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THURSTON COUNTY SHORELINE MASTER PROGRAM

PREPARED FOR:

Thurston County Board of County Commissioners

PREPARED BY:

Thurston County Resource Stewardship

THURSTON COUNTY
WASHINGTON
SINCE 1852

_____ , 2017

Chapters:

19.100	Introduction
19.150	Definitions
19.200	Shoreline Jurisdiction and Environment Designation
19.300	General Goals and Policies
19.400	General Regulations
19.500	Permit Provisions, Review and Enforcement
19.600	Shoreline Use and Modification Development Standards
19.700	Special Reports
Appendix A	Shoreline Environment Designations Map
Appendix B	Mitigation Options to Achieve No Net Loss for New or Re-Development Activities
Appendix C	Shoreline Restoration Plan
Appendix D	Channel Migration Zone Maps
Appendix E	Critical Area Regulations Incorporated By Reference

Acknowledgements:

Chapter 19.100 Introduction

19.100.105 Title

The goals, policies and regulations herein shall be known as the Thurston County Shoreline Master Program, and may be referred to as the "Master Program", "Program", or the "SMP".

19.100.110 Purpose and Intent

The Thurston County Comprehensive Plan explains that Thurston County's shorelines provide valuable habitat for fish and wildlife, economic diversity, and recreational opportunities used by residents of all ages. Shorelines play an important role in enhancing the quality of life for our County's citizens. Therefore, the purpose of the Master Program is to guide the future development of the shorelines in Thurston County in a manner consistent with the Shoreline Management Act of 1971, hereinafter the "Act." The Act and this Program comprise the basic state and county law regulating use of shorelines in the county and is the regulating document for critical areas within shoreline jurisdiction.

Thurston County utilizes a variety of other regulations, policies, plans, and programs to supplement the goals and regulations contained within the Shoreline Master Program, and to manage shoreline resources and regulate development near the shoreline. All development projects are reviewed for compliance with the Thurston County Code (TCC) including but not limited to: Thurston County Comprehensive Plan, Zoning Ordinance (TCC 20, 21, 22, and 23); Critical Areas Ordinance (TCC 24); Thurston County Stormwater Standards (TCC 15.05); Platting and Subdivisions (TCC 18); and the State Environmental Policy Act (SEPA) Ordinance (TCC 17.09.). The County works with other entities such as the Thurston Conservation District, Stream Team, South Sound Salmon Recovery Group and watershed lead entities to promote awareness of shoreline issues. In addition, the County has developed Shellfish Protection Districts, Basin Plans, and Capital Facilities Plans to further the goals and the policies of the Shoreline Master Program and promote wise shoreline usage.

Although critical areas in shoreline jurisdiction are identified and designated under the Growth Management Act (GMA), they must also be protected under the Shoreline Management Act (SMA). The Washington State Legislature has determined that local governments must adopt Programs that protect critical areas within shorelines at a level that assures no net loss of shoreline ecological functions (ESHB 1653 Sec. 2(4)). Although Washington's shorelines may contain critical areas, the shorelines themselves are not critical areas by default as defined by GMA.

The provisions of this title for regulating critical areas shall apply to all land, all water areas and all structures, and all uses irrespective of lot lines in the unincorporated territory of Thurston County, Washington, except for existing and on-going agricultural activities. Agricultural activities meeting the requirements of TCC Section 17.15.110 shall be regulated by Chapter 17.15 TCC (as updated) or by the Voluntary Stewardship Program (VSP) once a VSP Workplan is adopted.

19.100.115 Adoption Authority

This Master Program is adopted pursuant to the authority granted under the Shoreline Management Act of 1971, Chapter 90.58 Revised Code of Washington (RCW) and Chapter 173-26 of the Washington Administrative Code (WAC).

19.100.120 Applicability

A. Unless specifically exempted by statute, all proposed uses and development occurring within shoreline jurisdiction must conform to Chapter 90.58 RCW, the Act, this Master Program and Thurston County Code (TCC), whether or not a permit is required. This Master Program applies to every person, firm, corporation, government agency, or department who or which:

1. Proposes any new use, activity, development or structure within the unincorporated area of Thurston County subject to the Act, as now or hereafter amended; or
2. Proposes a change, modification, addition or alteration to a legally existing use, activity, development or structure within the unincorporated area of Thurston County subject to the Act, as now or hereafter amended.

B. Direct federal agency activities affecting the uses or resources subject to the Act must be consistent to the maximum extent practicable with the enforceable provisions of the Act and with this Master Program as required by WAC 173-27-060.

C. The Act and this Program, including the permit system, shall apply to all non-federal developments and uses undertaken on federal lands and on lands subject to non-federal ownership, lease or agreement, even though such lands may fall within the external boundaries of a federal ownership.

D. This Master Program shall apply to all unincorporated rural and urban lands until such time as a city incorporates land into their city boundaries through annexation.

19.100.125 Relationship to Other Plans and Regulations

A. Uses, developments, and activities regulated by the Master Program may be independently subject to the Thurston County Comprehensive Plan, the Washington State Environmental Policy Act, the Thurston County Code (TCC) Zoning (Title 20, 21, 22, and 23), Platting and Subdivisions (Title 18), Environment (Title 17), the Critical Areas Ordinance (Title 24), and various other provisions of federal, state, and county laws. The applicant must comply with all applicable laws prior to commencing any use, development, or activity.

B. Should a conflict occur between the provisions of this Program or between this Program and the laws, regulations, codes or rules promulgated by any other authority having jurisdiction within Thurston County, the more restrictive requirements shall apply, except when constrained by federal or state law, or where specifically provided otherwise in this Program.

C. When achieved in accordance with Title 20, 21, 22, or 23 TCC (Zoning), building and lot dimension flexibility may be allowed on shorelines within Urban areas or Limited Areas of More Intensive Rural Development (LAMIRDs) when consistent with the Act and all other applicable

requirements of this Program, including the requirement to achieve no net loss of shoreline ecological functions.

Further, in order to preclude fragmentation of review and the necessity for individual shoreline permits, a combined shoreline permit is encouraged for proposed activities within the shoreline jurisdiction where feasible.

D. Consistent with RCW 36.70A.480, the goals and policies of this Master Program approved under Chapter 90.58 RCW shall be considered an element of the County's comprehensive plan, including Chapter 19.300 (General Goals and Policies). All regulatory elements of this Program, including, but not limited to Chapter 19.100 (Introduction), Chapter 19.150 (Definitions), Chapter 19.200 (Shoreline Jurisdiction and Environment Designations), Chapter 19.400 (General Regulations), Chapter 19.500 (Permit Provisions, Review and Enforcement), Chapter 19.600 (Shoreline Use and Modification Development Standards), Chapter 19.700 (Special Reports), Appendix A (Shoreline Environment Designations Map), Appendix B (Mitigation Options to Achieve No Net Loss for New or Re-Development Activities), and Appendix D (Channel Migration Zone Maps) shall be considered a part of the County's development regulations. Certain non-regulatory elements of this Master Program, including, but not limited to Appendix C (Shoreline Restoration Plan), may be updated and amended at any time without requiring a formal Master Program amendment.

E. Where this Program makes reference to RCW, WAC, or other state or federal law or regulation, the most recent amendment or version shall apply.

F. This Program will be applied consistent with all applicable federal, state and local laws affecting tribal rights.

G. Coastal Zone Management Act Consistency reviews for sites within federal jurisdiction shall apply the Environment Designation criteria in Chapter 19.200 that most closely correspond to the project site in order to determine applicable Program policies.

19.100.130 Governing Principles

The following governing principals, along with the policy statement of RCW 90.58.020, the principles of WAC 173-26, and purpose statements in Title 24.01.010 & 24.01.015 TCC, establish the basic concepts of this Program.

A. Any inconsistencies between this Program and the Act must be resolved in accordance with the Act.

B. The policies of this Program may be achieved by diverse means, one of which is regulation. Other means authorized by the Act include, but are not limited to: acquisition of lands and/or easements by purchase or gift, incentive programs, and implementation of capital facility and/or non-structural programs.

C. Protecting the shoreline environment is an essential statewide policy goal. Permitted and/or exempt development, actions taken prior to the Act's adoption, and/or unregulated activities can impair shoreline ecological processes and functions. This Program protects shoreline ecology from such impairments in the following ways:

1. By using a process that identifies, inventories, and ensures meaningful understanding of current and potential ecological functions provided by shorelines.
2. By including policies and regulations that require mitigation of all adverse impacts in a manner that ensures no net loss of shoreline ecological functions. The required mitigation shall include avoidance, minimization, and compensation of impacts in accordance with the policies and regulations for mitigation sequencing. This Program and any future amendment hereto shall ensure no net loss of shoreline ecological functions and processes on a programmatic basis in accordance with the baseline functions present as of the date of adoption of this Program.
3. By including policies and regulations that ensure that the cumulative effect of exempt development will not cause a net loss of shoreline ecological functions, and by fairly allocating the burden of addressing such impacts among development opportunities.
4. By including regulations and regulatory incentives designed to protect shoreline ecological functions, and restore impaired ecological functions where such opportunities have been identified, consistent with the Shoreline Restoration Plan (Appendix C) developed by Thurston County.

D. Regulation of private property to implement Program goals, such as public access and protection of ecological functions and processes, must be consistent with all relevant constitutional and other legal limitations. These include, but are not limited to the protections afforded by the federal and state constitutions, and federal, state and local laws.

E. Regulatory or administrative actions contained herein must be implemented with consideration to the Public Trust Doctrine, regulatory takings, and other applicable legal principles as appropriate.

F. Regulatory provisions of this Program are limited to Shorelines of the State, whereas the planning functions of this Program may extend beyond the designated shoreline boundaries.

G. Consistent with the policy and use preferences of RCW 90.58.020, Thurston County should balance the various policy goals of this Program along with giving consideration to other relevant local, state, and federal regulatory and non-regulatory programs.

19.100.135 Liberal Construction

As provided for in RCW 90.58.900, the Act is exempted from the rule of strict construction. Therefore, the Act and this Program shall be liberally construed to give full effect to the purposes, goals, objectives, and policies for which the Act and this Program were enacted and adopted, respectively.

19.100.140 Severability

Should any section or provision of this Program be declared invalid, such decision shall not affect the validity of this Program as a whole.

Chapter 19.150 Definitions

Where terms, phrases and words are not defined, they shall have their ordinary accepted meanings within the context with which they are used. The most current version of the English Webster's Dictionary shall be considered as providing ordinary accepted meanings. In addition, where available, the definitions provided in WAC 173-26-020, WAC 173-27-030, Chapter 90.58 RCW, TCC 20.03, or TCC Title 24.03 shall be applied in the interpretation and administration of this Program. The definition of various terms as presented in this section does not necessarily represent the same definitions as may be found for the same terms in other chapters of the Thurston County Code.

19.150.100 Abandonment: cessation or vacation of a permitted use or structure through non-action for a period of one year or longer**.**

19.150.105Accessory use or accessory structure - any use or structure customarily incidental and accessory to the principal use of a site or a building or other structure located upon the same lot.

19.150.110 Accessory Structure -View Blockage: as it relates to view blockage, buildings and other structures encompassing less than 200 square feet and less than twelve feet in height from grade level, and fences which are six feet, or less in height from grade level do not constitute view blockage.

19.150.115 Accretion: the growth of a beach by the addition of material transported by wind and/or water. Included are such shoreforms as barrier beaches, points, spits, and hooks.

19.150.120 Adaptive Management: a process of evaluating data acquired through project monitoring relative to a developed plan with goals or benchmarks, and taking action based on the results in order to reduce uncertainty with regard to adverse ecological impacts and improve outcomes over time.

19.150.125 Adjacent Principle Building: a principle building on a lot abutting the applicant's lot.

19.150.130 Agriculture: uses and practices, primarily commercial in nature, which are in support of agricultural activities, agricultural products, agricultural equipment and facilities, and agricultural land, as defined in WAC 173-26-020(3). This excludes activities typically associated with single-family residences, such as gardening activities primarily for on-site consumption. Such uses may still be subject to other provisions of this Program, Title 24 TCC, or Title 17.15 TCC.

19.150.135 Amendment: a revision, update, addition, deletion, and/or reenactment to an existing shoreline master program.

19.150.140 Anchor: a device used to secure a vessel

19.150.145 Appurtenance: structures and development necessarily connected to the use of a single family residence, and located within contiguous ownership of the primary residential use: Common appurtenances include a garage, deck, driveway, fences, utilities, septic tanks and drain-fields, officially registered historic structures, and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the OHWM. Appurtenances do not include bulkheads and other shoreline modifications or over-water structures, including tower stairs with landings at or below the ordinary high water line.

19.150.150 Aquaculture: 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 and tribal co-managed wild-stock geoduck fishery.

19.150.155 Aquatic Lands: the bed-lands (submerged at all times) and tidelands (submerged lands and beaches that are exposed and submerged with the ebb and flow of the tides) beneath the waters of lakes, rivers and marine waters and along their shores.

19.150.160 Associated Wetlands: those wetlands which are in proximity to and either influence or are influenced by tidal waters or a lake or stream subject to the Act.

19.150.165 Barrier Structure: any shoreline or in-water structure that has the primary purpose of diverting, capturing or altering the natural flow or transport of water or sediment. These include breakwaters, jetties, groins and weirs.

19.150.170 Best Management Practices: those practices determined to be the most efficient, practical and cost-effective measures identified to reduce or control impacts to water bodies from a particular activity, most commonly by reducing the loading of pollutants from such sources into stormwater and water bodies.

19.150.175 Boat House: a structure built for and with a continued primary purpose to store aquatic vessels and usually associated with a single-family residence.

19.150.180 Boat Launch or Ramp: a solid ramp, usually made of concrete, used for the purpose of placing watercraft in and out of the water.

19.150.185 Boating Facilities: public and private mooring structures and related services serving five or more boats, including piers, docks, buoys, floats, marinas, and facilities for the use of boat launching, boat storage, or for the service and maintenance of pleasure or commercial craft.

19.150.190 Breakwater: a protective structure usually built off-shore to protect beaches, bluffs, or harbor areas from wave action.

19.150.195 Buffer: a non-clearing area established to protect the integrity, functions and values of the affected critical area or shoreline, so that no net loss of critical area or shoreline ecological functions occurs. Under optimal conditions, buffers are composed of intact native vegetation. Buffer widths are measured horizontally.

19.150.200 Building: any structure used or intended for supporting or sheltering any use or occupancy.

19.150.205 Building Line: the perimeter or that portion of a building closest to the ordinary high water mark (OHWM), including (but not limited to) decks, balconies, open steps, architectural features (such as cornices), utilities, and roof overhangs.

19.150.210 Bulkhead: a “normal protective” bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the OHWM for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion.

19.150.215 Buoy: an anchoring device with a float used to secure a vessel. For the purposes of this program, the term “buoy field” refers to more than one buoy per parcel.

19.150.220 Census-defined Urban Areas: Territories that consist of areas of high population density and urban land use resulting in a representation of "urban footprint". The territories include residential, commercial and other non-residential urban land uses. Defined by U.S. Department of Commerce and the U.S. Census Bureau Tigerline Shapefile 2012: *http://www.census.gov/geo/www/ua/2010urbanruralclass.html*.

19.150.225 Certified Local Government: a local government that establishes a historic preservation program meeting federal and state standards, and is eligible to apply to the State Historic Preservation Officer (SHPO) and the National Park Service for certification.

19.150.230 Clearing: the destruction, removal, or disposal of vegetation by manual, mechanical, or chemical methods. Clearing includes logging, even when the understory of vegetation is not being removed.

19.150.235 Commercial, Commercial Development: a use that involves wholesale or retail trade, or the provision of services.

19.150.240 Compensatory Mitigation: compensatory mitigation is the stage of mitigation sequencing where unavoidable impacts to shoreline ecological functions are offset by restoring, creating, enhancing, or preserving critical habitat within a specific watershed or geographic area.

19.150.245 Conditional Use Permit (CUP): a permit for a use, development, or substantial development that is classified as a conditional use or is not a listed use in the Use and Modifications Matrix in Chapter 19.600.

19.150.250 Critical Areas: As defined in Title 24 (Critical Areas) of the Thurston County Code which is adopted by reference as though set forth herein in full, (as amended) provided that the reasonable use provisions set forth in TCC 24.45, and 24.17, shall not be available within the shoreline jurisdiction. Instead, applicants may apply for a shoreline variance when seeking relief from critical areas regulations within shorelines.

19.150.255 Critical Habitat: Habitat areas within which endangered, threatened, sensitive or monitored plant, fish, or wildlife species have a primary association (e.g., feeding, breeding, rearing of young, migrating). Such areas are identified herein with reference to lists, categories, and definitions promulgated by the Washington Department of Fish and Wildlife as identified in WAC 232-12-011 or WAC 232-12-014; in the Priority Habitat and Species (PHS) program by the Department of Fish and Wildlife; or by rules and regulations adopted by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or other agency with jurisdiction for such designations.

19.150.260 Critical Freshwater Habitats: includes those portions of streams, rivers, wetlands, lakes and their associated channel migration zones and flood plains that provide habitat for priority species at any stage in their life cycles, and provide critical ecosystem-wide processes, as established in WAC 173-26-221(2)(c)(iv). This is distinguished from the term "Critical Habitat" as utilized in relation to the Endangered Species Act.

19.150.265 Critical Saltwater Habitats: as defined in WAC 173-26-221(2)(c)(iii), include all kelp beds; eelgrass beds; spawning and holding areas for forage fish, such as herring, smelt and sand lance; subsistence, commercial and recreational shellfish beds; mudflats; intertidal habitats with vascular plants; and areas with which priority species have a primary association. See this chapter for definitions of each type of critical saltwater habitat. This is distinguished from the term "Critical Habitat" as utilized in relation to the Endangered Species Act.

19.150.270 Cumulative impacts or cumulative effects: the impact on the environment or other shoreline functions or uses which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a long period of time. See WAC 173-26-186(8)(d).

19.150.275 Department: for the purposes of this program, means the Thurston County Resource Stewardship Department (or as amended).

19.150.280 Development: means any human-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, clearing, paving, excavation or drilling operations, storage of equipment or materials, 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 waters overlying lands subject to the Act at any stage of water level.

19.150.285 Development Regulation Standards: controls placed on development or land uses, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under Chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

19.150.290 Dock: the collective term for a moorage structure that typically consists of a nearshore fixed-pile pier, a ramp (or gangway), and a float that is used as a landing place for marine transport or for recreational purposes. It does not include recreational decks, storage facilities or other accessory structures.

19.150.295 Dredge: the removal of earth, gravel, sand or other mineral substances from the bottom of a stream, river, lake, bay, or other waterbody, including wetlands.

19.150.300 Ecological Functions: the work performed or 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.

19.150.305 Ecologically Intact: those shoreline areas that retain the majority of their natural shoreline functions, as evidenced by the shoreline configuration and the presence of native vegetation. Generally, but not necessarily, ecologically intact shorelines are free of structural shoreline modifications, structures, and intensive human uses. In forested areas, they generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent water bodies. Recognizing that there is a continuum of ecological conditions ranging from near natural conditions to totally degraded and contaminated sites, this term is intended to delineate those shoreline areas that provide valuable functions for the larger aquatic and terrestrial environments which could be lost or significantly reduced by human development. Whether or not a shoreline is ecologically intact is determined on a case-by-case basis.

19.150.310 Eelgrass: a flowering plant adapted to the marine environment that roots in sand or mud in shallow waters where waves and currents are not too severe. Eelgrass beds require high ambient light levels. Where eelgrass beds are disputed as a critical saltwater habitat, appropriate state agencies and co-managing tribes shall be consulted in order to assist with the determination.

19.150.315 Emergency: an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this program. All

emergency construction is construed narrowly and shall be consistent with the SMA and this Program (RCW 90.58.030 (3eiii)). See also emergency exemption procedures in WAC 173-27-040(2)(d).

19.150.320 Endangered Species Act (ESA) - a federal law intended to protect any fish or wildlife species that are threatened with extinction throughout all or a significant portion of its range.

19.150.325 Enhancement: to improve the ecological functions at the site or landscape scale. This includes physical, biological and chemical processes which contribute to the maintenance of the aquatic and terrestrial environments.

19.150.330 Environmental Limitations: limiting factors to new modifications or development, such as floodplains or unstable slopes.

19.150.335 Excavation: the mechanical removal of earthen material.

19.150.340 Exemptions: uses and development, set forth in WAC 173-27-040 and RCW 90.58.030 (3)(e), 90.58.140(9), 90.58.147, 90.58.355, and 90.58.515, that are not required to obtain a Substantial Development Permit, but which must otherwise comply with applicable provisions of the Act and this Program. Certain exemption developments must obtain a letter of exemption (see Section 19.500.100(C)(4)).

19.150.345 Existing Lots: lots, tracts, parcels, sites or other fractional part of divided land that was legally established in accordance with local and state subdivision requirements prior to the effective date of this Program.

19.150.350 Existing Structures: structures that were legally constructed prior to the effective date of this Program in accordance with the requirements in effect at the time of construction.

19.150.355 Existing Uses: uses that were legally established prior to the effective date of this Program in accordance with the applicable regulations at the time established.

19.150.360 Facilities: defined per 19.600.115(3)

19.150.365 Feasible: an action, such as a development project, mitigation, or preservation requirement, that 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.

The burden of proving infeasibility is on the applicant. In determining infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

19.150.370 Fill: the addition or redistribution of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, within a one-hundred year floodplain; or within an important habitat, lake, pond, stream, wetlands, or shorelands (and their associated buffers) in a

manner that changes the elevation or creates dry land. Large woody debris or other native materials approved as a part of a habitat restoration project shall not be considered fill.

19.150.375 Float: an anchored (not directly to the shore) floating platform that is free to rise and fall with water levels and is used for water-dependent recreational activities such as boat mooring, swimming or diving. Floats may stand alone with no over-water connection to shore or may be located at the end of a pier or ramp.

19.150.380 Forage Fish: small, schooling fishes that are key prey items for larger predatory fish and wildlife in a marine food web. Puget Sound species include, but are not limited to, Pacific herring, surf smelt, Pacific sand lance and northern anchovy. Each species has specific habitat requirements for spawning, such as sediment grain size, tidal heights, or vegetation types. Known spawning and holding areas have been mapped by the Department of Fish and Wildlife.

19.150.385 Forest Practices: any activity conducted on or directly pertaining to forestland and relating to growing, harvesting or processing timber, including, but not limited to:

A. Road and trail construction;

B. Harvesting, final and intermediate;

C. Pre-commercial thinning;

D. Reforestation;

E. Fertilization;

F. Prevention and suppression of diseases and insects;

G. Salvage of trees; and

H. Brush control.

Forest practices shall not include preparatory work such as tree marking, surveying and road flagging; or removal or harvest of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms and other products which cannot normally be expected to result in damage to forest soils, timber or public resources.

19.150.390 Groin: barrier-type structures extending waterward from the back shore across the beach to interrupt and trap sand movement.

19.150.395 Guidelines (WAC): those standards adopted by the Department of Ecology pursuant to RCW 90.58.200 to assist in the implementation of Chapter 90.58 RCW for the regulation of shorelines of the state. The standards may be referenced at WAC 173-26 and 173-27.

19.150.400 Hard Surface: An impervious surface, a permeable pavement, or a vegetated roof.

19.150.405 Impervious Surface: A non-vegetated surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which 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, roof tops, 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.

19.150.410 Industrial, Industrial Development: facilities for processing, manufacturing, and storing finished or partially finished goods; heavy vehicle dispatch and maintenance facilities; and similar facilities.

19.150.415 In-lieu Fee (Fee In-Lieu): a fee paid to a sponsor (e.g., Thurston County,) to satisfy compensatory mitigation requirements when mitigation is precluded from being completed on-site due to site development or physical constraints, is part of a habitat conservation plan, or when the permitting agencies determine that ILF is more environmentally preferable over proposed permittee responsible mitigation.

19.150.420 Invasive exotics/non-native vegetation: see Chapters 17.10.010 RCW and WAC 16-750-003

19.150.425 In-stream Structure: 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.

19.150.430 Jetty: barrier-type structures designed to modify or control sand movement and usually placed at inlets to improve a navigable channel.

19.150.435 Kelp: a plant generally attaching to bedrock or cobbles in shallow waters, especially in areas with moderate to high waves or currents. Kelp beds generally require high ambient light levels. Kelp includes both floating and non-floating species. Where kelp beds are disputed as a critical saltwater habitat, appropriate state agencies and co-managing tribes shall be consulted in order to assist with the determination.

19.150.440 Landscaping/Landscape materials:

19.150.445 Land-disturbing Activity: Any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land-disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

19.150.505 Limited Area of More Intense Rural Development (LAMIRD): locally designated rural areas authorized to accept more intense, urban-like development under RCW 36.70A.070(5)(d) and Title 20 TCC.

19.150.510 Live Aboard: use of a vessel as a residence, meaning full time occupancy in a single location, for an uninterrupted period exceeding 60 days in any calendar year.

19.150.515 Lot: a fractional part of divided lands having fixed boundaries, being of sufficient area and dimension to meet minimum zoning requirements for width and area. The term shall include tracts, or parcels. Where the context so indicates, lots, tracts or parcels may refer to subdivided lands not conforming to, or in violation of, zoning or subdivision regulations.

19.150.520 Lot Coverage: the percent or square footage of a lot that will be covered by a modification to impervious or hardened surfaces.

19.150.525 Low Impact Development (LID): a stormwater management strategy that that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

19.150.530 Low-intensity: activities which do not adversely alter natural ecosystem functions.

19.150.535 Macroalgae: Marine algae visible to the naked eye, such as kelp or other seaweeds.

19.150.540 Marina: a public or private water dependent wet moorage and/or dry boat storage facility for 10 or more pleasure craft and/or 10 or more commercial craft, and generally including goods or services related to boating. Marinas also include wet moorage facilities where boat moorage slips may be leased or rented to individuals who are not a member owner of an associated residential development. Launching facilities may also be provided. Marinas may be open to the general public or restricted on the basis of property ownership or membership.

19.150.545 Marine rail system: a pair of sloping tracks which extends into the tidelands, used for the purpose of placing watercraft in and out of the water.

19.150.550 May: a permissive term that means the action is acceptable, provided it satisfies all other provisions of this Program.

19.150.555 Mining: the removal of sand, soil, minerals, and other naturally occurring materials from the earth for commercial or economic use.

19.150.560 Mitigation Sequencing: Mitigation actions associated with development proposals impacting critical areas shall adhere to the following mitigation sequence:

A. Avoiding the impact altogether by not taking a certain action or parts of an action;

B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by 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 during the life of the action;

E. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or

F. Monitoring the impact and taking appropriate corrective measures.

19.150.565 Modification: 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 structure. They can include other actions, such as clearing, grading, or application of chemicals.

19.150.570 Mooring Structures: includes piers, docks, floats and buoys and their associated pilings, ramps, lifts and railways, as well as modifications that support boating facilities and marinas. Any mooring structure or grouping of structures that provide docking space for 10 or more boats is considered a marina.

19.150.575 Mudflats: a low-lying land of fine sediments and silt that is exposed at low tide and covered at high tide.

19.150.580 Must: a mandatory term that means an action is required.

19.150.585 Natural hydrographic conditions: the natural conditions for a particular time of year of water delivery and movement through a system.

19.150.590 No Net Loss: the maintenance of the aggregate total of the County's shoreline ecological functions. The no net loss standard requires that the impacts of shoreline development and/or use, whether permitted or exempt, be identified and prevented or mitigated such that there are no resulting adverse impacts on ecological functions or processes. Each project shall be evaluated based on its ability to meet the no net loss requirement. The no net loss standard applies at multiple scales, starting at the project site. Compensatory mitigation standards include sequencing guidelines to ensure the most appropriate mitigation type and site are selected, as close to the impacted location as possible.

19.150.595 Normal Maintenance: those usual acts necessary to prevent a decline, lapse or cessation from a lawfully established condition.

19.150.600 Normal Repair: to restore a development to a state comparable to its original condition, including, but not limited to, its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to a 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.

19.150.605 Noxious Weeds: see Chapters 17.10.010 RCW and WAC 16-750-003.

19.150.610 Ordinary High Water Mark (OHWM): the 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 existed on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by the County or Ecology provided, that in any area where the OHWM cannot be found, the OHWM adjoining salt water shall be the line of mean higher high tide and the OHWM adjoining fresh water shall be the line of mean high water.

19.150.615 Pervious Surface: Any surface material that allows stormwater to infiltrate into the ground. Examples include lawn, landscape, pasture, native vegetation areas, and permeable pavements.

19.150.620 Pier: a rigid structure built over the water and typically constructed on piles, attached to the shore and used as a landing place for marine transport or for recreational purposes.

19.150.625 Platted: land that has been divided following the applicable laws for divisions of land under Title 18 TCC, including land subject to a current application for such division.

19.150.630 Predator Exclusion: an object or activity used to implement pest management in aquaculture practices with the intent of deterring or excluding predators such as moon snails, sea star, crabs, diving ducks, burrowing shrimp or sand dollars. Common methods include, but are not limited to, large canopy nets, mesh, PVC tubes with net caps, flexar plastic tunnels, oyster bags and suspended culture systems.

19.150.635 Principle Building: the primary structure on a lot closest to the ordinary high water mark excluding accessory structures.

19.150.640 Priority Species: species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below.

A. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened [WAC 232-12-011(1)], or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the Washington Department of Fish and Wildlife (POL-M 6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

B. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. Examples include heron colonies, seabird concentrations, and marine mammal congregations.

C. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.

D. Species listed by the National Marine Fisheries Service or the U.S. Fish and Wildlife Service under the federal Endangered Species Act as either proposed, threatened, or endangered.

19.150.645 Prohibited: not permitted to occur in a particular designation.

19.150.650 Public Access: the ability of the general public or, in some cases, a specific community, 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.

19.150.655 Qualified Professional or Qualified Consultant: 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, soil science,

engineering, environmental studies, fisheries, geology, geomorphology or related and relevant field to the subject in question, have related work experience and meet the following criteria:

A. A qualified professional for wetlands must have a degree in biology, ecology, soil science, botany, or a closely related field and a minimum of five years of professional experience in wetland identification and assessment associated with wetland ecology in the Pacific Northwest or comparable systems.

B. A qualified professional for habitat management plans or shoreline mitigation plans must have a degree in wildlife biology, ecology, fisheries, or closely related field and a minimum of five years professional experience related to the subject species/habitat type.

C. A qualified professional for geologically hazardous areas, geotechnical and hydrogeological reports must be a professional engineering geologist or geotechnical engineer, licensed in the state of Washington. In designing soft armoring techniques, a qualified professional may also have similar qualifications as that required for habitat management plans.

D. A qualified professional for critical aquifer recharge areas means a Washington State licensed hydrogeologist, geologist, or an engineer qualified in experience and training in aquifer recharge.

19.150.660 Ramp (or gangway): a structure between a pier and float which adjusts its angle based on the tidal elevation, allowing access to the float at all times.

19.150.665 Recreation: the use and enjoyment of the shoreline by the public, including but not limited to fishing, hiking, swimming and viewing.

19.150.670 Recreational Development: development that provides opportunities for the use and enjoyment of the shoreline by the public, including but not limited to fishing, hiking, swimming and viewing. This includes both commercial and public recreational facilities.

19.150.675 Residential Development: development for the purpose of human habitation. Residential development includes the construction or modification of one- and two-family detached structures, multi-family structures, condominiums, townhouses, mobile home parks, and other similar group housing, together with accessory dwelling units, accessory uses and structures common to residential uses. Residential development also includes the creation of new residential lots through the subdivision of land. Residential development does not include hotels, motels, bed and breakfasts, or any other type of overnight or transient housing or camping facilities.

19.150.680 Resource-based Uses: low-intensity uses, which may include agriculture, aquaculture, forestry, recreation and designated open-space.

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

19.150.690 Revision: the modification or change to a permit authorized under this Program.

19.150.695 Setback: the distance a use or development must be from the edge of a buffer to prevent construction and other activities from intruding into the buffer.

19.150.700 Shall: a mandatory term that means an action is required.

19.150.705 Shellfish Beds: a general area of shoreline, both intertidal and subtidal, where shellfish congregate. This includes natural subsistence, recreational and commercial beds. Shellfish include, but are not limited to, abalone, hardshell clam, subtidal clam, dungeness crab, geoduck clam, manila clam, oysters, razor clam, pandalid shrimp and red urchin. Where disputed as a critical saltwater habitat, appropriate state agencies and affected tribes shall be consulted in order to assist with the determination.

19.150.710 Shorelands: 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 from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology.

19.150.715 Shoreline Management Act (Act): the Washington State Shoreline Management Act, Chapter 90.58 RCW.

19.150.720 Shoreline Stabilization: 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. Nonstructural methods, for example, include approaches such as building setbacks, structure relocation, groundwater management, and land use planning. Structural methods can be “hard” or “soft”. "Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while "soft" structural measures rely on less rigid materials, such as bioengineering vegetation measures or beach enhancement. “Hybrid” structures are a composite of both soft and hard elements along the length of the armoring. Generally, the harder the construction measure, the greater the impact on shoreline processes including sediment transport, geomorphology, and biological functions.

There are a range of measures for shoreline stabilization, varying from soft to hard that include, but are not limited to:

A. Soft
1. Vegetation enhancement;
2. Beach enhancement;
3. Bioengineering measures;
4. Anchor logs and stumps; and
5. Gravel placement/beach nourishment.

