CITY OF BAINBRIDGE ISLAND

Shoreline Master Program

As amended through Ord. 2020-17
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2014 Comprehensive Update Acknowledgments

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Shoreline New and Existing Development Work Group

John Anderson	Mark Dawson*	Greg Hepp
Andy Mueller*	Charles Schmid*	Ken Sethney*
Al Solonsky		

Shoreline Setback and Vegetation Conservation Work Group

Kathleen Dwyer	Jeanne Huber	Lisa Macchio*
J. Mack Pearl*	Alice Tawresey*	Gary Tripp
Elise Wright		

Shoreline Modification Work Group

John Barutt*	John Bomben*	Wayne Daley*
Stephen Ekholm	Marcia Lagerloef	David McCaughey
Eric Rehm	Bruce Taft	

*Also Served on the Task Force

Planning Commission

Michael Lewars, Chair	Martin Minkoff, Vice-Chair	Martha Droge
Don Fisher	Maradel K. Gale	J. Mack Pearl
Michael Wangen		

City Council

Ann Blair	Sarah Blossom	Steve Bonkowski
Wayne Roth	Val Tollefson	Roger Townsend
David Ward		

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1.0 INTRODUCTION

1.1 Shoreline Master Program Introduction

This Shoreline Master Program (SMP) establishes regulations, enforcement procedures and policies for protection and development of Bainbridge Island's shoreline areas. The regulations in the SMP state specific legal requirements which future development must follow. The regulations in the SMP are part of the City's development regulations. The policies in the SMP state the underlying objectives the regulations are intended to accomplish. The policies are a component of the City's Comprehensive Plan and guide the interpretation and enforcement of the Shoreline Master Program's regulations. The policies are not regulations in themselves and, therefore, do not impose requirements beyond those set forth in the regulations.

1.1.1 Purpose and Intent

The Shoreline Master Program is intended to implement the Shoreline Management Act of 1971 (Chapter 90.58 Revised Code of Washington) by:

- Planning for and guiding the orderly development of the shoreline in a positive, effective, and equitable manner, protecting and restoring shoreline resources, and helping to assure public access to the shoreline;
- Promoting the health, safety, and general welfare of the community by providing long range, comprehensive policies and effective, reasonable regulations for use and development of Bainbridge Island's shorelines;
- Ensuring, at minimum, no net loss of shoreline ecological functions and ecosystem-wide processes;
- Planning for the restoration of shorelines that have been impaired or degraded in the past and in a manner that educates the community in the use and protection of its shorelines;
- Adhering to and fostering the policies of the Act contained in RCW 90.58.020 for shorelines of the state; and
- Improving the water quality of the Puget Sound.

1.2 Requirements of the Shoreline Management Act

In June 1971, the Washington State Legislature approved a comprehensive regulatory program for shorelines of the state with the adoption of the Shoreline Management Act of 1971 ("SMA" or "Act"). The Act carried with it provisions for a vote by the people and in November 1972, the people of the State of Washington enacted the Shoreline Management Act (Chapter 90.58 RCW). The Act's paramount objectives are to protect and restore the valuable natural resources that shoreline represent, and to plan for and foster all "reasonable and appropriate uses", including single-family development, that are dependent upon a waterfront location or that offer the opportunities for the public to enjoy the state's shoreline. With this clear mandate, the Shoreline Management Act establishes a planning and regulatory program, initiated at the local level under state guidelines.

1.2.1 Shoreline Management Act Administration

Administration of the Act is a cooperative effort balancing local and statewide interest in the management and development of shoreline areas by requiring local government to plan (via the SMP) and regulate (via permits) shoreline development. Local government actions are monitored by the Washington State Department of Ecology (Ecology), which approves new or amended SMPs, reviews substantial development permits, and approves shoreline Conditional Use permits and Variances. The SMP is essentially a shoreline comprehensive plan with distinct environmental orientation applicable to shoreline areas and customized to local circumstances. Collectively, the local master programs comprise the State SMP. By law, the City is responsible for the following:

1. Preparation of a SMP in accordance with the policies and requirements of the Act and the State Master Program Approval/Amendment Procedures and Master Program Guidelines (the "Guidelines" or "Shoreline Master Program Guidelines"; Chapter 173-26 WAC). The purpose of a SMP is to protect shoreline resources, manage the uses and activities on local shorelines, and assure continued public use of waters of the state.
2. The Act specifies that local SMPs include goals and policy statements for each of the required elements and take into account economic development, public access, circulation and transportation, and recreation. Local government is further encouraged to identify any other elements that are deemed appropriate and necessary to implement the intent of the Act, and to develop goals and policies for those additional elements.
3. Master program regulations are developed and adopted by local government to implement the goals and policies for each of the elements. These regulations address various types of shoreline development, including agriculture, aquaculture, forest management, commercial development, marinas, mining, outdoor advertising and signs, residential development, utilities, ports and water-related industries, bulkheads, breakwaters, jetties and groins, landfills, solid waste disposal.
4. Administration of a shoreline permit system to further the goals and policies of both the Act and the local SMP for proposed substantial development within two hundred (200) feet of the ordinary high water mark (OHWM) of designated water bodies. [Local government has the option to adopt the administrative process as part of the SMP or as a reference document not considered part of the SMP. This allows local government to make changes without the need of a SMP amendment. See WAC 173-26-191(2)(a)(iii)(C).]
5. Development of an inventory of natural characteristics and land use patterns along those designated water bodies. Local governments are required to prepare a detailed shoreline inventory that provides the foundation for development of a system that classifies the shoreline into distinct shoreline "environments" These environments, or designations, provide the framework for implementing shoreline policies and regulatory measures.
6. Local governments have the primary responsibility for initiating the planning program and administering the regulatory requirements. The City of Bainbridge Island SMP must be consistent with the policies and requirements of the Act and the Guidelines. The role of the Department of Ecology is to provide support and review of the SMP and

subsequent shoreline development permits and approvals and ensure compliance with the policies and provisions of the Act.

1.2.2 Scope of Shoreline Management Act

The Act covers all shorelines of the state, including "shorelines" and "shorelines of state-wide significance." Figure 1-1 illustrates shoreline jurisdiction on coastal shorelines.

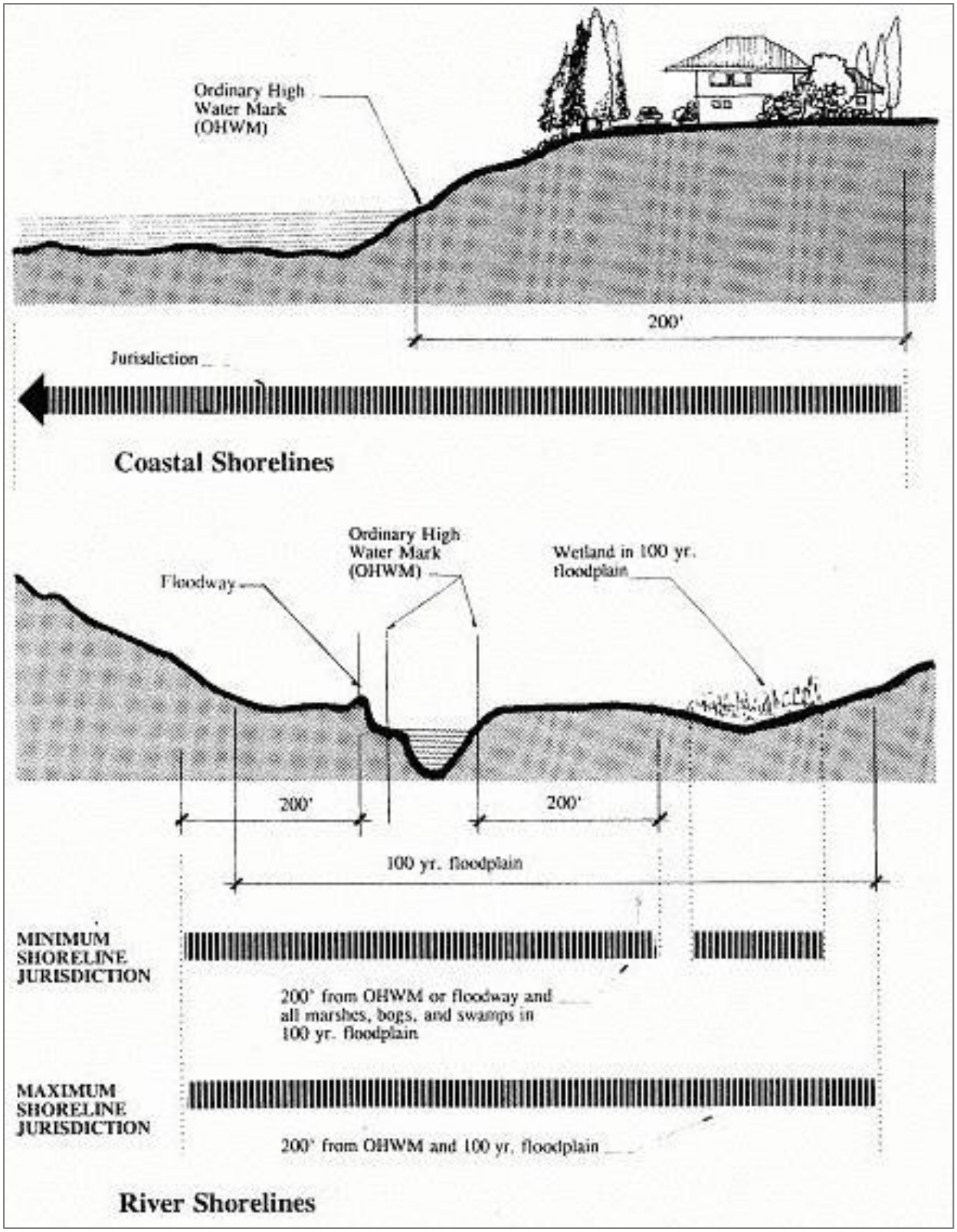

Figure 1-1 Shoreline Jurisdiction

Provisions of the Act apply to the following geographical shoreline areas:

1. All marine waters of the state, together with the lands underlying them;
2. Segments of streams and rivers where the mean annual flow is more than 20 cubic feet per second (cfs);
3. Lakes and reservoirs 20 acres and greater in area;
4. Shorelands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous flood plain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters; and
5. Shorelines of state-wide significance as defined in RCW 90.58.030 or its successor. This includes those areas of Puget Sound lying seaward from the line of extreme low tide.

1.2.3 Development of the City's Shoreline Master Program

The City of Bainbridge Island adopted a SMP in 1996 after annexation of the entire Island occurred in March 1991. Prior to annexation, Bainbridge Island's shorelines were managed under the Kitsap County SMP and the City of Winslow SMP. The goals and policies in the SMP are an element of the City's Comprehensive Plan. All other portions of the SMP, including the use of regulations, are part of the City's development regulations.

The "precautionary principle" was employed as guidance in updating the policies and regulations of this SMP. The "precautionary principle" is cited in the State Shoreline Guidelines under WAC 173-26-201(3)(g) and states, in part that "as a general rule, the less known about existing resources, the more protective shoreline master program provisions should be to avoid unanticipated impacts to shoreline resources."

1.2.4 Public Involvement

Public participation strategies were used in developing the SMP adopted in 1996, and updating the SMP in 2012.

For the 1996 SMP, the City convened a citizen committee that worked from 1991-1993 to develop the first SMP for the City of Bainbridge Island. In addition, approximately 45 citizen volunteers participated in a shoreline survey. The City used a variety of tools for public outreach, and conducted several public meetings, special topic meetings, and public hearings.

In updating this SMP, the City first developed a public participation plan with the community in March 2010. The public participation plan was accepted by the City Council in May, 2010, and the City used the plan as a guide for public involvement and notification throughout the update process. An SMP Ad Hoc Committee composed of two members from the City Council and two members from the Planning Commission also helped guide the public participation process.

The public participation plan developed with the community identified the following key challenges and opportunities:

- Build Common Understanding
- Clearly Address the Use of Science
- Engage the Community

- Allow Respectful Dialog
- Sustain Community Involvement
- Formed Ad Hoc Committee
- To meet these challenges, the City developed the following outreach components:
- Set up the SMP Update web page
- Identified stakeholders in the SMP Update process
- Created community outreach list
- Developed a Shoreline Education series to inform the community and decision makers about the natural resource processes and the legal requirements of updating the SMP.

At the Shoreline Education series, experts in the field presented information related to the SMP Update and Bainbridge Island. At the end of each presentation, there was an open discussion with the presenter related to issues of the SMP Update. Each of these educational events was advertised and filmed, and the video was made available on the City's SMP Update webpage. The education series included the following topics:

- June 3, 2010, Event #1 Ecology's Role in the SMP Update with Department of Ecology representatives Geoff Tallent, Regional Manager, and Barbara Nightingale, the City's Ecology Project Officer and primary contact;
- June 17, 2010, Event #2, Shoreline Processes with Hugh Shipman, coastal geologist with the Dept. of Ecology's Shorelands and Environmental Assistance program and Jeff Adams, Marine Water Quality Specialist with Washington Sea Grant;
- June 22, 2010, Event #3, Property Rights/Listening Session with Dawn Findlay Reitan, Interim City Attorney from the firm of Inslee Best;
- July 8, 2010, Event #4, Coastal Bluffs and Beaches with Jim Johannesen, principal scientist at Coastal Geological Services; and
- July 27, 2010, Event #5, Nearshore Assessment with Ron Thom, who leads the Coastal Assessment and Restoration group at Battelle's Marine Sciences Laboratory.

Citizen Committees

The City solicited citizen volunteers and formed topic-based workgroups to assist in drafting revisions to SMP policies and regulations that reflected the requirements of the State SMP Guidelines and community values. Four community organizations (Bainbridge Shoreline Property Owners, Bainbridge Concerned Citizens, Association for Bainbridge Communities, and Bainbridge Island People for Puget Sound) self-selected members to represent their organization on the SMP Workgroups. The remaining volunteers were selected by the SMP Ad Hoc Committee. The three topic-based workgroups focused on major issues of the program. A fourth committee, the SMP Task Force, was formed from members selected from each of the three topic-based workgroups. The committees drafted the revisions between September 2010 and August 2011, over the course of approximately 45 public meetings. The citizen committee's recommendations were made available on the City's website for public review and forwarded to

the Planning Commission in July 2011. Public comment was accepted throughout the process, and comments were posted on the City's website.

From July 2011 through March 2012, the Planning Commission reviewed the recommendations and made amendments. Public comment opportunity was provided at each of the Planning Commission's seventeen study sessions. A public hearing on the draft amendments was held on March 29, 2012. The Commission considered public comment and approved the draft on April 12, 2012, and forwarded their recommendation to the City Council for consideration.

The City Council considered the Planning Commission recommendations conducting eleven (11) study sessions from May 2012 to April 2013, and holding a public hearing on May 8, 2013. The Council approved the amendments on May 15, 2013 and forwarded the program to the Department for review on June 7, 2013. After the City held a final public hearing on the draft on July 14, 2014, the Department of Ecology approved the amended program on July 16, 2014.

1.3 Bainbridge Island's Shoreline Master Program (SMP)

1.3.1 Bainbridge Island's Shorelines

Bainbridge Island has approximately 53 miles of waterfront. (See Figure 1-2 Map of Bainbridge Island.) It has seven harbors or bays, each having a long and interesting history and a wide variety of uses. Eagle Harbor has the most activity, including a ferry landing, boatyard repair, a boatyard, numerous marinas and restaurants, a waterfront park, a Superfund site, condominiums, detached homes, and a live-aboard community. Most of the Bainbridge Island's shorelines have been developed with single-family residences, from small summer cabins to large mansions. Their locations range from below ordinary high water to high water cliffs nearly 200 feet above the water. At the north end of the island is a large sand spit called Point Monroe, while at the south end is Restoration Point, composed of raised bedrock located on the Seattle fault.

Bainbridge Island's shorelines exhibit many uses and geologic characteristics. The shoreline is home for about twenty percent of the island residents, as well as numerous species of fish and wildlife. Bald eagles, herons, seals, otters, and numerous waterfowl depend on the shoreline. There are also salmon streams and bays necessary for fish, shellfish, clams, and vegetation to survive. At the south end of the island is an aquaculture farm for salmon. In short, Bainbridge Island's shorelines support a wide variety of life.

Located on the eastern border of Kitsap County, Bainbridge Island is connected to the rest of Kitsap County by one bridge and to Seattle (King County) by a 35-minute ferry ride. Because of its proximity to Seattle, the island has close cultural and economic ties to Seattle. Approximately 23,000 people currently live on Bainbridge Island. The population increased from 15,846 in 1990 to 23,090 in 2012. Until 2008 with the national economic decline, the Island grew at a fairly steady rate of approximately 300 people each year. This increased growth, reflected in higher waterfront land values and taxes, along with a growing concern for the environment, motivated citizen participation in the update of the SMP. The program must strike a balance between imposing regulatory powers for the benefit of the community at large and the rights of the individual property holder. Fortunately, the Act and the public trust doctrine provide the guidance to create a program which recognizes both of these values.

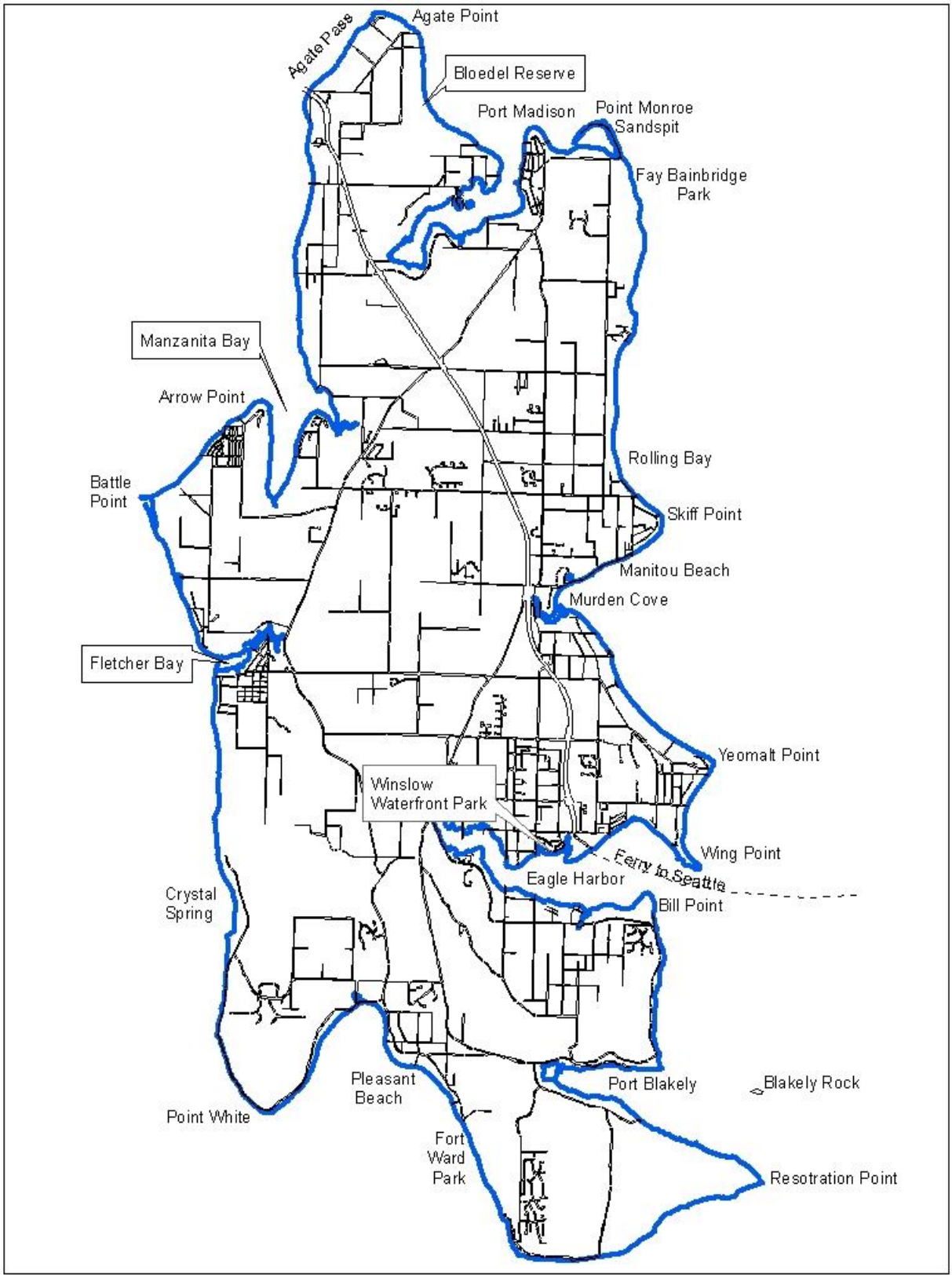

Figure 1-2 Map of Bainbridge Island

1.3.2 Title

This document shall be known as the Bainbridge Island Shoreline Master Program ("the Shoreline Master Program," "Master Program," "the Program", or the "SMP").

1.3.3 Adoption Authority

This Bainbridge Island Shoreline Master Program is adopted under the authority granted by Chapter 90.58 RCW and Chapter 173-26 WAC.

1.3.4 Relationship to Other Plans and Regulations

The Shoreline Master Program regulations are used as an overlay to other City policies and regulations for properties within shoreline jurisdiction. The following provisions apply to this program in relationship to other plans and regulations:

1. In addition to compliance with the provisions of the Shoreline Management Act of 1971 (also called "the Act"; RCW 90.58) and the State Master Program Approval/Amendment Procedures and Master Program Shoreline Guidelines (the "Guidelines" or "Shoreline Master Program Guidelines"; WAC 173-26);, this Shoreline Master Program must be consistent with local plans and policy documents, specifically, the City's Comprehensive Plan and the City's critical areas regulations. This Shoreline Master Program must be consistent with the regulations developed by the City to implement its plans, such as the zoning code and subdivision code, as well as regulations relating to building construction and safety.
2. Uses and developments regulated by this Program may also be subject to other provisions of the Bainbridge Island Municipal Code, the City of Bainbridge Island Comprehensive Plan, the Washington State Environmental Policy Act (Chapter 43.21C RCW and Chapter 197-11 WAC), Chapter 173-27 WAC Shoreline Management Permit and Enforcement Procedures, and other local, state and federal laws.
3. Project proponents are responsible for complying with all applicable laws prior to commencing any use, development or activity.
4. Where this Program makes reference to any RCW, WAC, or other state or federal law or regulation the most recent amendment or current edition shall apply.
5. In the event of a conflict between the provisions of this program and the laws, regulations, codes or rules of any other authority having jurisdiction within the City, the regulations that provide more protection to the shoreline area shall apply, except when constrained by federal or state law, or where specifically provided otherwise in this Program.
6. Other activities that could occur along the shoreline (starting bonfires, disposing or spilling/releasing of regulated or hazardous waste products, use of pesticides, activities within wetlands) may require other permits, review, or approval not identified here.

1.3.5 Applicability of Bainbridge Island Shoreline Master Program

1. The Bainbridge Island Shoreline Master programs applies to 200 feet landward of ordinary high water mark and all marine waters out to the midline of Puget Sound, Port

Madison, Agate Pass, Port Orchard and Rich Passage. The SMP does not apply to freshwater lakes or streams on Bainbridge Island.

2. The provisions of this Program apply to both existing and new development, uses, lots, and activities as follows:

    a. Development, uses, lots, and activities lawfully occurring, established or constructed prior to the effective date of the initial adoption of this Program (November 26, 1996), or amendments thereto, are not required to meet this Program's requirements, unless new development or changes to a development, use, lot or structure that would require review under this Program are proposed.

    b. All existing legally constructed single-family residences and accessory structures, including lawns, landscaping and recreation areas, which do not meet the standards of this Program are allowed to continue, and are allowed to ~~may~~ be maintained, repaired, remodeled, or replaced.

    c. All proposed uses and development occurring within shoreline jurisdiction must be consistent with Chapter 90.58 RCW, the Shoreline Management Act and this Program.

    d. Uses and activities that do not meet the definition of development may be subject to the provisions and regulations of this Program.

3. Any person wishing to undertake activities constituting "development" within shoreline jurisdiction shall apply to the Administrator for a Shoreline Permit. Based on the provisions of this Master Program, the Administrator shall determine if a Letter of Exemption, a Substantial Development Permit, a Shoreline Conditional Use Permit, and/or a Shoreline Variance is required. Substantial development shall not be undertaken within the jurisdiction of the Act and this Master Program unless a Substantial Development Permit has been obtained and the appeal period has been completed and any appeals have been resolved and/or the project proponent is allowed to proceed under the provisions of the Act or by court order. "Substantial development" shall be defined as it is by the Act (RCW 90.58.030) and supplementing provisions of the Washington Administrative Code (WAC 173-27-040).

4. Developments exempt from a Substantial Development Permit, which are outlined in BIMC Section 2.16.165, shall require a Letter of Exemption. A project that qualifies as "exempt development" may also require a Shoreline Conditional Use Permit, and/or a Shoreline Variance.

5. This Master Program shall apply to every individual, firm, partnership, association, organization, corporation, local or state governmental agency, public or municipal corporation, or other entity which develops, owns, leases or administers lands, wetlands, or waters that fall under the jurisdiction of the Act.

6. Applicability of this Master Program to federal lands and agencies shall be consistent with WAC 173-27-060.

1.3.6 Program Provisions

1. Exempt developments shall not be undertaken within the jurisdiction of the Act and this Master Program, unless a Letter of Exemption has been obtained documenting that the development is consistent with the policies and procedures of the Act, all applicable state regulations and this Master Program.
2. The request for a Letter of Exemption shall be in writing, on forms required by the Administrator, and include the information required by the Administrator.
3. Approved shoreline restoration projects that cause a landward shift in the ordinary high water mark may be relieved from the standards of this Program pursuant to RCW 90.58.580.
4. The "policies" in this Master Program provide broad guidance and direction and will be used by the City in applying the "regulations."

1.3.7 Bainbridge Island Shoreline Master Program Administrative Procedures

As described in the adopted Ordinance 2014-04, with the exception of specific enforcement procedures, the general administrative sections of Shoreline Master Program as listed below are included in Title 2 of the Bainbridge Island Municipal Code. The use of separate local administrative and enforcement procedures is consistent with the 2003 Washington State Shoreline Master Program Guidelines, Administrative provisions [WAC 173-26-191(2)(a)(iii)(C)]:

> Local governments may include administrative, enforcement, and permit review procedures in the master program or the procedures may be defined by a local government ordinance separate from the master program. In either case, these procedures shall conform to the Shoreline Management Act, specifically RCW 90.58.140, 90.58.143, 90.58.210 and 90.58.220 and to Chapter 173-27 WAC.

This allows the City to revise local administrative procedures (fees, application meetings, authority of Administrator, etc.) without another formal SMP amendment process. These chapters must still be consistent and remain consistent with the related provisions in the Shoreline Management Act and state shoreline rules (WAC's). In the event of a conflict, the state RCW or WAC, as amended, will prevail over the local ordinance.

The following administrative sections are part of the Bainbridge Island Municipal Code, BIMC 1.26, Code Enforcement, and BIMC 2.16.165, Shoreline Master Program Administration:

1. Permit or Exemption Required- Before Undertaking Development or Activity
2. Applications
3. Statement of Exemptions from Shoreline Substantial Development Permit
4. Shoreline Substantial Development Permit
5. Shoreline Variance
6. Shoreline Conditional Use Permits
7. Shoreline Application Appeals

8. Enforcement

1.4 Restoration Planning

To achieve island-wide improvements in ecological functions and ecosystem-wide processes as required by WAC 173-26-201(2)(f) and meet the no net loss standard of WAC 173-26-201(2)(c), the City developed a Restoration Plan that guides improvements of degraded shoreline areas over time by restoring shoreline ecological functions and processes over time. The Restoration Plan is linked to the goals and policies of Section 4.1.8, Shoreline Restoration and Enhancement, and is intended to be accomplished through voluntary and incentive-based public and private programs that restore and enhance shoreline areas identified and prioritized for improvement. The Restoration Plan can be found on the City's web page: www.ci.bainbridge-isl.wa.us.

The Restoration Plan provides the following information for shoreline improvements:

1. Identification of degraded areas and opportunities for restoration.
2. Identification of development that is adversely impacting shorelines.
3. Opportunities for protection and conservation.
4. Identification of programmatic restoration strategies.
5. A summary of ongoing and proposed restoration projects.
6. A summary of completed restoration projects.

1.5 Master Goal

The City's shorelines are among the most valuable and fragile of our natural resources and their use, protection, restoration, and preservation is of public interest to all residents of the City. The Island shorelines provide for a significant part of our way of life as a place of residence, recreational enjoyment, and occupation. It is the intent of this program to manage the shorelines of Bainbridge Island consistent with the requirements of the Shoreline Management Act, the Shoreline Master Program Guidelines, and the Growth Management Act, giving preference to water-dependent and water-related uses, and to encourage all reasonable and appropriate development and other activities to occur in a manner which will promote and enhance the public interest and protect environmental resources. An over-arching goal of this master program is to ensure that future use and development of the City's shoreline maintain a balance between competing uses, results in no net loss of shoreline ecological functions, and achieves a net ecosystem improvement over time.

2.0 SHORELINE INVENTORY AND CHARACTERIZATION

2.1 Summary

To characterize the Island's 53 miles of shoreline, the City initiated a series of studies to update the Shoreline Master Program with the most current science. A shoreline structure inventory and two shoreline characterization reports were completed. The primary inventory and characterization data is found in the *Nearshore Habitat Characterization and Assessment, Management Strategy Prioritization, and Monitoring Recommendations* produced by Battelle Laboratories for the City of Bainbridge Island in 2004 (Battelle 2004). The assessment uses a conceptual model to determine potential level of impact from alterations to the nearshore environment. The conceptual model identifies nine controlling factors which represent physical, biological, and chemical attributes of the nearshore marine habitats. The integrated spread-sheet model and geographical information system developed by Battelle~~,~~ quantifies existing anthropogenic impacts by converting qualitative factor values to standardized scores. The model's scoring approach uses a 5-point scale to assign qualitative categories to potential impacts for the nine controlling factors identified in the nearshore conceptual model.

The model divides the shoreline into 201 reaches, which are then grouped into nine (9) management units. The controlling factor score for each represents the predicted impacts affecting nearshore processes. To allow island-wide comparison across different types of shorelines, a normalized index was calculated called the cumulative reach index. Controlling factor scores are best used to prioritize conservation and restoration efforts in the nearshore as indicators for identifying the probability for successful conservation and restoration strategies (Battelle 2004).

The model uses ecological information collected by Washington Department of Natural Resources (WDNR) for a regional shoreline inventory. The data is available through the Department of Ecology's Coastal Atlas. Additional datasets from the City's shoreline structural inventory and other sources are listed in Table 3 in the Battelle document.

An Island-wide inventory of current geomorphic features and an accompanying analysis of historic conditions were produced for the City in 2010 by Coastal Geological Services. This study maps coastal geomorphic shore types (such as "feeder bluffs") and prioritizes restoration and conservation sites. The study includes current and historic mapping of coastal processes and process-impaired areas. Report conclusions integrate a qualitative, coastal processes-based prioritization with an objective of restoring and preserving coastal processes that sustain and maintain critical habitats.

These documents can be accessed from the City's website (www.bainbridgewa.gov).

3.0 SHORELINE DESIGNATION POLICIES AND REGULATIONS

3.1 General

The Master Program establishes seven shoreline designations based on a combination of existing shoreline features and conditions and types of existing and potential future use. When applied to geographic areas of the island, these designations form an overlay for addressing shoreline considerations to the City's land use regulations. Uses which are consistent with a particular designation are encouraged, while uses which are in conflict are discouraged or prohibited. A conditional use process is available when further review is needed to determine whether the use is compatible with the particular designation at the proposed site. Table 4.1, Shoreline Use and Modification Table, provides a summary of uses in relation to the various shoreline designations. Legally existing uses and activities which are incompatible with their shoreline designation are subject to provisions for shoreline uses and structures which do not conform to the SMP. (See Section 4.2.1, Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots).

3.1.1 Shoreline Designation Map

The official Bainbridge Island Shoreline Designation Map (Appendix A) shall be in the custody of the Department of Planning and Community Development and shall be available for public inspection during normal business hours.

The purpose of the map is to depict those areas of Bainbridge Island within the jurisdiction of the Master Program and the various shoreline designations.

3.1.2 Designation Boundaries

Where the shoreline jurisdiction or designation is uncertain, the official shoreline designation map shall be used to determine boundary location. If the conflict cannot be resolved using the shoreline designation map, the following rules shall apply:

1. Boundaries indicated as approximately following the center lines of streets, highways, alleys or other roadways shall be construed to follow such center lines.
2. Boundaries indicated as approximately following lot, fractional section, or other subdivision lines shall be construed as following such subdivision lines.
3. Boundaries indicated as parallel to or extensions of features identified in subsections 1 and 2 above shall be so construed.
4. When not specifically indicated on the Shoreline Designation Map, distances shall be determined by the scale of the map.
5. If there is no designation on the map, then the Shoreline Residential Conservancy designation applies.

Where existing physical or cultural features are at variance with those shown on the Shoreline Designation Map and cannot be determined with certainty by applying subsections 1 through 4 above, the Department shall determine the location or existence of such feature utilizing any appropriate criteria contained in the Master Program.

3.2 Upland Designations

3.2.1 Urban

3.2.1.1 Purpose

The purpose of Urban is to provide for high-intensity water-oriented commercial, transportation, industrial, mixed-use, multi-family residential, public access and recreational uses while protecting existing natural resources, ecological functions and ecosystem-wide processes, and restoring ecological functions in areas that have been previously degraded.

3.2.1.2 Designation Criteria

Areas to be designated Urban should not have biophysical limitations to development such as wetlands and estuaries, floodplains, steep slopes, landslide hazard areas, and/or other sensitive areas; and must meet one or more of the following criteria:

1. Shorelines used or designated for high intensity commercial, industrial, recreational use, or for multifamily residential development.
2. Areas where adjacent land use is urban and urban services are available or areas designated for higher intensity use under the comprehensive plan.
3. Shorelines used for water-oriented and port activities.

3.2.1.3 Management Policies

1. Priority should be given to the following uses in order of preference: water-dependent, water-related, and water-enjoyment uses. Uses which derive minimal benefit from a water location should be discouraged or prohibited. Nonwater-oriented uses should be allowed only if the use is otherwise compatible with the purpose of the Urban designation and the setting, does not displace water-dependent uses, and results in no net loss of ecological functions and ecosystem-wide processes.
2. New development applications should demonstrate they will not result in a net loss of shoreline ecological functions and ecosystem-wide processes.
3. Environmental remediation and restoration priorities should be established for the shoreline that comply with relevant state and federal law.
4. Because urban use tends to preclude other shoreline uses, emphasis should be given to directing new development into already developed areas consistent with the Master Program.
5. Full utilization of existing urban areas should be achieved before additional areas are designated Urban.
6. Visual and physical public access should be required and implemented where feasible. Industrial and commercial facilities should be designed to permit pedestrian waterfront activities. Planning for the acquisition of land for permanent public access to the water in the Urban designation should be encouraged and implemented, where feasible.

7. To protect shoreline character and promote compatible development within the Urban designation, aesthetic considerations should be actively promoted by mechanisms such as sign control regulations, appropriate development siting, screening and architectural standards, flexible lot design process, and through the maintenance of Shoreline Buffer and Site Specific Vegetation Management Areas.
8. In order to make maximum use of the available shoreline resource and to accommodate future water-dependent uses, redevelopment and restoration for a net ecosystem improvement of degraded urban shoreline areas should be encouraged.
9. Developments within the Urban designation should be compatible with uses and activities in adjacent designations, including Aquatic and Priority Aquatic.

3.2.2 Shoreline Residential

3.2.2.1 Purpose

The purpose of Shoreline Residential is to provide for residential development and appurtenant structures, appropriate public access and recreational use, which are consistent with the Shoreline Management Act, while protecting existing natural resources, ecological functions and ecosystem-wide process, and restoring ecological functions in previously degraded areas.

3.2.2.2 Designation Criteria

Areas to be designated Shoreline Residential should be presently zoned, platted or developed for residential use, and should meet one or more of the following criteria:

1. Areas having the physical ability to support low to medium density residential uses and associated recreational and public service facilities; and/or
2. Areas which can provide, and have the capabilities to support, the necessary public services, utilities, and access to accommodate low to medium density residential development. Sewage disposal and water supply facilities may be provided on an individual or community basis.

3.2.2.3 Management Policies

1. Development and new uses should assure no net loss of shoreline ecological function by compliance with:
    a. Minimum frontage width, setbacks, and buffers;
    b. Lot coverage limitations;
    c. Shoreline stabilization standards; and
    d. Protective measures for vegetation conservation, critical areas and water quality.
2. New development should be permitted only in those shoreline areas that are capable of supporting the proposed use in a manner which protects or enhances the shoreline environment, and reflects the character of the surrounding area such as providing open space and maintaining shoreline vegetation buffers.

3. Public access to shorelines should be required for multi-family residences, apartments, and subdivisions. Common access for single-family residential short subdivisions should be encouraged and should be required where feasible.
4. Recreational developments should provide shoreline areas for community or public open space and public access to shorelines.
5. Access, utilities and public services should be available and adequate to serve existing needs and planned future development.
6. Developments within the Shoreline Residential designation should be compatible with uses and activities in adjacent designations, including Aquatic and Priority Aquatic.
7. Restoration of shoreline ecological functions and ecosystem-wide processes should be encouraged through non regulatory programs.

3.2.3 Shoreline Residential Conservancy

3.2.3.1 Purpose

The purpose of Shoreline Residential Conservancy is to accommodate compatible residential uses while protecting, conserving, and restoring shoreline ecological functions and processes of open space, floodplains or other-flood prone areas, and other sensitive lands. It is the further purpose to conserve and manage valuable historic and cultural resources where they exist. Due to the more sensitive characteristics of these areas, a higher level of development standards is warranted.

3.2.3.2 Designation Criteria

Areas to be designated Shoreline Residential Conservancy should include the following criteria:

1. Areas that are appropriate and planned for water-related or water-enjoyment uses that are compatible with maintaining or restoring ecological functions and processes; or
2. Areas that are not generally suitable for commercial/industrial water-dependent uses or more intensive uses due to the potential impacts these uses may have on the existing shoreline characteristics; and one or more of the following criteria:
    a. Areas subject to severe biophysical limitations such as:
        i. Sediment sources for littoral cell (Feeder Bluffs).
        ii. Flood-prone areas.
        iii. Geo-hydraulic shoreforms (e.g., accretion beaches, barrier beaches, and sand spits).
        iv. Wetlands and estuaries
        v. Areas important to the maintenance of surface water level groundwater flow, and water quality.
        vi. Biodiversity maintenance.
    b. Areas that retain important ecological functions and processes, even though partially developed.

c. Areas with valuable historic or cultural features.

3.2.3.3 Management Policies

1. New residential and other development that preserves the natural character of the area, maintains shoreline vegetation buffers and/or promotes preservation of open space, floodplains or sensitive lands, either directly or over the long-term, should be the principal uses. Development that enhances or results in restoration of ecological functions and ecosystem-wide processes should be encouraged if the use is otherwise compatible with the purpose of the designation, the setting, and with adjacent uses and activities, including aquatic designations.
2. Standards should be established for protecting the sensitive shoreline characteristics in this designation to assure no net loss of shoreline ecological functions and ecosystem-wide process, including measures that provide the following:
    a. Minimum frontage width;
    b. Setbacks;
    c. Shoreline buffers;
    d. Lot coverage limitations;
    e. Shoreline modification standards; and
    f. Protective measures for vegetation conservation, critical areas and water quality.
3. Water-oriented uses should be given priority over nonwater-oriented uses. For shoreline areas adjacent to navigable waters, water-dependent uses should be given highest priority.
4. Public access, common access and public recreation objectives should be implemented as required whenever feasible and significant ecological impacts can be mitigated.
5. High intensity development should be prohibited and commercial uses should be limited to those that are water-oriented, consistent with zoning regulations.
6. Recreational developments should provide shoreline areas for community or public open space and public access to shorelines.

3.2.4 Island Conservancy

3.2.4.1 Purpose

The purpose of Island Conservancy is to accommodate a variety of private or public recreational uses that might have a higher level of impact than would be allowed in the Natural designation. Uses should incorporate elements compatible with protecting, conserving and restoring ecological functions and ecosystem-wide processes of open space, floodplains or other flood prone areas, and other sensitive lands, and manage valuable historic and cultural resources where they exist.

3.2.4.2 Designation Criteria

Areas to be designated Island Conservancy should include the following criteria:

1. Areas that are in public ownership such as open space or parks or in private ownership which are voluntarily designated and one of the following:
    a. Areas that are appropriate and planned for recreational or cultural development that is compatible with maintaining or restoring ecological functions and processes; or
    b. Areas that are suitable for water-oriented recreational or cultural uses, but not generally suitable for intensive uses due to the potential impacts these uses may have on the existing shoreline characteristics.
    c. Areas of high scenic or recreational value such as shoreline parks including urban parks, active use parks, passive use parks, and those privately held recreation areas that voluntarily agree to the designation.
2. Areas with extensive or unique historic or cultural resources.
3. Areas where intensive development or use would interfere with natural processes and result in significant damage to other resources.

3.2.4.3 Management Policies

1. New recreational uses that preserve the natural character of the area or promote preservation of open space, floodplain or sensitive lands either directly or over the long-term should be the principal uses. Uses that enhance or result in restoration of ecological functions and ecosystem-wide processes should be strongly encouraged if the use is otherwise compatible with the purpose of the designation, the setting, and with adjacent uses and activities, including aquatic environments.
2. When required by this Program or other land use covenants, public access and public recreation objectives should be implemented whenever feasible and when significant ecological impacts can be mitigated.
3. Uses in the "Island Conservancy" should be limited to those which sustain the shoreline area's physical and biological resources and uses of a nonpermanent nature, except those preferred uses in 3.2.4.2(4) below, that do not substantially degrade ecological functions or natural character of the shoreline area.
4. Water- recreation facilities that do not deplete the resource over time, such as boating facilities, recreational fishing, wildlife viewing trails, and swimming beaches, are preferred uses, provided shoreline resources are conserved over time and significant adverse cumulative impacts to the shoreline are mitigated.
5. Commercial and industrial uses are not permitted except that low intensity, water-oriented commercial uses may be permitted in limited instances where sites possess shoreline conditions and available services to support the development.
6. Construction of new structural shoreline stabilization and flood control works should only be allowed where there is a documented need to protect an existing primary structure or park use (Section 6.2, Shoreline Stabilization) and mitigation is applied, consistent with WAC 173-26-231, Shoreline Modifications. New development should be designed and located to preclude the need for such work.

7. When allowed, new shoreline stabilization, flood control measures, vegetation removal, and other shoreline modifications should be designed and managed consistent with these guidelines to ensure that the natural shoreline functions and ecosystem-wide processes are protected. Such shoreline modification should be consistent with planning provisions for the restoration of shoreline ecological functions and processes.

3.2.5 Natural

3.2.5.1 Purpose

The purpose of the Natural designation is to protect those shoreline areas where the majority of natural ecological functions and/or shoreline ecosystem-wide processes are retained, often evidenced by the shoreline configuration and the presence of native vegetation. Generally, but not necessarily, they include ecologically intact shorelines that are free of structural shoreline modifications, structures, and intensive human uses or have potential for restoration.

3.2.5.2 Designation Criteria

Areas to be designated Natural shall meet the following criteria:

1. Areas that perform irreplaceable shoreline ecological functions or ecosystem-wide process that would be damaged by human activity, including areas that contain largely undisturbed or restored shoreline features or unique natural features, such as wetlands, estuaries, unstable bluffs, coastal dunes, sand spits, and ecologically intact shoreline habitats, and one or more of the following:
    a. Wildlife Habitats.
        i. A shoreline area that provides food, water, or cover and protection for any rare, endangered, or diminishing species, or for significant populations of flora or fauna during critical stages of their life cycle.
        ii. A seasonal area for concentration of native animals, fish, or fowl such as a migration route, breeding site, rearing ground, or spawning site.
    b. Areas of Scientific and Educational Value.
        i. Areas considered to best represent basic ecosystems and geologic types that are of particular scientific and educational interest.
        ii. Areas which best represent undisturbed natural areas.
        iii. Areas with established histories of scientific research.
    c. Areas of Scenic and Recreational Value
        i. Those areas having an outstanding or unique scenic feature in their natural state.
        ii. Areas having a high value for wilderness experience.
        iii. Areas which in their natural state have a high value for low intensity recreational use.
    d. Areas with Restoration Potential.

i. Areas which have been degraded, but which have a high potential of being successfully restored to a natural or near natural condition, or are capable of natural regeneration if left undisturbed.

3.2.5.3 Management Policies

1. Any use that would substantially degrade the ecological functions and ecosystem-wide processes or natural character of the shoreline area should not be allowed. The following new uses should not be allowed in the Natural designation:
    a. Residential uses.
    b. Agriculture uses.
    c. Commercial uses.
    d. Industrial uses.
    e. Nonwater-oriented recreation.
    f. Roads, utility corridors, and parking areas that can be located outside of Natural designated shorelines.
2. Limited access should be permitted for scientific, cultural, educational, and passive recreational purposes, provided that no significant, adverse impact on the area will result.
3. Physical alterations, including new development or "significant removal of vegetation", should only be considered when: a) they serve to protect a significant, unique, or highly valued feature which might otherwise be degraded or destroyed; and b) when alterations would not result in a net loss of shoreline ecological functions and ecosystem-wide processes; and c) alterations would not further degrade other shoreline values; and d) vegetation removal would not reduce the capability of vegetation to perform normal ecological functions and processes.
4. Uses and activities within the Natural designation should be compatible with uses and activities in adjacent, including aquatic designations.
5. A single active use area should be allowed with appropriate compensatory mitigation to accommodate cultural events and passive recreational uses near the log pond at Blakely Harbor Park.

3.3 Aquatic Designations

3.3.1 Aquatic

3.3.1.1 Purpose

The purpose of the Aquatic designation is to protect, restore and manage the sensitive and unique characteristics and resources of the waters of the Puget Sound, tidelands, and submerged intertidal areas located waterward of the ordinary high water mark. The Aquatic designation may allow either multiple water-dependent uses or specific dominant water-dependent uses. It is intended to promote sustainable use of the natural features and resources of Aquatic areas.

