

SHORT COURSE STUDY CITY OF GOLD BAR SHORELINE MANAGEMENT PLAN

**CITY COUNCIL MEETING
MAY 21, 2013**

The following sections of the Environment Designations, Policies & Regulations document are the principal points to be covered at the Council Meeting. The maps will be reviewed also.

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| CHAPTER 2 | ENVIRONMENT DESIGN PROVISIONS
Complete section, pages 7 – 15 |
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Department of Ecology

Grant No. G1000017



City of Gold Bar

Shoreline Master Program

Environment Designations, Policies & Regulations

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Chapter 2: Environment Designation Provisions

A. Introduction to Shoreline Environment Designations

The basic intent of a shoreline environment designation is to preserve and enhance shoreline ecological functions and to encourage development that will enhance the present or desired future character of the shoreline. Shoreline segments are given an environment designation based on existing development patterns, biological capabilities and limitations, and consistency with the City's Comprehensive Plan and zoning.

The City has adopted five designations:

1. **"High Intensity"** is appropriate for areas of high intensity water-oriented commercial, transportation, and industrial development.
2. **"Shoreline Residential"** is intended to accommodate residential development, and appropriate public access and recreational uses consistent with other elements of the SMP.
3. **"Urban Conservancy"** is a designation designed to protect and restore the ecological functions of open space, floodplain, and other sensitive lands where they exist in urban and developed areas.
4. **"Natural"** is intended to protect shorelines that remain relatively free of human influence or that include intact or minimally degraded shoreline functions that cannot support human use.
5. **"Aquatic"** is a designation intended to protect, restore, and manage the areas waterward of the ordinary high water mark (OHWM).

B. Need for Consistency

The SMA requires that policies for lands adjacent to the shorelines be consistent with the SMA and the local SMP. Conversely, local comprehensive plans provide the underlying framework within which SMP provisions should fit. The Growth Management Act (GMA) requires that SMP policies be incorporated as an element of the comprehensive plan, and that all elements be internally consistent. In addition, under the GMA, all development regulations must be consistent with the comprehensive plan. The City's SMP was developed to be consistent with its adopted comprehensive plan and development regulations.

C. City of Gold Bar's Shoreline Environment Designations & Map

This SMP establishes five shoreline environments for the City. These environments are derived from the *Shoreline Analysis Report: Including Shoreline Inventory and Characterization for City of Gold Bar's Shorelines: Skykomish River, Wallace River, and May Creek*, the City's Comprehensive Plan, and the environments recommended by the SMA and the Shoreline Guidelines. The City's *Shoreline Analysis Report* provided an inventory of natural and built conditions within the City's shoreline jurisdiction. The conditions identified in the inventory have been compared with the recommended shoreline environments and the most appropriate environments selected. The five (5) City shoreline environment designations in order of most intensive to least intensive are:

1. High Intensity,
2. Shoreline Residential,
3. Urban Conservancy,
4. Natural, and
5. Aquatic

These shoreline environments are illustrated for the City in Figure 15 located in Appendix 1, and described in the text below. Each shoreline environment description includes a definition and statement of purpose, followed by designation criteria, management policies, and development standards specific to that shoreline environment. Shoreline development standards are summarized in Table 2 in Chapter 4 and regulations that apply throughout the SMP (except where specifically provided) are included at the end of this Chapter.

D. Shoreline Areas Not Mapped or Designated

Any undesignated shorelines in the City are assigned automatically an Urban Conservancy shoreline environment designation. This includes any areas that are annexed into the City that fall within the City's shoreline jurisdiction. The SMP does not apply to annexed areas unless the City complies with the requirements of WAC 173-26-150 and -160.

E. Policies and Regulations

1. High Intensity Environment

a. Purpose

The purpose of the High Intensity shoreline environment designation is to provide for high intensity water-oriented commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded.

b. Designation Criteria

A High Intensity shoreline environment designation should be assigned to shoreline areas where one or both of the following characteristics apply:

1. They currently support high intensity uses related to commerce or transportation; or
2. They are suitable for high intensity water-oriented uses.

c. Designated Areas

Description

1. The High Intensity shoreline environment designation is assigned to those areas directly south of State Route 2 to the railroad tracks as well as an area extending approximately from Powell Lane to Smeltzer Road along the south bank of May Creek.

d. Management Policies

1. First priority should be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses. New non-water oriented uses are not prohibited if they do not conflict with or limit opportunities for water oriented uses or where there is no direct access to the shoreline
2. Full utilization of existing urban areas should be achieved before further expansion of intensive development is allowed.
3. Assure no net loss of shoreline ecological functions occurs because of new development. Where applicable to comply with any relevant state and federal law, new developments should include environmental cleanup and restoration of the shoreline.
4. Visual and physical access should be required where feasible with physical access prioritized over visual access.
5. Aesthetic objectives should be implemented by means such as appropriate development siting, screening, and architectural standards, and maintenance of natural vegetative buffers.
6. Development should be located, sited, designed, and maintained to protect, enhance, and be compatible with the shoreline environment.
7. Development regulations should require the preservation of ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

8. Low impact development (LID) techniques, such as minimizing effective impervious surfaces, infiltration of run-off, use of green roofs and pervious pavers, and other techniques, should be encouraged.
9. New development should be required to preserve and enhance native shoreline vegetation and use environmentally friendly landscaping practices, and existing development should be encouraged to do likewise. Incentives, information, and other assistance should be considered.

2. Shoreline Residential Environment

a. Purpose

The Shoreline Residential shoreline environment designation is designed to provide for residential uses where necessary facilities for development can be provided. An additional purpose is to provide public access and recreational uses.

b. Designation Criteria

The Shoreline Residential shoreline environment is assigned to shoreline areas that are predominantly single-family or multi-family residential development or are planned and platted for residential development.

c. Designated Areas

Description

The Shoreline Residential shoreline environment includes the following areas:

1. The south bank of the Wallace River from the western city limits to the first area of unincorporated Snohomish County;
2. Portions of May Creek, extending from the northwest city limits along the north and south banks to First Street, excluding a portion of the south bank designated as High Intensity shoreline environment designation;
3. The south bank of May Creek from First Street east until the Urban Conservancy shoreline environment designation just before the creek makes a tangent to the south;
4. The south bank of May Creek from the eastern City limits until the Urban Conservancy shoreline environment designation just before the creek makes a tangent to the south; and
5. A small portion exists along the north bank of May Creek south of May Creek Place surrounded on three sides by the Urban Conservancy shoreline environment designation.

d. Management Policies

1. Residential activities are preferred over other land and resource consumptive development or uses.
2. Limited non-residential uses, such as parks and home occupation businesses may be allowed, provided they are consistent with the residential character.
3. Development should be located, sited, designed, and maintained to protect, enhance, and be compatible with the shoreline environment.
4. Ecological functions should be preserved by establishing development standards for density or minimum frontage width, setbacks, lot coverage limitations, buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality to assure no net loss of shoreline ecological functions. These regulations should take into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.
5. LID techniques, such as minimizing effective impervious surfaces, infiltration of run-off, use of green roofs and pervious pavers, and other techniques, should be encouraged.
6. New development should be required to preserve and enhance native shoreline vegetation and use environmentally friendly landscaping practices, and existing development should be encouraged to do likewise. Incentives, information, and other assistance should be considered.
7. Multi-family developments, residential developments containing four (4) or more lots and recreational developments should provide public access and joint use for community recreational facilities.
8. Access, utilities, and public services should be available and adequate to serve existing needs and and/or planned future development.
9. Assure no net loss of shoreline ecological functions because of new development. Where applicable, include environmental cleanup and restoration of the shoreline in new developments and comply with any relevant state and federal law.