B. Hard
1. Rock revetments;
2. Gabions;
3. Groins;
4. Bulkheads; and
5. Seawalls.

19.150.725 Shoreline Structure Setback Line: the closest distance measured on a horizontal plane between the ordinary high water mark and the building line.

19.150.730 Shorelines of the State: includes all “shorelines” and “shorelines of statewide significance” within the state, as defined in RCW 90.58.030.

19.150.735 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**;**

19.150.740 Shorelines of Statewide Significance: shorelines in Thurston County designated as shorelines of statewide significance are:

A. Nisqually Delta – from DeWolf Bight to Tatsolo Point, between the ordinary high water mark and the line of extreme low tide, together with shorelands associated therewith per RCW 90.58.030(2)(f)(vi).

B. Puget Sound – seaward from the line of extreme low tide.

C. Lakes, whether natural or artificial, or a combination thereof, with a surface acreage of one thousand acres or more measured at the ordinary high water mark.

D. Natural rivers or segments thereof downstream of a point where the mean annual flow is measured at one thousand cubic feet per second or more.

E. Shorelands and wetlands associated with A through D above.

19.150.745 Should: a term that means a particular action is required unless there is a demonstrated, sufficient reason, based on a policy of the Act or this Program, for not taking the action.

19.150.750 State Environmental Policy Act (SEPA): An environmental review process designed to work with other regulations to provide a comprehensive review of a proposal. Most regulations focus on particular aspects of a proposal, while SEPA requires the identification and evaluation of probable impacts for all elements of the environment. See Chapter 197-11WAC.

19.150.755 Streams: means those areas of Thurston County where surface waters flow sufficiently to produce a defined channel or bed. A "defined channel or bed" is an area which demonstrates clear evidence of the passage of water and includes but is not limited to bedrock channels, gravel beds, sand and silt beds and defined-channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses unless they are used by salmon or used to convey streams naturally occurring prior to construction.

"Stream and water body types" means as follows:

1. **Type S waters** include all aquatic areas inventoried as "shorelines of the state," in accordance with Chapter 90.58 RCW, including segments of streams where the mean annual flow is more than twenty cubic feet per second, marine shorelines and lakes twenty acres in size or greater.

2. **Type F waters** include all segments of aquatic areas that are not type S waters and that contain fish or fish habitat including waters diverted for use by a federal, state or tribal fish hatchery from the

point of diversion for one thousand five-hundred feet or the entire tributary if the tributary is highly significant for protection of downstream water quality.

3. **Type N waters** include all segments of aquatic areas that are not type S or F waters and that are physically connected by an above-ground channel system, stream or wetland to type S or F waters.

19.150.760 Stormwater Facility: A constructed component of a stormwater drainage system designed or constructed to perform a particular function, or multiple functions. Stormwater facilities include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, and biofiltration swales. An engineered or natural dispersion area that is dedicated to strormwater use is also considered a stormwater facility for purposes of this Program.

19.150.765 Structure: a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except vessels.

19.150.770 Substantial Development: any development of which the total cost or fair market value exceeds five thousand dollars, or any development which materially interferes with the normal public use of the water or shorelines of the state. The dollar threshold must be adjusted for inflation every five years, as defined in WAC 173-27-040(2). On September 15, 2012, the amount was increased to six thousand four hundred and sixteen dollars ($6,416).

19.150.775 Substantial Development Permit: a permit for any substantial development.

19.150.780Transportation: systems for automobiles, public transportation, pedestrians, and bicycles. This includes, but is not limited to, roads, parking facilities, bridges, sidewalks and railroads.

19.150.785 Urban Growth Area (UGA): those areas designated by Thurston County pursuant to RCW 36.70A.110 for urban development.

19.150.790 Use: the end to which a land or water area is ultimately employed.

19.150.795 Utilities: services and facilities that produce, convey, store or process electric power, gas, sewage, water, communications, oil, stormwater, and waste. This includes drainage conveyances and swales.

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

19.150.805 Vascular Plants: all seed-bearing plants that have vascular tissue (xylem and phloem).

19.150.810 Vegetation, Native: 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. Examples include, but are not limited to, 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.

19.150.815 WAC: Washington Administrative Code.

19.150.820 Water-Dependent Use: a use or portion of a use that cannot exist in a location that is not adjacent to the water and that is dependent on the water by reason of the intrinsic nature of its operations.

19.150.825 Water-Enjoyment Use: a recreational use 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.

19.150.830 Water-Oriented Use: a use that is water dependent, water-related, or water-enjoyment, or a combination of such uses.

19.150.835 Water-Related Use: a use or portion of a use that 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.

19.150.840 Weir: a structure that impounds, diverts or uses water for hydraulic generation and transmission, flood control, irrigation, water supply, recreational or fisheries enhancement.

19.150.845 Wetlands: areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. 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.

Chapter 19.200 Shoreline Jurisdiction and Environment Designation

19.200.100 Shoreline Jurisdiction

A. The Shoreline Master Program jurisdiction applies to all shorelines of the state in Thurston County and their associated shorelands. This includes:

1. All marine waters;
2. Rivers and streams with more than 20 cubic feet per second (cfs) mean annual flow;
3. Lakes and reservoirs 20 acres and greater in area;
4. Associated wetlands;
5. Shorelands adjacent to these waterbodies, typically within 200 feet of the ordinary high water mark (OHWM);
6. Buffers necessary to protect critical areas that are located within shoreline jurisdiction as described in this program.*

*- *optional jurisdiction*

B. Associated estuarine wetlands: the jurisdictional boundary shall extend 200 feet landward of the delineated edge of the wetland.

C. Associated wetlands that extend greater than 200 feet landward of the OHWM of the shoreline: the jurisdictional boundary shall extend to the delineated edge of the wetland.

D. Critical areas designated pursuant to Chapter 36.70A RCW and located within shoreline jurisdiction shall be subject to the regulations of this Program.

19.200.105 Shoreline Environment Designations

In order to plan and manage shoreline resources effectively and to provide a uniform basis for applying policies and regulations within distinctively different shoreline areas, a system of categorizing shoreline areas is necessary. Under the following system, shoreline environment designations are given to specific areas based on the existing development pattern, the biophysical capabilities and limitations of the shoreline being considered for development, the provisions of WAC 173-26-211 and the goals and aspirations of the citizens of Thurston County as expressed in the Comprehensive Plan. The existing development pattern and the biophysical information of the shoreline was compiled in a *Thurston County Shoreline Master Program Update Inventory and Characterization Report* (Thurston County 2013) and was included as the basis for the environment designations.

Environment designation assignment to shoreline reaches must assure the protection of existing shoreline ecological functions with the proposed pattern and intensity of development as well as be consistent with policies for restoration of degraded shorelines [WAC 173-26-211 (4) (b)].

Thurston County is using five of the six Ecology recommended Shoreline Environment Designations (SED's) and criteria consistent with Ecology's provided criteria for each of the environment designations:

Aquatic, Natural, Urban Conservancy, Rural Conservancy, and Shoreline Residential [WAC 173-26-211(5)]. Thurston County does not have any "High Intensity" shorelines within its jurisdiction. In addition to the five Ecology recommended SEDs, Thurston County is proposing to use one additional SED: Mining (*Shoreline and Environmental Designations Report*, Thurston County 2013). A map of the environment designations can be found in Appendix A.

This Program is designed to encourage, in each environment, uses which enhance the character of that environment. At the same time, the Program imposes reasonable standards and restrictions on development so that such development does not disrupt or destroy the character of the environment or result in a net loss of shoreline ecosystem functions.

The shoreline environment designations are not intended to be land use designations. They do not imply development densities, nor are they intended to mirror the Comprehensive Plan designations. The system of categorizing shoreline environment designations is derived from Chapter 173-26 WAC.

The basic intent of this system is to utilize performance standards that regulate activities in accordance with goals and objectives defined locally rather than to exclude any use from any one environment. Thus, the particular use or type of developments placed in each environment must be designed and located so that there are no effects detrimental to achieving the objectives of the shoreline environment designations and local development criteria.

This approach provides an "umbrella" environment class over local planning and zoning on the shorelines. Since every area is endowed with different resources, has different intensities of development and attaches different social values to these physical and economic characteristics, the environment designations should not be regarded as a substitute for local planning and land-use regulations.

19.200.110 Mining

A. Purpose. To protect shoreline ecological functions in areas with mining activities within shoreline jurisdiction. To provide sustained resource use, and protect the economic base of those lands and limit incompatible uses.

B. Designation Criteria.

1. Outside incorporated municipalities and outside urban growth areas, AND:
2. Contains shorelines created from mining activity in areas where no previous naturally occurring SMA shoreline existed.

C. Management Policies.

1. First priority should be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses.
2. Non-water-oriented uses should not be allowed except:
    a. As part of mixed used development;
    b. In limited situations where they do not conflict with or limit opportunities for water-oriented uses; or
    c. On sites where there is no direct access to the shoreline.
3. Policies and regulations shall assure no net loss of shoreline ecological functions as a result of new development. Where applicable, new development shall include environmental cleanup and restoration of the shoreline to comply with any relevant state and federal law.

4. Where feasible, visual and physical public access should be required.
5. Aesthetic objectives should be implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers.
6. Full utilization of existing urban areas should be achieved before further expansion of intensive development is allowed. Consideration should be given to the potential for displacement of non-water-oriented uses with water-oriented uses when analyzing full utilization of urban waterfronts and before considering expansion of such areas.

19.200.115 Shoreline Residential

A. Purpose. To accommodate residential development and appurtenant structures that are consistent with this Program, and to provide appropriate public access and recreational uses.

B. Designation Criteria.

1. Does not meet the criteria for the Natural or Rural Conservancy Environments.
2. Predominantly single-family or multifamily residential development or are planned and platted for residential development.
3. Majority of the lot area is within the shoreline jurisdiction.
4. Ecological functions have been impacted by more intense modification and use.

C. Management Policies.

1. Standards for buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality should be set to assure no net loss of shoreline ecological functions.
2. Multi-family and multi-lot residential and recreational developments should provide public access and joint use for community recreational facilities. If public access is not feasible on site, off-site options such as an in-lieu fee may be recommended.
3. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
4. Commercial development should be limited to water-oriented uses. Water-oriented includes water-dependent, water-related and water-enjoyment uses.

19.200.120 Urban Conservancy

A. Purpose. To protect and restore ecological functions of open space, floodplain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.

B. Designation Criteria. Shoreline areas within UGAs or LAMIRDs that are appropriate and planned for development that is compatible with maintaining or restoring of the ecological functions of the area and generally are not suitable for water-dependent uses. Such areas must also have any of the following characteristics:

1. Area suitable for low-intensity water-related or water-enjoyment uses without significant adverse impacts to shoreline functions or processes;
2. Open space, flood plain or other sensitive areas that should not be more intensively developed or supporting resource-based uses;

3. Potential for ecological restoration;
4. Retained important ecological functions, even though partially developed; or
5. Potential for development that is compatible with ecological restoration or Low Impact Development techniques.
6. Does not meet the designation criteria for the Natural Environment.
7. Land having any of the above characteristics and currently supporting residential development may be Urban Conservancy, as may those areas into which a UGA boundary is expanded and thus has any of the above characteristics.

C. Management Policies.

1. Uses that preserve the natural character of the area or promote preservation of open space, floodplain or other sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration or preservation of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
2. Standards for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications shall ensure that new development does not result in a net loss of shoreline ecological functions, or further degrade other shoreline values.
3. Public access and public recreation objectives should be implemented whenever feasible and ecological impacts can be mitigated.
4. Water-oriented uses should be given priority over non-water oriented uses. For shoreline areas adjacent to commercially navigable waters, water-dependent uses should be given highest priority.
5. Any development in the Urban Conservancy designation should implement Low Impact Development techniques, as much as is feasible, in order to maintain ecological functions.

19.200.125 Rural Conservancy

A. Purpose. Provide for sustained resource use, public access, and recreational opportunities while protecting ecological functions, and conserving existing ecological, historical, and cultural resources.

B. Designation Criteria. Shorelines outside the UGA or LAMIRD that have any of the following characteristics:

1. Currently support lesser-intensity resource-based uses, such as agriculture, aquaculture, forestry, or recreational uses, or are designated agriculture or forest lands;
2. Currently accommodate residential uses but are subject to environmental limitations, such as properties that include or are adjacent to steep banks, feeder bluffs, or flood plains or other flood-prone areas;
3. Can support low-intensity water-dependent uses without significant adverse impacts to shoreline functions or processes;
4. Private and/or publically owned lands (upland areas landward of OHWM) of high recreational value or with valuable historic or cultural resources or potential for public access;
5. Does not meet the designation criteria for the Natural environment;
6. Land designated Urban Conservancy and from which a UGA boundary is retracted may be designated as Rural Conservancy, if any of the above characteristics are present.

C. Management Policies.

1. Uses should be limited to those which sustain the shoreline area's physical and biological resources, and those of a non-permanent nature that do not substantially degrade ecological functions or the rural or natural character of the shoreline area. Developments or uses that would substantially degrade or permanently deplete the physical and biological resources of the area should not be allowed.
2. New development should be designed and located to preclude the need for shoreline stabilization. New shoreline stabilization or flood control measures should only be allowed where there is a documented need to protect an existing structure or ecological functions and mitigation is applied.
3. Residential development standards shall ensure no net loss of shoreline ecological functions and should preserve the existing character of the shoreline consistent with the purpose of the "Rural Conservancy" environment.
4. Low-intensity, water-oriented commercial uses may be permitted in the limited instances where those uses have been located in the past or at unique sites in rural communities that possess shoreline conditions and services to support the development.
5. Water-dependent and water-enjoyment recreation facilities that do not deplete the resource over time, such as boating facilities, angling, hunting, wildlife viewing trails and swimming beaches, are preferred uses, provided significant adverse impacts to the shoreline area are mitigated.
6. Agriculture, commercial forestry and aquaculture, when consistent with the Program, may be allowed.

19.200.130 Natural

A. Purpose. To protect those shoreline areas that are relatively free of human influence, and/or that include intact or minimally degraded shoreline functions intolerant of human use. Only very low intensity uses are allowed in order to maintain the ecological functions and ecosystem-wide processes. Restoration of degraded shorelines should be planned within this environment.

B. Designation Criteria. Shorelines having a unique asset or feature considered valuable for its natural or original condition that is relatively intolerant of intensive human use. This includes shorelines both in and out of the UGA or LAMIRD when any of the following characteristics apply:

1. The shoreline is ecologically intact and currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity; or
2. The shoreline is considered to represent ecosystems and geologic types that are of scientific and educational interest;
3. The shoreline is unable to support new development or uses without adverse impacts to ecological functions or risk to human safety.
4. The shoreline includes largely undisturbed portions of shoreline areas such as wetlands, estuaries, unstable bluffs, coastal dunes, spits, and ecologically intact shoreline habitats.
5. Retain the majority of their natural shoreline functions, as evidenced by shoreline configuration and the presence of native vegetation.
6. Generally free of structural shoreline modifications, structures, and intensive human uses.

C. Management Policies.

1. Any use that would substantially degrade or result in a net loss of ecological functions or natural character of the shoreline area should not be allowed. The following new uses should not be allowed: commercial, industrial and non-water-oriented recreation.
2. Any alteration should be designed with low impact development methods, or be capable of restoration to the natural condition, where feasible. New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should not be allowed.
3. Single-family residences, roads, parking areas and utility corridors may be allowed as a conditional use only if they cannot be located outside the Natural Designation or shoreline jurisdiction, provided that the density and intensity of such use is limited to protect ecological functions and is consistent with the purpose of the designation.
4. Low-intensity, water-oriented recreational access, scientific, historical, cultural, educational research uses may be allowed provided that no significant ecological impact on the area will result.

19.200.135 Aquatic

A. Purpose. To protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark (OHWM).

B. Designation Criteria. Lands waterward of the OHWM, which include tidelands, bedlands, and lands beneath freshwater shorelines of the state (may also include wetlands).

C. Management Policies.

1. New over-water structures and development on navigable waters and their beds should be allowed only for water-dependent uses, public access or ecological restoration, and when:
    a. They do not preclude attainment of ecological restoration; and
    b. The size of the new over-water structure is limited to the minimum necessary to support the structure's intended use; and
    c. Multiple use of the over-water facility has been encouraged; and
    d. The structure or use is located and designed to minimize interference with surface navigation, to consider impacts to public views, to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration and to ensure that the project does not conflict with existing water dependent uses; and
    e. The use or modification is designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
2. When new over-water structures are proposed for residential development of two or more dwellings, joint use or community dock facilities should be utilized rather than single-use facilities.
3. Development should be compatible with the adjoining upland designation.
4. Existing over-water residences may continue through normal maintenance and repair, but should not be enlarged or expanded. New over-water residences should be prohibited.
5. Applicants for any use or modification should schedule a staff consult to review the site conditions, and potential habitats and species. This consult should result in a general understanding of applicable development standards for the proposal.
6. Development over or in critical freshwater or saltwater habitats should be limited to those which mitigate impacts according to mitigation sequencing, and development standards for that development activity.

19.200.140 Official Shoreline Map

A. As part of this Program, there is one official Thurston County Shoreline Environment Designations Map, which shall be in the custody of the Department of Resource Stewardship and available for public inspection during normal business hours and on the Thurston County website. Unofficial copies of the official map or portions thereof may be included or distributed with copies of this Program (see Appendix A).

B. The purpose of the official Shoreline Environment Designations Map is to depict graphically those areas of Thurston County falling under the jurisdiction of this Program, and the shoreline environment designations of those areas.

19.200.145 Map Boundaries and Errors

A. Mapping Boundaries. Where the exact location of a jurisdiction or environment designation boundary line is uncertain, the official Shoreline Environment Designations Map will be used to determine the location of such line. When resorting to the Shoreline Environment Designations Map does not resolve the conflict, the following rules will apply:

1. Boundaries indicated as approximately following the center lines of streets, highways, alleys or other roadways shall be construed to follow such center lines;
2. Boundaries indicated as approximately following lot, fractional section or other subdivision lines shall be construed as following such subdivision lines;
3. Boundaries indicated as approximately following any lines of corporate limits or other local government jurisdictional lines shall be construed as following such lines;
4. Boundaries indicated as following railroad lines shall be construed as following the center line of the railroad right-of-way;
5. Boundaries indicated as parallel to or extensions of features identified in subsections 1. through 4. above shall be so construed;
6. Boundaries between parallel environment designations shall be construed as the top of the bluff or vegetation line that distinguishes existing development from the critical area abutting the shoreline;
7. When not specifically indicated on the Shoreline Environment Designations Map, distances shall be determined by the scale of the map;
8. Where existing physical or cultural features are at variance with those shown on the Shoreline Environment Designations Map and cannot be determined with certainty by applying subsections one through six above, the Director shall determine the location or existence of such feature utilizing the provisions of WAC 173-27-211, the policies of RCW 90.58.020, TCC 24.01.040, and the corresponding Master Program provisions herein; and
9. Where a parcel within the shoreline jurisdiction is separated from the water by an existing developed road or an additional parcel that serves to create a distinct break in connectivity to the shoreline, the parcel on the landward side may not be required to meet certain development regulations for that designation (such as public access, water-oriented use, or vegetation conservation standards), provided all other applicable provisions of this Program are met, including no net loss of shoreline ecological functions.

B. Mapping Errors. Some mapping errors may be adjusted prior to a Master Program amendment to assign the appropriate designation to that area by the following methods:

1. The common boundary descriptions and the criteria in RCW 90.58.030(2) and Chapter 173-22 WAC supersede the map when there are mapping error conflicts, other than those with a solution provided in this section.
2. In the event that a jurisdictional area is not mapped, it will automatically be assigned a "Rural Conservancy" or "Urban Conservancy" designation depending on its location outside or inside of a UGA or LAMIRD. Such designation will apply until a Master Program amendment is approved that assigns the appropriate designation to the subject area.
3. In the event that a parcel was inadvertently assigned more than one designation, the more restrictive designation shall apply.
4. In the event that a parcel on the boundary between two designations appears to be a mapping error based on the criteria in this section, the County shall apply the most appropriate of the two designations, until such time as the map can be formally corrected consistent with WAC 173-26-100 and Section 19.500.105(I) (Shoreline Master Program Amendment).
5. In the event of an environment designation mapping error where the Master Program update or amendment record, including the public hearing process, is unclear in term of the correct environment designation to apply to a property, the County shall apply the environment designation approved through the Master Program Update or Amendment process and correct the map.
6. If the environment designation criteria were misapplied, but the update or amendment record, including the public hearing process, does not clearly show that a different designation was intended to be shown on the map, a Master Program amendment may be obtained consistent with WAC 173-26-100 and Section 19.500.105(I) (Shoreline Master Program Amendment). This process is intended to allow for reasonable corrections to the Shoreline Environment Designation process. Such process shall include early consultation with the Department of Ecology and other agencies with jurisdiction, affected tribes, and appropriate public notification prior to local approval. Current designations are reflected in the Shoreline Environment Designations Map (Appendix A).

Chapter 19.300 General Goals and Policies

19.300.050 Applicability

A. The general goals and policies of this chapter apply to all use and development activities within the Program's jurisdiction, regardless of environment designation. As provided in WAC 173-26-191, these policies are the basis for regulations that govern use and development along the shoreline. Some Program policies may not be fully achievable by regulatory means, but may be pursued by other means as provided in RCW 90.58.240.

B. Regulation of administrative actions contained herein must be implemented with consideration to the Public Trust Doctrine, regulatory takings, and other applicable legal principles as appropriate.

19.300.100 Shorelines of Statewide Significance

A. Designation

The Shoreline Management Act designated certain shoreline areas as shorelines of statewide significance. Shorelines thus designated are important to the entire state. Because these shorelines are major resources from which all people of the state derive benefit, the statewide interest should be recognized and protected over the local interest.

Those areas that have been designated as shorelines of statewide significance (RCW 90.58.030) in Thurston County are:

1. *Puget Sound* - those areas lying seaward from the line of extreme low tide.

2. *Nisqually Delta* - From DeWolf Bight to Thurston County line, from the line of extreme low tide to the OHWM.

3. *Chehalis River* - From Lewis-Thurston County line downstream to the Thurston-Grays Harbor County line, excluding all federal lands. The flow exceeds 1,000 cubic feet per second (cfs) mean annual flow (MAF) at Lewis County line.

4. *Nisqually River* - From the Pierce-Thurston County line in Alder Reservoir downstream along left shore only, (exclude area from LaGrande Dam downstream to powerhouse due to use of aqueduct; also exclude all federal lands) to the Nisqually Indian Reservation boundary. The flow exceeds 1,000 cfs MAF at Pierce County line in Alder Reservoir.

5. *Alder Lake* – That portion of the lake from the Pierce County line up to the OHWM.

6. Shorelands and wetlands associated with 1 through 5 above.

Goal: To ensure that the statewide interest is recognized and protected over the local interest in shorelines of statewide significance, the County shall review all

development proposals within shorelines of statewide significance for consistency with RCW 90.58.020 and the following policies (in order of preference):

B. County-wide Policies

1. Policy SH-1 Recognize and protect the statewide interest over local interest.

    a. The Washington Departments of Fish and Wildlife and Ecology, affected tribes, other resources agencies, and interest groups should be consulted for development proposals that could affect anadromous fisheries or other priority species or habitats.
    b. Recognize and take into account state agencies' policies, programs and recommendations in developing and administering use regulations.

2. Policy SH-2 Preserve the natural character of the shoreline.

    a. Administer shoreline environments and regulations to minimize damage to the unique character and ecology of shorelines of statewide significance.
    b. Where natural resources of statewide importance are being diminished over time by human activities, restoration of those resources should be facilitated.
    c. In order to reduce adverse impacts to the environment while accommodating future growth, new intensive development activities should upgrade and redevelop those areas where intensive development already occurs, rather than allowing high intensity uses to extend into low intensity use or underdeveloped areas.

3. Policy SH-3 Result in the long term over short term benefit.

    a. Preserve sufficient shorelands and submerged lands to accommodate current and projected demand for economic resources, such as shellfish beds and navigable harbors.
    b. Actions that would convert resources into irreversible uses or detrimentally alter natural conditions that are characteristic of shorelines of statewide significance should be severely limited.
    c. Evaluate the short-term economic gain or convenience of developments in relationship to long-term and potentially costly impairments to the natural environment.
    d. Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities, or for the general enhancement of shoreline areas.

4. Policy SH-4 Protect the resources and ecology of the shoreline.

    a. Projects shall be required to consider incremental and cumulative impacts while ensuring no net loss of shoreline ecosystem processes and functions.
    b. In order to ensure the long-term protection of ecological resources of statewide importance, activities impacting anadromous fish habitats, forage fish spawning and rearing areas, shellfish beds and other unique environments should be severely limited.
    c. Limit public access where improvements would result in a loss of shoreline ecological functions, such as in priority or sensitive habitats.

5. Policy SH-5 Increase public access to publicly owned areas of the shorelines.

a. Preserve and encourage public access with special scenic or cultural qualities.
b. Give priority to developing paths and trails to shoreline areas and linear access along the shorelines, where appropriate.
c. Locate development, including parking, as far inland from the OHWM as is feasible so that access is enhanced.

6. Policy SH-6 Increase recreational opportunities for the public in the shoreline.

a. Public access and recreation requirements should take into account the activities of state agencies and the interests of the citizens of the state to visit public shorelines.

b. Plan for and encourage development of facilities for recreational use of the shorelines, but reserve areas for lodging and related facilities on uplands well away from the shoreline, with provisions for non-motorized access to the shorelines.

19.300.105 Critical Areas and Ecological Protection

Goal: Protect and conserve shoreline natural resources, including protection of critical areas (Title 24 TCC), while accommodating reasonable and appropriate uses which will assure, at a minimum, no net loss to shoreline ecological functions and processes.

A. Policy SH-7 Protect and conserve shoreline areas that are ecologically intact and minimally developed or degraded. Develop incentives and regulations for privately owned shorelines that will protect and conserve these areas while allowing reasonable and appropriate development.

B. Policy SH-8 Recognize that nearly all shorelines, even substantially developed or degraded areas, retain important ecological functions.

C. Policy SH-9 Utilize transfer of development rights as allowed by Chapter 20.62 TCC, or as now or hereafter amended, as an option to protect ecological functions.

D. Policy SH-10 Permitted uses and developments should be designed and conducted in a manner that protects the current ecological condition, and prevents or mitigates adverse impacts. Mitigation measures shall be applied in the following sequence of steps listed in order of priority:

1. Avoid 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 eliminate the impact over time by preservation and maintenance operations;

5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments, including utilization of the in-lieu-fee process where appropriate; and
6. Monitor the impact and the mitigation projects and take appropriate corrective measures.

E. Policy SH-11 Shoreline ecological functions that should be protected include, but are not limited to:

1. Habitat (space or conditions for reproduction; resting, hiding and migration; and food production and delivery);
2. Water quality maintenance; and
3. Water quantity maintenance.

F. Policy SH-12 Shoreline processes, both freshwater and marine, that should be protected to support the above functions include, but are not limited to the delivery, loss and movement of:

1. Sediment,
2. Water,
3. Nutrients,
4. Toxins,
5. Pathogens, and
6. Large woody material.

G. Policy SH-13 In assessing the potential for new uses and developments to impact ecological functions and processes, the following should be taken into account:

1. On-site and off-site impacts;
2. Immediate and long-term impacts;
3. Cumulative impacts, from both current and reasonably foreseeable future actions, resulting from the project; and
4. Any mitigation measures or beneficial effects of established regulatory programs to offset impacts.

H. Policy SH-14 Critical areas in the shoreline jurisdiction shall be protected in a manner that results in no net loss to shoreline ecological functions. Pursuant to RCW 36.70A.030(5) and 24.01.020 TCC, critical areas include:

1. Critical Aquifer Recharge Areas
2. Fish and Wildlife Habitat Conservation Areas
3. Frequently Flooded Areas
4. Geologically Hazardous Areas
5. Wetlands

19.300.110 Vegetation Conservation

Goal: Conserve, protect and restore native shoreline vegetation to provide for ecological and habitat functions as well as human health and safety. These

functions include, but are not limited to, variable shading of the nearshore, food and shelter for terrestrial and aquatic organisms, and slope/soil stabilization.

A. Policy SH-15 Preserve native plant communities on marine, river, lake and wetland shorelines. In order to maintain shoreline ecological functions and processes, development along the shoreline should result in minimal direct, indirect, or cumulative impacts. This includes:

1. Keeping overhanging vegetation intact along the shoreline edge to provide shading and other ecological functions;
2. Preserving established areas of native plants and minimizing clearing and grading near bluff edges and other erosion or landslide-prone areas in order to maintain slope stability and prevent excess surface erosion and stormwater runoff; and
3. Designing and placing structures and associated development in areas that avoid disturbance of established native plants, especially trees and shrubs; and
4. Removal of noxious weeds in accordance with WAC 16-750-020.

B. Policy SH-16 Shoreline landowners are encouraged to preserve and enhance native woody vegetation and native groundcovers to stabilize soils and provide habitat. When shoreline uses or modifications require a planting plan, maintaining native plant communities, replacing noxious weeds and avoiding installation of ornamental plants are preferred. Unless approved by the Director or their designee, non-native vegetation is prohibited.

C. Policy SH-17 Maintaining native or ecologically functional vegetation is preferred over clearing to provide views or lawns. Limited and selective clearing may be allowed when slope stability and ecological functions are not compromised. Limited trimming and pruning is preferred over removal of native vegetation.

19.300.115 Water Quality and Quantity

Goal: Provide regulations and voluntary incentives to encourage practices which protect water quality and reduce stormwater runoff and erosion in order to protect against adverse impacts to the public health, to the land and its vegetation and wildlife, and to the waters of the state and its aquatic life.

A. Policy SH-18 Shoreline use and development should minimize impacts that contaminate surface or ground water, cause adverse effects on shoreline ecological functions, or impact aesthetic qualities and recreational opportunities, including healthy shellfish harvest.

B. Policy SH-19 Ensure mutual consistency with other regulations that address water quality and stormwater quantity, including standards as provided for in TCCTitle 15.05 (Thurston County Storm Water Standards) and Chapter 173-201A WAC (Water Quality Standards).

C. Policy SH-20 Utilize pervious materials and other appropriate low impact development techniques where soils and geologic conditions are suitable and where such practices could reduce stormwater runoff.

D. Policy SH-21 All shoreline use and development shall be conducted in accordance with Chapter 24.20 TCC (Frequently Flooded Areas). 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. When evaluating alternate flood control measures or floodplain restoration opportunities, consider the removal or relocation of structures in flood-prone areas.

19.300.120 Economic Development

Goal: Provide for the location and design of industries, transportation, port and tourist facilities, commerce and other developments that are particularly dependent upon a shoreline location and/or use, when the shoreline can accommodate such development.

A. Policy SH-22 Accommodate and promote, in priority order, water-dependent, water-related and water-enjoyment economic development. Such development should occur in those areas already partially developed with similar uses consistent with this Program, areas already zoned for such uses consistent with the Thurston County Comprehensive Plan, or areas appropriate for water-oriented recreation.

B. Policy SH-23 Water-oriented economic development, such as those aquaculture activities encouraged under the Washington Shellfish Initiative, should be encouraged and shall be carried out in such a way as to minimize adverse effects and mitigate unavoidable adverse impacts to achieve no net loss of shoreline ecological functions.

19.300.125 Historic, Archeological, Cultural, Scientific and Educational Resources

Goal: Protect shoreline features of historic, archaeological, cultural, scientific and educational value or significance through coordination and consultation with the appropriate local, state and federal authorities, affected Indian tribes, and property owners.

A. Policy SH-24 Prevent damage or destruction of historic, archaeological, cultural, scientific and educational (HASCE) sites through coordinated identification, protection and management with the appropriate local, state and federal authorities and registrars, affected Indian tribes, and property owners.

B. Policy SH-25 Provide opportunities for education and appreciation related to HASCE features where appropriate and where maximum protection of the resource can be achieved.

19.300.130 Shoreline Use and Site Planning

Goal: Preserve and develop shorelines in a manner that allows for an orderly balance of uses by considering the public and private use, along

with the development of shorelines and adjacent land areas with respect to the general distribution, location and extent of such uses and development.

A. Policy SH-26 For shoreline use and development activities, including plats and subdivisions at full build-out, employ innovative development features to achieve no net loss of ecological functions, such as sustainable and low impact development practices where appropriate.

B. Policy SH-27 Give preference to water-dependent uses and single-family residential uses that are consistent with preservation of shoreline ecological functions and processes. Secondary preference should be given to water-related and water-enjoyment uses. Non-water-oriented uses should be limited to those locations where the above-described uses are inappropriate or where non-water-oriented uses demonstrably contribute to the objectives of the Act. For use preference within shorelines of statewide significance, see Section 19.300.100(B) above.

C. Policy SH-28 Designate and maintain appropriate areas for protecting and restoring shoreline ecological functions and processes to control pollution and prevent damage to the shoreline environment and/or public health.

D. Policy SH-29 Through appropriate site planning and use of the most current, accurate and complete scientific and technical information available, shoreline use and development shall be located and designed to avoid the need for shoreline stabilization or actions that would result in a net loss of shoreline ecological functions.

