



COUNTY COMMISSIONERS

John Hutchings
District One

Gary Edwards
District Two

Bud Blake
District Three

**COMMUNITY PLANNING &
ECONOMIC DEVELOPMENT DEPARTMENT**

Joshua Cummings, Director

Creating Solutions for Our Future

MEMORANDUM

TO: Thurston County Planning Commission

FROM: Community Planning Department

DATE: November 28, 2018

SUBJECT: Shoreline Master Program Update – Shoreline Uses (Chapter 19.600)

For the work session on November 28th I will focus on how Chapter 19.600 is anticipated to work; the structure of the chapter and the information contained in Chapter 19.600. At later meetings I will work through specific examples with Planning Commission based on information not only in Chapter 19.600 but the entire SMP, including permits and mitigation. Staff encourages comments or questions from the Planning Commission to help inform the forthcoming updated draft SMP. Although staff will be bringing a redline updated version to the Planning Commission with public comments, it's not necessary for the Planning Commission to wait for that version to suggest edits or request clarification of language. Suggestions from the Planning Commission on examples you would like to work through in upcoming work sessions, would also be helpful.

Chapter 19.600, *Shoreline Use and Modification Development Standards*, contains the permit requirements, application requirements, and development standards for common activities and development in shoreline jurisdiction. Table 19.600.105 lists different uses, modifications, and development along with the proposed shoreline permit that would be required for the activity. This is based on which shoreline environmental designation the use is located in using the shoreline environmental designation map.

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.

Thurston County Planning Commission
 October 3, 2018 SMP Buffers

Legend: P = Substantial Development Permit (SDP) E = Exemption letter 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		Aquatic
Agriculture						
General ¹	X	P	P	P		X
Aquaculture						
Commercial Geoduck	C	C	C	C		2
Other Aquaculture	P ³	P ³	P ³	P ³		2
<i>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.</i>						
Barrier Structures (Includes Breakwaters, Jetties, Groins and Weirs)						
General	X	C	C	C		2
Ecological Restoration ⁴	P	P	P	P		2
Boating Facilities (including Marinas)						
General	X	P	P	P		2
Marinas	X	C	C	C		2
Commercial						
Water-Oriented	X	P	P	P		X ⁵
Non-Water-Oriented	X	X ⁶	X ⁶	X ⁶		X ⁶
Dredging (see Section 19.600.135)						
General	X	C	C	C		2
Dredge Disposal (see section 19.600.135)						
General	X	C	C	C		2
Ecological Restoration ⁷	C	P	P	P		2
Fill (See section 19.600.140)						
Waterward of OHWM	X	C	C	C		2
Upland of OHWM, or Ecological Restoration	C	P	P	P		2
Ecological Restoration	P	P	P	P		2
Flood Hazard Reduction Measures						
General	C	C	C	C		C
Forest Practices						
Commercial Forestry	C	P	X	X		N/A
Class IV-General	C	P	P	P		N/A
Industrial						
Water-oriented Uses	X	X	C	X		X ⁸
Non-water-oriented Uses	X	X	X	X		X
Mining						
General	X	C ⁹	X	X		X
Mooring Structures and Activities (Includes piers, docks, floats, ramps and buoys)						
Single Use	X	P ¹⁰	P ¹⁰	P ¹⁰		2
Joint or Public Use	X ¹¹	P	P	P		2
Recreation and Public Access						

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= Exemption letter 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		Aquatic
Non-motorized, Water-Oriented	P	P	P	P		13
Other Water-Oriented	C ¹²	P	P	P		13
Non-Water-Oriented	X	P ¹⁴	P ¹⁴	P ¹⁴		X
Residential						
Single-Family	Ad	E ¹⁵	E ¹⁵	E ¹⁵		X
Multi-Family, Subdivisions, and Accessory Dwelling Units	X ¹⁶	C	C	P		X
Swimming Pools	X	X	X	X		X
Restoration and Enhancement						
General	P	P	P	P		P
Retaining Walls	X	C	C	C		
Shoreline Stabilization (New/Repair and Maintenance)						
Hard	C	C	C	C		18
Hybrid	Ad	Ad	Ad	Ad		
Soft	Ad ¹⁷	Ad ¹⁷	Ad ¹⁷	Ad ¹⁷		19
Transportation						
General	X ²⁰	C	C	P		P ²¹
Utilities						
General	X ²²	P ²³	P ²³	P ²³		C

Footnotes:

- Does not modify or limit agricultural activities occurring on lands currently in agricultural use.
- Adjoining upland designation applies; see applicable regulations.
- 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).
- See Barrier Structures and Other In-Stream Structures (Section 19.600.120) for qualifying ecological restoration.
- 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.
- See Commercial Development (Section 19.600.130) for allowances with a CUP.
- See Dredging and Dredge Disposal (Section 19.600.135) for qualifying ecological restoration.
- 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.
- Provided it is consistent with the Thurston County Comprehensive Plan Mineral Resources Overlay 20.30B.
- 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)..
- If the adjoining upland use is a public park, then up to two buoys allowed.
- May be permitted through a SDP if consistent with an approved park plan.

Thurston County Planning Commission
October 3, 2018 SMP Buffers

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 19.600.185) 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".

The different types of permits currently proposed for the different uses, modifications, and development are based on discussions with Thurston County current planners, the shoreline environmental designations, review of other Ecology approved SMP's, and regulatory requirements.

Application requirements are different based on the use, modification, or development being proposed. For some activities, such as Residential Development (19.600.170), the normal general permit requirements listed in 19.500.105 are what's required. For "specialized" activities such as Aquaculture (19.600.115) and Mooring Structures and Activities (19.600.160), additional application requirements are added so that project reviewers have enough information on the project specifics to adequately review the project, and any potential impacts from the project that could require mitigation, to achieve no-net loss of environmental function.

For example, here are the proposed application requirements for Aquaculture and Mooring Structures in addition to those in Chapter 19.500.105:

19.600.115.B. Aquaculture 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.

19.600.160. B. Mooring Structures 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.

Project reviewers will work with applicants to determine the information required at time of submittal based on the complexity of the project being proposed. The information submitted will inform the development standards associated with the proposed project.

Development Regulation Standards are defined in the document (19.150.285) as: *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.*

Like Application Standards, certain listed uses, modifications, and development also have Development Standards listed based on characteristics applicable to the specifics of the proposed use, modification or development being reviewed.

For example, here are the proposed Development Standards for Aquaculture (19.600.115) and Residential Development (19.600.170);

19.600.115.C. Aquaculture 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-M) 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.

19.600.170.B. Residential 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.

Thurston County Planning Commission
October 3, 2018 SMP Buffers

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.

The additional application and development standards help insure that proposed developments will meet regulatory requirements and meet no net loss of ecological functions.