

CHAPTER 6

SPECIFIC SHORELINE USE AND MODIFICATION REGULATIONS

6.1 General Provisions

1. This chapter contains the regulations that apply to specific uses, developments, and activities in the shoreline jurisdiction.
2. These regulations are intended to work in concert with all sections of this Program and in particular the Goals and Policies (Chapter 3) and General Use and Development Regulations (Chapter 5).

6.2 Shoreline Use and Modification Table

1. Shoreline modification activities must be in support of an allowable shoreline use that conforms to the provisions of this Master Program. Except as otherwise noted, all shoreline modification activities not associated with a legally existing or an approved shoreline use are prohibited.
2. Shoreline uses and developments prohibited by this Master Program shall not be considered as a variance or a conditional use.
3. Each shoreline designation shall be managed in accordance with its designated purpose as described in this Program. Tables 6-1 and 6-2 identify those uses and modifications that are permitted, may be permitted with a conditional use approval, or are prohibited in each shoreline designation. In the event conflicts exist between the Tables and the text in this chapter, the text shall apply.

Table 6-1. Shoreline Use Matrix

Legend: P - Permitted X - Prohibited C - Conditional Use							
Shoreline Designation	Urban Industrial	Urban Multi-purpose	Urban - Goldsborough Creek	Conservancy	Residential	Aquatic - Harbor⁶	Aquatic - Conservancy⁶
Agriculture	X	X	X	P	P	X	X
Aquaculture	P	P	X	X	X	C ¹ /P ⁷	C ¹
Boating Uses:							
Boat Houses	P ⁷	P ⁷	X	X	X	P ⁷	X
Motorized Boat Launches	P	P	X	X	P ⁸	P	P ¹⁰
Nonmotorized Boat Launches	C	P	X	P	P	P	P
Marinas	P	P	X	X	X	P	X
Docks, Piers and Mooring Buoys	P	P	X	X	P	P	C ¹⁰
Commercial Uses:							
Water-dependent	P	P	P	X	X	P ³	X
Water-related	P	P	P	X	X	C	X
Water-enjoyment	C	P	P	X	X	C	X
Nonwater-oriented	C ²	C ²	P ²	X	X	X	X
Forest Practices	X	P	P	P	X	X	X
Industrial Uses:							
Water-oriented	P	P ⁹	X	X	X	P ³	X
Nonwater-oriented	C	X	X	X	X	X	X
Log Storage	P	P ⁹	X	X	X	P ⁵	P ⁵
Log Rafting	P	P ⁹	X	X	X	P ⁵	P ⁵
Institutional Uses:							
Water-oriented	P	P	P	P	P	P ³	C ³
Nonwater-oriented	P ²	P	P ²	X	C	X	X
Mining	X	X	X	X	X	X	X
Parking:							
Primary Use	X	X	X	X	X	X	X
Accessory Use	P	P	P	X	P	X	X

Legend: P - Permitted X - Prohibited C - Conditional Use	Urban Industrial	Urban Multi-purpose	Urban - Goldsborough Creek	Conservancy	Residential	Aquatic - Harbor ⁶	Aquatic - Conservancy ⁶
Shoreline Designation							
Recreational Uses:							
Water-dependent	C	P	P	P	P	P ³	P ³
Water-related/enjoyment (trails, accessory buildings)	C	P	P	P	P	X	X
Nonwater-oriented (sports fields)	X	P	P	X	P	X	X
Residential Development	X	P	P	P	P	X	X
<u>Floating, on-water, Residences.</u>	X	X	X	X	X	X	X
Signs	P	P	P	X ⁴	X ⁴	X ⁴	X ⁴
Transportation Uses:							
Water-dependent	P	P	P	C	P	P ¹¹	P ¹¹
Non-water dependent	P	P	P	C	P	C ¹¹	C ¹¹
Railroads	P	P	P	C	C	C ¹¹	C ¹¹
Utilities	P	P	P	C	C	C	C
Unclassified Uses	C	C	C	C	C	C	C

NOTES:

1. Conditioned upon the requirement that operations do not significantly conflict with navigation, boating or industrial activities.
2. May be permitted as part of a mixed-use project including water-dependent uses, on sites where navigability is severely limited, or in areas physically separated from the shoreline by another property or public right-of-way.
3. Water-dependent uses may be permitted provided the City finds that the specific function (e.g., log loading, ship docking, view platform) cannot be located on land.
4. Directional signs and navigational aids may be permitted.
5. Conducted at a depth such that the log rafts will not ground out at extreme low water (approximately -4.5 feet).
6. The use may be allowed in the Aquatic designation only if permitted or conditionally permitted in the adjacent upland designation.
7. Maintenance, repair and replacement of existing boathouses are permitted. No new overwater boathouses are permitted. Up to 10 boathouses may be converted to a shellfish nursery use within the Port of Shelton Marina as a permitted use in compliance with Section 6.5, Aquaculture. No additional boathouses or boat slips may be converted. Additional uses of this nature would require that a permit request be submitted for consideration of a separate commercial dock/float at the facility to accommodate the increased demand.
8. Only public boat launches are permitted.

9. Industrial uses are not allowed within the shoreline jurisdiction of Goose Lake.
10. Only permitted within the shoreline jurisdiction of Island Lake and Goose Lake. On Goose Lake docks, piers and mooring buoys must be public.
11. Roads, railroads, and other transportation facilities are prohibited over water, EXCEPT to serve water-dependent or public uses consistent with this Program when inland alternatives are unfeasible or for water crossings.

Table 6-2. Shoreline Modification Matrix

Legend: P - Permitted X - Prohibited C - Conditional Use							
Shoreline Designation	Urban Industrial	Urban Multi-purpose	Urban - Goldsborough Creek	Conservancy	Residential	Aquatic - Harbor	Aquatic - Conservancy
Dredging, Maintenance Dredging, and Dredge Material Disposal	P/C	P	P	X	X	P	P
Dredging and Disposal as part of Ecological Restoration/Enhancement	P	P	P	P	P	P	P
Flood Control Works and In-stream Structures							
Dikes & Levees	P	C	C	X	P	C	C
In-stream Structures	P	P	C	C	P	P	C
Shoreline Restoration and Enhancement	P	P	P	P	P	P	P
Shoreline Stabilization:							
Bioengineered Shoreline Stabilization	P	P	P	P	P	P	P
Structural Shoreline Stabilization	P	P	P	X	P	P	X
Breakwaters, Jetties, Weirs, Groins	P	C	X	X	X	C	X

6.3 Buffer and Bulk Dimensional Standards Table

Buffers and dimensional standards are required for new developments within the City's shoreline jurisdiction. Table 6-3 establishes buffer, building setbacks, lot coverage, and building height standards by shoreline environment designation.

Table 6-3. Buffer and Bulk Dimensional Standards

SEDs	Critical Area Buffer ^{1, 2}	Building Setback ³	Maximum Impervious Surface ⁴	Maximum Structure Height
Urban Industrial	(See SMC 21.64.320)	10 feet (See 21.64.086)	Per zoning standards	50 feet. Conditional Use Permit for structures proposed over 50 feet in height.
Urban Multi-purpose	(See SMC 21.64.320)	10 feet (See 21.64.086)	30% for Goose Lake ⁵ Per zoning standards for all other areas	50 feet. Conditional Use Permit for structures over 50 feet in height.
Urban Goldsborough Creek	(See SMC 21.64.320)	10 feet (See 21.64.086)	50%	35 ft
Conservancy	(See SMC 21.64.320)	10 feet (See 21.64.086)	10%	35 ft
Residential	(See SMC 21.64.320)	10 feet (See 21.64.086)	50%	35 ft
Aquatic Harbor	N/A	N/A	N/A	N/A
Aquatic Conservancy	N/A	N/A	N/A	N/A

¹Alternative buffers may be allowed pursuant to SMC 21.64.320C. Buffer averaging may be allowed pursuant to SMC 21.64.325. Buffers may be increased pursuant to SMC 21.64.326.

²Certain actions and activities are allowed in the required shoreline buffer pursuant to SMC 21.64.071 and SMC 21.64.330.

³Certain facilities and uses are allowed in the building setback pursuant to SMC 21.64.086.

⁴The impervious surface area is calculated by dividing the total area of impervious surface (e.g., driveways, buildings, patios, parking lots) located in shoreline jurisdiction by the total lot area that is within shoreline jurisdiction and then multiplied by one-hundred (100) to convert to percentage points.

⁵Planned unit developments may exceed the 30 percent maximum impervious surface standard on individual lots, provided the entire Goose Lake shoreline jurisdiction does not exceed 30 percent in total impervious surfaces.

6.4 Agriculture

6.4.1 Applicability

Agriculture activities are agricultural uses and practices including, but not limited to: producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation (WAC 173-26-020). Christmas tree farming (silviculture) policies and regulations are covered under Forest Practices in Section 6.9.

Agricultural activities associated with residential uses and for the primary purpose of household consumption are subject to the underlying zoning regulations.

In accordance with RCW 90.58.065, this Master Program does not regulate existing or ongoing agricultural activities occurring on agricultural lands. However, new agricultural use and development on lands not meeting the definition of agricultural land, conversions of agricultural lands to other uses, and development not meeting the definition of agricultural activities must comply with this Master Program.

6.4.2 Regulations

1. Agricultural development shall conform to applicable state and federal policies and regulations including but not limited to the following:
 - a. Erosion control guidelines and standards of the Soil Conservation Service and U.S. Department of Agriculture;
 - b. Feedlot control guidelines of the U.S. Environmental Protection Agency; (see “Guidelines for Handling Livestock Wastes for Western Washington”, distributed by the Washington State Department of Ecology in conjunction with the United States Environmental Protection Agency for the Cooperative Extension Service);
 - c. Washington Pesticide Application Act (Chapter 17.21 RCW);
 - d. Washington Pesticide Act (Chapter 15.57 RCW);

- g. State Board of Health Water Supply Rules and Regulations; and
- 2. In accordance with RCW 90.58.065, this Program shall not restrict existing or ongoing agricultural activities occurring on agricultural lands.
- 3. New agricultural use and development on lands not meeting the definition of agricultural land may be allowed when it complies with this Program and all of the following regulations:
 - a. Agricultural practices shall prevent erosion of soils and bank materials within shoreline areas and minimize siltation, turbidity, pollution, and other environmental degradation of watercourses and wetlands.
 - b. Streambanks and water bodies shall be protected from damage due to concentration and overgrazing of livestock by providing the following:
 - i. Suitable bridges, culverts or ramps for stock crossing;
 - ii. Ample supplies of clean water in tanks on dry land for stock watering; and
 - iii. Fencing or other grazing controls to prevent damage to riparian vegetation, bank compaction or bank erosion.
 - c. New confinement lots, feeding operations, lot wastes, stockpiles of manure solids, manure lagoons, and storage of noxious chemicals are prohibited.
 - d. The disposal of farm wastes, chemicals, fertilizers and associated containers and equipment within shoreline jurisdiction is prohibited. However, composted organic wastes may be used for fertilization or soil improvement.
 - e. A buffer of naturally occurring or planted native vegetation shall be maintained between the shoreline and areas used for crops or intensive grazing. The width of the buffer on marine, river and lake shorelines shall correspond to the standards of the Program and as required by Chapter 21.64 (Critical Areas) of the Shelton Municipal Code.
 - f. Conversion of agricultural lands to other uses shall comply with the provisions of this Program for the proposed new use.
 - g. Construction of new structures including residences, barns, sheds and similar buildings on agricultural lands shall conform to the requirements of this Program. Such structures shall adhere to the buffer and setback requirements, height limits and other regulations established by this Program.