3. Urban Conservancy Environment

a. Purpose

The purpose of the Urban Conservancy shoreline environment designation is to protect and restore ecological functions of open space and other sensitive lands where they exist in urban and developed settings, while allowing a variety of water-oriented uses and uses consistent with effective environmental management. The designation will provide for ecological protection and rehabilitation in relatively undeveloped shoreline areas anticipated for or containing existing forested area,

agricultural, recreation, and open space uses and limited development suitable to lands characterized by ecological and flood hazard constraints.

b. Designation Criteria

Include within the Urban Conservancy shoreline environment designation those shorelines and shoreland areas that most closely match the following characteristics:

1. They are suitable for water-related or water-enjoyment uses;
2. Areas containing extensive forested and recreational uses;
3. They are open space, flood plain, wetland or wetland buffer, stream buffer or other sensitive areas that should not be more intensively developed;
4. They have the potential for development that is compatible with ecological restoration;
5. Areas with existing non-water dependent shoreline development that will not be expanded;
6. They have potential for ecological restoration;
7. Areas that retain important ecological functions, even though partially developed;
or
8. Newly annexed areas where there is no designation.

c. Designated Areas

Description

The Urban Conservancy shoreline environment designation is assigned to the shoreline areas along the north bank of May Creek from 1st Street East to the City boundary, and along the south bank of the Wallace River from the City's boundary with Snohomish County to the easternmost City boundary.

d. Management Policies

1. Uses that preserve the natural character of the area or promote preservation of forested areas, open space, floodplain, or critical areas directly or over the long-term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
2. Standards should be established for vegetation conservation, water quality, and shoreline modifications within the 'Urban Conservancy' designation. These standards should ensure that new development does not result in a net loss of shoreline ecological functions or degrade other shoreline values.
3. Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.

4. LID techniques, such as minimizing effective impervious surfaces, infiltration of run-off, use of green roofs and pervious pavers, and other techniques, should be encouraged.
5. New development should be required to preserve and enhance native shoreline vegetation and use environmentally friendly landscaping practices, and existing development should be encouraged to do likewise. Incentives, information, and other assistance should be considered.
6. Assure no net loss of shoreline ecological functions because of new development. Where applicable, include environmental cleanup and restoration of the shoreline in new developments and comply with any relevant state and federal law.
7. Water-oriented uses should be given priority over non-water oriented uses.
8. Non-water oriented uses should not be allowed except in the following cases:
 - a) In limited situations where they do not conflict with or limit opportunities for water-oriented uses and non-mixed uses or on site where there is no direct access to the shoreline or the water body is not navigable; or
 - b) Where the site is separated physically from the shoreline by another property or public right-of-way.

4. Natural Environment

a. Purpose

The Natural shoreline environment designation is assigned to protect those shoreline areas within the City that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use.

b. Designation Criteria

Include within the Natural environment those shorelines and shoreland areas that most closely match one of the following three characteristics:

1. The shoreline is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity;
2. The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or
3. The shoreline is unable to support new development or uses without significant adverse impacts to ecological functions or risk to human safety.

c. Designated Areas

Description

The Natural shoreline environment designation is assigned to portions of the shoreline areas along the Skykomish River south of the existing railroad tracks as well as the east and west banks of the south fork of May Creek.

d. Management Policies

1. The following uses should be allowed in the Natural shoreline environment designation: low-intensity agriculture and in-stream structures as part of a fish habitat enhancement project. Water-oriented recreational development, commercial forestry, and single-family dwellings require a conditional use permit.
2. Low intensity public uses such as scientific, historical, cultural, and educational research uses should be allowed if ecological impacts are avoided.
3. Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed except where necessary to achieve the objectives of RCW 90.58.020, and then only when their impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) as necessary to assure no net loss of ecological functions.
4. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
5. Assure no net loss of shoreline ecological functions because of new development. Where applicable, include environmental cleanup and restoration of the shoreline in new developments and comply with any relevant state and federal law.

5. Aquatic Environment

a. Purpose

The Aquatic shoreline environment designation is assigned to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM.

b. Designation Criteria

All lands waterward of the OHWM shall be assigned an Aquatic shoreline environment designation.

c. Designated Areas

Description

All lands waterward of the OHWM in the Skykomish River, Wallace River, and May Creek shall be assigned an Aquatic shoreline environment designation.

d. Management Policies

1. Aside from bridges for motorized or non-motorized uses, new over-water structures are allowed only for water-dependent uses, public access, or ecological restoration.
2. The size of new bridges for motorized or non-motorized uses should be limited to the minimum necessary to support the structure's intended use.
3. In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple uses of over-water bridges for motorized or non-motorized uses should be encouraged.
4. Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed except where necessary to achieve the objectives of RCW 90.58.020, and then only when their impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) as necessary to assure no net loss of ecological functions.
5. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
6. The location and design of all developments and uses should minimize interference with surface navigation, consider impacts to public views, and allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
7. Assure no net loss of shoreline ecological functions because of new development. Where applicable, include environmental cleanup and restoration of the shoreline in new developments and comply with any relevant state and federal law.

3. Significant archaeological and historic resources shall be preserved permanently for scientific study, education, and public observation. When the City's Shoreline Administrator determines that a site has significant archeological, natural scientific or historical value, a shoreline substantial development Permit and/or any other permit authorizing development or land modification shall not be issued which would pose a threat to the site. The City's Shoreline Administrator may require that a site be redesigned or that development be postponed in such areas to allow investigation of public acquisition potential, potential for adaptive new uses or management practices, retrieval and preservation of significant artifacts, or another course of action appropriate for the location and circumstances.
4. In the event that unforeseen factors constituting an emergency as defined in RCW 90.58.030 necessitate rapid action to retrieve or preserve artifacts or data identified above, the project may be exempted from the permit requirement of these regulations. The City's Shoreline Administrator shall notify Ecology, the State Attorney General's Office, and the DAHP of such a waiver in a timely manner.
5. Archaeological sites located both in and outside the shoreline jurisdiction are subject to RCW Chapter 27.44 (Indian Graves and Records) and RCW Chapter 27.53 (Archaeological Sites and Records) and shall comply with WAC Chapter 25-48 or its successor as well as the provisions of this SMP.
6. Identified historical or archaeological resources shall be considered in park, open space, public access, and site planning with access to such areas designed and managed to give maximum protection to the resource and surrounding environment.
7. Clear interpretation of significant archaeological and historic resources shall be provided when and where appropriate.

3. Critical Areas CHAPTER 3

a. Applicability

The Critical Areas Code (CAO), Ordinance No. 593 (2005) as codified under Chapter 18.08 of the Gold Bar Municipal Code (GBMC), regulates critical areas such as wetlands, critical aquifer recharge areas, geologically hazardous areas, fish and wildlife habitat conservation areas, and frequently flooded areas in the shoreline jurisdiction. The CAO, as amended, is herein incorporated into this SMP except as noted in the policies and regulations below.

b. Policies

1. If there is a conflict between the provisions of the CAO and other parts of the SMP, the provisions most protective of the shoreline jurisdiction shall apply, as determined by the City's Shoreline Administrator.
2. Provisions of the CAO that are not consistent with the SMA, RCW Chapter 90.85, and supporting WAC Chapters shall not apply in the shoreline jurisdiction, as follows:
 - a) The provisions of the CAO do not extend the shoreline jurisdiction beyond the limits specified in this SMP. For regulations addressing critical area buffer areas that are outside the shoreline jurisdiction, see the City's CAO.
 - b) Certain provisions of the CAO relating to Critical Areas do not apply within the shoreline jurisdiction, and certain CAO Sections are hereby excepted in this SMP and in the shoreline jurisdictions to which this SMP pertains. Excepted CAO Sections and appropriate replacement regulations are detailed in the following regulations Section for Critical Areas, and are based on Best Available Science (BAS) conclusions regarding effective management of critical and sensitive areas.
 - c) Shoreline variance procedures and criteria have been established in this SMP, Chapter 6, Section I, and in WAC 173-27-170(4).
3. Provisions of the CAO that create exemptions not authorized by the SMA shall not apply in the shoreline jurisdiction.

c. Regulations

1. Wetlands
 - a) Identification of wetlands and delineation of their boundaries pursuant to this Chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements.
 - b) The CAO Chapter 5.1(B) wetlands rating system is amended in this SMP as follows. Wetland ratings in the shoreline jurisdiction shall be conducted per the 2004 Ecology Washington State Wetland Rating System for Western Washington, Publication #04-06-25, or as revised by Ecology in the future.
 - c) The CAO Chapter 5.2(B) regarding water dependent uses allowed in Category II and III wetlands is excepted from this SMP.
 - d) The CAO Chapter 5.2(D)(1) regarding standard buffer widths is amended in this SMP, as follows. Properly protective wetland buffers within the shoreline jurisdiction areas will follow Ecology's BAS guidelines, per Appendix A of the Wetlands Guidance for Small Cities Western Washington Version:

- 1) Buffer Requirements. The standard buffer widths in Table 1 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington state wetland rating system for western Washington.
- 2) The use of the standard buffer widths requires the implementation of the measures in Table 2, where applicable, to minimize the impacts of the adjacent land uses.
- 3) If an applicant chooses not to apply the mitigation measures in Table 2, then a 33% increase in the width of all buffers is required. For example, a seventy-five (75) foot buffer with the mitigation measures would be a one hundred (100) foot buffer without them.
- 4) The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should be planted to create the appropriate plant community, or the buffer should be widened to ensure that adequate functions of the buffer are provided.
- 5) Additional buffer widths are added to the standard buffer widths depending on habitat function scores in the wetland rating. For example, a Category I wetland scoring 32 points for habitat function would require a buffer of two hundred and twenty-five (225 feet) (75 feet + 150 feet).