3.3.1.2 Designation Criteria

Aquatic areas include:

1. All marine areas waterward of the OHWM which have not been designated Priority Aquatic.
2. All wetlands associated to the above which have not been designated priority aquatic.

3.3.1.3 Management Policies

1. Uses that adversely impact the ecological functions of critical saltwater and freshwater habitats should not be allowed except where necessary to achieve the restoration objectives, and then only when the impacts are mitigated to assure no net loss of ecological functions and ecosystem-wide processes. Compatibility between upland and aquatic uses should be confirmed.
2. New over-water structures are allowed only for water-dependent uses, public access or ecological restoration and such structures must be limited to the minimum size necessary to support the structure's intended use while protecting and conserving aquatic resources.
3. Diverse public access opportunities should be encouraged and developed and should be compatible with the existing shoreline and aquatic uses.
4. Aquaculture practices, should be limited to those activities that can demonstrate that significant impacts to ecological functions, ecosystem-wide processes, and adjacent land uses will not occur. Aquaculture should be encouraged in those tidelands, waters and beds most suitable for such use.
5. Multiple use of over-water facilities or tidelands is preferred over a single industry use. In appropriate areas, fishing and water recreation should be protected from competing uses.
6. All developments and uses on navigable waters, tidelands or bedlands should be located to avoid and designed to minimize interference with navigation.
7. Development and uses on navigable waters, tidelands or bedlands should be located to avoid and designed to minimize impacts to public views.
8. Development and uses on navigable waters, tidelands or bedlands should be designed and located for the safe, unobstructed passage of fish and wildlife, including species whose life cycles are dependent on migration that would be impacted by in-water development.
9. Uses that accommodate deep draft vessels and/or require placement of fill, if allowed, should not occur in areas requiring extensive initial or maintenance dredging or if significant adverse environmental impacts cannot be mitigated.
10. Development of underwater pipelines and cables on tidelands should be discouraged except where adverse environmental impacts can be shown to be less than the impact of upland alternatives. When permitted, such facilities should include adequate provisions to ensure against substantial or irrevocable damage to the environment and no net loss of ecological functions and ecosystem-wide processes.

11. Abandoned and/or neglected structures which cause adverse visual impacts or are a hazard to public health, safety, and welfare should be removed or restored to a useable condition consistent with the provisions of this Program.
12. Restoration or enhancement of aquatic resources and adjacent uplands is encouraged.

3.3.2 Priority Aquatic

3.3.2.1 Purpose

The purpose of the Priority Aquatic designation is to protect, preserve, restore and manage aquatic areas of sensitive and unique ecological value that include those portions of the marine waters of the City that exist in a relatively natural state, free of human influence, or which contain resources, biological diversity, or other features that are particularly sensitive to human activity, or which contain unique, historical, archeological, cultural, or educational features that merit special protection.

3.3.2.2 Designation Criteria

A number of separate criteria are required to define the diverse character of Priority Aquatic types. Tidal lagoons and sensitive portions of tidal inlets will require protection in terms of water salinity and quality, sediment quality and quantity, native vegetation on adjacent shorelines, and remaining areas of native salt-tolerant vegetation. Other types, such as aquatic vegetation, have similar requirements. The Priority Aquatic designation requires additional restrictions than the Aquatic designation on the intensity and type of permitted uses to maintain the integrity of the shoreline environment. Two subcategories of Priority Aquatic will be established in order to recognize the level of development adjacent to the Priority Aquatic and provide an appropriate level protection for the critical habitat. Priority Aquatic shall be designated as follows:

1. Priority Aquatic Category A is more protective and intended to be the default classification.
    a. Those areas previously designated Aquatic Conservancy are designated Priority Aquatic Category A.
2. Priority Aquatic areas located adjacent to upland areas with a high level of existing development are classified as Priority Aquatic B.

The City shall map the limits of the designations with assistance from state resource agencies and other cooperating agencies. Any aquatic area in which actions have been taken under an approved permit that create, restore, or enhance characteristics of the aquatic area that meet any of these criteria shall be designated Priority Aquatic through an amendment to this program as specified in BIMC Section 2.16.200. Where there is a conflict between the map and criteria, the criteria will prevail provided a report is prepared within three years by a qualified professional verifying that the map is in error. The report will be the responsibility of the party requesting the map change. The City may require a third-party review at the applicant's expense. If areas are determined to be appropriate for designation, an amendment to this Program is required to designate Priority Aquatic and shall be processed as specified in Shoreline Master Program Administration, BIMC Section 2.16.200.

3.3.2.3 Type 1: Embayment: Barrier Estuary, Barrier Lagoons, or Closed Lagoon and Marshes

The upland boundary of Type 1 Priority Aquatic shall be the OHWM. There are two barrier lagoons currently identified on the Island; "Point Monroe Lagoon" and "Battle Point Lagoon"; two closed lagoons and marshes "Wing Point Lagoon" and "Tolo Lagoon"; and one barrier estuary "Fletcher Bay".

3.3.2.4 Type 2: Salt marshes and mud flats in Open Coastal Inlets

Embayments and related intertidal areas subject to the daily influence of tides where they support salt-tolerant vegetation and/or exposed mudflats. Open coastal inlets areas should be designated Priority Aquatic if they meet either Criterion I or II below. Only those areas designated will be subject to the Priority Aquatic management policies and regulations.

This type of Priority Aquatic designation shall extend from the OHWM to six (6) feet below mean lower low water (MLLW). If the inlet is less than six hundred (600) feet wide, or less then (6) feet deep at the MLLW, the resource should be considered to be a single system encompassing both sides and the channel. In these cases, boundaries should be drawn from the OHWM to a line perpendicular to the average direction of the tidal flow where the criteria are no longer met. Parts of tidal inlets that do not fit either criterion, and do not fit other types of Priority Aquatic designation, shall be designated Aquatic.

Criterion I: The area between the OHWM and MLLW that provides a habitat for at least one quarter (1/4) acre of salt-tolerant vegetation. Vegetated patches may be smaller than one quarter (1/4) acre, but the total vegetated area must be at least one quarter (1/4) acre.

Criterion II: At least one quarter (1/4) acre of exposed flats is exhibited between OHWM and MLLW whose sediments are at least thirty (30) percent muds.

3.3.2.5 Type 3: Marine Vegetation

Areas waterward of the MLLW that support a sustainable community of kelp, or eelgrass and/or other submerged aquatic vegetation in sufficient quantities to provide special value as habitat for marine life.

Consideration for Priority Aquatic designation under Type 3 may be initiated by any interested person, group, or the City. A petition for nomination shall be submitted by an interested person or group. The following information shall be used by the City to determine when an area meets the criteria for Priority Aquatic under Type 3:

1. Delineation of proposed area, including aerial extent and bathymetric contours.
2. Inventory of submerged aquatic vegetation. Use percent coverage for macro algae and shoot density for eelgrass.
3. Further information, as determined by the Administrator, may be required in addition to the above including but not limited to:
    a. Relationship of proposed area to nearby ecosystems.
    b. List of species utilizing the proposed area.

c. Abundance and diversity of species in the proposed area.

The City shall keep a record and review data annually to determine whether sites are appropriate for nomination under Type 3. If areas are determined to be appropriate for designation, an amendment to this program is required to designate Priority Aquatic and shall be processed as an amendment as specified in the Shoreline Master Program Administration, BIMC Section 2.16.200.

3.3.2.6 Type 4 Other areas

Areas, as designated through the Shoreline Master Program amendment process [BIMC Section 2.16.200], whose existing natural state is relatively free of human influence, or in which resources, biological diversity, or other features are particularly sensitive to human activity, or in which unique ecology, historical, archeological, cultural, or educational features merit special protection. Designation under this type shall be based on a report documenting the presence, function, and distribution of the resources in the area to be designated.

3.3.2.7 Priority Aquatic Category A Management Policies

1. The City should develop a program that identifies critical saltwater habitat appropriate for greater protection under the provisions of the Priority Aquatic designation. The program should include a process to review citizen petitions for Priority Aquatic designation.
2. Uses and activities which would potentially degrade or significantly alter the natural or visual character or ecological functions and ecosystem-wide processes of the shoreline should be severely restricted or prohibited and only allowed if adverse impacts can be mitigated to ensure no net loss of ecological functions and processes.
3. Public use and access should be permitted for scientific, cultural, educational, and recreational purposes if such use is compatible with the purposes of this designation and no significant adverse impact to the biological and visual resources of the areas will result. Motorized vessels should not be allowed.
4. In conjunction with the Island-wide shoreline restoration plan, physical alterations should only be considered when they serve to protect or enhance significant, unique, or highly valued features which might otherwise be degraded or destroyed.
5. Uses and activities adjacent to shorelines designated Priority Aquatic should be compatible with and not compromise the integrity of the Priority Aquatic designation.
6. Protection of shoreline vegetation should be established in all adjacent upland designations to protect the ecological functions, ecosystem-wide processes and characteristics of the Priority Aquatic designation. (See Section 4.1.5, Critical Areas.)
7. A management study of each area should be conducted with appropriate agencies and residents to determine possible refinement~~s~~ to the adopted types, changes in the boundaries of the designated areas, and/or inclusion of additional management strategies.
8. Restoration of enhancement of aquatic resources and adjacent uplands is encouraged.

3.3.2.8 Priority Aquatic Category B Management Policies

1. Implement policy number 1 in Priority Aquatic A management policies (3.3.2.7).

2. Uses and activities which would potentially degrade or significantly alter the natural or visual character or ecological functions and ecosystem-wide processes of the shoreline should be limited and only allowed when adverse impacts can be mitigated to ensure no net loss of ecological functions.
3. Public use and access should be permitted for:
    a. Scientific, cultural, educational purposes;
    b. Recreational shellfish harvesting of a de minimis nature;
    c. When vessels are operated to limit wake and noise impacts; and
    d. Uses compatible with the purpose of this designation, provided that no significant, adverse impact to the biological and visual resources of on the area will result.
4. In conjunction with the part of an Island-wide shoreline restoration plan, physical alterations should only be considered when they serve to protect or enhance significant, unique, or highly valued features which might otherwise be degraded or destroyed.
5. Protection and enhancement of shoreline buffers should be established in all adjacent upland designation to protect the ecological functions, ecosystem-wide processes and characteristics of the Priority Aquatic designation areas. (See 4.1.5 Critical Areas)
6. Restoration or enhancement of aquatic resources and adjacent uplands is encouraged.

3.4 Island Conservancy, Shoreline Residential and Shoreline Residential Conservancy Designation Strategy

In general, shoreline designations criteria are based on the existing use, characteristics of the shoreline environment, and modified by the expected land use. To ensure consistent application of shoreline residential designation criteria a framework was developed to meet natural resource management strategies recommended by the Environmental Technical Advisory Committee. The committee recommended using a broad stroke approach to manage natural resources in an attempt to avoid a piecemeal development pattern. The following rules apply:

1. For properties zoned single family residential, the default shoreline designation is Shoreline Residential.
2. Properties within the Winslow Master Plan area will be designated Shoreline Residential to accommodate the comprehensive plan policy of focusing new residential development into the plan's service area.
3. If less than ten parcels or 1,000 linear feet exist between Shoreline Residential Conservancy designations, then the properties between the two designations will also be designated Shoreline Residential Conservancy to avoid fragmented management of ecological functions and ecosystem-wide processes.
4. If a property has a conservation easement and is adjacent to either a Shoreline Residential Conservancy or Island Conservancy designation, then the property is designated Shoreline Residential Conservancy.
5. All publicly owned open space or park properties shall be designed Island Conservancy or Natural.

6. All publicly owned saltwater road ends shall be designated Island Conservancy.

4.0 GENERAL (ISLAND-WIDE) POLICIES AND REGULATIONS

Introduction

The following general policies and regulations apply to all designations. These provisions are to be used in conjunction with the more specific shoreline use (referred to as "uses") and shoreline modification activity (referred to as "activities") policies and regulations found in Sections 4.0 and 5.0 respectively.

4.0.1 Regulations - General

1. All new shoreline uses and shoreline modification activities, including those that do not require a Shoreline Substantial Development Permit, must conform to all applicable goals, policies, shoreline designations (including the shoreline designation map), and regulations and use tables provided in this Master Program.
2. Shoreline modification activities must be in support of an allowable shoreline use which conforms to the provisions of the Master Program. Except as otherwise noted, all shoreline modification activities not associated with a legally existing or approved shoreline use are prohibited.
3. Shoreline uses, modification activities, and conditions listed as "prohibited" in Table 4-1 shall not be eligible for consideration as a Shoreline Variance or Shoreline Conditional Use Permit.
4. Uses, modification activities, and conditions that are not "prohibited" and not listed in Table 4-1 shall be reviewed through the Shoreline Conditional Use process.
5. The policies listed in the Master Program shall provide broad guidance and direction and shall be used by the Director in interpreting the "regulations."
6. BIMC Title 18 Zoning or its successor also apply to shoreline parcels.
7. Where provisions of this Master Program or other provisions in BIMC conflict, the conflict shall be resolved by the Director of Planning and Community Development by applying the provision that provides the most protection of shoreline ecological functions consistent with the purposes and intent of the Shoreline Management Act. If the Director's decision is made in response to a code interpretation request filed under BIMC 2.16.020.D, the decision shall be appealable in the same manner as other code interpretations. If the Director's decision is made in the processing of a development permit, the Director's decision shall be appealable as part of the permit decision.
8. The use table (Table 4-1), shoreline setback table (Table 4-2), and the shoreline buffer table (Table 4-3) provide regulatory use and dimensional provisions for each shoreline designation.
9. An increase in the dimensional height standard (Table 4-2) for essential public facilities shall be reviewed through a Shoreline Conditional Use. Submittal requirements are in Section 4.1.2.9(2).
10. Submittal requirements for all shoreline development permits or shoreline exemptions are in BIMC Title 2 and the Administrative Manual.

Explanation of Table Abbreviations

The abbreviations used in the Table 4-1 have the following meanings:

- "P" in a cell indicates that the use is permitted by right in that designation. Permitted uses are subject to all other applicable regulations of this Program, including the use-specific standards.
- "C" in a cell indicates that, in the respective designation, the use is a conditional use that is allowed only if reviewed and approved in accordance with the procedures set forth in BIMC Title 2. Unless otherwise stated in this Program or in a conditional use approval, conditional uses are subject to all other applicable regulations of this Code, including the use-specific standards.
- An "A" in a cell indicated that the use is permitted as an accessory use to a permitted use or to an approved conditional use in the same designation. In the case of approved conditional uses, accessory uses listed in the table are permitted unless the terms of the conditional use permit prohibit that accessory use.
- A "CA" in a cell indicated that the use is permitted as an accessory use to a permitted use or to an approved conditional use, but that a conditional use permit is always required.
- An "X" indicated that the use is prohibited in the respective designation. The use may be allowed outside the shoreline jurisdiction, see Title 18 Zoning.
- The column headed "Use Specific Standards" identifies a subsection within BIMC 16.12 that imposes additional standards with which the use must comply. The use specific standard may limit the "P" or "C" designation to certain areas.

Table 4-1. Shoreline Use and Modification Table

Table 4-1 Shoreline Use and Modification Table

"P" = Permitted Use
"C" = Conditional Use
"X" = Prohibited Use
"#" = Same as Upland Property
"A" = Accessory Use
"CA" – Conditional Accessory Use

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Natural Resource Management									
Agriculture	X	X	X	X	X	X	X	X	
Aquaculture	C[1]	X	C	C	C	C	C[1]	C[1]	
Aquaculture, Shellfish Garden	X	P	P	P	P	P	P[1]	P[1]	
Flood Hazard Management [7]	X	C	C	C	C	#	X	X	
Stormwater Management [7]	X	P	P	P	P	#	X	X	
Forest Practices	X	X	C	C	C	X	X	X	
Shoreline Restoration	P	P	P	P	P	P	P	P	
Commercial Development									
Boating Facilities	X	C[8]	X	C[9]	P	#	X	X	
Nonwater-Oriented	X	X[8]	X[22]	X	C[17]	X	X	X	
Water-Dependent	X	X	X[22]	C	P	#	X	X	
Water-Related or Enjoyment	X	X	X[22]	C	P	X	X	X	
Educational and Community Facilities									
Educational Facility	X	C	C	C	P	X	X	X	
Governmental Facility	X	X	C	C	P	X	X	X	

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Religious Facility	X	C	C	C	P	X	X	X	
Cultural and Entertainment Facilities									
Club	X	C	C	C	P	X	X	X	
Commercial Amusement	X	X	C	C	P	X	X	X	
Cultural Facility	X	C	C	C	P	X	X	X	
Entertainment Facility	X	X	C	C	P	X	X	X	
Industrial									
Mining	X	X	X	X	X	X	X	X	
Nonwater-Oriented	X	X	X	X	X	X	X	X	
Solid Waste Disposal	X	X	X	X	X	X	X	X	
Water-Dependent	X	X	X	X	P	#	X	X	
Water-Related	X	X	X	X	C	#	X	X	
Water Enjoyment	X	X	X	X	X	X	X	X	
Overwater Structures									
Boatlift	X	X	P	P	P	#	X	#	
Marine Railway	X	X	P	P	P	#	X	X	
Marine Railway, Retractable [12]	X	P	P	P	P	#	X	#	
Mooring Buoys	X	P	P	P	P	#	X	X	
Piers and Docks	X	C[16]	P	P	P	#	X	P	

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Recreational Floats	X	X	X	P	P	#	X	X	
Recreational Development									
Golf Courses	X	C	X	C	C	X	X	X	
Nonwater-Oriented	X	X	X	C	C	X	X	X	
Recreation, Active	X	C[16]	C[19]	C	P	#	X	X	
Recreation, Passive	P	P	P	P	P	#	P[14]	P[14]	
Event: Recreation, Culture, Education									
Water-Oriented	X	P	P	P	P	#	X	X	
Residential									
Accessory Dwelling Unit	X	C	C[19]	C	C	X	X	X	
Subdivision	C	P	P	P	P	#	#	#	
Multi-family [22]	X	X	X	P	P	X	X	X	
Single-family	X	C	P	P	P	X	X	X	
Shoreline/Aquatic Modification [5] [7]									
Beach Nourishment (Mitigation)	C	P	P	P	P	#	#	#	
Beach Enhancement (non-restoration) [6]	C[12]	C[12]	C[12]	C[12]	C[12]	#	#	#	
Breakwaters	X	X	X	X	X	X	X	X	
Dredging	X	X	X	X	X	C	X	C	
Drift Sill	X	X	X	X	X	P	P	P	

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Landfill	C	C	C	C	C	#	X	X	
Fill	X	C	X	X	C	#	X	X	
Repair of Shoreline Stabilization	X	P	P	P	P	#	#	#	
New or Replacement Shoreline Stabilization, Hard [4]									
New Bulkheads	X	X	P[19]	P	P	#	X	X	
Replacement Bulkheads	X	X	P[19]	P	P	#	#	#	
Gabions	X	X	X	X	X	X	X	X	
Weirs, Groins (rock or concrete)	X	X	X	X	X	X	X	X	
Jetties	X	X	X	X	X	X	X	X	
Levees/Dikes	X	X	X	X	X	X	X	X	
Retaining Walls and Bluff Walls	X	C	C	C	C	X	X	X	
Revetments	X	X	X[2]	X[2]	X[2]	#	X	X	
Seawalls	X	X	X	X	X	X	X	X	
Hybrid	X	P	P	P	P	#	#	#	
New or Replacement Shoreline Stabilization Non-Structural and Soft									
Non-Structural Stabilization, Soft-treatment	X	P	P	P	P	#	#	#	

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SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Transportation									
Existing Road repair	X	P	P	P	P	X	X	X	
New Arterials	X	X	X	X	X	X	X	X	
New Highways	X	X	X	X	X	X	X	X	
New Secondary Arterials	X	X	X	X	X	X	X	X	
Float Plane Facilities and Services	X	X	X	X	C	#	X	X	
Heliports	X	X	X	X	X	X	X	X	
Additional Bridge to Bainbridge Island	X	X	X	X	X	X	X	X	
Parking (primary)	X	X	X	X	X	X	X	X	
Public Access Facilities									
Public Ferry Terminal Facilities and Services	X	X	X	X	P	#	X	X	
Over-water Public Ferry Terminal Facilities and Services	X	X	X	X	C[10]	#	X	X	
Railroads	X	X	X	X	X	X	X	X	
Trails	P	P	P	P	P	#	#	#	
Utilities & Telecommunication									
Utilities (primary)	X	X	C[11]	C[11]	C[11]	#	X	X	

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Signs									
Primary	X	X	X	X	X	P	X	X	
Accessory Structures									
All Uses									
Potable Water Wells	X	A	A	A	A	X	X	X	
Signs	X[20]	X[20]	P	P	P	P	X[20]	X[20]	
Tram	X	A	A	A	A	#	X	X	
Underground Utilities	X	A[21]	A[21]	A[21]	A[21]	#	X	X	
Residential									
Upland appurtenant Structures	X	CA	A	A	A	#	X	X	
Commercial									
Upland appurtenant structures that support a water-dependent use [13]	X	X	X	CA	A	#	X	X	
Upland appurtenant structures that support a water related or water enjoyment use [13]	X	X	X	CA	A	X	X	X	
Upland appurtenant structures that support a non-water oriented use [13]	X	X[8]	X	X	C[17]	X	X	X	
Industrial									

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Upland appurtenant structures that support a water-dependent use [13]	X	X	X	X	A	#	X	X	
Upland appurtenant structures that support a water related [13]	X	X	X	X	CA	#	X	X	
Upland appurtenant structures that support a water enjoyment use [13]	X	X	X	X	X	X	X	X	
Upland appurtenant structures that support a non-water oriented use [13]	X	X	X	X	X	X	X	X	
Public Park/Recreational Development									
Public pathways to the shoreline	A	A	A	A	A	#	#	#	
Public Stairway	A	A	A	A	A	#	#	#	
Access Roads	X	A	A	A	A	X	X	X	
Upland appurtenant structures that support a water-oriented Active recreational use	X	A	CA	CA	A	#	X	X	
Upland appurtenant structures that support a water oriented passive recreational use	A	A	A	A	A	#	A[14]	A[14]	

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Upland appurtenant structures that support a non-water oriented use	X	X	X	X	X	X	X	X	

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	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	

[1] Allowed if using native species and part of an approved shoreline restoration project.
[2] Revetments are prohibited unless they are constructed as part of a public facilities project.
[3] Construction of a bulkhead, revetment, or other structure for the purpose of retaining a landfill or creating dry land is prohibited, unless it is proposed in conjunction with a water-dependent or public use.
[4] Stabilization that would cause significant impacts to adjacent or down current properties is prohibited.
[5] Shoreline modification should not be located on feeder bluffs, except when the area is already developed with a single family primary structure, in which case stabilization may be allowed pursuant to the provisions in Section 6.2, Shoreline Stabilization.
[6] Beach enhancement is prohibited if it interferes with the normal public use of the navigable waters of the state.
[7] Shoreline stabilization and flood protection works are prohibited in wetlands (located in both the upland and the shoreline jurisdiction). They are also prohibited in salmon and trout spawning areas, except for fish or wildlife habitat enhancement.
[8] Public parks only. Nonwater-oriented commercial development only for concessions as accessory use allowed as an SSDP.
[9] Community and joint use docks providing moorage for six or more vessels are permitted with an SSDP but must comply with the provisions in BIMC 16.12.5.4, Boating facilities, as well as the provisions in BIMC 16.12.6.3, Overwater Structures.
[10] New overwater facilities are permitted as a conditional use only in the ferry terminal district. Normal repair and maintenance of existing over-water facilities do not require a Shoreline Conditional Use Permit, but may require an SSDP.
[11] Permitted as a conditional use if no feasible alternative exists.
[12] If upland of Priority Aquatic designation, then the use is prohibited.
[13] All structures are prohibited in Zone 1 upland of a Priority Aquatic Category A designation.
[14] Passive recreational uses and activities are allowed. Development and associated structures is allowed through a Shoreline Conditional Use Permit.
[15] As allowed by Island Conservancy designation 3.3.5.2(6)
[16] Except in Waterfront Park a dock is permitted with a SSDP.
[17] Mixed-use Commercial/Industrial only.
[18] Day use only.
[19] Prohibited or restricted in the Point Monroe District.
[20] Allowed for Public Park, Interpretive, Information, Direction or Dedication. Temporary signs are allowed in accordance with Section 4.2.5 Signs
[21] Conditional use when primary use is a conditional use.
[22] Mixed use development is allowed in areas within the Mixed Use Town Center zones, when physically separated from the shoreline by another parcel in accordance with Section 5.4 Commercial Development.

Table 4-2. Dimensional Standards Table

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Natural Resource Management									
Aquaculture									
Setbacks									
Water-dependent	X	0’	0’	0’	0’	DOES NOT APPLY TO DEVELOPMENT BELOW OHWM			
Water-related	X	25’	25’	25’	25’				
Nonwater-oriented	X	150’	115’	100’	100’				
Height Limit									
Overwater Structures	DOES NOT APPLY TO DEVELOPMENT ABOVE THE OHWM					3'	X	3'	
Accessory use on overwater structures						3'	X	3'	
Overwater Structure Predator Control						6'	X	6'	
Upland	X	30’	30’	30’	30’	DOES NOT APPLY TO DEVELOPMENT BELOW OHWM			

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Aquaculture, Noncommercial for Recovery of Native Population									
Setbacks									
Water-dependent	X	0’	0’	0’	0’	DOES NOT APPLY TO DEVELOPMENT BELOW OHWM			
Water-related	X	25’	25’	25’	25’				
Nonwater-oriented	X	150’	115’	100’	100’				
Height Limit									
Overwater	DOES NOT APPLY TO DEVELOPMENT ABOVE THE OHWM					3'	X	3'	
Upland	X	30’	30’	30’	30’	DOES NOT APPLY TO DEVELOPMENT BELOW OHWM			
Commercial Development									
Boating Facilities									
Setbacks									
Accessory Structures	X	X	X	50’	30’				
Water-dependent	X	X	X	0’	0’				
Dry Moorage	X	X	100’	100’	100’				

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Height Limit									
Dry moorage	X	X	20’	20’	30’				
Buildings	X	X	20’	20’	30’				
Non-water Oriented									
Setbacks									
	X	X	X	200’[2]	200’[2]				
Height Limit									
	X	X	X	30’	30’				
Water-Dependent									
Setback									
	X	X	X	0’	0’				
Height Limit									
	X	X	X	30’	30’				
Water-Related and Enjoyment									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Setback									
	X	X	X	50'[1]	30'				
Height Limit									
	X	50'[1]	X	30'	30'				
Educational and Community Facilities									
Educational Facility									
Setbacks									
Water-dependent	X	X	0'	0'	0'				
Water-related	X	X	50'[1]	30'[1]	30'[1]				
Nonwater-oriented	X	X	115'[1]	30'[1]	30'[1]				
Height Limit									
Upland	X	X	30'	30'	30'				
Governmental Facility									
Setbacks									
Water-dependent	X	X	0'	0'	0'				
Water-related	X	X	50'[1]	30'[1]	30'[1]				

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Nonwater-oriented	X	X	115’	75’	30’				
Height Limit									
Upland	30’	30’	30’	30’	30’				
Religious Facility									
OHWM Setback									
Water-dependent	X	0’	0’	0’	0’				
Water-related	X	50’[1]	50’[1]	30’[1]	30’				
Nonwater-oriented	X	150’	115’	75’	30’				
Height Limit									
Upland	X	30’	30’	30’	30’				
Cultural and Entertainment Facilities									
Club									
Setbacks									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Water-dependent	0’	0’	0’	0’	0’				
Water-related	100’	50’[1]	50’[1]	30’[1]	30’				
Nonwater-oriented	100’	150’	115’	75’	30’				
Height Limit									
Upland	30’	30’	30’	30’	30’				
Commercial Amusement									
Setbacks									
Water-dependent	X	X	0’	0’	0’				
Water-related	X	X	50’[1]	30’[1]	30’				
Nonwater-oriented	X	X	150’	75’	30’				
Height Limit									
Upland	X	X	30’	30’	30’				
Cultural Facility									
Setbacks									
Water-dependent	0’	0’	0’	0’	0’				

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Water-related	100’	50’[1]	50’[1]	30’[1]	20’				
Nonwater-oriented	100’	150’	115’	75’	20’				
Height Limit									
Upland	30’	30’	30’	30’	30’				
Entertainment Facility									
Setbacks									
Water-dependent	X	0’	0’	0’	0’				
Water-related	X	100’[1]	100’[1]	50’[1]	30’				
Nonwater-oriented	X	150’	115’	75’	30’				
Height Limit									
Upland	X	30’	30’	30’	30’				
Industrial									
Water-Dependent									
Setbacks									
	X	X	X	X	0’’				
Height Limit									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Upland	X	X	X	X	30’				
Water-Related									
Setbacks									
	X	X	X	X	100’				
Height Limit									
Upland	X	X	X	X	30’				
Overwater Structures									
Marine Railway									
Setbacks									
	X	X	10’						
Height Limit									
Upland	X	X	10’						
Marine Railway, Retractable [12]									
Setbacks									
	X	10’							

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Height Limit									
Upland	X	10’							
Mooring Buoys									
Setbacks									
From Overwater Structures	100’								
Piers and Docks									
Setbacks From Property Lines									
	10’						X	10’	
Recreational Floats									
Setbacks									
From Overwater Structures	100’						X	X	
Recreational Development									
Height Limit									
Upland	X	20’	20’	20’	30’				
Nonwater-oriented									
Setbacks									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
	200’	200’	200’	200’	100’				
Park, Active Recreation									
Setbacks									
Water-Dependent Primary Structure	X	[2]	[2]	[2]	[2]	[2]	[2]	[2]	
Car/RV Camp Site	X	100’	100’	100’	50’				
Golf Course	X	100’	100’	100’	100’				
Play-structure	X	100’	100’	100’	50’				
Playfields or other Intensive use areas	X	150’	150’	100’	100’				
Height									
Upland	X	20’	20’	20’	20’				
Park, Passive Recreation									
Setbacks									
Water-Dependent Primary Structure	X	[2]	[2]	[2]	[2]	[2]	[2]		
Picnic Area and Related	X	75’[1]	75’[1]	75’[1]	30’[1]				

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Kayak/Hiking and Related Camp Site	X	50'[1]	50'[1]	50'[1]	30'[1]				
Accessory Use									
Setbacks									
Access Roads	X	75'[1][3]	75'[1][3]	75'[1]	50'[1][3]				
Parking	X	100'[1]	100'[1]	100'	50'				
Events, Recreation; Education; Culture									
Setbacks									
Water-Dependent	X	0'	0'	0'	0'				
Water-related/Enjoyment	X	50'[1]	50'[1]	50'[1]	30'				
Residential									
Flex lot Subdivision									
Setbacks									
SUBJECT TO 30% SIDE YARD SETBACK, SHORELINE SETBACK AND ZONING AND SUBDIVISION REQUIREMENTS									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Height Limit									
Upland	X	30’	30’	30’	30’				
Multi-family									
Setbacks									
SUBJECT TO 30% SIDE YARD SETBACK, SHORELINE SETBACK AND ZONING REQUIREMENTS AND BIMC Title 18									
Height Limit									
Upland	X	X	30’	30’	30’				
Single-family									
Setbacks									
SUBJECT TO 30% SIDE YARD SETBACK, SHORELINE SETBACK AND ZONING REQUIREMENTS									
Height Limit									
Upland	X	30’	30’	30’	30’				
Shoreline/Aquatic Modification [5] [7]									
Utilities & Telecommunication									
Utilities (primary)									
Primary Structure	X	200'	200'	200'	200'				

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Accessory Use	X	100'	100'	100’	100'				
Telecommunication Accessory Use	X	100'	100'	100’	100'				
Height									
Distribution Poles	X	X	30’[1][5]	30’[1][5]	30’[1][5]				
Buildings, storage Tanks, Accessory Uses	X	X	30’[1][4]	30’[1][4]	30’[1][4]				
Accessory Structures									
Architectural Elements									
Setback									
	SUBJECT TO SETBACK REQUIREMENTS OF PRIMARY STRUCTURE								
Height									
	TOTAL HEIGHT OF ARCHITECTURAL ELEMENT AND PRIMARY STRUCTURE SHALL NOT TOTAL MORE THAN 35’.								
Residential									
Primary Appurtenant Structures and Non-habitable Structures (boat house, deck, patio, stairway)									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Setbacks									
	SUBJECT TO 30% SIDE YARD SETBACK, SHORELINE SPECIFIC USE SETBACK AND ZONING REQUIREMENTS					SAME AS SPECIFIC USE SETBACK	X	#	
Height									
Boat house, shed, well house, etc.	X	12’	12’	12’	12’	SHORELINE SPECIFIC USE SETBACK	X	X	
Commercial/Industrial									
Primary appurtenant structures that either support public access or are necessary to support a water-dependent use [13]									
Setbacks									
	SAME AS SPECIFIC USE						X	#	
Public Park									

Table 4-2 Dimensional Standards Table

Greyed out setback boxes or letter X indicate prohibited uses

SHORELINE USE	UPLAND DESIGNATION					AQUATIC DESIGNATION			Use Specific Standards
	Natural	Island Conservancy	Shoreline Residential Conservancy	Shoreline Residential	Urban	Aquatic	Priority Aquatic		
							A	B	
Primary appurtenant structures that either support public access or are necessary to support a water-dependent recreational									
Setbacks									
	15’	75’	75’	75’	50’				
Event, Recreation; Culture; Education									
Setbacks									
	N/A	75’[1]	75’[1]		75’[1]				
Parking	N/A	100’[1][3]	100’[1[3]]		100’[3]				

[1] Must be located outside of site specific Zone 1
[2] Same as Use specific setback
[3] ADA access roads may be allowed a lesser setback than standard 5.6.5(2)

Table 4-3. Shoreline Buffer Standards Table

Table 4-3 Shoreline Buffer Standards Table Additional Use restrictions for BIMC Titles 17 and 18 may apply					
SHORELINE USE	**UPLAND DESIGNATION**				
	Natural	**Island Conservancy**	**Shoreline Residential Conservancy**	**Shoreline Residential**	**Urban**
The shoreline buffer consists of two management areas Zone 1 and Zone 2. Zone 1 is located closest to the water; it is a minimum of 30 feet in all designations, except in Natural and Island Conservancy the minimum is 50' and expands to include existing native vegetation. Zone 2 is the remaining area of the shoreline buffer. See figure XXX					
Category A: Low bank lots with 65% Canopy Area in Zone 1, OR spit/barrier/backshore, marsh lagoon, or rocky shores. Category B: Low bank with less than 65% Canopy Area in Zone 1, or lots with a depth < 200' or High Bluff. *Geomorphic Class (i.e. low bank, High Bluff) shall be determined by Battelle 2004 Nearshore Characterization and Inventory.*					
Developed lots					
Category A	200'	150'	115'	75'	30'
Category B	200'	100'[1]	75'[1]	50'[1]	30 [1]
Undeveloped lots					
	200'	150'	150'	75/150'[2]	30'
1. For High bluff properties the greater distance of 50' from the top of the bluff or the standard shoreline buffer. 2. If adjacent to the Priority Aquatic designation then 150' is required.					

4.1 Environmental Quality and Conservation

4.1.1 Shorelines of State-wide Significance

4.1.1.1 Purpose

The Shoreline Management Act of 1971 designated certain shoreline areas as shoreline of state-wide significance (SSWS). Because these shorelines are resources from which all people in the state derive benefit, preference is given to uses which favor public and long-range goals.

4.1.1.2 Applicability

Within the City's jurisdiction all those areas lying waterward from the line of extreme low tide are shorelines of state-wide significance. [RCW 90.58.030(2)(f)(iii) or its successor]. Development, use, or activities located within shorelines of statewide significance shall follow all the provisions of this program. Proposed development, use, and activity within shorelines of statewide significance shall be reviewed in accordance with preferred policies listed in 4.1.1.3. The Administrator may reduce, alter, or deny proposed development, use, or activity to satisfy the preferred policy.

4.1.1.3 Policies (In order of preference)

1. Recognize and protect the state-wide interest over local interest.
    a. Solicit comments and opinions from groups and individuals representing state-wide interests by circulating the Master Program, and any amendments thereof affecting Shorelines of State-wide Significance, to state agencies, adjacent jurisdictions, citizen's advisory committees, local officials, and state-wide interest groups.
    b. Recognize and take into account state agencies' policies, programs, and recommendations in developing and administering use regulations, and in approving shoreline permits.
    c. Solicit comments, opinions, and advice from individuals with expertise in ecology, geology, limnology, aquaculture, and other scientific fields pertinent to shoreline management.
2. Preserve the natural character of the shoreline.
    a. Designate and administer shoreline designation and use regulations to minimize damage to the ecology and environment of the shoreline as a result of man-made intrusions on the shorelines.
3. Result in long-term over short-term benefit.
    a. Evaluate the short-term economic gain or convenience of developments relative to the long-term and potentially costly impairments to the natural shoreline.
    b. In general, preserve resources and values of shoreline of state-wide significance for future generations and restrict or prohibit development that would irreversibly damage shoreline resources.

c. Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities, or general enhancement of shoreline areas.

4. Protect the resources and ecology of the shoreline.
    a. Minimize development activity that will interfere with the natural functioning of the shoreline ecosystem including, but not limited to, stability, drainage, aesthetic values, and water quality.
    b. All shoreline development should be located, designed, constructed, and managed to avoid disturbance of, and to minimize adverse impacts on, fish and wildlife resources including spawning, nesting, rearing, and habitat areas and migratory routes.
    c. Restrict or prohibit public access onto areas which cannot be maintained in a natural condition under human uses.
    d. Shoreline materials including, but not limited to, bank substrate, soils, beach sands, and gravel bars should be left undisturbed by shoreline development.
5. Increase public access to publicly owned areas of the shorelines.
    a. Give priority to developing paths and trails to shoreline areas, linear access along the shorelines, and to upland parking.
    b. Locate development landward of the ordinary high water mark.
    c. Limit public access when environmental or habitat values warrant such limitations.
6. Increase recreational opportunities for the public on the shoreline.
    a. Plan for and encourage development of facilities for recreational use of the shorelines.

4.1.2 Environmental Impacts

4.1.2.1 Applicability

All shoreline development and activity shall be located, designed, constructed, and managed in a manner that avoids, minimizes and/or mitigates adverse impacts to the shoreline environment. The preferred mitigation sequence (avoid, minimize, rectify, reduce, or compensate for the environmental impact) shall follow that listed in WAC 173-26-201(2)(e). See definition of "Mitigation" listed in this Master Program, in Section 8.0, Definitions.

In approving shoreline development, the City shall ensure that shoreline development, use, and/or activities will result in no net loss of ecological functions and ecosystem-wide processes necessary to sustain shoreline resources, including loss that may result from the cumulative impacts of similar developments over time consistent with constitutional and statutory limitations on the regulation of private property. To this end, the City may require modifications to the site plan and/or adjustments to proposed project dimensions, intensity of use, and screening, as deemed appropriate. If impacts cannot be avoided through design modifications, the City shall require compensatory mitigation commensurate with the project's adverse impacts.

4.1.2.2 Goal

Minimize impacts of shoreline development, uses and activities on the environment during all phases of development (e.g. design, construction, and management).

4.1.2.3 Policies

1. Ensure all shoreline uses, activities and developments are designed and located in a manner that prevents or mitigates adverse impacts to shoreline ecological functions and ecosystem-wide processes, including the use of the mitigation sequence (avoid, minimize, rectify, reduce, compensate); and make available flexible alternatives to accommodate preferred shoreline uses.
2. Ensure, through appropriate monitoring and enforcement measures that all required conditions are met, and improvements are installed and properly maintained.
3. Promote shoreline uses and activities within critical areas which do not cause significant adverse impacts to ecological functions and ecosystem-wide processes, such as public access on publicly owned lands.
4. In assessing the potential for new uses, activities and developments to cause adverse impacts, take into account all of the following:
    a. Effects on ecological functions and ecosystem-wide processes, including temporal loss of functions; and
    b. Effects that occur on-site and effects that may occur off-site; and
    c. Direct and indirect effects and long-term effects of the project; and
    d. Effects of the project and the incremental or cumulative effects resulting from the project added to other past, present, and reasonably foreseeable future actions; and
    e. Compensatory mitigation actions that offset adverse impacts of the development action and/or use.
5. To provide for comprehensive management strategies for shoreline areas, integrate planning and regulatory measures, such as those within the comprehensive plan, regional watershed plans, or state and federal regulations.

4.1.2.4 Regulations – Impact Analysis and No Net Loss Standard

1. All shoreline development, use and activities, including preferred uses, and uses that are exempt from a shoreline substantial permit, shall be located, designed, constructed, and maintained in a manner that protects ecological functions and ecosystem-wide processes. All proposed shoreline development, uses and activities shall:
    a. Utilize the required mitigation sequence of Section 4.1.2.6, Regulations – Mitigation; and
    b. Utilize effective erosion and scour control methods during project construction and operation; and

c. Minimize adverse impacts to critical salt water habitat, fish and wildlife conservation areas, and/or other ecological functions and ecosystem-wide processes, such as those provided by shoreline vegetation; and

d. Minimize interference with beneficial natural shoreline processes, such as water circulation, sand and gravel transport movement, erosion, and accretion; and

e. Avoid hazards to public health and safety; and

f. Minimize the need for shoreline stabilization measures and flood protection in the future; and may require a geotechnical analysis to ensure that the proposed activity meets this regulation (See Section 6.2, Shoreline Stabilization); and

g. Result in no net loss of ecological functions and processes necessary to sustain shoreline resources, including loss that may result from the cumulative impacts of similar developments over time.

2. In reviewing and approving shoreline development, use or activity, regardless of whether a permit is required the following shall apply:

   a. The Administrator shall condition the shoreline development, use, and/or activities such that it will:

      i. Meet provisions in subsection 1 above; and

      ii. Employ measures to mitigate adverse impacts on shoreline functions and, processes, if necessary; and

      iii. Modify the site plan and/or adjust the project dimensions, intensity of use, or screening as deemed appropriate to address impacts. If impacts cannot be avoided through design modification, the Administrator shall require compensatory mitigation, pursuant to regulations in Sections 4.1.2.5, Regulations – Revegetation Standards, and 4.1.2.6, Regulations – Mitigation; and

   b. If a proposed shoreline development, use or activity is determined by the Administrator to result in significant short-term, long-term, or cumulative adverse environmental impacts lacking appropriate compensatory mitigation, it shall be sufficient reason for the Administrator to deny a permit.

3. To assure that development activities contribute to meeting the no net loss provisions pursuant to subsection 1 and 2 above, an applicant is required to submit a site-specific analysis of potential impacts and a mitigation plan that includes compensatory mitigation measures when determined necessary as a result of the analysis. The site-specific analysis shall be prepared in accordance with Section 4.1.2.9, Submittal Requirements – Site-Specific Impact Analysis and Mitigation Plan.

4. To mitigate anticipated impacts and meet the no net loss standards in subsection 1 and 2 above, an applicant for a single family residential development or accessory structures may choose to use the Standard Residential Mitigation Manual in Appendix D in lieu of a site-specific impact analysis and mitigation plan. If an applicant uses the Single Family Residential Mitigation Manual, compensatory mitigation requirements provided in the manual shall be included in the project submittal.

4.1.2.5 Regulations – Revegetation Standards

1. Vegetation replanting is required for all development, uses or activities within the 200-foot shoreline jurisdiction that either alters existing native vegetation or any vegetation in the required Shoreline Buffer or Vegetation Management Areas, whether a permit is required or not. This includes invasive species removal. Minimum requirements for planting plans can be found in the City's Administrative Vegetation Management Manual. The following information shall be submitted for approval prior to vegetation disturbance as part of a project proposal or clearing permit pursuant to BIMC 15.18, Land Clearing:

    a. Residential, Industrial and Commercial Development.

        i. Vegetation disturbance of 200 square feet or less requires submittal of an annotated list of proposed plants and their spacing specifications and location.

        ii. Vegetation disturbance greater than 200 square feet requires that the planting plan shall be completed by a qualified professional or the applicant may use the single-family residential mitigation manual.

    b. Public Park and City Maintained Areas.

        i. Vegetation disturbance of 2,500 square feet or less requires submittal of an annotated list of proposed plants and their spacing specifications and location.

        ii. Vegetation disturbance greater than 2,500 square feet requires that the planting plan shall be completed by a qualified professional.

2. For vegetation mitigation in the Shoreline Buffer or Site-specific Vegetation Management Areas, all new plantings shall meet the provisions in Section 4.1.3.5(5), except for the Point Monroe District which shall meet special provisions in subsection 6,

3. If the Shoreline Buffer is altered or reduced pursuant to provisions of Section 4.1.3, Vegetation Management the following shall occur in Zone 1:

    a. Retain existing native vegetation; and

    b. Plant the entire area of Zone 1. Obtain 65% vegetation canopy coverage within 10 years.

4. When vegetation mitigation is required for new upland development, uses, or activities the mitigation plan shall include new plantings that are protective of views from the primary structure of the subject property and in proportion to the identified impact. Mitigation shall be located in the following sequence, except for the Point Monroe District which shall meet special provisions in subsection 6,

    a. Within Zone 1, plant vegetation-to obtain a minimum of 65% native vegetation canopy coverage;

    b. In Zone 2, plant to increase canopy coverage, in a manner that promotes contiguous native vegetation or in areas nearest the shoreline;

c. In the Shoreline Buffer, plant in a manner that promotes a contiguous native vegetated corridor that connects to the shoreline;

d. Outside of the Shoreline Buffer, plant in a manner that promotes a contiguous native vegetated corridor to the shoreline;

e. Outside of the Shoreline Buffer; or

f. At an off-site location approved by the Administrator, within Zone 1, plant to meet the standard of subsection a.

5. When mitigation is required for shoreline stabilization projects due to site disturbance, the required planting plan shall also include the following, unless an alternative planting plan is approved by the Administrator:

   a. Replant 75% of the shoreline area located along the upland edge of the shoreline stabilization structure to a minimum depth of ten (10) feet, unless demonstrated to be infeasible to the Administrator;

      i. The depth may be reduced to five (5) feet to allow for landscape design variation, provided that the total square footage of the area planted equals the required 75% of the shoreline;

   b. Planting plans shall meet provisions in Section 4.1.3.5(5), and shade bearing plants shall be provided at suitable-fish spawning sites; and

   c. Include plantings equivalent to one tree per ever 20 linear feet of shoreline and one shrub per ever five linear feet, which may be planted with due consideration of views from the primary structure of the subject property.