6.5 Aquaculture

6.5.1 Applicability

Aquaculture is the farming or culturing of fish, shellfish or other aquatic plants and animals. Aquaculture does not include the harvest of wild geoduck associated with the state managed wildstock geoduck fishery. Activities include the hatching, cultivating, planting, feeding, raising and harvesting of aquatic plants and animals and the maintenance and construction of necessary equipment, buildings and growing areas. Cultivation methods include but are not limited to fish pens, shellfish rafts, racks and long lines, seaweed floats and nets, and the culture of clams and oysters on tidelands and subtidal areas. Aquaculture is a preferred shoreline use when operations do not damage the environment and are consistent with pollution control requirements (WAC 173-26-241(3)b).

6.5.2 Regulations - General

1. Applicants shall include in their applications all information needed to conduct thorough evaluations of their aquaculture proposals. To minimize redundancy, applicants may rely on documentation that has been submitted to other permitting agencies where applicable. Applications may include the following:
 - a. Copies of permit applications and/or studies required by state and federal agencies;
 - b. Species to be reared;
 - c. Anticipated harvest cycles and potential plans for future expansion or change in species grown or harvest practices;
 - d. Aquaculture method(s), including number, types and dimensions of structures, apparatus and/or equipment;
 - e. Anticipated use of any feed, pesticides, herbicides, antibiotics, or other substances, and their predicted impacts;
 - f. Manpower/employment necessary for the project;
 - g. Harvest and processing location, method and timing;
 - h. Anticipated levels of noise, light and odor and plans for minimizing their impacts;
 - i. Location and plans for any shoreland activities, including loading, unloading and product processing;

- j. Amount of marine and truck or other vehicle traffic that will occur during the regular operation of the facility;
 - k. Methods of traffic control, waste disposal and predator control;
 - l. Environmental assessment, including best available background information on water quality, tidal variations, prevailing storm wind conditions, current flows, flushing rates, aquatic and benthic organisms, and probable impacts on water quality, biota, currents, littoral drift, and any existing shoreline or water uses. Further baseline studies may be required depending upon the adequacy of available information, existing conditions, the nature of the proposal, and probable adverse environmental impacts. Baseline monitoring shall be at the applicant's expense unless otherwise provided for;
 - m. Method of disposal of dead fish to control noxious odors; and
 - n. Other pertinent information deemed necessary by the City such as noise generation and visual impact.
2. Permit applications shall also identify all pesticides, herbicides, antibiotics, vaccines, growth stimulants, anti-fouling agents, or other chemicals that the applicant anticipates using. Such materials shall not be used until approval is obtained from all appropriate state and federal agencies, including but not limited to the U.S. Food and Drug Administration, the Washington State Departments of Ecology, Fisheries and Wildlife, and Agriculture, as required, and proof thereof is submitted to the City. When feasible, the cleaning of nets and other apparatus shall be accomplished by air drying, spray washing, or hand washing, rather than chemical treatment and application.
 3. Permit applications shall identify any noise generation associated with the project and also the amount of marine and truck or other vehicle traffic that will occur during the regular operation of the facility.
 4. The location of floating and submerged aquaculture structures shall not significantly conflict with navigation and other water-dependent uses. Floating structures shall remain shoreward of principal navigation channels. Other restrictions on the scale of aquaculture activities to protect navigational access may be necessary based on the size and shape of the affected water body.
 5. Subtidal, intertidal, floating, and upland structures and apparatus associated with aquaculture use shall be located, designed and maintained to avoid adverse effects on ecological functions and processes.
 6. The City shall consider the location of proposed aquaculture facilities/farms to prevent adverse cumulative effects on ecological

functions and processes and adjoining land uses. The City shall determine what constitutes acceptable placement and concentration of commercial aquaculture based on the specific characteristics of the water body, reach, drift cell, and uplands in the vicinity of the farm/facility. In making its determination, the City may solicit comments from federal agencies such as U.S. Fish and Wildlife Service, State agencies such as the Washington Department of Fish and Wildlife, and affected tribes.

7. Aquaculture use and development shall be sited so that shading and other adverse impacts to existing eelgrass, kelp, or native shellfish beds are avoided, minimized, and mitigated consistent with Section 5.4.
8. Aquaculture uses and developments that require attaching structures to the bed or bottomlands shall use anchors, such as helical anchors, that minimize disturbance to substrate.
9. No aquatic organism shall be introduced into City waters without prior written approval of the Washington Department of Fish and Wildlife for the specific organism proposed for introduction, including import and transfer permits under WAC 220-76-100 and WAC 220-72-076. The required approval shall be submitted in writing to the Shoreline Administrator prior to the introduction or the granting of the permit, whichever comes first. Unless otherwise provided in the shoreline permit issued by the City, the repeated introduction of an approved organism in the same location shall require approval by the City only at the time the permit is issued. Introduction for purposes of this section shall mean the placing of any aquatic organism in any area within the waters of the City regardless of whether it is a native or resident organism and regardless of where it is being transferred from.
10. Aquacultural structures and activities that are not water-dependent (e.g., warehouses for storage of products, parking lots) shall be located landward of the OHWM, upland of water-dependent portions of the project, and shall minimize detrimental impacts to the shoreline.
11. Aquacultural structures and equipment shall be of sound construction and shall be so maintained. Abandoned or unsafe structures and equipment shall be removed or repaired promptly by the owner.
12. Legally established aquacultural enterprises, including authorized experimental projects, shall be protected from incompatible uses which may seek to locate nearby. Demonstration of a high probability that such an adjacent use would result in damage to or destruction of such an aquacultural enterprise shall be grounds for the denial of that use.
13. Operational monitoring may be required if and to the extent that it is necessary to determine, ensure or confirm compliance with predicted or

required performance. Such monitoring requirements shall be established as a condition of the permit and shall be conducted at the applicant's (operator's) expense.

14. Processing of any aquacultural product, except for the sorting or culling of the cultured organisms and the washing or removal of surface materials or organisms, shall not occur in or over the water after harvest, unless specifically approved by permit. All other processing and processing facilities shall be located on land and shall be governed by, in addition to these provisions, the policies and regulations of other applicable sections of this Master Program, in particular, provisions addressing commercial and industrial uses.
15. Aquacultural wastes shall be disposed of in a manner that will ensure compliance with all applicable governmental waste disposal standards, including but not limited to the Federal Clean Water Act, Section 401, and the Washington State Water Pollution Control Act (RCW 90.48). No garbage, wastes or debris shall be allowed to accumulate at the site of any aquaculture operation.
16. Hatchery and other aquaculture operations shall be required to maintain a minimum fifty (50) foot wide vegetated buffer zone along the affected streamway or the buffer required by Table 6.3, whichever is larger, PROVIDED that clearing of vegetation shall be permitted for essential water access points.
17. For aquacultural projects using overwater structures, storage of necessary tools and apparatus seaward of the ordinary high water mark shall be limited to containers of not more than three (3) feet in height, as measured from the surface of the raft or dock; provided that in locations where the visual impact of the proposed aquaculture structures will be minimal, the City based upon written findings and without requiring a variance may authorize storage containers of greater height. In such cases, the burden of proof shall be on the applicant. Materials which are not necessary for the immediate and regular operation of the facility shall not be stored seaward of the ordinary high water mark.
18. Aquaculture use and development shall employ nonlethal, nonharmful measures to control birds and mammals. Control methods shall comply with existing federal and state regulations.
19. Fish net-pens shall meet, as a minimum, state approved administrative guidelines for the management of net-pen cultures; where any conflict in requirements arises the more stringent requirement shall prevail.
20. Aquacultural proposals that include net pens or rafts shall satisfy the environmental and aesthetic concerns expressed in this Master Program

shall be addressed. The burden of proof shall be on the applicant to demonstrate that the cumulative impacts of the existing and proposed operations would not be contrary to the policies and regulations of this Master Program.

21. For floating culture facilities the City shall reserve the right to require a visual impact analysis consisting of information comparable to that found in the Department of Ecology's *Aquacultural Siting Study* (1986). Such analysis may be prepared by the applicant, without professional assistance, provided that it is competently prepared. The analysis shall demonstrate that adverse impacts on the character of nearby areas are effectively mitigated.

6.5.3 Regulations - Commercial Geoduck Aquaculture

1. Commercial harvesting of geoduck shall be permitted subject to the Washington State Departments of Natural Resources and Fish and Wildlife contract and controlling regulations, and state and county public health requirements, as applicable.
 - a. A conditional use permit is required for new commercial geoduck aquaculture and the conversion of an existing nongeoduck aquaculture operation to geoduck aquaculture.
 - b. All subsequent cycles of planting and harvest shall not require a new conditional use permit.
 - c. A single conditional use permit 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 same shoreline permitting jurisdiction.
 - d. In addition to complying with the requirements of Chapter 173-27 WAC, the application must contain:
 - i. A narrative description and timeline for all anticipated geoduck planting and harvesting activities. Documentation submitted to state and/or federal permit agencies for the proposal may be used to satisfy this requirement.
 - ii. A baseline ecological survey of the proposed site to allow consideration of the ecological effects associated with the proposal. Documentation submitted to state and/or federal permit agencies for the proposal may be used to satisfy this requirement.

- iii. Measures to achieve no net loss of ecological functions consistent with the mitigation sequence described in WAC-173-26-201 (2)(e).
- iv. Management practices that address impacts from mooring, parking, noise, lights, litter, and other activities associated with geoduck planting and harvesting operations.
- e. On-site work is allowed during low tides, which may occur at night or on weekends. Measures to reduce impacts, from such sources as noise from equipment and glare from lighting, to adjacent existing uses shall be identified.
- f. All commercial geoduck aquaculture operations authorized by a conditional use permit shall be reviewed by the City after the first year of operation to confirm compliance with the terms and conditions of the permit. In reviewing the permit, the City shall solicit comments from all parties of record to the approved conditional use permit.
- g. Conditional use permits shall be reviewed using the best scientific and technical information available.
- h. Best management practices shall be employed to accomplish the intent of the limits and conditions.
- i. In order to avoid or limit impacts from geoduck aquaculture siting and operations and achieve no net loss of ecological functions, the following should be addressed:
 - i. The practice of placing nursery tanks or holding pools or other impervious materials directly on the intertidal sediments.
 - ii. Use of motorized vehicles, such as trucks, tractors and forklifts below the ordinary high water mark.
 - iii. Specific periods when limits on activities are necessary to protect priority habitats and associated species. The need for such measures should be identified in the baseline ecological survey conducted for the site.
 - iv. Alterations to the natural condition of the site, including significant removal of vegetation or rocks and regrading of the natural slope and sediments.
 - v. Installation of property corner markers that are visible at low tide during planting and harvesting.
 - vi. Mitigation measures such as buffers between commercial geoduck aquaculture and other fish and wildlife habitat conservation areas as necessary to ensure no net loss of ecological functions.