Table 1 - Wetland Buffer Requirements

Category of Wetland	Standard Buffer Width	Additional buffer width if wetland scores 21-25 habitat points	Additional buffer width if wetland scores 26-29 habitat points	Additional buffer width if wetland scores 30-36 habitat points
Category I: Based on total score	75 feet	Add 30 feet	Add 90 feet	Add 150 feet
Category I: Bogs	190 feet	NA	NA	Add 35 feet
Category I: Natural Heritage Wetlands	190 feet	N/A	NA	Add 35 feet
Category I: Forested	75 feet	Add 30 feet	Add 90 feet	Add 150 feet
Category II: Based on	75 feet	Add 30 feet	Add 90 feet	Add 150 feet

Category of Wetland	Standard Buffer Width	Additional buffer width if wetland scores 21-25 habitat points	Additional buffer width if wetland scores 26-29 habitat points	Additional buffer width if wetland scores 30-36 habitat points
score				
Category III All	60 feet	Add 45 feet	Add 105 feet	NA
Category IV All	40 feet	NA	NA	NA

Table 2 - Required Measures to Minimize Impacts to Wetlands

Disturbance	Required Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> • Direct lights away from wetland
Noise	<ul style="list-style-type: none"> • Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source • For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	<ul style="list-style-type: none"> • Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 feet of wetland • Apply integrated pest management
Stormwater runoff	<ul style="list-style-type: none"> • Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use Low Intensity Development techniques
Change in water regime	<ul style="list-style-type: none"> • Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	<ul style="list-style-type: none"> • Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion • Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	<ul style="list-style-type: none"> • Use best management practices to control dust
Disruption of corridors or connections	<ul style="list-style-type: none"> • Maintain connections to offsite areas that are undisturbed • Restore corridors or connections to offsite habitats by replanting

- e) The CAO Chapter 5.2(D)(4)(d) regarding wetland buffer width averaging is amended in this SMP, as follows. Wetland buffer reduction may not exceed 25% within shoreline jurisdiction areas (see Chapter 4, Table 1).
- f) The CAO Chapter 5.2(D)(5) regarding reduction of buffer widths is excepted from this SMP. Within shoreline jurisdiction areas, buffer widths may only be reduced to a maximum of 25% and only if the following avoidance, minimization, and mitigation sequencing has been followed:
 - 1) Avoiding the impact altogether by not taking a certain action or parts of an action;
 - 2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
 - 3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - 4) Reducing or eliminating the impact over time by preservation and maintenance operations; and
 - 5) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
- g) The CAO Chapter 5.3(D)(1) and 5.3(E) regarding wetland acreage replacement and wetland enhancement for mitigation are excepted from this SMP. Within shoreline jurisdiction areas, wetland mitigation ratios for wetlands found within Gold Bar will follow Ecology's BAS guidelines, per Appendix A of the Wetlands Guidance for Small Cities Western Washington Version:

Table 3 - Wetland Mitigation Ratios

Category of Wetland	Creation or Reestablishment	Rehabilitation	Enhancement	Preservation
Category I: Based on Functions	4:1	8:1	16:1	20:1
Category I: Bog, Natural Heritage Site	Not considered possible	Case by case	Case by case	Case by case
Category I: Mature Forested	6:1	12:1	24:1	Case by case
Category II	3:1	6:1	12:1	20:1
Category III	2:1	4:1	8:1	15:1
Category IV	1.5:1	3:1	6:1	10:1

Wetland compensatory mitigation categories are defined as follows, per U.S. Army Corps of Engineers *Regulatory Guidance Letter 02-02* and adopted by Ecology:

- Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into the following:
 - 1) Re-establishment. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.
 - 2) Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.
- Creation (Establishment): The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site where wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.
- Enhancement: The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, floodwater retention, or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities.
- Protection/Maintenance (Preservation): Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. This term also includes activities commonly

associated with the term preservation. Preservation does not result in a gain of wetland acres, it may result in a gain in functions, and it will be used only in exceptional circumstances.

2. Fish and Wildlife Conservation Areas

- a) The CAO Chapter 8.4(C)(3) regarding riparian habitat area width averaging is amended in this SMP, as follows. Riparian habitat area reduction may not exceed 25% or result in less than a one hundred (100) foot width in any location within the shoreline jurisdiction. Riparian habitat widths of 100 feet or greater are generally accepted per best available science as being protective of most riparian ecological functions.

4. Environmental Impacts

a. Applicability

The SMA is concerned with the environmental impacts that both a use and activity may have on the fragile shorelines of the state. Problems of degrading the shoreline and its waters with contaminants such as petroleum products, chemicals, metals, nutrients, solid or human waste, or soil sediments from erosion are all issues that are addressed.

b. Policies

1. Protect shoreline process and ecological functions through regulatory and non-regulatory means that may include acquisition of key properties, conservation easements, regulation of development within the shoreline jurisdiction, buffering, and incentives to encourage ecologically sound design.
2. Preserve the scenic aesthetic quality of shoreline areas to the greatest extent feasible.
3. Minimize and/or avoid adverse impacts on the natural environment during all phases of development (e.g., design, construction, operation, and management).

c. Regulations

1. All shoreline uses and developments shall be located, designed, constructed, and mitigated to result in no net loss of ecological functions necessary to sustain shoreline natural processes.
2. Adequate setbacks and natural buffers from the water should be provided, in addition to ample open space among buildings and structures to protect natural features, preserve views, and minimize use conflicts. Critical area buffers as described in the best available science (BAS) shall be required.

- 5) Modifications or additions to an existing nonagricultural legal use, provided that channel migration is not limited further and that the new development includes appropriate protection of ecological functions.
- 6) Development in the City where existing structures prevent active channel movement and flooding.
- 7) Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measure includes appropriate mitigation of impacts to ecological functions associated with the river or stream.

6. Public Access

CHAPTER 3

a. *Applicability*

Public access includes the ability of the public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. There are a variety of types of potential public access, including picnic areas, pathways and trails, promenades, bridges, street ends, ingress and egress, parking and others. Physical access to the shoreline is preferred over visual access.

May Creek

The Creekside Vista subdivision is located in the eastern portion of the City. Two tracts in the subdivision have been conveyed to the Homeowner's Association (HOA) for ongoing maintenance. Both tracts, immediately adjacent to May Creek have been set aside as native growth protection areas (NGPA), and are designated to remain in a natural state in perpetuity. There is no clearing, grading, filling, building construction or placement, or road construction of any type allowed on these tracts. These tracts provide visual access to the shoreline.

May Creek Park Plat is another subdivision in the City developed alongside May Creek which has a 4,500 square foot undeveloped park tract adjacent to the shoreline. A fifteen (15) foot public access easement was granted to the City from the right-of-way on Evergreen Way to access the park and water's edge. The City's Comprehensive Plan – Parks, Trails and Recreation Appendix notes that the park could be developed as a trailhead. The City's Pedestrian and Bicycle Plan identifies a proposed soft surface trail running through the park connecting to the path that runs adjacent to May Creek.

Wallace River

Wallace River Estates is a subdivision, located off May Creek Road and adjacent to Wallace River in the northern portion of the City. There is a designated NGPA

associated with the plat immediately adjacent to Wallace River. A fifteen (15) foot public ingress/egress easement was granted from the new plat road through to the NGPA along the Wallace River to provide public access.

