters within the bankfull width of the defined channels that are not Type 1, 2, 3, or 4 Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of the year and are not located downstream from any stream reach that is a Type 4 Water. Type 5 Waters must be physically connected by an above-ground channel system to Type 1, 2, 3, or 4 Waters.

Watercourse – Any portion of a channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state including areas in which fish may spawn, reside, or through which they may pass, and tributary waters with defined beds or

banks, which influence the quality of fish habitat downstream. This definition includes watercourses that flow on an intermittent basis or which fluctuate in level during the year and applies to the entire bed of such watercourse whether or not the water is at peak level. This definition does not include irrigation ditches, canals, stormwater run-off devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans.

Well – A bored, drilled, or driven shaft, or a dug hole whose depth is greater that the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

Wellhead protection area (WHPA) – The portion of a zone of contribution for a well, wellfield, or spring, as defined using criteria established by the Washington Department of Ecology.

Wetlands – 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 adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, 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, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. For identifying and delineating a wetland, local government shall use the *Washington State Wetland Identification and Delineation Manual.*

Wetland classes, classes of wetlands, or wetland types – The descriptive classes of the wetlands taxonomic classification system of the U.S. Fish and Wildlife Service (Cowardin, et al. 1979).

Wetland edge – The boundary of a wetland as delineated based on the definitions contained in this Chapter.

Wetlands mitigation bank – A site where wetlands are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.[9]

Z

Zone of contribution – The area surrounding a well or spring that encompasses all areas or features that supply ground water recharge to the well or spring.

[9] See RCW 90.84.010(5).