- vii. Use of predator exclusion devices with minimal adverse ecological effects and requiring that they be removed and disposed of at an approved upland location as soon as they are no longer needed for predator exclusion.
- viii. Use of the best available methods to minimize turbid runoff from the water jets used to harvest geoducks.
- ix. Number of barges or vessels that can be moored or beached at the site as well as duration limits.
- x. Public rights to navigation over the surface of the water.
- xi. Good housekeeping practices at geoduck aquaculture sites, including worker training and regular removal of equipment, tools, extra materials, and all wastes.
- j. Where the site contains existing public access to publicly owned lands, the City shall consider recommendations from the Department of Natural Resources regarding protection of the existing public access.

6.6 Boating Facilities

6.6.1 Applicability

Boating facilities include marinas, both backshore and foreshore, dry storage and wet moorage types, liveboards, boat launches, covered moorage, boathouses, mooring buoys, marine travel lifts, floats, piers and docks. Piers and docks are structures which abut the shoreline and can be used for public access and/or as a landing or moorage place for commercial and/or pleasure craft. Piers are built on fixed platforms above the water, while docks float on the water. Piers and docks can be utilized for commercial, industrial or recreational purposes and often serve several uses.

Uses and activities associated with boating facilities that are identified separately in Chapters 5 and 6 (for example, Bulkheads; Breakwaters, Commercial Development, Industrial Development, Jetties and Groins; Dredging; Fill; and Utilities) are subject to the policies and regulations established for those uses as well as the boating facility provisions established in this section.

A marina is a water-dependent use that consists of a system of piers, buoys, or floats providing permanent or long-term moorage for ten (10) or more vessels. Community moorage facilities, yacht club facilities, and camp or resort moorage areas providing moorage for ten (10) or more vessels shall be reviewed as marinas under this Master Program. Uses and developments commonly associated with

marinas include boat launch facilities and businesses that provide services and supplies for small commercial and/or pleasure craft.

The following regulations apply to the construction, expansion and maintenance of all boating facilities and their accessory uses unless otherwise stated.

Note: The Department of Natural Resources should be contacted for all projects involving the use of state-owned aquatic lands.

6.6.2 Regulations - General

1. All boating facility development and/or renovations shall comply with all other applicable state agency policies and regulations.
2. All facilities shall be constructed so as not to interfere with or impair the navigational use of surface water.
3. New boating facilities shall be designed so they will be aesthetically compatible with or will enhance existing shoreline features and uses.
4. The shoreline shall be stabilized both above and below the water's edge both during and after all boating facility construction.
5. New overwater parking facilities shall be prohibited.
6. Short-term loading areas may be located at ramps or near berthing areas. For new facilities, long-term parking and paved storage areas shall be located as far from the OHWM as is feasible.
7. To the maximum extent possible, new boating facilities and accessory uses shall share parking facilities, with boating facility usage given preference.

6.6.3 Regulations - Boathouses and Covered Moorage

1. Legally permitted covered moorage and boathouses that were in lawful existence as of December 1, 2013, may continue subject to the requirements of this Master Program and the following restrictions:
 - a. Existing covered moorage and boathouses shall not increase overwater coverage unless part of a comprehensive review of a public marina plan and ensures no net loss of shoreline ecological functions;
 - b. All work and materials shall be performed using best management practices;
 - c. Existing structures may be repaired;

- d. Walls and fences for covered moorage shall be prohibited above deck or float level, except that handrails which are open in nature and not higher than forty-two (42) inches above the deck or float may be permitted; and
 - e. Existing covered moorage and boathouses may be relocated and reconfigured within an approved marina if the relocation and reconfiguration results in an improvement to shoreline ecological functions.
 - f. Up to 10 boathouses may be converted to a shellfish nursery use within the Port of Shelton Marina as a permitted use in compliance with Section 6.5, Aquaculture. No additional boathouses or boat slips may be converted. Additional uses of this nature would require that a permit request be submitted for consideration of a separate commercial dock/float at the facility to accommodate the increased demand.
2. New covered moorage for boat storage and new overwater boat houses shall be prohibited.
 3. The restrictions in Section 6.6.3, Regulation #2 shall not apply to overwater structures housing water-dependent emergency response equipment for public agency use to protect people, property, and the environment in and adjacent to shoreline jurisdiction. However, such new, remodeled, rebuilt, or relocated structures shall be constructed to allow sixty percent (60%) light penetration over sixty percent (60%) of the structure whether enclosed or not.
 4. Commercial covered moorage facilities may be permitted only where boat construction or repair work is to be the primary activity and covered work areas are demonstrated to be the minimum necessary over water, including a demonstration that adequate upland sites are not feasible. When permitted, commercial covered moorage facilities must be constructed to allow sixty percent (60%) light penetration over sixty percent (60%) of the structure, whether enclosed or not.

6.6.4 Regulations - Boat Launch Ramps

1. Preferred ramp designs, in order of priority, are:
 - a. Open grid designs with minimum coverage of beach substrate;
 - b. Seasonal ramps that can be removed and stored upland; and
 - c. Structures with segmented pads and flexible connections that leave space for natural beach substrate and can adapt to changes in beach profile.

- d. Other ramp designs may be considered provided the City of Shelton finds the preferred ramp designs are infeasible and the proposed ramp design ensures no net loss of ecological functions as supported by a Critical Areas Report.
2. Ramps shall be placed and maintained near flush with the foreshore slope, where feasible.
3. In addition to requirements of this section, SMC 21.64.330(F) and (I) shall apply, where feasible.

6.6.5 Regulations - Marinas

1. The City shall require and use the following information in its review of marina proposals:
 - a. Existing natural shoreline and backshore features and uses, and water depth;
 - b. Water processes and flushing characteristics, volume, rates and frequencies;
 - c. Biological resources and habitats for the backshore, foreshore and aquatic environments;
 - d. Area of surface waters appropriated, and leased areas;
 - e. Site orientation; exposure to wind, waves, flooding or tidal/storm surges; type and extent of shore defense works or shoreline stabilization and flood protection necessary;
 - f. Impact upon existing and created demand for shoreline and water uses including public access and recreation and views;
 - g. The regional need for additional facilities; and
 - h. The design of the facilities, including sewage disposal, water quality controls, provisions for the prevention and control of fuel spillage.

6.6.5.1 *Location*

1. Deteriorated urban waterfront areas in need of restoration and where channel depths are such that commercial activity is no longer feasible shall be given priority consideration for potential marina sites.
2. Boats shall be dry stored whenever possible to retain shoreline for other water-dependent uses.
3. Marinas shall take all reasonable steps to locate in areas where fill is not required and should be located in water of sufficient depth such that dredging is not required. Where these modifications are unavoidable,

marinas shall locate on stable shorelines where water depths avoid and minimize the need for offshore or foreshore channel construction dredging, maintenance dredging, dredge material disposal, filling, and channel maintenance activities.

4. Marinas shall be located so as not to adversely affect flood channel capacity or otherwise create a flood hazard.
5. Marinas or launch ramps shall not be permitted on the following marine shores unless it can be demonstrated that interference with littoral drift and/or degradation or loss of shoreline ecological functions and processes, especially those vital to maintenance of nearshore habitat, will not occur. Such areas include:
 - a. Feeder bluffs; and
 - b. High-energy input driftways.
6. Marinas or launch ramps shall not be permitted within the following marine shoreline habitats because of their scarcity, biological productivity and sensitivity unless no alternative location is feasible, the project would result in a net enhancement of shoreline ecological functions, and the proposal is otherwise consistent with this Program:
 - a. Marshes, estuaries and other wetlands;
 - b. Kelp beds, eelgrass beds, spawning and holding areas for forage fish (such as herring, surf smelt and sandlance); and
 - c. Other critical saltwater habitats.
7. Marinas or launch ramps may be permitted on low-erosion rate marine feeder bluffs or on low-energy input erosional driftways if the proposal is otherwise consistent with this Program.
8. Where marinas are permitted, the following conditions shall be met:
 - a. Open pile or floating breakwater designs shall be used unless it can be demonstrated that riprap or other solid construction would not result in any greater net impacts to shoreline ecological functions or processes or shore features; and
 - b. Solid structures that block fish passage shall not be permitted to extend without openings from the shore to zero tide level (Mean Lower Low Water, or MLLW), but shall stop short to allow sufficient shallow fringe water for fish passage.
9. Marinas shall be designed to allow the maximum possible circulation and flushing of all enclosed water areas.

10. New or expanding marinas with dredged entrances that adversely affect littoral drift to the detriment of other shores and their users shall be required to periodically replenish such shores with the requisite quantity and quality of aggregate as determined by professional coastal geologic engineering studies.

6.6.5.2 *Design, Renovation, Expansion*

1. The marina design shall minimize interference with existing shore forms and natural coastal processes.
2. Public access, both visual and physical, shall be an integral part of all marina development. Marinas shall be designed so that existing or potential public access along beaches is not unnecessarily blocked nor made dangerous and public use of the surface waters below the ordinary high water mark is not unduly impaired.
3. Marinas shall have adequate facilities and post the operational procedures for fuel and sewage handling and storage to prevent and minimize accidental spillage.
4. Marinas shall have facilities, equipment and posted procedures for the containment, recovery and mitigation for spilled petroleum, sewage and toxic products and debris from maintenance and repair.
5. Marina operators shall post signs, containing the following information, where they are readily visible to all marina users:
 - a. Regulations pertaining to handling and disposal of waste, including grey water, sewage and toxic materials;
 - b. Regulations prohibiting the use of marine toilets while moored unless these toilets are self-contained or have an approved treatment device;
 - c. Regulations prohibiting the disposal of fish and shellfish cleaning wastes, scrap fish, viscera or unused bait in or near the marina waters; and
 - d. Rules and best management practices for boat maintenance and repairs on site.

6.6.5.3 *Utilities*

1. New or expanded marinas shall have accessible boat sewage disposal systems or services available to all marina users. Such systems or services shall be conveniently located for all boats.

2. The marina shall provide facilities for the adequate collection and dumping of marina-originated materials including but not limited to sewage, solid waste and petroleum waste.
3. Adequate and satisfactory means for handling accidental fuel and chemical spills must be provided.
4. All marinas shall provide restrooms for all boaters' use. The restrooms shall be identified by signs and shall be accessible to tenants 24 hours a day and open to day users those hours of operation that boating services are open to the public such as gas dock, ramp, or hoist.

6.6.5.4 Liveboards

1. Liveboards (moored boats with residents living aboard) shall be limited to no more than ten percent (10%) of the total number of moorage slips, excluding persons in transit.
2. Any marina with liveboard vessels shall require:
 - a. That all liveboard vessels are connected to utilities that provide sewage conveyance to an approved disposal facility; or
 - b. That marina operators or liveboards are contracted with a private pump-out service company that has the capacity to adequately dispose of liveboard vessel sewage; or
 - c. That a portable pump-out facility is readily available to liveboard vessel owners;
 - d. That all liveboard vessels shall have access to utilities that provide potable water;
 - e. That liveboard vessels are of the cruising type, and are kept in good repair and seaworthy condition.
3. Marinas with liveboard vessels shall only be permitted where compatible with the surrounding area and where adequate sanitary sewer facilities exist within the marina and on the liveboard vessel.