6. Special Mitigation Provisions for Point Monroe District. When vegetation mitigation is required for new development, uses, or activities in the Point Monroe District, the mitigation plan shall include new vegetation communities appropriate for dune, sand spit, barrier beach, barrier estuary, or barrier lagoon, including salt marsh that shall be installed within the spit-specific vegetation management area (SVMA) as defined in Section 4.1.3.5(9), thirty (30) foot setback between the OHWM and the primary structure, or where area is available on the site.

4.1.2.6 Regulations – Mitigation

1. Mitigation Sequence: Mitigation shall include the following actions in order of priority (a-e), and (f) is required for all mitigation activities:

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

   b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;

   c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

   d. Reducing or eliminating the impact over time by preservation and maintenance operations;

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

f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

2. When compensatory mitigation is necessary to offset impacts, mitigation measures in the immediate vicinity of the impact shall be the preferred mitigation option. Property owners may be required to perform the balance of compensatory mitigation off-site if the property cannot support required mitigation or when off-site mitigation can be demonstrated to the satisfaction of the Administrator to be more beneficial to shoreline ecological functions and processes. For example, off-site mitigation may be the better choice if large, cohesive areas are available off-site while only small fragmented areas are available on-site for mitigation.

3. Mitigation actions shall not have a significant adverse impact on other preferred shoreline uses promoted by the policies of the Shoreline Management Act.

4. When compensatory mitigation measures are required, all of the following shall apply:

   a. The quality and quantity of the replaced, enhanced, or substituted resources shall be the same or better than the affected resources; and

   b. The mitigation site and associated vegetative planting shall be nurtured and maintained such that healthy native plant communities can grow and mature over time; and

   c. Unless the Single-family Residential Mitigation Manual is being used for single-family residential development and accessory structures pursuant to Section 4.1.2.4(4), the mitigation shall be informed by pertinent scientific and technical studies, including but not limited to the Shoreline Inventory and Characterization Report, the Shoreline Restoration Plan and other background studies prepared in support of this Program; and

   d. The mitigation activity shall be monitored and maintained to ensure that it achieves its intended functions and values, pursuant to Section 4.1.2.7, Surety Regulations.

5. To encourage shoreline property owners to remove bulkheads and perform other beneficial shoreline restoration actions in advance of shoreline development or redevelopment, the City may give mitigation credit to any beneficial restoration action that occurred within 10 years of the proposed development/redevelopment activity provided that:

   a. The applicant/property owner declares the intent of the restoration or enhancement project as mitigation credit at the time of the restoration permit application; and

   b. The City can confirm via site inspection, photographs, or other evidence that the restoration actions have improved shoreline conditions.

6. Where feasible, replacement compensatory mitigation should be required prior to impact and, if applicable, prior to final inspection and approval of building occupancy; and to

ensure no net loss, the mitigation shall replace the functions as quickly as possible following the impact.

4.1.2.7 Regulations – Surety

1. The applicant/property owner shall provide assurance to the satisfaction of the Administrator, that the restoration area (including off-site mitigation) will be maintained in perpetuity. The assurance can be in the form of notice on title, conservation easement, or similar mechanism as approved by the City Attorney.
2. Except for projects undertaken by public entities, performance and/or maintenance bonds or other security shall be required by the City to assure that work is completed, monitored, and maintained. The bond/surety shall be refunded to the depositor upon completion of the mitigation activity and any required monitoring.

4.1.2.8 Regulations – Monitoring and Maintenance

1. When mitigation is required, a periodic monitoring program shall be included as a component of the required mitigation plan. To ensure the success of the required mitigation, monitoring shall occur for a minimum duration of five years from the date of the completed development. The monitoring plan may also require that periodic maintenance measures be included as recommended by a qualified professional. The duration of monitoring may be extended if the project performance standards set forth in the approved mitigation plan fail to be accomplished, or, due to project complexity, the approved mitigation plan requires a longer period of monitoring.
2. Monitoring programs may be forwarded for review and comment to state and/or federal resource agencies and affected tribes with jurisdiction.
3. Monitoring programs shall meet the requirements established in Section 4.1.5.14, Critical Area Reports.
4. All new and replacement shoreline stabilization projects shall complete and submit a minimum five-year monitoring and maintenance program that addresses the shoreline stabilization mitigation measures, and shall at a minimum include:
    a. An annual site visit by a qualified professional for each of the five (5) years to assess the effectiveness of the mitigation; and
    b. A progress report submitted to the Administrator annually, which includes any monitoring or maintenance recommendations of the qualified professional.

4.1.3 Vegetation Management

4.1.3.1 Applicability

Vegetation management is required for protection and conservation within the shoreline jurisdiction. Dimensional and other development standards, including buffers, are established based on site-specific development and conditions or as specified for that particular shoreline designation. The purpose of vegetation management is to protect and enhance the Island's natural character, water quality, native plant communities, and wildlife habitat within the shoreline jurisdiction. Vegetation management activities will be reviewed under the no net loss

provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.4, Land Modification; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

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

The Vegetation Management provisions apply to all shoreline development, and regulated uses and activities, including those that do not require a shoreline permit. Similar to other master program provisions, vegetation standards do not apply retroactively to existing uses and structures unless changes or alterations are proposed. Standards for vegetation management are established using current scientific and technical information pursuant to WAC 173-26-221(5)(b) and 173-26-201(2)(a), and are based on the use category, shoreline characterization and the designation. Standards are provided in Section 4.0, and Tables 4-2 and 4-3.

4.1.3.2 Goal

Protect and restore shoreline vegetation to maintain and enhance ecological functions and processes, shoreline views and vistas, human safety, and personal property.

4.1.3.3 Policies

1. Maintain existing shoreline vegetation to protect ecological functions and/or processes from adverse impacts of uses, activities and developments within the shoreline jurisdiction.
2. Emphasize the use of native vegetation species to maintain the ecological functions and/or processes and mitigate the direct, indirect, and/or cumulative impacts of shoreline development, uses and activities.
3. Provide flexible dimensional standards for buffers and setbacks that are based on performance standards designed to protect ecological functions and ecosystem-wide processes, including considering alternatives to planting native vegetation species if it can be demonstrated that the equivalent ecological functions can be provided.
4. Use monitoring programs to ensure the protection of shoreline ecological functions and ecosystem-wide processes, particularly when non-native vegetation species are used as an alternative to native vegetation.
5. Encourage the restoration or enhancement of shoreline vegetation through incentive programs.
6. Establish buffers immediately upland of OHWM for each shoreline designation, recognizing the pattern of development, shoreline ecological functions and ecosystem-wide processes, and using current science and technical information, as described in WAC 173-26-201(2)(a). In establishing buffers, consideration should be given to the land use patterns to minimize the number of existing structures that would not conform to buffer dimensional standards.

7. At the time of a proposal, allow site-specific dimensional standards for vegetation management areas for shoreline development, use or activity. Dimensional standards must protect shoreline ecological functions and ecosystem-wide processes.
8. Implement a public education program emphasizing the importance of shoreline vegetation management.
9. Allow selective vegetation clearing for views for new development and to maintain views from existing residences when slope stability and ecological functions and ecosystem-wide processes are not compromised. Trimming and pruning are generally preferred over removal of native shoreline vegetation.
10. Develop specific regulations for Point Monroe, based on vegetation and management practices appropriate for dune communities, sand spits, barrier beaches, barrier estuaries or barrier lagoons.

4.1.3.4 Regulations – Exceptions

1. Vegetation management standards shall not apply retroactively to existing lawfully established conforming and nonconforming uses and developments, including maintenance of existing residential landscaping, such as lawns and gardens. Property owners are strongly encouraged to voluntarily improve shoreline vegetation conditions over the long term.
2. Existing buffers and setbacks that have been established through previously approved subdivisions and indicated on the face of an approved plat shall be recognized and adhered to.
3. The following shall be exempt from the provisions of Section 4.1.3.
    a. Maintenance trimming of vegetation that has a main stem or supporting structure which is less than three (3) inches in diameter; except that tree topping or other vegetation removal is not exempt.
    b. Buffer enhancement through the removal of noxious or invasive weeds, provided the following are met:
        i. The vegetation removal is based on consultation with the Kitsap County Noxious Weed Board or the species being removed are on the Washington State Noxious Weed List (WAC 16-750, or its successor); and
        ii. The vegetation removal is conducted in a manner consistent with best management practices (BMP); and
        iii. Replanting occurs in the disturbed area in accordance with Section 4.1.2.5, Revegetation Standards.
    c. Removal of hazard trees-where a report by an arborist or other qualified professional demonstrates to the satisfaction of the Administrator that trimming is not sufficient to address the hazard provided:
        i. Mitigation is provided in accordance with Section 4.1.2, Environmental Impacts, including:

A. Requiring that the downed tree be retained on the site to provide or enhance wildlife or marine habitat; and/or

B. When possible, require that the hazard tree be topped for safety and remain as a wildlife snag; or

ii. When a hazard tree is located in a geologically hazardous area, the applicant shall submit documentation of compliance with development standards pursuant to Section 4.1.5.11, Critical Areas. The hazard tree may be removed prior to the approval of the plan if it is necessary to protect life and property.

d. Commercial forest practices and the removal of trees pursuant to a Forest Practices Permit (Class II, III and IV-S only) issued by the Washington State Department of Natural Resources under the Washington State Forest Practices Act (RCW 76.09), except where such activities are associated with a conversion to other uses or other forest practice activities over which local governments have authority. For the purposes of this Program, preparatory work associated with the conversion of land to non-forestry uses and/or developments shall not be considered a forest practice and shall be reviewed in accordance with the provisions for the proposed non-forestry use, the general provisions of this Program and shall be limited to the minimum necessary to accommodate an approved use.

4.1.3.5 Regulations - General

1. Development within the shoreline jurisdiction shall be located and designed to protect existing native vegetation from disturbance to the fullest extent possible, to mitigate impacts to existing vegetation, and to meet the standard of no net loss of ecological functions and processes, Section 4.1.2, Environmental Impacts.

2. Vegetation clearing~~,~~ or grading, may not be undertaken within the shoreline jurisdiction without prior review and approval by the Administrator, unless otherwise exempt under Section 4.1.3.4, Regulations – Exceptions, or as provided in subsection 7 below, with an approved Standard Operation Procedure (SOP) manual. Clearing and grading may be subject to Section 4.1.4, Land Modification.

3. Two alternative methods may be used to meet the goals and policies of the Vegetation Management Section, as provided below, except the Point Monroe District shall meet the special provisions provided in subsection 9:

   a. Site-Specific Vegetation Management Areas

      i. As an alternative to the Shoreline Buffer dimensions provided in subsection b, below, an applicant may propose specific dimensional standards that meet the Vegetation Management goals and policies as determined through a Habitat Management Plan (Section 4.1.5.14.3) provided that the plan demonstrates the following:

         A. The proposed development is for a residential use.

B The site-specific proposal assures there is no net loss of the property's specific shoreline ecological functions and associated ecosystem-wide processes pursuant to Section 4.1.2, Impact Analysis and No Net Loss; and

C. The site-specific proposal uses the scientific and technical information1 compiled to support the Shoreline Buffer standards of Section 4.1.3.5(3)(b), and/or other appropriate technical information which, as determined by a qualified professional, demonstrates how the proposal protects ecological functions and processes and how it meets the goals and policies of this Section.

ii. The Habitat Management Plan shall be reviewed by the Administrator in accordance with provisions in Section 4.1.5.14.3. The Administrator may approve, approve with conditions, or deny the request. The Administrator shall have the Habitat Management Plan reviewed by an independent third party, the cost of which will be borne by the applicant.

iii. If the Site-specific Vegetation Management Area is approved, prior to permit issuance, the applicant shall record with the County Auditor a notice on title, or other similar document subject to the approval of the Administrator.

b. As an alternative to a Site-specific Vegetation Management Area, a Shoreline Buffer shall be maintained immediately landward of the OHWM and managed according to provisions of this section. The Shoreline Buffer shall meet the location and design standards of Section 4.1.3.6, Regulations – Shoreline Buffer – Location and Design Standard. The Shoreline Buffer shall be composed of two zones:

i. Zone 1, an inner protective buffer area located immediately abutting the OHWM; and

ii. Zone 2, the remaining portion of the Shoreline Buffer located immediately abutting Zone 1.

4. The Shoreline Buffer or Site-specific Vegetation Management Area shall be maintained in a predominantly natural, undisturbed and vegetated condition. Unless specifically allowed by this program, the following standards shall apply:

a. All existing native groundcover, shrubs and significant trees located within the Shoreline Buffer or Site-specific Vegetation Management Area shall be retained;

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[1] Scientific and technical information supporting the Shoreline Buffer standards is provided in the following documents available at the City of Bainbridge Island's Department of Planning and Community Development: *Documentation of Marine Shoreline Buffer Recommendation Discussions*, Memorandum, 2011, Herrera Environmental; *Addendum to Summary of Science*, 2011, Herrera Environmental; *Bainbridge Island Current and Historic Coastal Geomorphic/Feeder Bluff Mapping*, 2010, Coastal Geologic Services, Inc.; *Best Available Science*, 2003, Battelle; *Bainbridge Island Nearshore Habitat Characterization and Assessment*, 2004 Battelle.

b. All activities shall be performed in compliance with the applicable standards contained in the Vegetation Management Section, unless the applicant demonstrates that alternate measures or procedures are equal or superior in accomplishing the purpose and intent of the Vegetation Management Section, including no net loss of ecological functions and ecosystem-wide processes.

c. The use of pesticides are prohibited unless specifically allowed in Section 4.1.6, Water Quality and Stormwater Management.

5. New vegetation planted in the Shoreline Buffer or Site-specific Vegetation Management Area, unless otherwise provided for in zone-specific requirements Section 4.1.3.6 (6), shall be:

   a. Native species using a native plant-community approach of multi-storied, diverse plant species that are native to the Central Puget Lowland marine riparian zone.

   b. Other plant species may be approved that are similar to the associated native species in diversity, type, density, wildlife habitat value, water quality characteristics, and slope stabilizing qualities, excluding noxious/invasive species provided that, as submitted by a qualified professional, it is demonstrated to the satisfaction of the Administrator that the selected ornamental plants can serve the same ecological function as native plant species.

6. Significant trees located outside the Shoreline Buffer or Site-specific Vegetation Management Area but within the shoreline jurisdiction, shall be retained unless allowed to be removed under the exceptions or other provisions of this program provided:

   a. The Administrator may require alterations of a site plan in order to retain significant trees outside the Shoreline Buffer or Vegetation Management Area. This may include minor adjustments to the location of building footprints, the location of driveways and access ways, or the location of walkways, easements or utilities.

7. Vegetation clearing and maintenance activities, except those which are part of new construction, are allowed consistent with an approved SOP manual for vegetation maintenance and management of public parks, public trails, public rights-of-way or easements, publicly-owned property, and/or other areas normally maintained by the City. A shoreline substantial development permit may be required for the SOP manual. The SOP manual shall include the following prescriptive elements:

   a. Procedures for maintaining vegetation on shoreline properties, shoreline trails or shoreline rights-of-way and easements, including procedures for noxious weed removal;

   b. Procedures for maintaining vegetation in Critical Areas, Shoreline Buffers, or Site-specific Vegetation Management Areas, or other sensitive land areas, including areas with cultural resources;

   c. Procedures for mitigation and vegetation replanting including appropriate species list; and

   d. Procedures for review and approval of allowed activities occurring under the scope of the SOP, including procedures for documenting activities.

8. Minor vegetation removal outside the shoreline buffer or site-specific vegetation management area on a developed property not associated with new construction may be allowed, as provided in this program with an approved clearing permit provided:
    a. The Administrator may grant approval of minor vegetation clearing if it meets the provisions of this Program and the following:
        i. The minor vegetation clearing allowed within a three (3) year period will include an area no greater than 200 square feet in area and/or no more than 3 non-significant trees per 20,000 square feet up to a maximum of six (6) trees; and
        ii. Native vegetation will not be removed from the Shoreline Buffer or Vegetation Management Area; and
        iii All applicable standards of an approved Vegetation Management Plan are met; and
        iv. The replanting is performed pursuant to Section 4.1.2.5, Revegetation Standards; and
        v. Documentation of compliance with the development standards in Section 4.1.5.11 provided by a licensed geotechnical engineer for any vegetation alteration in a geologically hazardous area.
    b. Proposed clearing must meet the provisions of Sections 4.1.2, Environmental Impacts and 4.1.4, Land Modification.
9. **Special Provisions for Point Monroe District**. Shoreline Buffers or Site-specific Vegetation management Areas are not required for properties located in the Point Monroe District;-the following specific vegetation provisions shall apply:
    a. All properties in the Point Monroe District shall retain existing native vegetation and shall be subject to a Point Monroe vegetation management area (PVMA).
    b. The PVMA shall include areas that are:
        i. Within thirty (30) feet of the OHWM and within the required side yard and the salt marsh fringe; and
        ii. Outside any designated development area as approved pursuant to Section 5.9.6(2).
    c. The PVMA shall be managed and maintained in vegetation communities appropriate to dune, sand spit, barrier beach, barrier estuary, or barrier lagoon, including salt marsh.
    d. Developed properties shall retain existing native vegetation (including dune grass and salt marsh plant communities) in those areas that are not developed with legally established impervious surfaces.
    e. Any new development or alterations and expansion of existing development shall assess impacts to existing vegetation and meet the no net loss standard pursuant to Section 4.1.2, Environmental Impacts.

4.1.3.6 Regulations – Shoreline Buffer – Location and Design Standard

1. The total depth of the Shoreline Buffer is based on the shoreline designation and the physical and most predominant geomorphic characteristics of the property. The depth of the Shoreline Buffer will be determined by the Administrator according to criteria below.
    a. Property-specific physical and geomorphic characteristics of the particular lot will determine the maximum width (Category A) or minimum width (Category B) of the Shoreline Buffer, as follows:
        i. Shoreline Buffer Category A: The property contains or abuts a spit/barrier/backshore, or marsh, or lagoon; or

           The property contains or abuts a low bank and the existing native tree and shrub vegetation cover is at least 65% of the area of Shoreline Buffer Zone 1.
        ii. Shoreline Buffer Category B: The property is shallow (200 feet in depth or less, as measured landward), or located on a high bluff, or does not meet any of the characteristics of Category A.
    b. Shoreline Buffer standard depth in Table 4-3
    c. As determined by the Administrator, buffers do not extend beyond an existing public paved street or an area which is determined by the Administrator to be functionally isolated from the shoreline or critical area. In these limited instances the no net loss of shoreline ecological function and processes still apply to properties within the shoreline jurisdiction.
2. The total area of the Shoreline Buffer shall be the equivalent of the length of the property along the shoreline, multiplied by the required buffer depth as prescribed for the specific shoreline designation in which the property is located. See Figure 4-1.
3. The Shoreline Buffer consists of two zones. The depth of each of the two zones within the Shoreline Buffer is determined as follows:
    a. Zone 1 shall extend from the ordinary high water mark (OHWM) a minimum of 30 feet, or to the limit of existing native vegetation whichever is greater. The native vegetation limit is determined through a site-specific analysis of existing conditions, and in no case shall Zone 1 be greater than the depth of the Shoreline Buffer.
    b. Zone 2 shall be established immediately landward of the Zone 1 and extend no further than the depth of the Shoreline Buffer.
4. The following zone specific planting regulations apply to the Shoreline Buffer:
    a. New lawns are not permitted in Zone 1.
    b. In Zone 2, one-third (1/3) of the area may be planted in a combination of grass lawns and approved structures provided:
        i. Significant native trees are not removed to establish such use, or
        ii. The buffer has been reduced through view provisions of Section 4.1.3.11.

c. The remaining two-thirds (2/3) of Zone 2 shall be maintained in a native vegetative state.

d. Planted areas in which fertilizers might be applied-shall be located as far landward of Zone 1, as feasible.

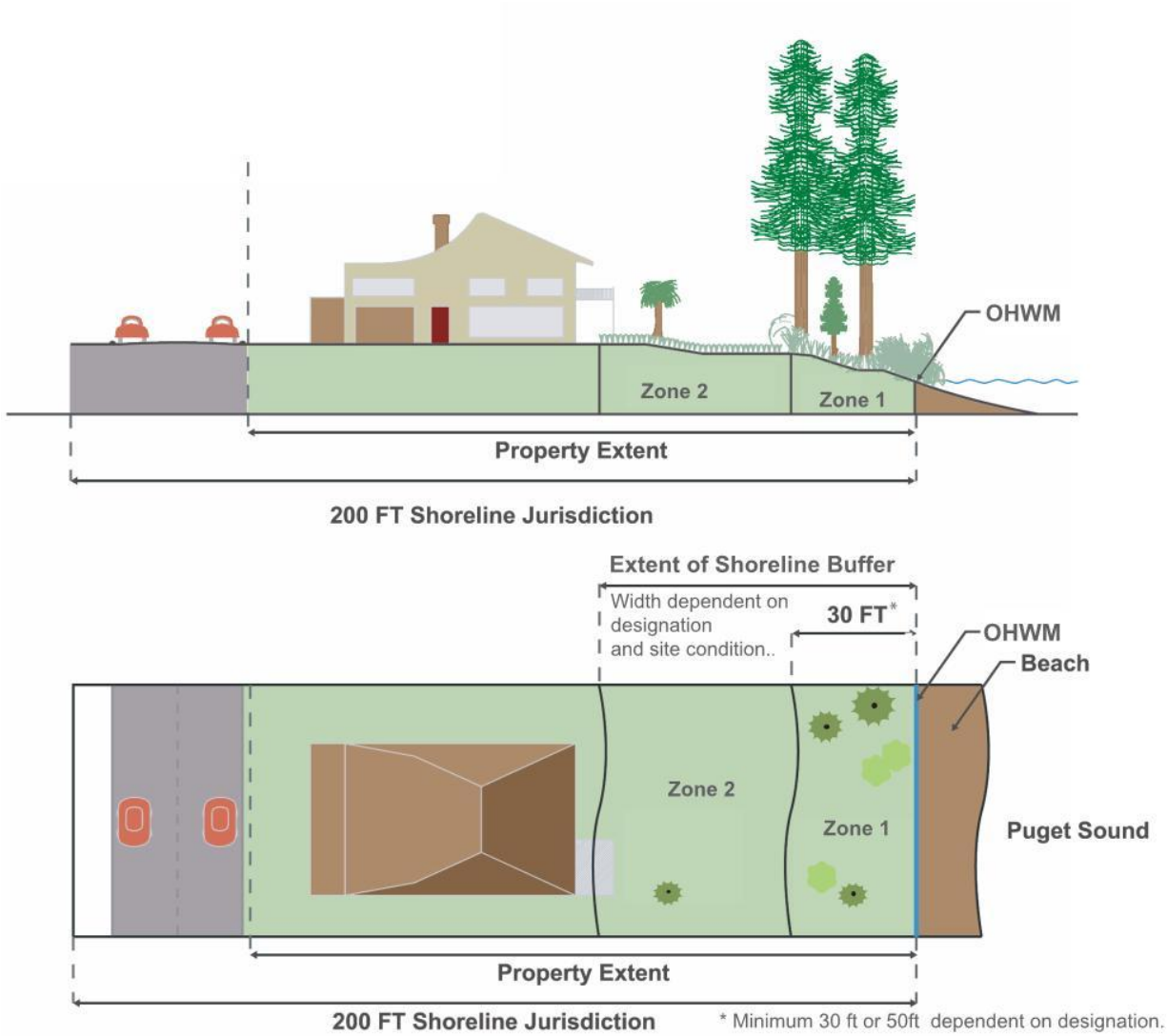


Figure 4-1 Dual Shoreline Buffer

4.1.3.7 Regulations – General Vegetation Alterations in Shoreline Buffers or Site-specific Vegetation Management Areas

1. The following activities are allowed within the Shoreline Buffer and Site-specific Vegetation Management Area with an approved clearing permit. Such activities shall meet the standards of Section 4.1.4, Land Modification.

    a. Existing landscape areas may be retained within the Shoreline Buffer or Site-specific Vegetation Management Area. However, any changes from the existing

landscape to a different landscaping use or activity will require that the modified area comply with the provisions of 4.1.3, Vegetation Management, and the intent of providing native vegetation to maintain ecological functions and processes.

b. Minor Pruning. Tree pruning, including thinning of lateral branches to enhance views, or trimming, shaping, thinning or pruning necessary for plant health and growth and which does not harm the plant, is allowed consistent with the following standards:

    i. All pruning shall meet the American National Standard Institute (ANSI) tree pruning standards;

    ii. In no circumstance shall removal of more than one-fourth (1/4) of the original crown be permitted within a three year period;

    iii. Pruning shall not include topping, stripping of branches or creation of an imbalanced canopy; and

    iv. Pruning shall retain branches that overhang the water.

c. Vegetation Removal Related to Construction. Tree or vegetation removal within the Shoreline Buffer or Site-Specific Vegetation Management Area that is associated with new construction may be allowed, but must retain significant trees and shall meet the requirements of Section 4.1.2, Environmental Impacts, including replanting provisions.

d. Vegetation Removal Related to Public Facility Maintenance. Tree or vegetation removal within the Shoreline Buffer or Site-specific Vegetation Management Area that is associated with maintenance of existing public facilities (including: roads, paths, bicycle ways, trails, bridges, sewer infrastructure facilities, storm drainage facilities, fire hydrants, water meters, pumping stations, street furniture, potable water facilities, and other similar public infrastructure), may be approved by the Administrator if no significant trees are removed, the requirements of Section 4.1.2, Environmental Impacts are met, and the maintenance is measures meet the goals and policies of Section 4.1.3, Vegetation Management, or as approved in a SOP manual as provided in Section 4.1.3.5(7). The following activities are exempt from this requirement:

    i. Removal of vegetative obstructions required for sight distance and visual clearance at street intersections provided in the Public Works Design and Construction Standards and Specifications.

e. Underground Utilities. Utilities that run approximately perpendicular to the buffer (for example, a stormwater tightline to the water to protect a slope or a sewer line to a marina), may be allowed within the Shoreline Buffer or Site-specific Vegetation Management Area, provided that disturbance is minimized and the disturbed area is revegetated after construction; and

f. Other Approved Development in the Shoreline Buffer or Site-specific Vegetation Management Area.

    i. Potable water wells; and

ii. Approved shoreline stabilization;

2. Shoreline Buffer Reductions.
   a. When the prescriptive buffer depth is reduced or dimensions altered through provisions of this Program, the applicant shall record a notice on title, or other similar document with the County Auditor prior to permit issuance, subject to the approval of the Administrator.
   b. If the required depth of a Shoreline Buffer for a single-family residential property is reduced in accordance with the Shoreline Structure Setback provisions of Section 4.1.3.11 or other reductions allowed through this Program, Zone 1 must be restored in accordance with provisions of Section 4.1.2.5.
3. Stairways to the shoreline shall not exceed 300 square feet for private use, the minimum necessary for public use and are not included in the total square footage allocations prescribed in subsections 4.1.3.8(3) of this Program.
   a Larger stairway~~s~~ serving a single-family residence may only be allowed through approval of a Shoreline Variance.
      i. As an alternative to a stairway larger than 300 square feet and to reduce environmental impacts, a tram may be allowed without a variance.
   b. Stairway design shall meet the following minimum criteria:
      i. International Codes for:
         A. Hand Railings;
         B. Stairway width; and
         C. Tread Depth.
      ii. Landings are required, unless demonstrated not to be necessary, and shall be determined by:
         A. Existing site topography;
         B. Personal safety; and
         C. Slope stability.

4.1.3.8 Vegetation Alterations Standards – Residential Development

Minor clearing, grading or construction may be allowed within the Shoreline Buffer or Site-specific Vegetation Management Plan for a residential development with approval of the Administrator pursuant to Section 4.1.3.7(1)(a), and only for the following activities as prescribed below and pursuant to Section 4.1.4, Land Modification:

1. Maintenance of existing residential landscaping is allowed subject to Sections 4.1.3.5(8) and 4.1.3.7. 2. One (1) hand installed pervious trail to the shoreline not more than four (4) feet in width, which may include hand installed steps, and shall be designed to minimize environmental impacts. No significant trees shall be removed. The trail may be wider when required for handicapped or public access. For single-family residential development vegetation trimming is limited to two (2) feet on either side of the trail.

3. Non-habitable structures appurtenant to a single-family use, such as a boat house, deck/patio and/or stairway may be allowed consistent with the following standards, except that all structures are prohibited in Zone 1 when upland of a Priority Aquatic – Category A designation.
    a. For Site-specific Vegetation Management Areas, the total square footage of all buildings or structures must not exceed 300 square feet in area.
    b. For Shoreline Buffer areas, the total square footage of all buildings or structures must not exceed 400 square feet or 10% of the Shoreline Buffer area, whichever is less.
    c. For Shoreline Buffer areas, only 10% of the total allowed square footage or 300 square feet, whichever is less, can be located in Zone 1, except when upland of Priority Aquatic B, the total allowable square footage is 5% of Zone 1 or 150 square feet, whichever is less.
    d. All structures must be designed to not significantly impact views from adjoining property primary buildings.
    e. All structures must meet the following standards:
        i. Only water-related structures are allowed within 30 feet of the OHWM or in Zone 1, including a boathouse, permeable deck, boat storage, or staircase.
        ii. Shall not exceed 12 feet in height above existing grade.
        iii. Decks and/or patios shall be permeable and shall not exceed 30 inches in height above existing grade.
4. View Maintenance – Single-family Residential Only.
   Shoreline residential use and development shall use all feasible techniques to maximize retention of existing native shoreline vegetation within the Shoreline Buffer and the Site-specific Vegetation Management Area.
    a. Limited removal of existing trees or vegetation located on the same property as a single-family residence may be allowed for maintenance of a pre-existing view from the primary structure, or to establish a view for a new primary structure provided the following are met:
        i. The applicant demonstrates to the satisfaction of the Administrator that the vegetation removal is the minimum necessary to re-establish or establish a view of the water similar to that enjoyed by other residences in the area and that pruning methods are not sufficient to provide an adequate view of the water similar to that enjoyed by other residences in the area; and
        ii. Existing significant native trees are not removed within the Shoreline Jurisdiction, unless exempt; and
        iii. In no instance, including accounting for other approved alterations as provided in Section 4.1.3, shall vegetation removal exceed twenty (20) percent of the required Shoreline Buffer area or Site-specific Vegetation

Management Area or reduce the vegetation canopy coverage to less than 65% in the Shoreline Buffer or Vegetation Management Area.

A. Vegetation removal occurring adjacent to the shoreline shall also be limited to fifteen (15) linear feet of the water frontage; and

iv. Documentation of compliance with the development standards in Section 4.1.5.11 provided by a licensed geotechnical engineer for any vegetation alteration in a geologically hazardous area. The cost and preparation of the plan is the responsibility of the applicant; and

v. All vegetation removal complies with other applicable requirements of this Program (such as clearing and grading, forest practices, and protection standards for fish and wildlife habitat), including the no net loss and/or revegetation standards in Section 4.1.2.

b. The Administrator my deny a request or condition approval for vegetation alteration proposals for view maintenance if it is determined that the action will result in an adverse effect to any of the following:

i. Slope stability;

ii. Habitat value;

iii. Health of surrounding vegetation;

iv. Risk of wind damage to surrounding vegetation;

v. Nearby surface or ground water; or

vi. Water quality of a nearby water body.

4.1.3.9 Vegetation Alteration Standards – Commercial and Industrial Development in Shoreline Buffers

Minor clearing, grading, or construction may be approved within the Shoreline Buffer for a commercial or industrial development with approval of the Administrator pursuant to Section 4.1.3.7(1)(a) and only for the following activities as prescribed below and pursuant to Section 4.1.4, Land Modification:

1. Primary appurtenant structures to a commercial use that either support public access or are necessary to support a water-dependent use shall be allowed within the buffer when the applicant has demonstrated a need for the shoreline location, except that all structures are prohibited in Zone 1 when upland of a Priority Aquatic designation.
2. When appurtenant structures are allowed they must be the minimum necessary to meet the needs of the water-dependent use or public access requirements of Section 4.2.4, Public Access.

4.1.3.10 Vegetation Alteration Standards – Public Park Development in Shoreline Buffers

Minor clearing, grading, or construction may be allowed within the Shoreline Buffer for a public park development with approval of the Administrator consistent with the following or pursuant to Section 4.1.3.7:

1. Vegetation clearing and maintenance is allowed in accordance with an approved SOP manual that meets Section 5.1.3.5(7) and the standards of this Program.
2. Maintenance of existing public trails, provided the vegetation trimming is limited to four (2) feet on either side of the trail and no significant trees are removed.
3. Alterations that are included in a Park Development or Concept Plan. Minor clearing, grading, or construction for which the size and extent of proposed disturbed areas located within the Shoreline Buffer have been determined as part of a park development plan or concept park plan, with due consideration of the intended park use; and provided all proposed disturbance areas meet the no net loss standards pursuant to in accordance with Section 4.1.2. Environmental Impacts; and provided appropriate permits are obtained, including those pursuant to Section 4.1.4, Land Modification;
4. Alterations that are not part of a Park Development or Concept Plan. The following minor clearing, grading, or construction activities may be allowed without an approved park development plan or conceptual park plan:
    a. Maintenance of existing public trails is allowed, provided maintenance is limited to the existing size of the trail, any vegetation trimming is limited to four (4) feet on either side of the trail, and no significant trees are removed.
    b. New public pathways or trails to the shoreline provided it is demonstrated that the size and extent of the public pathways has been determined with due consideration of the intended park use.
    c. Structures.
        i. Primary appurtenant structures to a public park and recreational use that either support public access or are necessary to support a water-dependent recreation use shall be allowed within the Shoreline Buffer when a need for the shoreline location is demonstrated, except that all structures are prohibited in Zone1 when upland of a Priority Aquatic designation. When appurtenant structures are allowed, they must be the minimum necessary to meet the needs of the water-dependent use or public access requirements of Section 4.2.4, Public Access.
        ii. The total square footage of all buildings or structures must not exceed 6,000 square feet or 10% of the Shoreline Buffer area, whichever is less.
        A. Only 10% of the total allowed square footage or 1,000 square feet, whichever is less, can be located in Zone 1.
        iii. All structures must be designated to not significantly impact views from adjoining property primary buildings.
        iv. All structures must meet the following standards:

A. Only water-related recreational furniture, amenities and structures are allowed in Zone 1, including but not limited to, picnic tables, benches, interpretive kiosks, viewing platforms, boardwalks, pervious trails or staircases, recreational furniture, signs, pervious trails, and staircases are not included in the maximum square footage allocations prescribed in subsection 4.c.ii, above;

B. Accessory recreation buildings, including restrooms, picnic pavilions and service roads that serve such structures may be allowed in Zone 2 and buildings shall not exceed 12 feet in height above existing grade;

C. Stairways may exceed 300 square feet, provided that it is demonstrated that a greater area is necessary to meet public access and public use demands Stairways shall conform to the standards of the Building Code as adopted in BIMC Chapter 15.04.; and

D. Boat ramps and other boating facilities may be allowed pursuant to Section 5.4, Boating Facilities.

4.1.3.11 Regulations – Shoreline Structure Setback View Requirement

1. To protect existing predominate shoreline views and accommodate shoreline views for a new single-family primary residential structure or addition to a primary residential structure, the Administrator may allow Zone 2 of the Shoreline Buffer to be altered when there is an existing primary residential structure located within 100 feet of the property line of the subject property and topographical or other relevant information indicates that the view of the shoreline from the subject property or the adjacent residence would be impacted by existing or proposed development. The shoreline structure setback line may also require that new structures be set farther away from the shoreline to preserve existing views enjoyed by an adjoining single-family primary structure that was established earlier. These provisions apply to single-family residences only, except in the Point Monroe District.

    a. Setbacks for the purpose of this subsection are based on the location of primary residential structure(s) existing at the time a new primary residential building permit is submitted. A primary residential structure constructed in compliance with the required shoreline setback is not made nonconforming by the later construction of a primary residential structure in a different location on an adjoining lot.

    b. The shoreline structure setback provisions apply only to primary single-family residential structures located within the 200-foot shoreline jurisdiction, where an existing primary single-family residential structure is located within 100 feet of the subject property line. All measurements are to the closest primary residential structure on either side of the subject property as measured parallel to the shoreline.

    c. In determining the shoreline structure setback line, the Administrator may also consider topography or other physical property constraints in addition to the provisions of subsection 4 and 5, below. Applicants may submit detailed

information regarding how property constraints impact the predominate shoreline views from either the subject property's proposed primary residential structure or adjoining properties' primary residential structure(s).

2. The Shoreline Buffer on the subject property may be reduced below the depth requirements identified in Table 4-3 to allow a new primary residential structure to be located within Zone 2 provided the conditions in Section 4.1.3.7(2) are met. Mitigation of proposed residential development shall be required pursuant to Section 4.1.2, Environmental Impacts.
3. In no case shall the subject property be permitted to locate a new primary residential structure within the site's specified Zone 1 of the Shoreline Buffer, unless a Shoreline Variance is granted.
4. Adjoining Development Located Within Shoreline Buffer. The setback requirement for the subject property shall be based on the location of the adjoining properties' primary residential structure(s) as described in subsections (a) through (d) below.
    a. Primary Residential Structure Located on One Side. When an existing primary residential structure is located on one side of the subject property, the shoreline structure setback line shall be determined as follows:
        i. If the adjoining primary residence is partially or wholly located within Zone 2, the shoreline setback line is determined by drawing a line from the most waterward point of the adjoining primary residential structure to the point at which the subject property's Shoreline Buffer boundary intersects the subject property's opposite property line. (See Figure 4-1 (A) I).
        ii. If the adjoining primary residence is located partially or wholly in Zone 1, the shoreline structure setback line shall be determined by drawing a line from the point of intersection of the subject property and the adjoining property's Zone 1 boundary, to the point at which the subject property's Shoreline Buffer boundary intersects the subject property's opposite property line. (See Figure 4-1 (A) II).
    b. Primary Residential Structure Located on Both Sides. When existing primary residential structures are located on both sides of the subject property, the shoreline structure setback line shall be determined as follows:
        i. If both the adjoining primary residential structures are located partially or wholly in Zone 2, then the shoreline structure setback line shall be determined by drawing a line between the most waterward points of each of the adjoining primary residential structures. (See Figure 4-1 (B) I)
        ii. If one of the adjoining primary residences is partially or wholly in Zone 1, and the other adjoining primary residence is partially or wholly in Zone 2, the shoreline structure setback line shall be determined by drawing a line from the point of intersection of the subject property and the adjoining property's Zone 1 boundary (for that adjoining residence located in Zone 1), to the most waterward point of the other adjoining primary residential structure located in Zone 2. (See Figure 4-1 (B) II).

iii. If both of the adjoining primary residences are located partially or wholly within Zone 1, the shoreline structure setback line shall be determined by drawing a line from the point of intersection of the subject property's Zone 1 boundary and the adjoining property's Zone 1 boundary to the same intersection point on the subject property's opposite property line. (See Figure 4-1 (B) III)

c. Primary Residential Structure Located on a Shoreline Forming a Cove or Headland. The Administrator shall make the determination whether a shoreline forms a cove or headland. When existing primary residential structures are located on a cove or headland, the shoreline structure setback line shall be determined as follows:

i. If there is a primary residential structure on only one side of the subject property, then the shoreline structure setback line for the subject property shall be either the distance from the OHWM to the most waterward portion of the primary residence structure of the adjoining property, or the subject property's Zone 1, whichever is greater. (See Figure 4-1 (C) I)

ii. If there are adjoining primary residential structures located on both sides of the subject property, the shoreline structure setback line shall be determined by averaging the distance from OHWM to the most waterward portion of the two adjoining property's primary residential structures. (See Figure 4-1 (C) II)

5. Adjoining Development Located Outside the Shoreline Buffer. The setback requirement for the subject property shall be based on the location of the adjoining properties' primary residential structure(s) as described in subsections (a) and (b) below.

a. Primary Structure Located on One Adjoining Property, Outside Shoreline Buffer. When an existing primary residential structure is located on one side of the subject property, the shoreline structure setback line shall be determined by drawing a line from the most waterward point of the primary residential structure of the adjoining property to a point at which the subject property's Shoreline Buffer boundary intersects the subject property's opposite property line. (See Figure 5-1 (A)).

b. Primary Structures Located on Both Adjoining Properties, Outside the Shoreline Buffer. When existing primary residential structures are located on both sides of the subject property, the shoreline structure setback line shall be determined by drawing a line between the most waterward points of each of the adjoining primary residential structures. (See Figure 5-1 (B)).

c. Primary Structures Located on Both Adjoining Properties, Outside the Shoreline on a Cove or Headland. When existing primary residential structures are located on both sides of the subject property, the shoreline structure setback line shall be determined by averaging the distance from OHWM to the most waterward portion of the two adjoining property's primary residential structures. (See Figure 5-1 (C)).