E. Policy SH-30 Aquaculture is of statewide interest. Properly managed, it can result in long-term, over short-term, benefit and can protect the resources and ecology of the shoreline. Aquaculture is dependent on the use of the water area and, when consistent with the control of pollution and prevention of damage to the environment, is a preferred use of the water area.

F. Policy SH-31 Potential locations for aquaculture activities are relatively restricted by water quality, temperature, dissolved oxygen content, currents, adjacent land use, wind protection, commercial navigation, and salinity. The technology associated with some forms of aquaculture is still experimental and in formative states. Therefore, some latitude should be given when implementing the regulations of this section, provided that potential impacts on existing uses and shoreline ecological functions and processes should be given due consideration. However, experimental aquaculture projects in water bodies should include conditions for adaptive management. Experimental aquaculture means an aquaculture activity that uses methods or technologies that are unprecedented or unproven in Washington.

G. Policy SH-32 Aquaculture activities should be located, designed and operated in a manner that supports long-term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes.

H. Policy SH-33 Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions and processes, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses. Aquaculture is not required to protect state-listed noxious weed species when control methods are conducted within applicable agency standards. In general, the following preferences apply when considering new aquaculture activities:

1. Projects that are not likely to negatively impact critical saltwater habitats.

2. Projects that involve little or no substrate modification.

3. Projects that involve little or no supplemental food sources, pesticides, herbicides or antibiotic application.

I. Policy SH-34 Aquaculture facilities should be designed and located to avoid:

A. the spread of disease to native aquatic life;
B. the establishment of new non-native species, which cause significant ecological impacts; and
C. significant impact to the aesthetic qualities of the shoreline.

J. Policy SH-35 Upland uses and modifications should be properly managed to avoid degradation of water quality of existing shellfish areas.

K. Policy SH-36 Planting and harvesting by boat shall be preferred over low-tide harvest methods where feasible.

L. Policy SH-37 Non-commercial and small scale aquaculture projects should be encouraged through the shoreline exemption process [Section 19.500.100(C)].

M. Policy SH-38 In order to facilitate more conforming uses in the shoreline environment provide an administrative Type I permit option to permit reconstruction or remodels of non-conforming structures that propose to make the structures and uses more conforming using innovative design techniques and/or by moving structures further landward of critical areas, their buffers and setbacks or, to the maximum extent possible, remove the structures completely from critical areas, their buffers, and setbacks.

19.300.135 Public Access and Recreation

Goal: Provide physical and visual public access opportunities and space for diverse forms of water-oriented recreation in such a way that private property rights, public safety, and shoreline ecological functions and processes are protected in accordance with existing laws and statutes.

A. Policy SH-39 Protect the public's opportunity to enjoy the physical and visual qualities of the shoreline by balancing shoreline use and development in such a way that minimizes interference with the public's use or enjoyment of the water. This may be achieved through regulatory provisions, incentives or other cooperative agreements.

B. Policy SH-40 Evaluate site-appropriate types and methods of required public access when reviewing all public shoreline development projects and private subdivision of land into more than four parcels. Based on project-specific circumstances, this may include physical or visual access on or off site.

C. Policy SH-41 Acquire, maintain and improve diverse physical and visual shoreline access through public and private efforts. This should be accomplished in a comprehensive and prioritized manner through the use of existing plans and programs, including those that address

population growth and shoreline access demands such as the Thurston County Comprehensive Plan, the Thurston County Parks, Recreation, Trails and Natural Resource Preserve Plan (2013) Plan, and other port and state park plans.

D. Policy SH- 42 Publically owned, undeveloped road-ends, tax-title lands and right-of-ways adjacent to salt and freshwater shorelines should be evaluated for use as public access points. These lands may be developed for access by a community organization, consistent with Chapter 13.56 TCC as now or hereafter amended.

E. Policy SH-43 Use shoreline public access points to enhance the public's understanding and appreciation of shoreline ecology, cultural history, maritime heritage, and location specific rules and boundaries by incorporating educational and interpretive signage and other tools into public access facilities.

19.300.140 Restoration and Enhancement

Goal: Re-establish, rehabilitate and/or otherwise improve impaired shoreline ecological functions and processes through voluntary and incentive-based public and private programs and actions that are consistent with the *Shoreline Restoration Plan* (Appendix C). (Note: this section does not address required mitigation sequencing related to specific development proposals; see Section 19.400.110(A) for mitigation standards.)

A. Policy SH-44 Integrate and facilitate voluntary and incentive-based cooperative restoration and enhancement programs between local, state, and federal public agencies, tribes, non-profit organizations, and landowners to address shorelines with impaired ecological functions and/or processes.

B. Policy SH-45 Identify restoration opportunities through sources such as the *Thurston County Shoreline Master Program Update Inventory and Characterization Report*, salmon recovery plans, local watershed plans, Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), and the Salmon Recovery Lead Entity Habitat Work Schedule, and authorize, coordinate and facilitate appropriate publicly and privately initiated restoration projects. This shall be accomplished through the *Shoreline Restoration Plan* (Appendix C), which addresses the following:

1. Identification of degraded areas and sites with potential for ecological restoration;
2. Restoration goals and priorities;
3. Existing and on-going projects and programs;
4. Additional projects and programs to achieve the restoration goals;
5. Funding sources, timelines and benchmarks for implementation; and
6. Monitoring effectiveness of restoration projects.

C. Policy SH-46 Encourage and facilitate restoration and enhancement projects for Priority Habitats and Species (Washington Department of Fish and Wildlife, PHS Program).

D. Policy SH-47 Shoreline ecosystem protection and restoration projects shall be prioritized, located and designed utilizing the most current, accurate and complete scientific and technical information available to promote resiliency of habitats and species.

19.300.145 Transportation and Utilities

Goal: Plan, locate and design transportation systems and essential utility facilities in shoreline areas where they will have the least possible adverse effect on shoreline ecological functions and/or processes and existing or planned water-dependent uses.

A. Policy SH-48 Plan, locate and design proposed transportation, parking facilities, and utility facilities where routes will avoid a net loss of shoreline ecological functions or will not adversely impact existing or planned water-dependent uses.

B. Policy SH-49 Parking facilities in shorelines are not a preferred use. Such facilities shall only be allowed as necessary to support an authorized use and only when environmental and visual impacts are avoided and minimized.

C. Policy SH-50 New or expanded transportation routes and essential utility facilities shall, to the extent feasible:

1. Be located in areas that do not require shoreline stabilization, dredging, extensive cut/fill and other forms of shoreline alteration;
2. Be limited to local access and public shoreline access routes;
3. Be located in existing rights of way and corridors; and
4. Not be built within shoreline jurisdiction when other options are available.

D. Policy SH-51 Transportation and utility projects shall be consistent with the public access policies and plans of this Program.

E. Policy SH-52 Provide for alternate modes of travel, including pedestrian, bicycle and public transportation, where appropriate.

F. Policy SH-53 Maintenance of existing transportation corridors and utility facilities shall be carried out in a manner that:

1. will avoid a net loss of shoreline ecological functions; and
2. where feasible and appropriate, improve shoreline ecological functions.

Unavoidable adverse impacts shall be mitigated.

C. South Puget Sound Policies

1. Policy SH-54 Thurston County recognizes that South Puget Sound is a unique and significant marine resource. As such, Thurston County should work to minimize use conflicts, exercise responsibility toward the South Sound's resources, and require commitment to water-quality preservation.

2. Policy SH-55 In planning for the future development of South Puget Sound, the statewide interest should be protected over the local interest.

3. Policy SH-56 The Alliance for a Health South Sound (AHSS) is a regional organization comprised of Thurston, Kitsap, Pierce and Mason County governments, and the Squaxin Island, Nisqually, and Puyallup tribes. The AHSS has been recognized by the State, including the Puget Sound Partnership, and the counties as having an important role in protecting, enhancing, and restoring the resources of South Puget Sound. As such, the AHSS has developed the South Sound Strategy, incorporated herein by reference, which should be consulted for guidance when reviewing new shoreline projects in South Puget Sound.

4. Policy SH-57 The public interest in South Puget Sound concerns the natural character and the future development. The scope of the public interest concerning the future development of South Puget Sound includes all residents of the state, tribes, the four county governments, and federal- and State-owned lands.

Chapter 19.400 General Regulations

19.400.100 Existing Development

A. Existing Uses

1. Lawfully established uses occurring as of the effective date of this Program, which do not meet the standards of this Program, shall be considered nonconforming to this Program,

2. All lawfully established uses, both conforming and nonconforming, may continue and may be, maintained, expanded, or modified consistent with the Act and this Program.

3. Any change in use shall conform to the standards of this Program and may require a Conditional Use Permit (CUP) in accordance with the findings in Section 19.500.100(D). A CUP may be granted only if no reasonable alternative use meeting the standards is practical, and the proposed use will be at least as consistent with the policies and provisions of this Program, the Act, and the uses in the area as the pre-existing use. Conditions may be imposed that are necessary to assure compliance with the above findings and with the requirements of this Program and the Act, to assure that the use will not become a nuisance or a hazard, and to assure that the use will not result in a net loss of the ecological function of the shoreline.

4. If a use is discontinued for twelve consecutive months or for twelve months during any two-year period, any subsequent use, if allowed, shall comply with the Act and this Program.

B. Existing Structures

1. Lawfully constructed structures

    a. Legally established structures occurring as of the effective date of this Program, which do not meet the standards of this Program, shall be considered nonconforming to this Program, to include appurtenances as defined in 19.100.150.
    b. All legally established structures may continue and may be repaired or maintained in accordance with the Act, this Program, and Chapter 24.50 TCC.
    c. In the event that a legally existing structure is damaged or destroyed by fire, explosion or other casualty, it may be reconstructed to configurations existing immediately prior to the time the structure was damaged or destroyed, provided the application is made for the necessary permits within twenty-four months of the date the damage or destruction occurred, and the restoration is completed within two years of permit issuance or the conclusion of any appeal on the permit.
    d. Any legally existing structure that is relocated must be brought in to conformance with the Act and this Program.

2. Existing Appurtenances to Single-Family Residences. Those legally existing appurtenances that are common to existing single-family residences that do not meet the standards of the code shall be considered nonconforming to this Program. Such appurtenances may include garages and sheds, but shall not include bulkheads, overwater structures or other shoreline modifications.

3. Vegetation conservation standards of this Program shall not apply retroactively in a way which requires lawfully existing uses and developments, including residential landscaping and gardens, to be removed, except as required as mitigation for new and expanded development.

4. Structures, improvements, docks, fills or developments lawfully placed in or over water prior to December 4, 1969 shall be considered non-conforming, but may continue in accordance with RCW 90.58.270. New overwater structures are prohibited.

C. Existing Lots

1. An undeveloped lot, tract, parcel, site, or division of land located landward of the OHWM that was created or established in accordance with local and state subdivision requirements prior to the effective date of this Program or the Act, but which does not conform to the present lot size standards, may be developed if permitted by other land use regulations so long as such development conforms to all other requirements of this Program or the Act.

2. This section does not modify the rules regarding the development of plats under RCW 58.17.170 as now or hereafter amended.

19.400.105 Proposed Development

A. Location

1. New development shall be located and designed to avoid or, if that is not possible, to minimize as much as possible the need for new and maintenance dredging.

2. New development shall be located and designed to avoid the need for future shoreline stabilization for the life of the structure. Likewise, any new development which would require shoreline stabilization which causes significant impacts to adjacent or down-current properties shall not be allowed.

3. New development on lots constrained by depth, topography or critical areas shall be located to minimize, to the extent feasible, the need for shoreline stabilization.

4. New development on steep slopes or bluffs shall 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.

5. Subdivision shall be planned to avoid the need for shoreline stabilization for newly created lots, utilizing geotechnical analysis where applicable.

6. Non-water-oriented facilities and accessory structures, except for preferred shoreline uses, such as single-family residences and single family residential appurtenances when consistent with buffer provisions in Chapter 19.400 of this program, must be located landward of buffers and adjacent water-oriented uses, or outside shoreline jurisdiction, unless no other location is feasible.

B Standards for Work Waterward of OHWM

1. Water-dependent in-water structures, activities, and uses are not subject to the shoreline buffers established in this Program.

2. Projects involving in-water work must obtain all applicable state and federal permits or approvals, including(but not limited to) those from the U.S. Army Corps of Engineers, Ecology, Washington Department of Fish and Wildlife (WDFW), and/or Washington Department of Natural Resources.

3. Projects involving in-water work must comply with timing restrictions as set forth by state and federal project approvals.

4. Protection of bank and vegetation.

    a. Alteration or disturbance of the bank and bank vegetation must be limited to that necessary to perform the in-water work.
    b. All disturbed areas must be restored and protected from erosion using vegetation or other means.

5. If at any time, water quality problems develop as a result of in-water work, immediate notification must be made to any appropriate state or federal agency, e.g., Ecology, WDFW, National Marine Fisheries Service, U.S. Fish and Wildlife Service, etc. Affected tribes shall also be notified.

19.400.110 Mitigation

A. Mitigation Sequencing

1. Permitted uses and developments shall be designed and conducted in a manner that protects the current ecological condition, and prevents or mitigates adverse impacts. Mitigation measures shall be applied in the following sequence of steps, listed in order of priority:

    a. Avoid the impact altogether by not taking a certain action or parts of an action;
    b. 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;
    c. Rectify the impact by repairing, rehabilitating or restoring the affected environment;
    d. Reduce or eliminate the impact over time by preservation and maintenance operations;
    e. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments, including utilization of the in-lieu-fee process where appropriate; and
    f. Monitor the impact and the mitigation projects, and take appropriate corrective measures.

2. Application of the mitigation sequence shall achieve no net loss of ecological functions for each new development and shall not result in required mitigation in excess of that necessary to assure that development will result in no net loss of shoreline ecological functions and not have a significant adverse impact on other functions fostered by the policy of the Act or this Program.

B. Mitigation Options

1. After mitigation sequencing is applied in accordance with Section 19.400.110(A) Appendix B, *Mitigation Options to Achieve No Net Loss for New or Re-Development Activities*, shall be utilized for compensatory mitigation options.

2. Site selection for compensatory mitigation shall consider factors to determine the most ecologically suitable potential mitigation site. References for consideration when determining appropriate site selection may include the *Thurston County In-lieu-fee Program Instrument*,

Appendix H, Watershed Approach to Mitigation, Ecology's *Watershed Characterization and Land Use Planning*, and Ecology's *Selecting Mitigation Sites Using a Watershed Approach* (Western Washington), or other current resources informing mitigation decisions.

3. Proposals that use ratios different from those prescribed in this Program, that seek to obtain alternative buffers [Section 19.400.120(C)], or that include larger modifications in a buffer [Section 19.400.120(D)] may be approved if justified in a Shoreline Mitigation Plan consistent with Section 19.700.140. Where applicable, a Shoreline Variance may be required in accordance with Section 19.500.100(E).

4. Activities not listed in Appendix B that result in adverse impacts to shoreline ecological functions shall also be subject to compensatory mitigation requirements.

5. When compensatory mitigation becomes necessary on a site where documented restoration activities have occurred within the previous three years, but after the effective date of this Program, such documented restoration may be utilized as mitigation to offset new development impacts, provided the restoration was voluntary and not required as mitigation for prior development impacts. Mitigation credit for prior restoration activities shall be determined upon application for the impacting project, and shall, at a minimum, be commensurate with the proposed level of impact unless additional compensatory mitigation is provided.

C. Mitigation Compliance

1. Unless otherwise specified, mitigation shall take place prior to final project inspection to provide assurance that it will be completed and to mitigate for temporal loss of shoreline functions.

2. Thurston County shall require monitoring reports on an annual basis, or an agreed upon monitoring schedule, for a minimum of five years and up to ten years, or until mitigation success is demonstrated through meeting all final performance standards for at least two consecutive monitoring reports. The mitigation plan shall provide specific criteria for monitoring the mitigation project. Results and additional conditions shall be electronically tagged to the parcel for future reference.

3. Mitigation requirements shall run with the parcel, and notice of such requirements shall be recorded as a Notice to Title. Mitigation as conditioned under project approval shall be maintained in perpetuity, except where authorized through review of an alternative mitigation plan.

4. In the event that a subsequent landowner applies for additional permits, the electronic permit database will be queried for past mitigation requirements. If such mitigation is no longer in place or functioning, it shall be reinstalled prior to permit issuance.

5. Mitigation enforcement shall occur under the authority of Chapter 19.500, Permit Provisions, Review and Enforcement, of this Program.

19.400.115 Critical Areas

A Incorporation of Title 24 TCC

The following sections of Title 24 TCC, Critical Areas Ordinance, dated July 24, 2012, are incorporated herein by this reference, and provided in Appendix E for reference purposes only, except as supplemented or modified under Sections 19.400.115(B) - 19.400.115(G):

1. Standards for Existing Development (24.50), as applicable and consistent with Chapter 19.500 of this Master Program

2. Critical Area Tracts and Delineations (24.65.040)

3. Administrative Procedures (24.05)

4. Critical Area Determinations (24.05.070)

5. Critical Aquifer Recharge Areas (24.10)

6. Geologically Hazardous Areas (24.15)

7. Frequently Flooded Areas (24.20)

8. Fish and Wildlife Habitat Conservation Areas (24.25)

9. Wetlands (24.30)

10. Definitions (24.03), except where conflict exists, then the definitions in this Program shall govern.

B. Frequently Flooded Areas

Encroachments, including new construction, substantial improvements, fill and other development, are prohibited within designated floodways, unless otherwise authorized by Chapter 24.20 TCC. Before any development activities are permitted within the floodplain, compliance with Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) protection standards for critical habitats for listed species shall be demonstrated through submittal of a Habitat Management Plan prepared by a qualified wildlife biologist.

Table 24.20-1 TCC, identifies the land uses and activities that are allowable in frequently flooded areas (i.e., one-hundred-year floodplains, one-hundred-year flood zone (one percent flood zone), floodways, high ground water hazard areas/restricted development zones, channel migration hazard areas, and coastal flood hazard areas) and one-hundred-year channel migration hazard areas. All land uses and activities not allowed by or not mentioned in Table 24.20-1, except water dependent uses allowed under this Program, are prohibited within the flood hazard and channel migration hazard areas regulated by this section, except as otherwise provided in Chapter 24.01 TCC.

Also see Section 19.400.150 (Flood Hazard Reduction Measures) for additional regulations governing uses and modifications in floodways, floodplains, high groundwater areas and one-hundred-year channel migration hazard area zones.

C. Critical Freshwater Habitats

Critical freshwater habitats includes those portions of streams, rivers, wetlands, lakes and their associated channel migration zones and floodplains that provide habitat for priority species at any stage in their life cycles, and provide critical ecosystem-wide processes, as established in WAC 173-26-221(2)(c)(iv) and 24.25.005 TCC. Specific standards follow.

1. Lakes over 20 acres.

    a. Vegetation buffers shall be retained for each shoreline environment designation as specified in Section 19.400.120 (Vegetation Conservation Buffers) below.
    b. Where a lot cannot accommodate required buffers due to size, shape or topography, the Alternatives for New Development [Section 19.400.120(C)(1)] and Alternatives for Existing Development [Section 19.400.120(C)(2)], shall apply.
    c. The specific Shoreline Use and Modification Development Standards of the Program shall apply (Chapter 19.600).

2. Streams and rivers over 20 cubic feet per second (cfs) mean annual flow as determined by the Department of Ecology.

    a. A 250-foot vegetation buffer and an additional 15-foot building setback [Section 19.400.120 (B)(4)] shall be maintained from the OHWM of all Type S and Type F (greater than 20 feet in width) streams (24.25.020 TCC). Additional critical area buffers and setbacks may apply where flood hazard areas, geologically hazardous areas, or wetlands are present (see Chapter 24.15.015 and Tables 24.25-1 and 24.30-1 TCC).
    b. Where a lot cannot accommodate required buffers due to size, shape or topography, the Alternatives for New Development [Section 19.400.120(C)(1)] and Alternatives for Existing Development [Section 19.400.120.(C)(2)], shall apply.
    c. The specific Shoreline Use and Modification Development Standards of the Program shall apply (Chapter 19.600).

3. The subdivision of land shall 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. When evaluating alternate flood control measures or floodplain restoration opportunities, the removal or relocation of structures in flood-prone areas shall be given consideration.

D. Critical Saltwater Habitats

1. Critical saltwater habitats require a higher level of protection due to the important ecological functions they provide. Non-residential docks, bulkheads, bridges, fill, floats, jetties, utility crossings and other human-made structures shall not intrude into or over critical saltwater habitats except in the following circumstances, and only when the applicable use or modification standards are also met (Chapter 19.600).

    a. The public's need for such an action or structure is clearly demonstrated, and the proposal is consistent with protection of the public trust.

b. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible or would result in unreasonable and disproportionate cost to accomplish the same general purpose. A cost analysis may be required to assist with the feasibility determination.
c. The project, along with any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.
d. The project is consistent with the State's interest in resource protection and species recovery.
e. Marine riparian habitat zone shall be maintain as described in Section 24.25.050TCC.

2. When a habitat survey (see Section 19.700.145, Biological and Habitat Surveys) is required pursuant to the applicable use or modification section, the *Thurston County Shoreline Master Program Update Inventory and Characterization* report shall be consulted as a basis for existing conditions, along with appropriate field verification. See the applicable sections for specific measures necessary for minimization and mitigation of impacts to critical saltwater habitats.

3. Critical saltwater habitats include (see Chapter 19.150, Definitions, for more detail):

a. Kelp beds
b. Eelgrass beds
c. Spawning and holding areas for forage fish, such as herring, smelt and sand lance
d. Shellfish beds (subsistence, commercial and recreational)
e. Mudflats
f. Intertidal habitats with vascular plants
g. Areas with which priority species have a primary association

E. Geologically Hazardous Areas

Channel migration zones shall be classified as landslide hazard areas, and may be either high geologic hazard or low geologic hazard depending on the site characteristics outlined in TCC 24.20. Channel migration zone maps can be found in Appendix D of this Program.

F. Wetlands

1. Consistent with WAC 173-22-035 and TCC 24.30.020, wetlands in shoreline jurisdiction shall be delineated using the procedure outlined in the approved federal wetland delineation manual and applicable regional supplements.,

2. A wetland buffer may not be reduced through averaging more than 25 percent of the standard buffer width applied per TCC 24.30.045. Buffer reduction is allowed only when following the steps described in TCC 24.30.050.

3. The County may require an increase in buffer width, as specified in TCC 24.30.055, as necessary to protect wetland area, their functions, and their buffers.

G. Fish and Wildlife Habitat Conservation Areas

1. All typed waters, defined by WAC 222-16-030 with 20 cubic feet per second (cfs) or over 20 cfs mean annual flow, and their buffers are regulated by this Program and other provisions of Chapter 24.25. TCC. All stream types under 20 cfs mean annual flow are regulated under Chapter 24.25 TCC.

2. Important animal and plant species, their habitats of primary association, and other important habitats protected by this Program are included in Chapter 24.25.065 TCC.

19.400.120 Vegetation Conservation Buffers

A General Regulations

1. Vegetation conservation buffers provide a means to conserve, protect and restore shoreline vegetation in order to provide for ecological and habitat functions as well as human health and safety. Buffers shall consist of a non-clearing area established to protect the integrity, functions and values of the affected critical area or shoreline, but may also be modified and reduced to accommodate allowed uses when consistent with the Act and this Program. The standards below provide a flexible approach to maximize both ecological functions and water-dependent uses.

2. Vegetation conservation standards shall not be applied retroactively in a way which requires lawfully existing uses and developments (as of the effective date of this Program), including residential landscaping and gardens, to be removed, except when required as mitigation for new or expanded development.

3. In order to implement this Program's policies for preservation of native plant communities on marine, river, lake and wetland shorelines, mitigation sequencing shall be applied during site planning for uses and activities within the shoreline jurisdiction so that the design and location of the structure or development minimizes native vegetation removal. Development or uses that require vegetation clearing shall be designed to avoid the following in the order indicated below, with a. being the most desirable vegetation to retain:

   a. Native trees,
   b. Other native vegetation,
   c. Non-native trees, and
   d. Other non-native vegetation.

B. Buffer Widths

1. Standard Buffer. Each shoreline environment designation shall have a starting, or standard, buffer as measured landward from the OHWM. This buffer shall be adhered to unless otherwise allowed as described in the Reduced Standard Buffer provisions below or other critical area buffers are required. The Standard Buffers for each environment designation are as follows:

		Marine	Freshwater
a.	Mining:	250 feet	250 feet
b.	Shoreline Residential:	85 feet	75 feet
c.	Urban Conservancy:	250 feet	100 feet
d.	Rural Conservancy:	250 feet	125 feet
e.	Natural:	250 feet	250 feet

   f. The Standard Buffer for shoreline jurisdictional freshwater streams and rivers is 250 feet.
   g. Buffer widths for all other streams, including Type F streams less than 20 feet wide and Type Np and Ns streams are in Table 24.25-1 TCC.

2. Reduced Standard Buffer. Utilizing the *Mitigation Options to Achieve No Net Loss for New or Re-Development Activities* table (Appendix B) to achieve no net loss of shoreline ecological functions, the Standard Buffer may be reduced down to the Reduced Standard Buffer as specified

below. Mitigation options shall be reviewed and approved by the County for applicability to the project site commensurate with project impacts. The *Shoreline Restoration Plan* (Appendix C) shall serve as an initial review source. The Reduced Standard Buffers for each environment designation are as follows:

a. Mining (no reduction without Type III variance)
b. Shoreline Residential: 60 feet marine, 50 feet freshwater
c. Urban Conservancy: 100 feet; 75 feet where a net gain in shoreline ecological functions can be achieved. Applications for reductions below 100 feet shall include information documenting: a) mitigation necessary to achieve no net loss of shoreline ecological functions for the reduced 75-foot buffer; b) additional mitigation necessary to achieve no net loss for any reduction below 75 feet; and c) additional actions proposed to achieve a net gain in shoreline ecological functions. Proposed restoration activities shall not include projects previously identified for public funding, except that public-private partnerships may be utilized. A minimum five-year monitoring plan shall be required to demonstrate project success, in accordance with Section 19.400.110(C), Mitigation Compliance.
d. Rural Conservancy: 150 feet marine, 100 feet freshwater
e. Natural: 200 feet
f. Shoreline jurisdictional freshwater streams and rivers: buffers may be reduced pursuant to the standards in Section 19.400.120(C) below.

3. Additional Standards for Applying the Reduced Standard Buffer, in a through f above, within the Rural Conservancy and Natural designations and shorelines of statewide significance. Buffers may be reduced for single-family residences and water-oriented uses in the Rural Conservancy designation, Natural designation, and shorelines of statewide significance only under the following circumstances with appropriate mitigation:

a. The lot is physically constrained by slopes, wetlands or other natural features such that the Standard Buffer cannot be met; or
b. The lot is legally constrained by its size or shape, such that it would not support a home and garage with a footprint of at least 1,200 square feet if placed at or above the Standard Buffer.

4. An additional 15-foot building setback shall be maintained beyond the outer boundary of the buffer. This building setback may be reduced provided that the resulting setback is protective of existing vegetation within the buffer.

5. Buffer widths may be increased in situations where steep slopes, the presence of important habitat or species, landslide hazard areas, marine bluffs, areas of inadequate vegetation to protect water quality, or other hazards are identified during project review.

C. Constrained Lot and Infill Provisions

1. Alternatives for New Development. New single-family and water-dependent development may qualify for an alternative buffer if the following apply:

a. Infill Provision. For new construction on a vacant parcel adjoined by existing homes on both sides, the Reduced Standard Buffer may be administratively reduced by up to 10% in compliance with Section 19.400.135 (View Blockage). This shall be a Type I administrative review process. The *Mitigation Options to Achieve No Net Loss for New or Re-Development Activities* table (Appendix B) shall apply to such reductions.

b. Constrained Lot Provisions.

i. Legally platted lots with a depth that would not allow for compliance with the Reduced Standard Buffer. Proposals to reduce the buffer below the Reduced Standard Buffer shall require a Shoreline Mitigation Plan (Section 19.700.140), starting with review of existing conditions as presented in the *Thurston County Shoreline Master Program Update Inventory and Characterization* report and supplemented with appropriate field verification.

ii. If the development requires less than a 25% reduction of the Reduced Standard Buffer, or any amount of buffer reduction within the Shoreline Residential designation, a Type II Administrative Variance shall be required. If the development is not within the Shoreline Residential designation and requires greater than a 25% reduction of the Reduced Standard Buffer, a Type III Variance shall be required.

c. Water-dependent development. Buffers may be modified and reduced to accommodate water-dependent uses when consistent with the Act and this Master Program, and when conducted so that no net loss of critical areas or shoreline ecological functions occurs. Any loss of critical areas or shoreline ecological functions will require mitigation pursuant to the *Mitigation Options to Achieve No Net Loss for New or Re-Development Activities* table (Appendix B)

2. Alternatives for Existing Development.

a. Expansion of development outside of the Standard Buffer width. Expansion of existing development landward, outside the Standard Buffer shall be permitted, provided all other applicable provisions are met.

b. Expansion of development within the Standard Buffer width. Structures in existence on the effective date of this Program that do not meet the setback or buffer requirements of this Program may be remodeled or reconstructed provided that the new construction or related activity does not exceed the standard height limit of 35 feet, remains in the existing footprint and does not further intrude into the Standard Buffer.

c. Expansion of development below the Standard Buffer width. Expansion of existing development below the Standard Buffer shall not occur further waterward of the existing structure. Any expansion below the Standard Buffer shall require a Shoreline Mitigation Plan (see Section 19.700.140). Expansion within the Standard Buffer shall require a Type II Administrative Variance. Expansion within the Reduced Standard Buffer shall require a Type III Variance.

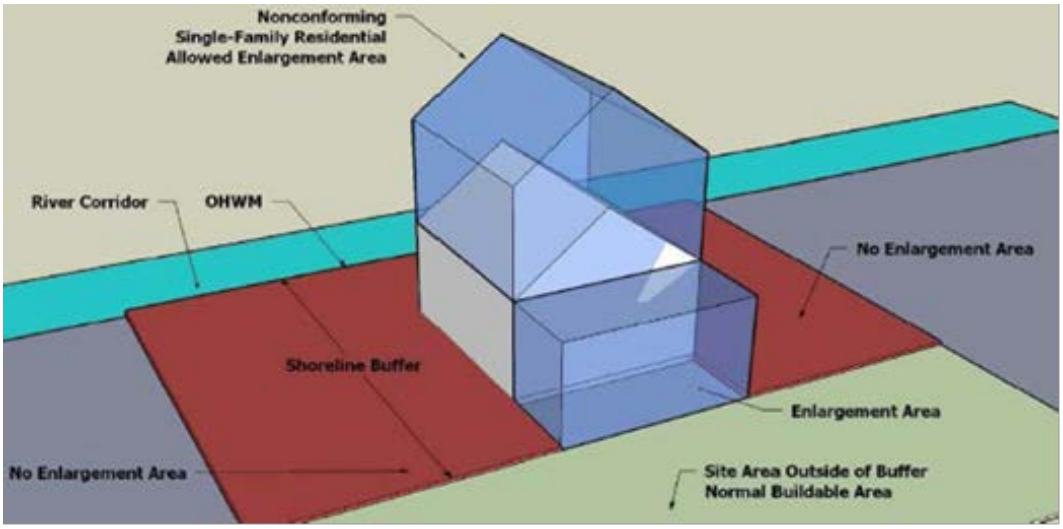

Figure 19.400.120 (C)(1) Allowed Expansion of Nonconforming Structures.

D. Other Uses and Modifications in Buffers

1. In order to accommodate water-enjoyment uses and development within the buffer, the following standards shall apply:

   a. Trails. Trails shall be limited to four feet in width, except where demonstrated necessary for a water-dependent use. Disturbance to soil, hydrological character, trees, shrubs, snags and important wildlife habitat shall be minimized. Pervious surfaces shall be utilized except where determined infeasible. Refer to Chapters 24.25.267 & 24.25.270 TCC for specifics on trail location, design, construction, and maintenance.

      i. Trails should be kept outside of all critical area buffers. If allowed, trails should only be located in the outer 25% of the buffer and follow mitigation sequencing in accordance with Section 19.400.110(A).

      ii. Trails that meet the definition of water-oriented use my be located within shoreline buffers when it can be demonstrated that buffer impacts are limited through mitigation sequencing in accordance with Section 19.400.110(A). Compensatory mitigation for unavoidable impacts will be required.

   b. Decks and Viewing Platforms. Decks and viewing platforms may be permitted, but shall be limited to one hundred square feet in size, unless demonstrated that a larger structure will not result in a net loss of shoreline ecological function through submittal of a Shoreline Mitigation Plan (Section 19.700.140). The structure shall be no closer than 25 feet from the ordinary high water mark (OHMW). Viewing platforms shall not have roofs, except where otherwise permitted through the view blockage standards (Section 19.400.135) and be no higher than 3 feet above grade. Creosote and pentachlorophenol should not be utilized in construction materials for decks, viewing platforms or boardwalks.

c. Beach Stairs. Beach stairs are permitted, subject to the exemption provisions in Section 19.500.100(C)(3). Beach stairs placed below the OHWM will normally require a shoreline permit from Thurston County, and Hydraulic Project Approval (HPA) from WDFW. Beach stairs with stair towers shall require an SDP where exemption provisions are not met.

d. Boat Launches and Railways. Boat launches and marine railways, when consistent with requirements in Section 19.600.160(C)(6) of this program, may be permitted, provided all applicable provisions are met to avoid net loss of shoreline functions.

e. Water-Oriented Storage Structure. One water-oriented storage structure to house boats and related equipment may be allowed within the buffer provided:

i. The structure is no closer than 25 feet from ordinary high water mark as determined by the Department;
ii. Mitigation will be required for buffer impacts due to placement of the storage structure within the buffer area;

iii. The structure's width shall be no greater than 25 feet or 25% of the lot width, whichever is less;
iv. Side yard setbacks shall be 10 feet for docks and storage structure.
v. The highest point of the structure shall not be greater than 12 feet above grade, and shall also comply with the View Blockage provisions of this program;
vi. The overall size shall not exceed 200 square feet.
vii. Allowance of a storage structure within a buffer shall not justify the need for shoreline armoring to protect the structure.
viii. Storage structures shall be prohibited in the Natural environment.

f. In no case shall non-water-oriented uses and activities be allowed below the Standard Buffer width. This includes swimming pools, sport courts, or fields.