6.6.6 Regulations - Piers, Docks, Floats, and Buoys

6.6.6.1 General

1. Proposals for floats, buoys, piers or docks shall include at a minimum the following information:

- a. Description of the proposed structure, including its size, location, design and any shoreline stabilization or other modification required by the project;
 - b. Ownership of tidelands, shorelands and/or bedlands;
 - c. Proposed location of piers, floats, buoys or docks relative to property lines and OHWM;
 - d. Location width, height and length of piers or docks on adjacent properties within three hundred (300) feet; and
 - e. Cost estimate.
2. Piers, floats, buoys, and docks shall not significantly interfere with use of navigable waters.
 3. In addition to requirements of this section, SMC 21.64.330(H) shall apply.

6.6.6.2 *General Design and Construction Standards*

1. Pilings must be structurally sound prior to placement in the water.
2. Materials for any portions of the dock, pier, float, framing, or decking that come in contact with water shall be approved by applicable state agencies for use in water.
3. Pilings employed in piers docks, or floats shall have a minimum vertical clearance of two (2) feet above extreme high water.
4. All docks shall include stops that keep the floats off the bottom of tidelands at low tide or water level.
5. Recreational floats shall be located as close to the shore as possible and still accommodate intended use.

6.6.6.3 *Accessory to Residential, Hotel, and Motel Use*

1. Mooring buoys shall be used instead of docks and piers whenever feasible.
2. Joint-use docks or piers are encouraged in-lieu of individual moorage facilities.
3. New docks or piers associated with single-family residences are allowed only as joint-use unless the applicant demonstrates that joint-use is not feasible.
4. Piers and docks associated with single-family residences are defined as water-dependent uses provided they are designed and intended as a facility for access to watercraft.

5. All hotels, motels, and multi-family residences proposing to provide moorage facilities shall be required to construct a single, community moorage facility provided that the City may authorize more than one community moorage facility if a single facility would be inappropriate or undesirable given the specific environmental conditions of the site.
6. Proposals for community piers and docks shall demonstrate and document that adequate maintenance of the structure and the associated upland area will be provided by identified responsible parties.
7. Single-user docks/piers/floats may be located within side yard setbacks for residential development (both onshore and offshore); provided that a joint-use dock/pier may be located adjacent to or upon a shared side property line upon recording of an agreement by the affected property owners with the Mason County Assessors Office.
8. To minimize adverse effects on nearshore habitats and species caused by overwater structures that reduce ambient light levels, the following dimensional standards shall apply:
 - a. The width of docks, piers, floats and lifts shall be the minimum necessary, and shall be authorized in the permitting documents approved by Washington Department of Fish and Wildlife and U.S. Army Corps of Engineers.
 - b. The length of docks and piers in the marine environment shall be the minimum necessary to prevent the grounding of floats and boats on the substrate during low tide. In fresh water, the length of new residential docks and piers shall be limited to the minimum necessary and shall not exceed the average length of the dock or pier on each adjacent parcel (or closest parcel with a dock/pier if the adjacent parcel does not have a dock/pier).
 - c. The applicant shall consider materials and methods of dock construction that increase light passage and limit overwater shading. This may be accomplished through grated decks or space between solid decking or other means.

6.6.6.4 Commercial/Industrial Facilities

These standards apply to piers and docks intended for any commercial or industrial use other than commercial moorage of boats in marinas.

1. Piers and docks shall be permitted for water-dependent and for multiple-use facilities if the majority use is water-dependent.
2. The length, width and height of nonresidential docks, piers and floats shall be no greater than that required for safety and practicality for the primary use.

3. Materials for any portions of a dock, pier, float, framing, or decking that come in contact with water shall be approved by applicable state agencies for use in water.
4. Joint-use piers shall be preferred for commercial and industrial developments which are in close proximity to one another.
5. Facilities and procedures for receiving, storing, dispensing and disposing of oil and other toxic products shall be designed and flood-proofed to insure that such oil and other toxic products are not introduced into the water body. Spill cleanup facilities shall be available for prompt response and application at all piers and docks involved in oil and hazardous products transfer.
6. Bulk storage for gasoline, oil and other petroleum products for any use or purpose is **prohibited** on piers and docks. Bulk storage means nonportable storage in fixed tanks.
7. Storage for boat fueling facilities shall be located landward of the OHWM and meet the applicable policies and regulations for utilities (accessory and primary), commercial and industrial development.

6.6.6.5 *Repair, Replacement or Expansion*

1. Existing overwater structures may be repaired and/or replaced in the same location as the existing structure.
2. Repair or replacement of docks shall, at a minimum, require as much light penetration to water as the existing facility. The new design shall maintain, and to the extent practicable, increase the amount of ambient light beneath the structure.
3. Materials that come in contact with the water shall be approved by applicable state agencies for use in water.
4. Expansion of existing overwater structures shall follow the guidelines for newly constructed facilities for the expanded portion.
5. Other repairs not described in this section to existing legally established overwater structures are considered minor and may be permitted consistent with all applicable regulations.

6.7 Commercial Uses

6.7.1 Applicability

Commercial development includes uses that are involved in wholesale, retail, service and business trade. Examples include hotels, motels, grocery markets, shopping centers, restaurants, shops, offices and private or public indoor recreation facilities. Excluded from this category are residential subdivisions, boating uses and industry.

Uses and activities associated with commercial development that are identified as separate use activities in this Program are subject to those regulations in addition to the standards for commercial development established herein.

6.7.2 Regulations

1. The City shall require and utilize the following information in its review of commercial development proposals:
 - a. Nature of the commercial activity (e.g., water-dependent, water-related, enjoyment, nonwater-oriented, mixed-use) including a breakdown of specific components;
 - b. Need for shoreline location;
 - c. Special considerations for enhancing the relationship of the activity to the shoreline;
 - d. Provisions for public visual and physical access to the shoreline;
 - e. Provisions to ensure that the development will not cause adverse negative environmental impacts; and
 - f. For mixed-use proposals, describe the type and amount of water-oriented and nonwater-oriented uses; present site and building designs, including bulk considerations, proposed public access improvements, restoration or enhancement of environmental features, and other considerations that address the goals and policies of the SMP.
2. A use or development shall not be considered water-dependent, water-related or water-enjoyment until the City determines that the proposed design, layout and operation of the use/development meet the definition and intent of water-dependent, water-related or water-enjoyment.
3. New nonwater-oriented commercial uses or development are prohibited unless they meet one of the following:
 - a. The use is part of a mixed-use project or facility that supports water-dependent uses and provides a significant public benefit with respect to the public access and restoration goals of this Program; or

- b. Navigability is severely limited at the proposed site and the use provides a significant public benefit with respect to the public access and restoration goals of this Program; or
 - c. The use is within the shoreline jurisdiction but physically separated from the shoreline by a separate property, public right-of-way, or existing use, and provides a significant public benefit with respect to the public access and restoration goals of this Program. For the purposes of this Program, public access trails and facilities do not constitute a separation.
4. Nonwater-oriented commercial developments shall not usurp or displace land currently occupied by a water-oriented use or interfere with adjacent water-oriented uses.
5. Commercial development shall be prohibited in marshes, bogs, and swamps.
6. Water-dependent, water-related, and water-enjoyment commercial development is allowed overwater in the Aquatic Harbor designation provided water-related or water-enjoyment commercial developments are located in existing overwater structures or where they are auxiliary to and necessary in support of water-dependent uses.
7. Commercial development shall be designed and maintained in a neat, orderly and environmentally compatible manner, consistent with the character and features of the surrounding area. To this end, the City may adjust the project dimensions and setbacks, and/or prescribe operation intensity and screening standards as deemed appropriate. Need and special considerations for landscaping and buffer areas shall also be subject to review.
8. Water-enjoyment and water-related commercial uses shall provide public access and ecological restoration where feasible and avoid impacts to existing navigation, recreation, and public access. Private water-dependent uses may be required to provide public access in accordance with section 5.12 Regulation #1(e) of this Master Program.

6.8 Forest Practices

6.8.1 Applicability

Forest practices are uses and activities relating to the growing, harvesting and limited processing of timber. This includes, but is not limited to, (1) site preparation and regeneration; (2) protection from insects, fire and disease; (3) silvicultural

practices such as thinning, fertilization and release from competing vegetation; and (4) harvesting. Forest practices do not include log storage. (See Section 6.9 on industrial uses.)

Timber harvesting and forest practices that do not meet the definition of development are regulated by the Washington State Forest Practices Act and the 1999 Forest and Fish Report. Such practices are not regulated by this Program except for selective commercial timber cutting on shorelines of statewide significance. Other activities associated with timber harvesting, such as filling, excavation, and building roads and structures that meet the definition of development, are regulated according to applicable sections of this Program and require shoreline substantial development permits or conditional use permits. Conversion of forest land to nonforestry uses (Class IV Conversion Forest Practices Permit) are also subject to this Program.

6.8.2 Regulations

1. Timber harvesting and forest practices activities regulated by the Washington State Forest Practices Act (RCW 76.09) and WAC 222 that do not meet the definition of development shall be conducted in accordance with the Forest Practices Act and the 1999 Forest and Fish Report, and any regulations adopted pursuant thereto. Such practices shall not be regulated by this Program and shall not require a shoreline permit, except for the following activities:
 - a. Selective commercial timber cutting on shorelines of statewide significance shall not exceed thirty percent (30%) of the merchantable trees in any ten (10) year period, as required by RCW 90.58.150. The City may allow exceptions to the thirty percent (30%) limit with a conditional use permit in accordance with WAC 173-26-241(3)(e).
 - b. Forest practices and/or roads to provide access on slopes that exceed thirty-five percent (35%) shall require a conditional use permit.
2. Tree cutting and timber harvest not regulated by the Forest Practices Act (RCW 76.09) and WAC 222 shall be regulated according to the general provisions (Chapter 5) and other applicable use-specific provisions (Chapter 6) of this Program and shall require a shoreline substantial development permit or conditional use permit, as specified in this Program.
3. Other activities associated with timber harvesting, such as filling, excavation, and building roads and structures, that meet the definition of development shall be regulated according to the general provisions (Chapter 5) and the other applicable use-specific provisions (Chapter 6) of this Program and shall require a shoreline substantial development permit or conditional use permit, as specified in this Program.

4. Conversion of forest land to nonforestry uses (Class IV Conversion Forest Practices Permit) shall be reviewed in accordance with the provisions for the proposed nonforestry use and the general provisions in Chapter 5 and shall be subject to any permit requirements associated with the nonforestry use.
5. Those lands harvested and not reforested under a Class I, II, or III permit and which do not meet the standards of this chapter and are later converted to nonforest uses shall have all local permits withheld for a period of six (6) years, as authorized by the Forest Practices Act. This moratorium shall run with the land and be duly noted in the public record. The conversion of land to nonforest uses shall mean the division of land or the preparation of land for land division or construction. Should a landowner wish to remove the moratorium or convert the land to nonforest uses, the owner shall:
 - a. Reforest the land as prescribed by the Department of Natural Resources and/or provide stabilization and protection of the area in a manner approved by the City of Shelton in accordance with this Program. Said reforestation shall be by planting and not by natural regeneration, unless the Department verifies that natural regeneration has already occurred to such an extent that planting is not necessary. Stabilization and protection of affected critical areas through drainage and erosion control measures shall be provided; and
 - b. Submit and have approved by the Shoreline Administrator a conversion harvest plan. The approval of said plan may include conditions and improvement requirements to control erosion, protect or enhance the critical area or buffer, or other conditions that are intended to reduce impacts to the critical area.
6. In addition to requirements of this section, SMC 21.64.071(K) shall apply.