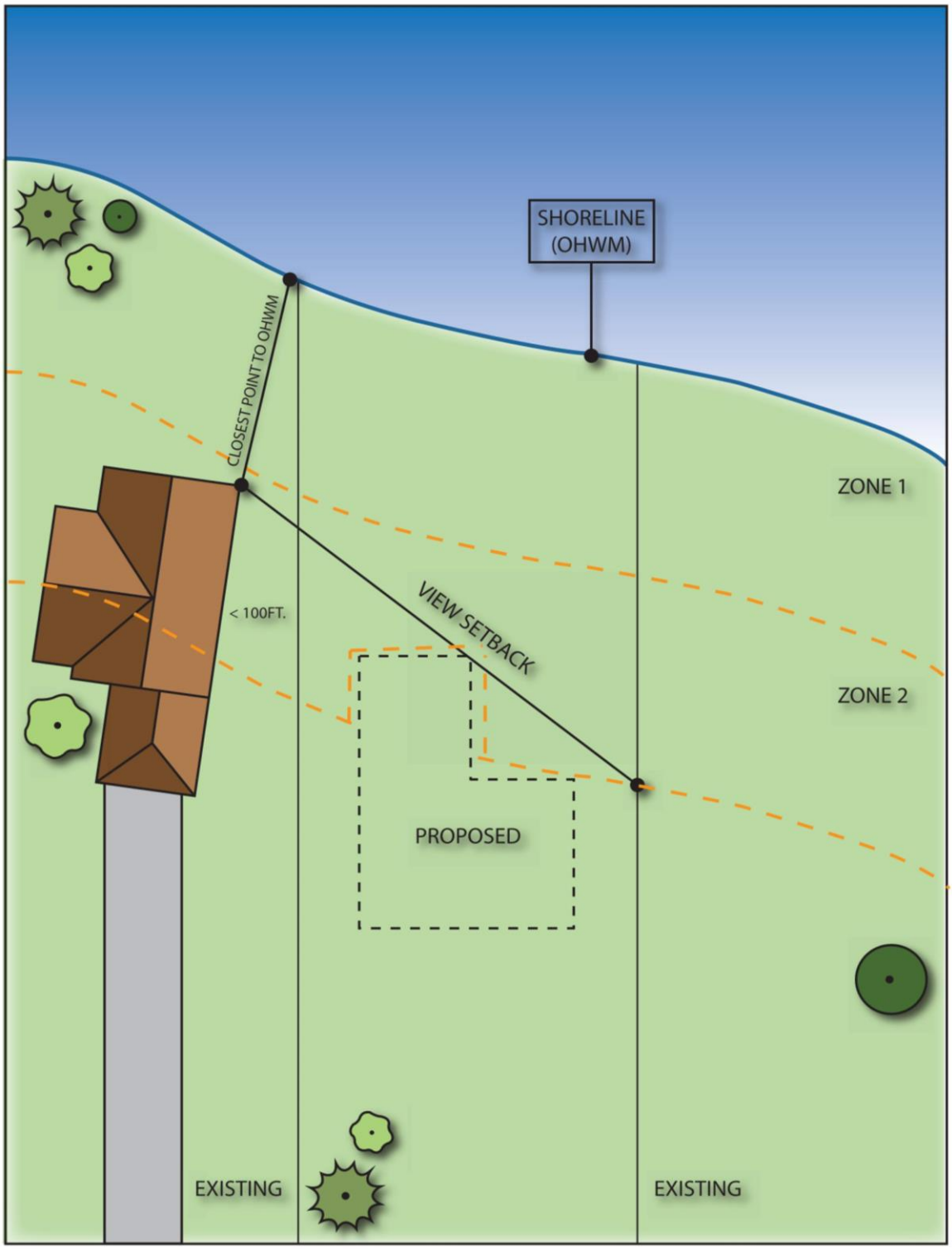

SHORELINE
(OHWM)
CLOSEST POINT TO OHWM
ZONE 1
< 100FT.
VIEW SETBACK
ZONE 2
PROPOSED
EXISTING
EXISTING

FIGURE 4-1 (A) I

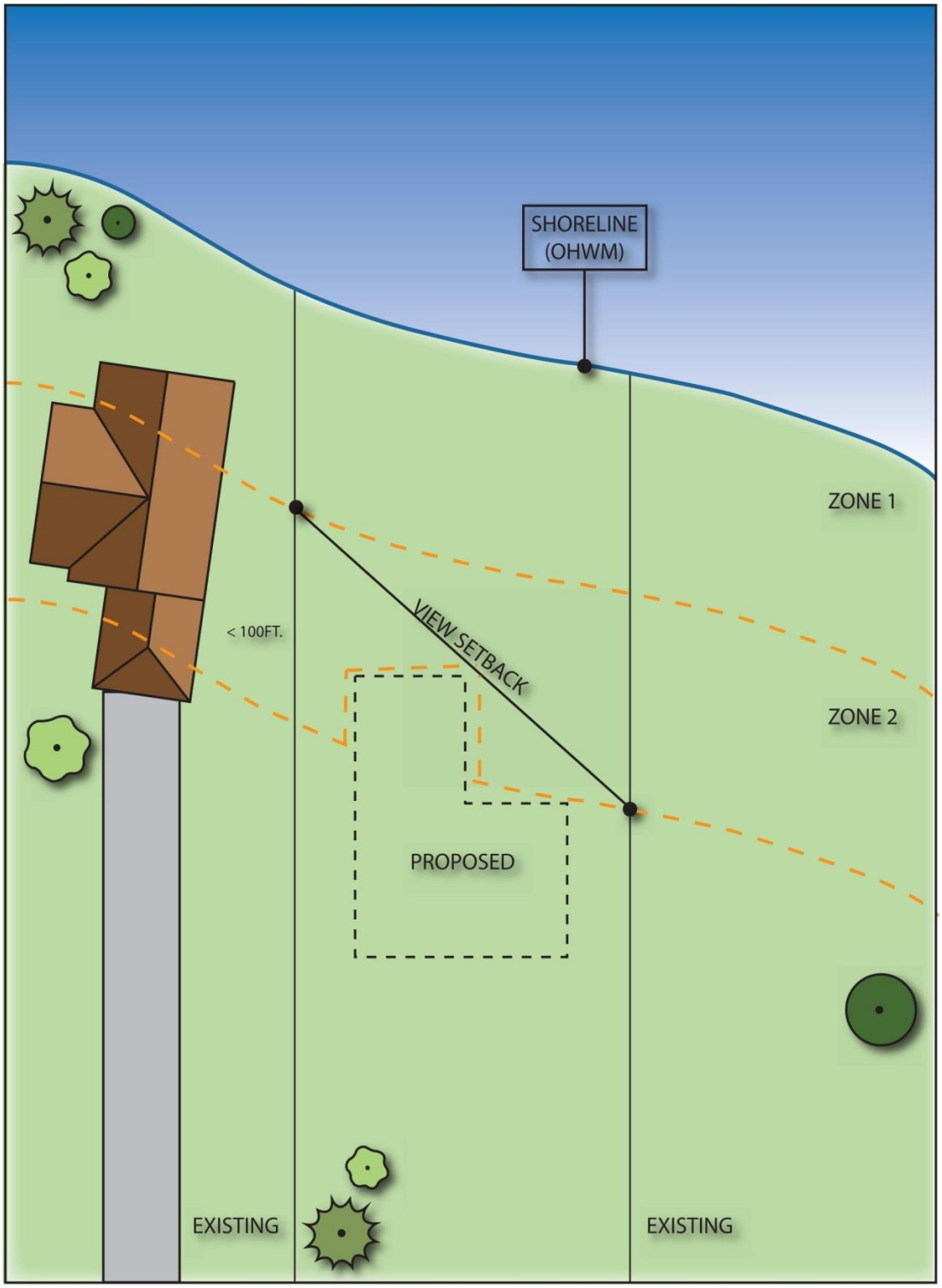


FIGURE 4-1 (A) II

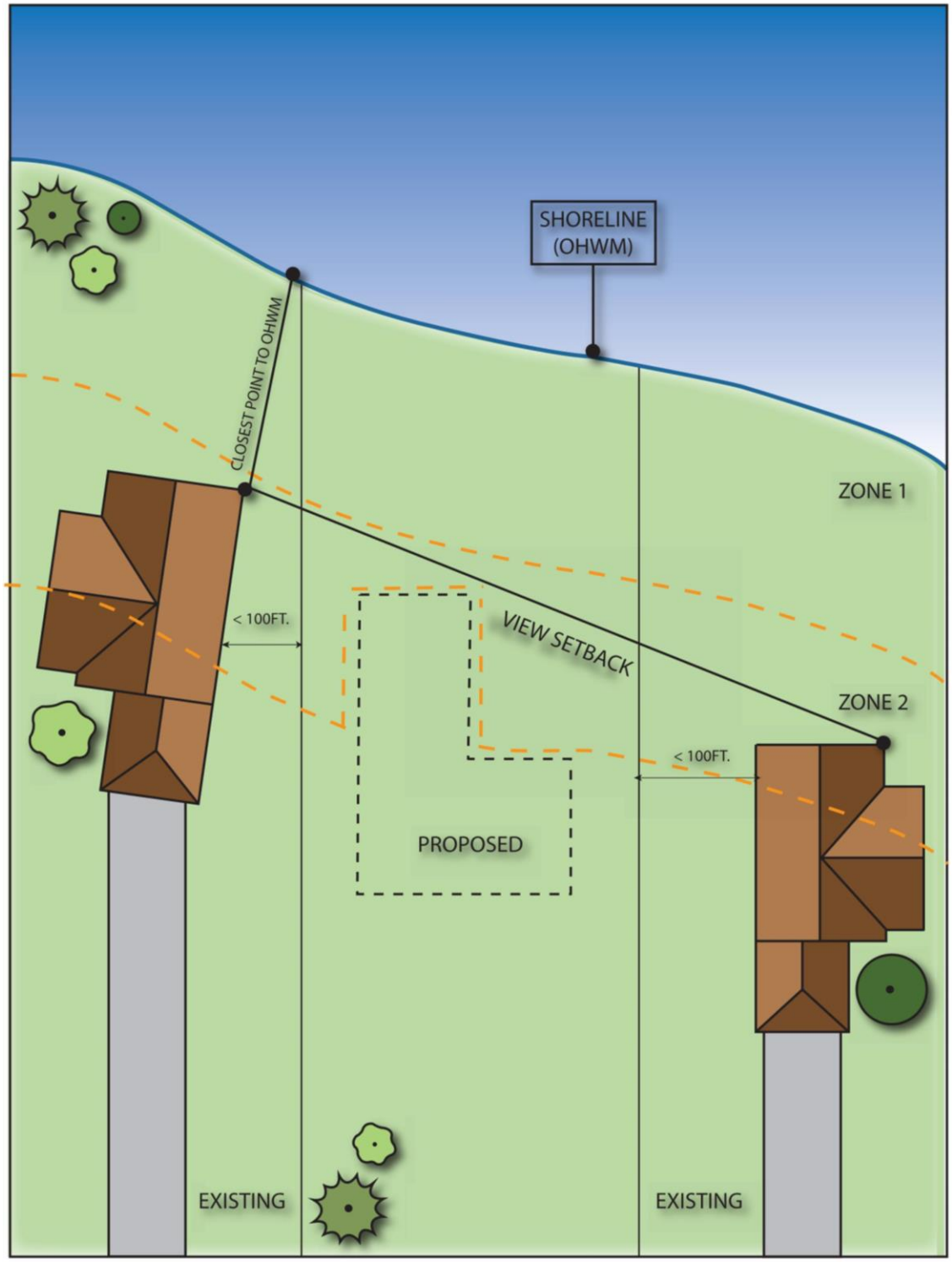

SHORELINE
(OHWM)
CLOSEST POINT TO OHWM
ZONE 1
< 100FT.
VIEW SETBACK
ZONE 2
< 100FT.
PROPOSED
EXISTING
EXISTING

FIGURE 4-1 (B) I

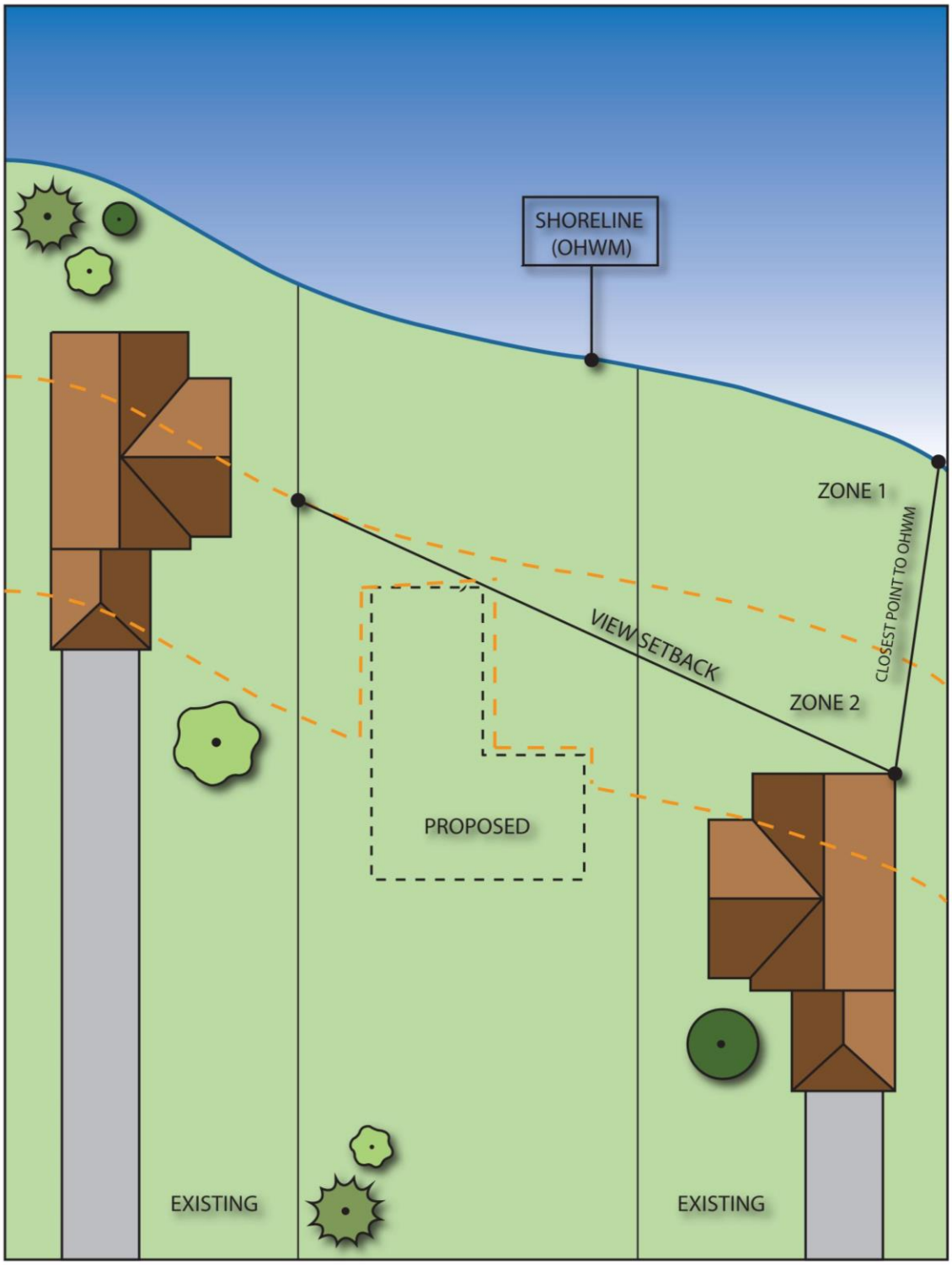


FIGURE 4-1 (B) II

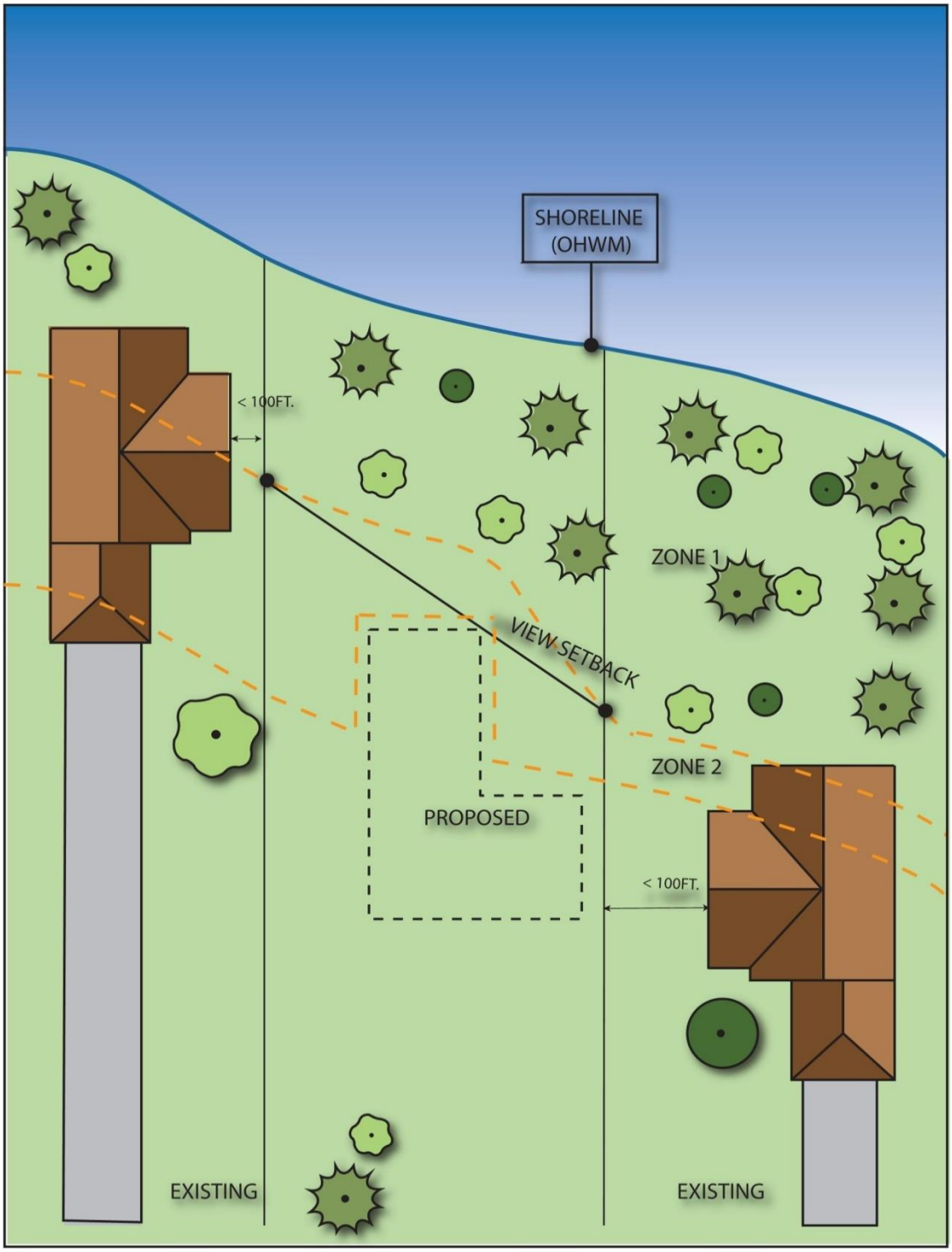


FIGURE 4-1 (B) III

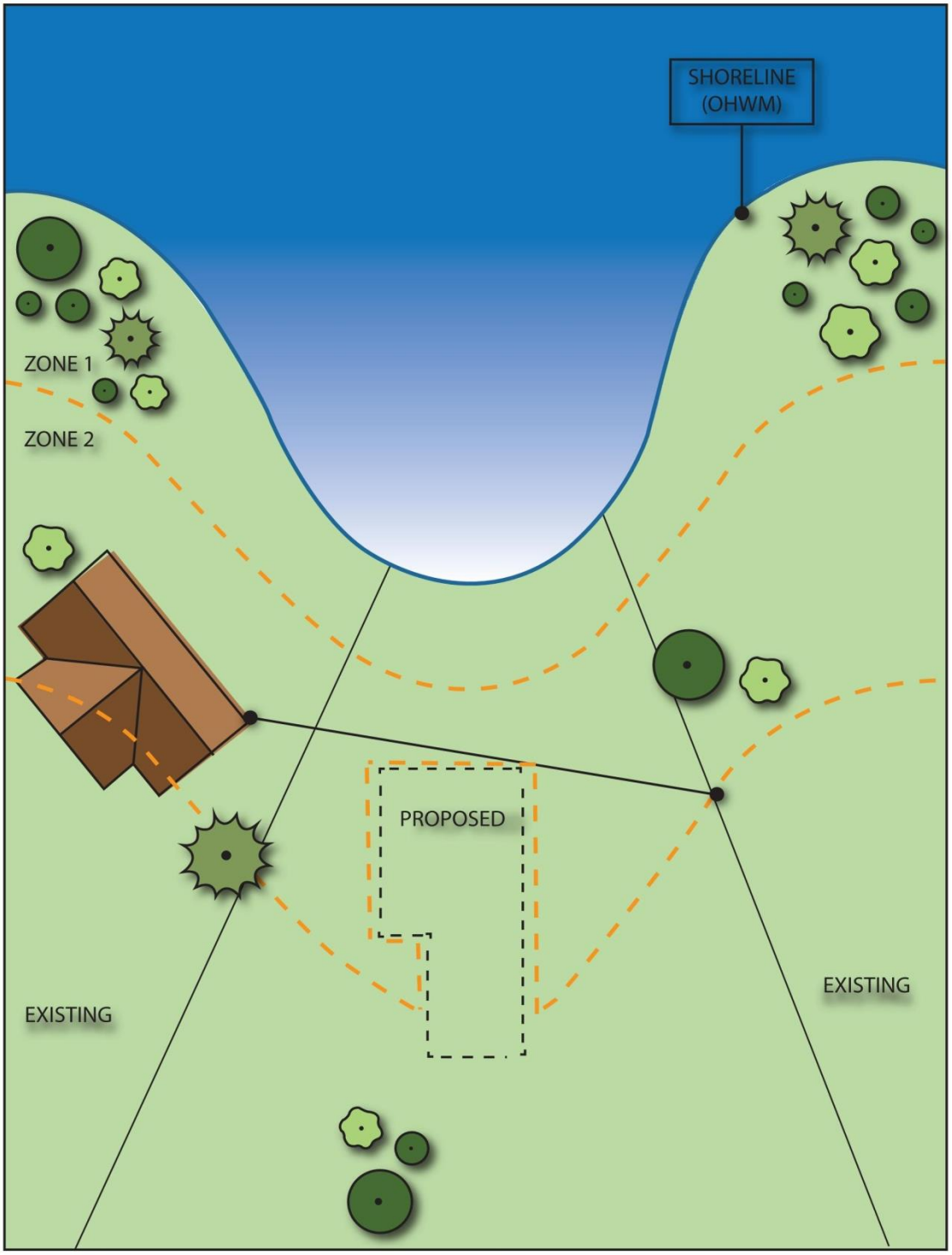


FIGURE 4-1 (C) I

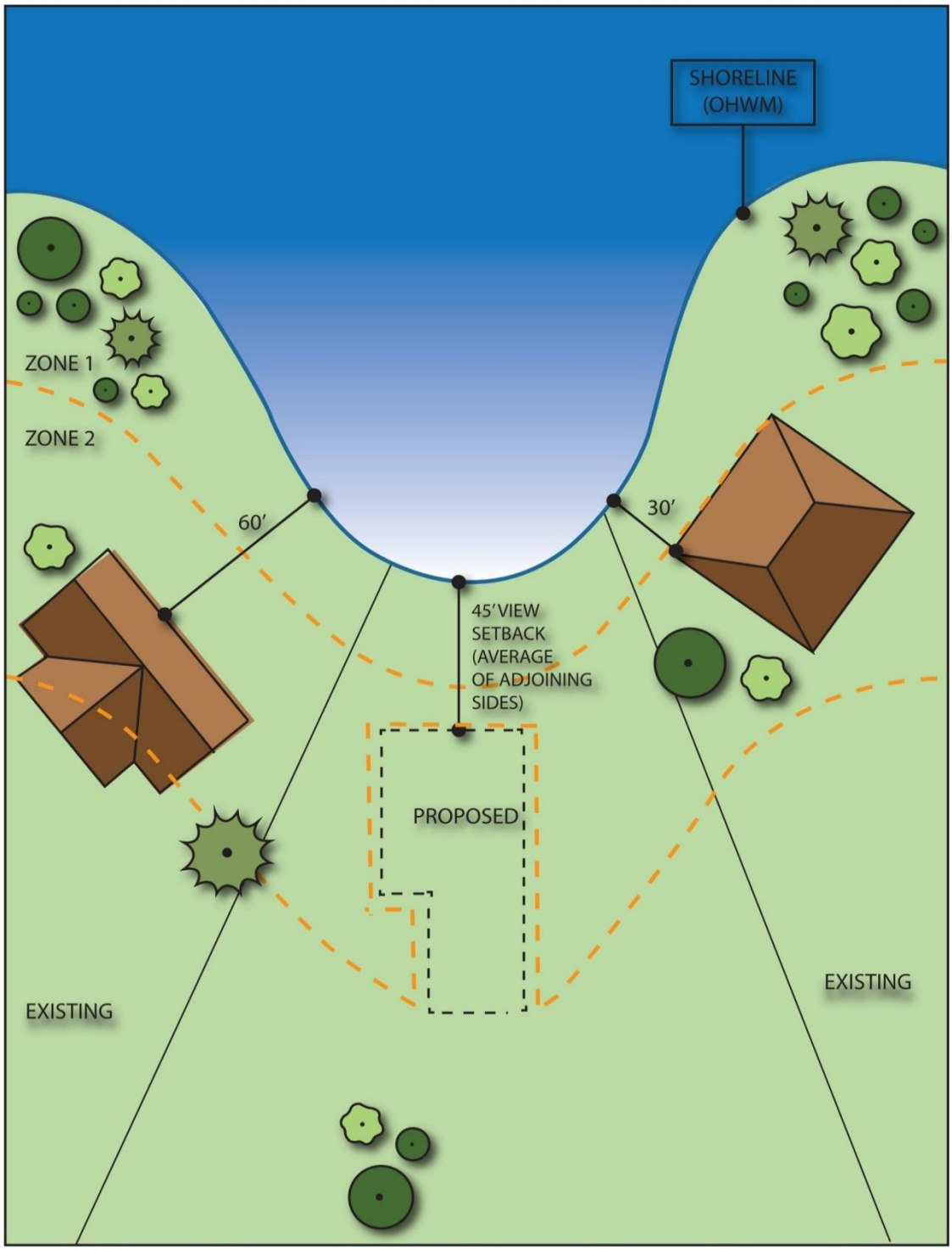


FIGURE 4-1 (C) II

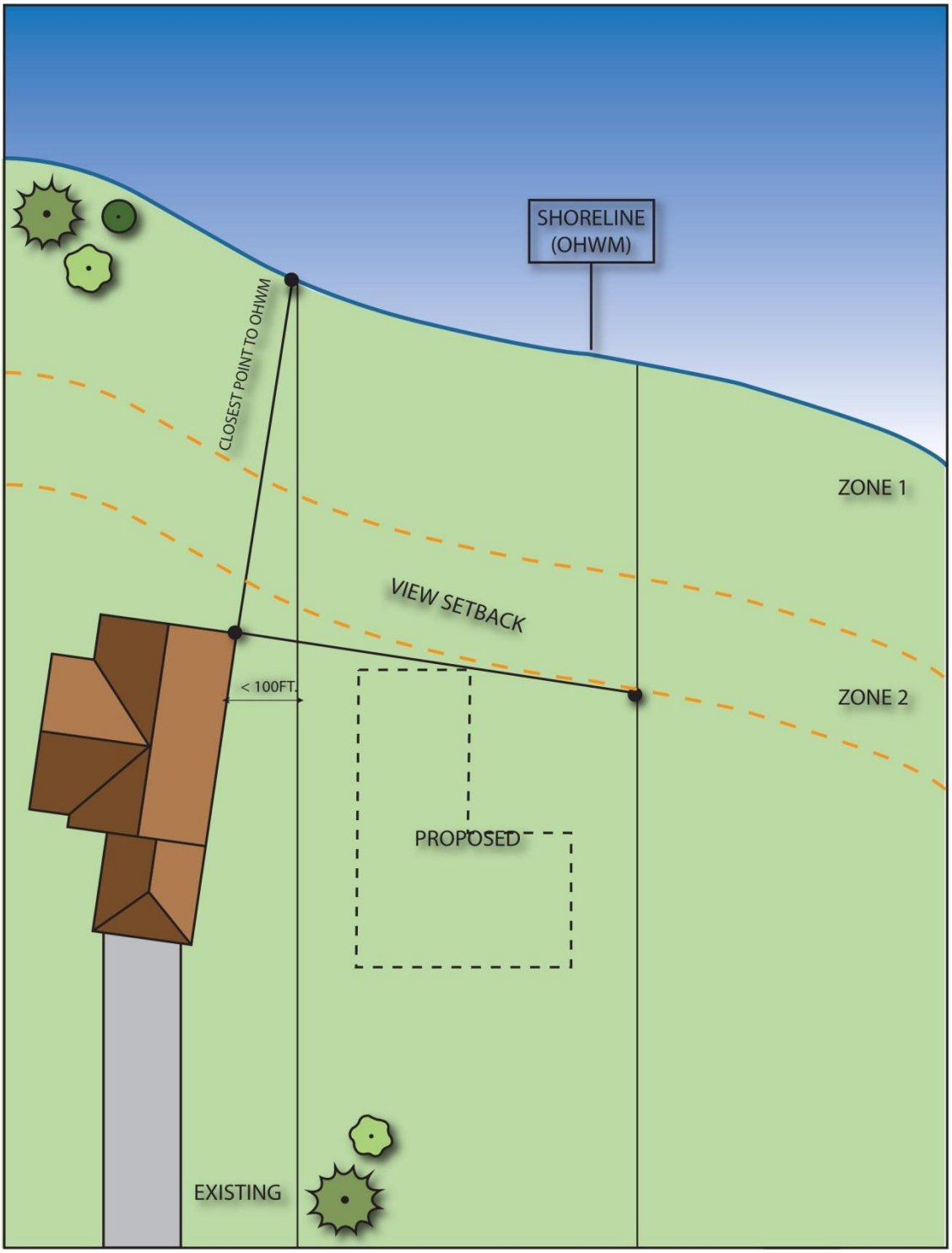

SHORELINE
(OHWM)
CLOSEST POINT TO OHWM
ZONE 1
VIEW SETBACK
< 100FT.
ZONE 2
PROPOSED
EXISTING

FIGURE 5-1 (A)

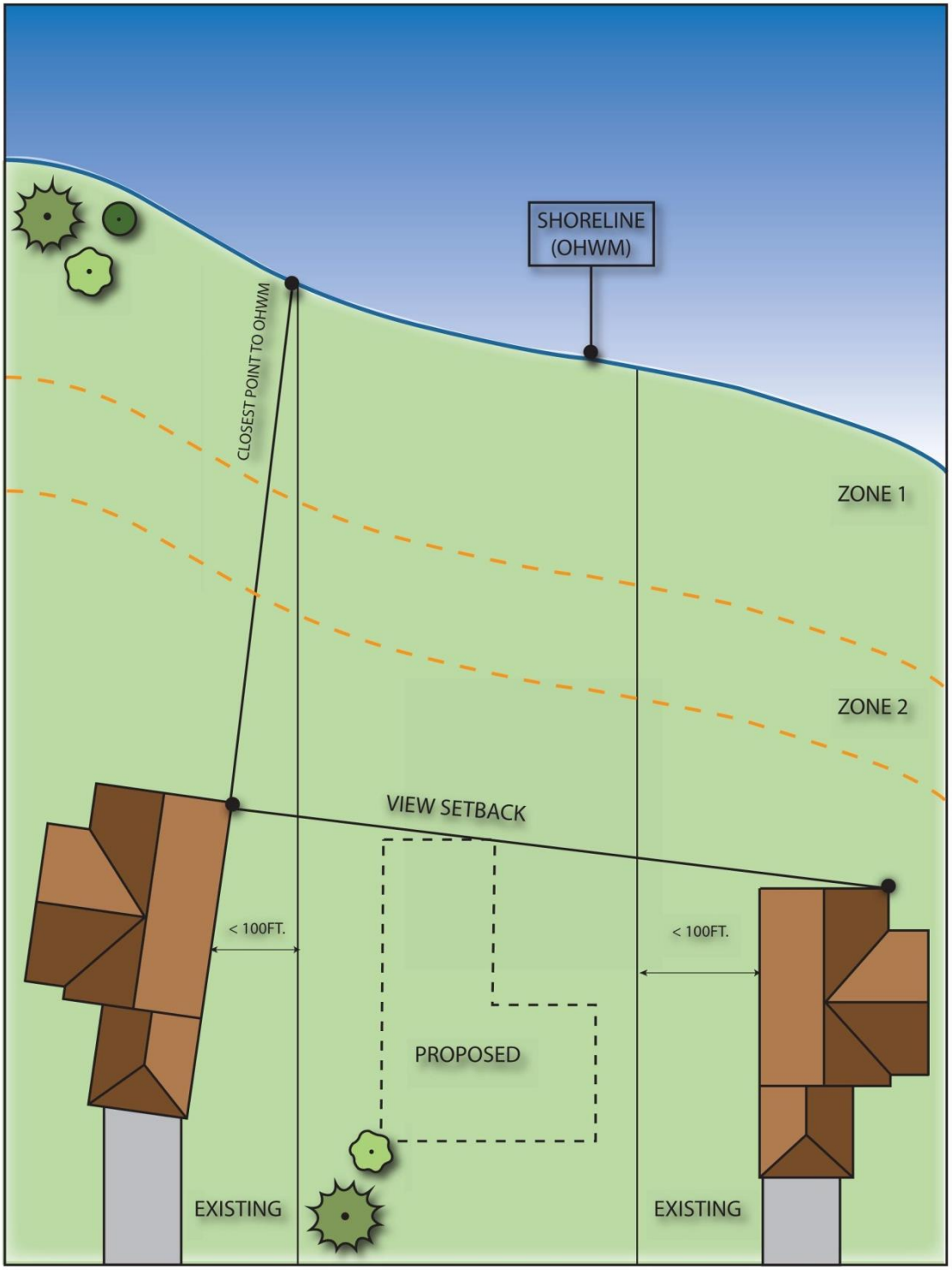

SHORELINE
(OHWM)
CLOSEST POINT TO OHWM
ZONE 1
ZONE 2
VIEW SETBACK
< 100FT.
< 100FT.
PROPOSED
EXISTING
EXISTING

FIGURE 5-1 (B)

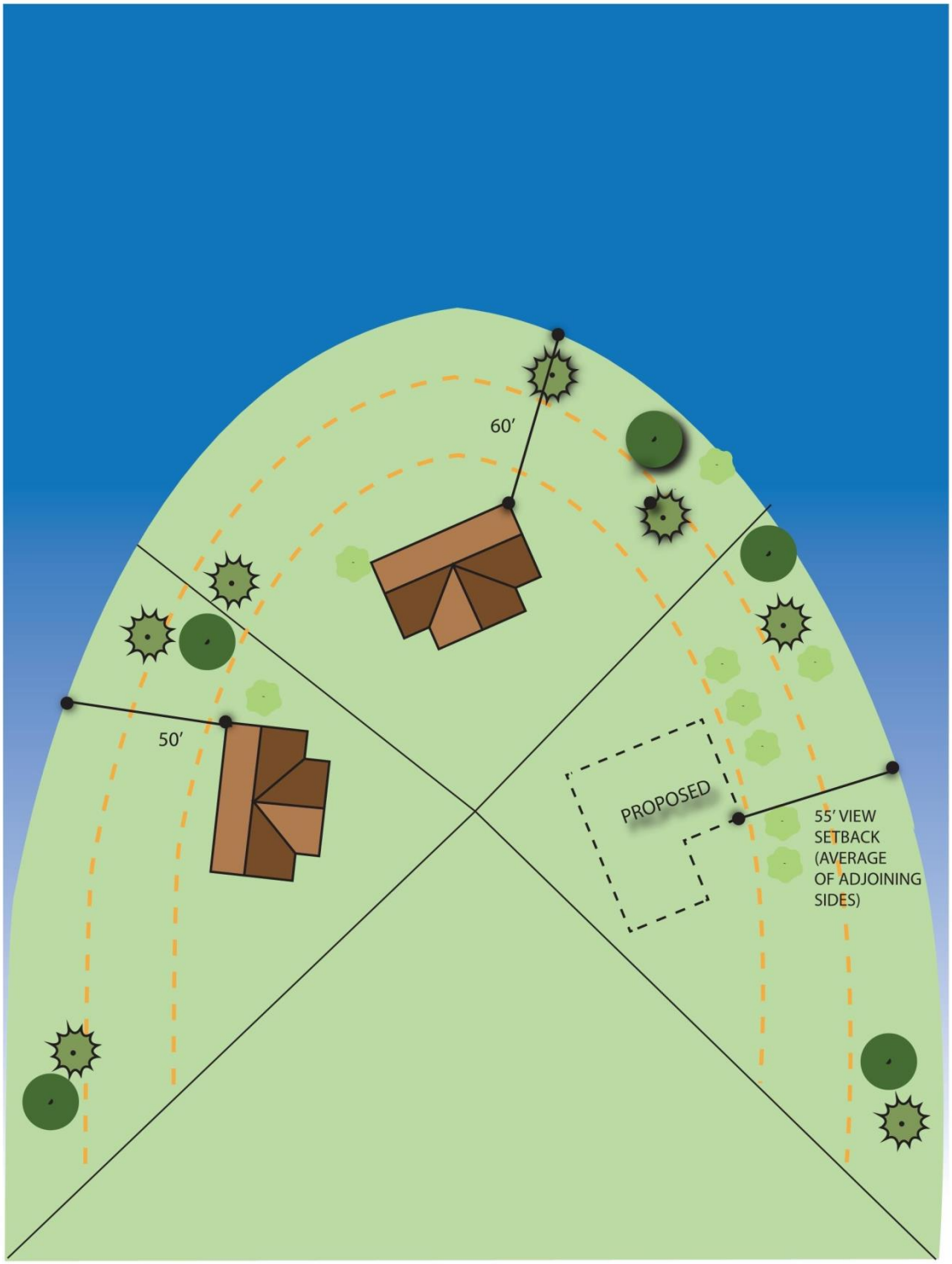


FIGURE 5-1 (C)

4.1.4 Land Modification

4.1.4.1 Applicability

All shoreline uses and activities must conform to the clearing and grading provisions herein, including development which does not require a shoreline permit. Shoreline development and land modification activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island Wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.1.4.2 Policies

1. Allow alteration of the natural landscape only in association with existing legal uses or new permitted or allowed shoreline use/or development. Prohibit speculative clearing, grading, or vegetation removal.
2. Avoid and minimize potential adverse impacts from land surface modification activities through proper site planning, construction timing practices, and use of erosion and drainage control methods. Generally, these activities should limit alteration of the natural landscape to the minimum extent necessary to accommodate the proposed use, and should be designed and located to protect shoreline ecological functions and ecosystem-wide processes.
3. Assure clearing and grading activities are consistent with the Stormwater Manual to prevent adverse impact to wildlife habitat, streams, lakes, and wetlands from erosion.
4. For clearing and grading proposals, provide a clearing and grading plan addressing vegetation removal, erosion and sedimentation control, and protection of critical areas and shoreline vegetation conservation and management zones. Use low impact development techniques to minimize adverse impacts to natural hydrologic conditions, such as soil compaction and transpiration.
5. Promptly replant disturbed areas following project completion. Replanting with native shoreline vegetation should be a priority, however, flexible planting plans that incorporate non-native plant species which provide similar functions and ecosystem-wide processes can be considered.

4.1.4.3 Regulations – Prohibited

1. All clearing and/or grading not associated with an approved development, use or activity, unless specifically provided for in this program.

4.1.4.4 Regulations - General

1. Clearing and/or grading within shoreline jurisdiction shall require an approved clearing or grading permit in association with an existing legal use or a new permitted or allowed shoreline use or development. Such activities shall meet the mitigation and revegetation provisions in Section 4.1.2, Environmental Impacts and Section 4.1.3, Vegetation Management.

2. Upon completion of development, use or activity, the remaining cleared areas shall be replanted within the first applicable planting season.
3. All vegetation that is intended to be retained but may likely be disturbed by the clearing and grading activity shall be protected in accordance with the standards of BIMC Chapter 18.15.010, Landscaping, Screening, and Tree Retention, Protection and Replacement.
4. Land alteration (clearing, grading, and filling) shall be limited to the minimum extent necessary for the proposed development, use or activity. All land alteration must meet the standards of BIMC Chapter 15.20 Surface and Storm Water Management.

4.1.5 Critical Areas

4.1.5.1 Applicability

This section provides policies and regulations that apply to critical areas located within the shoreline jurisdiction, including wetlands, streams, geologically hazardous areas, frequently flooded areas, fish and wildlife habitat conservation areas, and critical saltwater habitat. This section applies to all development, uses and activities within areas or adjacent to areas designated as critical areas. No action shall be taken by any person, company, agency, governmental body (including the city), or applicant, which results in any alteration of a critical area except as consistent with the goals, policies, purposes, intent, requirements, and development standards of this section.

4.1.5.2 Goal

Comprehensively manage shoreline uses and activities to protect, enhance, and restore existing ecological functions and ecosystem-wide processes of critical areas by utilizing the most current, accurate, and complete scientific and technical information. By avoiding and limiting adverse impacts to and alteration of critical areas, this section seeks to protect the Island's special character and accomplish the following goals:

1. To conserve the biodiversity of plant and animal species, protect, maintain and restore healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including, but not limited to, ground and surface waters, wetlands, fish and wildlife and their habitats;
2. Direct development, uses and activities to less environmentally sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
3. Prevent cumulative adverse environmental impacts to water quality, water quantity, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, aquifer recharge, and habitat conservation areas;
4. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, or flooding; and
5. Alert owners, potential purchasers, real estate agents, appraisers, lenders, builders, developers and other members of the public to natural conditions that pose a hazard or otherwise limit development.

4.1.5.3 Purpose and Intent

1. The purpose of this section is to designate and classify ecologically sensitive and hazardous areas as critical areas and to protect, maintain and restore these areas and achieve no net loss of their functions and values.
2. This section is intended to implement the goals, policies, guidelines, and requirements of the city comprehensive plan and the Shoreline Management Act (Chapter 90.58 RCW).
3. Critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the city and its residents. Critical areas may also pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of flood waters, ground water recharge and discharge, erosion control, wave attenuation, and protection from hazards and the impacts of climate change. Groundwater recharge is of particular concern for the city because the Island's drinking water is supplied solely by groundwater.
4. This section is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this section to make a parcel of property unusable by denying its owner reasonable use of the property or to prevent the provision of public facilities and services necessary to support existing development. If the provision of this Chapter results in the denial of reasonable use of a property, relief can be sought through the Shoreline Variance permit process.

4.1.5.4 Protection of Critical Areas

1. All proposed development, uses, and activities subject to this section shall utilize mitigation sequencing pursuant to Section 4.1.2.6.
2. The precautionary principle shall be applied in the review of any action, taken or proposed, that does not conform to the requirements of this section. The burden of proof that the action will cause no net loss or harm to persons or property falls on the applicant or the property owner.

4.1.5.5 Policies

1. Provide a level of protection to critical areas that protects, maintains and restores these areas, and achieves no net loss of their functions and values.
2. Encourage development proposals to include elements of preservation, conservation, restoration, or enhancement of critical areas, including saltwater habitat and fish and wildlife conservation areas, through incentives and ecosystem-wide restoration planning.
3. Locate, design, construction, and manage all shoreline uses and activities in ways that assure no net loss of shoreline ecological functions and ecosystem-wide processes, and protect critical saltwater habitat, including fish and wildlife habitat conservation areas.
4. Locate and design shoreline uses, activities, and/or development to avoid risks to people and property. See also Section 3.0, Shoreline Designation Policies and Regulations, for additional provisions.

5. Promote water-related shoreline uses and activities, such as public access and recreation, that are compatible with critical areas, provided they do not result in a net loss of critical area functions and values.

4.1.5.6 Allowed Activities within Critical Areas

1. The following activities are allowed within critical areas and their buffers and do not require review for compliance with critical area regulations. Any activity not subject to critical areas regulations that constitutes development pursuant to Section 8, Definitions, is subject to applicable review under this Program.

    a. Normal and routine yard and garden activities including, but not limited to, cutting and mowing lawns, weeding, removal of noxious and invasive species, harvesting and replanting of garden plants and crops, incidental vegetable gardening, and pruning and planting of noninvasive ornamental vegetation, intended to maintain the general condition and extent of such areas; provided, that such activities are limited to legally existing yard and garden areas, do not further expand into critical areas or associated buffers, do not significantly alter topography, and do not diminish water quality or quantity. Normal and routine activities cannot result in a change to the location, size at the ground level or configuration of existing yard and garden areas.

    b. Class I, II and III forest practices regulated pursuant to Chapter 76.09 RCW.

    c. Minor site investigative work. Work necessary for land use review submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require a clearing permit pursuant to Section 4.1.3 or construction of new roads. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored. Minor site investigative work may include educational and scientific research activities.

    d. Activities within the improved right-of-way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, when such facilities are located within the improved portion of the public right-of-way or easement of a private street, except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater.

    e. The installation of low impact fencing within critical area buffers provided the location does not result in restricting wildlife movement, the location and installation is the least impactful to the critical area and buffer as possible, and there is no alternative to fencing to achieve the purpose of the fence.

    f. Signs for marking critical area boundaries, interpretive signs and survey markers or property boundaries.

    g. Development, uses or activities within critical aquifer recharge areas that do not have the potential to generate a pollutant identified as a potential source of drinking water contamination pursuant to Section 4.1.5.9 and are outside an Aquifer Recharge Protection Area (ARPA) if one has been designated pursuant to BIMC 16.20.100 and any other critical area or its buffer or setback.

2. The following activities are allowed within critical areas and their buffers, without a shoreline variance, after review and authorization by the city. Review and authorization may occur over-the-counter and will require a written letter of approval or shall be reviewed for consistency with this section as part of the required shoreline review or permit. Any activity not subject to critical areas regulations that constitutes development pursuant to Section 8, Definitions, is subject to applicable review under this Program.
    a. Activities within a portion of a wetland buffer or fish and wildlife habitat conservation area buffer separated from the critical area by an existing permanent substantial development, use or activity which serves to eliminate or greatly reduce the impact of the proposed activity on the critical area are exempt from establishing the full required buffer width; provided, that impacts to the critical area do not increase. The director shall review the proposal to determine the likelihood of associated impacts and may require the applicant to provide a critical areas report prepared by a qualified professional that demonstrates through a site assessment or functional analysis that the interrupted buffer area is functionally isolated from the critical area. The director shall consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the physical separation.

4.1.5.7 Regulations – General

1. Any proposed development or activity within a critical area or its buffer or setback requiring review under this Program shall be reviewed based on the proposal's ability to comply with all of the following criteria:
    a. The proposal minimizes the impact on critical areas in accordance with mitigation sequencing (SMP 4.1.2.6);
    b. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
    c. The proposal is consistent with the general purposes of this section and the public interest;
    d. Any alterations permitted to the critical area are mitigated in accordance with mitigation requirements in SMP 4.1.2.6;
    e. The proposal protects the critical area functions and values consistent with best available science and results in no net loss of critical area functions and values;
    f. The proposal addresses cumulative impacts of the action; and
    g. The proposal is consistent with other applicable regulations and standards.
2. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this section.
3. Except as provided for by this section, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in SMP 4.1.2.6 shall be denied.

4.1.5.7.1 Support Information Requirements

Any application for proposed development or activity requiring review under this Program shall include the following:

1. A site plan drawn to scale identifying locations of critical areas and their buffers, location of proposed development, uses and activities, location and estimated quantity of earthwork and vegetation clearing and location and type of drainage features or infrastructure.
2. Any critical area report or study required by this section. Such reports or studies shall be prepared by qualified professionals in the area of concern as defined in Section 8.0, Definitions, and in accordance with the requirements provided in Section 4.1.5.14, Critical Areas Reports, as follows:
    a. Aquifer recharge study: Hydrogeologist;
    b. Geological hazard assessment: Engineering geologist; geotechnical engineer, provided that:
        i. An engineering geologist may provide a study, including interpretation, evaluation, analysis, and application of geological information and data and may predict potential or likely changes in types and rates of surficial geologic processes due to proposed changes to a location, provided it does not contain recommended methods for mitigating identified impacts, other than avoidance, structural impacts to, or suitability of civil works; and
        ii. Engineering geologists may not provide engineering recommendations or design recommendations, but may contribute to a complete geotechnical report that is co-sealed by a geotechnical engineer.
    c. Stream buffer enhancement plan: Biologist with stream ecology expertise; fish or wildlife biologist; a civil engineer may provide studies for drainage, surface and subsurface hydrology, and water quality;
    d. Wetland buffer enhancement plan, wetland critical area report, wetland mitigation plan: Wetlands specialist.
    e. Habitat Management Plans: Wildlife biologist and/or fisheries biologist.
    f. The director is authorized to retain experts at the applicant's expense and request review from other jurisdictional agencies to assist in the review of application materials; and
3. Any additional information determined as relevant by the director.

4.1.5.7.2 Notice on Title

1. The owner of any property with field-verified presence of critical area or buffer on which a development proposal is submitted shall file for record with the Kitsap County auditor a notice approved by the director in a form substantially as set forth in Subsection 2 of this Section. Such notice shall provide notice in the public record of the presence of a critical area and buffer, the application of this section to the property, and that limitations on actions in or affecting such areas may exist. The applicant shall submit proof that the notice has been filed for record before the city shall approve any development proposal

for such site. The notice shall run with the land and failure to provide such notice to any purchaser prior to transferring any interest in the property shall be in violation of this section.

2. Form of Notice

Critical Areas
and/or
Critical Areas Buffer Notice

Legal Description: _____

Present owner: _____

NOTICE: This property contains critical areas or their buffers as defined by the City of Bainbridge Island Ordinance No. _____.

The property _____ was the subject of a development proposal for _____(type of permit) application # _____ filed on _____(date).

Restrictions on use or alteration of the critical areas or their buffers may exist due to natural conditions of the property and resulting regulations. Review of such application has provided information on the location of critical areas or critical area buffers and restrictions on their use through setback areas. A copy of the plan showing such setback areas and other restrictions or required enhancements is attached hereto.

Signature of owner: _____

STATE OF WASHINGTON)

COUNTY OF _____)

On this day personally appeared before me to me known to be the individual(s) described in and who executed the within and foregoing instrument and acknowledged that they signed the same as their free and voluntary act and deed for the uses and purposes therein stated.

Given under my hand and official seal this _____ day of _____, _____.

NOTARY PUBLIC in and for the state of Washington, residing at _____.