2. Hand removal or spot-spraying of invasive or noxious weeds is permitted within Vegetation Conservation Buffers.

3. Standards for View Thinning

a. View thinning activities shall be limited to 30% of the total buffer length in the Shoreline Residential designation, and shall retain a minimum of 50% of the live crown;
b. View thinning activities shall be limited to 25% of the total buffer length in the Urban Conservancy and Rural Conservancy designations, and shall retain a minimum of 50% of the live crown;
c. No tree removal is allowed in the Natural designation for view enhancement; however, limited tree limbing may be allowed upon review and approval by the Department.
d. View thinning within the limited areas specified above shall generally be limited to tree limbing (see below, Figure 19.400.120(D)(1)). Where tree removal is demonstrated to be necessary, replanting of native trees shall occur at a 3:1 ratio (planted: removed) within the buffer area. Monitoring and maintenance of the plantings may be required by the Department.
e. Topping of trees is prohibited, except where demonstrated necessary for safety.
f. See the Forest Practices/Timber Harvest standards (Section 19.600.145) for hazard tree removal requirements.

g. An advance site visit may be required by the Department of Resource Stewardship in order to confirm the proposed thinning is consistent with this section and critical area protection standards. Site visit request applications may be obtained on-line or in person at Thurston County's permit assistance center. The County may also utilize site photographs in lieu of a site visit where sufficient detail is available to make a determination on consistency with thinning standards.

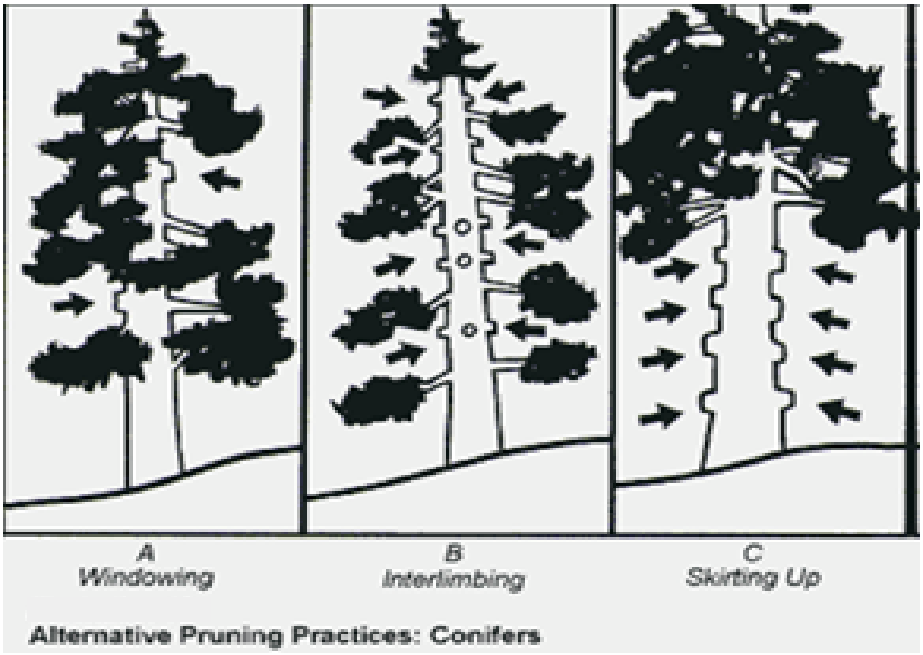

Figure 19.400.120 (D)(1) Alternative Pruning Techniques: Conifers

19.400.125 Water Quality and Quantity

New development shall provide stormwater management facilities designed, constructed and maintained in accordance with the current stormwater management standards, including but not limited to the following:

a. Chapter 2 of Volume I of the Thurston County Drainage Design and Erosion Control Manual (DDECM, dated December 31, 2016, or as amended) to determine which of the 11 Core Requirements apply to projects,

b. Chapter 3 of Volume I to determine what submittals will be required, what submittals shall contain and what site investigations, studies, and mapping will be required,

c. Chapter 4 of Volume I to determine what Best Management Practices (BMP's) should be applied to meet the requirements for on-site low impact development (LID) measures, flow control, and runoff treatment,

d. Guidance material in Volume II of the DDECM to prepare a Construction Stormwater Pollution Prevention Plan (Temporary Erosion and Sediment Control Plan) for the proposed project,

e. Information in Volume III that provides guidance on hydrologic modeling, conveyance system design, and establishing design infiltration rates for infiltration ponds,

f. And Volume V of the DDECM to site and design appropriate BMP's, paying particular attention to minimum required setbacks.

19.400.130 Historic, Archeological, Cultural, Scientific and Educational Resources (HASCE)

A. Applicability and Other Regulations

1. This section applies to archaeological and historic resources either recorded by the Department of Archaeology and Historic Preservation (DAHP), Thurston County Historic Commission (per Section 2.106.010 TCC), local jurisdictions or applicable tribal data bases or predictive models.

2. HASCE sites shall comply with the Governor's Executive Order 05-05, Section 2.106 TCC (Historic Commission), Chapter 25-48 WAC (Archaeological Excavation and Removal Permit), Chapter 27.44 RCW (Indian graves and records), and Chapter 27.53 RCW (Archaeological sites and resources).

B. Known or Potential HASCE Sites

1. Tribal Historic Preservation Officers (THPOs) for tribes with jurisdiction will be provided the opportunity to review and comment on all development proposals in the Thurston County shoreline jurisdiction, both terrestrial and aquatic, in order to ensure all known or potential archaeological sites, Traditional Cultural Properties and Traditional Cultural Landscapes are acknowledged, properly surveyed and adequately protected.

2. If archaeological resources are known in advance, developers and property owners must notify Thurston County, the Department of Archaeology and Historic Preservation, and applicable tribes.

3. Sites with known or potential archaeological resources, as determined pursuant to the resources listed at the beginning of this section, shall require a site inspection by a professional archaeologist in coordination with the affected tribe(s). The THPO shall be provided the opportunity to evaluate and comment on cultural resources evaluations conducted by the professional archaeologist.

4. Work on sites with identified archaeological resources shall not start until authorized by the Department of Archaeology and Historic Preservation through an Archaeological Excavation and Removal Permit, which may condition development permits.

C. Discovered HASCE sites

1. If archaeological resources are uncovered during excavation, developers and property owners must immediately stop work and notify Thurston County, the Office of Archaeology and Historic Preservation and affected Indian tribes.

2. Uncovered sites shall require a site inspection by a professional archaeologist in coordination with the affected tribe(s). Tribal Historic Preservation Officers shall be provided the opportunity to evaluate and comment on cultural resources evaluations conducted by the professional archaeologist.

3. Work shall not re-commence until authorized by the Office of Archaeology and Historic Preservation through an Archaeological Excavation and Removal Permit, which may condition development permits.

19.400.135 View Blockage

A. In order to protect water views, all principal buildings shall be so located as to maintain the minimum shoreline structure setback line. The shoreline structure setback line shall be determined as follows. Variances for reduced buffers may be needed along with mitigation per Section 19.400.120:

1. No Adjacent Principal Buildings. Where there are no adjacent principal buildings, the shoreline structure setback line shall be the buffer and setback specified elsewhere in this Program. See Figure 19.400.135(A)(1).

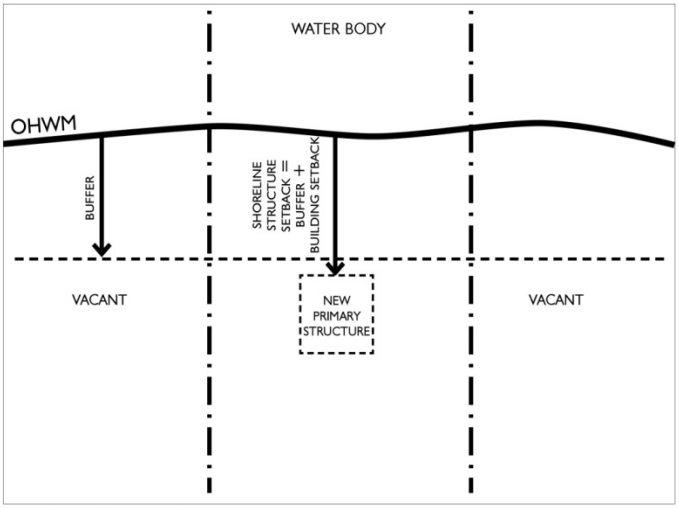

Figure 19.400.135 (A)(1) Buffer and shoreline structure setback with no adjacent primary structure. *(Note that in all figures the "square" includes all patios, decks, etc. – see principle building definition in Chapter 100)*

2. Adjacent Principal Building on One Side. Where there is an adjacent principal building on one side, the shoreline structure setback line shall be a distance no less than that of the adjacent principal building to the shoreline or the buffer and setback specified elsewhere in this Program, whichever is greater. See Figures 19.400.135(A)(2)(a) and 19.400.135.(A)(2)(b).

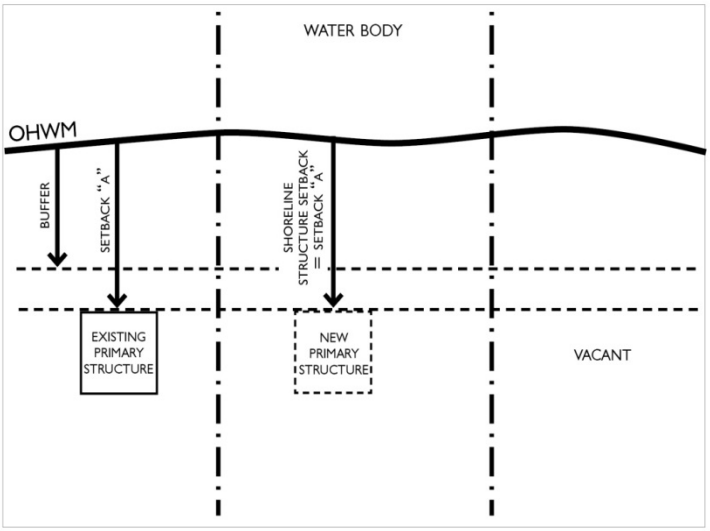

Figure 19.400.135(A)(2)(a) Buffer and shoreline structure setback with adjacent primary structure landward of buffer on one side.

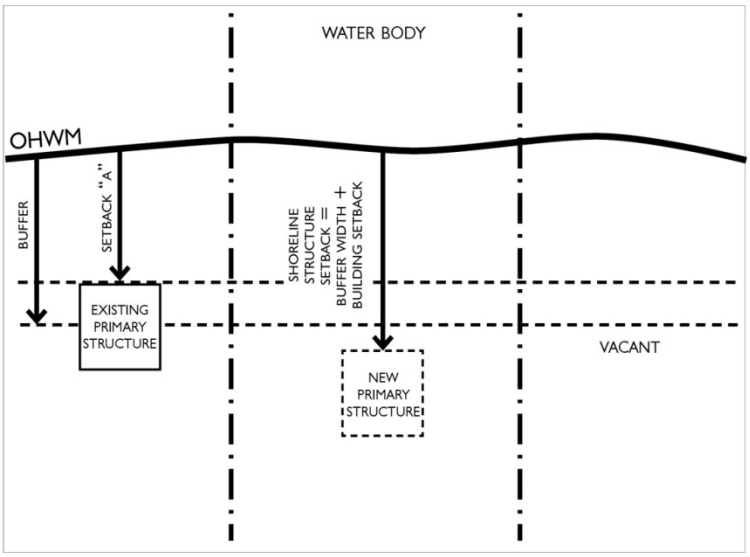

Figure 19.400.135(A)(2)(b) Buffer and shoreline structure setback with adjacent non-conforming primary structure within buffer on one side.

3. Adjacent Principal Buildings on Both Sides on a Regular Shoreline. Where there are adjacent principal buildings on both sides of the proposed structure on a regular shoreline, the shoreline structure setback line shall be determined by a line drawn

between the building line of the adjacent principal buildings or the buffer and setback specified elsewhere in this Program, whichever is greater. See Figure 19.400.135(A)(3).

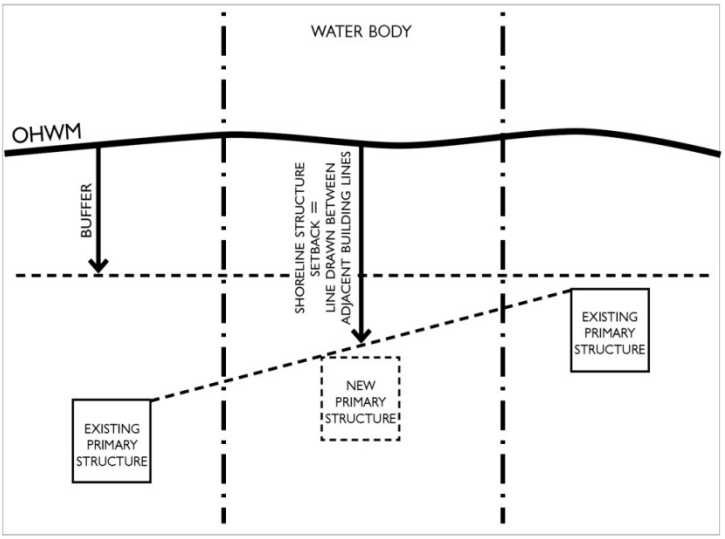

Figure 19.400.135(A)(3) Buffer and shoreline structure setback on a regular shoreline with adjacent primary structures on both sides.

4. Adjacent Principal Buildings on Both Sides on an Irregular Shoreline. Where there are two adjacent principal structures on a shoreline which forms a cove or peninsula, the shoreline structure setback line shall be determined by averaging the setback lines of the two adjacent principal buildings or the buffer and setback specified elsewhere in this Program, whichever is greater. See Figure 19.400.135(A)(4).

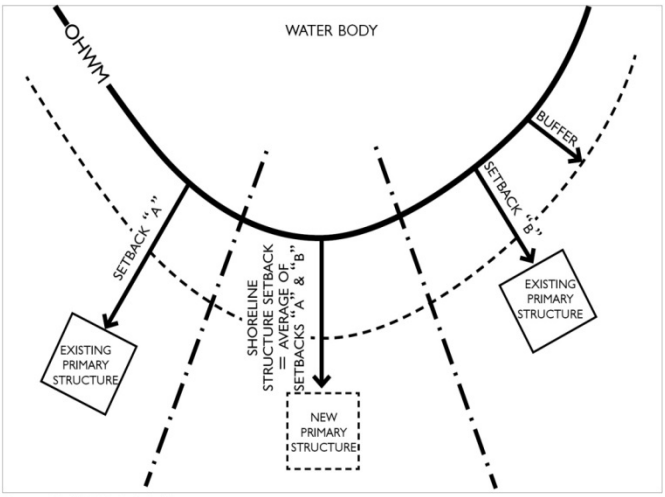

Figure 19.400.135(A)(4) Buffer and shoreline structure setback on an irregular shoreline with adjacent primary structures on both sides.

5. Consideration of existing mitigating circumstances. The shoreline structure setback line may be administratively waived where an elevation survey demonstrates that due to a difference in topography or a vegetation survey demonstrates that due to the presence of significant view blocking vegetation on or adjacent to the common border of the two parcels, the proposed principle building will not result in any view blockage to adjacent principle buildings. In such cases, the buffer and setback specified elsewhere in this Program shall apply.

B. Accessory structures. Accessory structures as defined for the purposes of view blockage may be sited within the shoreline structure setback area provided that they do not substantially obstruct the view of adjacent principal buildings and comply with applicable buffer provisions.

C. Appeal procedure. Determinations of shoreline structure setback lines are classified as Type I decisions under Title 20.TCC and may be subject to appeal as provided therein.

D. Variance (administrative) procedure.

1. An applicant aggrieved by the strict application of this chapter may seek a conditional waiver from the director. Such a waiver shall be a Type II administrative decision. A conditional waiver may be granted after the applicant demonstrates the following:

   a. The hardship which serves as the basis for granting the conditional waiver is specifically related to the property of the applicant and does not apply generally to other property in the vicinity;
   b. The hardship which serves as the basis for granting the conditional waiver is specifically related to the property of the applicant and does not apply generally to other property in the vicinity;
   c. The hardship which results from the application of the requirements of this chapter is not a result of the applicant's own actions;
   d. The conditional waiver, if granted, will be in harmony with the general purpose and intent of the Act and this Program in preserving the views of the adjacent shoreline residences; and
   e. In balancing the interest of the applicant with adjacent neighbors, if more harm will be done by granting the conditional waiver than would be done by denying it, the conditional waiver shall be denied.

2. The applicant seeking a conditional waiver of the strict application of this chapter may file an application with the Department accompanied by an application fee per the Thurston County Land Use Fee Schedule.

19.400.140 Bulk and Dimension Standards

A. The standards in Table 19.400.140 (A) below shall apply to all shoreline use and development activities except where specifically modified in this Master Program.

Table 19.400.140(A) Development Standards

Standard	Mining	Shoreline Residential	Urban Conservancy	Rural Conservancy	Natural	Aquatic
Lot Width (feet)	40-60 [1]	40-80 [2]	60	100	140	Not Applicable
Shoreline Buffers	See Section 19.400.120(B) of this Master Program					
Side Setbacks (feet)	5	5[3]	5[3]	5[3]	5[3]	5[3]
Maximum Hard Surface Area (percentage of lot area)	[4]	[4]	[4]	[4]	[4]	Not Applicable
Maximum Building Height (feet)[5]	35	35	35	35	35	35

Notes:

1. 40-foot lot width for single-family residential uses. 60-foot lot width for multifamily and non-residential uses.
2. 40-foot lot width for lots in Limited Areas of Intensive Rural Development or Urban Growth Areas. 80-foot lot width for all other Shoreline Residential lots.
3. Buildings housing animals, a minimum 35 foot side yard and 35 foot rear yard setback shall apply in accordance with TCC 20.07.
4. Hard Surface thresholds for Shoreline Environmental Designations: See Section 19.400.125
5. Does not include boathouses as described above in Section 19.400.100(B)(4)

B. The maximum allowable height of structures in shoreline jurisdiction is 35 feet above finished average grade. Building heights above 35 feet, but consistent with underlying zoning allowances, require authorization via a Shoreline Variance pursuant to Section 19.500.100(E) of this Master Program.

C. No new lots shall be created that are non-conforming. All new subdivided shoreline lots shall be, at a minimum, a 1:2 width to depth ratio. Exceptions may be granted in cases where such ratio would negatively impact critical areas or their buffers.

19.400.145 Public Access

A. All recreational and public access facilities shall be designed, located and operated in a manner consistent with the purpose of the environment designation in which they are located.

B. Except as provided in Regulations E and F below, substantial developments or conditional uses shall provide public access where any of the following conditions are present:

1. A development or use will create increased demand for public access to the shoreline.
2. A development or use will interfere with an existing public access way.
3. New non-water-oriented uses are proposed.
4. A use or activity will interfere with public use of lands or waters subject to the Public Trust Doctrine.

C. Shoreline development by public entities, port districts, state agencies, and public utility districts shall include public access measures as part of each shoreline development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.

D. Ensure that publicly financed or subsidized shoreline erosion control measures do 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. See public access provisions of WAC 173-26-221 (4). Where feasible, incorporate ecological restoration and public access improvements into the project.

E. Off-site public access may be allowed where it results in an equal or greater public benefit than on-site public access, or when on-site limitations relating to security, environment, use conflict, intervening improvements, or feasibility are present. Sites on the same waterbody, or secondarily within the same watershed, are preferred. Where feasible, off-site public access should include both visual and physical elements. Off-site public access may include, but is not limited to, enhancing an adjacent public property (e.g., existing public or recreation access site, road, street, or alley abutting a body of water, or similar) in accordance with County standards; providing, improving or enhancing public access on another property under the control of the applicant/proponent; or another equivalent measure.

F. Public access shall not be required for single-family residential development of four (4) or fewer lots.

G. Public access shall not be required if an applicant/proponent demonstrates to the satisfaction of the County that one or more of the following conditions apply:

1. Unavoidable health or safety hazards to the public exist and cannot be prevented by any practical means;
2. Constitutional or other legal limitations apply;
3. Inherent security requirements of the use cannot be satisfied through the application of alternative design features or other solutions;
4. The cost of providing the access, easement or alternative amenity is unreasonably disproportionate to the total long-term cost of the proposed development;
5. Adverse environmental impacts to shoreline ecological processes and functions that cannot be mitigated will result from the public access;
6. Significant undue and unavoidable conflict between any access provisions and the proposed use and/or adjacent uses would occur and cannot be mitigated; or
7. Adequate public access already exists within a mile along the subject shoreline, and there are no gaps or enhancements required to be addressed by the individual shoreline development.

H. When provisions for public access are required as a condition of project approval, the Director shall prepare written findings demonstrating consistency with constitutional and legal practices regarding private property and the principles of nexus and proportionality.

I. Required public access sites shall be fully developed and available for public use at the time of occupancy of the shoreline development.

J. Public access provisions shall run with the land and be recorded via a legal instrument such as an easement, or as a dedication on the face of a plat or short plat. Such legal instruments shall be recorded with the County Auditor's Office prior to the time of building permit approval, occupancy or plat approval, whichever comes first (RCW 58.17.110). Future actions by the applicant's successors in interest or other parties shall not diminish the usefulness or value of required public access areas and associated improvements.

K. Maintenance of the public access facility over the life of the use or development shall be the responsibility of the owner unless otherwise accepted by a public or non-profit agency through a formal agreement recorded with the County Auditor's Office.

L. The removal of on-site native vegetation shall be limited to the minimum necessary for the recreational or public access development area, such as picnic areas, campsites, selected views, or other permitted structures or facilities.

M. Preference shall be given to activities that are consistent with approved state and local park plans for water-oriented recreational development, including but not limited to the Thurston County Comprehensive Plan, Thurston County Parks Plan, Washington State Parks CAMP plans, Thurston County Non-Motorized Plan, and other agency plans.

N. Vehicular traffic is prohibited on beaches, bars, spits and streambeds, except for permitted construction and boat launching, or in areas where it can be demonstrated that a historical use has been established.

O. Public road-ends, tax-title lands and right-of-ways adjacent to shorelines of the state shall be preserved, maintained and enhanced consistent with RCW 36.87.130. The Thurston County "Right of Way Use Permit" process in TCC) shall be utilized to open shoreline road-ends, as now or hereafter amended. Such process shall include notification of abutting property owners, and may include a neighborhood meeting or community council outreach effort in order to solicit and resolve community concerns with regard to specific proposals. The public interest in shoreline access shall be given appropriate consideration during the review process, consistent with the Act. Decisions to approve or deny opening of road-ends may be appealed in accordance with Chapter 13.80 TCC.

P. Trail access shall be provided to link upland facilities to the beach area where feasible and where impacts to ecological functions can be adequately mitigated.

Q. When applicable, recreational and public access development shall make adequate provisions for the following. These requirements may be waived for opening of public road ends, tax title lands, and right-of-ways as described in N above, except where determined necessary through the public review process:

1. Vehicular parking and pedestrian access;
2. Proper wastewater and solid waste disposal methods;
3. Security and fire protection;
4. The prevention of overflow and trespass onto adjacent properties, including, but not limited to, landscaping, fencing, and posting of property; and
5. Screening of such development from adjacent private property to prevent noise and light impacts.
6. Compliance with the Americans with Disabilities Act (ADA), including being barrier-free and accessible for physically disabled uses where feasible.

R. Shoreline trails and pathways shall be located, designed, and constructed to avoid and minimize bank instability.

S. Project-specific public access standards are contained in the following Shoreline Use and Modification Development Standards sections (Chapter 19.600):

1. Barrier Structures and other In-Stream Structures (Section 19.600.120)
2. Boating Facilities (Section 19.600.125)
3. Commercial Development (Section 19.600.130)
4. Fill (Section 19.600.140)

5. Industrial Development (Section 19.600.150)
6. Residential Development (Section 19.600.170)
7. Shoreline Stabilization (Section 19.600.175)

19.400.150 Flood Hazard Reduction Measures

A. Environment Designations Permit Requirements

CUP is required for installation of flood hazard reduction measures in all environment designations.

B. Development Standards

1. Development in floodplains shall not significantly or cumulatively increase flood hazard and shall follow the criteria in Chapter 14.38 TCC.

2. New structural flood hazard reduction measures in shoreline jurisdiction are allowed only when a scientific and engineering analysis documents all of the following:

    a. They are necessary to protect existing development;
    b. Nonstructural measures are not feasible;
    c. Impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss; and
    d. Appropriate vegetation conservation actions are followed.

3. The following uses and activities may be appropriate and/or necessary within the channel migration zone (see Appendix D, Channel Migration Zone Maps) or floodway, provided that they provide appropriate protection of ecological functions and do not exacerbate flood risk onsite or in nearby areas:

    a. Actions that protect or restore the ecosystem-wide processes or ecological functions.
    b. Forest practices in compliance with the Washington State Forest Practices Act and its implementing rules.
    c. Existing and ongoing agricultural practices, provided that no new restrictions to channel movement occur.
    d. Mining when conducted in a manner consistent with WAC 173-26-241(3)(h) and this Program.
    e. Bridges, utility lines, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate cost. Where such structures are allowed, mitigation shall address impacted functions and processes in the affected section of watershed or drift cell.
    f. Repair and maintenance of an existing legal use.
    g. Modifications or additions to an existing legal use, provided that channel migration is not further limited.
    h. Development in designated UGAs where existing structures prevent active channel movement and flooding.
    i. Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally

acting in natural conditions, and that the measure includes appropriate mitigation of impacts to ecological functions associated with the river or stream.

j. Development with the primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.

Applicants for shoreline development or modification may submit a site-specific channel migration zone study if they do not agree with the mapping in Appendix D.

4. Structural flood hazard reduction measures shall be consistent with the County's adopted Hazard Mitigation Plan that evaluates cumulative impacts to the watershed system.

5. New structural flood hazard reduction measures shall be situated landward of associated wetlands and designated vegetation conservation areas, unless actions are intended to increase ecological functions or if it is determined through a geotechnical analysis that no other alternative to reduce flood hazard to existing development is feasible. Mitigation may be required for impacts to critical areas.

6. New structural flood hazard reduction measures on public lands or funded by the public shall provide or improve public access pathways unless such improvements would cause unavoidable health or safety hazards, 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.

7. The removal of gravel for flood management purposes may be permitted only if a biological and geomorphological study shows that extraction:

   a. Has a long-term benefit to flood hazard reduction,
   b. Results in not net loss of ecological functions, and
   c. Is part of a comprehensive flood management solution.

19.400.155 Restoration and Enhancement

A. Environment Designations Permit Requirements

Restoration and enhancement uses and developments are permitted as an SDP, or may be exempt from an SDP if criteria in Section 19.500.100(C) are met, for all environment designations, provided the project's primary purpose is the restoration of the natural character and ecological functions of the shoreline, as determined by the Department.

B. Development Standards

1. Restoration and enhancement shall be carried out in accordance with an approved shoreline restoration plan that uses the best available scientific and technical information, and implemented using best management practices (BMPs).

2. All shoreline restoration and enhancement projects shall protect the integrity of adjacent natural resources, including aquatic habitats and water quality, and shall not result in significant adverse changes to sediment transport, ecological processes, properties, or habitat.

3. Long-term maintenance and monitoring shall be arranged by the project applicant and included in restoration or enhancement proposals. Monitoring shall occur for a minimum of five years,

except the term may be reduced if all final performance standards have been met for at least two consecutive monitoring reports, demonstrating project success.

4. Shoreline restoration and enhancement shall not significantly interfere with the normal public use of the navigable waters of the state or tribal resources without appropriate mitigation. For projects on state-owned aquatic lands, prior to the solicitation of permits from regulatory agencies, project proponents must coordinate with the Washington Department of Natural Resources to ensure the project will be appropriately located. Affected tribes shall also be notified.

5 Applicants in the County's UGAs seeking to perform restoration projects that may shift the OHWM landward of the pre-project location, are advised to work with the County to assess whether and how the non-restoration-related elements of the project may be allowed relief under RCW 90.58.580.

Chapter 19.500 Permit Provisions, Review and Enforcement

19.500.050 Statement of Applicability and Purpose

RCW 90.58.140(3) requires local governments to establish a Program, consistent with the rules adopted by Ecology, for the administration and enforcement of shoreline development. Also, in accordance with RCW 90.58.050, which provides that this Program is intended to establish a cooperative program between Thurston County and the State, Thurston County shall have the primary responsibility for administering the regulatory program, and Ecology shall act primarily in a supportive and review capacity.

The applicable provisions of Titles 20, 21, 22, and 23 TCC shall govern the processing of permit applications required under this title. If any conflict should exist between Title 20, 21, 22, and 23 TCC and this Program, the provisions of this Program will be followed.

19.500.075 Permit Types Definitions

Applications for review of permit types or actions listed in Table 24.05-1 TCC shall be subject to a Type I, Type II, Type III, IV, or Type V review process. The application types are classified as follows:

A. A Type I process involves:

1. An application that is subject to clear, objective and nondiscretionary standards or standards that require the exercise of professional judgment about technical issues; and

2. Is exempt from State Environmental Policy Act (SEPA) review.

B. A Type II process involves an application that is subject to objective and subjective standards which require the exercise of limited discretion about nontechnical issues and about which there may be limited public interest. (Requires SEPA)

C. A Type III process involves an application that is subject to standards which require the exercise of substantial discretion and about which there may be broad public interest. (Requires Hearing Examiner decision)

D. A Type IV process involves the adoption or amendment of critical areas policies or regulations. It also includes critical areas analysis that would be required for a site-specific comprehensive plan or zoning amendment.

E. A Type V process is similar to a Type III process except that the local permit decision is not final until the permit has been reviewed, and either approved, denied, or approved with conditions, by Ecology within their 30 day permit decision review period pursuant to WAC 173-27-130 and 173-27-200.

19.500.100 Permit Application Review and Permits

A. Permit Application Review

1. No authorization to undertake use or development on shorelines of the state shall be granted by Thurston County unless upon review the use or development is determined to be consistent with the policy and provisions of the Act and this Program.

2. Per WAC 173-27-140(2), no permit shall be issued for any structure of more than thirty-five (35) feet above average grade level on shorelines of the state that will obstruct the view of a substantial number of residences on areas adjoining such shorelines, except where allowed through a variance, and then only when overriding considerations of the public interest will be served.

3. Consolidated Permit Review shall occur pursuant to the procedures in Chapter 20.60.025, 21.81.050, 22.62.025, and 23.72.050 TCC.

4. State Environmental Policy Act (SEPA) compliance shall be required for non-SEPA exempt projects, pursuant to the procedures in Title 17.09 TCC.

5. A permit or written approval is required from Thurston County for all development within shoreland jurisdiction. Written approval from Thurston County is required prior to conducting any and all exempt activities, unless otherwise stated in this Program.

6. All Shoreline permits and shoreline exemptions may be conditioned to ensure compliance with the SMP and the Shoreline Management Act.

7. Each permit for a substantial development, conditional use or variance, issued by Thurston County shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until twenty-one days from the date of filing as defined in RCW 90.58.140(6) and WAC 173-27-130, or until all review proceedings initiated within twenty-one days from the date of such filing have been terminated; except as provided in RCW 90.58.140 (5)(a) and (b).

B. Substantial Development Permit

1. The Act provides that no substantial development shall be undertaken on the shoreline of the state without first obtaining a Substantial Development Permit (SDP).

2. A SDP shall be classified as a Type III permit review under Chapter 20.60.020 TCC.

3. A SDP shall be granted only when the applicant can demonstrate that the proposed development is consistent with the policies and procedures of the Act and this Program, as well as criteria in WAC 173-27-150.

4. The Act provides a limited number of exceptions to the definition of substantial development. Those exceptions are contained in RCW 90.58.030 and in the section below, and do not require an SDP. Whether or not a development constitutes a substantial development, all development must comply with the requirements contained in the Act and this Program and may require other

permits or approvals under this Master Program. Permits may be issued with limitations or conditions to assure consistency with the Act and this Program.

5. All applications for Shoreline Substantial Development Permits or permit revisions shall be submitted to the Department of Ecology upon a final decision by local government pursuant to WAC 173-27-130. Final decision by local government shall mean the order of ruling, whether it be an approval or denial, that is established after all local administrative appeals related to the permit have concluded or the opportunity to initiate such appeals have lapsed.