6.9 Industrial Uses

6.9.1 Applicability

Industry located along the waterfront includes port development, water-oriented and nonwater-oriented manufacturing, warehousing, processing, storage and similar activities. Ports are a specialized subcategory of general industrial uses.

Industrial developments include facilities for processing, manufacturing and storage of finished or semi-finished goods. Ports are public enterprises providing services and facilities for commerce, transportation and economic development. Included in ports and industry are such activities as container ship terminals, log storage, log

rafting, forest product manufacturing, petroleum storage, transport and storage, ship building, tug and barge operations, etc. Excluded from this category and covered under other sections of this Master Program are boating uses, mining (including on-site processing of raw materials), utilities, and transportation.

Shelton's waterfront provides unique opportunities for water-dependent and water-related industrial uses and development.

6.9.2 Regulations - General

1. Accessory development that does not require a shoreline location shall be located upland of the water-dependent portions of the development and setback from the OHWM per Table 6-3. This category includes but is not limited to parking, warehousing, open air storage, waste storage, utilities and land transportation development.
2. Plans made to mitigate significant adverse environmental impacts pursuant to the General Regulations found in Chapter 5 of this program shall be submitted by the applicant.
3. New water-dependent industry shall be located and designed to minimize the need for initial and/or continual dredging, filling, dredge material disposal and other harbor and channel maintenance activities. New nonwater-oriented industrial uses or development may be considered as a conditional use as outlined in Table 6-1 and must meet one of the following:
 - a. The use is part of a mixed-use project that supports water-oriented uses and provides a significant public benefit with respect to the Shoreline Management Act's objectives; or
 - b. Navigability is severely limited at the proposed site and the use provides a significant public benefit with respect to the Shoreline Management Act's objectives; or
 - c. The use is within the shoreline jurisdiction but physically separated from the shoreline by another property or public right-of-way.
4. At new or expanded port and/or industrial developments, the best available facilities, practices and procedures shall be employed for the safe handling of fuels and toxic or hazardous materials to prevent them from entering the water, and optimum means shall be employed for prompt and effective cleanup of those spills that do occur.

6.9.3 Regulations - Design

1. The determinations of which lands are best suited for water-dependent/water-related industry shall be made on the basis of the following location criteria:
 - a. Channel access;
 - b. Rail access;
 - c. Major road access;
 - d. Size of land area;
 - e. Physical characteristics of site (e.g., grade, soil type, hydrology, etc.);
 - f. Size of ownership units;
 - g. Present use and projected growth patterns;
 - h. Environmental factors; and
 - i. Feasibility/market demand analysis of potential water-oriented uses.
2. Display and other exterior lighting shall be designed, shielded, and operated to minimize glare, avoid illuminating nearby properties and prevent hazards for public traffic.

6.9.4 Regulations - Log Booming, Rafting, and Storage

1. Log storage facilities and uses shall comply with all applicable local, state, and federal regulations, including stormwater management regulations, Hydraulic Project Approvals granted by the Washington State Department of Fish and Wildlife, and the Water Quality Certification requirements provided by the Washington State Department of Ecology.
2. New log storage facilities shall demonstrate use of best management practices to avoid significant adverse impact to critical saltwater habitats and fish and wildlife habitat conservation areas.
3. Log storage and log booming facilities shall be adequately maintained and repaired to prevent log escapement from the storage site.
4. New log rafting, log transfer to water or storage operations or existing log rafting, log transfer or storage operations pursuing a shoreline permit for substantial repair or reconstruction, are required to implement the following when feasible:

- a. Logs shall not be transferred to water, stored, or rafted where grounding on intertidal lands will occur during any portion of the tidal cycle. Tidelands which were leased for booming and rafting prior to January 1, 1980, are exempt from this provision.
- b. Easy let-down devices shall be provided for log transfer to water, to prevent the freefall dumping of logs into water.
- c. Bark and wood debris controls and disposal shall be implemented at log transfer to water operations, and log raft building areas. Accumulations of bark and wood debris on the land and docks around log transfer to water operations and upland storage sites shall be kept out of the water. After cleanup, any disposal shall be at an upland site where leachate will not enter surface or groundwaters.
- d. Where water depths will permit the floating of bundled logs, they shall be secured in bundles on land before being placed in the water. Bundles shall not be broken again except on land or at mill sites.

6.10 Institutional Uses

6.10.1 Applicability

Institutional uses include facilities for the provision of educational, medical, cultural, social, public safety, and/or recreational services to the community, including but not limited to schools, colleges, libraries, museums, community centers, government offices, and the relevant essential public facilities identified in WAC 365-196-550.

6.10.2 Regulations

1. Water-oriented institutional uses and developments are preferred.
2. Where allowed, nonwater-oriented institutional uses may be permitted provided that a significant public benefit such as public access and/or ecological restoration is provided.
3. Loading, service areas, and other accessory uses shall be located landward of a primary structure or underground whenever possible, but shall in no case be waterward of the structure.
4. Where institutional uses are allowed as a conditional use, the following must be demonstrated:
 - a. A water-dependent use is not reasonably expected to locate on the proposed site due to topography, surrounding land uses, physical features, or due to the site's separation from the water;

- b. The proposed use does not displace a current water-oriented use and will not interfere with adjacent water-oriented uses; and
- c. The proposed use will be of substantial public benefit by increasing the public use, enjoyment, or access to the shoreline.

6.11 Mining

6.11.1 Applicability

Mining is the removal of sand, gravel, soil, minerals, and other earth materials for commercial and other uses. Mining activities include in-water dredging activities related to mineral extraction. Mining does not include general manufacturing, such as the manufacture of molded or cast concrete or asphalt products, asphalt mixing operations, or concrete batching operations. (See Section 6.9 Industrial Uses for standards relating to these uses.)

6.11.2 Regulations

1. The excavation of sand, gravel, and other minerals is prohibited within the City's shoreline jurisdiction.
2. Impacts to shorelands and water bodies due to mining operations upland of shoreline jurisdiction shall be minimized to protect shoreline ecological functions.
3. Transport and storage of mined materials shall be considered an industrial use and be subject to "Industrial Use" regulations.

6.12 Parking

6.12.1 Applicability

Parking is the temporary storage of automobiles or other motorized vehicles. The following provisions apply **only** to parking that is accessory to a permitted shoreline use. Parking as a primary use is prohibited within shoreline jurisdiction.

6.12.2 Regulations

1. Parking as a primary use shall be prohibited.

2. Parking shall be prohibited over water, except for pre-existing parking areas serving water-dependent uses. Existing overwater parking areas shall not be expanded.
3. Parking in shoreline jurisdiction shall directly serve an authorized shoreline use.
4. Surface parking facilities shall be designed and landscaped to minimize visual impacts to adjacent shorelines and properties. At a minimum, the landscaping standards pursuant to SMC 20.60.150 (Parking lot landscaping and screening) shall be followed. .
5. Parking facilities serving individual buildings on the shoreline shall be located landward from the principal building being served, EXCEPT when the parking facility is within or beneath the structure and screened, or in cases when an alternate orientation would have less adverse impact on shoreline ecological functions and processes.
6. Parking areas shall use best available technologies to control quantity and quality of surface water runoff such as low impact development.

6.13 Recreational Development

6.13.1 Applicability

Recreational development includes commercial and public facilities designed and used to provide recreational opportunities to the public. Recreational development provides opportunities for the refreshment of body and mind through forms of play, sports, relaxation, amusement, or contemplation. It includes facilities for passive recreational activities, such as hiking, photography, viewing, and fishing. It also includes facilities for active or more intensive uses such as parks, campgrounds, and golf courses. This section applies to both publicly- and privately-owned shoreline facilities intended for use by the public or a private club, group, association, or individual. (Also see Chapter 5, Section 5.12 for regulations affecting public access.) Commercial recreation shall also be consistent with the provisions for commercial development in Section 6.7 of this Master Program.

6.13.2 Regulations -- General

1. Local governments shall consult state and local health regulations which apply to recreational facilities when issuing shoreline permits (WAC 173-16-060-21(k)).

2. Valuable shoreline resources and fragile or unique areas, such as marshes, bogs, swamps, estuaries, wetlands and accretion beaches, shall be used only for passive use recreational activities.
3. All permanent substantial recreational structures and facilities shall be located outside officially mapped floodways, provided the City may grant administrative exceptions for nonintensive minor accessory uses (e.g., picnic tables, tennis courts, etc.).
4. New recreational uses, trails and developments should be located landward of the buffer required by Chapter 21.64 of the Shelton Municipal Code excepting that components of the recreational use or development that are water-dependent, water-related, or whose primary use is to provide shoreline access may be allowed within the shoreline buffer, provided that the amount of buffer encroachment and disturbance are the minimum needed to accommodate the water-dependent or water-related component. Signs indicating the public's right of access to shoreline areas shall be installed and maintained in conspicuous locations at the point of access and the entrance thereto.

6.13.3 Regulations -- Design

1. Recreational development shall achieve no net loss of ecological processes and functions and should be designed to be compatible with surrounding properties.
2. Recreational development shall be designed and constructed so as to not unnecessarily interfere with public use of shorelines.
3. Recreational uses and improvements shall encourage and include public access to shorelines.
4. In approving shoreline recreational developments, the City shall ensure that the developments maintain, enhance or restore desirable shoreline features including unique and fragile areas, scenic views and aesthetic values. To this end, the City may adjust and/or prescribe project dimensions, location of on-site project components, intensity of use, screening, parking requirements and setbacks, as deemed appropriate.
5. Recreational developments shall provide facilities for nonmotorized access to the shoreline such as bicycle and/or pedestrian paths.
6. Motorized vehicular access is prohibited on beaches, bars, spits, and streambeds, EXCEPT for boat launching and maintenance activities. Recreational facility design and operation shall prohibit the use of all-terrain and off-road vehicles in the shoreline area.

7. Proposals for developments shall include a landscape plan that utilizes native, self-sustaining vegetation. The removal of on-site native vegetation shall be limited to the minimum necessary for the development of campsites, selected views or other permitted structures or facilities. (See Section 5.6.2 on Clearing, Grading, Fill and Excavation and Section 5.7 Vegetation Conservation.)
8. No recreational buildings or structures shall be built over water, EXCEPT for water-dependent and/or public access structures such as piers, docks, bridges, or viewing platforms.
9. Proposals for recreational development shall include adequate facilities for water supply, sewage and garbage disposal. Where sewage treatment facilities are not available, the appropriate reviewing authority shall limit the intensity of development to meet City, county and state on-site sewage disposal requirements.
10. Recreational facilities shall make adequate provisions, such as screening, buffer strips, fences and signs, to prevent overflow and to protect the value and enjoyment of adjacent or nearby private properties.
11. In addition to requirements of this section, SMC 21.64.330(C) shall apply.