4.1.5.8 Regulations – Critical Saltwater Habitat

1. Water-dependent development and uses, including marinas, docks, piers, mooring areas, underwater parks, utility crossings, and shoreline modifications, shall not intrude into or be built over critical saltwater habitat unless:
    a. The applicant can show that all of the following criteria can be met:
        i. The use preferences of Section 4.1.1 shall be utilized for uses in Shorelines of State-wide Significance; and
        ii. The need for such a structure is clearly demonstrated and an alternative alignment or location on the property that would avoid impacts to critical saltwater habitats is not feasible or would result in unreasonable and

disproportionate cost to accomplish the same general purpose, as demonstrated through an alternatives analysis. The analysis should include in part, shoreline bathymetry, shoreline features at the site, and substrate composition;

iii. It can be demonstrated that the project is consistent with the state's interest in resource protection and species recovery; and

iv. Impacts to critical saltwater habitat functions and processes are mitigated to result in equal or better ecological function; or

b. The proposal is for private, non-commercial, residential docks for single use, community, or joint-use, which may be authorized, provided that:

i. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible; and

ii. The project, including any required mitigation, will result in no net loss of ecological functions and processes associated with critical saltwater habitat.

c. New or expanded overwater structures shall be located the greater or most protective of:

i. A horizontal distance of 25 feet from the outside edge of the structure to native aquatic vegetation attached to or rooted in substrate;

ii. A horizontal distance equal to the maximum distance shade will be cast by the structure and vessel;

iii. A 4-foot vertical distance from eelgrass or relevant submerged aquatic vegetation;

iv. A distance the diameter of the turning circle, if the structure is to be utilized for motorized vessels. The turning circle is defined as 3.5 times the length of the longest vessel to use the structure.

v. Alternative measures that demonstrate no net loss of ecological functions.

d. For projects within WDFW documented Pacific herring spawning locations, in-water activities that would affect herring spawn should be restricted to WDFW's approved work window for Bainbridge Island (May 1 through January 14). For aquaculture projects, the City may consider alternative methods that are contained in federal and/or state aquaculture permits for reducing impacts to herring spawning habitat and other forage fish spawning habitat.

e. For projects other than commercial aquaculture within WDFW documented sand lance and surf smelt spawning locations, no activities should occur during spawning windows as identified by WDFW. For commercial aquaculture projects within WDFW documented sand lance and surf smelt spawning locations, no harvesting may occur during the surf smelt or sand lance spawning seasons until a spawning survey is conducted. If surf smelt or sand lance spawn are present in the growing area to be harvested or adjacent tidelands, then no harvest activities may occur until the eggs are hatched. Extreme caution should be taken to avoid

impact and minimize disturbance of sand lance and surf smelt larvae that are present.

2. Aquatic herbicide treatments, mechanical removal of vegetation or aquatic pesticide treatments shall not be used on critical saltwater habitats, except for approved habitat restoration or enhancement measures that meet the provisions of Section 4.1.6, Water Quality and Stormwater Management.
3. Sand, gravel, or other materials shall not be added or removed from critical saltwater habitat, unless approved as part of a restoration effort or beach nourishment program or as allowed in 1, above.
4. New outfalls (including stormwater and sewer outfalls) and discharge pipes shall not be located in critical saltwater habitats or areas where outfall or discharge will adversely affect critical saltwater habitat, unless the applicant can show that all of the following can be met:
    a. There is no feasible alternative location for the outfall or pipe; and
    b. The outfall or pipe is placed below the surface of the beach or bed of the water body; and
    c. The discharge point(s) on the outfall or discharge pipe is located so the discharges, including nutrients and flow, do not adversely affect critical saltwater habitats; and
    d. For public sewage outfalls:
        i. The outfall discharges waterward of the intertidal zone.
        ii. The disturbed area will be revegetated with native vegetation.
5. The use of existing outfalls shall be maximized to limit the need for additional outfalls, provided the existing outfall meets the standards of this section, or unless an alternatives analysis demonstrates the dispersal is less impacting to the shoreline environment.
6. Until an inventory of critical saltwater habitat is completed, all over water and near-shore development shall conduct an inventory of site and adjacent beach sections to assess the presence of critical saltwater habitat and/or functions and processes. The inventory shall occur prior to construction and the methods and extent of the inventory shall be consistent with accepted research methodology. New studies shall be required only when existing information is outdated or does not exist.

4.1.5.9 Regulations – Aquifer Recharge Areas

4.1.5.9.1 Classification

1. Aquifer recharge areas are areas that have a critical recharging effect on groundwater used for potable water supplies and/or that demonstrate a high level of susceptibility or vulnerability to groundwater contamination from land use activities. In accordance with WAC 365-190-100, the entirety of Bainbridge Island is classified as an aquifer recharge area to preserve the volume of recharge available to the aquifer system and to protect groundwater from contamination.

4.1.5.9.2 Prohibited Activities and Uses

1. The following activities and uses are prohibited within critical aquifer recharge areas due to the probability or potential magnitude of their adverse effects on groundwater:
    a. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;
    b. Underground Injection Wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells;
    c. Chemical wood preservation and/or treatment facilities;
    d. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store (other than minor sources such as medicinal uses or industrial testing devices), process, or dispose of radioactive substances;
    e. Hazardous liquid transmission pipelines;
    f. Commercial mining and chemical washing of metals, hard rock, sand, and gravel;
    g. Hydrocarbon extraction, reprocessing, refinement, and storage;
    h. Electroplating/metal finishing;
    i. Facilities that treat, store, process, or dispose of hazardous waste; and
    j. Other Prohibited Uses or Activities.
        i. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source; and
        ii. Activities that would significantly reduce the recharge to aquifers that are a source of significant baseflow to a stream.

4.1.5.9.3 Development Standards – General

1. No development, use or activity may exceed water quality standards or otherwise violate the anti-degradation requirements specified in WAC Chapter 173-200.

4.1.5.10 Regulations – Fish and Wildlife Habitat Conservation Areas

4.1.5.10.1 Classification

1. Fish and Wildlife Habitat Conservation Areas include:
    a. Within the city of Bainbridge Island, streams shall include those areas which meet the definitions in Section 8.0, Definitions. Streams shall be classified in accordance with the Washington Department of Natural Resources water typing system (WAC 222-16-030), which is hereby adopted in its entirety by reference and summarized as follows:
        i. Type F: streams which contain fish habitat pursuant to Section 8.0, Definitions;
        ii. Type Np: perennial non-fish habitat streams; and

iii. Type Ns: seasonal non-fish habitat streams.

b. Habitats recognized by federal or state agencies for federal- and/or state-listed endangered, threatened, sensitive and candidate/monitored species which presence is documented in maps or databases available to City of Bainbridge Island.

c. Areas that contain habitats and species of local importance. Any person may nominate for designation a species or habitat of local importance. Nominations will be processed pursuant to definitions in Section 8.0, Definitions and nomination criteria developed by the director.

d. Biodiversity areas and corridors as defined in the 2008 Washington Department of Fish and Wildlife Priority Habitat and Species List, or as amended.

e. All areas within the city of Bainbridge Island meeting one or more of the preceding criteria in this Section, regardless of any formal identification or mapping, are hereby designated critical areas and are subject to the provisions of this section and shall be managed consistent with the best available science, such as the Washington Department of Fish and Wildlife's most recent Management Recommendations for Priority Habitat and Species.

4.1.5.10.2 Mapping

1. The location and extent of all mapped critical areas shown on the city of Bainbridge Island critical area maps are approximate and shall be used as a general guide only. The type, extent and boundaries shall be determined in the field by a qualified professional according to the requirements of this section. The critical area maps are adopted as part of this section and are incorporated herein by this reference. Washington Department of Natural Resource (DNR) and Washington Department of Fish and Wildlife maps are not the only source of data. Any request to change the city's existing map shall be accompanied by a report from a qualified professional that includes a description of the critical area and a summary of how it meets the definitions in Section 8.0, Definitions. The inventory and cited resources are to be used as a guide for the city, project applicants, and/or property owners and may be continuously updated as new or altered critical areas are identified.

4.1.5.10.3 Development Standards – Stream Buffers

1. All designated streams require a buffer pursuant to Table 4-4. Buffers shall remain as undisturbed or enhanced vegetation areas for the purpose of protecting the integrity, function, and value of stream resources. Any buffer modification proposed shall be through an approved Buffer Enhancement Plan. No uses or activities shall be allowed within the buffer unless allowed by this Section. If the buffer has previously been disturbed, the director may require the disturbed buffer area be enhanced, including revegetation with native plant species, pursuant to an approved Buffer Enhancement Plan meeting the requirements of Section 4.1.5.14.4. No refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall be placed in the buffer.

2. The required minimum buffers listed in Table 4-4 are based on the assumption that the buffer is well vegetated with native species appropriate to the site. If the buffer does not consist of vegetation adequate to provide stream protection and buffer functions, the director may require that the buffer be planted to achieve such protection and function.

Table 4-4. Stream Buffers

Stream Type	Buffer Width
F	200’
Np	100’
Ns (connected to F or Np)	75’
Ns (not connected to F, Np)	50’

3. Buffer distances shall be measured from the ordinary high water mark (OHWM) or from the top of each bank where the OHWM cannot be identified.
4. The buffer width shall be increased to include streamside wetlands which provide overflow storage for stormwater, feed water back to the stream during low flow, or provide shelter and food for fish. In braided channels, the ordinary high water mark or top of bank shall be defined to include the entire stream feature.
5. For streams in ravines outside the Mixed Use Town Center with ravine sides 10 feet or greater in height, the buffer width shall be the greater of:
    a. The buffer width required for the stream type; or
    b. A buffer width which extends 25 feet beyond the top of the ravine.
6. The director may increase buffer widths, up to 50 percent greater than the applicable buffer set in this section for critical areas with known locations of endangered, threatened, or state monitor or priority species for which a habitat management plan indicates a larger buffer is necessary to protect habitat values for such species. Such determination shall be based on site-specific and project-related conditions.
7. A structure or hard surface setback line of fifteen feet is required from the edge of any stream buffer. Minor structural or impervious surface intrusions into the areas of the setback, such as but not limited to fire escapes, open/uncovered porches, landing places, outside walkways, outside stairways, retaining walls, fences and patios, may be permitted if the department determines upon review of an analysis of buffer functions submitted by the applicant, that construction and/or maintenance of such intrusions will not encroach into the stream buffer or adversely impact the stream. The functional analysis shall include a functional methodology supported by best available science. The setback shall be identified on a site plan and filed as an attachment to the notice on title as required by Section 4.1.5.7.2, Notice on Title.
8. Modification to buffer widths may be allowed provided the applicant demonstrates the need for modification through mitigation sequencing pursuant to Section 4.1.2.6.
    a. The width of a required buffer may be averaged if the applicant can demonstrate that averaging can provide equal or greater functions and values as would be provided under the required buffer and all of the following conditions are met:

i. The total area of buffer after averaging is equal to the area required without averaging.

ii. Averaging does not result in the any portion of the buffer being reduced more than 25 percent of its required width.

b. Any request for buffer modification outlined above shall be reviewed in conjunction with the underlying land use or construction permit. Requests for buffer reduction shall include a buffer enhancement plan prepared by a qualified consultant that meets the requirements of Section 8.0, Definitions.

c. The city may request technical review of a buffer enhancement plan from other agencies to ensure consistency with state, federal or tribal management recommendations.

d. Any other buffer modification, other than non-compensatory enhancement, requires a shoreline variance.

4.1.5.10.4 Development Standards – Other Fish and Wildlife Habitat Conservation Areas

1. All development, uses and activities within known fish and wildlife habitat conservation areas require submittal and approval of a Habitat Management Plan (HMP) as specified in Section 4.1.5.14.3. The HMP shall consider measures to retain and protect the fish and wildlife habitat and shall consider the effects of land use intensity, buffers, setbacks, impervious surfaces, erosion control and retention of existing native vegetation.
2. In the case of bald eagles, the HMP shall comply with the federal Bald and Golden Eagle Protection Act (16 USC 668) to avoid impacting eagles and their habitat.

4.1.5.10.5 Development Standards – Specific Development, Uses, and Activities

The following development, uses, and activities may be allowed within fish and wildlife habitat conservation areas and their buffers. Any proposal for the following development shall comply with the standards of this Section, other applicable sections of this Program, and other applicable state, federal and local regulations. The director may require submittal of a Habitat Management Plan unless project impacts are demonstrated to be de minimis through mitigation sequencing pursuant to Section 4.1.2.6.

1. Stream Crossings

a. Any private or public road or driveway expansion or construction proposed to cross streams classified within this section shall comply with the following minimum development standards. All other state and local regulations regarding water crossing structures shall apply, and the use of the Water Crossing Design Guidelines (WDFW, 2013), or as amended, is encouraged.

i. Bridges or bottomless culverts shall be required for all Type F streams. Other alternatives may be allowed upon (i) submittal of a Habitat Management Plan which demonstrates that other alternatives would not result in significant impacts to the fish and wildlife conservation area and (ii) as determined through the Hydraulic Project Approval (HPA) process

administered by the Washington Department of Fish and Wildlife. The plan must demonstrate that fish habitat will not be reduced in area or function.

ii. Crossings shall not occur in fish-bearing streams unless no other feasible crossing site exists. For new development proposals, if existing crossings are determined to adversely impact salmon spawning or passage areas, new or upgraded crossings shall be located as determined necessary through coordination with Washington Department of Fish and Wildlife;

iii. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists;

iv. Crossings shall not diminish flood carrying capacity;

v. Crossings shall serve multiple properties whenever possible;

vi. Where there is no reasonable alternative to providing a conventional culvert, the culvert shall be the minimum length necessary to accommodate the permitted activity.

2. Stream Relocations

a. Stream relocations may be allowed only for the purpose of flood protection and/or fisheries restoration and only when consistent with a Washington Department of Fish and Wildlife Hydraulic Project Approval (HPA) process and the following minimum performance standards:

i. The channel, bank, and buffer areas are replanted with native or equivalent vegetation that replicates a natural, undisturbed riparian condition;

ii. For those waters designated as Frequently Flooded Areas pursuant to BIMC 15.16, a professional engineer licensed in the State of Washington provides information demonstrating that the equivalent base flood storage volume and function will be maintained; and

iii. Relocated stream channels are designed to meet or exceed the functions and values of the stream to be relocated.

3. Pesticides, Fertilizers and Herbicides

a. No pesticides, herbicides or fertilizers may be used in fish and wildlife conservation areas or their buffers, except those approved by the U.S. Environmental Protection Agency (EPA) and approved under a Washington Department of Ecology Water Quality Modification Permit for use in fish and wildlife habitat conservation area environments and applied by a licensed applicator in accordance with the safe application practices on the label.

4. Land Divisions and Land Use Permits

a. All land divisions and land uses proposed on a site that includes Fish and Wildlife Habitat Conservation Areas shall comply with the following procedures and development standards:

i. The open water area of lakes, streams, and tidal lands shall not be permitted for use in calculating minimum lot area.

ii. Land division approvals shall be conditioned so that all required buffers are designated as an easement or covenant encumbering the buffer. Such easement or covenant shall be recorded together with the land division and represented on the final plat, short plat or binding site plan.

iii. In order to avoid the creation of nonconforming lots, each new lot shall contain at least one building site that meets the requirements of this section, including buffer requirements for fish and wildlife habitat conservation areas. Each lot must also have access and a sewage disposal system location that are suitable for development that do not adversely impact the fish and wildlife conservation area.

iv. After preliminary approval and prior to final land division approval, the director may require that the common boundary between a required buffer and the adjacent lands be identified using permanent signs. In lieu of signs, alternative methods of buffer identification may be approved when such methods are determined by the director to provide adequate protection to the aquatic buffer.

5. Utilities

a. Placement of utilities within designated fish and wildlife habitat conservation areas may be allowed pursuant to the following standards:

i. Construction of utilities may be permitted in fish and wildlife conservation area or their buffers, only when no practicable or reasonable alternative location is available and the utility meets the requirements for installation, replacement of vegetation and maintenance outlined below.

ii. Construction of sewer lines or on-site sewage systems may be permitted in fish and wildlife conservation area or their buffers when the applicant demonstrates it is necessary to meet state and/or local health code requirements; there are no other practicable alternatives available; and construction meets the requirement of this Section. Joint use of the sewer utility may be allowed.

iii. New utilities shall not be allowed in fish and wildlife habitat conservation areas with known locations of federal or state listed endangered, threatened or sensitive species, heron rookeries or nesting sites of raptors which are listed as state candidates except in those circumstances where an approved Habitat Management Plan indicates that the utility will not significantly impact the conservation area;

iv. Utility construction and maintenance shall protect the environment of fish and wildlife conservation area and their buffers.

A. New utilities shall be aligned whenever possible to avoid cutting or root damage to trees greater than 12 inches in diameter at breast height (four and one-half feet) measured on the uphill side.

B. Any area of disturbance shall be revegetated with appropriate native or equivalent vegetation at not less than pre-construction vegetation densities or greater, immediately upon completion of construction or as soon thereafter as possible due to seasonal growing constraints. The utility or landowner responsible for installation shall ensure that such vegetation survives.

C. Any additional access for maintenance shall be provided wherever possible at specific points rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than 15 feet; and shall be contiguous to the location of the utility corridor on the side away from the conservation area.

v. Utility maintenance shall include the following measures to protect the environment of regulated fish and wildlife habitat conservation areas.

A. Utility towers shall not be sandblasted or spray-painted. Lead-based paint is prohibited.

B. No pesticides, fertilizers, or herbicides may be used in fish and wildlife habitat conservation areas or their buffers, except those applied by a licensed applicator in accordance with the safe application practices on the label.

6. Bank Stabilization

a. A stream channel and bank may be stabilized when naturally occurring earth movement threatens existing structures (defined as requiring a building permit pursuant to the applicable building code), public improvements, unique natural resources, public health, safety or welfare, or the only feasible access to property, and, in the case of streams, when such stabilization results in maintenance of fish and wildlife habitat, flood control, and improved water quality.

b. Where bank stabilization is determined to be necessary, bioengineering or other non-structural methods should be the first option for protection. Structural methods, or hard stabilization, may only be utilized where it can be demonstrated by a professional engineer licensed in the State of Washington that an existing primary residential structure or essential public facility cannot be safely maintained without such measures, and that the resulting hard stabilization is the minimum length necessary to provide a stable building area for the structure. The director may require that bank stabilization be designed by a professional engineer licensed in the State of Washington with demonstrated expertise in hydraulic actions of shorelines. Bank stabilization projects may also require a City of Bainbridge Island clearing or grading permit and Hydraulic Project Approval from the Washington Department of Fish and Wildlife.

c. Nonstructural streambank protective techniques are preferred to bulkheads or other types of streambank armoring. Nonstructural techniques include but are not limited to vegetation plantings and bioengineering.

7. Fencing and Signs

a. Prior to approval or issuance of permits for land divisions or other new development, the director may require that the common boundary between a required buffer and the adjacent lands be identified using fencing or permanent signs. In lieu of fencing or signs, alternative methods of buffer identification may be approved when such methods are determined by the director to provide adequate protection to for the buffer.

8. Forest Practice, Class IV General and Conversion Option Harvest Plans (COHPs)
    a. All timber harvesting and associated development activity, such as construction of roads, shall comply with the provisions of this chapter, and the Stormwater Management standards in Chapters 15.20 and 15.21 BIMC, including the maintenance of buffers, where required.
9. Road/Street Repair and Construction
    a. Any private or public road or street expansion or construction which may be allowed in a Fish and Wildlife Habitat Conservation Area or its buffer shall comply with the following minimum development standards:
        i. No other reasonable or practicable alternative exists and the road or street crossing serves multiple properties whenever possible;
        ii. Expansion or construction of any private or public road shall only be allowed when adverse impacts can be avoided;
        iii. Public and private roads should provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.; and
        iv. The road or street construction is the minimum necessary, as required by the Department of Public Works, and shall comply with the Department of Public Works' guidelines to provide public safety and mitigated stormwater impacts.
        v. Construction time limits shall be determined in consultation with Washington Department of Fish and Wildlife in order to ensure habitat protection.

4.1.5.11 Regulations – Geologically Hazardous Areas

1. Applicability. This section applies to all geologically hazardous areas classified pursuant to SMP 4.1.5.11.1, below.

4.1.5.11.1 Classification

1. Geologically hazardous areas include erosion hazard areas, landslide hazard areas, and seismic hazard areas (including fault and liquefaction hazard areas). Zone of influence areas are not considered geologically hazardous areas.
2. Geologically hazardous areas shall be classified based upon landslide history and the presence of unstable soils, steepness of slopes, erosion potential, and seismic hazards. Areas in this category are a potential threat to public health, safety, and welfare when construction is allowed. While some potential risk due to construction can be reduced through engineering design, construction in these areas should be avoided when the

potential risk cannot be reduced to a level comparable to the risk if the site were initially stable prior to construction. Classification and rating shall be based upon the risk to the environment and to development in geologically hazardous areas.

4.1.5.11.2 Review Procedures

1. Applications for proposed activities in geologically hazardous areas shall include:
    a. An indemnification or hold harmless agreement shall be required for all projects in geologically hazardous areas, except erosion hazard areas and landslide hazard area setbacks. The form of the agreement shall be approved by the city and executed prior to the commencement of construction or any land disturbing activity.
    b. A notice of intent to construct on a landslide hazard area or reduce the standard setback in a landslide hazard area shall be given pursuant to BIMC 2.16.020.M. The notice of intent shall be issued within 14 days of a complete application pursuant to BIMC 2.16.020.J.2. The notice shall include a 21-day comment period and no permits or approval of reduced setbacks shall be issued before the end of the comment period.
    c. A geological hazards assessment is required for all projects in geologically hazardous areas and landslide hazard area setbacks in accordance with Section 4.1.5.14.5. To protect public health, safety and welfare, the director may require third party review of any geological hazards assessment or geotechnical report in cases where there may be potential for substantial damage to life, property or the environment should the proposed engineering solution fail. When a third-party review is required, costs incurred for a qualified third party geologist or geotechnical engineer to perform the review shall be borne by the applicant.

4.1.5.11.3 Development Standards – General

1. The following development standards apply to all activities within any geologically hazardous area or associated landslide hazard area setback:
    a. The proposed activity shall not create a net increase in geological instability, either on- or off-site, which is defined as follows:
        i. The subject parcel shall not be less stable after the planned development than before; and
        ii. The adjacent parcels shall not have greater risk or be less stable after the planned development than before.
    b. The proposed activity shall not increase the risk of life safety due to geological hazards above professionally acceptable levels.
    c. The proposed activity shall not increase the risk due to geological hazards above professionally acceptable levels for:
        i. Property loss of any habitable structures or their necessary supporting infrastructure on-site or;
        ii. Risk to any off-site structures or property of any kind; and

d. Proposed buildings shall be constructed using appropriate engineering methods that respond to the geologic characteristics specific to the site in order to achieve a high standard of safety and meet professional practice standards and codes.

e. The proposed activity shall not further degrade the values and functions of the associated critical areas.

f. Unless allowed pursuant to Section 4.1.2 or Section 4.1.3 or as part of an approved building permit, removal of vegetation from an erosion or landslide hazard area or setback is prohibited.

4.1.5.11.4 Development Standards – Landslide Hazard Areas

1. The following requirements shall apply to any land disturbing activity or construction within a landslide hazard area or its setback as described herein:

   a. Development of habitable structures and critical facilities is prohibited in landslide hazard areas and landslide hazard area setbacks.

   b. The following minor development may be allowed in landslide hazard areas on slopes forty (40) percent or greater and landslide hazard area setbacks if the development standards of this Section are met:

      i. Surface water management, including outfalls

      ii. Septic facilities, including drainfields

      iii. Trails and stairs

      iv. Cable lifts and trams

      v. Public or private utilities or streets

      vi Seismic or other safety upgrades to protect existing habitable structures

      vii. Other non-habitable structures

   c. Any land disturbing activity or construction within a landslide hazard area or its setback shall meet the following requirements:

      i. All development proposals shall be designed to avoid impacts to geologically hazardous areas. The development shall be designed to minimize the footprint of building in other disturbed areas, minimize removal of vegetation, minimize topographic change, and retain open space to the maximum extent practicable;

      ii. Development design shall utilize clustering, under-structure parking, multi-level construction, and tiered foundations to the extent feasible to minimize impervious lot coverage, slope disturbance, and changes to the natural topography;

      iii. Access shall be in the least sensitive part of the site, and common access drives and utility corridors are required to the extent feasible;

      iv. Roads, walkways and parking areas shall be designed to parallel the natural contours to the extent feasible;

v. Cut and fill slopes shall be prepared and maintained to control against erosion and instability; and

vi. Drainage and stormwater designs in zones of influence shall incorporate elements of low impact design, add examples to the extent feasible, and shall be designed in such a manner that stormwater outlet discharges do not create additional impacts.

d. Factors of safety in accordance with Table 4-5 are required. Analysis of dynamic conditions shall be based on the minimum horizontal acceleration for the probabilistic maximum considered earthquake as established by the currently adopted version of the International Building Code.

Table 4-5. Factors of Safety and Standard Setbacks

Structure, Use, or Activity	Static Factor of Safety	Dynamic (seismic) Factor of Safety	Standard Setback
Habitable structure	1.5	1.0	Top of slope: Height of slope up to maximum of 75 feet Bottom of slope: Height of slope
High-risk non-habitable structure	1.3	As determined by geological hazards assessment	Top of slope: Height of slope up to maximum of 75 feet Bottom of slope: Height of slope
Lower-risk non-habitable structures	As determined by geological hazards assessment	As determined by geological hazards assessment	Height of slope up to 75 feet
Other structure or use	As determined by geological hazards assessment	As determined by geological hazards assessment	Height of slope up to 75 feet
Tree and vegetation activities in accordance with Section 4.1.3	n/a	n/a	25 feet only from top of slope

e. Setbacks from landslide hazard areas are required. A setback shall be established from all edges of a landslide hazard area as follows:

i. A standard setback in accordance with Table 4-5; or

ii. A setback established by the findings of a geological hazards assessment prepared by a licensed geologist or geotechnical engineer that protects and minimizes the risk of property damage, death or injury resulting from a potential landslide impact. The geological hazards assessment shall require a third-party independent review by a qualified geologist or geotechnical engineer at the cost to the applicant;

iii. A setback less than 20 feet is prohibited for habitable structures;

iv. The setback for tree and vegetation activities in accordance with Section 4.1.3 is 25 feet only from the top of slope.

v. No setback is required for slopes forty (40) percent or greater with a vertical elevation change of up to twenty (20) feet, if compliance with development standards in Section 4.1.5.11.3 and 4.1.5.11.4 is documented by a geotechnical engineer licensed in the State of Washington;

vi. The setback may be increased beyond that specified in subsection (i) above if the director determines a larger setback is necessary to prevent risk of damage to proposed adjacent development and the associated critical areas.

f. For the purposes of establishing the factors of safety and setback using Table 4-5, the following categories shall apply:

i. Habitable structure: residences, accessory dwelling units, garages;

ii. High-risk non-habitable structure: decks, patios, pool/hot tub, driveways, trams, cable lifts, carports;

iii. Lower-risk habitable structure: storage shed, boathouse, stairs, pathways, structures intended for short-term use;

iv. Other structures or uses: septic facilities including drainfields, drainage outfalls, bulkheads, landscape walls, other utilities; and

v. If a proposed structure, use or activity is not included in subsections (i) through (iv) of this section, the category shall be determined by the City Engineer.

g. A zone of influence shall be established 300 feet upslope from slopes greater than 40 percent and 200 feet upslope from slopes greater than 15 percent but less than 40 percent that are determined to be geologically hazardous areas to assess changes in land use and hydrology that may affect the stability of the geologically hazardous area.

i. The applicant shall have the stormwater pollution prevention plan (erosion control plan) for the project reviewed by a geotechnical engineer to determine if there are any potentially adverse impacts to the landslide hazardous area. The report shall contain recommendations to avoid adverse impacts to the geologically hazardous area. Concentrated discharge of stormwater shall only be allowed where specifically recommended in the report and authorized by the City Engineer.

ii. If the geotechnical engineer or the City Engineer determines that there are potential adverse impacts, the applicant shall provide a geotechnical analysis containing information specified by the City Engineer which analyzes the potential impacts to the geological hazard from the proposed development in the zone of influence and meets the standards of this section.

h. Proposed clearing and work limit lines and landslide hazard setbacks shall be marked in the field for inspection and approval by the city prior to start of any land disturbing activity. Field marking shall remain in place until construction is completed and final inspection is completed by the city.

i. Surface drainage shall be directed away from landslide hazard areas. When no other solution is feasible, surface drainage piping may be located on the face of a steep slope when contained in a tight line (closed, non-leaking pipe) and in such a way that erosion will not be increase at the base of the bluff and provided that physical access along the shoreline is not degraded. Furthermore, conditions may be applied to mitigate the aesthetic impacts of the proposed drainage systems as viewed from public areas.

4.1.5.12 Regulations – Wetlands

1. Applicability. This section applies to:
    a. All wetlands designated pursuant to Section 4.1.5.12.1.
    b. All wetland buffers as shown in the tables in Section 4.1.5.12.7.

4.1.5.12.1 Identification and Delineation

1. Identification of wetlands and delineation of their boundaries pursuant to this section shall be done in accordance with the federal wetland delineation manual and applicable regional supplements (as updated), as required by WAC 173-22-035. All areas within the city meeting the wetland designation criteria, regardless of any formal delineation, are hereby designated as wetlands and are subject to provisions of this section unless not included in the definition of wetland provided in Section 8.0, Definitions.
2. Wetland delineations shall be conducted by a qualified professional, in accordance with Section 4.1.5.7.1(2)(d).
3. The wetland boundary shall be marked in the field and surveyed by a licensed surveyor. The surveyed wetlands shall be sized and mapped on a scaled site plan. The director may require the wetland delineation to be verified in the field by the Army Corps of Engineers or the Washington State Department of Ecology when there is uncertainty in the wetland boundary or there was unauthorized wetland disturbance. The requirement for a licensed surveyor to survey the wetland boundaries may be waived in limited circumstances, such as when there is no access to the wetland property or there is no proposed impact to the wetland and wetland buffer, with authorization from the director.
4. Wetland delineations shall be valid for five years from the date of the delineation.
5. A wetland delineation shall be required for any proposed development within 300 feet of a designated wetland. If any portion of the designated wetland is on a different site than the proposed development, the location of the wetland boundary may be determined using best professional judgement.

4.1.5.12.2 Classification

1. Wetlands shall be rated according to the Washington State Wetland Rating System for Western Washington – 2014 Update (Ecology Publication No. 14-06-029, October 2014), as revised. The wetland categories determined by the rating are as follows:
    a. Category I wetlands are:
        i. Relatively undisturbed estuarine wetlands larger than one acre;

ii. Wetlands that are, or may be in the future, identified by scientists of the Washington Natural Heritage Program/Department of Natural Resources as wetlands of high conservation value;

iii. Bogs;

iv. Mature forested wetlands larger than one acre;

v. Wetlands in coastal lagoons; and

vi. Wetlands that perform many functions well and score 23 points or more in the wetland rating. These wetlands are those that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, or are relatively undisturbed and contain ecological attributes that are impossible to replace within one human lifetime.

b. Category II wetlands are:

i. Wetlands with a moderately high level of functions and score 20 to 22 points in the wetland rating.

ii. Estuarine wetlands smaller than one acre or disturbed estuarine wetlands larger than one acre.

c. Category III wetlands are:

i. Wetlands with a moderate level of functions and score between 16 to 19 points in the wetland rating.

d. Category IV wetlands are:

i. Wetlands with a low level of functions, scoring less than 16 points in the wetland rating.

2. The wetland rating categories in this Section shall be applied to wetland studies including but not limited to delineations, on or after the date of adoption of the ordinance codified in this section. The wetland rating shall be valid for five years unless the state rating system changes or the wetland and/or the wetland buffer have been altered since the rating.

3. A wetland rating pursuant to this Section shall be required for any proposed development within 300 feet of a designated wetland. If any portion of the designated wetland is on a different site than the proposed development, the rating may be determined using best professional judgement.

4. Wetland rating categories shall not change due to illegal modifications.

4.1.5.12.3 Mapping

1. The location and extent of all mapped critical areas shown on the City of Bainbridge Island critical area maps are approximate and shall be used as a general guide only. The type, extent and boundaries shall be determined in the field by a qualified professional according to the requirements of this section. The critical area maps are adopted as part of this section and are incorporated herein by this reference. In addition, the National Wetlands Inventory and Soil Maps produced by the U.S. Department of Agriculture,

National Resources Conservation Service may be useful in helping to identify potential wetland areas. The inventory and cited resources are to be used as a guide for the city, project applicants, and property owners, and may be continuously updated as new or altered critical areas are identified.

4.1.5.12.4 Protection of Wetlands

1. Any action taken pursuant to this section shall result in equivalent or greater functions and values of the wetlands and wetland buffers associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with mitigation sequencing as described in Section 4.1.6 and WAC 197-11-768.
2. Applicants must first demonstrate an inability to avoid or reduce impacts, before compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.
3. Permanent protection of critical areas that are part of an approved mitigation plan or buffer enhancement plan shall be achieved through a Notice to Title recorded at the Kitsap County Auditor's Office, or similar means of protection in perpetuity.

4.1.5.12.5 Prohibited Activities

1. The following development, uses and activities are prohibited in all wetlands:
    a. Draining, excavation, placement of fill material and flooding not associated with an exempt or regulated use
    b. Forest Practices – Class IV General or Conversion Option Harvest Plan
    c. New or expanded agriculture
    d. On-site sewage facility
2. The following development, uses and activities are prohibited in Category I and II wetlands:
    a. Fish hatchery
    b. Golf course
    c. Mineral extraction
    d. Public facility
    e. Public communications tower
    f. New public road/street
    g. New private access road or driveway
    h. Stormwater retention/detention facility
    i. Primary utility

4.1.5.12.6 Development Standards - Specific Development, Uses, and Activities

The following development, uses and activities may be allowed within wetlands and their required buffers. Any proposal for the following development shall comply with the standards of this Section, other applicable sections of this Program, and other applicable state, federal and local regulations.

1. Road/Street Repair and Construction
    a. Any private or public road or street repair, maintenance, expansion, or construction may be allowed within a wetland or its required buffer only when all of the following conditions are met:
        i. No other reasonable or practicable alternative exists and the road or street crossing serves multiple properties whenever possible;
        ii. Publicly owned or maintained road or street crossings should provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.; and
        iii. The road or street repair and construction are the minimum necessary to provide safe roads and streets.
        iv. Mitigation shall be performed in accordance with specific project mitigation plan requirements.
2. Land Divisions and Land Use Permits
    a. All land divisions and land uses proposed on a site that includes regulated wetlands shall comply with the procedures and standards listed below. When a parcel contains a wetland, city policy shall always be to primarily protect the functions and values of the wetland, while recognizing the value of the development rights provided to the property by its zoning.
        i. Density Calculation
            A. The actual density that will allowed to be built upon a parcel containing a wetland shall ultimately be determined during the site specific review of the parcel's planned development.
            B. In determining the actual density of a parcel based on a specific site plan, the site plan shall locate all buildings outside of any wetland and its required buffers;
            C. The number of development rights allowed for any residentially-zoned parcel shall be its size in square feet divided by the number of square feet per home that is required by its zoning;
            D. If the land can be subdivided such that all setbacks, buffers, and other zoning requirements can be observed, and no zoning variances are requested, the density from the wetland, except the area with permanent open water, can be transferred within the property;
            E. To the extent that the number of allowable development rights cannot be used on-site, they may be sold, traded, or transferred by

the property owner through the transfer of development rights program pursuant to Chapter 18.27 BIMC;

F. Property owners may voluntarily extinguish development rights that are provided by the underlying zoning, but the city shall not extinguish any of these rights outside the aforementioned transactions.

ii. Land division approvals shall be conditioned to require that wetlands and wetland buffers be designated as an easement or covenant encumbering the wetland and wetland buffer. Such easement or covenant shall be recorded together with the land division and represented on the final plat or binding site plan, and title.

iii. In order to implement the goals and policies of this section, to accommodate innovation, creativity, and design flexibility, and to achieve a level of environmental protection that would not be possible by typical lot-by-lot development, the use of the clustered development or similar innovative site planning is strongly encouraged for projects with regulated wetlands on the site.

3. Surface Water Management

a. Surface water structures or discharges from stormwater facilities may be allowed within wetlands and their required buffers only when the applicant has an approved Site Assessment Review (SAR) pursuant to the requirements of BIMC 15.20 and the proposal meets criteria in Appendix I-D, Guidelines for Wetlands when Managing Stormwater, from Washington State Department of Ecology's 2012 Stormwater Management Manual for Western Washington, as amended in 2014.

4. Trails and Trail-Related Facilities

a. Construction of public and private trails and trail-related facilities, such as benches and viewing platforms, are allowed in wetlands or wetland buffers only when the following standards are met:

i. Trails and related facilities shall be placed on existing road grades, utility corridors, or any other previously disturbed areas if present at the site and consistent with trail planning objectives.

ii. Trails and related facilities shall be planned to minimize removal of trees, soil disturbance, and maintain existing hydrological characteristics, shrubs, snags, and important wildlife habitat.

iii. Viewing platforms and benches, and access to them, shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected wetland. Viewing platforms shall be limited to one hundred (100) square feet in size, unless demonstrated through a wetland critical areas report and mitigation plan that a larger structure will not result in a net loss of wetland functions.

iv. Trail planning shall utilize mitigation sequencing in Section 4.1.2.6.1 to first avoid siting trail and trail-related facilities within wetlands and their required buffers. Trails and trail-related facilities are allowed within wetlands or wetland buffers if there are no reasonable alternatives for meeting an applicant's trail planning objectives and it is demonstrated through a wetland critical areas report and mitigation plan that the proposal will not result in a net loss of wetland functions.

v. Trails shall be limited to non-motorized use. Trail width shall not exceed six feet unless there is a demonstrated need, subject to review and approval by the director. Trails shall be constructed with pervious materials unless otherwise approved by the director.

5. Utilities

a. Installation of utilities within wetlands or their required buffers may be allowed when the following standards are met:

i. Construction of new utilities outside the road right-of-way or an existing utility corridor may be permitted in wetlands or wetland buffers, only when no reasonable alternative location is available and the utility meets the requirements for installation, replacement of vegetation and maintenance outlined below, and as required in the filing and approval of applicable permits and special reports required by this section.

ii. Construction of sewer lines or on-site sewage systems may be permitted in wetland buffers only when:

A. The applicant demonstrates it is necessary to meet state and/or local health code minimum design standards (not requiring a variance for either horizontal setback or vertical separation); and/or

B. There are no other practicable or reasonable alternatives available and construction meets all other applicable requirements of this Section. Joint use of the sewer utility corridor by other utilities may be allowed.

iii. New utilities shall not be allowed when the wetland or buffer has known locations of federal or state listed endangered, threatened, monitored or sensitive species, heron rookeries or nesting sites of raptors which are listed as species of concern, except in those circumstances where an approved Habitat Management Plan indicates that the utility corridor will not significantly impact the wetland or wetland buffer;

iv. New utility construction and maintenance shall protect the wetland and buffer environment by utilizing the following methods:

A. New utilities shall be aligned to avoid tree removal to the greatest extent practicable.

B. Any area of disturbance resulting from installation of a utility shall be revegetated with appropriate native or equivalent vegetation at preconstruction densities or greater, immediately upon completion

of construction, or as soon thereafter as possible, if due to seasonal growing constraints. The utility or landowner responsible for installation shall ensure that such vegetation survives.

C. Any access for maintenance shall be provided as much as possible at specific points, rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than 15 feet; and shall be contiguous to the location of the utility corridor on the side away from the wetland. Mitigation will be required for any additional access through restoration of vegetation in disturbed areas.

D. The director may require additional mitigation measures.

v. Utility maintenance shall include the following measures to protect the wetland and buffer environment:

A. Painting of utility equipment such as power towers shall not be sprayed or sandblasted. Lead-based paints are prohibited.

B. No pesticides, herbicides or fertilizers may be used in wetland areas or their buffers except those approved by the U.S. Environmental Protection Agency (EPA) and Washington Department of Ecology and applied by a licensed applicator in accordance with the safe application practices on the label.

6. Parks

a. Development of public park and recreation facilities may be allowed; provided, that no alteration of wetlands or wetland buffers is allowed except as allowed in Section 4.1.5.6, Allowed Activities within Critical Areas, and Section 4.1.5.12.6, Development Standards – Specific Development, Uses, and Activities.

4.1.5.12.7 Development Standards – Wetland Buffers

1. Buffers shall remain as undisturbed or enhanced vegetation areas for the purpose of protecting the integrity, function, and value of wetland resources. Any buffer modification proposed shall be through an approved Buffer Enhancement Plan meeting the requirements of Section 4.1.5.14.4. No uses or activities shall be allowed within the buffer unless allowed by this Section. If a buffer on a site subject to land use review or a building permit application has previously been disturbed, the director may require the disturbed buffer area be enhanced, including revegetation with native plant species, pursuant to an approved Buffer Enhancement Plan meeting the requirements of Section 4.1.5.14.4. No refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall be placed in the buffer.

2. All regulated wetlands shall be surrounded by a buffer, based upon Appendix 8-C, Section 8C.2.3 of Wetlands in Washington State – Volume 2: Guidance for Protecting and Managing Wetlands (Ecology Publication #05-06-008), as amended. Standard buffer widths are shown in Tables 4-6 through 4-9. If a wetland meets more than one of the criteria listed in each table, the buffer needed to protect the wetland is the widest one.

3. Standard buffer widths are based on impact of land use, which is categorized as follows:
    a. High impact land use includes commercial development, industrial development, institutional development, residential (all residential zoning classifications other than R-0.4, R-1 and R-2) development, new agriculture (high-intensity such as dairies, nurseries, greenhouses, raising and harvesting crops requiring annual tilling, raising and maintaining animals), forestry activities, and high-intensity recreation such as golf courses and ballfields.
    b. Moderate impact land use includes residential development (R.0-4, R-1 and R-2 residential zoning classifications), new agriculture (moderate-intensity such as orchard and hay fields), paved trails, and construction of temporary logging roads.
    c. Low impact land use includes low-intensity open space such as passive recreation, natural resources preservation, and unpaved trails.
4. The required minimum buffers listed in Tables 4-6 through 4-9 are based on the assumption that the buffer is well vegetated with native species appropriate to the site. If the buffer does not consist of vegetation adequate to provide wetland protection and buffer functions, the director may require that the buffer be planted to achieve such protection and function.

Table 4-6: Category I Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
Natural Heritage Wetlands	Low Moderate High	125 ft 190 ft 250 ft	No additional discharge of surface water. No septic systems within 300 ft. Restore degraded parts of the buffer
Bogs	Low Moderate High	125 ft 190 ft 250 ft	No additional surface discharges. Restore degraded parts of the buffer.
Forested	Low Moderate High	125 ft 190 ft 250 ft	If forested wetland scores high for habitat, maintain connectivity to other natural areas.
Estuarine	Low Moderate High	100 ft 150 ft 200 ft	N/A
Wetlands in Coastal Lagoon	Low Moderate High	100 ft 150 ft 200 ft	N/A
High level of function for habitat (score for habitat is 8-9 pts.)	Low Moderate High	150 ft 225 ft 300 ft	Maintain connectivity to other natural areas. Restore degraded parts of the buffer.
Moderate level of function for habitat (score for habitat is 5-7pts.)	Low Moderate High	75 ft 110 ft 150 ft	N/A
High level of function for water quality improvement and low for habitat (score for water quality pts.; habitat less than 5 pts.)	Low Moderate High	50 ft 75 ft 100 ft	No additional discharges of untreated runoff.

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
Not meeting any of the above criteria.	Low Moderate High	50 ft 75 ft 100 ft	N/A

Table 4-7: Category II Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
High level of function for habitat (score for habitat is -9 pts.)	Low Moderate High	150 ft 225 ft 300 ft	Maintain connectivity to other natural areas.
Moderate level of function for habitat (score for habitat is 5-7pts.)	Low Moderate High	75 ft 110 ft 150 ft	N/A
Estuarine	Low Moderate High	75 ft 110 ft 115 ft	N/A
Not meeting any of the above criteria	Low Moderate High	50 ft 75 ft 100 ft	N/A

Table 4-8: Category III Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
Moderate level of function for habitat (score for habitat is 5-7pts.)	Low Moderate High	75 ft 110 ft 150 ft	N/A
Not meeting above criterion	Low Moderate High	40 ft 60 ft 80 ft	N/A

Table 4-9: Category IV Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
All	Low Moderate High	25 ft 40 ft 50 ft	N/A

5. All buffers shall be measured on a horizontal plane from the delineated wetland edge as marked in the field by a qualified professional.
6. This section applies to those wetlands and their buffers that are within 200 feet of regulated development activities.
    a. Wetland buffers shall be temporarily fenced or otherwise suitably marked between the area where the construction activity occurs and the buffer. Fences shall be made of a durable protective barrier and shall be highly visible. Silt

fences and plastic construction fences may be used to prevent encroachment on wetlands or their buffers by construction. Temporary fencing shall be removed after the site work has been completed and the site is fully stabilized per city approval.

b. The director may require that permanent signs and/or fencing be placed on the common boundary between a wetland buffer and the adjacent land. Such signs will identify the wetland buffer. The director may approve an alternate method of wetland and buffer identification if it provides adequate protection to the wetland and buffer.

7. A structure or hard surface setback line of fifteen feet is required from the edge of any wetland buffer. Minor structural or impervious surface intrusions into the areas of the setback, such as but not limited to fire escapes, open/uncovered porches, landing places, outside walkways, outside stairways, retaining walls, fences and patios, may be permitted if the department determines upon review of an analysis of buffer functions submitted by the applicant, that construction and/or maintenance of such intrusions will not encroach into the wetland buffer or adversely impact the wetland. The functional analysis shall include a functional methodology supported by best available science. The setback shall be identified on a site plan and filed as an attachment to the notice on title as required by Section 4.1.5.7.2, Notice on Title.