C. Exemptions from Substantial Development Permits

1. Certain activities, developments or uses are exempt from the Substantial Development Permit requirements of the Act and this Program. These developments are those set forth in WAC 173-27-040 (or as amended), and do not meet the definition of substantial development under RCW 90.58.030(3)(e). A summary of exempt developments is listed in sub-section 3 below, the application of which shall be guided by WAC 173-27-040 (or as amended).

2. Application and interpretation of exemptions.

   a. Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the Substantial Development Permit process.
   b. An exemption from the SDP process is not an exemption from compliance with the Act or this Master Program, or from any other regulatory requirements. To be authorized, all uses and developments must be consistent with the policies and provisions of this Master Program and the Act. A development or use that is listed as a conditional use pursuant to this Master Program or is an unlisted use, must obtain a CUP even though the development or use does not require a SDP. When a development or use is proposed that does not comply with the bulk, dimensional and performance standards found in Chapters 5 and 7 of this Master Program, such development or use can only be authorized by approval of a Shoreline Variance (see Section 19.500.100(E)).
   c. The burden of proof that a development or use is exempt from the permit process is on the applicant.
   d. If any part of a proposed development is not eligible for exemption, then a SDP is required for the entire proposed development project.
   e. The County may attach conditions to the approval of exempted developments and/or uses as necessary to assure consistency of the project with the Act and this Master Program.

3. The following list of developments, summarized from WAC 173-27-040 (see chapter for complete language), shall not require SDPs:

   a. Any development of which the total cost or fair market value, whichever is higher, does not exceed sixty four hundred dollars (as amended), if such development does not materially interfere with the normal public use of the water or shorelines of the state. The dollar threshold established in this subsection is adjusted for inflation by the Washington State Office of Financial Management every five years. The total cost or fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials;
   b. Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements;

c. Construction of the 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 OHWM for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion;

d. Emergency construction necessary to protect property from damage by the elements;

e. Construction and practices normal or necessary for existing farming, irrigation, and ranching activities;

f. Construction or modification of navigational aids such as channel markers and anchor buoys;

g. Construction on shorelands by an owner, lessee or contract purchaser of a single-family residence for their own use or for the use of their family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of Thurston County or a state agency having jurisdiction thereof, other than requirements imposed pursuant to Chapter 90.58 RCW. "Single-family residence" means a detached dwelling designed for and occupied by one family including those structures and developments within a contiguous ownership which are a normal appurtenance. 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. On a statewide basis, normal appurtenances include a garage; deck; driveway; utilities; fences; installation of a septic tank and drainfield and grading 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. Construction authorized under this exemption shall be located landward of the ordinary high water mark.

h. 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 single-family and multiple-family residences. This exception applies if either:

   i. In salt waters, the fair market value of the dock does not exceed two thousand five hundred dollars; or

   ii. 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 shall be considered a substantial development for the purpose of this Program;

i. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system;

j. The marking of property lines or corners on state-owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;

k. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed or utilized primarily as a part of an agricultural drainage or diking system;

l. Any project with a certification from the governor pursuant to Chapter 80.50 RCW;

m. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under the Act and this Program;

n. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Washington Department of Agriculture or Ecology jointly with other state agencies under Chapter 43.21C RCW;

o. Watershed restoration projects as defined at WAC 173-27-040(2)(o). Thurston County shall review watershed restoration projects for consistency with this Program in an expeditious manner and shall issue its decision along with any conditions within forty-five 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 projects as used in this section;

p. A public or private project that is designed to improve fish or wildlife habitat or fish passage, when all of the following apply. The County may not require permits or charge fees for fish habitat enhancement projects that meet the criteria and that are reviewed and approved according to the WAC provisions cited herein:

i.. The project has been approved in writing by WDFW;

ii. The project has received Hydraulic Project Approval (HPA) from WDFW pursuant to Chapter 77.55 RCW;

iii. The County has determined that the project is substantially consistent with this Shoreline Master Program. The County shall make such determination in a timely manner and provide it by letter to the project proponent; and

iv. Fish habitat enhancement projects that conform to the provisions of RCW 77.55.181 are determined to be consistent with this Program.

4. Documentation of exemptions. For any project qualifying for a permit exemption that requires Federal Rivers & Harbors Act §10 permits, Federal Clean Water Act §404 permits, or State Hydraulic Project Approval, a permit exemption letter must be prepared. The County shall also prepare permit exemption letters for other types of exemptions, generally for activities at or below the OHWM, including but not limited to single-use buoys and floats. Permit exemption requests may be obtained through the County permit assistance center. The County shall document exemptions in the permit system.

D. Conditional Use Permits, including Administrative Conditional Use Permits

1. The purpose of a Conditional Use Permit (CUP) is to provide flexibility in authorizing uses in a manner consistent with RCW 90.58.020. Accordingly, special conditions may be imposed to prevent undesirable effects of the proposed use and/or to assure consistency of the project with the Act and this Program.

2. CUPs shall be classified as a Type V permit review under Chapter 20.60.020TCC. Where Administrative CUPs are allowed, they shall be classified as a Type I permit review under Chapter 20.60.020TCC. Unless specified otherwise in this Program, the CUP criteria apply in addition to the applicable SDP criteria, and shall be combined into a single review process.

3. Shoreline CUPs shall be granted only after the applicant can demonstrate compliance with WAC 173-27-160 and this section as follows:

a. That the proposed use is consistent with the policies of RCW 90.58.020 and this Program;

b. That the proposed use will not interfere with the normal public use of public shorelines and does not conflict with existing water dependent uses;

c. That the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Comprehensive Plan and this Program;

d. That the proposed use will not result in significant adverse effects or a net loss to the shoreline ecosystem functions in which it is to be located;

e. That the public interest suffers no substantial detrimental effect;
f. That consideration has been given to the cumulative impact of additional requests for like actions in the area and shall not result in substantial adverse effects or net loss of shoreline ecosystem functions. For example, if CUPs were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the use preference policies and shall not produce substantial adverse impacts to the shoreline environment. Consideration shall be demonstrated through preparation of a Cumulative Impacts Report, if requested, that substantially conforms to the applicable provisions of Chapter 19.700 (Special Reports).
g. Other uses which are not classified or set forth in this Program may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this section and the applicable requirements of the SMP.
h. Uses which are specifically prohibited by this Master Program may not be authorized pursuant to this section.

4. All applications for Shoreline CUPs, including Administrative CUPs, approved by the County shall be forwarded to Ecology pursuant to WAC 173-27-200, for final approval, approval with conditions, or denial. No approval shall be considered final until it has been acted upon by Ecology. No action shall be taken pursuant to a Conditional Use Permit until at least 21 days from the date the Department of Ecology sends Thurston County their determination on the CUP.

E. Variances and Administrative Variances

1. The purpose of a Variance Permit (VAR) is strictly limited to granting relief from specific bulk, dimensional, or performance standards (not uses) set forth in this Program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of this Master Program will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

2. Variances shall be classified as a Type V permit review under Chapter 24.05.020(A)(3) TCC. Administrative Variances shall be a Type I permit and may be granted where allowed under the Use and Modifications Matrix or applicable permit requirements.

3. Variance permits should be granted in circumstances where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In all instances, extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect.

4. Variance permits for development that will be located landward of the OHWM, except within those areas designated as wetlands pursuant to Chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:

a. That the strict application of the bulk, dimensional or performance standards set forth in Chapters 19.400 and 19.600 of this Program preclude, or significantly interfere with, reasonable use of the property;
b. That the hardship described in subsection 1 above is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of this Program, and for example, not from deed restrictions or from the actions of the applicant or a predecessor in title;
c. That the design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Comprehensive Plan and this Program, will

not cause net loss to shoreline ecological functions and does not conflict with existing water dependent uses;

d. That the variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;
e. That the variance requested is the minimum necessary to afford relief; and
f. That the public interest will suffer no substantial detrimental effect.

5. Variance permits for development and/or uses that will be located waterward of the OHWM or within any wetland as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant can demonstrate all of the following:

a. That the strict application of the bulk, dimensional or performance standards set forth in Chapters 19.400 and 19.600 of this Program preclude all reasonable use of the property;
b. That the proposal is consistent with the criteria established under subsection 4(a) and 4(b) of this section; and
c. That the public rights of navigation and use of the shorelines will not be adversely affected.

6. In the granting of all Variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if variances were granted to other developments and/or uses in the area where similar circumstances exist, the total of the variances shall remain consistent with the policies of RCW 90.58.020 and shall not cause substantial adverse effects to the shoreline environment. The applicant shall demonstrate such consideration through submittal of a Cumulative Impacts Report, where required (Section 19.700.130).

7. Variances from the Shoreline Use and Modifications Matrix in Section 19.600.105 is prohibited per WAC 173-27-170(5).

8. All applications for shoreline Variances approved by the County, including Administrative Variances, shall be forwarded to Ecology pursuant to WAC 173-27-200, for final approval, approval with conditions, or denial. No approval shall be considered final until it has been acted upon by Ecology. No action shall be taken pursuant to a Variance Permit until at least 21 days from the date the Department of Ecology sends Thurston County their determination on the VAR.

19.500.105 Procedure

A. Permit Process Summary

For informational purposes, a summary of the permit process described below follows and is illustrated on Figure 19.500.105(A):

1. An application for a permit or exemption shall be made on forms prescribed by Thurston County's permit procedures (20.60.020 & 030 TCC).

2. The application shall be made by the property owner, lessee, contract purchaser or other person entitled to possession of the property.

3. Where exempt, the permit shall be reviewed pursuant to exemption criteria at WAC 173-27-040 and Section 19.500.100(C) (Exemptions from Substantial Development Permits) above.

4. If not exempt, a pre-application or staff consultation meeting may be required as described below or for new dock proposals as described in Section 19.600.160(B)(1).

5. If the application involves state owned land, a pre-application conference with the Washington Department of Natural Resources land manager shall be held prior to submittal of the application. Confirmation of the pre-application conference shall be submitted as a requirement of the County's application process.

6. For non-exempt proposals, the County shall provide notice of application pursuant to Title 20.60 TCC.

7. A hearing date will be set before the hearing examiner. Notice of the hearing will be provided consistent with Chapter 20.60.TCC.

8. The public hearing will be conducted pursuant to Chapter 2.06 TCC.

9. Following a decision by the County, the application will be forwarded to Ecology in accordance with the filing procedures at WAC 173-27-130.

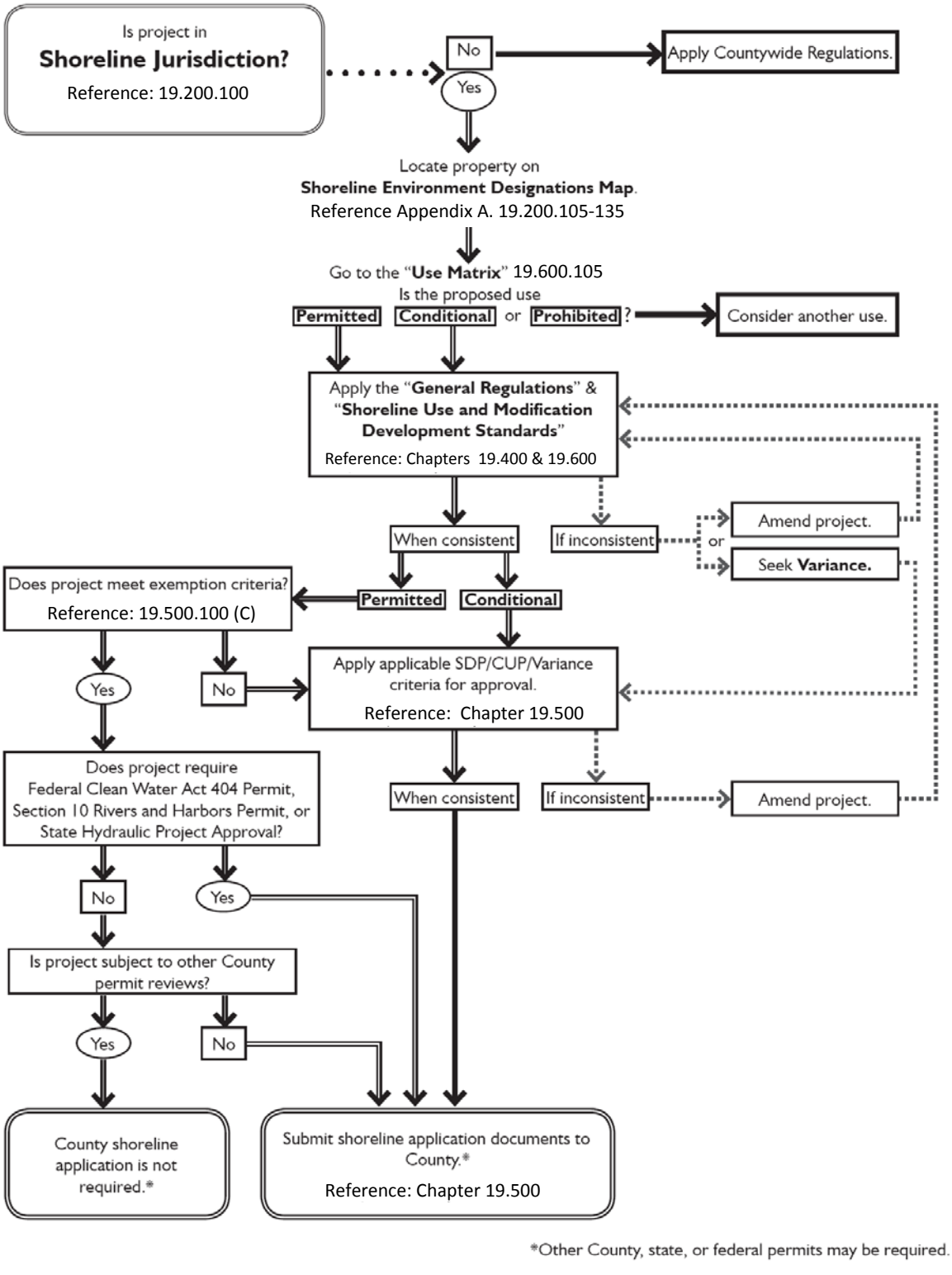

Figure 19.500.105(A)(7).Shoreline Application Flow Chart.

B. Pre-submission Conference

1. A pre-submission conference is required for any proposal that requires hearing examiner approval.

2. For leases of overwater structures on state owned aquatic lands managed by Washington Dept. of Natural Resources (DNR), approval will be conditioned in accordance with state standards, including but not limited to buffer requirements.

C. Minimum Application Requirements

A complete application for a project subject to the requirements of this Program shall contain a Master Application and the information contained in 20.60.030 TCC, the Joint Aquatic Resource Permit Application (JARPA) and the State Environmental Policy Act (SEPA) Checklist, as applicable.

1. The applicable permit fees in accordance with the Thurston County Land Use Application Fee Schedule.

D. Notice of Application

Following receipt of a complete application, the County will issue a Notice of Application for non-exempt projects, pursuant to the procedures in Section 20.60.020 TCC. In addition to the requirements of 20.60.020 TCC, the notice of application must provide for a 30-day comment period, and include the date, time and place of public hearing (if applicable and scheduled), in accordance with WAC 173-27-110(2)(e).

E. Public Hearings and Notice of Decision

1. The applicant has the burden of proof to establish that the proposed development is consistent with the Act, this Program, and other applicable county policies and regulations. Upon consideration of the evidence offered at the public hearing, the hearing examiner will issue a decision. The decision will contain findings of fact and conclusions describing the manner in which the decision is consistent with the Act and this Master Program. The decision will be mailed to the applicant and other interested parties, and Ecology. .

2. Hearings shall follow the process as described in Chapter 2.06 TCC. The Hearing Examiner Rules of Procedure shall also serve as reference for the hearing procedure.

F. Initiation of Development

As set forth in WAC 173-27-190, each permit for a substantial development, conditional use or variance, issued by local government shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until twenty-one days from the date of filing as defined in RCW 90.58.140(6) and WAC 173-27-130, or until all review proceedings initiated within twenty-one days from the date of such filing have been terminated.

G. Permit Revisions

1. 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 Program and/or the policies and provisions of the Act.

2. A revision shall be classified per the specifics of the proposed amendments under Chapter 20.60 TCC.

3. When an applicant seeks to revise a permit, the applicant shall submit detailed plans and text describing the proposed changes. If the County determines that the proposed changes are within the scope and intent of the original permit, the County may approve a revision. "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 for the original permit, whichever is less;
    b. Ground area coverage and height of each structure 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 Program except as authorized under the original permit;
    d. Additional landscaping is consistent with conditions (if any) attached to the original permit and with this Program;
    e. The use authorized pursuant to the original permit is not changed; and
    f. No adverse environmental impact and no net loss to shoreline ecological functions will be caused by the project revision.

4. If the sum of the revision and any previously approved revisions violate the provisions in WAC 173-27-100 or the proposed change itself constitutes a substantial development, the applicant shall apply for a new permit in the manner provided for herein rather than proceeding under this section.

5. Administrative appeals of revision decisions shall be processed in accordance with chapter 20.60.060 TCC, in addition to the following:

    a. Appeals shall be based only upon contentions of noncompliance with the provisions of Section 19.500.105(G)(3) above regarding whether or not the revision was "within the scope and intent of the original permit."
    b. If an appeal is successful in proving that a revision is not within the scope and intent of the original permit, the decision shall have no bearing on the original permit.

6. The County's final approval of the revision, along with the revised site plan, text and the final ruling on consistency with this section shall be filed with Ecology. In addition, the County shall notify parties of record during the original issuance of the permit. The revised permit is effective immediately upon final approval by the County.

7. If the revision to the original permit involves a conditional use or variance that was conditioned by Ecology, the County shall submit the revision to Ecology for its approval, approval with conditions, or denial. The revision shall indicate that it is being submitted under the requirements of WAC 173-27-100. Upon receipt of Ecology's decision, the County shall notify parties of record of Ecology's final decision. The revised permit is effective immediately upon final decision by Ecology.

H. Time Requirements and Expiration

1. The time requirements of this section shall apply to all Substantial Development Permits and to any development authorized pursuant to a Shoreline Variance or Conditional Use Permit.

2. 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. A single extension for a period not to exceed one year may be authorized 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.

3. Authorization to conduct development activities shall terminate five years after the effective date of a SDP. A single extension for a period not to exceed one year may be authorized 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.

4. The effective date of a SDP shall be the date of filing as provided in RCW 90.58.140(6). The permit time periods identified herein 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.

5. Revisions to permits under WAC 173-27-100 may be authorized after original permit authorization has expired so long as this procedure is not used to extend the original permit time requirements or to authorize substantial development after the time limits of the original permit.

6. Thurston County shall notify Ecology in writing of any change to the effective date of a permit, as authorized by this section, 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.

I. Shoreline Master Program Amendment

1. General

   a. This Master Program carries out the policies of the Act for Thurston County. It shall be reviewed and amended as appropriate in accordance with the review periods required in the Act and in order to:
      i. Assure that this Program complies with applicable law and guidelines in effect at the time of the review; and
      ii. Assure consistency of this Program with the County's comprehensive plan and development regulations adopted under Chapter 36.70A RCW, if applicable, and other local requirements.

   b. This Program and all amendments thereto shall become effective in accordance with RCW 90.58.090(7).

   c. The Program may be amended annually or more frequently as needed pursuant to the Growth Management Act, RCW 36.70A.130(2)(a)(iii).

2. Amendment Process and Criteria

   a. Initiation. Future amendments to this Program may be initiated by any person, resident, property owner, business owner, governmental or non-governmental agency.
   b. Application. Applications for Master Program amendments shall specify the changes requested and any and all reasons therefore. Applications shall be made on forms specified by the County. Such applications shall comply with Section 2.05.025 TCC.
   c. Public Review Process – Minimum Requirements. The County shall accomplish the amendments in accordance with the procedures of Act, Growth Management Act, and implementing rules including, but not limited to, RCW 90.58.080, WAC 173-26-100, RCW 36.70A.106 and 130, and Part Six, Chapter 365-196 WAC.
   d. Roles and Responsibilities. Proposals for amendment of this Program shall be heard by the Planning Commission in accordance with Section 2.05.030 TCC. Final local review and approval shall be in accordance with Chapter 2.05 TCC.
   e. Finding. Prior to approval, and in addition to the findings required by Chapter 2.05 TCC, the County shall make a finding that the amendment would accomplish (e.i) or (e.ii), and would accomplish (e.iii), below:
      i. The proposed amendment would make this Program more consistent with the Act and/or any applicable Ecology Guidelines;
      ii. The proposed amendment would make this Program more equitable in its application to persons or property due to changed conditions in an area;
      iii. This Program and any future amendment hereto shall ensure no net loss of shoreline ecological functions and processes on a programmatic basis in accordance with the baseline functions present as of the effective date of this Program.
   f. Upon local adoption, the Program or its amendment shall be forwarded to Ecology for review and approval in accordance with Chapter 90.58 RCW and WAC 173-26-110.

J. Administrative Interpretation

The County shall make administrative decisions and interpretations of the policies and regulations of this Program and the Act in accordance with Chapter 20.07 TCC. The County shall consult with Ecology to ensure that any formal written interpretations are consistent with the purpose and intent of Chapter 90.58 RCW, and Chapters 173-26 and 173-27 WAC.

K. Monitoring

The County will track all shoreline permits and exemption activities to evaluate whether the Master Program is achieving no net loss of ecological functions. Project monitoring is required for individual restoration and mitigation projects consistent with the critical areas regulations (Section 24.35.017 TCC). In addition, the County shall conduct system-wide monitoring of shoreline conditions and development activity that occur in shoreline jurisdiction outside of critical areas and their buffers, to the degree practical. Activities to be tracked using the County's permit system include development, conservation, restoration and mitigation, such as:

1. New shoreline development

2. Shoreline Variances and the nature of the variance

3. Compliance issues

4. Net changes in impervious surface areas, including associated stormwater management

5. Net changes in fill or armoring

6. Net changes in vegetation (area, character)

Using this information and information about the outcomes of other actions and programs of the other County departments, a no net loss report shall be prepared as part of the Program update required by RCW 90.58.080. Should the no net loss report show degradation of the baseline condition documented in the *Thurston County Shoreline Inventory and Characterization Report* (2013), changes to the Master Program and/or Shoreline Restoration Plan (Appendix C) shall be proposed at the time of the eight-year update to prevent further degradation and address the loss in ecological functions.

19.500.110 Enforcement and Penalties

A. Authority

Thurston County may bring such declaratory, injunctive or other action as may be necessary to assure that no uses are made of the shorelines subject to Thurston County jurisdiction contrary to the provisions of this Program or the Act. Ecology shall also have enforcement authority pursuant to Chapter 90.58 RCW and Chapter 173-27 WAC "Part II Shoreline Management Act Enforcement."

B. Process

1. Any action taken by Thurston County shall be in accordance with civil enforcement provisions of the Code Enforcement Chapter, Title 26 TCC, as now or hereafter amended, along with the following provisions.

2. The choice of enforcement action and the severity of any penalty should be based on the nature of the violation, the damage or risk to the public or to public resources, and/or the existence or degree of bad faith of the persons subject to the enforcement action.

3. Whenever an authorized official determines that a violation has occurred or is occurring, he or she should pursue reasonable attempts to secure voluntary corrections prior to taking any other action. Failing voluntary correction, the authorized official may issue a notice of violation. Upon receipt of a notice of violation, a person may request a hearing to explain mitigating circumstances surrounding the violation.

C. Civil Penalties

Pursuant to RCW 90.58.210, any person who fails to conform to the terms of a permit issued under this Program or who undertakes development on the shorelines of the state without first obtaining any permit required under this Program shall be subject to a civil penalty not to 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.

D. Criminal Penalties

Any person found to have willfully engaged in activities on the shorelines of the state in violation of the Act, this Master Program, or any rules and regulations adopted pursuant thereto, shall be guilty of a gross misdemeanor, pursuant to RCW 90.58.220.

Chapter 19.600 Shoreline Use and Modification Development Standards

19.600.100 Applicability

The provisions in this section apply to specific common uses and modifications and types of development to the extent they occur within shoreline jurisdiction.

19.600.105 Use and Modifications Matrix

Table 19.600.105 Shoreline Use and Modifications Matrix

SHORELINE USES and MODIFICATIONS *The following permits apply to the specific uses, modifications and development. Individual uses, modifications and development shall comply with the provisions of this Program, particularly Section 19.400.110 (Mitigation), and the Thurston County Comprehensive Plan as of the effective date of this Program.*						
Legend: P = Substantial Development Permit (SDP) E= Exempt if exemption criteria in Section 19.500.100(C) are met C = Conditional Use Permit (CUP) Ad = Administrative CUP X = Prohibited	Natural	Rural Conservancy	Urban Conservancy	Shoreline Residential	Mining	Aquatic
Agriculture						
General[1]	X	P	P	P	X	X
Aquaculture						
Commercial Geoduck	C	C	C	C	C	[2]
Other Aquaculture	P[3]	P[3]	P[3]	P[3]	P[3]	[2]
Note: An SDP shall not be required for aquaculture development that meets the exemption criteria at Section 19.500.100(C) Supplemental seeding activities are also exempt.						
Barrier Structures (Includes Breakwaters, Jetties, Groins and Weirs)						
General	X	C	C	C	C	[2]
Ecological Restoration[4]	P	P	P	P	P	[2]
Boating Facilities (including Marinas)						
General	X	P	P	P	P	[2]
Marinas	X	C	C	C	C	[2]
Commercial						
Water-Oriented	X	P	P	P	P	X[5]
Non-Water-Oriented	X	X[6]	X[6]	X[6]	X[6]	X[6]
Dredging (see Section 19.600.135)						
General	X	C	C	C	C	2

SHORELINE USES and MODIFICATIONS

The following permits apply to the specific uses, modifications and development. Individual uses, modifications and development shall comply with the provisions of this Program, particularly Section 19.400.110 (Mitigation), and the Thurston County Comprehensive Plan as of the effective date of this Program.

Legend: P = Substantial Development Permit (SDP) E= Exempt if exemption criteria in Section 19.500.100(C) are met C = Conditional Use Permit (CUP) Ad = Administrative CUP X = Prohibited	Natural	Rural Conservancy	Urban Conservancy	Shoreline Residential	Mining	Aquatic
Dredge Disposal (see section 19.600.135)						
General	X	C	C	C	C	[2]
Ecological Restoration[7]	C	P	P	P	P	[2]
Fill (See section 19.600.140)						
Waterward of OHWM	X	C	C	C	C	[2]
Upland of OHWM, or Ecological Restoration	C	P	P	P	P	[2]
Ecological Restoration	P	P	P	P	P	[2]
Flood Hazard Reduction Measures						
General	C	C	C	C	C	C
Forest Practices						
Commercial Forestry	C	P	X	X	X	N/A
Class IV-General	C	P	P	P	P	N/A
Industrial						
Water-oriented Uses	X	X	C	X	P	X[8]
Non-water-oriented Uses	X	X	X	X	X	X
Mining						
General	X	C[9]	X	X	C[9]	X
Mooring Structures and Activities *(Includes piers, docks, floats, ramps and buoys)*						
Single Use	X	P[10]	P[10]	P[10]	P[10]	[2]
Joint or Public Use	X[11]	P	P	P	P	[2]
Recreation and Public Access						
Non-motorized, Water-Oriented	P	P	P	P	P	[13]
Other Water-Oriented	C[12]	P	P	P	P	[13]
Non-Water-Oriented	X	P[14]	P[14]	P[14]	P[14]	X
Residential						
Single-Family	C	P[15]	P[15]	P[15]	P[15]	X
Multi-Family, Subdivisions, and Accessory Dwelling Units	X[16]	C	C	P	P	X
Swimming Pools	X	X	X	X	X	[2]
Restoration and Enhancement						
General	P	P	P	P	P	P
Retaining Walls	X	C	C	C	C	
Shoreline Stabilization *(New/Repair and Maintenance)*						
Hard	C	C	C	C	C	[18]
Hybrid	Ad	Ad	Ad	Ad	Ad	
Soft	Ad[17]	Ad[17]	Ad[17]	Ad[17]	Ad[17]	[19]
Transportation						

SHORELINE USES and MODIFICATIONS

The following permits apply to the specific uses, modifications and development. Individual uses, modifications and development shall comply with the provisions of this Program, particularly Section 19.400.110 (Mitigation), and the Thurston County Comprehensive Plan as of the effective date of this Program.

Legend: P = Substantial Development Permit (SDP) E= Exempt if exemption criteria in Section 19.500.100(C) are met C = Conditional Use Permit (CUP) Ad = Administrative CUP X = Prohibited	Natural	Rural Conservancy	Urban Conservancy	Shoreline Residential	Mining	Aquatic
General	X[20]	C	C	P	C	P[21]
Utilities						
General	X[22]	P[23]	P[23]	P[23]	P[23]	C

Footnotes:

1. Does not modify or limit agricultural activities occurring on lands currently in agricultural use.

2. Adjoining upland designation applies; see applicable regulations.
3. A CUP shall be required for floating net pens in all areas and for aquaculture activities in the Natural environment designation where the proposal requires new structures or facilities (see section 19.600.115).
4. See Barrier Structures and Other In-Stream Structures (Section 19.600.120) for qualifying ecological restoration.
5. If the use is water-dependent or necessary to support an allowed use in the adjoining upland designation, then may be permitted through a SDP.
6. See Commercial Development (Section 19.600.130) for allowances with a CUP.
7. See Dredging and Dredge Disposal (Section 19.600.135) for qualifying ecological restoration.
8. If the use is water-dependent or necessary to support an allowed use in the adjoining upland designation, then may be permitted with a CUP.
9. Provided consistent with the Thurston County Comprehensive Plan Mineral Resources Overlay 20.30B.
10. Single-use buoys are exempt from Substantial Development Permit in certain environments, in accordance with Sections 19.500.100(C)(2)(B); 19.500.100(C)(3)(f); and 19.600.160(A)(1)..
11. If the adjoining upland use is a public park, then up to two buoys allowed.
12. May be permitted through a SDP if consistent with an approved park plan.
13. See Recreation and Public Access (Section 19.600.165) for applicability in the Aquatic designation.
14. Non-water-oriented uses shall also be subject to shoreline buffer standards (Section 19.400.120).
15. Exempt if single-family residence exemption criteria in Section 19.500.100(C)(3) and WAC 173-27-040 are met.
16. May be permitted through a CUP for subdivisions.
17. Soft shore shoreline stabilization is exempt from a SDP if exemption criteria in Section 19.500.100(C)(3)(c)are met.
18. Hard shoreline stabilization prohibited in Aquatic unless demonstrated necessary, then may be permitted with a CUP (see Section 19.600.175).
19. Soft shoreline stabilization may be permitted with a SDP in Aquatic where demonstrated necessary, or through an exemption where criteria are met (see 19.600.175(D)).
20. If necessary to serve essential transportation corridors or in support of permitted uses and activities that cannot be located outside of applicable buffers, may be permitted through a CUP (see Section 19.600.180).
21. See Transportation (Section 19.600185) for limitations in Aquatic designation.
22. If essential utilities in support of permitted uses and activities that cannot be located outside of applicable buffers, may be permitted with a CUP. Utilities in support of a permitted use shall be reviewed under the permitted use.
23. Utilities associated with an exempt single-family residence and appurtenances are accessory to the development and also “exempt”.

19.600.110 Agriculture

A. Environment Designations Permit Requirements

Except for agricultural uses and lands that exist at the time of the adoption of this Program, and thus do not need to apply for a permit, where agriculture is proposed in the following designations the identified permit requirements shall apply:

1. Natural- Prohibited

2. Rural Conservancy and Urban Conservancy- SDP

3. Shoreline Residential- SDP

4. Mining- Prohibited

5. Aquatic: Prohibited (Farming of fin fish, shellfish and management of other aquatic products are subject to the policies and regulations of Section 19.600.115, Aquaculture).

B. Development Standards

1. New agricultural practices below the Standard Buffer and above the Reduced Standard Buffer shall require an approved Farm Management Plan in accordance with United States Department of Agriculture standards.

2. Existing Agriculture.

    a. This section does not require modification of or limit agricultural activities occurring on agricultural lands as of the effective date of this Program.
    b. Expansion of agricultural activities on existing agricultural lands shall be encouraged to comply with the vegetation conservation standards identified in Section 19.400.120.

3. New Agricultural Activities.

    a. New agricultural activities proposed on land not currently in agricultural use, and any modifications in support of such use, shall comply with the following:
        i. The use or modification is consistent with the environment designation in which the land is located, and
        ii. The use or modification is located and designed to assure no net loss of ecological functions and in such as way as to not have a significant adverse impact on other shoreline resources and values.
    b. A native vegetation buffer, consistent with that of the Environment Designation in which the use is occurring shall be permanently maintained between new agricultural activities and the OHWM of the shoreline or wetlands. A fence shall be installed at the outer buffer edge to separate water bodies from livestock pastures.
    c. Confined animal feeding operations, retention and storage ponds for feed lot wastes, and stock piles of manure solids shall not be allowed within shoreline jurisdiction, unless shoreline ecological functions are mitigated through an approved Farm Management Plan.
    d. Soil conservation measures, including but not limited to erosion control, crop rotation, mulching, strip cropping, contour cultivation, and best management practices, shall be utilized to minimize soil erosion.
    e. Aerial spraying of fertilizers, pesticides, or herbicides over waterbodies is prohibited.

f. No fertilizers, pesticides or herbicides shall be used in agricultural practices unless the applicant can demonstrate that the application of such substances will not result in the direct runoff of contaminated waters into water bodies or aquifer-recharge areas.
g. The applicant may be required to submit a soil study and drainage plan in order to determine that the agricultural practices meet the regulations set forth above.