6.14 Residential Development

6.14.1 Applicability

Residential development applies to the development of single-family and multi-family residences and their normal appurtenances, and the creation of new residential lots through land division. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities. Those developments are regulated under Section 6.7 Commercial Uses.

6.14.2 Regulations

1. House boats, floating homes, and other overwater residential structures are prohibited.
2. New residential lots created through land division may be allowed provided:
 - a. New lots shall be consistent with lot configuration requirements that are established by SMC Title 20, Zoning, as applicable;
 - b. Structural shore armoring or flood control structures will not be required to protect or create the land;

- c. The new lots will not require structural shoreline stabilization or flood control measures during the useful life of the development or one hundred (100) years, whichever is greater;
 - d. No improvements are proposed within the required shoreline buffer or critical area buffer, except as provided in SMC Chapter 21.64 Critical Area Protection;
 - e. Site work does not create significant erosion or landslide hazard or reduce slope stability;
 - f. There is sufficient buildable area above the one hundred (100) year flood zone level within each resultant parcel.
3. Residential development shall be located and designed to avoid the need for structural shore defense and flood protection works in the foreseeable future.
 4. Stormwater drainage and treatment facilities shall be required for all development pursuant to SMC Chapter 13.02 Stormwater Management.
 5. Residential development plans submitted for approval shall contain provisions for protection of groundwater supplies, erosion control, landscaping and maintenance of the natural shoreline integrity and ecological functions.

6.15 Signs

6.15.1 Applicability

The following provisions apply to any commercial or advertising sign directing attention to a business, professional service, community, site, facility, or entertainment, conducted or sold either on or off premises.

The provisions of this section do not apply to publicly owned signs where the purpose is safety, direction, or information.

Additional regulations are provided in the City of Shelton Sign Ordinance (Chapter 20.38 SMC). Where the regulations herein conflict with the City sign ordinance, the more stringent regulations shall apply.

6.15.2 Regulations

1. Sign plans and designs shall be submitted for review and approval at the time of shoreline permit approval.

2. Signs in the shoreline shall be designed and placed in a manner that does not interfere with the public's ability to access the shoreline and will not result in a net loss of shoreline ecological functions.
3. Overwater signs or signs on floats or pilings shall be related to water-dependent uses only.
4. Lighted signs shall be hooded, shaded, or aimed so that direct light will not result in glare when viewed from surrounding properties or water bodies.
5. No commercial or advertising signs shall be placed in a public access corridor.
6. The following types of signs are prohibited:
 - a. Signs which impair visual access in view corridors.
 - b. Off-premise detached outdoor advertising signs.
 - c. Spinners, streamers, pennants, flashing lights, and other animated signs used for commercial purposes.
 - d. Signs placed on trees, rocks, or other natural features.
7. Signs to protect public safety or prevent trespass may be allowed and should be limited in size and number to the maximum extent practical.

6.16 Transportation Uses

6.16.1 Applicability

Transportation facilities are those structures and developments that aid in land and water surface movement of people, goods, and services. They include roads and highways, bridges and causeways, bikeways, trails, and railroad facilities.

6.16.2 Regulations - General

1. Transportation facilities and services shall utilize existing transportation corridors whenever feasible, provided that facility additions and modifications will not adversely impact shoreline resources and are otherwise consistent with this Program. If expansion of the existing corridor will result in significant adverse impacts to shoreline ecological functions, then a less disruptive alternative shall be utilized.
2. Transportation and primary utilities shall be encouraged to make joint use of rights-of-way and to consolidate crossings of water bodies where impacts to the shoreline can be minimized by doing so.

3. In addition to requirements of this section, SMC 21.64.330(B) shall apply.

6.16.3 Regulations - Location and Design

1. Proposed transportation facilities are required to be planned, located, and designed in such a manner that routes will have the least possible adverse effect on unique or fragile shoreline features and will not result in a net loss of shoreline ecological functions or adversely impact existing or planned water-dependent uses and public access.
2. Major new highways, freeways and railways shall be located outside shoreline jurisdiction, EXCEPT where water crossing is required or no other feasible alternative exists. These roads shall cross shoreline areas and water bodies by the shortest, most direct route feasible unless such route would cause more damage to shoreline ecological functions and processes.
3. New transportation facilities shall be located and designed to minimize or prevent the need for shoreline protective measures such as riprap or other bank stabilization, landfill, bulkheads, groins, jetties or substantial site grading. Transportation facilities allowed to cross over water bodies, marshes, bogs and swamps shall utilize elevated, open pile or pier structures whenever feasible. All bridges must be built high enough to allow the passage of debris.
4. Vehicle and pedestrian circulation systems shall be designed to minimize clearing, grading and alteration of topography and natural features. Roadway and driveway alignment shall follow the natural contours of the site and minimize width to the maximum extent feasible.
5. All roads shall be adequately set back from water bodies and shall provide buffer areas of compatible, self-sustaining native vegetation. Shoreline scenic drives and viewpoints may provide breaks in the vegetative buffer to allow open views of the water.
6. All transportation facilities shall be designed, constructed and maintained to contain and control all debris, overburden, runoff, erosion and sediment generated from the affected areas.
7. Bridge abutments and necessary approach fills shall be located landward of wetlands or the OHWM for water bodies without wetlands, PROVIDED bridge piers may be permitted in a water body as a conditional use.
8. Transportation facilities are prohibited in:
 - a. Hazardous areas such as steep slopes or in areas with soils subject to severe erosion or landslide hazard;

- b. Front of feeder bluffs, over driftways, or on accretion shoreforms; or
 - c. Channel migration zones.
9. Roads, railroads and other transportation facilities are prohibited over water, EXCEPT to serve water-dependent or public uses consistent with this program when inland alternatives are unfeasible or for water crossings.
 10. Open pile bridges shall be the preferred water crossing structures in and adjacent to streams supporting salmon and steelhead.

6.16.4 Regulations - Construction and Maintenance

1. Overburden, debris and other waste materials from both construction and maintenance activities, including drainage ditch clearance, shall not be deposited into or sidecast on the shoreline side of roads or in water bodies, wetlands, estuaries, tidelands, accretion beaches and other unique natural areas. Such materials shall be deposited in stable locations where reentry and erosion into such areas is prevented.
2. All shoreline areas disturbed by facility construction and maintenance shall be replanted and stabilized with compatible, self-sustaining vegetation by seeding, mulching or other effective means immediately upon completion of the construction or maintenance activity. Such vegetation shall be maintained by the agency or developer constructing or maintaining the road until established.

6.17 Utilities Uses

6.17.1 Applicability

Utilities are services and facilities that produce, convey, store, or process power, oil, gas, natural gas, sewage, communications, water and the like. 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.

6.17.2 Regulations - General

1. Applications for installation of utilities shall include the following:
 - a. Description of the proposed facilities;
 - b. Reason(s) why the utility requires a shoreline location;
 - c. Alternative locations considered and reasons for their elimination;

- d. Location of other utilities in the vicinity of the proposed project and any plans to include the facilities of other types of utilities in the project;
 - e. Plans for reclamation of areas disturbed both during construction and following decommissioning and/or completion of the primary utilities' useful life;
 - f. Plans for control of erosion and turbidity during construction and operation; and
 - g. Identification of any possibility for locating the proposed facility at another existing utility facility site or within an existing utility right-of-way.
2. Utility development shall, through coordination with local government agencies, provide for compatible, multiple use of sites and rights-of-way where possible. Such uses include shoreline access points, trails and other forms of recreation and transportation systems, provided such uses will not unduly interfere with utility operations or endanger public health and safety.
 3. Nonwater-oriented utility facilities shall be located outside the shoreline jurisdiction unless it can be demonstrated that no feasible alternative option is available. This includes the following facilities, which shall only be authorized by conditional use permit:
 - a. Water system treatment plants;
 - b. Water reclamation plants;
 - c. Desalinization plants;
 - d. Wastewater treatment systems (lines, pump stations, treatment plants);
 - e. Electrical energy generating plants (except for in-stream structures), substations, lines and cables; and
 - f. Petroleum, gas and natural gas pipelines and facilities.
 4. Sewage treatment, water reclamation, and desalinization plants shall be located where they do not interfere with and are compatible with recreational, residential or other public uses of the water and shorelands.
 5. New solid waste disposal sites and facilities are prohibited. All underwater pipelines transporting liquids intrinsically harmful to aquatic life or potentially injurious to water quality are prohibited, except in situations where no other feasible alternative exists. In those limited instances when permitted, automatic shut-off valves shall be provided by the project proponent on both sides of the water body, and pipe sleeves shall be used to facilitate repair without future encroachment on surface waters and

wetlands, unless more feasible or technically superior alternatives exist that provide equivalent protection, as deemed by the Shoreline Administrator.

6. In addition to requirements of this section, SMC 21.64.330(D) and (E) shall apply.

6.17.3 Regulations - Location and Design

1. New utility lines, including electricity, communications and fuel lines, shall be located underground, except where the presence of bedrock or other obstructions make such placement infeasible or placing underground would result in greater adverse environmental impacts or public safety hazards. Furthermore, such lines shall utilize existing rights-of-way and corridors whenever possible. Existing aboveground lines shall be moved underground during normal replacement processes.
2. Underground utility lines shall be completely buried under the river bed in all river or stream crossings EXCEPT where such lines may be affixed to a bridge structure and EXCEPT for appropriate water or wastewater treatment plant intake pipes or outfalls.
3. Where major facilities must be placed in a shoreline area, the location and design shall be chosen so as not to destroy or obstruct scenic views.
4. Utilities that are not water-dependent shall be located outside shoreline buffers unless it is demonstrated that alternative locations and alternative technology are infeasible, or as allowed pursuant to SMC 21.64.330(D) and (E).
5. Permitted overwater utility crossings shall utilize pier or open pile techniques.
6. Utility development shall provide screening of facilities from water bodies and adjacent properties. Screening requirements shall be determined by the City on a case-by-case basis.

6.17.4 Regulations - Water Systems

1. Water system treatment plants should be located outside the shoreline jurisdiction unless it can be demonstrated that no feasible option is available.
2. Underground (or water) utility lines shall be completely buried under the riverbed in all river or stream crossings EXCEPT where such lines may be affixed to a bridge structure and EXCEPT for appropriate water or wastewater treatment plant intake pipes or outfalls.

3. Water intakes shall not be permitted near fish spawning, migratory, or rearing areas.

6.17.5 Regulations - Sewage System

1. Wastewater treatment systems should be located outside the shoreline jurisdiction unless it can be demonstrated that no feasible option is available.
2. Septic fields shall be located landward of all setbacks set by local, county, and state regulations.
3. All new shoreline development within Shelton City limits shall comply with on-site sewage disposal requirements pursuant to SMC Title 14 Sewers. Development within the Urban Growth Area shall comply with appropriate Health Department provisions for treatment of waste.