Salmon Run Park off 399th Avenue SE is an undeveloped park totaling approximately 1.3 acres on the south bank of Wallace River. The property was dedicated to the City for use as a park as part of the Olson Short subdivision.

Skykomish River

Publicly owned land does not border the Skykomish River, currently preventing public access to the river from within the City.

Standards for the dedication and improvement of public access, as noted in the SMP guidelines found in WAC 173-26-221(4)(d)(iii), is discussed in this Section.

b. Policies

1. Provide and enhance shoreline access to Skykomish River, Wallace River, and May Creek through purchase or retention of access easements, signage of public access points, and designation and design of specific shoreline access areas for wildlife viewing. Physical access to the shoreline is preferred over visual access.
2. Shoreline areas that hold unique value for public enjoyment should be identified and retained. Purchases should be made or easements should be acquired for public use. Prioritize sites in terms of short- and long-term acquisition and development.
3. The level of public access should be commensurate with the degree of uniqueness or fragility of the shoreline.
4. Street crossings of the Skykomish River, Wallace River, and May Creek and public street ends terminating at the rivers and creek should be considered for development of public access facilities.
5. Ensure the development of upland areas such as parking facilities and play areas are located and designed in ways that result in no net loss of ecological function.
6. Access should be provided for a range of users including pedestrians, bicyclists, and people with disabilities to the greatest extent feasible.
7. Public access provisions should be required for all shoreline development and uses, except for a single-family residence or residential projects containing four (4) or less dwelling units unless such development is part of an identified trail plan.
8. Regulate the design, construction, and operation of permitted uses in the shoreline jurisdiction to minimize, insofar as practical, interference with the public's use of the water.

9. Improve access to all shoreline areas through expanded non-motorized connections.
10. Integrate shoreline public access trails with other existing and planned regional trails where feasible to provide non-motorized access and community connections.
11. Ensure existing and proposed public access and recreational uses do not adversely affect the integrity and character of the shoreline, threaten fragile shoreline ecosystem, or impair or detract from the public's visual or physical access to the water.
12. Preservation and enhancement of the public's visual access to all shoreline areas should be encouraged through the establishment of setbacks and height limits that ensure view corridors. Enhancement of views should not be construed to mean excess removal of vegetation that partially impairs views.
13. Public access to shoreline areas does not include the right to enter upon or cross private property, except for dedicated easements.
14. Physical access for passive recreation (such as interpretive trails) and habitat enhancement should be important objectives for the management of shoreline public access sites.
15. Public access facilities should provide auxiliary facilities, such as parking and sanitation facilities, when appropriate, and they should be designed to be accessible by handicapped and physically impaired persons; auxiliary facilities should be located outside of the shoreline management area where feasible or near the outer edge of the shoreline management area if possible.
16. Public access should be designed to provide for public safety and to minimize potential impacts to private property and individual privacy.
17. Regulations should ensure that the development of active recreational facilities results in no net loss of ecological function. Regulations should address upland concerns, such as the location and design of parking and auxiliary facilities and active play areas, as well as the development of in-water and nearshore structures, such as non-motorized boat launches.
18. Public access facilities should be constructed of environmentally friendly materials, use LID techniques, and support healthy natural processes, when feasible.
19. Regulations should provide detailed guidance for the construction of trails in particularly environmentally sensitive shoreline segments along the Skykomish River, Wallace River, and May Creek.
20. Public access planning should include a plan for an integrated shoreline public access system that identifies specific public needs and opportunities to provide public access. This planning should be integrated with other relevant

comprehensive plan elements, especially transportation and parks/recreation. The planning process shall also comply with all relevant constitutional and other legal limitations that protect private property rights.

21. At a minimum, public access planning should result in public access requirements for shoreline permits, recommended projects, and/or actions to be taken to develop access to shorelines on public property. The City's Shoreline Administrator should identify a variety of shoreline circulation and access opportunities for pedestrians (including disabled persons), bicycles, and vehicles between shoreline access points, consistent with other comprehensive plan elements.

c. Regulations

1. Public access shall be required for all shoreline development and uses, except for a single-family residence or residential projects containing four (4) or less dwelling units unless such development is part of an identified trail plan.
2. Public access requirements shall be applied as follows:
 - a) A shoreline development or use that does not provide public access may be authorized provided the applicant demonstrates and the City's Shoreline Administrator determines that one or more of the following provisions apply.
 - 1) Unavoidable health or safety hazards to the public exist which cannot be prevented by any practical means;
 - 2) Inherent security requirements of the proposed development or use cannot be satisfied through the application of alternative design features or other solutions;
 - 3) The cost of providing the access, easement, or an alternative amenity is unreasonably disproportionate to the total long-term cost of the proposed development.
 - 4) Unacceptable environmental harm will result from the public access which cannot be mitigated; or
 - 5) Significant undue and unavoidable conflict between the proposed access and adjacent uses will occur and it cannot be mitigated.
 - b) Provided further, that the applicant has first demonstrated and the City's Shoreline Administrator has determined that all reasonable alternatives have been exhausted, including but not limited to the following:
 - 1) Regulating access by such means as limiting hours of use to daylight hours;
 - 2) Designing separation of uses and activities, with such means as fences, terracing, hedges, and landscaping;

- 3) Providing access that is physically separated from the proposal, such as a nearby street end, an off-site viewpoint, or a trail system; or
 - 4) Where the above conditions cannot be met, a payment in lieu of providing public access shall be required in accordance with RCW 82.02.020.
3. Developments, uses, and activities shall be designed and operated to avoid blocking, reducing, or adversely interfering with the public's visual or physical access to the water and the shorelines. In providing visual access to the shoreline, natural vegetation shall not be excessively removed either by clearing or by topping.
 4. Public access sites shall be connected directly to the nearest public street through a parcel boundary, tract, or easement.
 5. Public access sites shall be made barrier free for the physically disabled where feasible.
 6. Required public access sites shall be fully developed and available for public use at the time of occupancy or use of the development or activity.
 7. Public access easements and permit conditions shall be recorded on the deed where applicable or on the face of a plat, if applicable, or short plat as a condition running in perpetuity with the land. Recording with the Snohomish County Auditor's Office shall occur at the time of permit approval (RCW 58.17.110; relating to subdivision approval).
 8. The standard state approved logo or other approved signs that indicate the public's right of access and hours of access shall be constructed, installed, and maintained by the applicant in conspicuous locations at public access sites. Alternatively, where public access is prohibited, property owners may install signs indicating this, subject to size and location restrictions in a required permit.
 9. Future actions by the applicant or other parties shall not diminish the usefulness or value of the public access site.
 10. Physical public access shall be designed to prevent significant impacts to sensitive natural systems.
 11. The City's Shoreline Administrator shall require the use of environmentally friendly materials and technology in such things as building materials, paved surfaces, porous pavement, etc., when developing public access to the shoreline.
 12. Where public access is to be provided by a trail, the following requirements shall apply:
 - a) The trail shall be no greater than ten (10) feet in total improved width, which may include one (1) foot gravel shoulders. Not including landscaping, no more than eight (8) feet of improved surface is preferable in most cases;

- b) Pervious pavement should be used for public access within the shoreline management area unless the City's Shoreline Administrator determines that such use is not in the public interest because of safety, durability, aesthetic, or functionality concerns;
 - c) Where feasible, the trail shall be placed at least fifty (50) feet from the OHWM;
 - d) Landscaping should be native and drought tolerant or site appropriate; and
 - e) Other specific conditions described in a trail or parks plan.
13. Whenever financially feasible and practical, the City's Shoreline Administrator shall require the use of building materials and technologies whose production and use result in reduced environmental impacts when developing public access to the shoreline. Porous pavements shall be used unless the applicant demonstrates to the satisfaction of the City's Shoreline Administrator that such materials would restrict accessibility, pose a safety hazard, or are not sufficiently durable.
14. Public entities shall incorporate public access measures as part of each development project, unless access is incompatible with safety, security, or environmental protection.