8. Modifications to buffer widths may be allowed provided the applicant demonstrates the need for modification through mitigation sequencing pursuant to Section 4.1.2.6.

   a. The width of a required buffer may be averaged if the applicant can demonstrate that averaging can provide equal or greater functions and values as would be provided under the required buffer and all of the following conditions are met:

      i. The total area of buffer after averaging is equal to the area required without averaging.

      ii. Averaging cannot result in the any portion of the buffer being reduced more than 25 percent of its required width.

   b. The required buffer widths for proposed land uses with high-intensity impacts to wetlands may be reduced to those required for moderate-intensity impacts under the following conditions:

      i. For wetlands that score moderate or high for habitat (5 points or more for the habitat function), the width of the buffer may be reduced if both of the following criteria are met:

      ii. A relatively undisturbed, vegetated corridor at least 100-feet wide is provided if the wetland contains any priority habitats as defined by the Washington Department of Fish and Wildlife. “Relatively undisturbed” and “vegetated corridor” are defined in the Western Washington Wetland Rating System. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection, such as a Notice to Title.

iii. Measures to minimize the impacts of different land uses on wetlands, such as the examples in Table 4-10, are applied.

iv. For wetlands that score less than 5 points for habitat, the buffer width may be reduced to that required for moderate land use impacts by applying measures to minimize the impacts of different land uses on wetlands, such as the examples in Table 4-10.

c. Any request for buffer modification outlined above shall be reviewed in conjunction with the underlying land use or construction permit. Requests for buffer averaging or buffer reduction shall include a Buffer Enhancement Plan prepared by a qualified professional that meets the requirements of Section 4.1.5.14.4. Buffer Enhancement Plans shall be reviewed pursuant to the criteria in Section 4.1.5.7.

d. Any other buffer modification resulting in a reduced buffer area, other than non-compensatory enhancement, requires a shoreline variance.

Table 4-10: Examples of Measures to Minimize Impacts to Wetlands from Different Types of Activities

Examples of Disturbance	Examples of Measures to Minimize Impacts	Activities that Cause the Disturbance
Lights	• Direct lights away from wetland.	Parking lots, warehouses, manufacturing, residential
Noise	• 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 heavy industry or manufacturing, establish an additional 10-foot heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.	Manufacturing, residential
Toxic runoff*	• Route all new runoff away from wetland. • Establish covenants limiting use of pesticides within 150 feet of wetland. • Apply integrated pest management.	Parking lots, roads, manufacturing, residential areas, application of agricultural pesticides, landscaping
Stormwater runoff	• Retrofit stormwater detention and treatment for roads and existing adjacent development. • Prevent channelized flow from lawns that directly enters the buffer. • Use Low Impact Development techniques consistent with BIMC 15.20.	Parking lots, roads, manufacturing, residential areas, landscaping
Change in water regime	• Infiltrate or treat, detain, and disperse new runoff into buffer.	Impermeable surfaces, lawns, tilling
Pets and human disturbance	• Plant buffer with dense, impenetrable native vegetation appropriate for region. • Install low impact fencing at buffer perimeter.	Residential areas

	• Place wetland and its buffer in separate open space tract or protect with conservation easement.	
Dust	• Utilize best management practices to control dust.	Tilled fields
* These examples are not necessarily adequate to meet the rules for minimizing toxic runoff if threatened or endangered species are present at the site.		

4.1.5.12.8 Wetland Mitigation Requirements

1. All development, uses and activities proposed to impact wetlands shall be mitigated according to this Section and the mitigation sequencing steps outlined in Section 4.1.2.6. The applicant shall demonstrate to the satisfaction of the director that each step of mitigation sequencing has been adequately addressed prior to approval of impacts to wetlands.
2. Compensatory mitigation shall be required for development, uses or activities that result in the loss of wetland acreage or in the reduction of wetland functions or values.
    a. Compensatory mitigation may occur at the site of the allowed impacts or at an off-site location. Considerations for determining whether off-site mitigation is preferable include, but are not limited to one or more of the following:
        i. On-site conditions do not favor mitigation success due to soil conditions, hydrology or adverse impacts of adjacent land uses;
        ii. On-site conditions are isolated from other aquatic or riparian habitats;
        iii. An off-site location is beneficial to larger ecosystem or watershed functions;
        iv. An off-site location has greater likelihood of success or will provide greater functional benefits;
        v. The proposal for an off-site location uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington) (Ecology Publication #09-06-32, December 2009).
    b. Off-site compensatory mitigation may include the use of a wetland mitigation bank or an in-lieu fee program if such instruments are available within the city limits.
    c. Compensatory mitigation in advance of proposed impacts may be allowed on a case-by-case basis for projects with pre-identified impacts consistent with Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation (Ecology Publication #12-06-015, December 2012).
3. Where mitigation is required under the sequencing in subsection (1), a mitigation plan is a required component of a critical areas report meeting the requirements in Section 4.1.5.14, Critical Area Reports.
4. The ratios shown in Table 4-11 shall be used to determine the required amount of wetland mitigation. The first number specifies the amount of wetland area to be restored, rehabilitated, created or enhanced, and the second number specifies the amount of wetland area lost. The director may decrease these ratios when there are findings of

special studies coordinated with agencies with expertise which demonstrate that no net loss of wetland function or value is attained under the decreased ratio.

5. Mitigation requirements may also be determined using the credit/debit tool described in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report (Ecology Publication #10-06-011, March 2012), or as revised) consistent with Table 4-11.

Table 4-11: Replacement Ratios for Wetlands

Category and Type	Re-establishment or Creation	Rehabilitation	1:1 Re-establishment or Creation (R/C) and Enhancement (E)	Enhancement Only
I – Mature Forested	6:1	12:1	1:1 R/C and 10:1 E	24:1
I – Based on functions	4:1	8:1	1:1 R/C and 6:1 E	16:1
I – Bog or Natural Heritage Site	Not considered possible	6:1	Case by Case	Case by Case
II	3:1	6:1	1:1 R/C and 4:1 E	12:1
III	2:1	4:1	1:1 R/C and 2:1 E	8:1
IV	1.5:1	3:1	1:1 R/C and 2:1 E	6:1

4.1.5.13 Regulations – The Winslow Ravine – Special Rules in Mixed Use Town Center

A portion of the "Winslow Ravine" which contains a ravine, a Type F stream, and several wetlands, is located in the Mixed Use Town Center (MUTC) zoning designation. In order to accommodate more dense development within the MUTC, and recognizing the significant distance from the top of the ravine to the stream and its adjacent wetlands, in lieu of the buffer and setback rules provided for streams (Section 4.1.5.10) and wetlands (Section 4.1.5.12), an applicant may select the prescriptive option or the mitigated option with respect to the Winslow Ravine within the MUTC as described below:

Table 4-12. "Option A" - Prescriptive Standards

Categories	Buffer Width Standard	Minimum Structure and Hard Surface Setback	Other Development Standards
Streams and wetlands associated with the Winslow Ravine within the MUTC	50 feet measured from the top of the Winslow Ravine	15 feet beyond the buffer	No development, uses or activities are allowed within the buffer. Refuse, including but not limited to household trash, yard waste and commercial/ industrial refuse, shall not be located in the buffer and shall be removed if present.

Table 4-13. "Option B" - Mitigated Standards

The applicant shall demonstrate by submittal of necessary studies and proposed mitigation, that measures can and will be taken to ensure that the functions and values provided by the buffers prescribed under "Option A" are retained or improved.

Categories	Buffer Width Standard	Minimum Structure and Hard Surface Setback	Other Development Standards
Streams and wetlands associated with the Winslow Ravine within the MUTC	25 feet measured from the top of the Winslow Ravine	15 feet beyond the buffer	No development, uses or activities are allowed within the buffer other than for public access meeting the standards in Section 5.8. If the buffer has previously been disturbed, the disturbed buffer area shall be revegetated pursuant to an approved Buffer Enhancement Plan meeting the requirements of Section 4.1.5.14.4. Refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall not be located in the buffer and shall be removed if present.

4.1.5.14 Critical Area Reports

4.1.5.14.1 Aquifer Recharge Areas Hydrogeological Site Assessment

1. The hydrogeological site assessment shall include:
    a. A site map drawn to scale which indicates the location of known or geologically representative wells (abandoned and active), springs, and surface water features within 1,000 feet of the project property boundary;
    b. A description of the site-specific hydrogeological characteristics. At a minimum this will include a description of the lithology, depth and static water level of known underlying aquifer(s) and depiction of groundwater flow direction and patterns on the site map;
    c. A description of the proposed land use and activities specifically detailing water consumption; an inventory of all chemical use, storage, transportation, production (including process wastewater), and disposal; and any potential pollutant identified by the U.S. EPA as a potential source of drinking water contamination (Appendix A of the Washington State Critical Aquifer Recharge Area Guidance Document) or known to be deleterious to the environment or human health; and
    d. A general discussion of surface and groundwater quality and quantity in the area and the identification of the potential adverse quality and quantity impacts to groundwater and surface water features within 1,000 feet of the project.
2. The required elements of the in-depth site assessment for a given development or re-development will be based on the initial site assessment review by the city, the Kitsap Public Health District, affected Tribes, and affected public water purveyors.

    One or more of the elements listed below may be required based upon the proposed project activity, complexity of underlying hydrogeological conditions, and the perceived potential to adversely impact groundwater or surface water quality or quantity. One or more of these elements may also be required if the applicant chooses to demonstrate that mitigation measures are not necessary to protect the quantity or quality of groundwater or

surface water or that the project does not pose a risk of detriment to groundwater or surface water. Additional in-depth site assessment elements may include:

a. Lithologic characteristics and stratigraphic relationships of the affected aquifer(s) and overlying geologic units and soil types including thickness, horizontal and vertical extent, permeability, and infiltration rates of surface soils.

b. Delineation of identified structural features such as faults, fractures, and fissures.

c. Aquifer characteristics including determination of recharge and discharge areas, transmissivity, storage coefficient, hydraulic conductivity, porosity, and estimate of groundwater flow direction, velocity and patterns for the affected aquifer(s).

d. Estimate of precipitation and evapotranspiration rates for the project area.

e. Preparation of appropriate hydrogeological cross sections depicting underlying lithology and stratigraphy, aquifer(s), and potential or probable contaminant pathways to both surface and groundwater from a chemical release.

f. Determination of background or existing groundwater quality underlying the project area and water quality of surface water bodies.

g. Contaminant fate and transport including probable migration pathways and travel time of potential contaminant release(s) from the site through the unsaturated zone to the aquifer(s) and through the aquifer(s), and how the contaminant(s) may be attenuated within the unsaturated zone and the aquifer(s) with consideration to advection, dispersion, and diffusion of contaminants in the groundwater.

h. Delineation of areas potentially affected by contaminant migration on the ground surface and/or through potentially affected aquifer(s).

i. Determination of the degree of continuity between groundwater and nearby surface water including potential impacts to baseflow in streams from proposed groundwater withdrawals, and potential impacts to surface water quality from site runoff or contaminated groundwater discharge.

j. Assessment of the potential for pumping-induced seawater intrusion.

k. For projects that have the potential to adversely impact groundwater quality by nitrate loading, the applicant shall test existing wells and/or required test wells for nitrate as nitrogen and calculate the current and projected future groundwater nitrate concentrations at full project build-out, at appropriate point(s) of compliance, as determined by project characteristics, and in a methodology approved by the city. If the calculated nitrate loading in the intended water supply equals or exceeds 5 milligrams per liter nitrate as nitrogen, the applicant shall develop a mitigation plan with the point(s) of compliance determined based on project characteristics.

l. Multiple-stage (or phased) development must consider impacts of the total build-out of the project to allow for an assessment of the cumulative impacts of the entire development on critical aquifer recharge areas.

4.1.5.14.2 Aquifer Recharge Areas Mitigation Plan

For proposals requiring aquifer recharge area impact mitigations, the applicant shall develop for approval by the city a mitigation plan for the proposed development. Affected public water purveyors (Group A & B), affected Tribes, and the Kitsap Public Health District will be notified and invited to comment on all mitigation plans. The city will consider all recommendations submitted by these entities when developing appropriate permit conditions.

The city may, based on performance criteria and monitoring results, require additional amendments to the plan. The city reserves the right to submit mitigation plans for a third-party review at the applicant's expense and to reject any proposed land use or activity that poses significant risk to groundwater or surface water quality or quantity that cannot be satisfactorily mitigated.

1. The mitigation plan shall contain the project's permit conditions and, as applicable:
    a. A description of the mitigation measures to be taken, how they will be implemented, and performance criteria.
    b. A groundwater and surface water monitoring program to measure potential impacts of the development to underlying aquifer(s) and surface water. The monitoring plan will describe monitoring, maintenance, and reporting requirements.
    c. A contingency plan describing spill response and corrective actions to be taken if a release of a pollutant occurs or monitoring results indicate that mitigation measures are not effectively protecting groundwater and surface water resources and human health. The city shall have the authority to impose additional required corrective actions where such measures are necessary to protect groundwater and surface water resources or human health. Where appropriate contingencies are not feasible and result in an activity posing unacceptable risk to groundwater or surface water resources or human health, the city shall deny the proposal.
    d. Multiple-stage (or phased) development must consider mitigation for each phase of development as well as the total build-out of the project to allow for an assessment of the cumulative impacts of the entire development on critical aquifer recharge areas.
    e. Conditions that would arise that warrant ceasing the project operation altogether.
    f. Where a wellhead protection plan addressing the project area exists, the city shall use the recommendations contained in the wellhead protection plan as a basis for formulating required mitigation measures. In the absence of such a mitigation plan, the city shall contact the owner of the public water system (Group A and B) impacted by the proposed project and jointly develop mitigation measures, a summary of which shall be signed by the applicant and recorded with the applicant's property title.
    g. Nitrate Loading Mitigation
        i. If a calculated nitrate loading concentration for a project at the designated point(s) of compliance is equal to or greater than 5 milligrams per liter nitrate as nitrogen, then the applicant shall be required to place a notification on the documents of title for the property affected. A

monitoring plan shall be developed to monitor the nitrate level and include a contingency plan to be implemented if the nitrate level exceeds 10 milligrams per liter nitrate as nitrogen.

ii. Land Divisions. If the calculated nitrate loading concentration for a land division at the designated point(s) of compliance is equal to or greater than 5 milligrams per liter nitrate as nitrogen, then the applicant shall:

A. Develop a mitigation plan to minimize the nitrate loading rate; and

B. Develop a contingency plan to be implemented if the nitrate concentration exceeds 10 milligrams per liter nitrate as nitrogen; and

C. Submit the contingency plan with the final plat application. The contingency plan must be approved by the city, and then recorded with the Kitsap County Auditor as part of the final plat. Conditions of the contingency plan shall be listed on the face of the plat.

iii. Mitigation of nitrate in groundwater from on-site septic systems may include decreasing the density of septic system drainfields.

2. Recording of Mitigation Plan Summaries

a. The city may require that the applicant record a city-approved summary of the mitigation plan on the property title. A copy of the recorded summary shall be provided to the city in hard copy and electronic format. If a property owner can demonstrate, to the satisfaction of the city, that mitigation measures are no longer necessary, the city shall approve the addition of language on the title for the property nullifying the mitigation requirements.

b. Land Divisions. The mitigation plan must be approved by the city, and then recorded with the Kitsap County Auditor as part of the final plat. Conditions of the mitigation plan shall be listed on the face of the plat.

3. The director may require that the applicant provide a performance surety to ensure conformance with mitigation requirements of the Aquifer Recharge Mitigation Plan pursuant to Section 4.1.5.14.2.

4.1.5.14.3 Habitat Management Plan

1. A habitat management plan (HMP) is a detailed report that outlines and documents the location of fish and wildlife conservation areas, any planned incursions or habitat impacts and a strategy for limiting impacts.

2. All HMPs shall be submitted to the Washington State Department of Fish and Wildlife habitat biologist and to the Suquamish Tribe for review and comment within 14 days of a complete application pursuant to BIMC 2.16.020. If the HMP recommends mitigation involving federally listed threatened or endangered species, migratory waterfowl or wetlands, the U.S. Fish and Wildlife Service shall receive a copy of the draft HMP. Within that same time frame, the city's Environmental Technical Advisory Committee shall be asked to review the HMP and provide comments.

3. The HMP shall contain a map prepared at an easily readable scale, showing:
    a. The location of the proposed development site;
    b. Property boundaries;
    c. The relationship of the site to surrounding topographic and aquatic features and any connectivity to other wildlife habitat and corridors;
    d. Proposed building locations;
    e. A legend which includes acreage of the parcel, scale, north arrow, and date of map revision.
4. The HMP shall contain a report that includes:
    a. A description of the nature and intensity of the proposed development
    b. Identification of existing habitat functions and values;
    c. An analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat features and processes identified for protection;
    d. Any review comments received from a habitat biologist from the Washington State Department of Fish and Wildlife, and the Suquamish Tribe and U.S. Fish and Wildlife Service;
    e. Demonstration of consistency with current Washington State Department of Fish and Wildlife Habitat Management Recommendations for the applicable habitat or species. If the recommendations are not followed, the HMP report should identify the best available science guidance that is being followed or applied;
    f. A description of proposed seasonal activity restrictions in accordance with the Washington State Department of Fish and Wildlife Habitat Management Recommendations;
    g. An analysis of the feasibility to maintain wildlife corridors and connectivity, if applicable;
    h. A plan identifying proposed measures to mitigate any adverse impacts to wildlife habitats created by the proposed development. Proposed mitigation measures shall be specific to the affected habitat or species; and
    i. A schedule for periodic monitoring, and a contingency plan with corrective actions if conservation or mitigation actions do not lead to the desired outcome.
5. If there is a disagreement between the director and the applicant as to the adequacy of the HMP, the issue of plan adequacy shall be resolved by consulting with the Washington Department of Fish and Wildlife. If the Washington Department of Fish and Wildlife is not available to review the HMP in a timely manner, the applicant may choose to have the city refer the HMP to a third party consultant at the expense of the applicant. After consultation with such State departments or third party consultant, the director shall make a final decision on the adequacy of the HMP.

6. An HMP must be developed and approved prior to issuance of a building permit or underlying land use application and must be implemented before the city grants a certificate of occupancy, as applicable.
7. The director may require that the applicant provide a performance surety to ensure conformance with mitigation requirements of the habitat management plan pursuant to Section 4.1.2.7.

4.1.5.14.4 Buffer Enhancement Plan

1. As part of a buffer modification request, the applicant shall submit a buffer enhancement plan that assesses the functions and values of the buffer and the effects of the proposed modification on those functions and values.
2. The buffer enhancement plan shall clearly demonstrate that equal or greater protection of the functions and values of critical areas and their buffers can be achieved through the buffer modification than could be achieved through providing the required buffer using an appropriate function assessment methodology.
3. The buffer enhancement plan shall identify how the applicant proposes to mitigate any adverse impacts to the critical area or buffer created by the proposed development.
4. The buffer enhancement plan shall be prepared in accordance with the applicable requirements of Section 4.1.5.14.7, Wetland Mitigation Plan.

4.1.5.14.5 Geological Hazards Assessment

1. Basic Geologic Hazards Assessment

   A geological hazards assessment shall contain the following site- and proposal-related information at a minimum:

   a. The report shall include a copy of the site plans for the proposal showing:

      i. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, or within a zone or distance of potential significant influence as determined by a qualified professional;

      ii. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;

      iii. The topography, as determined by a professional engineer or geologist, of the project area and all hazard areas addressed in the report; and

      iv. Clearing limits.

   b. The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:

i. A description of the surface and subsurface geology, including complexes, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;

ii. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and

iii. A description of the vulnerability of the site to seismic and other geologic events.

c. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties.

d. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis. Where the recommended buffers are less than the standard setbacks set forth in Section 4.1.5.11, the rationale and basis for the reduced buffer shall be clearly articulated and demonstrate that the protection standard set forth in that section has been met.

e. A review of, and recommendations relating to, the low impact development (LID) infeasibility criteria in the 2014 Stormwater Management Manual for Western Washington, as amended, demonstrating reasonable consideration of all applicable LID practices.

2. Landslide Hazard and Erosion Hazard Areas

In addition to the basic geologic hazards assessment, an assessment for an erosion hazard or landslide hazard area shall include the following information at a minimum:

a. An erosion control plan prepared by a civil engineer shall be submitted to the city prior to the issuance of a building permit.

b. The applicant shall provide a geotechnical analysis containing the following information:

i. The critical area report shall include a copy of the site plan for the proposal showing:

A. The height of slope, slope gradient, and cross-section of the project area;

B. The location of springs, seeps, or other surface expressions of ground water on or a zone or distance of potential significant influence as determined by a qualified professional; and

C. The location and description of surface water run-off features.

c. The hazards analysis component of the critical areas report shall specifically include:

i. A description of the extent and type of vegetative cover;

ii. A description of subsurface conditions based on data from site-specific explorations;

iii. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;

iv. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

v. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred-year storm event;

vi. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;

vii. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;

viii. Recommendations for building siting limitations;

ix. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion; and

x. A description of the potential modes of failure.

3. Geotechnical Engineering Report

The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:

a. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;

b. Recommendations for drainage and subdrainage improvements;

c. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

d. Mitigation of adverse site conditions including slope stabilization measures for seismically unstable soils, surface water management, location and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability if appropriate.

4. Seismic Hazards Areas

In addition to the basic geologic hazards assessment, an assessment for a seismic hazard area shall also meet the following requirements:

a. Fault Hazard. The applicant shall provide a geologic/geotechnical analysis containing information specified by the City Engineer that documents the

presence or absence of any surface deformation on the site in areas mapped by the city. If deformation is located, the applicant shall provide a geotechnical analysis containing information specified by the City Engineer, which concludes that the development proposal as mitigated meets the standards of this section.

b. Liquefaction Hazard. The applicant shall provide a geotechnical analysis containing information specified by the City Engineer that meets the standards of this section (as mitigated).

c. Seismic Landslide Hazard. The applicant shall provide the same analysis and plan as required for landslide hazard areas.

5. Tsunami Hazards

a. The city shall provide applicants for development in low lying shoreline areas and other areas where flood elevation is controlled by tide level with information on tsunami hazards.

4.1.5.14.6 Wetland Critical Areas Report

A wetland critical areas report shall include, but not necessarily be limited to, the following:

1. A site plan showing the following:

a. Surveyed wetland boundaries based upon a delineation by a wetland specialist or wetland boundaries recorded using a differential global positioning system, based upon a delineation by a wetland specialist.

b. Location of required buffers pursuant to Section 4.1.5.12 or as proposed through buffer modification.

c. Site boundary property lines and roads;

d. Internal property lines, rights-of-way and easements;

e. Existing physical conditions of the site, including buildings, fences and other structures, existing hard surfaces, utilities, etc.

f. Contours at the smallest readily available intervals;

g. Hydrologic mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the site;

h. Location of all test holes and vegetation sample sites, numbered to correspond with flagging in the field and field data sheets; and

i. An aerial photograph with overlays displaying the site boundaries and wetland delineation.

2. A report including the following:

a. Vicinity map;

b. Location information (parcel number and address);

c. General site conditions including topography, size and surface area of all wetlands identified and water bodies within one-quarter mile of the site;

d. Analysis of functional values of existing wetlands;

e. Summary of proposed development, use or activities and potential impacts to wetlands;

f. Copies of rating forms and maps from the Wetland Rating System for Western Washington – Revised (2014) or as amended;

g. Required buffers pursuant to Section 4.1.5.12;

h. Complete U.S. Army Corps of Engineers wetland determination data forms

i. National Wetland Inventory map; and

j. Wetland mitigation plan, if compensatory mitigation is required.

4.1.5.14.7 Wetland Mitigation Plan

1. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans – Version 1 (Ecology Publication #06-06-011b, March 2006), as revised, and, if applicable, Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington)(Ecology Publication 09-06-032, December 2009) and meet the following standards:

    a. All critical area restoration, creation and/or enhancement projects required pursuant to this section either as a permit condition or as a result of an enforcement action shall follow a mitigation plan prepared by an expert approved by the director. The applicant or violator shall receive written approval of the mitigation plan by the director prior to commencement. Compensatory mitigation is not required for allowed activities which utilize best management practices to protect the functions and values of regulated critical areas.

    b. The mitigation plan shall provide information on land acquisition, construction, maintenance and monitoring of the replaced critical area. The mitigation plan shall recreate as nearly as possible the original critical area in terms of its acreage, function, geographic location and setting.

    c. A complete mitigation plan shall consist of plot plans, a written report, and performance bonds, as required below. The plot plans and written report shall be prepared by qualified professionals approved by the director.

2. Plot Plan Requirements

    The following information shall be submitted on one or more plot plans (as determined by the director):

    a. A legal description and a survey (boundary and topography) prepared by a licensed surveyor of the proposed development site, compensation site, and location of existing critical area(s) on each. This shall include wetland delineation and existing wetland acreage.

    b. Scaled plot plan(s) indicating:

        i. Proposed construction;

        ii. Zoning setback and critical area buffer requirements;

iii. Construction phasing and sequence of construction;

iv. Site cross-sections, percent slope, existing and finished grade elevations;

v. Soil and substrate conditions;

vi. Grading and excavation plan, including erosion and sediment control plans needed for construction and long-term survival; substrate stockpiling locations and techniques, and source controls needed for critical area construction and maintenance;

vii. Landscape plans indicating species, types, quantities, locations, size, spacing or density of planting; planting season or timing; planting instructions, watering schedule and nutrient requirements; source of plant materials or seeds; and, where appropriate, measures to protect plants from destruction or predation; and

viii. Water control structures and water-level maintenance practices needed to achieve the necessary hydrocycle/hydroperiod characteristics, etc.

3. Written Report Requirements

A written report shall accompany the plot plan(s) and shall provide the additional information required below. In addition, the report should be used as needed to clarify or explain elements of the plot plan(s).

a. Baseline Information

i. Wetland delineation and existing wetland acreage;

ii. Vegetative, faunal and hydrologic characteristics;

iii. Soil and substrate conditions;

iv. Relationship within watershed and to existing streams, wetlands, ponds, or saltwater;

v. Existing and proposed adjacent site conditions; and

vi. Existing and proposed ownership.

b. The report shall contain a description of the environmental goals and objectives to be met by the compensation plan. The goals and objectives shall be related to the functions and values of the original critical area or, if out-of-kind wetland mitigation, the type of wetland to be emulated. This analysis shall include, but is not limited to the following:

i. Site selection criteria;

ii. Identification of compensation goals;

iii. Identification of functions and values;

iv. Dates for beginning and completion of the project and compensation plan;

v. A complete description of the relationship between and among structures and functions sought;

vi. Review of available literature and/or known like-projects to date in restoring or creating the type of critical area proposed;

vii. Likelihood of success of the proposed compensation project at duplicating the original critical area. This shall be based on experiences of comparable projects identified in the literature review or existing projects, if any; and

viii. Likelihood of the ability of the created or restored critical area to provide the functions and values of the original critical area. This shall be based on such factors as surface water and groundwater supply and flow patterns; dynamics of the ecosystem; sediment or pollutant influx and/or erosion, periodic flooding and drought, etc.; presence of invasive flora or fauna; potential human or animal disturbance; and previous comparable projects, if any.

c. Specific criteria shall be provided for evaluating whether or not the goals and objectives of the project are met and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance, and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria.

d. Written specifications and descriptions of compensation techniques shall be provided. These shall include, but not be limited to, items in Subsection (3)(b) of this Section.

e. A program outlining the approach for monitoring construction of the compensation project and for assessing a completed project shall be provided. Monitoring may include, but is not limited to:

i. Establishing vegetation plots to track changes in plant species composition and density over time;

ii. Using photo stations to evaluate vegetation community response;

iii. Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (pH, nutrients, heavy metals);

iv. Measuring base flow rates and storm water runoff to model and evaluate water quality predictions, if appropriate;

v. Measuring sedimentation rates, if applicable; and

vi. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity.

vii. A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the compensation project. A monitoring report shall be submitted annually, at a minimum, documenting milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored

for a period necessary to establish that performance standards have been met, but not for a period less than seven years.

viii. Contingency Plan. Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

A. Performance and Maintenance Surety and Demonstration of Competence. A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise to successfully execute the compensation project shall be provided. A compensation project manager shall be named and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training and experience with comparable projects. In addition, a surety ensuring fulfillment of the compensation project, monitoring program, and any contingency measure shall be posted pursuant to Section 4.1.2.7.

4. The city may consult with and solicit comments from any federal, state, regional, or local agency, including tribes, having any special expertise with respect to any environmental impact prior to approving a mitigation proposal which includes critical areas compensation. The compensation project proponents should provide sufficient information on plan design and implementation in order for such agencies to comment on the overall adequacy of the mitigation proposal.

5. Any compensation project prepared pursuant to this section and approved by the director shall become part of the application for the permit.

4.1.6 Water Quality and Stormwater Management

4.1.6.1 Principles

Water quality is affected in numerous ways by human activity. Impervious surfaces that accompanies development increases surface water runoff; which causes scouring and erosion of stream banks. Erosion increases suspended solid levels and a greater amount of stormwater carries heavy metals, household wastes, and excess nutrients into the waters of the state. Increased nutrient enrichment depresses dissolved oxygen levels. Degradation of water quality adversely impacts wildlife habitat and public health. The purpose of these provisions is to minimize water quality impacts of shoreline uses and activities. Shoreline master programs shall, as stated in RCW 90.58.020, protect against adverse impacts to the public health, to the land and its vegetation and wildlife, and to the waters of the state and their aquatic life, through implementation of the following principles:

(i) Prevent impacts to water quality and stormwater quantity that would result in a net loss of shoreline ecological functions and processes, or a significant impact to aesthetic qualities, or recreational opportunities.

(ii) Ensure mutual consistency between shoreline management provisions and other regulations that address water quality and stormwater quantity, including public health, stormwater discharge standards. The regulations that are most protective of ecological functions and processes shall apply.

4.1.6.2 Applicability

These provisions apply to all shoreline development, including that which does not require a Shoreline Substantial Development Permit. The use of pesticides, herbicides or fertilizers within the shorelines jurisdiction, including applications of herbicides to control noxious aquatic vegetation, shall comply with regulations of Section 4.1.5, Critical Areas and responsible federal and state agencies. Shoreline development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.1.6.3 Goal

Maintaining high water quality standards and restoring degraded systems is mandated in the Shoreline Management Act (RCW 90.58.020 or its successor). The purpose of these provisions is to maintain existing water quality, restore impaired water bodies and minimize water quality impacts of shoreline uses and activities.

4.1.6.4 Policies

1. Require all shoreline uses and activities, and developments to be located, designated, constructed, and maintained to avoid or minimize adverse impacts to water quality, quantity, or hydrology.
2. Ensure that shoreline uses, activities, and developments are consistent with the City's Stormwater Management Plan and stormwater ordinances. Protect ecological functions and/or ecosystem-wide processes by avoiding and minimizing adverse impacts to water quality through shoreline vegetation management and stormwater management.
3. Use effective public education programs, site planning and best management practices to avoid or minimize the need for chemical fertilizers, pesticides, herbicides, and fungicides that could contaminate surface or ground water or cause adverse effects of shoreline ecological functions and ecosystem-wide processes.
4. Encourage the use of low impact development techniques as water quality treatment of surface water runoff, unless precluded by soil conditions, slope or other sensitive area conditions.

4.1.6.5 Prohibited

1. Wood that is treated with creosote, copper chromium arsenic (CCA) or pentachlorophenol (PCP) in or above shoreline water bodies, unless otherwise approved in Section 6.3, Overwater Structures.

2. Use of pesticides within a Shoreline Buffer and Site-specific Vegetation Management Areas, except as follows:
    a. All shoreline developments and activities shall comply with the following standards in the application of pesticides or herbicides.
        i. As part of an integrated pest management plan which is administered by a qualified professional to control rodents.
        ii. When it is the accepted practice to successfully eradicate aquatic or upland invasive/noxious vegetation species and Department of Ecology has approved a method of application.

4.1.6.6 Regulations – General

1. All shoreline development shall minimize any increase in surface runoff through control, treatment, and release of surface water runoff so that the receiving water quality, shore properties, and features are not adversely affected, and through compliance with the standards established in the City's adopted Stormwater Management Manual in BIMC 15.20.
2. Shoreline use and development shall incorporate measures to protect and maintain surface and ground water quantity and quality in accordance with all applicable laws.
3. Low impact development techniques shall be considered and implemented consistent with the City's adopted Low Impact Development Manual cited in BIMC 15.20.050.C unless the site is demonstrated to the satisfaction of the Administrator to be unsuitable for low impact development techniques.
    a. When a direct discharge pipe is demonstrated to be necessary, the conveyance shall consist of the following:
        i. A continuous heat welded high density polyethylene (HDPE) pipe; and
        ii. Devices to keep the pipe stationary and set off bank; and
        iii. An energy dissipation pad or water dissipater installed at the end of the pipe. The dissipation pad shall extend the minimum distance necessary to protect the beach substrate.
4. All proposals for bulk storage of oil, fuel, chemicals, or hazardous materials, on either a temporary or a permanent basis, shall require adequate secondary containment and an emergency spill response plan in place when appropriate. It shall be the responsibility of property owners to fund and implement the approved spill containment and cleanup plans and to complete the work by the deadline established in the plans according to BIMC 15.22.
5. Allowances to alter stormwater management standards of BIMC 15.20 may be approved by the City, provided it can be demonstrated that off-site facilities would provide better treatment, or where common retention, detention and/or water quality facilities meeting such standards have been approved as part of a comprehensive regional stormwater management plan.

6. Best management practices (BMP's) for control of erosion and sedimentation shall be implemented for all development in shorelines through an approved Stormwater Pollution Prevention Plan (SWPPP), as required by BIMC 15.20, Surface and Storm Water Management, or administrative conditions.
7. To avoid water quality degradation by malfunctioning or failing septic systems located within shoreline jurisdiction, on-site sewage systems shall be located landward of any new residence or business or if determined to be infeasible, in a location approved by the Administrator and designed to meet all applicable water quality, utility, and health standards. The owner must be in compliance with the Kitsap Health District, and any state and federal laws.
8. New residences or businesses on the shoreline located within two hundred (200) feet of an existing sewer line and/or within an established sewer service area shall be connected to the sewer system.
9. All materials that may come in contact with surface water or stormwater shall be constructed of materials, such as untreated wood, concrete, approved plastic composites or steel, that will not adversely affect water quality or aquatic plants or animals. To avoid discharge of pollution, decking material or other structural components shall be approved by applicable state agencies for contact with water.
10. As a condition of permit approval, the Administrator may apply the following conditions to protect water quality:
    a. Shoreline uses and activities shall apply Best Management Practices (BMP's) to minimize any increase in surface runoff and to control, treat and release surface water runoff so that receiving properties, receiving waters, wetlands or streams, and are not adversely affected, consistent with the City's adopted Stormwater Management Manual.
    b. All types of BMPs shall be regularly maintained to continue to function as intended, according to the BIMC 15.21, Storm Water Facilities Maintenance Program. Such measures may include, but are not limited to:
        i. Vegetated shoreline buffers and setbacks.
        ii. Low Impact Development techniques for infiltration (rain gardens, pervious surfaces).
        iii. Methods described in the City's adopted Stormwater Manual (catch basins or settling ponds, oil interceptor drains, grassy swales).
        iv. The release of oil, chemicals (including pesticides and herbicides), fertilizer or hazardous materials, and others listed in BIMC 15.22 onto land or into the water is prohibited within the shoreline jurisdiction.
        v. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leak-proof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected.

11. The use of fertilizer is allowed within the Shoreline Buffer and Site-specific Vegetation Management Area when measures are taken to protect the waters of the state.
    a. Minimize or prevent the runoff of chemical laden into adjacent water bodies.
    b. The direct runoff of fertilizer chemicals into adjacent water bodies is prohibited.
    c. Application of fertilizer shall utilize BMPs outlined in the City's adopted Stormwater Management Manual.

4.1.7 Flood Hazard Management

4.1.7.1 Applicability

These provisions apply to primary flood hazard projects or programs. They also apply to construction, maintenance, repair, modification and/or expansion of flood hazard management systems. Provisions applicable to individual properties are in Section 6.0, Shoreline Modification Policies and Regulations. Shoreline development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.1.7.2 Policies

1. Base flood hazard management planning on applicable watershed management plans, critical area ordinances, and other comprehensive planning efforts. Coordinate flood hazard management among affected property owners and public agencies by considering the system-wide impacts of individual projects, cumulative impacts of individual projects, and ensuring that flood hazard protection measures do not result in a net loss of ecological function.
2. Allow removal of gravel for flood control should only if a biological and geomorphological study demonstrates a long-term benefit to flood hazard reduction and that no net loss of ecological functions and ecosystem-wide processes will result. Removal must be part of a comprehensive flood management solution.
3. Ensure flood hazard management works are located, designed, constructed, and maintained to provide:
    a. Protection of shoreline ecological functions and ecosystem-wide processes which may be damaged by interruptions of the geo-hydraulic system;
    b. Protection of water quality and natural ground water movement;
    c. Protection of fish, vegetation and other life forms and their habitat vital to the aquatic food chain; and
    d. Protection of recreation resources and aesthetic values such as point and channel bars, islands, and other shore features and scenery.

4. Give preference to non-structural methods over structural flood control methods wherever feasible, including prohibiting or limiting development in historically flood prone areas, regulating structural design, and limiting increases in peak-flow runoff from new upland development. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not sufficiently reduce the damage.

4.1.7.3 Prohibited

1. Flood control works are prohibited on estuary or embayment shores, on point and channel bars, and in salmon spawning areas, except for the purpose of fish or wildlife habitat enhancement or restoration or as approved for a foundation for redevelopment of a legally established primary residential structure in the Point Monroe District.
2. Flood control structures and stream channelization projects that damage fish and wildlife resources, recreation or aesthetic resources, or create high flood stages and velocities shall be prohibited.

4.1.7.4 Regulations – General

1. Flood hazard management shall be a conditional use in the Shoreline Residential Conservancy, Island Conservancy, Shoreline Residential, Urban and Aquatic designations and prohibited in the Natural and Priority Aquatic designations, except in the Point Monroe District.
2. The City shall require the applicant to provide the following information during its review of shoreline flood management projects and programs.
    a. Channel hydraulics and floodway characteristics up and downstream from the project area;
    b. Existing shoreline stabilization and flood protection works within the area;
    c. Physical, geological and soil characteristics of the area;
    d. A biological resource inventory and analysis prepared by a qualified professional biologist that describes the anticipated effects of the project on fish and wildlife resources; and
    e. A hydraulic analysis prepared by a licensed professional engineer that describes anticipated effects of the project on hydraulics including:
        i. Potential increases in base flood elevation; and
        ii. Geo-hydraulic processes leading to erosion or adverse effects to shoreline resources and uses; and
        iii. Potential for redirection of the normal flow of the affected stream; and
        iv. Predicted impact upon adjacent properties and shoreline and water uses; and
        v. Analysis of alternative flood protection measures, both structural and nonstructural; and

vi. An analysis of the flood frequency, duration and severity and expected health and safety risks as a rationale and justification for the proposed structure; and

vii. Proposed provisions for accommodating public access to and along the affected shoreline, as well as any proposed on-site recreational features; and

viii. A description of any proposed plans to remove vegetation and revegetate the site following construction.

3. The City shall require flood control structures to be professionally engineered and designed prior to final approval. The design shall be consistent with the Department of Fish and Wildlife Aquatic Habitat Guidelines and other applicable guidance and regulatory requirements.

4. Flood control structures shall be permitted only when there is credible engineering and scientific evidence that:

    a. They are necessary to protect existing, lawfully established development; and

    b. They are consistent with BIMC 15.16, Flood Damage Prevention and the City Comprehensive Plan; and

    c. Non-structural flood hazard reduction measures are infeasible; and

    d. Proposed measures are consistent with an adopted comprehensive flood hazard management plan, if available.

5. When permitted, flood control structures shall be:

    a. Constructed and maintained in a manner that does not degrade the quality of affected waters or the habitat value associated with the in stream and riparian area; and

    b. Placed landward of the OHWM except for weirs, current deflectors and similar structures to protect public bridges and roads; and

    c. Placed landward of associated wetlands and designated habitat conservation areas, except for structures with a primary purpose of improving ecological functions and processes; and

    d. Designed based on engineering and scientific analyses that provide the highest degree of protection to shoreline ecological functions or processes; and

    e. Designed to allow for normal ground water movement and surface runoff. Natural in-stream features such as snags, uprooted trees, or stumps should be left in place unless they are actually causing bank erosion or higher flood stages; and

    f. Designed to allow streams to maintain point bars and associated aquatic habitat through normal accretion so that the stream can maintain normal meander progression and maintain most of its natural storage capacity.

6. No flood control structure shall be installed or constructed without first having obtained all applicable federal, state, and local permits and approvals, including but not limited to a hydraulic project approval (HPA) from the Department of Fish and Wildlife and

Federal Emergency Management Agency (FEMA) requirements for National Flood Insurance Program (NFIP) communities pertaining to flood prone areas. Conditions of the hydraulic project approval permit (HPA) issued by Washington State Department of Fish and Wildlife shall be incorporated into permits issued for flood protection.

7. Removal of beaver dams to control or limit flooding shall be allowed provided that the project proponent coordinates with the Department of Fish and Wildlife and obtains all necessary permits and approvals from the state.
8. Flood protection measures that alter, reroute, or change the shoreline may be approved as a conditional use only if it is demonstrated that other flood protection and planning measures would be insufficient. Alternative measures shall be considered in the following sequence:
    a. No action
    b. Non-structural measures such as vegetation enhancement or comprehensive planning
    c. Increase building setbacks and/or relocate structures to a feasible location and/or elevate the structures.
    d. Implement flexible/natural materials and methods, beach nourishment, protective berms, bioengineered solutions or other soft-treatment measures.
    e. Apply development restrictions.

4.1.8 Shoreline Restoration and Enhancement

4.1.8.1 Applicability

This section provides for restoration and enhancement of ecologically impaired areas or areas with the goal of achieving a net gain in shoreline ecological functions and ecosystem-wide processes above the baseline conditions as of the adoption of this shoreline master program. Restoration and enhancement provisions apply to activities and projects proposed and conducted specifically for the purpose of establishing, restoring, or enhancing ecological functions and ecosystem-wide processes within shoreline upland, beach and/or aquatic areas measured below the ordinary high water mark (OHWM). Shoreline restoration activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.1.8.2 Goal

Over time, create net ecosystem-wide improvement in the shoreline environment by improving impaired shoreline ecological functions and ecosystem-wide processes that have been degraded or diminished. This will be accomplished through voluntary and incentive-based public and private programs and actions that restore and enhance shoreline areas prioritized through a restoration plan.

4.1.8.3 Policies

1. Improve shoreline ecological functions and ecosystem-wide processes through restoration and enhancement actions designed using principles of landscape and conservation ecology with the primary goal being to restore and/or enhance physical and biological ecosystem-wide processes that create and sustain shoreline habitat structures and functions.
2. Encourage and facilitate cooperative shoreline restoration and enhancement programs between local, state, and federal agencies, tribes, non-profit organizations, and landowners to address shorelines with impaired ecological functions and/or ecosystem-wide processes.
3. Target restoration and enhancement actions to improve habitat requirement of priority species, such as Chinook and other species and/or locally important plant, fish and wildlife species; and/or other populations or habitats for which a prioritized restoration of recovery plan is available.
4. Integrate restoration and enhancement with other natural resources management efforts such as Puget Sound Salmon recovery planning, West Sound Watershed planning and Water Resource Inventory Area (WRIA) 15 Watershed Management planning.
5. As feasible, include provisions for shoreline vegetation restoration, fish and wildlife habitat enhancement, and low impact development techniques in projects located within the shoreline through project mitigation and incentive-based restoration.
6. Seek funding from state, federal, private and other sources to implement restoration and enhancement, and provide support to restoration work by identifying shoreline restoration priorities and organizing information on available funding sources for restoration implementation.
7. Encourage restoration and enhancement projects by developing project permitting and processing guidelines that will streamline the review of restoration-only projects.
8. Identify and encourage the use of tax incentive programs, mitigation banking, grants, land swaps, or other programs as they are developed, to encourage restoration and enhancement of shoreline ecological functions and ecosystem-wide processes and to protect habitat for fish, wildlife and plants.
9. Avoid adverse impacts to existing critical saltwater habitat areas, fish and wildlife habitat conservation areas, water quality and flood holding capacities.
10. Restore or enhance Island shorelines in conjunction with shoreline stabilization, recreational enhancement, and aquatic habitat creation or restoration. Do not allow creation of new land area along the shoreline below the OHWM to raise the elevation to create dry upland areas.
11. Encourage supplementary beach nourishment where existing shoreline stabilization has the potential to decrease existing beach materials at or down-drift from the project site and should be coordinated with an Island-wide shoreline restoration plan.
12. Promote shoreline stabilization that incorporates beach restoration or enhancement in accordance with the restoration provisions of this Master Program.

4.1.8.4 Objectives

1. Encourage and facilitate cooperative restoration and enhancement programs between local, state and federal public agencies, tribes, non-profit organizations, and landowners to address shorelines with impaired ecological functions and/or ecosystem-wide processes.
2. Restore and enhance shoreline ecological functions and processes as well as shoreline features through voluntary and incentive-based public and private programs.
3. Target restoration and enhancement towards improving habitat requirements of priority and/or locally important wildlife species.
4. Ensure restoration and enhancement is consistent with and, where practicable, prioritized based on the biological recovery goals for Chinook and bull trout populations and other species and/or populations for which a recovery plan is available.
5. Seek funding for various restoration actions and programs from local sources and by working with the Bainbridge Island Metropolitan Park and Recreation District and other jurisdictions in the WRIA 15 and stakeholders to seek federal, state, grant and other funding opportunities.
6. Continue to develop and implement the City's Shoreline Stewardship Program as a public education program to inform private property owners in the shoreline jurisdiction and in the remainder of the City about the effects of land management practices and other unregulated activities (such as vegetation removal, pesticide/herbicide use, car washing) or fish and wildlife habitats.

4.1.8.5 Regulations – Restoration

1. Restoration activities are permitted in all designations, and shall be carried out in accordance with the objectives of an approved shoreline restoration plan and in accordance with the policies and regulations of this Program.

4.1.8.6 Beach Nourishment and Enhancement

4.1.8.6.1 Policies

1. All beach enhancement projects should ensure that aquatic habitat, existing water quality levels and flood-holding capacities are maintained.
2. Beach restoration/enhancement utilizing self-sustaining systems should be required where;
    a. The length and configuration of the beach will accommodate such systems;
    b. Such protection is a reasonable solution to the needs of the specific site; and
    c. Beach restoration/enhancement will accomplish one or more of the following objectives:
        i. Recreate or enhance natural conditions.
        ii. Create or enhance natural habitat.

iii. Mitigate erosion.

iv. Enhance access to the shoreline.

3. Supplementary beach nourishment should be encouraged where existing shoreline stabilization is likely to increase impoverishment of existing beach material at or down drift from the project site.