6.17.6 Regulations - Oil, Gas, and Natural Gas Transmission

1. Petroleum and gas pipelines should be located outside the shoreline jurisdiction unless it can be demonstrated that no feasible option is available.
2. Pipelines for oil, gas, water and other utilities shall:
 - a. Use the best available technology to protect health, safety, and the environment;
 - b. Be routed through sites that are already lacking vegetation, such as existing roadways, or attached to existing bridges, to the greatest extent feasible;
 - c. Avoid critical aquatic habitat to the greatest extent feasible.
3. If crossing beneath a streambed, utilities shall be designed to avoid streambed mobilization and adverse impacts on groundwater flow; be placed in a sleeve or conduit that allows replacement without need for additional excavation; and return grades to existing or better condition that provides for normal floodwater flow.

6.17.7 Regulations - Electrical Energy and Communication System

1. Electrical energy substations, lines and cables shall be located outside the shoreline jurisdiction unless it can be demonstrated that no feasible option is available.

2. Cable crossings for telecommunications and power lines shall:
 - a. Use the best available technology to protect health, safety, and the environment;
 - b. Be routed through sites that are already free of vegetation, such as existing roadways, or attached to existing bridges, to the greatest extent feasible;
 - c. Avoid critical aquatic habitat to the greatest extent feasible; and
 - d. If crossing beneath a streambed, utilities shall be designed to avoid streambed mobilization and adverse impacts on groundwater flow; be placed in a sleeve or conduit that allows replacement without need for additional excavation; and return grades to existing or better condition that provides for normal floodwater flow.

6.17.8 Regulations - Power Generation Facility

1. Electrical energy generating plants shall be located outside the shoreline jurisdiction unless it can be demonstrated that no feasible option is available.
2. Power generating facilities shall comply with all policies and regulations contained in this Master Program (see Section 6.19 Floodplain Management, Flood Control Works, and In-stream Structures) and shall require approval of a shoreline conditional use permit in all environment designations.

6.18 Dredging and Dredge Material Disposal

6.18.1 Applicability

Dredging is the removal or displacement of earth or sediments such as gravel, sand, mud or silt and/or other materials or debris from any stream, river, lake or marine water body and associated wetlands. Dredging is normally done for specific purposes or uses such as construction or maintenance of canals, navigation channels, turning basins, harbors and marinas, and for installing pipelines or cables, for dike or drainage system repair and maintenance.

Dredge material disposal is the depositing of dredged materials on land or into water bodies for the purpose of either creating new or additional lands for other uses or disposing of the byproducts of dredging.

6.18.2 Regulations - General

1. Dredging and dredge material disposal shall be done in a manner which avoids or minimizes significant ecological impacts. Impacts which cannot be avoided should be mitigated in a manner that assures no net loss of ecological function.
2. New development shall be sited and designed to avoid, or if that is not possible, to minimize the need for new maintenance dredging.
3. Applications for shoreline dredging and dredge material disposal may be required to provide the following types of information:
 - a. Physical, chemical and biological assessment of the proposed dredged material applicable to the particular dredging site. Information needed will vary depending upon:
 - i. existing biological communities or resources in the area;
 - ii. the possibility of significant sediment contamination; and
 - iii. the suitability of the proposed dredge disposal site. Specific data to be considered include:
 1. Physical - Grain size, clay, silt, sand or gravel as determined by sieve analysis.
 2. Chemical - Including conventional parameters, metals, and organics.
 3. Biological - Bioassays useful in determining the suitability of dredged material for a selected disposal option.
 - b. Dredging volumes, methods, schedule, frequency, hours of operation and procedures;
 - c. Method of disposal, including the location, size, capacity and physical characteristics of the disposal site, transportation method and routes, hours of operation, schedule;
 - d. Location and stability of bedlands adjacent to proposed dredging area;
 - e. Hydraulic analyses, including tidal fluctuation, current flows, direction and projected impacts. Hydraulic modeling studies are required for large scale, extensive dredging projects, particularly in estuaries, in order to identify existing geohydraulic-hydraulic patterns and probable effects of dredging;
 - f. Assessment of water quality impacts; and

- a. For navigation or navigational access only when necessary for assuring safe and efficient accommodation of existing navigational uses and only when significant ecological impacts are minimized and mitigated; or
 - b. In conjunction with water-dependent use of water bodies or adjacent shorelands; or
 - c. Ecological restoration and enhancement projects benefitting water quality and/or fish and wildlife habitat; or
 - d. Environmental cleanup activities required under Model Toxics Control Act or Comprehensive Environmental Response, Compensation, and Liability Act; or
 - e. In conjunction with a bridge, navigational structure or wastewater treatment facility for which there is a documented public need and where other feasible sites or routes do not exist; or
 - f. Maintenance dredging for the purpose of restoring previously permitted or authorized hydraulic capacity of a stream or river. Maintenance dredging of established navigation channels and basins is restricted to maintaining previously dredged and/or authorized locations, depths, and widths.
2. The City may permit dredging for flood management purposes only when the project proponent demonstrates that:
 - a. The dredging is a required component of a county and/or City-approved comprehensive flood management plan, or
 - b. The dredging has a long-term benefit to public health and safety and will not cause a net loss of ecological functions and processes.
 3. New nonwater-dependent development that would result in the need for new dredging shall be prohibited.
 4. When dredging is permitted, the dredging shall be the minimum necessary to accommodate the proposed use.
 5. Dredging shall utilize techniques that cause minimum dispersal and broadcast of bottom material.
 6. New dredging activity is prohibited in the following locations:
 - a. In estuaries except by conditional use permit;
 - b. Along net positive drift sectors and where geohydraulic-hydraulic processes are active and accretion shore forms would be damaged, altered or irretrievably lost;

- c. In shoreline areas with bottom materials that are prone to significant sloughing and refilling due to currents or tidal activity, which result in the need for continual maintenance dredging; or
 - d. In habitats identified as critical to the life cycle of officially designated or protected fish, shellfish or wildlife.
7. Dredging waterward of the ordinary high water mark for the primary purpose of obtaining material for landfill shall not be allowed except when the material is necessary for the restoration of ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the ordinary high water mark. The project must either be associated with a MTCA or CERCLA habitat restoration project or, if approved through a shoreline conditional use permit, any other habitat enhancement project.

6.18.4 Regulations - Dredge Material Disposal

1. Disposal of dredged material may be accomplished at approved contained upland disposal sites.
2. Dredge disposal within river channel migration zones shall only be authorized when part of an approved shoreline restoration project, and requires a Conditional Use Permit.
3. Individual disposal operations shall comply with the Washington Department of Natural Resources leasing practices, Washington Department of Ecology Water Quality Certification process, Washington Department of Fish and Wildlife Hydraulic Project Approval, Mason County regulations for solid waste disposal, and the U.S. Army Corps of Engineers permit requirements.
4. Depositing dredge materials in water areas other than Puget Sound Dredged Disposal Analysis sites shall be allowed only by conditional use permit for one or more of the following reasons:
 - a. For wildlife habitat improvement;
 - b. To correct problems of material distribution adversely affecting fish and shellfish resources;
 - c. For permitted beach enhancement;
 - d. When the alternative of depositing material on land is demonstrated to be more detrimental to shoreline resources than depositing it in water areas; or
 - e. For the implementation of adopted regional interagency dredge material management plans or watershed management planning.

5. Disposal, if allowed in water, shall utilize techniques that cause the least dispersal and broadcast of materials unless specifically designed and approved as a dispersal site.
6. Use of dredge materials for beach enhancement shall be conducted so that:
 - a. Erosion or deposition downstream from the disposal site does not occur. Erosion of the dredged material shall not smother marsh or other shallow or nearshore productive areas.
 - b. To the extent possible, the volume and frequency of dredged material disposal maintains a stable beach profile. Dredged material shall be graded at a uniform slope and contoured to reduce cove and peninsula formation and to minimize stranding of juvenile fish.
7. When dredge material is deposited on land it shall be considered fill and subject to all applicable fill regulations.

6.19 Floodplain Management, Flood Control Works and In-stream Structures

6.19.1 Applicability

Floodplain management involves actions taken with the primary purpose of preventing or mitigating damage due to flooding. It can involve site design, land use controls and zoning to control development, either to reduce risks to human life and property or to prevent development from contributing to the severity of flooding. Floodplain management can also address the design of developments to reduce flood damage and the construction of flood controls, such as dikes, dams, engineered floodways, and bioengineering.

Flood control works are structural floodplain management measures that include modifications such as dikes, levees, revetments and floodwalls.

In-stream structures function for the impoundment, diversion, or use of water for hydroelectric generation and transmission (including both public and private facilities), flood control, irrigation, water supply (both domestic and industrial), recreation or fisheries enhancement. In-stream structures and their support facilities are covered in this section. The following regulations apply to the construction, operation and maintenance of in-stream structures, as well as the expansion of existing structures and support facilities.

6.19.2 Regulations - Floodplain Management and Flood Control Works

1. To determine that the provisions of this section are fully addressed, the City may require one or more technical studies/reports prepared by a licensed professional engineer and/or qualified biologist, as applicable, at the time of permit application for flood hazard management projects and programs unless the City determines that issues are adequately addressed via another regulatory review process. Technical reports required pursuant to this section may include any of the following.
 - a. River channel hydraulics and river channel characteristics up and downstream from the project area;
 - b. Existing shoreline stabilization and flood protection works within the area;
 - c. Description of the physical, geological and soil characteristics of the area;
 - d. Description of biological resources and predicted effects of the project on fish, vegetation and animal habitat associated with shoreline ecological functions and processes;
 - e. Predicted impact upon area shore and hydraulic processes, adjacent properties and shoreline and water uses;
 - f. Analysis of alternative flood protection measures including both structural and nonstructural;
2. Conditions of Hydraulic Project Approval, issued by the Washington State Department of Fish and Wildlife, may be incorporated into permits issued for flood protection.
3. The City shall require a professional engineer in the design of flood protection works where such projects may cause interference with normal river geohydraulic processes, leading to erosion of other upstream and downstream shoreline properties, or adverse effects to shoreline resources and uses. The design shall be consistent with the Department of Fish and Wildlife Aquatic Habitat Guidelines and other applicable guidance and regulatory requirements.
4. Flood control structures may be allowed when consistent with this Program and when there is credible engineering and scientific evidence that:
 - a. They are necessary to protect existing, lawfully established development; and

- b. They are consistent with SMC Chapter 18.10 Flood Damage Prevention; and
 - c. Nonstructural flood hazard reduction measures are infeasible; and
 - d. Proposed measures are consistent with an adopted comprehensive flood hazard management plan, if available.
5. When allowed, dikes, levees, floodwalls and similar structures must comply with the following:
 - a. Diking is set back to the edge of the OHWM at a minimum except for weirs, current deflectors and similar structures whose primary purpose is to protect public bridges, roads, and other public infrastructure;
 - b. Timing and construction shall be coordinated with Washington Department of Fish and Wildlife;
 - c. Diking shall be designed and constructed to meet Soil Conservation Service technical manual standards and shall, at a minimum include (1) layered compaction, (2) removal of debris (tree stumps, tires, etc.), and (3) revegetation and maintenance until ground cover is established; and
 - d. Appropriate vegetation management actions are undertaken.
6. New dikes, levees and similar structures shall be placed landward of channel migration zones, designated floodways, designated habitat conservation areas, critical area buffers, associated wetlands, and established public access or recreational facilities, or other public benefit, except when the project's primary purpose is to improve ecological functions and done in a manner consistent with Section 6.19.2 Regulation #5, above.
7. Flood protection measures that alter, reroute or change the natural water course of the shoreline may be approved as a conditional use only if it is demonstrated that other flood protection and planning measures would be insufficient. Alternative measures to be analyzed shall include bioengineering techniques, restrictions to development, shoreline setbacks, and comprehensive land use planning.
8. Flood control structures shall be designed to allow for normal groundwater movement and surface runoff. Natural in-stream features such as snags, uprooted trees, or stumps should be left in place unless they are actually causing bank erosion or higher flood stages.
9. The removal of gravel for flood management purposes shall be consistent with an adopted flood hazard reduction plan and allowed only after a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of

ecological functions, and is part of a comprehensive flood management solution.