7. Restoration

a. *Applicability*

Restoration refers to the reestablishment or upgrading of impaired ecological shoreline processes or functions. The following goals and policies are intended to guide actions that are designed to achieve improvements in shoreline ecological functions over time in shoreline areas where such functions have been degraded. The overarching purpose is to achieve overall improvements over time when compared to the ecological conditions upon adoption of the SMP, as detailed in the *City's Shoreline Analysis Report*. Restoration is distinct from mitigation measures necessary to achieve no net loss of shoreline functions and the City's commitment to plan for restoration will not be implemented through regulatory means.

b. *Policies*

1. Reclaim and restore biologically and aesthetically degraded areas, to the greatest extent feasible while maintaining appropriate use of the shoreline.
2. Increase quality, width, and diversity of native vegetation in protected corridors adjacent to riparian habitats to provide safe migration pathways for fish and wildlife, food, nest sites, shade, perches, and organic debris. Strive to control non-indigenous plants or weeds that are proven harmful to native vegetation or habitats.

~~2. Preserve the natural character of the shoreline.~~

- ~~a) Designate and administer shoreline environments and use regulations to protect and restore the shoreline ecology and character; and~~
- ~~b) Protect and restore diversity of vegetation and habitat associated with shoreline areas.~~
- ~~3. Support actions that result in long-term benefits over short-term benefits.~~
 - ~~a) Restrict or prohibit development that would irreversibly damage shoreline resources.~~
- ~~4. Protect the resources and ecology of the shoreline.~~
 - ~~a) All shoreline development should be located, designed, constructed, and managed to avoid disturbance of and minimize adverse impacts to wildlife resources, including spawning, nesting, rearing and habitat areas and migratory routes; and~~
 - ~~b) Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities or general enhancement of shoreline areas.~~
- ~~5. Achieve no net loss of shoreline ecological functions.~~
 - ~~a) All development and redevelopment activities within the City's shoreline jurisdiction should be designed to achieve no net loss of shoreline ecological functions.~~
- ~~6. Increase public access to publicly owned areas of the shorelines.~~
 - ~~a) Implement a comprehensive way-finding signage program that directs the public to publicly owned shoreline areas.~~
 - ~~b) Increase recreational opportunities for the public in the shoreline.~~

9. Vegetation Conservation

CHAPTER 3

a. Applicability

Vegetation within and adjacent to water bodies provides a valuable function for the health of riparian ecosystems. Vegetation conservation includes activities to protect and restore native riparian vegetation along or near freshwater shorelines that contribute to the ecological functions of shoreline areas.

b. Policies

1. Where new developments and/or uses or redevelopments are proposed, native riparian shoreline vegetation should be conserved to maintain shoreline ecological functions and/or processes. Native riparian vegetation conservation

and restoration should be used to mitigate the direct, indirect, and/or cumulative impacts of shoreline development, wherever feasible.

2. Adverse environmental and shoreline impacts of clearing and grading should be avoided wherever possible through proper site planning, construction timing and practices, bank stabilization, soil bioengineering and use of erosion and drainage control methods. Maintenance of drainage controls should be a high priority to ensure continuing, effective protection of habitat and water quality.
3. All clearing and grading activities should be designed with the objective of maintaining natural diversity in vegetation species, age, and cover density.
4. Provide incentives for the retention and planting of native vegetation, discourage extensive lawns due to their limited erosion control value, limited water retention capacity, and associated chemical and fertilizer applications.
5. The City should explore opportunities for weed management to eliminate non-native vegetation invasives and encourage the planting and enhancement of native vegetation at the Skykomish River, Wallace River, and May Creek.
6. In order to increase habitat and address other ecological functions within the shoreline environment such as temperature regulation and bank stabilization, encourage homeowners and property managers to leave fallen trees in place along the shoreline edge provided the trees are not a danger to public safety or private property.
7. The City should provide information to the public about environmentally appropriate vegetation management, landscaping for shoreline properties and alternatives to the use of pesticides and herbicides, which affect water quality and aquatic habitat.
8. Property owners should use the following BMPs when maintaining residential landscapes:
 - a) Avoid use of herbicides, fertilizers, insecticides, and fungicides along drainage channels, and shores of the Skykomish River, Wallace River, and May Creek;
 - b) Limit the amount of lawn and garden watering so that there is no surface run-off; and
 - c) Dispose of grass clippings, leaves, or twigs properly; do not sweep these materials into the street, into a body of water, or near a storm drain.
9. Riparian vegetation management should involve usage of native plant materials wherever possible in soil bioengineering applications and habitat restoration activities. Where active removal or destruction of riparian vegetation is necessary, it should be done only where native plant communities and associated habitats are threatened or to the extent necessary to allow water-dependent activities to continue. Removal or modification of riparian vegetation should be conducted in a manner that minimizes adverse impacts to native plant

communities, and should include appropriate handling or disposal of any weed materials and attached sediments.

c. Regulations

1. Clearing and grading activities and related alteration of the natural landscape shall only be allowed in association with a permitted shoreline use or development with limited exceptions as set forth below:
 - a) Removal of noxious weeds as listed by the state in WAC Chapter 16-750, provided such activity must be conducted in a manner consistent with BMPs and the City's engineering and stormwater design standards. Native vegetation shall be promptly reestablished in the disturbed area; or
 - b) Pruning consistent with accepted arboricultural practices, maintenance of existing ornamental landscapes, and other activities allowed pursuant to these regulations, if said modification is conducted in a manner consistent with this SMP and results in no net loss to ecological functions or critical fish and wildlife habitats.
2. All clearing and grading activities must adhere to the requirements of the City's code pertaining to land, clearing and grading and all additional requirements provided in the SMP. Additional clearing and grading performance standards may be required as a condition of permit issuance to ensure the proposal will result in no net loss of shoreline ecological functions.
3. Prior to issuance of any construction, grading, or building permits, the permittee shall post with the City a cash operating bond, and a cash surety reclamation bond in amounts approved by the City's Shoreline Administrator. This amount shall equal one hundred fifty percent (150%) of the estimated cost of the project as reviewed and approved by the Public Works Director, or no less than two thousand dollars. This regulation would also apply to any site mitigation requirements.
4. Prior to final issuance of a building permit, land use permit or occupancy, a maintenance bond or other acceptable financial guarantee equal to thirty percent (30%) of the replacement cost of the landscaping shall be submitted. The bond or other suitable financial guarantee shall be maintained for a three (3) year period, at which point the City's Shoreline Administrator and Public Works Director, or designee, will determine if the bond shall be released or extended to maintain landscaped areas. This regulation would also apply to any site mitigation requirements.
5. In all shoreline areas, land clearing, grading, filling and alteration of natural drainage features and landforms shall be limited to the minimum necessary for development.

6. Any normal and routine maintenance of existing trees shall not be subject to these clearing and grading regulations, if said maintenance does not involve removal of healthy trees and is not detrimental to the health of any trees.
7. Any significant placement of materials from off-site (other than surcharge or pre-load), or the substantial creation or raising of dry upland shall be considered fill and shall comply with the requirements of the City.
8. Within all shoreline areas, tree removal shall be limited to the minimum necessary to accommodate proposed buildings, structures, and uses or to mitigate a hazard to life or property. Tree cutting plans shall be prepared for both subdivisions and short subdivision according to GBMC 16.12.080 as adopted or amended or the applicant may submit a tree replacement plan prepared by a qualified professional that demonstrates how no net loss will be achieved.
9. The City's Shoreline Administrator shall require a report prepared by a qualified professional as determined by the Public Works Director or designee as part of any shoreline substantial development permit that includes tree removal and land clearing. The report shall identify appropriate mitigation, performance assurances, maintenance, and monitoring requirements necessary to assure no net loss of ecological function necessary to sustain shoreline processes.
10. Restoration of any shoreline that has been disturbed or degraded shall use native plant materials, unless such restoration occurs within a developed and maintained ornamental landscape, in which case non-invasive plant materials, similar to that which most recently occurred on-site, may be used.
11. Surfaces cleared of vegetation and not developed must be replanted with native species or other species as approved by the City's Shoreline Administrator within one (1) year. Replanted areas shall be planned and maintained such that, within three (3) years, the vegetation is at least ninety (90) percent reestablished.
12. Stabilization of exposed erosion-prone surfaces within the shoreline environment shall utilize soil-bioengineering techniques wherever feasible.
13. Aquatic vegetation control shall only occur where native plant communities and associated habitats are threatened or where an existing water dependent use is restricted by the presence of weeds. Aquatic vegetation control shall occur in compliance with all other applicable laws and standards, including Washington Department of Fish and Wildlife requirements.
14. The application of herbicides or pesticides in the Skykomish River, Wallace River, and May Creek, wetlands, or ditches requires a permit from Ecology and may require preparation of a SEPA checklist for review by other agencies. The individual(s) involved must obtain a pesticide applicator license from the Washington State Department of Agriculture.