4. Non-agricultural Activities on Long Term Agricultural Land. The use of agricultural land for development that does not meet the definition of agricultural activities, including the conversion of agricultural land to non-agricultural uses, shall be consistent with the environment designation and the general and specific regulations applicable to the proposed use, and shall result in no net loss of ecological functions associated with the shoreline.

19.600.115 Aquaculture

A. Environment Designations Permit Requirements

Where aquaculture is proposed in the following upland designations, the identified permit requirements shall apply. Where proposed in the adjacent aquatic designation, the corresponding upland designation shall be used to determine permit requirements:

1. Mining, Shoreline Residential, Urban Conservancy, Rural Conservancy, and Natural: Except as otherwise stated in this section, an SDP shall be required for new aquaculture activities that meet the definition of substantial development under the Shoreline Management Act and this Shoreline Master Program.

2. Natural: A CUP shall be required where the proposal requires new structure or facilities.

3. Geoduck aquaculture in all designations:

   a. A CUP shall be required for all new commercial geoduck aquaculture and existing aquaculture being converted to commercial geoduck aquaculture;
   b. An SDP shall be required for the planting, growing and harvesting of farm-raised geoducks only if the specific project or practice causes substantial interference with normal public use of the surface waters.
   c. Wildstock geoduck harvest associated with the state and tribal co-managed geoduck fishery is not aquaculture. Since a fishery does not constitute development under this Program, it is not subject to its regulations.

4. Certain aquaculture developments and supplemental wild stock seeding may be exempt from SDP requirements pursuant to the exemption criteria at Section 19.500.100(C) of this Program. Such activities shall also comply with all state and federal requirements, including but not limited to Department of Health certification and license, or Shellfish Import or Shellfish Transfer permits, where applicable.

B. Application Requirements

In addition to the minimum application requirements in Section 19.500.105(C), aquaculture applications shall include the following information if not already provided in the local, state or federal permit applications. Where requested information is not applicable to a specific proposal, the application shall not be required to include all items listed under this section as long as it is demonstrated why the information does not apply, with concurrence from the Department.

1. A site plan, including:

a. The perimeter of the proposed aquaculture operation area;
b. Existing bathymetry depths based on mean lower low water (MLLW datum);
c. Adjacent upland use, vegetation, presence of structures, docks, bulkheads and other modifications;
d. Areas where specific substrate modification will take place or structures will be constructed or installed;
e. Access provisions for marine or vehicle traffic, processing structures or facilities; and
f. Location of storage or processing structures or facilities.

2. A baseline description of existing and seasonal conditions, including best available information. Where applicable to the subject proposal, the following shall be included. Note: information regarding wind conditions, current flows and flushing rates (items 3-5) will generally not be applicable to shellfish aquaculture applications.

a. Water quality;
b. Tidal variations;
c. Prevailing storm wind conditions;
d. Current flows at each tidal cycle;
e. Flushing rates;
f. Littoral drift;
g. Sediment dispersal, including areas of differing substrate composition;
h. Areas of aquatic, intertidal and upland vegetation complexes; a vegetation habitat survey (see Section 8.10, Biological and Habitat Surveys) must be conducted according to the most current WDFW eelgrass and macroalgae survey guidelines;
i. Aquatic and benthic organisms present, including forage fish, and spawning and other lifecycle use of, or adjacent to, the site;
j. Probable direct, indirect and cumulative impacts to items B.1. - B.9. above; and
k. Visual assessment, including photo analysis / simulation of the proposed activity demonstrating visual impacts within 1,500 feet of the proposed project site. Where predator exclusion devices are proposed, the assessment shall include an analysis of visual impacts of proposed predator exclusion devices at mean high and mean low tides.

3. An operational plan, which includes the following, when applicable:

a. Species, and quantity to be reared;
b. Source of aquatic product;
c. Implementation methods, including density, schedule, phasing options, time of day, and anticipated lighting and noise levels;
d. Number of employees/workers necessary for the project, including average and peak employment;
e. Methods and location of waste disposal and sanitation facilities;
f. Methods for planting and harvest;
g. Methods for predation control, including types of predator exclusion devices;
h. Food and equipment storage;
i. Anticipated use of any feed, herbicides, antibiotics, vaccines, growth stimulants, antifouling agents, or other chemicals and an assessment of predicted impacts;
j. Methods to address pollutant loading, including biological oxygen demand (BOD);
k. A schedule for water quality monitoring, where required; and
l. Other measures to achieve no net loss of ecological functions consistent with the mitigation sequence described in WAC173-26-201(2)(e).

4. Other applications and reports, when applicable or requested, to ensure compliance with permit conditions, which may include:

a. An accepted Washington Department of Natural Resources lease application, including a waiver of preference rights to access for navigation from the upland property owner, if applicable;
b. An accepted Washington Department of Ecology National Pollutant Discharge Elimination System (NPDES) permit, if applicable;
c. An accepted Washington Department of Health beach certification number;
d. An accepted WDFW aquatic farm permit, and/or fish transport permit;
e. Water quality studies;
f. Reports on solids accumulation on the bottom resulting from the permitted activity along with its biological effects;
g. Report on growth, productivity, and chemical contamination of shoreline plants and animals within or adjacent to the proposed site;
h. Noise level assessments, including mitigation measures to ensure compliance with Chapter 10.36 & 10.38 TCC; and/or
i. Monitoring and Adaptive Management Plan for introduction of aquatic species not previously cultivated in Washington State.

C. Development Standards

1. General Standards.

a. Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, shall be a preferred use.
b. When a shoreline substantial development or conditional use permit is issued for a new aquaculture use or development, that permit shall apply to the initial siting, construction, and planting or stocking of the facility or farm. Authorization to conduct such activities shall be valid for a period of five years with a possible extension per Section 19.500.105(H) of this Program. After an aquaculture use or development is established under a shoreline permit, continued operation of the use or development, including, but not limited to, maintenance, harvest, replanting, restocking or changing the culture technique shall not require a new or renewed permit unless otherwise provided in the conditions of approval, or if required pursuant to permit revision criteria in WAC 173-27-100 or this Program. Changing of the species cultivated shall be subject to applicable standards of this Program, including, but not limited to, monitoring and adaptive management in accordance with standard g, below.
c. Aquaculture shall not be permitted in areas where it would result in a net loss of shoreline ecological functions, or where adverse impacts to critical saltwater and freshwater habitats cannot be mitigated according to the mitigation sequencing requirements of this Program (see Section 19.400.100(A)).
d. Aquaculture shall not significantly conflict with navigation and other water-dependent uses.
e. Aquaculture activities proposed within Shorelines of statewide significance shall first be subject to the policies for shorelines of statewide significance contained in Chapter 19.300 (General Goals and Policies) of this Program, and then the policies and regulations contained in this section, in that order of preference.
f. In general, when considering new aquaculture activities, refer to policies at Section 19.300.130(E-K) for siting and design preferences.
g. Project applicants proposing to introduce aquatic species that have not previously been cultivated in Washington State are responsible for pursuing required state and federal approvals relating to the introduction of such species, as determined by applicable state and federal agencies. A plan for monitoring and adaptive management shall also be submitted for County review, unless the operation is conducted in a fully contained system with no water exchange to the shoreline. The County shall provide notice and

time to comment for appropriate agencies in accordance with County procedural requirements, and shall circulate the monitoring and adaptive management plan. Upon approval, the plan shall become a condition of project approval.

h. Over-water structures and/or equipment, and any items stored upon such structures such as materials, garbage, tools, or apparatus, shall be designed and maintained to minimize visual impacts. The maximum height for items stored upon such structures shall be limited to three feet, as measured from the surface of the raft or the dock, unless shoreline conditions serve to minimize visual impacts (for example: high bank environments, shorelines without residential development), but in no case shall the height exceed six feet. Height limitations do not apply to materials and apparatus removed from the site on a daily basis. Materials that are not necessary for the immediate and regular operation of the facility shall not be stored waterward of the OHWM.

i. Aquaculture structures and equipment used on tidelands below ordinary high water shall be of sound construction, with the owners' identifying marks where feasible, and shall be so maintained. Abandoned or unsafe structures and/or equipment shall be promptly removed or repaired by the owner.

j. No processing of any aquaculture product, except for the sorting and culling of the cultured organism and the washing or removal of surface materials or organisms after harvest, shall occur in or over the water unless specifically approved by permit. All other processing and related facilities shall be located on land and shall be subject to the regulations for Commercial) and Industrial Uses (Section 24.10.100), in addition to the provisions of this section.

k. No garbage, wastes or debris shall be allowed to accumulate at the site of any aquaculture operation, except for in proper receptacles.

l. All floating and submerged aquaculture structures and facilities in navigable waters shall be marked in accordance with U.S. Coast Guard requirements.

m. The rights of treaty tribes to aquatic resources within their usual and accustomed areas are addressed through direct coordination between the applicant/proponent and the affected tribe(s). Thurston County will notify affected tribes of new shoreline permit applications utilizing the applicable notification process in Title 20.60 TCC.

n. In order to avoid or limit the ecological and aesthetic impacts from aquaculture siting and operations, the following shall apply:

   i. Predator exclusion devices shall be firmly attached or secured so as not become dislodged.

   ii. Predator exclusion devices shall blend with the natural environment.

   iii. Aquaculture operators shall routinely inspect and maintain predator exclusion devices.

   iv. Predator exclusion devices such as rubber bands, small nets, and area netting can be dislodged and pose a hazard to birds, marine mammals, and other wildlife and domestic animals, and thus are subject to Thurston County Public Nuisance regulations (Chapter 10 TCC).

   v. Predator exclusion devices shall be removed as soon as they are no longer needed to perform protective functions.

   vi. Predator exclusion methods shall not be designed to intentionally kill or injure wildlife. Predator exclusion methods shall comply with federal and state regulations as determined by applicable federal and state agencies.

   vii. When determined necessary to minimize aesthetic and habitat impacts of large-scale projects, the County may require a phased approach to operation. This includes planting and harvesting areas on a rotational basis within the same tideland parcel.

o. Where aquaculture occurs on state owned aquatic lands, the project proponent shall contact and adhere to Washington Department of Natural Resources requirements.

2. Additional Standards for Commercial Geoduck Aquaculture.

a. In addition to the general development standards above, commercial geoduck aquaculture shall only be allowed where sediments, topography, land and water access support geoduck aquaculture operations without significant clearing or grading.
b. All permits shall take into account that commercial geoduck operators have the right to harvest geoduck once planted.
c. All subsequent cycles of planting and harvest shall not require a new CUP, subject to WAC 173-27-100.
d. A single CUP may be submitted for multiple sites within an inlet, bay or other defined feature, provided the sites are all under control of the same applicant and within the Program's jurisdiction.
e. Commercial geoduck aquaculture workers shall be allowed to accomplish on-site work during low-tides, which may occur at night or on weekends. Where such activities are necessary, noise and light impacts to nearby residents shall be mitigated to the greatest extent practicable.

3. Additional Standards for Net Pens. Fish net pens and rafts shall meet the following criteria:

a. Fish net pens shall meet, at a minimum, state approved administrative guidelines for the management of net pen cultures. In the event there is a conflict in requirements, the more restrictive shall prevail.
b. Alternative facilities and technologies that reduce ecological and aesthetic impacts shall be preferred to traditional floating net pens.
c. Anchors that minimize disturbance to substrate, such as helical anchors, shall be employed.
d. Net pen facilities shall be located no closer than 1,500 feet from the OHWM, unless a specific lesser distance is determined to be appropriate based upon a visual impact analysis or due to potential impacts to navigational lines.
e. Net cleaning activities shall be conducted on a frequent enough basis so as not to violate state water quality standards.
f. In the event of a significant fish kill at the site of the net pen facility, the facility operator shall submit a timely report to the Thurston County Environmental Health Section and the Thurston County Department of Resource Stewardship stating the cause of death and shall detail remedial action(s) to be implemented to prevent reoccurrence.
g. New floating net pens shall be prohibited in Thurston County's South Puget Sound jurisdictional area until updates to Ecology's guidance on *Recommendations for Managing Commercial Finfish Aquaculture* is completed and can be reviewed by county staff to evaluate possible environmental benefits and impacts.

19.600.120 Barrier Structures and In-stream Structures

A. Environment Designations Permit Requirements

Where barrier structures or in-stream structures are proposed in the following upland designations, the following permit requirements shall apply. Where proposed in the adjacent aquatic area, the corresponding upland designation shall be used to determine permit requirements.

1. Natural: Prohibited.

2. Mining, Shoreline Residential, Urban Conservancy, Rural Conservancy: CUP, except as otherwise stated in this section.

3. All designations: An SDP shall be required for barrier structures or in-stream structures that have ecological restoration as the primary purpose.

B. Application Requirements

1. In addition to the general permit requirements, applications for breakwaters, jetties and groins shall include the following information:

   a. Reason for the project;
   b. Type of construction;
   c. Method of construction;
   d. Direction of net long-shore drift;
   e. Location of the barrier structure; and
   f. Notification of affected property owners, to include at minimum all property owners downdrift of the project in the drift cell, unless reviewed and approved otherwise by the County.

2. In addition to the general permit requirements, applications for weirs and other in-stream structures shall contain, at a minimum, the following:

   a. Hydrogeological Report (see Section 19.700.125), prepared by a licensed professional engineer, which sufficiently describes the project's effects on stream-way hydraulics, including potential for re-direction of the normal flow of the affected stream.
   b. Habitat surveys, prepared by a professional biologist consistent with Section19.700.145, which sufficiently describes the project's effects on fisheries and wildlife resources.
   c. Provision for erosion control, and protection of water quality and fishery and wildlife resources during construction.
   d. Long-term management plans, which describe, in sufficient detail, provisions for protection of in-stream resources during construction and operation. The plan shall include a means for monitoring success.

C. Development Standards

1. When located waterward of the OHWM, barrier structures and other in-stream structures shall be allowed only where necessary to support:

   a. Water-dependent uses. Public access
   c. Public facilities or utilities
   d. Existing or restored natural features, with special emphasis on protecting and restoring priority habitats and species, but only where part of an approved restoration plan.

2. Structures shall be designed to protect critical areas, shoreline processes and ecological functions, fish and wildlife passage, natural character/scenery, and cultural resources, and shall provide for mitigation according to the sequence defined in Sections 19.300.105 (Critical Areas and Ecological Protection) and 19.400.110 (Mitigation) of this Program.

3. Structures shall be the minimum size necessary to achieve the intended purpose.

4. Floating breakwaters shall be utilized instead of solid fill breakwaters, except where proven infeasible.

5. Consideration shall be given to avoiding or minimizing land use conflicts to properties adjacent to the proposed site, whether upstream/up-drift or downstream/down-drift.

19.600.125 Boating Facilities

A. Environment Designations Permit Requirements

Where boating facilities are proposed in the following upland designations, the identified permit requirements shall apply. Where proposed in the adjacent aquatic area, the corresponding upland designation shall be used to determine permit requirements:

1. Natural, Mining- Prohibited

2. Rural Conservancy, Urban Conservancy, Shoreline Residential:

    a. SDP for boating facilities designed for 9 vessels or less;
    b. CUP for marinas (10 or more vessels) and buoy fields for 10 or more vessels.

B. Application Requirements

In addition to the general permit requirements, the applicant shall be required to submit the following information:

1. A study of water quality, water circulation and flushing;

2. A survey of littoral drift and shoreform processes;

3. A benthic and habitat study;

4. A petroleum handling and storage management plan;

5. An emergency management plan, to include fire protection and hazard response;

6. A visual impact assessment;

7. Waste and sewage disposal plan;

8. Speed limits;

9. Noise levels;

10. Lighting and signage;

11. Size, scale, and building materials;

12. Public or private use;

13. Parking and circulation;

14. Distance to the nearest boating facility

C. Development Standards

1. General Regulations.

    a. All boating facilities must conform to the requirements for Mooring Structures (Section 19.600.160).
    b. Dredging for boating facilities shall conform to the requirements for Dredging and Dredge Disposal (Section 19.600.135).
    c. Boating facilities and their associated and accessory uses shall result in no net loss of shoreline ecological functions.
    d. Boating facilities shall be located, designed, and maintained to be compatible with abutting land uses and the prevailing community character to the greatest extent feasible. Aesthetic impacts must be avoided, or mitigated where avoidance is not feasible.
    e. Boating facilities must meet applicable federal and state health, safety, and welfare requirements. This shall include, but not be limited to, the Thurston County Board of Health Sanitary Code (Article IV), and the Thurston County Board of Health Sanitary Code (Article VI). In addition, notice of permit application shall be provided to the Washington State Department of Health in order to ensure consistency with state health regulations for shellfish harvest.
    f. Boating facilities shall protect the rights of navigation.
    g. Boating facilities shall avoid impacts to littoral drift. Where impacts cannot be avoided, mitigation shall be required.
    h. All non-water-dependent structures shall be located landward of the OHWM.

2. Marinas.

    a. In evaluating an application for a marina, consideration shall be given to water quality, water circulation and flushing, aquatic life, petroleum handling and storage, fire codes, public access and compatibility with other uses.
    b. New marinas shall incorporate public access pursuant to WAC 173-26-221(4). Examples of public access may include pocket beaches, fishing piers, viewing platforms and transient moorage slips.
    c. Accessory parking, transportation facilities, and commercial development shall meet the requirements of Sections 19.600.180 and 19.600.130, respectively.
    d. Marinas shall provide an operational plan. At a minimum, the operational plan shall address all of the following:
        i. Adequate facilities and operational procedures for fuel handling and storage in order to prevent accidental spillage.
        ii. Facilities, equipment and established procedures for the containment, recovery, and mitigation of spilled sewage, petroleum and other hazardous materials.
        iii. Signs concerning the following matters where they are readily visible to all marina users:
            1. Regulations pertaining to handling and disposal of waste, sewage, or other toxic materials;
            2. Regulations prohibiting the disposal of fish or shellfish wastes, scrapfish, viscera or unused bait in or near the marina;
            3. Location of all public access facilities and pump-out devices.
        iv. Garbage or litter receptacles, including provisions for recycling waste shall be provided and maintained by the marina operator at several locations convenient to users.
    e. Additional standards for marinas.
        i. The dock facilities shall be equipped with adequate lifesaving equipment such as life rings, hooks and ropes.

ii. Adequate fire protection shall be required pursuant to the Washington State Uniform Fire Code.

iii. Swimming shall be prohibited within marina facilities unless the swimming area is adequately separated and protected.

iv. If dredging at marina entrances changes the littoral drift processes or adversely affects adjacent shores, the marina operator shall be required to replenish these shores periodically with the appropriate quantity and quality of aggregate, subject to applicable permits and with written approval of the Director or designee.

v. Marina facilities permitted under this Program shall provide upland restrooms available twenty-four hours a day for use by any patron of the marina facility. At a minimum, the facilities shall include one urinal, one toilet, and one washbasin for men and two toilets and two washbasins for women. The need for additional facilities shall be determined based on the number of slips, percentage of live-aboard moorages, and the number of transient moorage slips within the marina.

vi. All pipes, plumbing, wires and cables at a marina site shall be placed at or below ground and dock levels.

vii. Marinas are permitted to moor live-aboard vessels provided the marina meets the following conditions:

1. The slips assigned to live-aboards are designed and constructed to handle the anticipated moorage loads of live aboard vessels;
2. Sewer hook-ups for live-aboard vessels or upland bathroom facilities to accommodate the number of live-aboards within the facility;
3. No more than ten percent of the surface area of the marina or ten percent of the slips, whichever is less, is devoted to live-aboard vessels;
4. In addition to required marina parking, two parking stalls are to be provided for each live-aboard vessel;
5. If pets are to be allowed, a pet exercise area shall be provided. Marina operators are encouraged to provide such pet exercise areas for pets of live-aboard residences and transient boaters; and
6. Marina operators execute a lease, contract or deed which establishes permission to use a particular slip for a stated period of time and which establishes conditions for use of the slip such as adherence to marina best management practices, and including the requirement that all boats meet applicable state or federal water-quality and sanitation requirements.

19.600.130 Commercial Development

A. Environment Designations Permit Requirements

Where commercial development is proposed in the following upland or aquatic designations, the identified permit requirements shall apply:

1. Natural- Prohibited

2. Urban Conservancy, Rural Conservancy, Shoreline Residential and Mining:

   a. SDP for water-oriented commercial activities;
   b. Prohibited for non-water-oriented uses, except CUP for uses described in Section 19.600.130(B)(8)

3. Aquatic: Prohibited, unless the activity is water-dependent or a necessary appurtenance to a use allowed in the adjoining upland designation, then a CUP.

B. Development Standards

1. Commercial development shall result in no net loss of shoreline ecological functions or have significant adverse impact to other shoreline uses, resources and values provided for in RCW 90.58.020, such as navigation, recreation and public access.

2. Commercial developments shall be permitted on the shoreline in descending order of preference. The applicant shall demonstrate that a more preferred use is not feasible when proposing a less preferred use.

    a. Water-dependent uses;
    b. Water-related uses;
    c. Water-enjoyment uses;
    d. Non-water-oriented uses that include substantial opportunities for public access and subject to a CUP.

3. Commercial development shall not significantly impact views from upland properties, public roadways, or from the water.

4. The design and scale of a commercial development shall be compatible with the shoreline environment. The following criteria will be used to assess compatibility:

    a. Building materials
    b. Site coverage
    c. Height
    d. Density
    e. Lighting, signage, and landscaping
    f. Public access
    g. Visual assessment

5. The County shall consider public access and ecological restoration as potential mitigation of impacts to shoreline resources and values for all water-related or water-dependent commercial development, unless such improvements are demonstrated to be infeasible or inappropriate. Public access shall be provided consistent with Section 19.400.145 of this Master Program. In-kind mitigation shall be determined infeasible prior to utilizing out-of-kind mitigation.

6. Non-water-dependent commercial uses shall not be allowed over water except in existing structures or in the limited instances where they are auxiliary to and necessary in support of water-dependent uses.

7. Parking shall be located upland of the commercial use and designed to minimize adverse visual impacts to the shoreline. Over-water parking is prohibited.

8. Non-water-oriented commercial uses are prohibited unless:

    a. The use is on land designated commercial by the Thurston County Comprehensive Plan and existing on the effective date of this Program;
    b. The use is on land designated commercial by the Thurston County Comprehensive Plan and is physically separated from the shoreline by another property or public right-of-way;
    c. The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Act's objectives, such as providing ecological restoration and public access. Water-dependent components of the project and ecological restoration and access shall be improved prior to occupancy;

d. The use is on a site where navigability is severely limited and the use would provide a significant public benefit with respect to the Act's objectives, such as providing public access and ecological restoration.

Non-water-oriented commercial uses meeting these criteria must obtain a CUP.

C. Redevelopment

1. When commercial redevelopment involves relocating or expanding the existing structure, shoreline restoration or mitigation shall be a condition of approval (see Appendix B). Restoration may include, but is not limited to:

   a. Moving the structure away from the shoreline;
   b. Removing any shoreline armoring or replacing hard with soft armoring;
   c. Riparian vegetation restoration, including removing invasive and planting natives;
   d. Stormwater retrofits to implement Low Impact Development.

2. When commercial redevelopment involves relocating or expanding the structure, public access shall be a condition of approval, unless infeasible due to health or safety issues. Public access may include, but is not limited to:

   a. Maintaining current public access, if existing;
   b. Connecting a trail to existing public access on adjacent property;
   c. Providing for visual access to the shoreline.

19.600.135 Dredging and Dredge Disposal

A. Environment Designations Permit Requirements

Where dredging is proposed in the following upland designations, the identified permit requirements shall apply. Where proposed in the adjacent aquatic designation, the corresponding upland designation shall be used to determine permit requirements.

1. Natural: Prohibited, unless for purposes of ecological restoration (as defined in this section), then with a CUP.

2. Mining, Shoreline Residential, Urban Conservancy and Rural Conservancy: CUP, unless for purposes of ecological restoration (as defined in this section), then with a SDP.

3. All Designations: Dredging waterward of the OHWM for the primary purpose of obtaining fill material shall not be permitted, except as allowed under Section 19.600.135(C)(5), below.

B. Application Requirements

In addition to the general permit requirements, applications for dredging shall include the following information:

1. An analysis of materials to be dredged, including a habitat survey (Section 19.700.145) and sediment analysis;

2. Time of dredging;

3. Method of dredging and disposal, including a description of water quality best management practices;

4. Location and stability of bedlands adjacent to proposed dredging area;

5. Location, size, capacity and physical characteristics of spoils disposal area;

6. Quantity of material to be removed as specified in SEPA application and/or grading permit.

7. An explanation of why the dredging is necessary.

C. Development Standards

1.. Dredging and dredge material disposal shall only be allowed when the purpose is consistent with those listed in WAC 173-26-231 (3)(f), and conducted in a manner which avoids and minimizes significant ecological impacts. Impacts which cannot be avoided and minimized shall be mitigated in a manner that assures no net loss of shoreline ecological functions.

2. Dredging for the purpose of establishing, expanding, relocating or reconfiguring navigation channels and basins shall be allowed when necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts area minimized and when mitigation is provided.

3. Dredging for the purpose of ecological restoration may be allowed when the project is primarily serving to restore degraded ecological functions or ecosystem-wide processes.

4. Maintenance dredging of established navigation channels and basins shall be restricted to maintaining previously dredged and/or existing authorized location, depth, and width. Such activities shall be exempt from permit procedures when such proposals meet the criteria for normal maintenance or repair (Section 19.500.100(C)(3)(b) & WAC 173-27-040).

5. Dredging waterward of the OHWM for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for a project to restore ecological functions waterward of the OHWM. Such project shall either be associated with a Model Toxics Control Act (MTCA) or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) habitat restoration project, or, if approved through a CUP, a significant habitat enhancement project.

6. Deposition of dredge material below ordinary high water shall be allowed only at those Puget Sound dredge disposal sites approved by the Dredged Material Management Program (DMMP) representing the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington Department of Ecology, and Washington Department of Natural Resources.

7. Disposal of dredge material on shorelands or wetlands within a river's or stream's channel migration zone shall not occur, except as authorized by CUP as a part of a shoreline restoration project.

8. Disposal of contaminated dredge materials, not suitable for open water disposal, and otherwise regulated by Section 404 of the Federal Clean Water Act, shall occur only at permitted solid waste or dangerous waste disposal facilities.

19.600.140 Fill

A. Environment Designations Permit Requirements

Where fill is proposed in the following upland designations, the identified permit requirements shall apply. Where proposed in the adjacent aquatic designation, the corresponding upland designation shall be used to determine permit requirements.

1. Natural: Prohibited, except for restoration purposes as noted below;

2. Mining, Shoreline Residential, Urban Conservancy, Rural Conservancy;

    a. CUP for fill waterward of the OHWM for any use except ecological restoration.
    b. SDP for fill landward of the OHWM.

3. All Designations: SDP if for ecological restoration where restoration is the primary purpose for the activity.

4. All Designations: Any fill quantity in critical areas (and their buffers) or fill quantity in excess of 50 cubic yards outside of critical areas shall also require a Grading Permit pursuant to Title 20, 21, 22, and 23 TCC as now or hereafter amended.

B. Application Requirements

In addition to general permit requirements, applications for fill shall include, but not be limited to, the following information:

1. Physical, chemical, and biological character of fill materials;

2. Source of fill material;

3. Method of placement and compaction;

4. Type of proposed surfacing and stormwater control devices;

5. Method of perimeter erosion control;

6. Proposed use of fill area;

7. Location of fill relative to natural and/or existing drainage patterns.

C. Development Standards

1. Fill materials shall be sand, gravel, soil, rock or similar material. Use of polluted dredge spoils or other solid or dangerous wastes as defined by the Thurston County Public Health and Social Services Department is prohibited.

2. Fill within shoreline jurisdiction shall be avoided to the extent feasible. Where necessary, fill in shoreline jurisdiction shall be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.

3. Erosion control measures shall be implemented pursuant to Title 15 TCC (Stormwater Standards).

4. Fill shall be designed and reviewed for avoidance of water-quality impacts in accordance with local, state and federal regulations.

5. Fill shall only be allowed below the OHWM for:

    a. Water-dependent uses,
    b. Public access,
    c. Cleanup and disposal of contaminated sediments as part of an interagency environmental cleanup plan,
    d. Mitigation action,
    e. Environmental restoration,
    f. Beach nourishment or enhancement projects,
    g. The expansion or alteration of existing transportation facilities of statewide importance located along the shoreline, and only upon demonstration that alternatives to fill are not feasible.

6. Fill shall not be used to create land to serve residential development.

7. Fill shall not be used to create land to serve non-water dependent commercial development.

8. If archaeological resources are uncovered during excavation, developers and property owners must immediately stop work and notify Thurston County, the Department of Archaeology and Historic Preservation, and affected Indian tribes. Permits may be conditioned after review by a professional archaeologist.

19.600.145 Forest Practices/Timber Harvest

A. Environment Designations Permit Requirements

Forest practices conducted under a Forest Practices Permit (Class I, II, III and IV-Special) from the Washington Department of Natural Resources shall not be regulated by this Program and shall not require a local shoreline permit. However, forest practice conversions and other Class IV-General forest practices where there is a likelihood of conversion to non-forest uses, and timber harvest within Shorelines of Statewide Significance shall be regulated by this Program. Where such forest practices are proposed in the following designations, the identified permit requirements shall apply.

1. Natural: CUP

2. Rural Conservancy: SDP

3. Urban Conservancy, Shoreline Residential, Mining:

    a. Prohibited for Commercial Forestry;
    b. SDP for Class IV-General permit.

4. All designations: CUP for exceptions to Shorelines of Statewide Significance standards in section 19.600.145(C)(4) below.

B. Application Requirements

In addition to the general permit requirements of this Program, a Thurston County Timber Harvest Permit (Class IV General, Class III Conversion Option Harvest Plan, and timber harvest within Shorelines of

Statewide Significance) shall be required. This includes all other application requirements as outlined in Chapter 17.25 TCC (Forest Lands Conversion).

C. Development Standards

1. Forest practices within shoreline jurisdiction shall comply with the requirements of the Forest Practices Act (Ch. 76.09 RCW) and the Forest and Fish Report (United States Fish and Wildlife Service et al. 1999). The following standards shall apply to those activities subject to this Program, including forest practices conducted under a Class IV-General forest practice permit or Class III-Forest Practices conversion option harvest plan, and timber harvest activities conducted within Shorelines of Statewide Significance.

2. Timber Harvest Permit activity shall assure no net loss of shoreline ecological functions and shall maintain ecological quality of the watershed's hydrologic system.

3. Timber Harvest Permit activity in all shoreline areas shall comply with the policies and regulations outlined in this Program, Chapter 17.25 TCC (Forest Lands Conversion) and Title 15.05 TCC (Storm Water Standards) for silt and erosion control.

4. With respect to timber situated within the shoreline jurisdiction for shorelines of statewide significance, only selective commercial timber cutting shall be allowed provided that no more than thirty percent of the merchantable trees may be harvested in any ten year period of time, further provided that:

    a. Other timber harvesting methods may be permitted in those limited instances where the topography, soil conditions or silviculture practices necessary for regeneration render selective logging ecologically detrimental; and
    b. Clear cutting may occur when timber harvest is solely incidental to the preparation of land for other uses authorized by this chapter.

5. Exceptions to the standards provided in RCW 90.58.150 as stated in Section 19.600.145(C)(4) shall require a CUP.

6. Failure to apply for a local Class IV Forest Practices Permit, when required, will result in a six-year moratorium on any subsequent development proposals on the subject parcel.

7. When timberland is to be converted to another use, such conversion shall be clearly indicated on the Forest Practices application. Shoreline buffers shall be established and maintained for all Type IV Forest Practices Permits in accordance with the proposed shoreline use. Failure to establish shoreline buffers or declare intent to convert on the application shall provide grounds for the denial of subsequent development proposals for a period of six years from the date of the Forest Practices application approval (RCW 76.09.060(3)(d)).

8. Timber harvest activities subject to this Program shall not be permitted until local plat approval or other applicable land use authorization has been given, and any required shoreline permits have been issued for the land division(s) or intended use(s) where applicable.

9. Hazard tree removal or view tree limbing: Where a threat to human life or property is demonstrated, or where view thinning is allowed in accordance with the Vegetation Conservation Buffer standards in Section 19.400.120, the Department may allow removal or trimming of hazard trees or limbing of view trees within shoreline jurisdiction. Requests for tree removal shall be reviewed by the Department in accordance with the following criteria:

a. For hazard trees, tree removal shall be the minimum necessary to balance protection of the critical area or shoreline buffer with protection of life and property. For view trees, tree limbing shall be the minimum necessary in accordance with the Vegetation Conservation Buffer standards of Section 19.400.120;
b. The critical area or shoreline buffer shall be replanted as determined by the Department. Except where determined otherwise, a replanting ratio of 3:1 (planted: removed) shall be a standard requirement;
c. The Department shall coordinate with the property owner and WDFW as determined necessary to assure habitat protection. Habitat needs may require leaving the fallen tree within the buffer area or leaving a high stump for wildlife habitat;
d. The Department may require the applicant to consult with a professional forester or a certified arborist prior to tree removal;
e. The Department may require a site visit to review the proposal, subject to applicable fee requirements in the Thurston County Fee Schedule.