4.1.8.6.2 Regulations – Prohibited

1. Dikes, levees, jetties, groins, gabions and breakwaters, are prohibited. Drift sills for enhancement or restoration projects may be allowed.
2. Beach nourishment is prohibited unless part of an approved mitigation plan or restoration project within spawning, nesting, or breeding habitat and/or where littoral drift of the enhancement materials enhances shoreline and does not adversely affects shoreline ecological functions and shoreline ecosystem-wide processes or adjacent properties.

4.1.8.6.3 Regulations – General

1. Mitigation/enhancement/restoration proposal design alternatives shall include the best available technology.
2. Mitigation/enhancement/restoration proposals shall not:
    a. Detrimentally interrupt littoral drift, or redirect waves, current or sediments to other shorelines;
    b. Result in any exposed groin-like structures, provided that small "drift sill" groins may be used as a means of stabilizing restored sediment as part of a permitted beach restoration program;
    c. Extend waterward more than the minimum amount necessary to achieve the desired stabilization;
    d. Result in contours sufficiently steep to impede easy pedestrian passage, or to trap drifting sediments;
    e. Create additional dry land mass; or
    f. Disturb valuable shallow-water fish/wildlife habitat as determined by the Department of Fish and Wildlife, unless such habitat is immediately replaced by new habitat that is comparable or better.
3. Beach Restoration Construction Standards:
    a. The size and/or mix of new material to be added to a beach shall be as similar as possible to the undisturbed bluff sediment and Washington Department of Fish and Wildlife approved material (i.e. "Fish mix, or smaller grain size). The material shall not predominately consist of grain size similar to clay or silt.
    b. The restored beach shall approximate, and may slightly exceed, the natural beach width, height, bulk, or profile (but not so as to obviously create additional dry land mass).

4.1.8.6.4 Specific Regulations – Beach Enhancement

1. Beach enhancement shall be a conditional use in all environments and shall be undertaken only for restoration, enhancement and maintenance of natural resources, or to enhance public access to the shoreline. Beach enhancement is prohibited if undertaken upland of Priority Aquatic designation.

4.2 General Use

4.2.1 Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots

4.2.1.1 Applicability

This section applies to shoreline uses and/or structures that were lawfully established or constructed prior to the effective date of the initial adoption of the Master Program (November 26, 1996) or amendments thereto, and which do not conform to current regulations or standards of this Program. This section does not apply to shoreline modification or shoreline stabilization.

Nonconforming uses, lots and structures are not required to meet this Program's requirements, unless new development or changes to a use, lot or structure that would require review under this Program are proposed.

4.2.1.2 Definitions

1. Nonconforming Use. A nonconforming use means an existing shoreline use that was lawfully established prior to the effective date of this Program (November 26, 1996), as amended, but which does not conform to present use regulations due to subsequent changes to the Program.
2. Nonconforming Lot. A nonconforming lot means a lot that met dimensional requirements of the applicable SMP at the time of its establishment (November 26, 1996), as amended, but now contains less than the required width, depth or area due to subsequent changes in the Program.
3. Nonconforming Development or Nonconforming Structure. An existing structure that was lawfully constructed at the time it was built but is no longer fully consistent with present regulations such as setbacks, buffers or yards; area; bulk; height or density standards due to subsequent changes to the master program.

4.2.1.3 Goal

It is the purpose of this section to recognize legally established uses, lots, and structures, and to allow them to be maintained, repaired, and remodeled, and, in some cases replaced or expanded, in conformance with Section 4.2.1.5 through 4.2.1.8 of this Program with due regard to unique site conditions and property rights.

4.2.1.4 Policies

1. Nonconforming structures may be repaired, maintained, or remodeled and, in some cases, nonconforming structures may be replaced or expanded provided the change meets the

current regulations and standards of this Program. Decreases in nonconformity should be encouraged.

2. Once discontinued, reestablishment of nonconforming uses and nonconforming commercial structures located in the shoreline jurisdiction should be restricted or phased out over time.
3. Nonconforming overwater structures may be reconstructed to the same size and modified, reoriented, or altered within the same general location to be more consistent with the provisions of this Program.
4. Nonconforming lots of record may be developed consistent with the standards and regulations of this Program.
5. Redevelopment of nonconforming public rights-of-way and associated existing transportation structures may be permitted for purposes of facilitating essential public access, development of public trails and/or public shoreline access.

4.2.1.5 Regulations – General

1. Nonconforming uses, lots, and structures may continue subject to the provisions of this section.
2. Any alterations to nonconforming uses or structures shall meet the no net loss standard pursuant to Section 4.1.2.4. The current condition of the shoreline, including nonconforming uses and structures, shall be the starting point or baseline for determining compliance with the no net loss standard.

4.2.1.6 Regulations - Nonconforming Uses

1. Nonconforming uses shall not be altered or expanded in any way that increases the nonconformity.
2. If a nonconforming use is discontinued for twelve (12) consecutive months, any subsequent use shall be conforming; except that if a nonconforming use is operated within a nonconforming structure that is accidently damaged or destroyed and reconstruction is proposed under Section 4.2.1.6, then the use may be re-established within the same time period as the reconstruction for the nonconforming structure pursuant to Section 4.2.1.6.1(7).
3. A nonconforming use cannot be changed to another nonconforming use.
4. Change of ownership, tenancy, or management of a nonconforming use shall not affect its nonconforming status, provided that all provisions are met.

4.2.1.7 Regulations – Nonconforming Structures

4.2.1.7.1 General Provisions – Nonconforming Structures

1. All nonconforming structures may be maintained, repaired, renovated, remodeled, or rebuilt, except where stated otherwise in the specific provisions of this program. In some cases, nonconforming structures may be expanded subject to the specific provisions of this Program.

2. Nonconforming structures shall not be reconstructed, altered, or expanded in any way that increases the nonconformity.
3. No further encroachment into the shoreline buffer established in accordance with Section 4.1.3 is allowed unless permitted by this Program.
4. Any nonconforming structure that is relocated must conform to regulations of this Program.
5. The enlargement or replacement of a structure shall not warrant new shoreline stabilization for the life of the new structure; and
6. A replacement structure, or portion thereof, must meet geologically hazardous provisions in Section 4.1.5.
7. A complete application for any reconstruction under this section must be submitted within three (3) years of the date of damage or removal and must include documentation of site conditions and building configuration existing immediately prior to the time the structure was demolished or destroyed. Upon approval of the application, redevelopment must be completed within one (1) year of the commencement of reconstruction. A one (1) year extension may be granted, provided that a written request is submitted no later than twenty-one (21) days prior to either deadline and provided that the owner is not responsible for the delay.

4.2.1.7.2 Nonconforming Structures – Residential Single-Family: Primary Structures

1. A nonconforming primary residential structure located within the shoreline buffer may be altered, expanded, or rebuilt, provided the proposal is consistent with all of the following:
    a. If an existing primary residential structure is damaged or destroyed by any means, it may be reconstructed to the same footprint and bulk dimensions existing immediately prior to the demolition or destruction.
    b. Any enlargement or expansion of the building, including any new impervious surfaces, shall be located landward of the existing or original building footprint.
    c. No enlargement or expansion shall be located within Zone 1 of the shoreline buffer.
    d. Expansion is limited to an increase of up to 500 square feet of the existing footprint over the lifetime of the structure.
    e. For structures not within an encumbered lot, enlargement or expansion may be allowed as follows:
        i. If the total footprint of any remaining portion of the existing primary structure, the proposed additional footprint, and any existing and proposed hard surfaces is less than or equal to four thousand square feet expansion is allowed with mitigation as required in the Single Family Shoreline Mitigation Manual.
        ii. If the total footprint of any remaining portion of the existing primary structure, the proposed additional footprint, and any existing and proposed

hard surfaces is greater than four thousand square feet expansion is allowed with submittal of a site-specific impact analysis and approval of a shoreline conditional use permit.

f. No landmark trees as defined in BIMC 16.32 shall be removed to accommodate the enlargement or expansion.

g. No significant trees shall be removed to accommodate the enlargement or expansion unless the Administrator determines all of the following are met:

   i. The use of mitigation sequencing pursuant to Section 4.1.2.6 is demonstrated prior to removal of the tree.

   ii. The healthy trees remaining on the property are able to maintain existing shoreline ecological function and processes.

   iii. Reasonable and feasible alternatives that would allow for the preservation of the tree are not available.

h. Permitted expansion of a nonconforming structure shall not substantially impact the existing views of the water from primary residences or public rights-of-way to any greater degree than a fully conforming structure in accordance with Section 4.1.3.11.

i. All other applicable standards and provisions are met, including regulations of this Program, the Bainbridge Island Municipal Code, the septic system requirements of the Kitsap Health District, and any state and federal laws.

4.2.1.7.3 Nonconforming Structures – Residential: Accessory Structures

1. If a nonconforming residential accessory structure is damaged, destroyed or intentionally demolished, any reconstruction shall be in conformance with all standards of this Program.

2. If a nonconforming essential single-family residential accessory structure is damaged, destroyed or intentionally demolished, it may be replaced in the same location provided all other applicable standards and provisions are met, including regulations of this Program, the Bainbridge Island Municipal Code, the septic system requirements of the Kitsap Public Health District, and any state and federal laws.

4.2.1.7.4 Nonconforming Structures – Residential and Commercial Overwater Structures

1. Nonconforming docks, piers, floats, and buoys may be replaced in the same footprint and shall comply with this Program's requirements for materials and standards, to the extent practicable.

2. Nonconforming docks, piers, floats, and buoys may be modified, reoriented or altered within the same general location without a substantial development permit if the resulting structure is more consistent with this Program's requirements for materials and standards.

3. Replacement of nonconforming overwater structures other than docks, piers, floats, and buoys may be replaced if such replacement is authorized as normal repair consistent with WAC 173-27-040(2)(b).

4.2.1.7.5 Nonconforming Structures – Multifamily Residential: Primary Structures

1. A nonconforming primary multifamily residential structure, or any portion thereof, may be reconstructed only in conformance with the current regulations and standards of this Program, including provisions for public access (Section 4.2.4.6) and residential development (Section 5.9).
2. A nonconforming primary multifamily residential structure, or any portion thereof, that is damaged or destroyed by a natural catastrophic event, may be reconstructed to the footprint and bulk dimensions existing immediately prior to the catastrophic event.

4.2.1.7.6 Nonconforming Structures – Commercial and Industrial (Primary and Accessory)

1. Nonconforming commercial and industrial structures, or any portion thereof, demolished or destroyed by any means may be reconstructed only in conformance with the current regulations and standards of this Program; except, nonconforming commercial structures utilized wholly for water-oriented uses may be reconstructed to the same footprint and bulk dimensions existing immediately prior to destruction by catastrophic event or intentional demolition.

4.2.1.7.7 Regulations – Nonconforming Public Facilities & Transportation

1. Nonconforming public facilities shall be allowed to continue and to be repaired, maintained, or remodeled.
2. Redevelopment of nonconforming public rights-of-way and associated transportation structures is allowed for purposes of facilitating essential public access, development of public trails, and/or public shoreline access, provided that no other alternative is feasible and redevelopment shall be otherwise consistent with the provisions of this Program, including but not limited to the provisions for public access and no net loss of shoreline ecological functions and processes.

4.2.1.8 Regulations – Encumbered and Nonconforming Lots

1. Single-family development and redevelopment, except in the Point Monroe District, that is proposed on a nonconforming lot or proposed for a shoreline property that is significantly encumbered by critical areas, critical areas buffers or setbacks, or shoreline buffers, may be allowed without a shoreline variance when the following criteria are met:
    a. If a lot contains a development area of 2,500 square feet or more that is unrestricted by critical areas, critical areas buffers or setbacks, or shoreline buffers, development of a single-family residence and normal appurtenances shall occur within that unrestricted development area and comply with the provisions of this Program. The development area means

the entire area that will be disturbed to construct the home, normal appurtenances (except drainfields), and landscaping.

b. If a lot does not contain a development area of 2,500 square feet or more available for a single-family residence and normal appurtenances that is unrestricted by critical areas, critical areas buffers or setbacks, or shoreline buffers, development shall meet the following provisions:

   i. Landslide hazard provisions of Section 4.1.5, Critical Areas and provide the maximum buffer dimension feasible for critical areas; and

   ii. Provide a development area not to exceed 2,500 square feet with maximum lot coverage of 1,200 square feet. The development area shall be located on the portion of the lot providing the maximum Shoreline Buffer dimension with consideration given to view; and

   iii. All single-family residential development approved under this section shall meet the shoreline structure view setback provisions in Section 4.1.3.11, Regulations – Shoreline Structure Setback View Requirement; and

   i.v. The area between the structure and the shoreline and/or critical area shall comply with revegetation standards in Section 4.1.2.5(3), the vegetation conservation standards of Section 4.1.3, Vegetation Management, and provisions of Section 4.1.5 Critical Areas; and

   v. Development may not take place waterward of the ordinary high water mark; and

   vi. Facilities such as a conventional drainfield system may be allowed outside of the development area specified above, and allowed within buffer areas, except wetlands buffers. Such facilities shall be located a minimum of 75 feet from the ordinary high water mark; and shall be subject to regulations of Section 4.1.5, Critical Areas.

4.2.2 Cultural Resources

4.2.2.1 Applicability

The following provisions apply to cultural, archaeological and historic resources that are either recorded by the State Historic Preservation Office, affected Indian tribes and/or by local jurisdictions, or have been inadvertently uncovered. Archaeological sites located both in and outside shoreline jurisdiction are subject to Chapter 27.44 RCW (Indian graves and records) and Chapter 27.53 RCW (Archaeological sites and records) and development or uses that may impact such sites shall comply with Chapter 25-48 WAC (archaeological excavation and removal permit) as well as the provisions of this Master Program. Shoreline development and activities associated with cultural resources will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.2.2.2 Policies

1. Due to the limited and irreplaceable nature of the resource(s), prevent the destruction of or damage to, any site having historical, cultural, scientific or educational value as identified by the appropriate authorities, including affected Indian tribes, and the Washington State Department of Archaeology and Historic Preservation.
2. Ensure that public or private uses and activities are compatible with any site having historic, prehistoric, cultural, scientific or educational purpose or value as identified by the appropriate authorities.
3. Develop guidelines to direct private and public development with regard to historic structures and areas. Require on-site interpretive signs, plaques or other interpretive and educational measures when a project impacts or retains cultural resources, unless prohibited by law.
4. Coordinate with the Metropolitan Park District to ensure Comprehensive Plan's consistency with cultural resource management policies.

4.2.2.3 Regulations - General

1. New or expanded shoreline use and development, including preferred uses, restoration projects and uses exempt from permit requirements shall:
    a. Preserve and protect cultural resources that are recorded by the Washington State Department of Archaeology and Historic Preservation or local registry and resources that are inadvertently discovered during use or development activities; and
    b. Consult the City, the Washington State Department of Archaeology and Historic Preservation and affected tribes prior to beginning development so there is ample time to assess the site and make arrangements to preserve cultural resources; and
    c. Comply with all state and federal regulations pertaining to archaeological sites.
2. Significant cultural resources shall be permanently preserved for scientific study, education, and public observation. Employ all feasible means to ensure that data, structures, and sites having historical, archaeological, cultural, scientific, or educational significance are preserved, extracted, or used in a manner commensurate with importance. Unless an alternate period is agreed to by the applicant, or if a different federal or state law supersedes this SMP, the City may postpone development activities a maximum of 90 days to allow for the:
    a. Development of a Cultural Resource Management Plan and/or retrieval and preservation of significant artifacts.
    b. Investigation of public acquisition potential, including:
        i. Consulting with Historic Preservation Commission on grant opportunities; and
        ii. Informing City Council of opportunity.

3. When determining potential impacts to cultural resources, the project area shall be limited to proposed development use pattern, including associated areas, such as paths, equipment storage and appurtenances.
4. Archaeological excavations may be permitted subject to the provisions of this program.

4.2.2.4 Regulations - Procedure

1. When reviewing a permit, the City will use the following methods to determine probability of cultural resources occurrence:
    a. Predictive models;
    b. Local and State Inventory; and
    c. Registries:
        i. National Register of Historic Places
        ii. Washington Heritage Register
        iii. Heritage Barn Register
2. The following shall be required of the City when permits or statements of exemptions are issued in areas known to contain, or to have a significant probability of containing cultural resources:
    a. The Washington State Department of Archaeology and Historic Preservation and affected tribes shall be notified of the proposed activity, including timing, location, scope, and resources affected; and
    b. The applicant shall provide a Cultural Resource Site Assessment and a Cultural Resource Management Plan, for review and approval pursuant to subsection 3, below; and
    c. Costs for the Cultural Resource Site Assessment and Cultural Resource Management Plan are the responsibility of the applicant; and
    d. The applicant shall identify areas and fence off known or suspected archaeological middens and areas of cultural significance according to the Cultural Resource Management Plan, prior to site development or proposed activities.
3. If a Cultural Resource Assessment identifies significant cultural resources, the applicant shall be required to submit a Cultural Resource Management Plan (CRMP) which shall include:
    a. An analysis of actions to be taken by the property owner, applicant, archaeologist, or historic preservation professional in the event that an inadvertent discovery of historic, archaeological, or cultural sites or artifacts occurs during site development; and
    b. An explanation of why the proposed activity requires a location on, or access across and/or through, a significant cultural resource; and
    c. A description of the cultural resources affected by the proposal; and

d. An assessment of the cultural resource and an analysis of the potential adverse impacts as a result of the activity; and

e. Measures recommended to prevent adverse impacts or to address review comments from the City, Washington State Department of Archaeology and Historic Preservation, and affected tribes;

f. Measures recommended for mitigation; and

g. Measures for identification and education. Interpretive signs, plaques, or other interpretive and educational measures of historical and archaeological features shall be provided, unless the identification of the location of the cultural resource is protected by state or federal laws. (See Applicability for laws governing Archaeological sites.)

4. If archaeological resources are inadvertently uncovered during construction or other activities, the property owner(s) shall immediately stop work and comply with the provisions of Subsection 2, and the following:

   a. The applicants(s) must first receive permission from the State Office of Archaeology and Historic Preservation and the City, prior to further site disturbance (RCW 27.53.060 or its successor).

5. Identified historical or archaeological resources shall be considered during project planning for all park, open space, public access and projects with access to such areas. Projects shall be designed and managed to give maximum protection to retain cultural resources and surrounding environment.

6. The project may be exempt from shoreline permit requirements in the event that unforeseen factors constituting an emergency (as defined in RCW 90.58.030 or its successor) necessitate rapid action to retrieve or preserve artifacts or data. When such a waiver is provided, the City shall notify the Washington State Department of Ecology, the State Attorney General's Office~~,~~ and the Washington State Department of Archaeology and Historic Preservation.

4.2.3 Parking

4.2.3.1 Applicability

The following should apply only to parking that is accessory to a permitted shoreline use. Additional parking regulations in the BIMC Title 18, Zoning, may also apply. Shoreline development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.2.3.2 Policies

1. Allow parking that directly serves a shoreline use and that is sensitive to adjacent shorelines and properties. Encourage accessible parking for road ends; limit accessory

motorized parking within the shoreline jurisdiction, except for ADA parking services; and encourage parking facilities for non-motorized transportation.

2. Ensure parking facilities are located, designed, constructed, and operated to minimize adverse impacts to water quality, aesthetics, public access, vegetation and habitat, stormwater runoff, noise, and glare. Low impact development techniques, such as permeable surfaces and/or rain gardens (bio-retention cells), should be required of all parking, including single-family residences where suitable site conditions exist.
3. Design and locate parking to serve more than one use (e.g., recreational use on weekends, commercial uses on weekdays).

4.2.3.3 Regulations – Prohibited Uses

1. Parking as a principal use (i.e., not accessory to an authorized use) except when provided as part of a public road end or scenic vista.
2. Parking shall be prohibited over water except at the publicly-owned ferry terminal in the Urban designation.

4.2.3.4 Regulations – General

1. Parking in the shoreline jurisdiction shall directly serve a shoreline use and shall require a conditional use permit in the Natural designation.
2. Parking supporting specific land use activities within the shoreline jurisdiction is subject to the requirements and standards set forth in BIMC 18.15.020, in addition to the specific use regulations of this section.
3. Parking shall be prohibited over water except at the publicly-owned ferry terminal in the Urban designation.
4. Parking areas shall serve multiple facilities unless shown to the satisfaction of the Administrator not to be feasible.

4.2.3.5 Regulations – Location and Design

Parking shall comply with the following design standards as applicable (e.g. item 1 would not apply to over-water ferry terminal parking):

1. Parking facilities shall be located upland of the water-oriented portions of the development and where feasible, landward of the principal buildings unless contained within a permitted structure, and set back from the OHWM as established in Section 4.0, Table 4-2, Shoreline Setback.
2. The design and construction for single-family residential parking and parking facilities shall assure that surface water runoff will not pollute adjacent waters or cause soil or beach erosion, and shall meet the standards of Section 4.1.6. Water Quality and Stormwater Management. Oil separators and detention facilities shall be required for new parking facilities. Alternatives to conventional stormwater treatment, such as use of pervious materials, shall be considered where appropriate in order to minimize impacts of runoff and/or the need for stormwater treatment.

3. Security lighting associated with parking facilities shall be beamed, hooded, or directed so as to not cause a nuisance glare.
4. Parking facilities shall be separated from residential, recreation, and natural areas (e.g., the shoreline) by landscaping and/or screening in accordance with the landscaping requirements of BIMC Title 18, Zoning.
5. Parking facilities shall be designed and landscaped to minimize adverse impacts to adjacent shorelines and properties. Landscaping shall be designed and installed pursuant to BIMC 18.15.010(F), Parking Lot Landscaping, and shall provide screening within three (3) years of planting. Plantings shall be maintained for the life of the parking facility. The requirement for screening may be waived or modified by the Administrator, where screening would impact shoreline views from public property or public roadway or to address public safety concerns. Landscape areas shall not be used for the storage of materials or parking of automobiles or other vehicles.
6. Parking facilities shall provide safe and convenient pedestrian circulation within the parking area, and to the shoreline and building entrances. Pedestrian connections must be at least five (5) feet wide and shall either be a raised sidewalk or composed of a different material than the parking lot material. Parking facilities shall meet ADA standards.
7. Surface parking areas shall be developed using low impact development techniques whenever possible, including but not limited to the use of permeable surfacing materials.
8. Parking facilities contained in buildings that face a public pedestrian walkway, public use area, or public park must incorporate vegetation and/or building surface treatment to mitigate the visual impacts of the structured parking.

4.2.3.6 Regulations – Use Specific Parking and Circulation

1. See Table 4-1, Shoreline Use and Table 4-2, Shoreline Setback, for restrictions related to specific uses and the following regulations.

4.2.3.7 Specific Regulations – Boating Facilities Parking

1. Short-term loading areas may be located at ramps or near berthing areas. Long-term parking that is greater than 24 hours, and long-term paved storage areas shall be separated from the OHWM by a native vegetation buffer and setback at least one-hundred (100) feet, unless demonstrated to the satisfaction of the Administrator not to be feasible.
2. To the maximum extent possible, marinas and accessory uses shall share parking facilities, giving preference to marina use.
3. Parking facilities shall be provided according to the following schedule

First 50 moorage slips:	1 vehicle space per 2 slips
Slips 51 to 100:	1 vehicle space per 3 slips
Slips over 100:	1 vehicle space per 4 slips

4. Additional parking space shall be provided as follows:

a. An additional space for every four hundred (400) square feet of interior floor space devoted to accessory retail sales or services.

b. Where live-aboards are permitted, additional parking shall be provided at a rate of 1 vehicle per live-aboard vessel or houseboat allowed, except open water moorage and anchorage areas shall follow (c) and (d) below.

c. Live-aboard tenants of open water moorage and anchorage areas shall provide either:

    i. Evidence of access to one legal vehicle parking space per anchorage/moorage space for the duration of the anchorage/moorage period; or

    ii. An affidavit stating that no vehicle is owned or used by the tenant.

d. Two load/unload parking spaces shall be provided for transient users of open water moorage and anchorage areas.

5. Marinas and launch ramps shall be located where access streets are adequate to handle the traffic load generated by the facility and shall be designed to minimize other circulation and access conflicts. Backing of trailers on public roads shall be discouraged and appropriate signage shall be provided.

6. Roads between marinas and arterial routes shall be satisfactory to the City for marina access including:

    a. All-weather surfacing;

    b. Width;

    c. Safety;

    d. Alignment;

    e. Sign distance;

    f. Grade; and

    g. Intersection controls.

7. Marinas and boat launches shall be designed so that existing or potential public access along beaches is not unnecessarily blocked nor made dangerous, and so that public use of the surface waters below the OHWM is not unduly impaired.

8. At each public or quasi-public launch ramp, at least ten (10) car and trailer spaces measuring at least ten (10) feet by forty (40) feet shall be provided for each ramp lane.

4.2.3.8 Specific Regulations – Road Ends and Scenic Viewpoints Parking Facilities

1. Road ends shall contain a minimum number of two parking stalls, if feasible, which shall be designed pursuant to BIMC 18.15.020.

2. Trailheads shall contain a minimum number of two parking stalls, if feasible, which shall be designed pursuant to BIMC 18.15.020.

4.2.4 Public Access – Visual and Physical

4.2.4.1 Principles

The provisions of this section are intended to:

1. Promote and enhance the public interest with regard to rights to access waters held in public trust by the state while protecting private property rights and public safety.
2. Protect the rights of navigation and space necessary for water-dependent uses.
3. To the greatest extent feasible consistent with the overall best interest of the state and the people generally, protect the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the state, including views of the water.
4. Regulate the design, construction, and operation of permitted uses in the shorelines of the state to minimize, insofar as practical, interference with the public's use of the water.

4.2.4.2 Applicability

Public access includes the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and shoreline from adjacent locations. Public access provisions apply to all shoreline as prescribed by this program. Development, uses, and activities shall be consistent with Section 4.1.3, Vegetation Management. Public access provisions must be consistent with the Non-motorized Transportation Plan, a component of the Transportation Element of the Comprehensive Plan. Shoreline development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.2.4.3 Goal:

Provide, maintain and enhance a safe, convenient and balanced system of visual and physical public access to the shoreline which includes a diversity of opportunities for the public to enjoy the shorelines of the state, including ADA access to the extent feasible, while recognizing or acknowledging the fragile natural features of the shoreline and the rights of private property ownership.

4.2.4.4 Policies

1. Develop, adopt and implement a comprehensive shoreline public access plan that incorporates public access into new shoreline development, unifies individual public access points into a system plan, and seeks new waterfront access points to increase visual and physical shoreline access through enhancement of publicly held land, incentives, easements, land acquisition, and other appropriate means.
2. Locate, design, manage and maintain public access in a manner that protects shoreline ecological functions and ecosystem-wide processes and the public health and safety.

3. Preserve and enhance physical and visual shoreline access. Shoreline development, uses, and activities should not unreasonably impair or detract from the public's physical and visual access to the water. Development provisions, such as height limits, setbacks and view corridors, should be utilized to minimize impacts to existing views from public property or substantial numbers of residences. Physical public access shall have priority over maintenance of views from adjacent properties, unless there is a compelling reason to the contrary. View enhancement should not adversely impact the ecological functions of shoreline vegetation.
4. Expand the amount and diversity of public shoreline access opportunities and promote public access to the water via road rights-of-way ("road ends") and public utility corridors and easements (where possible), with a goal of providing comparable access in all neighborhoods.
5. New commercial use development or development by public entities must include public access to the shoreline as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment. Where feasible, public access should be provided parallel to the beach (such as a walking/bicycling path or promenade) and waterward of all buildings in all commercial and all Urban designation.
6. The Winslow Waterfront Trail should be completed and protected through acquisition, easement dedication, or other appropriate means.
7. Require public access, both visual and physical, as a condition of approval for any new private shoreline development which diminishes existing public access or increases demand for public access commensurate with the impacts of such development and the corresponding benefit to the public. In such cases, public access should be required unless health, safety, or environmental protection needs cannot be met.
8. Public access should be designed to avoid or minimize adverse impacts to the shoreline environment; to minimize impacts to private property and individual privacy; to distinguish between public and private property; and to ensure public safety.
9. City-owned shorelines should be reserved for water-dependent or public recreational uses, or maintained as open space.
10. Shoreline and water views from public upland areas should be preserved and enhanced where it would not risk environmental damage. However, vegetation alteration or removal to achieve a filtered view should not be excessive.

4.2.4.5 Regulations - General

1. New development increasing demand for public access and/or reducing existing access by blocking or discouraging its use, shall incorporate provisions for visual and/or physical public access into any shoreline development that meets one or more of the following tests:
    a. Any uses, except for single-family residential development with four or fewer dwelling units or building lots located in the Urban designation;

b. Includes commercial, industrial or any nonresidential uses located in any shoreline designations;

c. Includes residential development and/or residential land division that provides five or more dwelling units or building lots located in any shoreline environments.

2. When public access provisions are required for development, the Administrator shall prepare written findings demonstrating consistency with the principles of nexus and proportionality and the test stated in regulation (1), above. The determination shall include:

   a. Project-specific expected impacts;

   b. Specific reasoning for determination of need for public access requirements;

   c. How the suitable public access options are related to the specific project.

3. Public access will not apply as prescribed in regulation (1) above, if the determination does not demonstrate the need or the applicant demonstrates to the satisfaction of the City one or more of the following:

   a. Unavoidable health or safety hazards to the public exist which cannot be prevented by any practical means.

   b. Inherent security requirements of the use cannot be satisfied through the application of alternative design features or other solutions.

   c. The cost of providing the access, easement, or an alternative public access amenity on or off the development site is unreasonably disproportionate to the total long-term cost of the proposed development.

   d. Environmental impacts which cannot be adequately mitigated will result from the public access.

   e. Significant undue and unavoidable conflict between any access provisions and the proposed use and/or adjacent uses would occur and cannot be mitigated.

4. Prior to deciding public access is not required pursuant to regulation (2) or (3) above, the applicant must first demonstrate, and the City determine in its findings, that all reasonable alternatives have been exhausted, including, but not limited to:

   a. Regulating access by such means as maintaining a gate and/or limiting hours of use.

   b. Designing separation of uses and activities (e.g., fences, terracing, use of one-way glazing, hedges, other landscaping).

   c. Provision(s) for access on a site geographically separate from the proposal such as a road end, vista, tideland or trail system.

5. Development, uses, and activities shall be designed and operated to avoid blocking, reducing, or adversely interfering with the public's existing physical and visual access to the water and shorelines; and shall balance the public's visual access to the shoreline with the retention of existing shoreline vegetation so as not to adversely impact the ecological functions and processes of existing shoreline vegetation.

a. The public's physical shoreline access is a priority over maintenance of adjacent shoreline properties shoreline views.

b. Where a development or use will interfere with an existing public access, the development or use shall apply mitigation sequencing principles and provide public access in proportion to the impact.

c. Public upland properties may preserve and enhance public shoreline views through limited vegetation pruning and/or vegetation removal to achieve a filtered view as described in the filtered screen landscaping provisions of BIMC 18.15.010, provided that it is demonstrated to the satisfaction of the Administrator that such visual enhancement measures

   i. Do not adversely impact the environment, including the ecological functions of shoreline vegetation; and

   ii. Meet the standards of Section 4.1.3, Vegetation Management of this Master Program.

6. The public's visual and physical access provided by shoreline road ends, public utilities, and rights-of-way shall not be diminished. [RCW 35.79.035 or its successor and RCW 36.87.130 or its successor]. Submerged public rights-of-way shall be preserved for public access.

7. Publicly owned shoreline properties shall be reserved for public water-dependent uses, public recreational uses, or public open space.

8. Development by public entities shall include public access to the shoreline, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.

4.2.4.6 Regulations – Public Access Design and Location Standards

1. Public access shall consist of a dedication of land, easement, and/or a physical improvement such as a walkway, trail, bikeway, corridor, viewpoint, park, deck, observation tower, pier, boat launching ramp, dock or pier area, or other area serving as a means of view and/or physical approach to public waters and may include interpretive centers and displays.

2. The minimum width of public access easements shall be 10 feet, unless the Administrator determines that undue hardship would result. In such cases, easement widths may be reduced only to the extent necessary to relive hardship.

3. Public access shall incorporate the following location and design standards:

   a. A public pedestrian access walkway located generally parallel to the ordinary high water mark of the property and waterward of buildings shall be required in the Urban designation, or for new commercial developments or where open space is provided along the shoreline, provided that the public access can be designed in a manner that will not adversely impact shoreline ecological functions and/or processes.

i. The walkway shall be buffered from sensitive ecological features and provide limited and controlled access to sensitive features and the water's edge where appropriate.

ii. Fencing may be provided temporarily to control damage to plants and other sensitive ecological features and permanently where appropriate.

iii. Trails should be constructed of materials, such as permeable material or elevated structures appropriate for conditions to limit impacts to ecologically sensitive areas and should be limited to 4 feet in width to reduce impacts to ecologically sensitive resources.

b. Public access where applicable should be designed to:

i. Be located adjacent to other public areas, accesses or connecting trails;

ii. Connect to the nearest public street and include connections to the Winslow Waterfront Trail and other planned trails as required and specified in the City's Non-Motorized Transportation Plan or Metropolitan Park District Comprehensive Plan; and

iii. Include provisions for handicapped and physically impaired persons where feasible and consistent with applicable state and federal law.

c. Where views of the water or shoreline are available and physical access to the water's edge is not present or appropriate, a public viewing area shall be provided.

d. Design shall minimize intrusions on privacy by avoiding locations adjacent to windows and/or private open spaces or by screening or other separation techniques.

e. Public amenities that are appropriate to the level of expected use shall be provided to serve the users of a public access area, such as benches, picnic tables and sufficient public parking. Vista parking facilities shall include a significant public view and provide recreational opportunities such as picnic tables or viewing benches.

f. Public facilities, public uses and commercial developments that attract a substantial number of people, and developments by government/public entities may be required to provide public restrooms, facilities for disposal of animal waste, and other appropriate public facilities.

4.2.4.7 Regulations – Public Access Permit Requirements

1. Development with public access requirements shall meet the following:

a. The required public access shall be fully developed and available for public use at the time of occupancy of the use or activity in accordance with conditions of approval, or in accordance with other provisions for guaranteeing installation within a 5-year period through a monetary performance assurance as approved by the City Attorney.

b. Public access easements and conditions of approval shall be recorded on the deed of title and/or on the face of the plat or short plat as a condition running with the authorized land use. Recording with the County Auditor's office shall occur at the time of permit approval. [RCW 58.17.110 or its successor].

c. The standard state-approved logo or other approved sign(s) that indicate the public's rights of access and hours of access shall be constructed, installed, and maintained in conspicuous locations at public access sites. In accordance with regulation 4.2.4.6(3)(a) above, the City may control or restrict public access as a condition of permit approval.

d. Public access facilities shall be maintained over the life of the use or development unless the City approves amending access to provide equal or greater public access than currently provided. Future actions by the applicant, successors in interest, or other parties shall not diminish the usefulness or value of the public access provided.

2. When properties are subdivided, owners of newly created lots which do not have frontage on the water shall be provided common access to the water, to the extent feasible and provided that it will not cause unacceptable environmental harm which cannot be adequately mitigated.

4.2.5 Signs

4.2.5.1 Applicability

Signs are regulated primarily through BIMC 15.08, Sign Code. The following provisions apply to all signs within the jurisdiction of the Shoreline Master Program, including signs used for the purpose of providing information related specifically to enhancing the public enjoyment of the shorelines through education and/or noting areas of special cultural or historical significance. These provisions do not apply to publicly owned signs where the purpose is to provide information regarding safety, direction, directions, and the like. Shoreline development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.3, Vegetation Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.2.5.2 Policies

1. Signs should be designed and placed so they are compatible with the aesthetic quality of the existing shoreline and adjacent land and water uses.
2. Signs should not block or otherwise interfere, during daylight or non-daylight hours, with visual access to the water or shorelands.
3. Signs should be of a permanent nature, should serve an approved use, and should be located on the property approved for such use.

4.2.5.3 Regulations - General

1. Signs for specific land use activities within the shoreline jurisdiction are subject to the requirements and standards set forth in the Bainbridge Island Municipal Code, Chapter 15.08, Sign Code, in addition to the regulations of this section.
2. Overwater signs or signs on floats or pilings shall be prohibited, except when related to navigation or as approved as part of a water-dependent use.
3. The following types of signs may be permitted, subject to the provisions contained within this section:
    a. Water navigational signs and highway and road signs necessary for operation, safety and direction;
    b. Public information/interpretive signs directly relating to a shoreline resource, use or activity;
    c. Off-premise, free-standing signs for community identification, information, or directional purposes;
    d. Signs with changing messages, provided that the information displayed on a non-lighted sign is limited to displaying time, temperature or date or public non commercial messages. Commercial electric signs with changing messages are prohibited;
    e. National, state or institutional flags or temporary decorations customary for special holidays and similar events of a public nature; and
    f. Temporary directional signs to public or quasi-public events if removed within ten (10) days following the event and permitted in accordance with BIMC Chapter 15.08.

4.2.5.4 Regulation – Public Access Signs

1. Signs indicating the public's right to access shoreline areas shall be installed and maintained in conspicuous locations at recreational facility points of access and entrances.
2. The location of new public access sites shall be clearly identified. Signs with the appropriate agency's logo shall be constructed, installed and maintained by the project proponent in conspicuous locations at the public access sites and/or along common routes to public access sites. The signs shall indicate the public's right of access, the hours of access, and other information.

4.2.6 Transportation Facilities

4.2.6.1 Applicability

Transportation facilities are also subject to Section 4.0, General (Island-wide) Policies and Regulations, including Tables 4-1 through 4-3; Section 3.0, Shoreline Designation Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 6.0, Shoreline Modification Policies and Regulations; Section 6.4,

Dredging and Dredge Material Disposal; and Section 6.5, Fill. Construction and maintenance activities related to transportation facilities may require a Vegetation Management Plan and/or a Stormwater Pollution Prevention Plan (SWPP) pursuant to BIMC Chapter 15.20, Surface and Storm Water Management, and Master Program Sections 4.1.3, Vegetation Management, and 4.1.6, Water Quality and Stormwater Management. Transportation facility development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts and may also be reviewed under BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.2.6.2 Policies

1. Plan, locate and design proposed transportation and parking facilities where routes will have the least possible adverse effect on unique or fragile shoreline features, and will not result in a net loss of shoreline ecological functions and ecosystem-wide processes or adversely impact existing or planned water-dependent uses.
2. In planning for new transportation systems, give priority to transportation modes favoring multimodal systems. New roads and bridges should not be allowed, except access roads (including driveways) or when a bridge provides the least adverse impact to ecological functions and ecosystem-wide process.
3. Encourage trail and bicycle systems as a preferred access to and along the shoreline. Road reconstruction projects should include non-motorized transportation facilities.
4. When existing transportation corridors are vacated, acquire them for water-dependent use or public access.
5. Encourage joint use of transportation and utility rights-of-way within shoreline jurisdiction for roads and utilities.
6. Encourage state highway and public street modifications that promote stream restoration or mitigate existing environmental damage.
7. Encourage the completion of the Eagle Harbor Waterfront Trail.
8. Locate nonwater-oriented and water-related transportation facilities outside the shoreline jurisdiction.
9. Promote public views from roads and encourage projects to incorporate ADA compliant shoreline access opportunities.
10. Allow reconstruction of public roads located in the shoreline that are in danger of loss or substantial damage and which serve as the primary means of access to a substantial number of residents, if no feasible alternative is possible for relocating the road out of danger or where it would cause more ecological damage to do so, and where mitigation of impacts avoids a net loss of shoreline ecological functions and ecosystem-wide processes.

4.2.6.3 Regulations – Prohibited

1. The following transportation facilities are prohibited:
    a. New highways, arterials, secondary arterials, railroad facilities, and heliports;

b. Additional bridges over Puget Sound waters to and from Bainbridge Island;

c. In the Priority Aquatic designation all transportation facilities, except trails; and

d. New transportation facilities in front of feeder bluffs, over driftways or on accretion shoreforms.

2. Fills for transportation facility development are prohibited in water bodies, wetlands, marshes, bogs, swamps and on accretion beaches except when there is a demonstrated purpose and public need that supports the uses consistent with this program, and alternatives to accomplish the same purpose have been shown to be infeasible. Such fill may be permitted by a conditional use permit and must comply with the provisions of Section 6.5, Fill.

3. Herbicides for roadside brush control on city roads in the shoreline jurisdiction, except when a city-approved integrated pest management plan is implemented. See Section 4.1.6, Water Quality and Stormwater Management.

4.2.6.4 Regulations – General

1. Pervious trails shall be permitted in upland shoreline designations.

2. Publicly-owned ferry terminals and services, except over-water facilities, are allowed as a permitted use in the Urban designation and in the adjacent aquatic environment. New over-water facilities in conjunction with a permitted ferry terminal are a conditional use in the Urban designation and in the adjacent aquatic environment and are prohibited in all other environments.

3. Float plane facilities and services are a conditional use in the Urban designation.

4. New access roads shall be allowed only where required because of one of the following:

   a. Other means of access are demonstrated to the satisfaction of the Administrator to be infeasible or environmentally unacceptable; or

   b. The road is needed for ferry service.

5. Transportation facilities and services shall utilize existing transportation corridors whenever possible, provided that facility additions and modifications will not adversely impact shoreline resources and are otherwise consistent with this program. Expansion of the existing corridor shall meet the provisions of Section 4.1.3, Environmental Impacts.

6. Shoreline road ends may not be vacated except in compliance with RCW 35.79.035 or its successor and RCW 35.79.035 or its successor.

7. Transportation facilities including, but not limited to, ferry terminals, and/or float plane terminals shall meet the height and setback standards in Table 4-2.

4.2.6.5 Regulation – Design, Construction and Maintenance

4.2.6.5.1 Construction and Maintenance

1. Waste material from both construction and maintenance activities, including drainage ditch clearing, shall not be deposited into or cast on the side of roads within a shoreline,

water body, wetland, estuary, tideland, accretion beach, and other unique natural area. Such materials shall be deposited in stable locations where re-entry and erosion into such areas is prevented.

2. No machinery shall be operated within or along a stream bed, marine shoreline, lake, wetland or pond except in compliance with a hydraulics permit approval (HPA) issued by the Washington State Department of Fish and Wildlife. If an HPA is not required, operation of machinery may be approved by the Administrator.
3. Existing road~~s~~ corridors shall be adequately maintained with site-appropriate native vegetation where feasible to provide slope stability and to enhance shoreline function. Shoreline scenic drives and viewpoints may provide breaks periodically in the vegetative buffer to allow open views of the water.

4.2.6.5.2 Road Design

1. Transportation facilities shall employ low impact development techniques according to the provisions of Section 4.1.6, Water Quality and Stormwater Management.
2. Transportation and primary utility facilities shall be required to make joint use of rights-of-way and to consolidate crossings of water bodies; where doing so minimizes adverse impacts to the shoreline.
3. Roadway design shall include facilities for bicycle and pedestrian routes as prioritized in the Non-Motorized Transportation Plan.
4. Culverts, bridges and similar devices shall be designed to pass water, sediment, and debris loads anticipated under appropriate hydraulic analysis in compliance with the stormwater regulations of BIMC 15.20, Surface and Storm Water Management, and shall not impede the migration of anadromous fish.
5. The use of hard shoreline stabilization in transportation facility design shall be employed only when it is demonstrated to the Administrator that alternatives are impracticable or infeasible.

4.2.7 Utilities (Primary and Accessory)

4.2.7.1 Applicability

These provisions apply to services and facilities that produce, convey, store, or process power, gas, sewage, communications, oil, waste, and the like. On-site utility features serving a principal use, such as water, sewer or gas line to a residence, are “accessory utilities” and shall be considered a part of the principal use. Shoreline development and activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.3, Vegetation Management; Section 6.0, Shoreline Modification Policies and Regulations; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

4.2.7.2 Policies – Primary Utility

1. Design and locate utility facilities to assure no net loss of shoreline ecological functions and ecosystem-wide processes, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.
2. Ensure utilities utilize existing transportation and utility sites, rights-of-way, and corridors whenever possible, rather than creating new corridors. Joint use of rights-of-way and corridors should be encouraged.
3. Do not allow utility production and processing facilities, such as power plants, sewage treatment plants, and solid waste disposal activities and facilities, or parts of those facilities that are nonwater-oriented in shoreline areas unless it can be demonstrated that no other feasible option is available.
4. Do not allow new utilities where shoreline stabilization is required.
5. Ensure utilities and utility corridors locations do not obstruct or otherwise affect scenic views. Whenever feasible, such facilities should be placed underground or alongside or under bridges.
6. Locate transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, outside of the shoreline area where feasible, and when necessarily located within the shoreline area, assure such facilities demonstrate no net loss of shoreline ecological function. Communication towers shall be prohibited in the shoreline area.
7. Discourage development of pipelines and cables on tidelands, particularly those running roughly parallel to the shoreline, and development of facilities that may require periodic maintenance which disrupt shoreline ecological functions and ecosystem-wide processes, except where no other feasible alternative exists. When permitted, provisions shall assure that the facilities do not result in a net loss of shoreline ecological functions and ecosystem-wide processes or significant impacts to other shoreline resources and values.

4.2.7.3 Policies – Accessory Utilities

1. On-site utilities and rights of way should be:
    a. Located outside of the shoreline area to the maximum extent possible. When utility lines require a shoreline location, they should be placed underground.
    b. Designed and located in a manner which preserves the shoreline ecology, water quality and the natural landscape to avoid and minimize adverse affects to shoreline ecological functions and ecosystem-wide processes, and minimizes conflicts with existing or planned land uses.

4.2.7.4 Regulations - Prohibited

1. The following uses associated with utilities shall be prohibited within shoreline jurisdiction:
    a. New solid waste disposal sites and facilities;
    b. Primary radio, cellular phone and microwave towers;

c. Utilities requiring withdrawal of water from streams, and

d. Primary power-generating facilities including solar power and wind generation that are not considered accessory structures in BIMC 18.09, except public facilities necessary to serve a public system, such as sewer lift stations or similar facilities which must be located within the shoreline area due to the system design of the existing public facility.

e. Land filling in shoreline jurisdiction for utility or utility line development purposes is prohibited.