Chapter 4: Shoreline Use Provisions

A. Introduction

As required by the SMA, this SMP sets forth policies and regulations governing specific categories of uses and activities typically found in shoreline areas. The policies and regulations cover the following uses and activities: Agriculture, Aquaculture, Boating Facilities, Civic, Commercial Development, Forest Practices, In-Stream Structural Use, Industry and Manufacturing, Medical, Mining, Parking, Recreational Development, Residential Development, Signs, Transportation Facilities, and Utilities (Primary and Accessory). The policies and regulations, which provide basic criteria for evaluating shoreline permit applications, are used to implement the broader goals, policies, and intent of the SMA and this SMP.

B. Basic Shoreline Use and Development Standards

Table 4 - Permitted, Conditional, and Prohibited Uses

KEY	
P	= Permitted Use
C	= Conditional Use
X	= Prohibited

Shoreline Uses (1)	High Intensity	Shoreline Residential	Urban Conservancy	Natural (4)	Aquatic
Agriculture	P	C	P	X	X
Aquaculture	X	X	X	X	C
Boating Facilities	X	X	X	X	X
Civic	P	C	X	X	X
Commercial Development	P	X	X	X	X
Forest Practices (2)	X	X	X	C (6)	X

Shoreline Uses (1)	High Intensity	Shoreline Residential	Urban Conservancy	Natural (4)	Aquatic
In-Stream Structural Uses					
As Part of a Fish Habitat Enhancement Project	X	X	X	X	P
Other	X	X	X	X	X
Industry and Manufacturing					
Medical	P	P	X	X	X
Mining	X	X	X	X	X
Parking (3)	P	P	X	X	X
Recreational Development					
Water-Oriented	P	P	P	C	X
Non-Water Oriented (7)	P	P	C	X	X
Residential Development					
	P	P	C	C (5)	X
Transportation Facilities					
New Roads related to Permitted Shoreline Activities	C	C	C	X	X
Bridges for Motorized and Non-motorized Uses	C	C	C	X	C
Expansions of Existing Circulation Systems outside of New Roads related to Permitted Shoreline Activities	P	P	X	X	X
Utilities (Primary)	P	C	C	X	C
Utilities (Accessory)	P	C	X	X	X

Notes:

1. Any use that would substantially degrade the ecological functions or natural character of the shoreline area should not be allowed. In addition, development shall be subject to the allowed uses established by the underlying zoning. In the event of a conflict between the SMP and the GBMC, the GBMC shall govern whether a use is allowed or not.
2. The removal of trees in shorelines of statewide significance shall be limited. Exceptions to this standard shall require a shoreline conditional use permit.
3. Primary use parking lots or garages are prohibited in all shoreline environments.
4. In the Natural Environment, development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions is prohibited. As is subdivision of property in a configuration that will require significant vegetation removal or shoreline modification that adversely impacts ecological functions.

5. Single-family residential development may be allowed as a conditional use within the "natural" environment if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of the environment.
6. Commercial forestry may be allowed as a conditional use in the "natural" environment provided it meets the conditions of the State Forest Practices Act and its implementing rules and it is conducted in a manner consistent with the purpose of this environment designation.
7. This includes low intensity public uses such as scientific, historical, cultural, educational research uses, and water-oriented recreational access if ecological impacts are avoided.

Table 5 - Basic Development Standards

Shoreline Standards	High Intensity	Shoreline Residential	Urban Conservancy	Natural	Aquatic
Maximum Height (1)	35 feet	35 feet	35 feet	35 feet	N/A
Shoreline Setback (from Ordinary High Water Mark) (2)(3)(4)	150 feet. (May be reduced by 25% with buffer averaging.)	150 feet. (May be reduced by 25% with buffer averaging.)	150 feet. (May be reduced by 25% with buffer averaging.)	150 feet. (May be reduced by 25% with buffer averaging.)	N/A
Maximum Impervious Surface Coverage in the Shoreline Jurisdiction (5)	50%	35%	30%	N/A	N/A
Minimum Lot Width in the Shoreline Jurisdiction (6)	N/A	75 Feet	75 Feet	N/A	N/A

Notes:

1. Development shall also be subject to the height limits established by the underlying zoning. In no case shall the height exceed thirty-five (35) feet or fifty (50) feet for appurtenances. Height is defined in WAC 173-27-030(9) as "measured from average grade level to the highest point of a structure: provided that television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where such appurtenances obstruct the view of the shoreline of a substantial number of residences on areas adjoining

such shorelines, or the applicable SMP specifically requires that such appurtenances be included: provided further that temporary construction equipment is excluded in this calculation.”

2. Setbacks are measured landward, on a horizontal plane perpendicular to the shoreline. See zoning regulations for interior lot setbacks and other requirements that apply to specific zones. In the event of a conflict between a provision in this SMP and a provision in another part of the GBMC, the requirement that provides the most protection to the shoreline management area shall be applied.
3. Developments associated with an ecological restoration or interpretation, water-dependent uses, and public access are not required to meet the minimum setback. However, where such development can be approved within the minimum setback, the placement of buildings, structures, and hard surfaces shall be limited to the minimum necessary for the successful operation of the use. These developments must demonstrate “no net loss” of ecological functions prior to being approved within the setbacks. In no case shall parking be allowed within the minimum setback.
4. Major structures cannot be built in the shoreline setback, but low impact uses such as trails, lawns, small patios, decks, gardens, or sheds are allowed within the shoreline setback in areas cleared before this SMP was adopted.
5. Development shall also be subject to the maximum impervious surface coverage limits established by the underlying zoning. In no case shall it be more than 50%.
6. Development shall also be subject to the minimum lot width limits established by the underlying zoning.

C. Shoreline Use Policies and Regulations

1. General Use Policies

a. Applicability

The provisions in this Section apply to all uses and development types permitted within the shoreline jurisdiction.

b. Policies

1. When determining allowable uses and resolving use conflicts within the City’s shoreline jurisdiction, apply the following preferences and priorities in the order listed below:
 - a) Reserve appropriate areas for protecting and restoring ecological functions to control pollution and prevent damage to the natural environment and public health;

~~2. General Modification Policies and Regulations~~

~~a. Policies~~

- ~~1. The adverse effects of shoreline modifications should be reduced, as much as possible, and shoreline modifications should be limited in number and extent.~~
- ~~2. The City should take steps to assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological function. This is to be achieved by preventing unnecessary shoreline modifications, by giving preference to those types of shoreline modifications that have a lesser impact on ecological functions, and by requiring mitigation of identified impacts resulting from shoreline modifications.~~

~~b. Regulations~~

- ~~1. All shoreline modifications must be in support of a permitted shoreline use or provide for human health and safety.~~
- ~~2. All shoreline development shall be located and designed to prevent or minimize the need for shoreline modification activities.~~
- ~~3. In reviewing shoreline modification permits, the City's Shoreline Administrator shall require steps to reduce significant ecological impacts according to the mitigation sequence described under 'mitigation' in Chapter 7 – Definitions.~~
- ~~4. The City's Shoreline Administrator shall base all shoreline modification decisions on available scientific and technical information and a comprehensive analysis of site-specific conditions provided by the applicant, as stated in WAC 173-26-231.~~

CHAPTER 5

D. Shoreline Stabilization

Shoreline stabilization includes structural and nonstructural methods taken to address erosion impacts to property and dwellings caused by natural processes, such as current, flood, tides, wind, or wave action. New stabilization measures include enlargement of existing structures. These actions include all structural and non-structural methods. "Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete or boulder bulkheads, while "soft" structural measures rely on less rigid materials, such as bioengineered vegetation measures or shoreline enhancement. Non-structural methods include building setbacks, relocation of the building or structure to be protected, ground water management, planning and regulatory measures to avoid the need for structural stabilization.

Generally, the harder the construction measure, the greater the effect on shoreline processes, including sediment transport, geomorphology, and biological functions. The means taken to reduce damage caused by erosion, accretion, and flooding must recognize the positive aspects of each of these processes in order to retain the benefits of these natural occurrences. Erosion

does not occur without accretion, the deposition and accumulation of eroded material. Likewise, accretion cannot occur unless material has been eroded.