19.600.150 Industrial Development

A. Environment Designations Permit Requirements

Where industrial development is proposed in the following designations, the identified permit requirements shall apply.

1. Natural and Rural Conservancy: Prohibited

2. Urban Conservancy and Shoreline Residential: CUP for water-oriented industries. Non-water-oriented industrial development shall be prohibited.

3. Mining: SDP for water-oriented industries. Non-water-oriented industrial development shall be prohibited, except as specified in Section 19.600.150(B) below.

4. Aquatic: Prohibited, unless water-dependent or allowed in the adjoining upland designation, then a CUP.

B. Development Standards

1. When allowed, industrial development shall be located, designed and constructed in a manner that assures no net loss of shoreline ecological functions, resources and values.

2. Water-dependent, water-related, and non-water oriented industrial uses are permitted where allowed by zoning and this Program. The following preferential order shall be considered by the County when evaluating SMP amendments and determining compliance of shoreline permits:

    a. The industrial use is water-dependent, consistent with the Act and this Program. The County may require an applicant to provide documentation about the characteristics of the development to confirm the proposal's water-dependent nature.
    b. The industrial use is water-related, consistent with the Act and this Program. The County may require an applicant to provide documentation about the characteristics of the development to confirm the proposal's water-related nature.
    c. The industrial use is non-water-oriented and consistent with the exceptions and conditions in Section 19.600.150(B)(3).

3. Non-water-oriented industrial development shall be prohibited in shoreline jurisdiction except when:

a. The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Act's objectives such as providing ecological restoration and public access. Any such public access shall be improved prior to occupancy;
b. Navigability is severely limited at the proposed site; and the industrial use provides a significant public benefit with respect to the Act's objectives, such as providing public access and ecological restoration;
c. The area is designated for industrial use by the Thurston County Comprehensive Plan and the site is physically separated from the shoreline by another property or public right of way.

4. Industrial development must consider incorporating public access as mitigation for impacts to shoreline resources and values unless public access cannot be provided in a manner that does not result in significant interference with operations or hazards to life or property.

5. Where industrial use is proposed for location on land in public ownership, public access shall be required.

6. Industrial development and redevelopment shall locate, when feasible, where environmental cleanup and restoration of the shoreline area can be incorporated.

7. Where industrial uses are allowed, Chapter 20.28 TCC (Section 20.28.020 Permitted Uses) shall apply to new or expanded industrial development.

8. Buffers shall not be used for storage of industrial equipment or materials, nor for waste disposal, but may be used for outdoor recreation if consistent with public access and other provisions of this Program.

9. Applications for water-oriented facilities for processing, manufacturing, and storage of natural resource products, including log storage, shall include provisions which address:

a. Navigation,
b. No net loss of shoreline ecological functions,
c. Impacts to public access,
d. Aesthetics.

10. Boat yards and similar ship-building facilities shall comply with the mandatory best management practices and other provisions of the Boatyard General Permit issued through Ecology, as now or hereafter amended.

19.600.155 Mining

A. Environment Designations Permit Requirements

Where mining is proposed in the following designations, the identified permit requirements shall apply.

1. Natural: Prohibited

2. Rural Conservancy: CUP

3. Urban Conservancy and Shoreline Residential: Prohibited

4. Mining: CUP

5. Aquatic: Prohibited

B. Development Standards

1. Mining and associated activities shall only be allowed when all of the following criteria have been met:

    a. The location, design and conduct is consistent with the Environment Designation and with the Thurston County mineral resource overlay,
    b. Demonstrated consistency with critical areas regulations;
    c. The activity is dependent on a shoreline location;
    d. The activity demonstrates no net loss of shoreline ecological functions through avoidance, minimization and mitigation of adverse impacts during the course of mining and reclamation.

2. All of the provisions and requirements for mining in Chapter 78.44 RCW (Surface Mining), as now or hereafter amended, shall be met.

3. Any proposed subsequent use of mined property shall be consistent with the provisions of the environment designation in which the property is located.

4. Reclamation of disturbed shoreline areas shall be required to provide appropriate ecological functions consistent with the pre-existing and current surrounding conditions.

5. Mining proposals shall give consideration to activities that result in the creation, restoration, or enhancement of habitat for priority species.

6. Mining shall be prohibited waterward of the OHWM and prohibited within a Channel Migration Zone.

7. The deposit of overburden within shorelines constitutes fill and shall be subject to the provisions of this Program.

19.600.160 Mooring Structures and Activities

A. Environment Designations Permit Requirements

When mooring structures are proposed in the Aquatic designation and are adjacent to the following upland designations, the identified permit requirements shall apply.

1. Mining: Prohibited

1. Natural:

    a. Prohibited for single-use;
    b. Prohibited for joint or public use, unless the adjoining upland is a public park, then up to two mooring buoys may be permitted with a SDP

2. Rural Conservancy, Urban Conservancy, Shoreline Residential, and: SDP.

B. Application Requirements

In addition to the general permit requirements, proposals for mooring structures shall include the following:

1. A staff consultation meeting with the Department, state and federal agencies (where applicable), and tribes affected by proposals within their usual and accustomed grounds and stations shall be required prior to application for new piers and docks, pursuant to Chapter 19.500 (Permit Provisions, Review and Enforcement);

2. Description of the proposed structure, including size, location, design, and any other modification required by the project;

3. Ownership of tidelands, shorelands, and/or bedlands;

4. Proposed location of mooring structures relative to property lines and OHWM;

5. Location, width, height, and length of mooring structures on adjacent properties;

6. If for residential moorage, demonstration that existing facilities, including public moorage within ten driving miles of the applicant's parcel, are not adequate or feasible to accommodate the proposed moorage;

7. Demonstration that alternative types of moorage, including buoys, are not adequate or feasible;

8. For residential docks, written confirmation from each adjoining landowner indicating whether or not a joint-use mooring structure agreement will be entered into; and

9. Habitat surveys as described in Section 19.700.145 shall be required for mooring structures, with the exception of buoys, and shall be conducted according to WDFW, Washington Department of Natural Resources, and the U.S. Army Corps of Engineers parameters, where applicable.

C. Development Standards

1. General Development Standards

   a. New mooring structures 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 and may be permitted, provided that it is designed and intended as a facility for access to watercraft and otherwise complies with the provisions of the Act and this Program.
   b. New water-related and water-enjoyment uses may be allowed as part of mixed-use development on overwater 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.
   c. Mooring structures shall follow all applicable state and federal requirements for building standards, materials, installation timing, and surveys.
   d. Mooring structures shall only be allowed in critical saltwater and freshwater habitats when the standards provided in this section for such habitats are met.
   e. Overwater structures shall be constructed to the minimum size necessary to meet the needs of the proposed water-dependent use, including single-family residences, provided the additional development standards of this chapter are met.
   f. Buoys shall be preferred over piers, docks or floats. Applicants shall demonstrate that a buoy is not a feasible option prior to proposing a less preferred option.

g. Single-use mooring structures, with the exception of buoys, shall be prohibited except where it can be demonstrated that a joint use facility is not feasible.

h. Proposed moorage structures for new residential development of two or more dwellings shall be limited to a single, joint-use community facility except where demonstrated to be infeasible, with no more than one moorage space per dwelling unit or lot. If shared moorage is provided, the applicant/proponent shall file a legally enforceable joint use agreement or other legal instrument at the time of plat recordation.

i. Except when accessory to single family residences, any new pier or dock construction may only be permitted if the applicant has demonstrated that a specific need exists to support the intended water-dependent use. This may include justification through port or county comprehensive plans.

j. Mooring structures shall be readily discernible under normal daylight conditions to the unaided eye at a minimum distance of one hundred yards and must be marked for night-time visibility.

k. No creosote, chromate copper arsenate, or pentachlorophenol treated wood, or other comparably toxic compounds shall be used as part of the decking, pilings, or other components of any in-water structures such as docks, piers, and floats. These types of treated wood shall only be used for above-water structural framing.

l. During maintenance, existing deteriorated treated wood shall be replaced with alternative materials such as untreated wood, steel, concrete, or recycled plastic, or encased in a manner that prevents metals, hydrocarbons and other toxins from leaching out. If maintenance activities exceed 50% repair or replacement of the existing structure, then the application requirements in Section 19.600.160(B) above shall apply.

m. Tires are prohibited as part of above and below water structures or where tires could potentially come in contact with the water.

n. During maintenance or repair of a pier, dock or ramp, existing tire materials shall be replaced with inert or encapsulated materials such as plastic or encased foam. Likewise, any un-encapsulated foam material must be removed or replaced.

o. To prevent scouring of the substrate, power-assisted pressure washing or cleaning of equipment, machinery, or structures in water less than seven feet deep shall be prohibited. In addition, equipment that contains or is covered with petroleum based products shall not be pressure washed in or over the water.

p. New covered moorage, over-water boat houses, side walls or barrier curtains associated with single family residential moorage are prohibited. When covered moorage and covered watercraft lifts are replaced, the replacement structures should use transparent roofing materials that are rated by the manufacturer as having 90% or better light transmittance.

q. New structures shall be designed and located so no new bulkheading or armoring of the shoreline is necessary.

r. Functional grating resulting in a total open area of a minimum of 24% must be installed on piers and floats which are new or greater than 50% replacement. This can be achieved by installing grating with 60% open area on at least 40% of the pier or by grating a larger percentage of the pier with grating with openings of less than 60%. Exceptions to these standards may be permitted where need is demonstrated and when approved by the U.S. Army Corps of Engineers.

s. Grating must not be covered, on the surface or underneath, with any stored items and must be kept clean of algae, mud or other debris that may impede light transmission.

t. All mooring facilities shall be designed and constructed to avoid, or where avoidance is not feasible, to minimize and mitigate impacts to achieve no net loss of ecological functions, including functions associated with critical saltwater habitats and species, such as eelgrass beds, and fish habitats and processes such as currents and littoral drift.

u. Proposed moorage facilities should be evaluated to ensure that the project does not conflict with existing water dependent uses.

2. Critical Saltwater Habitats Standards

a. Except for private, non-commercial mooring facilities for individual or community use, all mooring structures may only be permitted if the applicant can clearly demonstrate the public's need for the structure, the structure is consistent with the public trust protections in RCW 90.58.020, and the structure is consistent with the State's interest in resource protection and species recovery.

b. Where existing covered moorage, covered watercraft lifts, and boathouses associated with single-family residences occur within critical saltwater habitats, the structure shall be removed by the end of the life of the structure, or relocated to avoid critical saltwater habitats at the time of greater than 50% replacement, except where demonstrated to be infeasible.

c. New or expanded mooring structures shall be located the greater of or most protective of:
   i. A horizontal distance of twenty-five feet from the outside edge of the structure to native aquatic vegetation attached to or rooted in substrate;
   ii. A horizontal distance equal to the maximum distance shade will be cast by the structure and vessel;
   iii. A four foot vertical distance from eelgrass or relevant submerged aquatic vegetation;
   iv. A distance the diameter of the turning circle, if the structure is to be utilized for motorized vessels. The turning circle is defined as 3.5 times the length of the longest vessel to use the structure.
   v. Alternative measures that demonstrate no net loss of ecological functions.

d. In areas that have not been documented as spawning sites, but contain characteristics that would support forage fish spawning, a habitat survey shall be conducted over a two-year period throughout the assumed local spawning season. If the proponent is unwilling to bear the time and expense of such a survey, the project must be designed and operated under the presumption that forage fish spawning does occur at the site, pursuant to WDFW standards.

e. For sites adjacent to sand lance and surf smelt spawning areas, all in-water work that has the potential to increase suspended sediments in the spawning area during the spawning period shall require at least two feet vertical separation from the tidal elevation of the spawning bed, or a setback of180 feet horizontal distance from the lower edge of the spawning habitat zone. In-water work should occur during an outgoing tide when the water line is below the lower edge of a surf smelt/sand lance spawning habitat zone (five to six feet MLLW).

3 Pilings

a. New or replacement pilings may be made of steel, concrete, plastic, untreated wood or treated wood where approved for the marine or freshwater environment, except creosote and similar products.

b. New pilings must be spaced 20 feet apart lengthwise. If the structure is less than 20 feet in length, pilings may be allowed at the ends of the structure only. In areas with forage fish spawning or rearing and submerged aquatic vegetation, when allowed, pilings must be spaced 40 feet apart lengthwise.

c. A maximum of two moorage pilings beyond or parallel to a mooring structure may be allowed to accommodate moorage of boats exceeding the length of the mooring structure or to provide supplementary tie-down locations for boats that require additional stabilization.

d. New or replacement pilings shall be driven only during construction windows approved by WDFW. These include protection for spawning periods and periods of presence of juvenile salmonids, forage fish and groundfish.

4. Piers

a. Single-use piers may not exceed 4 feet in width (6 feet if wheelchair access is needed), and joint-use piers may not exceed 6 feet in width, unless otherwise approved by the U.S. Army Corps of Engineers, if applicable to the proposal. See Figures 19.600.160.1 and 19.600.160.2 for illustration of single-use and joint-use moorage requirements.

b. In no case shall piers and their associated ramps and floats extend greater than 15% of the perpendicular shore-to-shore distance across a waterbody, except where a navigational study has been submitted for County review and approval. The navigational study shall analyze impacts to local recreational use, and recommend mitigation measures to minimize such impacts.

c. Piers shall have a north-south orientation to the maximum extent feasible. For every 10 degrees difference from this orientation, the structure shall be 2/3 of one foot greater in height, to the extent which it does not create an aesthetic conflict.

d. New or replacement piers must be oriented in a straight line.

e. The construction of new covered structures on piers is prohibited. This does not include electrical utility boxes, or if such structure is an element of an approved marina, port or park plan.

f. The width of the ramp connecting the pier to shore or to a float must not exceed four feet in width (six feet if wheelchair access is needed). New and replacement ramps or gangways shall be fully grated with 60% open area. Exceptions to these standards may be permitted where need is demonstrated and where approved by the U.S. Army Corps of Engineers.

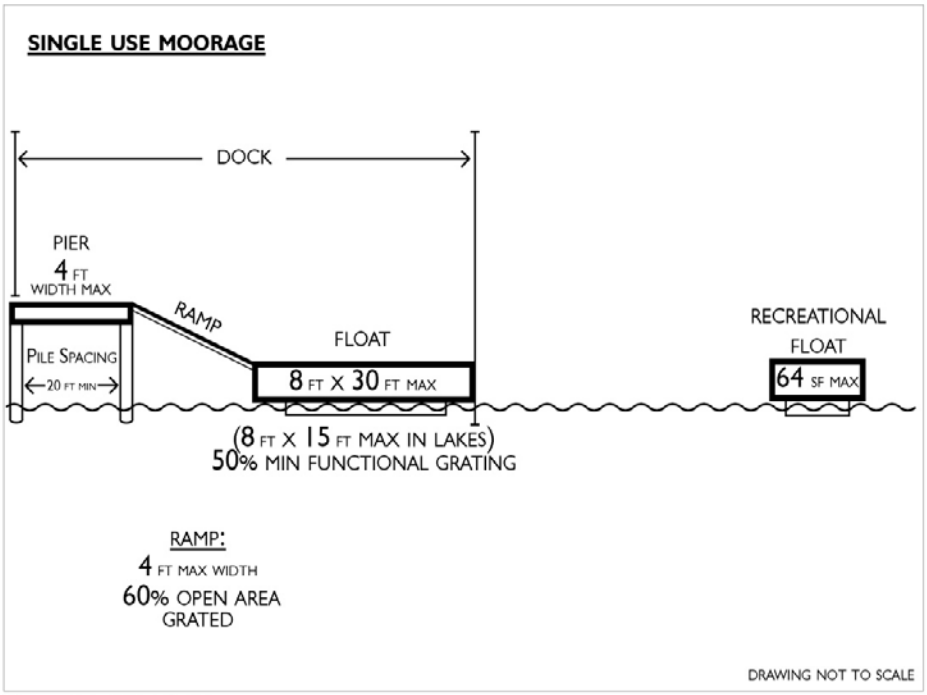

Figure 19.600.160(1). Mooring structure and recreational float dimensional requirements for single-use facilities.

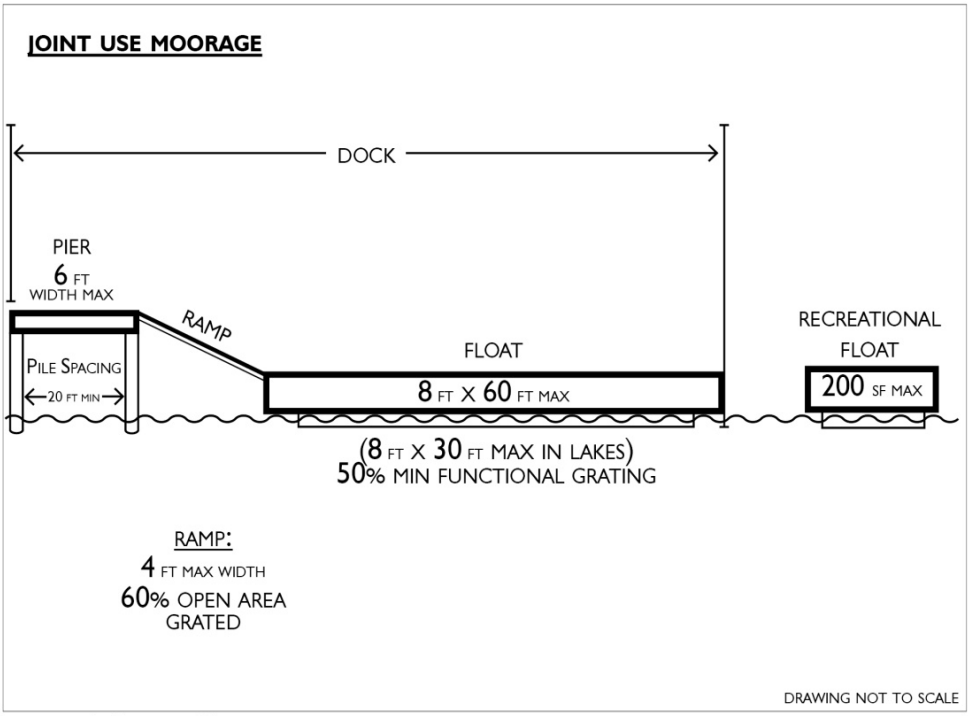

Figure 19.600.160(2) Mooring structure and recreational float dimensional requirements for joint-use facilities.

5. Floats

   a. All foam material whether used for flotation or for any other purpose must be encapsulated within a shell that prevents breakup or loss of the foam material into the water and is not readily subject to damage by ultraviolet radiation or abrasion.
   b. Floatation shall not be installed under functional grating.
   c. Floats and watercraft shall not ground out at low tide and shall not be permitted to rest landward of MLLW.
   d. Floats shall be suspended at all times a minimum of one foot above the substrate. The preferred method is to suspend the float above the substrate by installing float stops on piling. The stops must be able to fully support the entire float during all tidal elevations. In some instances, stub pilings or float feet may be considered.
   e. Single-use floats attached to piers shall not exceed eight feet in width and 30 feet (15 feet for lakes) in length. Functional grating must be installed on at least 50% of the surface area. See Figures 19.600.160(1) and 19.600.160(2) for illustration of single-use and joint-use moorage requirements.
   f. Joint-use floats attached to piers shall not exceed eight feet in width and 60 feet (30 feet for lakes) in length. Functional grating must be installed on at least 50% of the surface area. Exceptions to this standard may be permitted where need is demonstrated and where approved by the U.S. Army Corps of Engineers.
   g. Single-use recreational floats shall not exceed 64 square feet in size and joint-use recreational floats shall not exceed 200 square feet in size. In either case, the float must have at least 50% functional grating. See Figures 19.600.160(1) and 19.600.160(2) for illustration of single-use and joint-use moorage requirements.

h. Community recreational floats associated with public parks and other recreational facilities shall be a maximum of 300 square feet in size and must have at least 50% functional grating.

6. Boat Launching Ramps, Railways and Lifts

a. Private boat launches shall not extend below ordinary high water, unless they:
   i. Are elevated, and
   ii. Will result in no net loss of shoreline ecological functions, and
   iii. Minimize aesthetic impacts to the greatest extent possible.
b. Commercial or community boat launching ramps shall provide a wash-down drainage crypt which incorporates oil-water separators for the treatment and disposal of wastewater associated with the boat launching ramp.
c. Private marine rail systems are preferred over private boat launch ramps. Applicants shall demonstrate that the preferred option is infeasible before selecting the less preferred option.
d. Marine rail systems shall be maintained in operating condition or must be removed.
e. Marine rail systems shall be designed, to the greatest extent feasible, so they are not barriers to littoral drift.
f. Floating watercraft lifts shall be located greater than nine feet waterward from the OHWM.
g. The area of floating boat lifts to be installed on the overwater structure must be included in the float grating calculations.

7. Buoys and Anchors

a. One mooring buoy may be permitted per residence, pursuant to the standards in this section.
b. Mooring buoys may be permitted at public parks, provided they are part of an approved park plan.
c. Mooring buoys and/or anchors shall not be used for moorage of live-aboard vessels. Other extended moorage or anchoring shall only be allowed in waters of the State when permission is obtained from the State, and impacts to navigation and public access are mitigated.
d. Mooring buoys shall have a helical anchor with a mid-line float and be located in water at least sixteen feet deep to minimize impacts to the substrate and aquatic vegetation, except where consultation with the appropriate state resource agency results in an alternate design due to site-specific conditions.
e. Mooring buoys are limited to use for vessels no longer than sixty (60) feet in length.
f. Mooring buoys are subject to Washington Department of Natural Resources approval for placement in state owned aquatic lands (RCW 79.105.430), and WDFW approval for any mooring buoy placement.
g. Recreational mooring buoys shall be registered with Thurston County.

8. Lakes, Rivers and Streams

a. Mooring structures shall be prohibited on rivers and streams.
b. No mooring structures shall be constructed within 100 feet of the mouth of a river, stream or creek.

19.600.165 Recreation and Public Access

A. Environment Designations Permit Requirements

Where recreational development is proposed in the following designations, the identified permit requirements shall apply.

1. Natural:

    a. Prohibited for non-water-oriented recreational development;
    b. SDP for non-motorized, water-oriented recreational development; and
    c. CUP for all other forms of recreation, except where demonstrated to be consistent with approved park plans prior to application, and then with a SDP.

2. Rural Conservancy, Urban Conservancy, Shoreline Residential, Mining: SDP

3. Aquatic: The required permit type will be determined by the specific recreational development proposed as set forth in Chapter 19.600 (Shoreline Use and Modification Development Standards). For example, see Section 19.600.125, Boating Facilities.

B. Application Requirements

In addition to the general permit requirements, a description of how the proposed use is water-oriented is required if applicable.

C. Development Standards

1. Recreational development shall not result in a net loss of shoreline ecological functions or ecosystem-wide processes.

2. All recreational facilities shall be designed, located and operated in a manner consistent with the purpose of the environment designation in which they are located.

3. Water-oriented recreation may be allowed in shoreline buffers. The removal of on-site native vegetation shall be limited to the minimum necessary for the recreational development areas, such as picnic areas, campsites, selected views, or other permitted structures or facilities.

4. Preference shall be given to activities which are consistent with approved state and local park plans for water-oriented recreational development.

5. Non-water-oriented recreational facilities, such as golf courses, playing fields, and facilities with extensive impervious surfaces, shall observe Critical Area Buffers and Vegetation Conservation Standards (Sections 19.400.115 and 19.400.120, respectively).

6. Commercial recreational development shall be consistent with Section 19.600.130 (Commercial Development).

7. Vehicular traffic is prohibited on beaches, bars, spits and streambeds, except for permitted construction and boat launching, or in areas where it can be demonstrated that a historical use has been established.

8. Public road-ends, tax-title lands and right-of-ways adjacent to shorelines of the state shall be preserved for public access, unless the property is zoned for industrial uses. Pursuant to RCW 36.87.130, as now or hereafter amended, vacation of such shall only occur if the purpose is to:

    a. Enable any public authority to acquire the vacated property for port purposes, boat moorage or launching sites; or
    b. Provide for park, viewpoint, recreational, educational or other public purpose.

9. Trail access shall be provided to link upland facilities to the beach area where feasible and where impacts to ecological functions can be mitigated.

10. When applicable, recreational development shall make adequate provisions for:

    a. Vehicular parking and pedestrian access;
    b. Proper wastewater and solid waste disposal methods;
    c. Security and fire protection;
    d. The prevention of overflow and trespass onto adjacent properties, including, but not limited to, landscaping, fencing, and posting of property;
    e. Screening of such development from adjacent private property to prevent noise and light impacts.

11. Shoreline trails and pathways shall be located, designed, and constructed to protect bank stability.

12. As required by RCW 90.58.100(4), applications providing for wilderness beaches, ecological study areas, and recreational uses for the public on state-owned shorelines shall be considered a preferred use.

13. Public access sites shall be made barrier-free and accessible for physically disabled uses where feasible, and in accordance with the Americans with Disabilities Act (ADA).

19.600.170 Residential Development

A. Environment Designations Permit Requirements

Where residential development is proposed in the following designations, the identified permit requirements shall apply.

1. Natural:

    a. CUP for primary single-family residences and subdivisions.
    b. Prohibited for multi-family units and accessory dwelling units.

2. Rural Conservancy and Urban Conservancy:

    a. SDP if exemption criteria not met.
    b. CUP for multi-family units, accessory dwelling units and subdivisions.

3. Shoreline Residential:

    a. SDP if exemption criteria not met.
    b. SDP for multi-family units, accessory dwelling units, and subdivisions.

4. Aquatic and Mining: Prohibited

B. Development Standards

1. All new residential development, including subdivision of land, shall be designed, configured and developed in a manner that ensures no net loss of shoreline ecological function.

2. All sewage disposal and water systems shall be in compliance with state and local health regulations including but not limited to Thurston County Board of Health Articles III and IV for on-site sewage and water supply requirements.

3. New and remodeled residential development and new subdivisions shall be designed, located and constructed so that structural improvements, including bluff walls, retaining walls and other stabilization structures, are not required to protect such structures and uses.

4. New over-water residences, including floating homes, are prohibited. Where such homes exist as of the adoption date of this Program, they shall be reasonably accommodated to allow improvements associated with life safety matters and property rights (mitigation may be required).

5. Stormwater quality and quantity measures for residential development must comply with current codes.

6. Flood hazard reduction measures for residential development shall comply with Chapter 24.20 TCC, as incorporated here by Section 19.400.115 (Critical Areas) and Section 19.400.150 (Flood Hazard Reduction Measures) of this Program and shall be designed to prevent net loss of shoreline ecological functions.

7. New multi-unit residential development, including the subdivision of land for five or more parcels, shall provide for joint or community and/or public access, except where demonstrated to be infeasible due to any of the following:

    a. Incompatible uses;
    b. Safety;
    c. Security;
    d. Impact to the shoreline environment;
    e. Other legal limitations that may be applicable.

8. In cases where on-site access is infeasible, alternate methods of providing public access shall be considered, such as off-site improvements.

9. Lot area shall be calculated using only those lands landward of the OHWM.

10. Single-family residential uses are a priority use only when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.

19.600.175 Shoreline Stabilization

A. Environment Designations Permit Requirements

Based on the type of shoreline modification proposed, the identified permit requirements shall apply for all designations:

1. Administrative CUP for soft shoreline stabilization.

2. CUP for hard shoreline stabilization.

B. Exemptions from Substantial Development Permit for Shoreline Stabilization

1. The construction of a normal protective bulkhead common to single-family residences shall not require an SDP if it meets the exemption criteria listed in Section 19.500.100(C)(3)(c) of this Program, or as further amended in WAC 173-27-040. An exemption from an SDP is not an exemption from a CUP or an Administrative CUP where applicable.

2. A “normal protective” bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the OHWM for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion.

3. A letter of permit exemption will be prepared for qualifying shoreline stabilization activities in accordance with Section 19.500.100(C)(4). The County shall track exemption activities in the permit system.

C. Application Requirements

In addition to the general application requirements, applications for shore protection and bluff stabilization shall include the following information, when applicable:

1. Upland, onsite improvements and any existing shoreline structures.

2. Type of proposed shore protection and a description of alternatives to hard approaches where proposed, and a thorough discussion of the environmental impacts of each alternative;

3. Habitat survey prepared by a qualified professional biologist that describes the anticipated effects of the project on fish and wildlife resources and marine vegetation;

4. A description of any proposed vegetation removal, and a plan to re-vegetate the site following construction;

5. Tidal elevations and field verified line of ordinary high water;

6. Ownership of the tidelands, shorelands and/or bedlands;

7. Purpose of shore protection;

8. Direction of net longshore drift (for marine shoreline);

9. Plan and profile of existing bank and beach;

10. Profile of adjacent existing bulkhead;

11. In addition to the general Geotechnical Report requirements in Section 19.700.120, the following information shall be included for shoreline stabilization proposals:

    a. Address the need to prevent potential damage to a primary structure through the use of shoreline stabilization measures.
    b. Estimate time frame and rates of erosion to report on the urgency associated with the specific situation. Urgent means:

i. That the primary structure will be damaged within three years as a result of natural shoreline erosion in the absence of hard armoring structures, or

ii. Where waiting until the need is that immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions.

c. If the report determines that the need is not as immediate as three years, it still may be used to justify a more immediate authorization to protect against erosion using soft measures.

d. The geotechnical analysis shall evaluate on-site drainage issues and address drainage problems away from the shoreline edge.

12. Any other information that may be required to demonstrate compliance with the review criteria referenced in this section and the guiding provisions at WAC 173-26-231(3)(a).

D. Development Standards

1. General Regulations

a. These standards shall be guided by the provisions at WAC 173-26-231(3)(a).

b. Applications for shore protection will be reviewed pursuant to comments made by the Washington Department of Fish and Wildlife pertaining to impacts on critical salt and freshwater habitats, and comments made by the Washington Department of Natural Resources for projects proposed on state owned aquatic lands.

c. Soft shoreline stabilization measures (i.e. non-structural) shall be utilized unless demonstrated through a geotechnical analysis not to be sufficient to protect primary structures, dwellings and businesses. Alternatives for shoreline stabilization shall be based on the following order of preference:
   i. No action, increase building setbacks, or relocate structures;
   ii. Soft shoreline stabilization constructed of natural materials including bioengineering, beach nourishment, protective berms, or vegetative stabilization;
   iii. Hybrid shoreline stabilization, usually constructed of a mix of rock, logs and vegetation;
   iv. Hard shoreline stabilization constructed of materials such as rock, riprap or concrete.

d. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the OHWM.

e. When hard shoreline stabilization measures (i.e. structural) are demonstrated to be necessary, they must:
   i. Limit the size of stabilization measures to the minimum necessary.
   ii. Assure no net loss of shoreline ecological functions.
   iii. Ensure that publically financed or subsidized shoreline erosion control measures do 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.
   iv. Where feasible, incorporate ecological restoration and public access improvements into the project.

f. Shoreline stabilization measures shall not be for the purpose of creating dry land. Leveling or extending property, creating or preserving residential lawns, yards or landscaping shall not be allowed except when other otherwise allowed in this section due to health and safety.

g. Minimize disturbance pertaining to beach access by avoiding switchback trails which require hard stabilization. Where such avoidance is not feasible, mitigation for impacts to shoreline ecological functions shall be required.

h. Bluff stabilization walls shall be prohibited unless proven necessary through a geotechnical report.

i. Placement of shoreline stabilization methods shall follow the natural contour of the existing shoreline, be parallel to and at or above the OHWM.

j. Shoreline stabilization on marine feeder bluffs, when determined necessary pursuant to the standards of this section, may require additional mitigation measures, including those necessary to offset the loss of sediment supply.

k. Shoreline stabilization must be designed by a professional engineer licensed in the State of Washington with demonstrated experience in hydraulic activities of shorelines. Alternatively, soft shoreline stabilization may be designed by a habitat biologist or a professional with demonstrated expertise in designing soft shoreline stabilization structures.

l. Depending on the degree of hard or soft elements to the project, the Department, Ecology, WDFW, and/or U.S. Army Corps of Engineers may require varying degrees of mitigation or other permit conditions.

m. Shoreline stabilization structures shall not result in a net loss of shoreline ecological functions.

n. Shoreline stabilization, as applied in this section, is generally distinguished from shoreline restoration activities. However, specific shoreline stabilization elements of restoration activities shall be guided by this section.

2. New and Expanded Shoreline Stabilization

a. If shoreline stabilization is necessary pursuant to a geotechnical analysis, the method, either hard or soft, shall not result in a net loss of shoreline ecological functions. To meet this requirement, on- and off-site mitigation measures may be required.

b. Shoreline stabilization structures shall not be constructed with waste materials such as demolition debris, derelict vessels, tires, concrete or any other materials which might have adverse toxic or visual impacts on shoreline areas.

c. New structural stabilization measures shall not be allowed except when necessity is demonstrated in the following manner:

   i. To protect legally existing primary structures:

      1. New or enlarged structural shoreline stabilization measures for the existing primary structure, including residences and their primary appurtenant structures or uses, shall not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the lawfully established, primary structure is in imminent danger from shoreline erosion caused by tidal actions, currents, or waves;

      2. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need;

   ii.. In support of water-dependent development when all of the following apply:

      1. The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage;

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

      3. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report;

   iii. In support of new non-water-dependent development, including single-family residences, when all of the following apply:

1. The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage;
2. Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient;
3. The need to protect the primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as tidal action, currents and waves;

iv. To protect projects for the restoration of ecological functions or hazardous substance remediation projects pursuant to chapter 70.105D RCW when nonstructural measures, planting vegetation, or installing on-site drainage improvements are not feasible or sufficient.