10. In addition to requirements of this section, SMC 21.64.330(G) shall apply.

6.19.3 Regulations – In-stream Structures

1. In-stream structures shall provide for the protection and preservation of ecosystem-wide processes, ecological functions, and cultural resources, including, but not limited to, fish and fish passage, wildlife and water resources, hydrogeological processes, and shoreline critical areas.
2. The location and planning of in-stream structures shall give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.
3. In-stream structures shall be designed, located, and constructed in such a manner as to avoid extensive topographical alteration and preserve natural scenic vistas.
4. All in-water diversion structures shall be designed to permit the natural transport of bedload materials. All debris, overburden and other waste materials from construction shall be disposed of in such a manner that prevents their entry into a water body.
5. In-stream structures and their support facilities shall be located and designed to avoid and minimize the need for structural shoreline stabilization.
6. Natural in-stream and in-water features such as snags, uprooted trees, or stumps shall be left in place unless it can be demonstrated that they are not enhancing shoreline function or are a threat to public safety. In-stream structures may be required to provide public access consistent with Section 5.12. Public access provisions shall include, but not be limited to, any combination of trails, vistas, parking, and any necessary sanitation facilities.
7. In addition to requirements of this section, SMC 21.64.330(J) shall apply.

6.20 Shoreline Restoration and Enhancement

6.20.1 Applicability

Restoration and enhancement involves the reestablishment or upgrading of impaired ecological shoreline processes or 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.

6.20.2 Regulations

1. Shoreline enhancement may be permitted if the project proponent demonstrates that no significant change to littoral drift or river current will result that will adversely affect adjacent properties or habitat.
2. Shoreline restoration and/or enhancement projects shall use best available technology and shall demonstrate that they are compatible with the functions of nearby restoration and enhancement sites.
3. Beach restoration and/or enhancement shall **not**:
 - a. Extend waterward more than the minimum amount necessary to achieve the desired result.
 - b. Create “additional dry land”.
 - c. Disturb significant amounts of valuable shallow water fish or wildlife habitat without appropriate mitigation.
4. Shoreline enhancement is prohibited in spawning, nesting or breeding habitat that would be adversely affected by the enhancement efforts.
5. Shoreline enhancement is prohibited where potential dispersal of enhancement materials from littoral drift will adversely affect adjacent spawning, nesting, or breeding habitat.
6. Beach enhancement is prohibited where it will significantly interfere with the normal public use of the navigable waters of the state without appropriate mitigation.
7. Restoration projects shall include a maintenance and monitoring plan, as well as a contingency plan in the event that said project does not achieve its intended objective.
8. Approval of restoration projects shall be based on a review of a plan containing an analysis of existing conditions, identification of the area to be restored, proposed corrective actions, including installation of native species, performance standards, monitoring schedule, planting plans, erosion and sedimentation control plans, and grading plans as necessary.

9. Shoreline restoration and/or enhancement projects may include shoreline modification actions such as modification of vegetation, shoreline stabilization, dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.

6.21 Shoreline Stabilization

6.21.1 Applicability

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

Nonstructural methods include building setbacks, relocation of the structure to be protected, groundwater management, planning and regulatory measures to avoid the need for structural stabilization. "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 biotechnical vegetation measures or beach enhancement. There is a range of measures varying from soft to hard that include:

- Vegetation enhancement;
- Upland drainage control;
- Biotechnical measures;
- Beach enhancement;
- Anchor trees;
- Gravel placement;
- Rock revetments;
- Gabions;
- Concrete groins;
- Retaining walls and bluff walls;
- Bulkheads; and
- Seawalls.

Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions.

6.21.2 Regulations – General

1. Permitted shoreline stabilization shall demonstrate that it results in no net loss of ecological function.

2. New development shall be located and designed to avoid the need for future shoreline stabilization to the extent feasible.
3. Subdivision of land must be regulated to assure that the lots created will not require shoreline stabilization in order for reasonable development to occur using geotechnical analysis of the site and shoreline characteristics.
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. New development that would require shoreline stabilization which causes significant impacts to adjacent or down-current properties and shoreline areas shall not be allowed.
6. New structural stabilization measures shall not be allowed except when necessity is demonstrated in the following manner:
 - b. To protect existing primary structures:
 - i. New or enlarged structural shoreline stabilization measures for an existing primary structure, including residences, should not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the structure is in danger from shoreline erosion caused by tidal action, currents, or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis should evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization.
 - c. In support of new nonwater-dependent development, including single-family residences, when all of the conditions below apply:
 - i. The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.
 - ii. Nonstructural measures, such as placing the development farther from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as tidal action, currents, and waves.
 - d. In support of water-dependent development when all of the conditions below apply:

- i. The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.
 - ii. Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report.
 - iv. The erosion control structure will not result in a net loss of shoreline ecological functions.
 - e. To protect projects for the restoration of ecological functions or hazardous substance remediation projects pursuant to Chapter 70.105D RCW when all of the conditions below apply:
 - i. Nonstructural measures, planting vegetation, or installing on-site drainage improvements are not feasible or not sufficient.
 - ii. The erosion control structure will not result in a net loss of shoreline ecological functions.
7. An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.
 - a. The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.
 - b. Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark or existing structure unless there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.
 - c. Where a net loss of ecological functions associated with critical saltwater habitats would occur by leaving the existing structure, remove it as part of the replacement measure.
 - d. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high water mark.
 - e. For purposes of this section standards on shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

8. Geotechnical reports pursuant to this section that address the need to prevent potential damage to a primary structure shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation. As a general matter, hard armoring solutions should not be authorized except when a report confirms that there is a significant possibility that such a structure will be damaged within three (3) years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions. Thus, where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as the three (3) years, that report may still be used to justify more immediate authorization to protect against erosion using soft measures.
9. When any structural shoreline stabilization measures are demonstrated to be necessary per Section 6.21.2, the following requirements shall be met.
 - a. Limit the size of stabilization measures to the minimum necessary. Use measures designed to assure no net loss of shoreline ecological functions. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
 - b. 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 in section 5.12. Where feasible, incorporate ecological restoration and public access improvements into the project.
 - c. Mitigate new erosion control measures, including replacement structures, on feeder bluffs or other actions that affect beach sediment-producing areas to avoid and, if that is not possible, to minimize adverse impacts to sediment conveyance systems. Where sediment conveyance systems cross jurisdictional boundaries, local governments should coordinate shoreline management efforts. If beach erosion is threatening existing development, local governments should adopt Master Program provisions for a beach management district or other institutional mechanism to provide comprehensive mitigation for the adverse impacts of erosion control measures.
10. In addition to requirements of this section, SMC 21.64.330(F) shall apply.

6.21.3 Regulations – Bioengineered Stabilization

1. The City shall require and utilize the following information, in addition to the standard permit information required by Chapter 2 Applicability, Shoreline Permits and Exemptions, in its review of all bioengineering stabilization projects:
 - a. Proposed construction timing;
 - b. Hydrologic analysis, including predicted flood flows;
 - c. Site vegetation, soil types, and slope stability analysis;
 - d. Proposed project materials including rock size, shape and quantity, plant types, and soil preparations;
 - e. Existing and proposed slope profiles, including location of ordinary high water mark;
 - f. Proposed designs for transition areas between the project site and adjacent properties; and
 - g. Documentation (including photos) of existing (pre-construction) shoreline characteristics.
2. The installation of bioengineering projects shall be scheduled to minimize impacts to water quality, fish and wildlife habitat, and aquatic and upland habitat and to optimize survival of new vegetation.
3. All bioengineered projects shall be designed by a Professional Engineer or Licensed Engineering Geologist in accordance with best available science and use a diverse variety of native plant materials including but not limited to trees, shrubs, forbs, and grasses, unless demonstrated infeasible for the particular site.
4. Cleared areas shall be replanted following construction. Vegetation shall be fully reestablished within three (3) years. Areas that fail to adequately reestablish vegetation shall be replanted with approved plants until the plantings are viable.
5. All bioengineering projects shall be monitored and maintained as necessary. Areas damaged by pests and/or the elements shall be promptly repaired.

6.21.4 Regulations - Revetments

1. The City shall require professional design of the proposed revetment if it is determined there are sufficient uncertainties, such as:
 - a. Inadequate data on local geophysical conditions;

- b. Inadequate data on stream flow, velocity, and/or flood capacity; and
 - c. Effects on adjacent properties.
2. Riprap shall be constructed using techniques and materials that will enhance natural shoreline values and functions, including fish and wildlife habitat, water quality, vegetation, and aesthetics. Materials that will not be allowed are sand-cement bags, paving or building blocks, and gabions.
3. When permitted, the siting and design of revetments shall be performed using appropriate engineering principles, including guidelines of the U.S. Soil Conservation Service and the U.S. Army Corps of Engineers.

6.21.5 Bulkheads

6.21.5.1 *General Regulations*

1. Bulkhead design and development shall conform to all other applicable state agency policies and regulations including the Department of Fish and Wildlife criteria governing the design of bulkheads. Consideration shall be given to design techniques such as vegetation coverage to enhance fish migration and wildlife habitat.
2. Bioengineered stabilization techniques such as those using natural materials and processes such as protective berms, drift logs, brush, beach feeding or vegetative stabilization are preferred over hard stabilization techniques and shall be utilized to the maximum extent feasible.

6.21.5.2 *Location*

1. Bulkheads shall not be located on shores where valuable geohydraulic-hydraulic or biological processes are sensitive to interference and critical to shoreline conservation.
2. Bulkheads are to be permitted only where local physical conditions such as foundation bearing material, surface and sub-surface drainage are suitable for such alterations.

6.21.5.3 *Design*

1. Bulkheads shall be designed with the minimum dimensions necessary to adequately protect the development.
2. Bulkheads shall be designed to permit the passage of surface or groundwater without causing ponding or saturation of retained soil/materials.

3. Adequate toe protection consisting of proper footings, a fine retention mesh, etc., shall be provided to ensure bulkhead stability without relying on additional riprap.
4. Materials used in bulkhead construction shall meet the following standards:
 - a. Bulkheads shall utilize stable, nonerodible, homogeneous materials such as concrete, wood, rock, riprap or other suitable material that will accomplish the desired end with the maximum preservation of natural shoreline characteristics.
 - b. Bulkhead materials shall take into account habitat protection and aesthetics, including consideration of Washington Department of Fish and Wildlife criteria.