General policies and regulations addressing shoreline stabilization methods applicable to the City are presented in the General Policies and Regulations Sections. Additional discussion of the individual stabilization methods, and policies and regulations specific to them, are provided following that Section.

1. Applicability and Definitions

a. Restoration and Enhancement

Enhancement is the alteration of exposed and submerged shorelines for the purpose of stabilization, recreational enhancement, and or/aquatic habitat creation or restoration using native or similar material. The materials used are dependent on the intended use. For recreational purposes, various grades of clean sand or pea gravel are used often to create a shore above the OHWM. Restoration or re-creation of a shore feature may require a rock and gravel matrix and/or creation of other materials appropriate for the intended use.

b. Soil Bioengineering

Soil bioengineering is the term given to the practice of using natural vegetative materials to stabilize shorelines and prevent erosion. This may include use of bundles of stems, root systems, or other living plant material; fabric or other soil stabilization techniques; and limited rock toe protection, where appropriate. Soil bioengineering projects often include fisheries habitat enhancement measures such as anchored logs or root wads, in project design. Soil bioengineering techniques may be applied to shoreline areas and the upland areas away from the immediate shoreline.

The use of soil bioengineering as a shoreline stabilization technique is a viable and proven alternative to riprap, concrete and other structural solutions. It provides habitat while maintaining and preserving the natural character of the shoreline. Soil bioengineering is the preferred "best practices" choice when considering shoreline stabilization.

c. Bulkheads

Bulkheads are shoreline structures, either sloped or vertical, usually constructed parallel to the shore. The primary purpose they serve is to contain and prevent the loss of soil caused by erosion.

Bulkheads have historically been constructed of poured-in-place or precast concrete, concrete blocks, steel or aluminum sheet piling, wood or wood and structural steel combinations, and boulders. Bulkheads may be either thin structures penetrating deep into the ground or more massive structures resting on the surface.

Uses and activities related to bulkheads, which are identified as separate use activities in this SMP, such as Fill and Residential Development, are subject to the regulations for those uses in addition to the standards for bulkheads established in this Chapter.

d. Groins

Groins are barrier-type structures of rock, wooden piling, or other materials constructed across the beach itself and extending into the water with the intent to obstruct sand and sediment carried by the littoral drift action along shorelines. Groins are not applicable in the City's shoreline jurisdiction.

e. Riprap

Riprap is a layer, facing, or protective mound of stones placed along rivers and streams to prevent erosion, scour, or sloughing of a structure or embankment. Riprap is also the term for the stone so used. Currently, riprap can be found along the Skykomish River.

f. Weirs

A weir is a small overflow-type dam commonly used to raise the level of a river or stream. Because a weir will typically increase the oxygen content of the water as it passes over the crest, a weir can have a detrimental effect on the local ecology of a river system. A weir will also artificially reduce the upstream water velocity, which can lead to an increase in siltation. A weir may pose a barrier to migrating fish. Weirs are not applicable in the City's shoreline jurisdiction.

2. General Policies and Regulations

a. Policies

1. Proposals for shoreline stabilization activities should address the impact of these activities on the shoreline environment. This planning should consider off-site erosion or damage that might occur because of shoreline stabilization structures or activities.
2. Non-structural stabilization measures are preferred over "soft" structural measures. Soft structural shoreline stabilization measures are strongly preferred over hard structural shoreline stabilization. Proposals for hard and soft structural solutions, including bulkheads, should be allowed only when it is demonstrated that non-structural methods are not feasible. Hard structural shoreline stabilization measures should be allowed only when it is demonstrated that soft structural measures are not feasible.
3. Structural shoreline stabilization should be permitted only when it has been demonstrated that shoreline stabilization is necessary for the protection of existing, legally established buildings, structures, primary uses, and public

improvements, and that there are no other feasible options to the proposed shoreline stabilization that have less impact on the shoreline environment.

4. New stabilization structures for existing primary residential structures are allowed only where no alternatives including relocation or reconstruction of existing structures are feasible and less expensive than the proposed stabilization measure, and then only if no net loss of ecological functions will result.
5. Shoreline stabilization structures should be located, designed, and constructed to minimize adverse impact on the property of others.
6. Shoreline modifications should be limited in number and extent, incorporate all feasible measures to protect ecological shoreline functions and ecosystem-wide processes as modifications occur, and require mitigation sequencing, if needed.
7. New development requiring bulkheads or similar protection should not be allowed. All new shoreline development should be located and designed to prevent or minimize the need for shoreline modification activities.
8. Mitigation for shoreline stabilization should be provided to achieve no net loss of ecological functions necessary to sustain shoreline natural resources.
9. Shoreline modifications should be appropriate to the specific type of shoreline and environmental conditions for which they are proposed.

b. Regulations

(I) General Shoreline Stabilization – Basic Requirements

1. Soft and hard structural solutions to reduce shoreline damage from erosion shall be allowed only after it is demonstrated through a geotechnical report that non-structural solutions would not provide sufficient protection to existing improvements. The geotechnical report shall evaluate the necessity of structural stabilization measures by estimating timeframes and rates of erosion damage within 3 years, urgency of replacement, alternative solutions, and other pertinent factors. Non-structural solutions include, but are not limited to, soil bioengineering, enhancement, alternative site designs, drainage improvements and increased building setbacks for proposed buildings and structures.
2. 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 periods and rates of erosion and geotechnical 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:
 - a) That there is a significant possibility that such a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or

- b) Where waiting until the need is that immediate, would foreclose the opportunity to use measures that avoid impacts on ecological functions.
3. Where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years that geotechnical report may still be used to justify more immediate authorization to protect against erosion using soft measures.
4. Impacts to sediment transport shall be avoided or minimized.

(II) General Shoreline Stabilization – New Development

1. New development, including the division of land into new parcels, shall be located and designed to eliminate the need for concurrent or future shoreline stabilization where feasible. New non-water dependent development that would require shoreline stabilization that would cause significant adverse impacts to adjacent or down-current properties is prohibited.
2. New development, including single-family residences, that includes structural shoreline stabilization will not be allowed unless all of the conditions below are met:
 - a) The need to protect the development from damage due to erosion cause by natural processes, such as currents and waves, and by man-made processes, such as boat wakes, is demonstrated through a geotechnical report;
 - b) The erosion is not being caused by upland conditions, such as loss of vegetation and drainage;
 - c) Non-structural measures, such as placing the development farther from the shoreline, planting vegetation, LID measures, or installing on-site drainage improvements, are not feasible or not sufficient; and
 - d) The stabilization structure will not result in a net loss of shoreline ecological functions.
3. New development on steep or unstable slopes shall be set back sufficiently to ensure that shoreline stabilization will not be needed during the life of the building or structure, as demonstrated by a geotechnical analysis prepared by a geotechnical engineer of related professional licensed and in good standing in the State of Washington.
4. New development that would require shoreline stabilization which causes significant impacts to adjacent or down-current properties and shoreline areas is prohibited

(III) General Shoreline Stabilization – New or Expanded Measures

1. New structural stabilization measures and enlargement of existing structural stabilization measures shall be limited to the minimum size necessary. These

measures shall be permitted only when it has been conclusively demonstrated through scientific analysis that shoreline stabilization is necessary to protect existing primary buildings, structures, public improvements, ecological function restoration projects, or hazardous substance remediation projects from erosion, and that non-structural measures, planting vegetation, or installing on-site drainage improvements are not feasible or not sufficient.

(IV) General Shoreline Stabilization – Replacement and Repair

1. Shoreline stabilization solutions developed to replace existing shoreline stabilization shall be placed along the same alignment as, or landward of, the shoreline stabilization being replaced, except as noted below.
2. Where existing structural stabilization is replaced by non-structural shoreline stabilization using bioengineering techniques and results in a documented improvement of shoreline functions, such stabilization may be allowed waterward of the OHWM subject to state and federal approvals.
3. A major repair of a hard shoreline stabilization structure shall be allowed when the existing primary building is ten (10) feet or less from OHWM. All other major repair proposals must include a written narrative prepared by a qualified geotechnical engineer that provides a demonstration of need. A major repair shall be defined as:
 - a) A repair needed to a portion of an existing stabilization structure that has collapsed, eroded away, or otherwise demonstrated loss of structural integrity, or in which the repair work involves modification of the toe rock or footing, and the repair is 50% or greater than the linear length of the shoreline stabilization measure; or
 - b) A repair to more than 75% of the linear length of the existing hard structural stabilization measure in which the repair work involves replacement of top or middle course rocks or other similar repair activities.
4. Minor repairs are repairs that do not meet the threshold established above and they shall be allowed without a demonstration of need.