3. Replacement and Repair of Existing Shoreline Stabilization and Armoring.

a. Additions to or increases in the size of existing shoreline stabilization measures shall be considered new structures.
b. An existing stabilization structure may be replaced with a similar structure if there is a demonstrated need, through a geotechnical report, to protect principle uses or structures from erosion caused by currents, tidal action or waves.
c. If the OHWM has been re-established, the replacement structure must be located at or near the new OHWM. In general, replacement of the shoreline stabilization structure within one year of damage will ensure recognition of the previous OHWM.
d. Alternative or soft stabilization approaches shall be considered prior to in-kind replacement.
e. The replacement structure shall:
   i. Be designed, located, sized and constructed to assure no net loss of ecological functions.
   ii. Perform the same stabilization function of the existing structure and does not require additions to or increases in size.
   iii. Not encroach waterward of the OHWM or existing structure unless the residence was occupied prior to January 1, 1992, and there are over-riding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.
f. When possible or as an element of mitigation sequencing, failing, harmful, unnecessary, or ineffective structures should be removed, and shoreline ecological functions and processes should be restored using non-structural or soft and/or long term stabilization measures.

4. Shore Stabilization on Streams.

a. Hard shoreline stabilization methods are prohibited in jurisdictional shoreline streams on estuarine shores, in wetlands, and in salmon spawning areas, except for the purpose of fish or wildlife habitat enhancement or restoration, or when deemed necessary through a geotechnical report to protect an existing primary structure.
b. All revetments or similar structures shall be designed in accordance with WDFW Integrated Streambank Protection Guidelines.

5. Use of shoreline armoring to protect a platted lot where no primary use or structure presently exists shall be prohibited.

19.600.180 Transportation

A. Environment Designations Permit Requirements

Where transportation is proposed in the following designations, the identified permit requirements shall apply. Note: new trail construction shall be regulated under applicable Recreation and Public Access (Section 19.600.165) provisions.

1. Natural: Prohibited, except to serve essential transportation corridors or in support of permitted uses and activities, and then with a CUP.

2. Rural Conservancy, Mining, and Urban Conservancy: CUP

3. Shoreline Residential: SDP

B. Development Standards

1. New transportation facilities and maintenance of existing transportation facilities shall be carried out in a manner that will: a) avoid a net loss of shoreline ecological functions, and b) result in a net improvement in ecological functions where feasible and appropriate. Unavoidable adverse impacts shall be mitigated.

2. Parking facilities as a primary use are prohibited and shall only be allowed in shoreline jurisdiction when:

    a. Necessary to support an authorized use, and
    b. No net loss of ecological functions can be demonstrated, and
    c. Visual impacts are minimized.

3. New or expanded transportation routes in the shoreline jurisdiction, including associated wetlands, shall to the greatest extent feasible:

    a. Be located in areas that do not require shoreline stabilization, dredging, extensive cut/fill and other forms of shoreline alteration;
    b. Be limited to local access and public shoreline access routes;
    c. Be located in existing rights of way and corridors; and/or
    d. Not be built within shoreline jurisdiction when reasonable or practicable alternative exist.

4. Provision shall be made for sufficient view points, rest areas, and picnic areas in public shorelines, where feasible. In addition, bike paths and walking paths shall be incorporated into road designs.

5. All proposed road, bridge or railroad crossings, shall be designed to cross at the shortest, most direct route, except where such design would result in a net loss of shoreline ecological functions or is prohibited by topography.

6 Bridge approach fill shall not encroach in the floodway of any stream or river.

7. All public bridges shall include sidewalks for pedestrian use if sidewalks exist or are planned for connecting roadways.

8. All bridges and culverts shall be large enough to pass the 100-year flood waters with consideration for debris flow likely to be encountered, or designed to the standards of the WDFW Aquatic Habitat Guidelines.

9. All bridges intended for use by motorized vehicles shall be designed for emergency vehicle weight loads.

10. Roads and bridges located in wetland areas shall be designed and maintained to prevent erosion and to permit the natural movement of groundwater to the greatest extent feasible.

11. Transit Facilities: To the extent feasible transit facilities such as bus stops and shelters shall be located and designed consistent with Subsection 3 above. Park and ride facilities shall meet the standards of Subsection B above. All other performance standards of Section 19.600.180(B) shall apply.

19.600.185 Utilities

A. Environment Designations Permit Requirements

Where utilities are proposed in the following designations, the identified permit requirements shall apply. Utilities associated with a single-family residence are considered an appurtenance and regulated under the residential development section. Utilities associated with other permitted uses are regulated as part of that use.

1. Natural: Prohibited, except to serve essential utility corridors or in support of permitted uses and activities, and then with a CUP.

2. Rural Conservancy, Urban Conservancy, Shoreline Residential, Mining: SDP.

3. Aquatic: CUP

B. Application Requirements

All applications for utility facilities shall include, at a minimum, the following:

1. Reason why facility must be located in the shoreline jurisdiction;

2. Alternative locations considered and reasons for their rejection;

3. Location of other facilities near the proposed project and if the location is to include other types of facilities;

4. Proposed method of construction and plans to control erosion and turbidity during construction;

5. Plans for restoration of areas disturbed during construction;

6. Possibility of locating proposed facility within existing utility right-of-way; and

7. Geotechnical Report when proposed in a geologically hazardous area.

C. Development Standards

1. General Regulations

    a. On-site utility features serving a primary use, such as a water, sewer or gas line to a residence, are accessory utilities and shall be considered a part of the primary use.

b. All utility facilities shall be designed and located to assure no net loss of shoreline ecological functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth per the Thurston County Comprehensive Plan.

c. Non-water-oriented utility production and processing facilities shall not be allowed in shoreline jurisdiction unless it can be demonstrated that no other feasible option is available.

d. Transmission facilities shall be located outside of the shoreline area where feasible. When located in the shoreline area, they must be constructed, designed and located to assure no net loss of shoreline ecological functions.

e. Utilities shall be located in existing rights-of-way and corridors whenever possible.

f. New or expanded utility facilities shall be located in areas that do not require shoreline stabilization, dredging, extensive cut/fill and other forms of shoreline alteration to the greatest extent feasible.

g. Maintenance of existing utilities shall be carried out in manner that will not result in a net loss of shoreline ecological functions, and any unavoidable adverse impacts shall be mitigated. This includes minimization of vegetation removal, and mitigation of any adversely affected area.

h. Where feasible and consistent with shoreline ecological functions, new and replacement utility lines shall be underground.

i. Development of pipelines and cables on tidelands and development of facilities that may require periodic maintenance that disrupts shoreline ecological functions should be prohibited unless no other feasible alternative exists. When allowed, the location, design and construction of such facilities shall not result in a net loss of shoreline ecological functions or significant impacts to the other shoreline resources and values.

2. Sewage Treatment Plants and Outfalls.

a. Where allowed, sewage treatment plant outfalls shall be below the extreme low water mark and are permitted only where adequate natural water circulation can be provided.

b. Sewage facilities shall be located within existing rights-of-way when feasible.

c. To the maximum extent possible, sewage treatment plant outfalls shall be located where their effluent will not negatively impact commercial and recreational shellfish and other critical habitat and marine resource areas. Mitigation may be required for any adverse impacts to fisheries and wildlife resources, natural systems and sensitive areas.

d. Discharge of untreated effluent over or into the shorelines of the county is prohibited.

Chapter 19.700 Special Reports

19.700.100 Special Reports-General

A. Special reports shall be submitted by the applicant and approved by the Department for regulated uses when required by this Program for the protection of shorelines or critical areas in shoreline jurisdiction per Chapter 24.35 TCC.

B. The applicant shall pay for or reimburse the county for the costs incurred in the preparation of special reports or tests, and for the costs incurred by the county to engage technical consultants or staff for review and interpretation of data and findings submitted by or on behalf of the applicant. The applicant shall pay permit fees or technical assistance fees as required by the Community Development Fee Schedule, as now or hereafter amended.

C. Any special report shall be prepared by a professional, as defined in Chapter 19.150 (Definitions), and shall include his or her resume, or other list of qualifications, to aid the Department in assessing these qualifications.

D. The special reports described in Sections 19.700.105 through 19.700.145 may be required to provide environmental information and to present proposed strategies for maintaining, protecting and/or mitigating shoreline functions and conditions.

19.700.105 Wetland Delineation Report

A. Minimum Wetland Delineation Report Contents

1. Vicinity map;

2. When available, a copy of a National Wetland Inventory Map (U.S. Fish and Wildlife Service) and/or a Thurston County Wetland Inventory Map identifying the wetlands on or within 250feet of the site;

3. A site map setting forth all of the following:

    a. Surveyed wetland boundaries based upon a delineation by a wetlands specialist;
    b. Site boundary property lines and roads;
    c. Internal property lines, right-of-way, easements, etc.;
    d. Existing physical features of the site including buildings, fences, and other structures, roads, parking lots, utilities, waterbodies, etc.;
    e. Contours at the smallest readily available intervals, preferably at two-foot intervals;
    f. Hydrologic mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the site area.
    g. Location of all test holes and vegetation sample sites, numbered to correspond with flagging in the field and field data sheets.
    h. The Department may require an air photo with overlays displaying the site boundaries and wetland delineation.

4. Location information (legal description, parcel number and address);

5. Discussion of wetland boundary. If the wetland extends outside the site, the delineation report shall discuss all wetland areas within 250 feet of the site, but need only delineate those wetland boundaries within the site;

6. General site conditions including topography, acreage, and surface areas of all wetlands identified in the Thurston County Wetland Inventory Map and water bodies within one quarter mile of the subject wetland(s);

7. Hydrological analysis, including topography, of existing surface and known significant sub-surface flows into and out of the subject wetland(s);

8. Analysis of functional values of existing wetlands, including vegetative, fauna, and hydrologic conditions;

9. A summary of proposed activity and potential impacts to the wetland(s);

10. Recommended wetland category using the Washington State Wetlands Rating System Categories, including rationale for the recommendation;

11. Recommended buffer boundaries, including rationale for boundary locations;

12. Site plan of proposed activity, including location of all parcels, tracts, easements, roads, structures, and other modifications to the existing site. The location of all wetlands and buffers shall be identified on the site plan.

B. Administrative Wetland Boundary and Rating Evaluation

1. The Thurston County Department of Community Development may delineate and evaluate wetland areas for any proposed single-family dwelling project listed in Chapter 24.30 TCC (Wetlands) as incorporated herein by Section 19.400.115 (Critical Areas), unless the applicant wishes to employ a qualified wetland biologist at the applicant's expense, or if such a report is required by the Department. Fees may be collected for this determination and evaluation, as specified in Community Development Fee Schedule.

2. The approved federal wetland delineation manual and applicable regional supplements shall be the methodology for delineation of the regulated wetland boundary.

3. The wetland boundary shall be field-staked and this line shall be depicted on the building site plan application.

4. The regulated wetland boundary and regulated wetland buffer shall be identified on all grading, building, site, utility or other development plans submitted on the project.

19.700.110 Wetland Mitigation Plan/Report

A. As required by TCC 24.30.070 (Wetland Mitigation), a mitigation plan shall be prepared. A detailed mitigation plan shall contain the following:

1. Executive summary which summarizes the project, its potential wetland related impacts, and the proposed mitigation to include the following information:
    a. Applicant Name/Address/Phone
    b. Agent/Consultant
    c. Description of land use proposal
    d. Description of mitigation area
    e. Description of impact avoidance and minimization measures
    f. Description of unavoidable wetland impacts and mitigation measures:
        i. Size (acres)
        ii. Wetland classification
        iii. Hydrogeomorphic (HGM) classification
        iv. Wetland rating
        v. Functions
        vi. Compensation ratios used
    g. Explanation of other impacts to waters of the state
    h. Goals, objectives and monitoring period
2. Project Description
    a. Type of development (existing and proposed land uses)
    b. Project size
    c. Implementation schedule
    d. Project location, maps
    e. Project summary
3. Ecological Assessment of Impact
    a. Impacts (acreage) and extent of disturbance to wetlands (wetland delineation)
    b. Summary of historic and current on-site and nearby land uses (zoning designations)
    c. Description of any known cultural resources on the site
    d. Description of the site in context of other wetlands/water bodies
    e. Description of the water regime
    f. Description of the soils
    g. Description of the plant communities
    h. Description of any fauna using the site
    i. Landscape position and geomorphology
    j. Description of functions provided
    k. Wetland category rating and buffer requirements
4. Mitigation Approach
    a. Mitigation sequencing followed
    b. Goals and objectives
    c. Performance standards to assess each objective
5. Proposed Compensation Site
    a. Site description (location, size, maps):
        i. Ownership
        ii. Total area of mitigation site (acres)
        iii. Current/past land use
    b. Site selection rationale
    c. Existing/baseline ecological conditions of the compensation site:
        i. Acreage of existing wetlands and uplands
        ii. National Wetland Inventory or local jurisdiction wetland mapping of the site
        iii. Summary of historic and current on-site and nearby land uses (zoning designations)

iv. Description of any known cultural resources on the site
v. Description of the site in context of other wetlands/waterbodies
vi. Description of the water regime
vii. Description of the soils
viii. Description of the plant communities
ix. Description of any fauna using the site
x. Landscape position and geomorphology
xi. Description of functions provided
xii. Wetland rating of any existing wetlands, buffer requirements

d. Site constraints

6. Preliminary Site Plan
   a. Explanation of how adequate hydrology will be provided
   b. Discussion of how project was designed to provide the proposed functions
   c. Schematic drawings: Change in topography:
      i. Hydrologic structures
      ii. Soils
      iii. Vegetation distributions
      iv. Habitat attributes
      v. Buffers
   d. Section drawings showing relationship of topography to water regime and vegetation
7. Final Site Plan/Design
   a. Site survey and topography
   b. Water regime including:
      i. Engineering drawings of water control structures
      ii. Source of water (volume, velocity, hydro period)
   c. Soil amendments
   d. Landscape plans:
      i. Drawing of proposed plant distribution
      ii. Location of existing or proposed upland buffers
      iii. Section drawings showing relationship of topography to vegetation
      iv. Erosion control
      v. Location of habitat structure
      vi. Location of upland buffers
      vii. Soil amendments
   e. Construction specifications
8. Monitoring Plan
   a. Vegetation
   b. Water regime
   c. Soils
   d. Fauna
   e. Functions and values
   f. Development of habitat structure
   g. Water quality
   h. Buffers
   i. Timetable for reporting monitoring results
9. Site Protection
   a. Physical site protection
   b. Legal protection
   c. Buffers
10. Maintenance and Contingency Plans

a. Maintenance schedule
b. Contingency plan:
    i. Initiating procedure
    ii. Funding
    iii. Responsible parties

11. Implementation Schedule
    a. Construction schedule
    b. Monitoring schedule
    c. Reporting schedule
    d. Financial assurance

B. Permit Conditions. Any compensation project prepared pursuant to this section and approved by the Department shall become part of the application for the permit. The Department will require an additional growing season year for approval of mitigation plan unless the applicant requests an inspection for final monitoring year during the final monitoring year assessment.

C. Performance Bonds and Demonstration of Competence. A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise of sufficient standing to successfully execute the compensation project shall be provided. A compensation project manager shall be named, and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training and experience with comparable projects. A performance bond, assignment of savings, or other like security will be required by the Department in an amount necessary to provide for future site monitoring and possible corrective action required for compensatory mitigation projects. This bond, assignment of savings, or the security will be released no later than five years after completion of the mitigation project. If the approved mitigation is not completed or fails to meet its success standards, the property owner must agree to a property access release form, with forfeiture of funds after the specified monitoring period.

D. Waiver. The Department may waive portions of this report if, in its opinion, there is adequate information available on the site to determine its impacts and appropriate mitigation measures.

19.700.115 Habitat Management Plan

A. A Habitat Management Plan (HMP) is a site investigation report to evaluate the potential presence or absence of a regulated fish or wildlife species or habitat, including critical freshwater and saltwater habitats, affecting a subject property and proposed development. This report shall identify how development impacts to fish and wildlife habitat from a proposed project will be mitigated. WDFW Priority Habitat and Species (PHS) management recommendations or bald eagle protection rules outlined in the U.S. Fish and Wildlife Service Bald Eagle Management Guidelines and Conservation Plan for the Pacific Region, as now or hereafter amended, may serve as guidance for this report.

B. The HMP shall contain a map prepared at an easily readable scale, showing:

1. The location of the proposed development site
2. The relationship of the site to surrounding topographic, water features, and cultural features
3. Proposed building locations and arrangements

4. A legend which includes a complete legal description, acreage of the parcel, scale, north areas, and date of map revision
5. WDFW PHS Data, no older than one year from the project submittal6. Locations of any identified federally listed species and critical freshwater or saltwater habitats

C. The habitat management plan shall also contain a report which describes:

1. The nature and intensity of the proposed development
2. An analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat, including critical freshwater and saltwater habitats, identified for protection
3. A discussion on how the applicant proposes to mitigate any adverse impacts to wildlife habitats created by the proposed development. (See Sections 19.700.105 Wetland Delineation Report, and 19.700.110 Wetland Mitigation Plan/Report).

D. Examples of mitigation measures to be included in the HMP report, include, but are not limited to:

1. Establishment of Buffer Zones. When applicable, the order of sequence for buffer reductions shall be as follows:
   a. Use of buffer averaging maintaining one hundred percent of the buffer area under the Standard Buffer requirement
   b. Reduction of the overall buffer area by no more than twenty-five percent of the area required under the Standard Buffer requirement
   c. Enhancement of existing degraded buffer area and replanting of the disturbed buffer area
   d. The use of alternative on-site wastewater systems in order to minimize site clearing
   e. Infiltration of stormwater where soils permit. Retention of existing native vegetation on other portions of the site in order to offset habitat loss from buffer reduction
2. Preservation of native plants and trees essential to maintaining habitat function;
3. Limitation of access to habitat areas;
4. Seasonal restriction of construction activities; and
5. Establishing phased development requirements and/or a timetable for periodic review of the plan.

E. A HMP shall be prepared by a fish or wildlife biologist, as defined in Section 19.150.655. For proposed single-family dwelling construction, the Department may complete the plan. Fees may be collected for this plan as specified in Community Development Fee Schedule. Where this plan is required for the protection of an eagle habitat, the USFWS Bald Eagle Management Guidelines and Conservation Plan for the Pacific Region shall be utilized.

19.700.120 Geotechnical Report and Geological Report

A. Whenever development is proposed in a geologically hazardous area or where required in this Program, or when the Department determines that additional soils and slope analysis is appropriate on a particular site, the applicant is required to submit a geotechnical or geological report that evaluates the surface and subsurface soil conditions on the site.

B. Qualifications.

1. Geotechnical reports shall be prepared by a geotechnical engineer.
2. Geological reports may be prepared by a licensed geologist or geotechnical engineer.

C. General Provisions. Report recommendations for earthwork, clearing or siting structures in geologically hazardous areas shall be based on existing site conditions rather than measures that have not yet been successfully approved, designed, or constructed (e.g., slope re-contouring, slope retaining walls, vegetation improvements, bulkheads, etc.). Shoreline stabilization and retaining walls may only be utilized only as an engineering solution where it can be demonstrated that:

1. An existing residential structure or other permitted existing public or private structures or public facilities such as roads or highways, cannot be safely maintained without such measures;
2. Other non-structural methods of beach stabilization have been considered and determined infeasible; and
3. The resulting stabilization structure is the minimum necessary to provide stability for the existing structure and appurtenances. Minor repair activities on existing permitted structures (e.g., those that do not involve design modifications, changes in structure location, and/or demolition or abandonment of failed structure and replacement with new structure) are not subject to the following project submittal standards.

D. Geological Report Submittal Standards. A Geological Report is required for site development proposals that involve development activity or the installation of structures within a geologically hazardous area or shoreline setbacks, or as otherwise required pursuant to Chapters 24.15 and 24.35 TCC as incorporated herein by reference, but do not involve or require engineering design recommendations. The following minimum information is required:

1. Site information regarding the Thurston County Shoreline Environment Designation and critical areas designations that affect site features.
2. Description of surface and subsurface conditions, including ground materials, vegetation, surface drainage, groundwater, and a preliminary geologic hazard assessment which includes the locations of structures and the identification of the slope and/or coastal processes occurring at the site and factors that contribute to them;
3. Review of available site information, literature, and mapping;
4. Detailed description of slope and other topographic features
5. Conceptual siting of structures and general recommendations, which include methods and practices that avoid and/or reduce slope and shore impacts. Minimum recommendations should include upland and slope drainage control, groundwater control, site vegetation management, and erosion control.

E. Geotechnical Report Submittal Standards. A Geotechnical Report is required when the Department or a Geological Report determines that a site development proposal requires additional site information such as engineering design recommendations, slope stability analysis, subsurface exploration and testing, coastal process analyses, or construction recommendations. Depending on the level of activity proposed, the report will either be a more limited geotechnical slope evaluation report or a full geotechnical design investigation report as described below.

1. Geotechnical Slope Evaluation Report. A geotechnical slope evaluation report is required when slope stability analyses are confined to addressing only existing surface and/or

drainage conditions, including the relationship of natural and constructed slope features to proposed changes in environmental conditions such as drainage, vegetation removal and slope geometry. The following minimum information is required:

a. All the information required under Subsection D, above (Geological Report);
b. Subsurface data, exploration logs, and testing data, when required by the geotechnical engineer;
c. Estimated (or surveyed) site plan with ground surface profiles and typical cross-sections;
d. Relative location of ordinary high water (OHW) on the surface profile and cross-sections, which includes mean higher high water (MHHW) for the site location, where applicable;
e. Soil strength parameters;
f. Stability analysis of existing site;
g. Analysis of the relationship of vegetation and slope stability; and
h. Conceptual site development plans and cross-sections.

2. Geotechnical Design Investigation Report. A geotechnical design investigation report is required for site development activities that propose design and construction measures at the slope crest, face and/or toe. If a designed structure does not impact slope stability or coastal processes, the report will not be required to perform all items listed under this section, as long as each item is addressed and the report details why a particular item does not apply. The report shall include all items considered necessary by the engineer to fully address the engineering design requirements of the site. The following minimum information is required:

a. All the information required under subsection E.1., above (Geotechnical Slope Evaluation Report);
b. Geotechnical requirements and measures to reduce risks;
c. Geotechnical criteria used for any designs including all critical dimensions, lateral earth pressures, soil bearing pressures, location and limits of structures on or near the slope, maximum constructed slope angles, minimum soil reinforcement embedment, soil compaction requirements, and structure heights;
d. Temporary construction slope stability recommendations and analysis of proposed final site stability measures;
e. Required construction specifications and construction monitoring procedures;
f. Revegetation and surface and groundwater management requirements;
g. Evaluation of erosion potential, recommendations for erosion avoidance and any proposed mitigation measures;
h. Detailed tabulation of all basic geotechnical engineering test results pertinent to design and construction, and when required for clarification, detailed examples of tests conducted for the project; and
i. Information outlined in the geotechnical design investigation report site evaluation checklist (See subsection G., below).

F. Additional Requirements for Sites in Geologically Hazardous Areas. When a project site is located within a landslide-prone geologically hazardous area, as classified in Section 24.35.050 TCC, the following additional project submittal requirements shall apply:

1. Erosion Control Information. An evaluation of the erosion potential on the site during and after construction is required. The evaluation shall include recommendations for mitigation, including retention of vegetative buffers and a revegetation program. The geotechnical engineer shall provide a statement identifying buffer areas at the top or toe

of a slope based on geotechnical site constraints and the impacts of proposed construction methods on the erosion potential of the slope.

2. Seismic Information. The geotechnical engineer shall submit a statement that the design criteria consider the one-in-one-hundred-year seismic event (an earthquake ground motion that has a 40 percent probability of exceedance in 50 years). Calculations of soil bearing capacity, general soil stability, and wall lateral earth pressures shall be adjusted to reflect a one-in-100 year seismic event and the structural plans for the project shall be reviewed by the geotechnical engineer for consistency with these design criteria. Analysis for the one-in-one-hundred-year seismic event shall be based on a near crustal event having an assumed magnitude of 6.5 and occurring directly below the site. Based on regional studies performed by others, the Department will allow the use of the following minimum general values of horizontal peak ground accelerations for this event:
   a = 0.2g for fill, alluvial soils
   a = 0.17g for till, firm glaciated soils
   a = 0.15g for rock.
   The appropriateness of the above accelerations shall be confirmed by the geotechnical engineer based on the actual site characteristics. Reduction in the above values may be considered when supported by the appropriate analytical evidence. Slope stability, lateral pressures, and liquefaction of the site shall be assessed by using subsurface soil, rock and groundwater conditions, as well as the seismic parameters discussed above.
3. Recommendations on Relative Site Stability. The geotechnical engineer shall make recommendations as to which portion of the site are the least prone to instability and the preferred location of the structure. The limits of any area proposed for grading activity shall be identified.
4. Construction Season Limitation. In general, no excavation will be permitted in landslide-prone geologically hazardous areas during the typically wet winter months. When excavation is proposed, including the maintenance of open temporary slopes, between October 1 and April 30, technical analysis shall be provided to ensure that no environmental harm, threat to adjacent properties, or safety issues would result. In addition, recommendations for temporary erosion control and shoring/mitigating measures shall be provided. The technical analysis shall consist of plans showing mitigation techniques and a technical memorandum from the geotechnical engineer.
5. Revisions to Geotechnical Report. Further recommendations shall be provided by the geotechnical engineer should there be additions or exceptions to the original recommendations based on the plans, site conditions, or other supporting data. If the geotechnical engineer who revises the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall, in a letter to the Department, express his or her agreement or disagreement with the recommendations in the geotechnical report and state whether the plans and specifications conform to his or her recommendations.
6. Plan and Specification Review. The geotechnical engineer shall submit a statement that in his or her judgment, the plans and specifications (if prepared by others) conform to the recommendations in the geotechnical report and that all portions of the site which are disturbed or impacted by the proposed development have appropriate measures or specifications that permit construction to occur while addressing slope stability so that the work does not create additional risk. The statement shall also indicate whether or not a relative gain in slope stability will be achieved after construction is complete.
7. Construction Inspection. A final inspection report shall be provided by the geotechnical engineer stating that construction has or has not implemented the design recommendations of the geotechnical report, and evaluating of any deviation from the design recommendations.

G. Geotechnical Design Investigation Report – Site Evaluation Checklist. The following are general report guidelines for geotechnical design investigation reports. The following guidelines are not intended to be all-inclusive. It is the responsibility of the geotechnical engineer to address all factors, which in their opinion are relevant to the site. The checklist information shall be included as part of the geotechnical design investigation report. All items listed below must be addressed in the report. Information shall be provided for those items, which are not relevant to a given site to demonstrate why the items are not applicable.

1. Project Information:
   a. Site Owner Name;
   b. Project Proponent Name;
   c. Shoreline Environment Designation (where applicable); and
   d. Critical Areas Ordinance (CAO) designations affecting site features.
2. Project Description:
   a. Description of proposed structures, site improvements, and adverse impact avoidance and reduction methods.
   b. Location and total area of the construction zone.

19.700.125 Hydrogeological Report

A. The hydrogeological report shall address the impact the proposed land use will have on both the quality and quantity of the water transmitted to the aquifer.

B. The report shall be submitted to the Department and shall address, at a minimum, the following criteria:

1. Surficial soil type and geologic setting;
2. Location and identification of wells within 1,000 feet of the site;
3. Location and identification of surface water bodies and springs within 1,000 feet of the site with recharge potential;
4. Description of underlying aquifers and aquitards, including water level, gradients and flow direction;
5. Available surface water and groundwater quality data;
6. Effects of the proposed development on water quality;
7. Sampling schedules required to assure water quality;
8. Discussion of the effects of the proposed development on the groundwater resource;
9. Recommendations on appropriate best management practices (BMPs) or mitigation to assure no significant degradation of groundwater quality; and
10. Other information as required by the Thurston Public Health District.
11. The report shall also address the types of pesticides, herbicides and fertilizers that can safely be used for the care of landscaping proposed by the applicant.

C. The hydrogeologic report shall be prepared by a professional geologist/hydrologist or by a soil scientist with a strong background in geology.

D. Applications for development or operations with underground storage of petroleum products will be processed using the appropriate procedure as specified in existing Thurston County ordinances.

E. Analysis for a specific parcel(s), using the criteria outlined below, will be employed to confirm if the soils present require a recharge area designation. Data collection will include, at a minimum, six soil logs to a depth of ten feet (or to a depth four feet below the lowest proposed excavation point whichever is greater) for each acre in the parcel(s) being evaluated. At least one well, two hundred feet or greater in depth with an adequate drilling report, must be available within one mile. The associated data shall be analyzed and included in the hydrogeologic report to determine the presence of highly permeable soils with the recharge area designation. For development proposals within aquifer recharge areas of concern, the hydrogeological report may be based on quarter-quarter section basis where the number of wells within a half-mile radius is thirty-six or more. To facilitate computer analysis, the evaluation may be done on a quarter-quarter section basis using the quarter-quarter section in which a parcel of interest is located and all the surrounding quarter-quarter sections, in place of the half-mile circle.

19.700.130 Cumulative Impacts Report

A. Introduction

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. While impacts can be differentiated by direct, indirect, and cumulative, the concept of cumulative impacts takes into account all disturbances. Thus, the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community, i.e., the sum of this action to all other activities affecting that resource no matter what entity is taking the actions.

Unlike direct and indirect impacts assessments, the cumulative impact assessment entails a more extensive and broader review of possible effects. It should be recognized that while no "cookbook" approach to cumulative impacts analysis exists, a general approach is described here.

B. Approach

1. Considerations:

    a. The proximity of the projects to other similar projects either geographically or temporally;
    b. The probability of actions affecting the same environmental system, especially systems that are susceptible to development pressures; and
    c. The likelihood that the project will lead to a wide range of effects or lead to a number of associated projects

2. Resources and Ecosystem Components. To determine which resources are cumulatively affected, consider:

    a. Whether the resource is especially vulnerable to incremental effects;
    b. Whether the proposed action is one of several similar action in the same geographical area;
    c. Whether other activities in the area have similar effects on the resource;
    d. Whether the effects have been historically significant for this resource; and
    e. Whether other analyses in the area have identified a cumulative effects concern.

3. Geographic Boundaries and Time Period. An appropriate spatial scope of the cumulative impacts analysis is determined by:

    a. Identifying a geographic area that includes resources potentially affected by the proposed project;
    b. Extending that area, where necessary, to include resources affected by the combined impacts of the project and other actions; and
    c. Combining ecological boundaries with political boundaries when necessary to adequately delineate the assessment area.

4. Past, Present and Reasonably Foreseeable Future Actions. Consider:

    a. Whether the environment has been degraded, and if so, to what extent,
    b. Whether ongoing activities in the area are causing impacts, and
    c. The trends of activities and impacts in the area.

5. Describing the Condition of the Environment. Describe:

    a. How the environment to be affected by the project functions naturally and whether it has been significantly degraded;
    b. The specific characteristics of the affected environment and the extent of change, if any, that has occurred in that environment; and
    c. The natural condition of the environment or, if that is not available, some modified, but ecologically sustainable, condition to serve as a benchmark.

6. Using Thresholds to Assess Resource Degradation. Thresholds should be practical, scientifically defensible, and fit the scale of the analysis. They may be either numeric standards, qualitative standards or based on desired management goals.

19.700.135 Navigation Study

A. Any overwater structure that will exceed a length of 15% of the shore-to-shore distance shall require a navigation study.

B. A navigation study, at a minimum, shall include:

    1. Demonstration of the need for a structure longer than 15% of the shore-to-shore distance;
    2. The proposed structure length and its percent of the shore-to-shore distance;
    3. Location of the nearest parks or public access points, especially those that provide haul-outs to recreational, scientific or tribal boaters/paddlers;
    4. Number of days for which the tides (low and high) would render navigation under or around the proposed structure to be hazardous for paddlers or motorized boaters (if allowed in the water body); and
    5. Any measures that could be taken to minimize impacts to navigation.

19.700.140 Shoreline Mitigation Plan

When required, a Shoreline Mitigation Plan shall include the following:

A. Requested biological and/or habitat surveys (Section 19.700.145) to determine the existing site condition;

B. A description of the existing conditions, functions and processes;

C. A plan for mitigating any development impacts so that the proposed development does not result in a net loss of those identified conditions, functions and processes.

D. The mitigation must be completed or installed prior to development activity, unless demonstrated infeasible.

E. The mitigation will require semi-annual progress updates until the Department determines the mitigation is successful.

F. Mitigation done as part of a Shoreline Mitigation Plan shall be subject to all other mitigation requirements of the Program.

19.700.145 Biological and Habitat Surveys

A. When a biological or habitat survey is required, it shall be conducted according to the WDFW, Washington Department of Natural Resources, and the U.S. Army Corps of Engineers parameters, where applicable.

B. A vegetation habitat survey must be conducted according to the most current WDFW eelgrass and macroalgae survey guidelines.

C. Surveys should be conducted by consultants or staff trained and certified in forage fish spawning survey protocols.