(V) General Shoreline Stabilization – Design Requirements

1. Shoreline stabilization and modification projects shall first avoid, and then minimize, adverse impacts to the environment to the greatest extent feasible, and where such impacts cannot be avoided, mitigation shall be provided to achieve no net loss of shoreline ecological functions.
2. Shoreline stabilization should not be used to create new or newly usable land.
3. Shoreline stabilization shall not significantly interfere with normal surface and/or subsurface drainage into the water body.

4. Shoreline stabilization shall be designed so as not to constitute a hazard and not to interfere substantially with visual access to the water.
5. Shoreline stabilization shall be designed so as not to not cause a significant impact to adjacent properties, including the need for shoreline stabilization elsewhere.
6. Professional design as approved by the City's Shoreline Administrator of all shoreline stabilization is required. All shoreline modification activities shall be in support of a permitted shoreline use that is in conformance with the provisions of this SMP unless it can be demonstrated that such activities are necessary and in the public interest.
7. All shoreline modification activities must comply with all other regulations as stipulated by State and Federal agencies, local Tribes, or others that have jurisdiction.
8. Alternative methods to typical shoreline armoring using native vegetation and other natural shoreline features shall be considered when replacing existing and constructing new shoreline stabilization solutions.
9. Publicly financed or subsidized shoreline erosion control measures shall not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. See the public access provisions in WAC 173-26-221(4). Where feasible, ecological restoration and public access improvements should be incorporated into the project.
10. Public access shall be required as part of publicly financed shoreline stabilization measures unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and immitigable significant ecological impacts, unavoidable conflict with proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.

(VI) Restoration and Enhancement

1. Enhancement along the Skykomish River, Wallace River, and May Creek may be permitted when the applicant has demonstrated that the project will not detrimentally interrupt or adversely affect adjacent properties or habitat and all other standards of the SMP are followed.
2. Enhancement is limited to the placement of no more than twenty-five (25) cubic yards of material below the OHWM. Proposals that exceed this threshold shall be subject to the requirements for Shoreline Fill in this Chapter; shall require a conditional use permit; and they shall only be allowed in conjunction with a water-dependent or public use permitted by this SMP, and for fisheries, aquaculture, or wildlife enhancement projects.

3. Natural restoration/enhancement activities shall not:
 - a) Extend waterward more than the minimum amount necessary to achieve the desired stabilization; or
 - b) Disturb significant amounts of valuable shallow water fish/wildlife habitat without appropriate mitigation of the impacts.
4. The size and/or mix of new materials to be added to a shore shall be as similar as possible to that of the natural shoreline sediment, but large enough to resist normal current action at the site.
5. The restored shore shall approximate, and may slightly exceed, the natural shore width, height, bulk, or profile, but not as much as to create additional dry land.
6. Shoreline enhancement is prohibited within fish and/or wildlife spawning, nesting, or breeding habitat that would be adversely affected and where the enhancement materials would adversely affect adjacent spawning grounds or other areas of biological significance.

(VII) Soil Bioengineering

1. All soil-bioengineering projects shall use native plant materials appropriate to the specific area including trees, shrubs, and groundcovers, unless demonstrated infeasible for the particular site.
2. Unless Critical Area Regulations apply, all cleared areas shall be replanted immediately following construction and irrigated (if necessary) to ensure that within three (3) years all vegetation is one hundred (100) percent reestablished to achieve no net loss of ecological functions of the shoreline area. Areas that fail to reestablish vegetation adequately shall be replanted with approved plant materials until the plantings are viable. The City's Shoreline Administrator may establish additional performance standards in administrative rules.
3. Bank stabilization in the form of a vegetated buffer zone shall be maintained for a minimum of three (3) years. Maintenance includes, but is not limited to, weeding, watering, dead plant replacement. The buffer zone shall exclude activities that could disturb the site. The planting of native vegetation and the removal of invasive vegetation does not constitute disturbance of the site. Where determined necessary by the City's Shoreline Administrator, fencing may be required to ensure protection of buffer plantings.
4. All construction and planting activities shall be scheduled to minimize impacts to water quality and fish and wildlife aquatic and upland habitat, and to optimize survival of new vegetation.

(VIII) Bulkheads

1. Bulkhead design and development shall conform to all other applicable local, state, and federal agency regulations, including regulations for shoreline stabilization in this Chapter.
2. On shorelines where no other bulkheads are adjacent, the construction of a bulkhead shall tie in with the contours of the adjoining shorelines, as feasible, such that the proposed bulkhead would not cause erosion of the adjoining properties.
3. Bulkheads may tie in flush with existing bulkheads on adjoining properties, provided that the new bulkhead does not extend waterward of OHWM, except that which is necessary to make the connection to the adjoining bulkhead. In such circumstances, the remaining portion of the bulkhead shall be placed landward of the existing OHWM such that no net loss of riparian area occurs and the design complies with all other regulations as stipulated by State and Federal agencies, local Tribes, or others that have jurisdiction.
4. Replacement bulkheads shall not encroach waterward of the OHWM or existing building or structure unless the building or structure is a residence that was occupied prior to January 1, 1992, and there is overriding safety or environmental concerns. In such cases, the replacement bulkhead shall be next to the existing shoreline stabilization structure.
5. Replacement bulkheads may be permitted if there is a demonstrated need to protect principal uses buildings, or structures from erosion caused by water action provided that:
 - a) The replacement bulkhead is designed, located, sized, and constructed to assure no net loss of ecological functions;
 - b) The existing bulkhead is removed; and
 - c) The proposal includes a report prepared by a geotechnical engineer or other qualified professional that evaluates the necessity of the bulkhead by estimating timeframes and rates of erosion, urgency of replacement (within 3 years), alternative solutions and other pertinent factors.
6. When a bulkhead is required at a public access site, provisions for safe access to the water shall be incorporated into bulkhead design.
7. Stairs or other permitted structures may be built into a bulkhead, but they shall not extend waterward of a bulkhead.
8. Fill behind bulkheads shall be limited to an average of one (1) cubic yard per running foot of bulkhead. Any filling in excess of this amount shall be considered a regulated activity subject to the policies and regulations in this SMP pertaining

to fill activities and the requirement for obtaining a shoreline substantial development permit.

(IX) Groins

1. Groins are prohibited within all shoreline environment designations.

(X) Riprap

1. Riprap design and development shall conform to all other applicable local, state, and federal agency regulations, including regulations for shoreline stabilization in this Chapter.
2. On shorelines where no riprap is adjacent, the construction with riprap shall tie in with the contours of the adjoining shorelines, as feasible, such that the proposed riprap would not cause erosion of the adjoining properties.
3. Riprap may tie in flush with existing riprap on adjoining properties, provided that the new area of riprap does not extend waterward of OHWM, except that which is necessary to make the connection to the adjoining area of riprap. In such circumstances, the remaining portion of the riprap shall be placed landward of the existing OHWM such that no net loss of riparian area occurs and the design complies with all other regulations as stipulated by State and Federal agencies, local Tribes, or others that have jurisdiction.
4. Replacement riprap shall not encroach waterward of the OHWM or existing buildings or structures unless the building or structure is a residence that was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement bulkhead shall be next to the existing shoreline stabilization structure.
5. Replacement of riprap may be permitted if there is a demonstrated need to protect principal uses, buildings, or structures from erosion caused by water action provided that:
 - a) The replacement riprap is designed, located, sized, and constructed to assure no net loss of ecological functions;
 - b) The existing riprap is removed; and
 - c) The proposal includes a report prepared by a geotechnical engineer or other qualified professional that evaluates the necessity of the riprap by estimating timeframes and rates of erosion, urgency of replacement (within 3 years), alternative solutions and other pertinent factors.
6. When a riprap is required at a public access site, provisions for safe access to the water shall be incorporated into design of the riprap.

(XI) Weirs

1. Weirs are prohibited within all shoreline environment designations.