4.2.7.5 Regulations - General

1. Primary utilities may be allowed as a conditional use in the Shoreline Residential Conservancy, Shoreline Residential, Urban, and Aquatic designations. They are prohibited in Natural, Island Conservancy and Priority Aquatic designations.
2. Utility development shall comply with required setbacks. (See Section 3.0, Shoreline Designation Policies and Regulations and Table 4-2.) Primary Utilities shall provide screening of facilities from water bodies and adjacent properties. Type of screening required shall be determined by the City on a case-by-case basis.
3. All utilities shall meet the height and setback standards in Table 4-2.
4. Utilities shall be located and designed so as to avoid the use of any shoreline stabilization or flood protection works.
5. Where utilities own rights-of-way in fee title, utility development shall, through coordination with local government agencies, provide for compatible, multiple use of sites and rights-of-way, provided such uses will not unduly interfere with utility operations, endanger public health and safety, or create a significant and disproportionate liability for the owner. Such uses include shoreline access points, trail systems, and other forms of recreation and transportation.
6. Utility lines, such as transmission and distribution, shall:
    a. Utilize existing rights-of-way, corridor and/or bridge crossings whenever possible and shall avoid duplication and construction of new parallel corridors in all shoreline areas. Proposals for new corridors or water crossings must fully substantiate the infeasibility of existing routes.
    b. Be completely buried under the stream bed in all in-stream crossings except for appropriate water or sewage treatment plant intake pipes or outfalls.
    c. Cross areas of shoreline jurisdiction by the shortest, most direct route feasible, unless such route would cause significant environmental damage.
    d. Be designed to minimize impacts to scenic shoreline views and located where major facilities must be placed in a shoreline area~~.~~
7. Permitted crossings shall utilize pier or open pile techniques.
8. Clearing of native vegetation for the installation or maintenance of utilities shall be kept to a minimum. Upon project completion, disturbed vegetation areas shall be replanted

according to the provisions of Section 4.1.3, Vegetation Management. Other disturbed areas shall be replanted with native or other approved species. Replanted areas shall be regularly maintained until established.

4.2.7.6 Regulations – Primary Utility Location and Design

4.2.7.6.1 Water Systems

1. Components of water systems which are not water-dependent shall be located outside shoreline jurisdiction, except waterlines serving shoreline uses or unless alternative locations, including alternative technology, are demonstrated to be infeasible to the Administrator and the facilities do not result in a net loss of shoreline ecological functions and processes or significant adverse impacts to other shoreline resources and values such as parks and recreation facilities, public access or archaeological, historic and cultural resources, or aesthetic resources.
2. Private and public intake facilities, and wells in the shoreline jurisdiction should be located where there will be no net loss in ecological functions and processes or adverse impacts upon shoreline resources, values, natural features, or other uses. Construction and maintenance activities shall follow best management practices and meet provisions of Section 4.1.6, Water Quality and Stormwater Management.
3. Desalinization facilities shall be located consistent with critical area regulations and buffers in Section 4.1.5, Critical Areas, except for water-dependent components such as water intakes.

4.2.7.6.2 Sewage Systems

1. Sewage trunk lines, interceptors, pump stations, treatment plants and other components that are not water-dependent shall be located outside shoreline jurisdiction unless alternative locations, including alternative technology, are demonstrated to be infeasible to the Administrator and the facilities do not result in a net loss of shoreline ecological functions and processes or significant impacts to other shoreline resources and values such as parks and recreation facilities, public access or archaeological, historic and cultural resources, or aesthetic resources.
2. Outfall pipelines and diffusers are water-dependent, but should be located only where there will be no net loss in shoreline ecological functions and processes or adverse impacts upon shoreline resources and values.

4.2.7.6.3 Natural Gas Transmission

1. Natural gas pipelines, except local service lines, shall not be located in shoreline jurisdiction unless alternatives are demonstrated to be infeasible to the Administrator. Application materials shall include analysis of alternative routes avoiding aquatic lands and including alternative technology.
2. Natural gas local service lines shall not be located in shoreline areas unless serving approved shoreline uses. Crossings of water bodies shall not be approved unless alternatives are demonstrated to be infeasible to the Administrator. Application materials

shall include an analysis of alternative routes avoiding aquatic lands, including an analysis of alternative technology.

3. Application for natural gas pipelines shall demonstrate that the facilities do not result in a net loss of shoreline ecological functions and processes or significant impacts to other shoreline resources and values.
4. Developers and operators of pipelines and related appurtenances for natural gas are to be required to demonstrate adequate provisions for preventing spills or leaks, as well as established procedures for mitigating damages from spills or other malfunctions and shall demonstrate that periodic maintenance will not disrupt shoreline ecological functions and processes.
5. Utilities for new development within the shoreline shall be installed underground.

4.2.7.6.4 Electrical Energy and Communication Systems

1. Energy and communication systems including substations, towers, transmission and distribution lines have critical location requirements, but are not normally water-dependent. System components that are not water-dependent shall not be located in shoreline jurisdiction, except lines serving shoreline uses or unless alternatives are demonstrated to be infeasible to the Administrator. Application materials for such facilities shall include an analysis of alternative routes avoiding aquatic lands, including an analysis of alternative technology.
2. Underground placement of lines shall be required for new or replacement lines that are parallel to the shoreline, and do not cross water or other critical areas regulated in Section 4.1.5, Critical Areas, provided that maintenance of existing aerial lines may be permitted above ground where alternatives are demonstrated to be impractical and/or infeasible to the Administrator.
3. New or replacement lines that cross water bodies or other critical areas regulated in Section 4.1.5, Critical Areas, may be required to be placed underground depending on impacts on ecological functions and processes and visual impacts; provided that maintenance of existing aerial lines may be permitted above ground where alternatives are demonstrated to be impractical and/or infeasible to the Administrator.
4. Poles or other supports treated with creosote or other wood preservatives that may leach contamination in water shall not be used along shorelines or associated wetlands. No new overhead wiring shall be installed between the road and OHWM, where road rights-of-way or easements are within 150 feet and also are parallel to shoreline for more than 500 feet.
5. Utilities for new development within the shoreline shall be installed underground.

4.2.7.6.5 Tidal Energy

1. System components of tidal energy or tidal power-generating facilities which are nonwater-dependent shall be located outside shoreline jurisdiction unless alternative locations, including alternative technology, are demonstrated to the Administrator to be infeasible, and that the facilities do not result in a net loss of shoreline ecological functions and processes or significant adverse impacts to other shoreline resources and

values such as parks and recreation facilities, public access or archaeological, historic and cultural resources, or aesthetic resource.

4.2.7.6.6 Fire Protection Facilities

1. Storage and handling facilities for water borne fire fighting or rescue equipment may be permitted on shoreline jurisdiction at locations which are demonstrated to the Administrator to be suitable considering the purpose of the proposal and the policies of this Program.

4.2.7.6.7 Other Essential Public Utility Facilities

1. Other utility processing facilities, such as power plants, that are nonwater-oriented shall not be allowed in shoreline jurisdiction unless no other feasible alternative is available.

4.2.7.6.8 Site Coverage

1. Maximum site coverage for utility development including parking and storage areas shall not exceed standards in the underlying zoning in BIMC Title 18, and shall not exceed fifty percent (50%) in Urban, and thirty-five percent (35%) in Shoreline Residential and Shoreline Residential Conservancy.

4.2.7.7 Regulations – Accessory Utility Location and Design

1. Accessory utility must be subordinate to principal use, such as utilities serving a residential use, and shall meet BIMC 18.09, Use Regulations, in addition to the provisions below.
    a. Temporary storage of solid waste in suitable receptacles is permitted as an accessory use to a primary permitted use, or for litter control.
    b. New residences or businesses on the shoreline within two hundred (200) feet of an existing sewer line and/or within an established sewer service area shall be connected to the sewer system. Existing residences shall be connected when the on-site sewage system has reached the end of its useful life.
    c. On-site sewage systems shall be located on the landward side of any new residence or business or in a location approved by the Administrator and designed to meet all applicable water quality, utility, and health standards.
    d. Accessory utilities shall be located outside of the shoreline area unless no suitable location is feasible. When utility lines require a shoreline location, they shall be placed underground.

5.0 SPECIFIC SHORELINE USE AND DEVELOPMENT POLICIES AND REGULATIONS

Introduction

This section contains policies and regulations for the following shoreline uses: agriculture, aquaculture, boating facilities, commercial development, forest practices, industrial development, mining, residential, recreational development, and residential development. The policies and regulations developed for each shoreline use, or category, are the primary set of criteria for evaluating proposed shoreline development. Some proposals will be subject to provisions of more than one use. Proposed development must also comply with Section 4.0, General (Island-wide) Policies and Regulations and Section 6.0, Shoreline Modification Policies and Regulations provisions.

While not all shoreline uses require a shoreline permit, no development shall be undertaken on the shorelines of Bainbridge Island except those which are consistent with the Shoreline Management Act (Act), applicable state guidelines, and the Master Program.

Shoreline uses which are not specifically identified shall be evaluated on a case-by-case basis for consistency with the Act and the requirements of the Master Program, and shall require a conditional use permit.

5.1 Agriculture

5.1.1 Applicability

These provisions apply to activities which are primarily commercial including cultivation of soil, production of crops, or the raising of livestock. Gardening activities primarily for on-site consumption and maintenance of household pets shall be considered accessory to residential uses.

5.1.2 Policies

1. Agriculture shall not be allowed in the shoreline jurisdiction.

5.1.3 Regulation - General

1. Agriculture is prohibited in the shoreline jurisdiction.

5.2 Aquaculture

5.2.1 Applicability

These provisions apply to the commercial cultivation and harvesting of fish, shellfish or other aquatic animals or plants, and also to non-commercial harvesting, and to the incidental preparation of fish and shellfish for human consumption, or cultivation for restoration purposes. Aquaculture is dependent on the use of the water, and when consistent with control of pollution and prevention of damage to the environment, is a preferred use of the water area. When properly managed, aquaculture can result in long-term over short-term benefit and can protect the resources and ecology of the shoreline. Aquaculture activities may be subject to the

regulations found in Section 6.4, Dredging and Dredge Material Disposal, depending on site-specific circumstances. Aquaculture activities will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical Areas; and Section 4.1.6, Water Quality and Stormwater Management. Other portions of this Program may also apply.

5.2.2 Policies

1. Identify and encourage aquaculture activities which may provide opportunities for creating ecosystem improvements and result in no net loss of ecological functions.
2. Allow experimental forms of aquaculture involving the use of new species, new growing methods, or new harvesting techniques, when they are consistent with applicable state and federal regulations and this Program. Experimental aquaculture projects should be limited in scale and should be approved for a limited period of time. When feasible, limit or restrict new development and uses in areas that affect existing experimental aquaculture.
3. Aquaculture should not be permitted in areas where it would result in a net loss of ecological functions, adversely impact eelgrass or macroalgae, or significantly conflict with navigation and other water dependent uses.
4. Aquaculture facilities should be designed and located to not spread disease to native aquatic life, establish new non-native species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline.
5. Impacts to ecological functions should be mitigated according to WAC 173-26-201(2) (e) and Section 4.1.2, Environmental Impacts.
6. Give preference to those forms of aquaculture that have less environmental and/or visual impacts. Preference is given to those projects that require fewer submerged or intertidal structures, fewer land-based facilities, limited substrate modification, and that don't rely on artificial feeding.
7. Ensure aquaculture does not cause cumulative impacts.

5.2.3 Regulations - Prohibited

1. Aquaculture is prohibited in the Natural and Priority Aquatic designations, except as provided in Section 5.2.4 (1), below.
2. Aquaculture that uses or releases herbicides, pesticides, antibiotics, fertilizers, parasites, pharmaceuticals, genetically modified organisms, feed or other materials known to be potentially harmful into surrounding waters is prohibited, unless:
    a. When conducted for native population recovery in accordance with government/Tribal approved plan and all state and federal regulations; or
    b. If approved by all appropriate state and federal agencies and proof thereof is submitted to the City.
3. Mechanical and/or hydraulic harvesting or other activities that involve substantial substrate modification shall be prohibited in existing kelp beds or in beds of native eel grass (Zostera marina).

5.2.4 Regulations - General

1. Aquaculture may be allowed as follows:
    a. Aquaculture as a conditional use in Shoreline Residential, Urban, and adjacent Aquatic designations.
    b. Community Shellfish Gardens are allowed as a conditional use in the Island Conservancy, Shoreline Residential Conservancy, Shoreline Residential, and Urban designations, and in adjacent Aquatic designations.
    c. Individual Shellfish Gardens are allowed in the Island Conservancy, Shoreline Residential Conservancy, Shoreline Residential and Urban shoreline designations and in adjacent Aquatic designation Priority B. They also are allowed in Aquatic Priority A when for the recovery of native populations, restoration, or personal use.
2. When a shoreline conditional use permit is issued for a new aquaculture use or development, that permit shall apply to the initial siting, construction, and/or planting or stocking of the facility or farm, and shall be valid for the period specified in the permit.
3. Aquaculture shall avoid:
    a. A net loss of ecological functions or processes;
    b. Adverse impacts to eelgrass and macro algae;
    c. Significant conflicts with navigation and water-dependent uses;
    d. The spread of disease to native aquatic life;
    e. Establishing new non-native species that cause significant ecological impacts;
    f. Significant impacts to shoreline aesthetic qualities; and/or
    g. Significant modifications of the substrate.

5.2.5 Regulations – Design Standards

1. Floating and submerged aquaculture structures shall be located to avoid or minimize interference with navigation and the normal public use of the surface waters. Floating structures shall remain shoreward of principal navigation channels. Other restrictions on the scale of aquaculture activities to protect navigational access may be necessary based on the size and shape of the affected water body. Netting and fencing shall be the minimum necessary to deter targeted predators and shall not exceed six (6) feet in height, as measured from water surface.
2. Aquacultural structures and activities that are not water-dependent (e.g., warehouses for storage of products, parking lots) shall be located landward of the OHWM, upland of water-dependent portions of the project, and shall avoid or minimize detrimental impacts to the shoreline.
3. Hatchery and other aquaculture operations shall be required to maintain a vegetated buffer zone along the affected stream as prescribed in Section 4.1.5 provided that clearing of vegetation shall be permitted for essential water access points.

4. Onshore support structures shall meet the height and setback standards established in Table 4-2, Site Development Dimensional Standards Table, except that reduced setbacks may be permitted through a shoreline variance where necessary for the operation of hatcheries and rearing ponds.
5. The following shall be limited to the minimum size or number necessary for approved aquaculture development, uses, and activities:
    a. Submerged or intertidal structures.
    b. Land-based facilities.
    c. Structures which modify substrate.
6 Floating/hanging aquaculture facilities and associated equipment, except navigation aids, shall use colors and materials that blend into the surrounding environment in order to minimize visual impacts. All materials, including those used for incidental aquaculture for personal consumption, shall be marked with owners' contact information to provide identification after storm disturbance. All floating and submerged aquaculture facilities in navigable waters shall comply with all applicable state and federal requirements.
7. Floating aquaculture facilities may require a visual impact analysis consisting of information comparable to that found in the Department of Ecology's Aquacultural Siting Study (1986), as updated. Such analysis may be prepared by the applicant without professional assistance, provided that it includes an adequate assessment of impacts, as determined by the Administrator.
8. For aquacultural projects using over-water structures, storage of necessary tools and apparatus waterward of the OHWM shall be limited to containers of not more than three (3) feet in height, as measured from the surface of the raft or dock, provided that, in locations where the visual impact of the proposed aquaculture structures will be minimal, the City, based upon written findings and without requiring a variance, may authorize storage containers of greater height. In such cases, the burden of proof shall be on the applicant. Materials which are not necessary for the immediate and regular operation of the facility shall not be stored waterward of the ordinary high water mark. A temporary sanitation station may be allowed on fixed overwater pier structures when utilities are not available within a reasonable distance.
9. Shellfish Gardens for personal consumption are allowed on private lands provided the following can be met:
    a. They comply with all state and federal regulations, including transfer and harvest permits required by WDFW.
    b. The cultivation and harvesting is limited to native species of shellfish acquired from a licensed source consistent with state law; and
    c. The operation may utilize bottom culture or off-bottom culture bags if in accordance with best management practices and it does not significantly alter the tidal bed.

5.2.6 Regulations – Operational Standards

1. Aquaculture structures and equipment shall be of sound construction and shall be so maintained. Abandoned or unsafe structures and equipment shall be removed or repaired promptly by the owner. Aquaculture operations that do not conform with this master program are considered discontinued if the use has ceased for a period of more than five (5) years.
2. Operational monitoring may be required if and to the extent that is necessary to determine, ensure, or confirm compliance with predicted or required performance, including periodic benthic analysis or noise pollution monitoring in accordance with BIMC Chapter 16.16. Such monitoring requirements shall be established as a condition of the permit and shall be conducted at the applicant's (operator's) expense.
3. No processing of any aquacultural product, except for the sorting or culling of the cultured organisms and the washing or removal of surface materials or organisms, shall occur in or over the water after harvest, unless specifically approved by permit. All other processing and processing facilities shall be located on land and shall be governed by these provisions and the policies and regulations of other applicable sections of the Master Program, in particular, provisions addressing commercial and industrial uses.
4. Aquaculture wastes shall be disposed of in a manner that will ensure compliance with all applicable governmental waste disposal standards. No garbage, wastes, or debris shall be allowed to accumulate at the site of any aquaculture operation [BIMC Chapter 8.16].
5. Predator control shall not involve the killing or abusive harassment of birds or mammals. Approved controls include, but are not limited to, double netting for seals, overhead netting for birds, fencing or netting for otters. The use of other nonlethal, non-abusive predator control measures shall be contingent upon receipt of written approval from the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service, as required.
6. All nets shall be maintained in accordance with all applicable state and federal requirements. If a state or federal permit is not required, cleaning of nets and other apparatus shall be accomplished by air drying, spray washing or hand washing, rather than chemical treatment and applications.

5.2.7 Commercial Geoduck Requirements

1. In addition to other provisions in Section 5.2, commercial geoduck aquaculture will be administered consistent with WAC 173-26-241(3)(b)(ii), (iii), and (iv). Where there is inconsistency between the provisions in 5.2.1, 5.2.2., 5.2.3, 5.2.4, 5.2.5, 5.2.6 or 5.2.7 and the geoduck provisions, the specific commercial geoduck provisions apply.
2. A conditional use permit is required for all new commercial geoduck aquaculture and conversions from existing non-geoduck aquaculture to geoduck aquaculture. CUPs for new commercial geoduck and conversions will be administered consistent with WAC 173-26-241(3)(b)(ii), (iii), and (iv).

5.3 Boating Facilities

5.3.1 Applicability

Boating facilities include marinas (both backshore and foreshore, dry storage, and wet moorage and open water types), boat launch ramps, covered moorage, marine railways, and marine travel lifts (Refer to Section 8.0, Definitions). Community, yacht club, camp, and resort moorage facilities must comply with boating facility requirements if they provide moorage for six (6) or more vessels. Both marina and non-marina boating facilities, including single-family, must comply with Section 4.0, General (Island-wide) Policies and Regulations, including the standards in Table 4-1 through 4-3, Section 3.0, Shoreline Designation Policies and Regulations, and Section 6.3, Overwater Structures. Boating facilities development will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.1.3, Vegetation Management; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

Accessory uses found in marinas may include fuel docks and storage, boating equipment sales and rental, repair services, boat launches, bait and tackle shops, potable water, waste disposal, administration, parking, and grocery and dry good shops. Uses which are not clearly accessory are also subject to the respective provisions in this section. (Examples might include commercial, industrial, or transportation facilities.)

Regulations governing boating activities in the bays and harbors of Bainbridge Island are contained in BIMC Chapters 12.24, Waterfront Park and Other City Harbors, and 12.40, Watercraft and Floating Homes, and may also apply. See Section 6.3.7.7 and 8, for regulations governing mooring buoys. Boating facility development and/or renovation shall comply with all other applicable state and federal agency policies and regulations including, but not limited to, the Department of Fish and Wildlife, Washington Department of Natural Resources, Federal Marine Sanitation standards (Environmental Protection Agency 1972) requiring water quality certification from the U.S. Army Corps of Engineers (33 USC § 403), U.S. Army Corps of Engineers dredging standards (33 USC § 404), and state and federal standards for the storage of fuels and toxic materials.

5.3.2 Goal

Boating facilities, including marinas and boat launch ramps, are priority water-dependent uses and should be located, designed, and operated with appropriate mitigation to avoid and minimize adverse effects on shoreline functions and processes; prevent conflicts with navigation and other allowed uses; and provide public access and enjoyment of water of the state.

5.3.3 Policies

1. Locate new or expanding boating facilities only where suitable environmental conditions are present. Avoid:
    a. Critical saltwater habitat, including kelp beds, eelgrass beds, spawning areas for forage fish (such as herring, surf smelt and sandlance);
    b. Subsistence, commercial and recreational shellfish beds;

c. Mudflats or intertidal habitats with vascular plants;

d. Areas with which priority species have a primary association;

e. Areas which have been identified as hazardous due to storm tides, high winds, or flooding; and

f. Embayments with poor flushing action.

2. Design and locate boating facilities to minimize adverse effects upon shoreline processes such as erosion, littoral or riparian transport, and where feasible, enhance degraded, scarce, and valuable shore features including accretion shoreforms.

3. Design, locate, construct, and maintain boating facilities to:

   a. Avoid adverse proximity impacts such as noise, light and glare; and

   b. Assure that their structures and operations will be aesthetically compatible with the area visually affected, and will not unreasonably impair shoreline views from adjacent shoreline properties or the public's visual access to the shore~~;~~

   c. Assure vegetation screening should be utilized to reduce visual impacts of associated parking and storage

4. Consider regional as well as local needs when determining the location of marinas and boat launches. Identify potential sites near high-use or potentially high-use areas.

5. Minimize displacement of limited shoreline resources by considering:

   a. Expanding existing marinas over adding new marina sites;

   b. Developing marinas and launch ramps over developing individual docking facilities for private, noncommercial pleasure craft; and

   c. Utilizing launching ramps and water-dependent dry storage or other new technologies over year-round wet-moorage.

6. Ensure the location and design of boating facilities does not unduly obstruct navigable waters, and avoids adverse effects to recreational opportunities or the use and enjoyment of the water or beach of adjoining properties.

7. Design, locate and construct new marina facilities to accommodate public access and enjoyment of the shoreline, including provisions for walkways, view points, restroom facilities, and other recreational uses according to the scale of the facility.

8. Encourage innovative construction techniques and methods of foreshore marinas to prevent degradation of fish and/or shellfish resources and habitat.

9. Require the installation and maintenance of sewage disposal (pump-out) facilities or services. These should be conveniently available to all users of marina facilities.

10. Prohibit floating houses. Allow live-aboard vessels only in those limited circumstances where their environmental and use impacts can be substantially avoided, minimized, or mitigated.

11. Ensure transient moorage is made available, with most of this need being met through use of short-term vacancies.

12. Work with the City Harbor Commission to establish regulations governing a uniform speed code, harbor safety, and harbor navigation through amendments to the municipal code.

5.3.4 Regulations - Prohibited

1. Boating facilities in the Shoreline Residential Conservancy, Island Conservancy, Natural, and Priority Aquatic designations, except that boating facilities may be permitted as a conditional use in public parks designated Island Conservancy.
2. Backshore marinas involving the creation of a basin for wet moorage.
3. Covered moorage.
4. Floating homes.

5.3.5 Regulations - General

1. Boating facilities, including marinas, shall be allowed as follows:
    a. Boating facilities shall be permitted in the Urban designation and allowed as a conditional use in the Shoreline Residential designation.
    b. Boating facilities in the Aquatic designation are allowed as-permitted in the adjacent upland designation pursuant to Table 4-2.
    c. One (1) public open water moorage and anchorage area shall be a permitted in the Aquatic designation located in Eagle Harbor.
2. Accessory uses at a marina or public launch ramp shall be limited to those which are water-dependent, related to boating, necessary for marina operation, or which provide physical or visual shoreline access to a substantial numbers of the general public. Accessory uses shall be consistent in scale and intensity with the marina and/or launch ramp and surrounding uses.
3. All marina developments shall provide boater education addressing boater impacts on water quality and other shoreline resources, and boater safety and requirements for boater use of sewage pump-outs to their marina users.
4. Live-aboard vessels, including houseboats, shall be permitted only in marinas. No more than 10% of the surface area of a marina or 10% of its slips, whichever is less, shall be devoted to live-aboard vessels, including houseboats, except that the percentage of live-aboard vessels in marinas may be increased through an approved conditional use permit. [WAC 332-30-171 or its successor]

5.3.6 Regulations - Location

1. When new marina sites are considered, sufficient evidence must be presented to show there is a regional demand and existing marinas are inadequate and cannot be expanded to meet regional demand.
2. Marinas shall be sited to prevent any restrictions in the use of commercial and recreational shellfish beds or commercial aquaculture operations. The specific distance shall be determined in conjunction with the Washington State Department of Health

Services, the Washington State Department of Ecology, and other agencies with expertise. Criteria for determining the specific distance may include:

a. The size and depth of the water body;

b. Tidal flushing action in the project area;

c. Size of the marina and projected intensity of use;

d. Whether fuel will be handled or stored;

e. Location of a sewer hook-up; and

f. Expected or planned changes in adjacent land uses that could result in additional water quality impacts or sanitary treatment requirements.

3. Marinas shall be allowed only on stable shoreline areas where water depth is adequate to eliminate or minimize the need for channel dredging (for construction or maintenance), soil disposal, filling, beach enhancement, and other harbor and channel maintenance activities.

4. Marinas shall be located only in areas where there is adequate water mixing and flushing and shall be designed so as not to reduce or negatively influence flushing characteristics.

5. Boating facilities shall not require fixed breakwaters.

6. Marinas shall be clearly separated from beaches commonly used for swimming and shall provided signage and provide protection measures to insure the safety of swimmers.

7. Marinas shall not be located at or along:

   a. Significant littoral drift cells, including resource material areas, such as feeder bluffs and accretion beaches, barrier beaches, points, sand spits and hooks; or

   b. Wetlands, marshes, bogs, swamps and lagoons; or

   c. Mud flats and salt marshes; or

   d. Fish and shellfish spawning and rearing areas.

8. Marinas shall not extend waterward farther than the following limits:

   a. The Construction Limit Line or the Harbor Structure Limit Line as depicted in Appendix E; except the public open water moorage and anchorage areas shall be allowed waterward of the Construction Limit Line.

   b. Where no limit line is depicted, not more than two hundred (200) feet beyond extreme low tide, the 18 MLLW depth contour, or the line of navigation whichever is closer to the shore. However, the distance from shore may be less in locations where it is necessary to protect the navigational rights of the public. [WAC 332-30-122(1)(ii) or its successor]

5.3.7 Regulations – Design/Renovation/Expansion

1. Proposals for marinas shall include public launch facilities unless the applicant can demonstrate that providing such facilities is not feasible.

2. Boating facilities shall be designed, constructed and maintained to:

a. Provide thorough flushing of all enclosed water areas and shall not restrict the movement of aquatic life requiring shallow water;

b. Minimize interference with geo-hydraulic processes and disruption of existing shore forms;

c. Be aesthetically compatible with existing shoreline features and uses;

d. Avoid adverse proximity impacts such as noise, light and glare;

e. Include vegetative screening for parking, and upland storage areas and facilities consistent with landscaping standards for parking lots as prescribed in BIMC Section 18.15.010, Development Standards and Guidelines; Landscaping, Screening, and Tree Retention, Protection, and Replacement; and

f. Include public restrooms, accessory parking or other recreational uses according to the scale of the facility.

3. Short-term loading/unloading areas and hand-launch storage areas may be located at ramps or near berthing areas and should be constructed of pervious material. Long-term parking and dry moorage and all other storage areas shall be set back at a distance of one-hundred (100) feet from the OHWM.

4. Public access, both visual and physical, such as viewpoints or walkways, shall be an integral part of all marina design and development commensurate with the particular proposal and must meet the standards of Section 4.2.4, Public Access.

5. Innovative construction techniques and construction methods of foreshore marinas may be allowed when demonstrated to the satisfaction of the Administrator that the design will prevent degradation of fish migration, critical saltwater habitat and/or shellfish resources.

5.3.8 Regulations - Utilities

1. All marinas shall have accessible boat sewage disposal systems or other pump-out services available on site. Existing marinas shall comply within one (1) year of the effective date of this regulation.

2. The marina shall provide facilities for the adequate collection and dumping of marina originated materials, including but not limited to, sewage, solid waste, and petroleum waste.

3. All marinas shall provide restrooms for boaters' use, including upland or floating facilities supporting open water moorage and anchorage areas. Upland restrooms shall be located within seventy-five (75) feet of the landward end of the dock or pier and floating restroom facilities shall be located to conveniently serve the tenants. Restrooms shall be identified by signs and be accessible to tenants twenty-four (24) hours a day.

    a. Marinas with fewer than ten (10) slips shall provide one (1) toilet and hand washing facility

    b. Marinas with ten (10) to one hundred (100) slips shall provide one (1) toilet and hand washing facility for each gender.

c. Marinas exceeding one hundred (100) slips shall provide an additional toilet and lavatory for each gender

d. Existing marinas shall comply within one (1) year of the effective date of this regulation.

4. Distribution systems for plumbing and wiring at a marina site shall be placed at or below ground and dock levels, in accordance with national marine standards.

5. Public boat launch facilities shall provide and maintain at least one restroom or portable toilet; required number may increase based on projected level of service.

6. Public boat launch facilities that also include a public dock shall provide and maintain a dump station.

5.3.9 Regulations – Management and Operations

1. The discharge of sewage and/or toxic material from boats and/or shore installations is prohibited. The responsibility for the adequate and approved collection and disposal of marina originated sewage, solid waste, and petroleum waste is that of the marina operator. An emergency spill kit and use instructions shall be provided for tenants in an easy to access are and be accessible twenty-four (24) hours a day.

2. Commercial fish or shellfish processing discharge or discarding of unused bait, scrapfish, or viscera shall be prohibited.

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

4. If dredging at marina entrances changes the littoral drift processes and adversely affects adjacent shores, the marina operator shall be required to periodically replenish these shores with the appropriate quantity and quality of aggregate as determined by a geo-hydraulic study, paid for by the operator or owner and completed to the satisfaction of the Administrator.

5. Temporary vacant moorage spaces shall be made available for “transient moorage” (less than two-week stay) when at least one of the following applies:

    a. The marina is owned, operated, or franchised by a governmental agency for use by the public;

    b. The marina provides more than three thousand (3,000) lineal feet of moorage; or

    c. The marina is part of a mixed-use development which includes restaurants or other water-enjoyment uses.

6. Additional transient moorage requirements may be established for Eagle Harbor in the Winslow Master Plan.

7. Marina operators shall execute a lease, contract, or deed which establishes permission to use a slip for a stated period of time and which establishes conditions for use of the slip, including the requirement that all boats meet applicable sanitation regulations.

8. Live-aboard vessels must comply with all marine regulations, policies and procedures of the Coast Guard, federal and state governments which pertain to health, safety and/or

environmental protection. Proof of seaworthiness of the vessel and the adequacy of the mooring arrangement must be provided and laws governing all the citizens of Bainbridge Island must be obeyed.

9. New marinas shall meet the following before occupancy, and existing marinas shall comply with the following within one (1) year from adoption of this program:
    a. Marinas which dispense fuel shall have adequate facilities and establish posted operational procedures for fuel handling and storage to prevent/minimize accidental spillage.
    b. Marinas shall have facilities, equipment, such as emergency spill kits, and established posted procedures for containment, recovery, and mitigation of spilled petroleum, sewage, and toxic products.
    c. Marina operators shall post signs where they are readily visible to all marina users describing regulations:
        i. Pertaining to handling and disposal of waste, wastewater, toxic materials, and recycling;
        ii. Prohibiting the use of marine toilets (i.e., no untreated sewage discharge);
        iii. Prohibiting the disposal of fish and shellfish cleaning wastes; and
        iv. Describing best management practices (BMPs) for boat maintenance and repairs on site.
    d. Garbage or litter receptacles shall be provided and maintained by the marina operator at several locations convenient to users in sufficient numbers to properly store all solid waste generated on site.
    e. Marina docks shall be equipped with adequate lifesaving equipment such as:
        i. Life rings, hooks, ropes and ladders, or equivalent, on the end of fingers; and/or
        ii. One ladder (per side) either every one hundred (100) linear feet of the dock, or every six (6) slips whichever is greater. This regulation does not apply to a float which is less than one hundred (100) feet from a shoreline; or
        iii. At least one ladder to serve a float with six (6) or more slips and is one hundred (100) linear feet in length or less.

5.3.10 Regulations – Boat Launches (includes marine railways)

5.3.10.1 Regulations - Prohibited

1. Boat launches are prohibited in
    a. Significant littoral drift cells, including resource material areas such as feeder bluffs and accretion beaches, points, spits and hooks; except for a public launch as provided for in section 5.3.10.2(2).
    b. Wetlands, marshes, bogs, swamps, and lagoons;

c. Mud flats and salt marshes; and

d. Fish spawning and rearing areas and commercial or recreational shellfish areas.

5.3.10.2 Regulations – Design and Location

1. Launch ramps shall be:

    a. Located on stable shorelines where water depths are adequate to eliminate or minimize the need for:

        i. Offshore or foreshore channel construction dredging; or

        ii. Maintenance dredging; or

        iii. Spoil disposal; or

        iv. Filling; or

        v. Beach enhancement; or

        vi. Other harbor and channel maintenance activities.

    b. Located in areas where there is adequate water mixing and flushing; and

    c. Designed so as not to retard or negatively influence flushing characteristics.

2. For public launch ramps, innovative or hinged boat launches may be permitted on marine accretion shoreforms, provided that continual grading is not required. When grading is permitted it must not adversely affect ecological functions and ecosystem-wide processes. Accessory facilities shall be located out of critical areas.

3. Public boat launches may be allowed on stable banks where current deflectors or other stabilization structures will not be necessary.

4. Boat launches shall not be permitted where the upland within twenty-five (25) feet of the OHWM has a slope that exceeds twenty-five percent (25%) grade and/or where substantial cutting, grading, filing, or defense works is necessary.

5. Boat launches, minor accessory buildings, and haul-out facilities shall be designed to be in character and scale with the surrounding shoreline.

6. Boat launches shall be built from flexible, hinge-segmented pads which can adapt to changes in beach profiles, unless a solid structure is demonstrated to be more appropriate for the intended level of use.

7. Boat launches shall be placed and kept near flush with the foreshore slope to minimize the interruption of geo-hydraulic processes and critical saltwater habitat.

8. Marine railways for boat launching shall be located the minimum distance necessary above existing grade to minimize impact on littoral drift and navigation along the shoreline.

9. Boat launch facilities shall be clearly separated from beaches commonly used for swimming and shall provide signage and provide protection measures to insure the safety of swimmers.

5.4 Commercial Development

5.4.1 Applicability

Uses associated with commercial development which are identified as separate uses in the Master Program are also subject to those regulations. Examples are industry, boating facilities, transportation facilities, and utilities. Commercial development and related shoreline modification activities, such as piers, docks, and bulkheads, will be reviewed under the no net loss provision of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 3.0, Shoreline Designation Policies and Regulations, including the standards in Tables 4-1 through 4-3. Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.3, Vegetation Management; Section 4.1.4, Land Modification; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 6.0, Shoreline Modification Policies and Regulations; and BIMC Chapter 15.18, Land Clearing, as applicable. Other portions of this Program may also apply.

5.4.2 Policies

1. Design and operate commercial uses, activities, and developments to avoid or minimize adverse impacts to ecological functions and ecosystem-wide processes. Encourage restoration of impaired ecological functions and ecosystem-wide process as mitigation for commercial development.
2. Give priority to those commercial developments that are dependent on shoreline locations or that allow a substantial number of people to actively or passively enjoy the shoreline; preference should be given to water-dependent uses, over water-related and water-enjoyment uses.
3. Discourage non-water-oriented commercial uses unless the use contains a mix of commercial and residential development that also includes either a public use benefit (open space, shoreline access, recreation), or a water-enjoyment commercial use.
4. Prohibit commercial developments over water unless the use is water-dependent and requires overwater development.
5. Locate new commercial development in shoreline areas with existing, compatible commercial uses and in a manner that will promote infill.
6. Provide physical or visual access to the shoreline as part of all new commercial development. Existing development should be required to provide public access amenities when building improvements are proposed. Incentives should be provided for commercial use proposals to include additional public amenities
7. Ensure commercial development is aesthetically and acoustically compatible with the surrounding areas.
8. View protection, both to the water and from the water, should be considered in the design and review of commercial development.

5.4.3 Prohibited

1. Nonwater-oriented commercial uses, except as provided in Section 5.4.4.

5.4.4 Regulations- General

1. Commercial uses should be located on shorelines with existing compatible commercial uses and regulated in the shoreline designations as follows:

    a. Water-oriented commercial use and development shall be permitted in the Urban designation-and may be allowed under a conditional use permit in the Shoreline Residential designation.

    b. Water-dependent commercial development that requires an over-water location may be permitted in the Aquatic designation when permitted in the upland environment.

    c. Nonwater-oriented commercial uses are prohibited in the shoreline except as provide in d. or as follows:

        i. As a conditional use in the Urban designation when located on a site physically separated from the shoreline by another property in separate ownership or by a public-right-of-way such that water access is precluded, provided that the property conditions were lawfully established prior to the effective date of this Program; and

        ii. As a permitted use if located in a mixed-use development in the Urban designation as subordinate to a more dominant water-oriented commercial, residential or recreational use contained in the same development, and which also provides significant public benefit amenities such as public open space or recreation, public access, or shoreline restoration.

        iii. The requirements of this section shall not apply to those nonwater-oriented commercial uses located on a site physically separated from the shoreline where access to the land/water interface is precluded.

    d. Water-Oriented and non-water oriented commercial uses may be permitted in a mixed-use development within the Mixed Use Town Center districts provided:

        i. The site is physically separated from the shoreline by another property in separate ownership or by a public-right-of-way such that water access is precluded, provided that the property conditions were lawfully established prior to the effective date of this Program; and

        ii. Water-oriented commercial or non-water oriented commercial development is subordinate to the residential use.

2. A use or development shall not be considered water-dependent, water-related or water-enjoyment until the Administrator makes the determination that the proposed design, layout and operation of the use or development meets the definition and intent of the water-dependent, water-related or water-enjoyment designation.

3. Where commercial development is allowed, it shall be located, designed and constructed in a manner that minimizes adverse impacts to shoreline resources and shall include mitigation to ensure no net loss of shoreline ecological functions and processes pursuant to Section 4.1.2, Environmental Impacts.

4. New commercial development and redevelopment shall provide public access in conformance with the Public Access requirements of Section 4.2.4.
5. When permitted, proposals that include nonwater-oriented commercial uses shall provide a significant public benefit in addition to any required public access, as follows:
    a. Additional public access in the form of unrestricted open space. The Administrator shall determine the amount of access on a case-by-case basis in accordance with the provisions of Section 4.2.4, Public Access – Visual and Physical.
    b. If no water-oriented commercial uses are located on or adjacent to the water as part of a mixed use development, eighty percent (80%) of the shoreline and associated buffers shall be preserved or restored to provide shoreline ecological functions and processes that approximate the functions provided by the site in natural conditions.
    c. The requirements in regulation (a) and (b) may be modified when:
        i. The site is designated as a public access area by a shoreline public access plan, in which case public access consistent with that plan element shall be provided; or
        ii. Specific findings are made demonstrating that the size of the parcel and the presence of adjacent uses preclude restoration of shoreline ecological functions and processes. Where on-site restoration is infeasible, equivalent off-site restoration shall be provided consistent with the policies and regulations of this Program.
    d. Where restoration is proposed, buffers shall be designed as appropriate to protect shoreline resources based on a specific restoration plan and may differ from the standard buffer dimensions provided in Table 4-3, provided that the building envelope for the proposed nonwater-oriented use shall be based on current site conditions.

5.4.5 Regulations – Design and Location

1. The design and location of commercial facilities shall meet the following:
    a. Those portions of the commercial development which are accessory to and not considered water-dependent and/or do not require direct contact with the water shall be set back from the shoreline at a sufficient distance to minimize impacts to water quality, to other shoreline uses and to the shoreline as a scenic view. (See Section 3.0, Shoreline Designations Policies and Regulations, Section 4.1.6, Water Quality and Stormwater Management, and Dimensional Standards Table 4-2.)
    b. Water-dependent commercial development shall be designated and operated to promote joint-use of overwater and accessory facilities such as:
        i. Piers;
        ii. Docks;

iii. Storage;

iv. Restrooms; and

v. Parking.

c. When demonstrated, to the satisfaction of the Administrator, not to be feasible the requirements of Section 5.4.5 (1)(a) and (b) may be reduced in scope or waived.

5.5 Forest Practices

5.5.1 Applicability

Forest Practices are primarily regulated by the Washington Department of Natural Resources under WAC Title 222 or its successor pursuant to the Forest Practices Act (RCW 76.09 or its successor). This section supplements those regulations. Activities which are not regulated under the Forest Practices Act are subject to clearing and grading provisions in Section 4.1.4, Land Modification. Forest Practices are subject to Section 3.0, Shoreline Designation Policies and Regulations, Section 4.0, General (Island-wide) Policies and Regulations, and Section 6.0, Shoreline Modification Policies and Regulations of this Program. Forest Practices and related activities will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.1.3, Vegetation Management; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

5.5.2 Policies

1. Rely on the Forest Practices Act and rules implementing the act and the Forest and Fish Report as adequate management of commercial operations within the shoreline jurisdiction.
2. Ensure timber harvesting is conducted in a manner that does not cause adverse impacts to shoreline ecological functions or ecosystem-wide processes and avoids impacts to navigation, recreation, and public access.
3. Limit timber harvesting in all shoreline areas to selective cutting which protects the shoreline as a scenic value. Shorelines having outstanding scenic or habitat qualities should be left in a substantially natural condition.
4. Accomplish revegetation in shorelines as quickly as possible in accordance with the provisions of the Forest Practices Act. Provisions for forest conversion proposals (Class IV Permits regulated under the Forest Practices Act and locally) are in Section 4.1.3.4, Vegetation Management; Regulations – Exceptions of this Program.

5.5.3 Regulations - General

1. Under the authority of planning and zoning granted to the city under RCW 76.09.240, the city of Bainbridge Island considers all forested areas within its jurisdiction as "lands with a likelihood of future conversion" from forest use as defined under WAC 222-16-060.
2. Conversion of forest land to non-forestry uses (Class IV – General Forest Practice Permit) shall be reviewed in accordance with the provisions for the proposed non-forestry

use and the provisions in the Shoreline Master Program and shall be subject to any permit requirements associated with the non-forestry use.

   a. Timber harvesting shall not be permitted until local plat approval or other applicable land use authorization has been given, and any required shoreline permits have been issued for the land division(s) or intended use(s).

3. All timber harvesting and forest practices except conversions conducted with a Class IV— General permit shall comply with the current rules and regulations adopted under the Forest Practices Act and the Timber, Fish, and Wildlife agreement or their successors.
4. Timber harvesting and forest practices conducted under a Class II, III, or IV Special permit from the Department of Natural Resources shall not be regulated by this Program and shall not require a shoreline permit. These permit categories shall only be authorized for lands that meet the definition DNR forestland, including any policies of DNR relating to proximity of structures to hazard trees.
5. Site preparation by burning and scarification piles shall be prohibited within shoreline jurisdiction.
6. When timberland is to be converted to another use, such conversion shall be clearly indicated on the Forest Practices application. Failure to indicate the intent to convert the timberland to another use on the application will result in subsequent conversion proposals being reviewed as conditional use applications. Such failure to declare intent to convert on the application may provide adequate grounds for denial of subsequent conversion proposals for a period of six (6) years from the date of the Forest Practices application approval, [RCW 76.09.060(3)(b)(i) or its successor].
7. Commercial timber cutting within the shoreline jurisdiction shall be by selective harvest and shall not exceed thirty percent (30%) of the merchantable trees in any ten-year period as required by WAC 222-30-110.

5.6 Industrial Development

5.6.1 Applicability

Industrial development, uses and activities that are identified as separate uses but associated with industrial development or use, are subject to the following provisions; Examples include transportation facilities, utilities, dredging, landfill, piers and docks, and bulkheads. Industrial development-will be reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, Section 3.0, Shoreline Designation Policies and Regulations, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.3, Vegetation Management; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 6.0 Shoreline Modification Policies and Regulations; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

5.6.2 Policies

1. Review new industrial proposals with consideration of regional and state-wide needs for industrial facilities, as well as in allocating shorelines for such development. Coordinate with port districts, adjacent counties and cities and the state in order to minimize new

industrial development that would unnecessarily duplicate under-utilized facilities elsewhere in the region, or result in unnecessary adverse impacts on other jurisdictions.

2. Encourage expansion or redevelopment of existing, legally established industrial areas, facilities, and services with the possibility of incorporating mixed-use development in lieu of the addition and/or location of new or single-purpose industrial facilities.
3. Strongly encourage joint use of piers, cargo handling, storage, parking and other accessory facilities among private or public entities in waterfront industrial areas.
4. Design and locate industrial development to avoid or minimize adverse impacts to ecological functions and ecosystem-wide processes.
5. Require new industrial development to provide physical and/or visual access to shorelines and visual access to facilities whenever possible, when such access does not cause significant interference with operations or hazards to life and property.
6. Preference should be given to locating new industrial development on those parts of the shoreline where industrial development is already permitted. Industrial uses and redevelopment are encouraged to locate where environmental cleanup and restoration can be accomplished.
7. Limit new industrial uses to existing industrial or water dependent commercial sites, such as marinas, where that use is consistent with the shoreline designation. Preferred industrial sites should be limited to water-oriented uses, and should encourage the development of preferred industrial uses, such as small boat haul-out and repair facilities, vessel fueling facilities and water-oriented industry serving local boating needs.
8. Discourage nonwater-oriented uses unless the use is located in a mixed-use development containing a public use benefit such as open space or recreation use, and includes a water-oriented commercial use.

5.6.3 Regulations – Prohibited

1. Storage and/or disposal of industrial wastes within shoreline jurisdiction.
2. Log storage in water.
3. Nonwater-oriented industrial development.

5.6.4 Regulations - General

1. Water-dependent industry shall be permitted in the Urban designation, and those portions of the Aquatic designation which are waterward of the Urban designation, and shall be prohibited in all other designations. Water-related industry shall be a conditional use in the Urban designation and prohibited in all other designations. Nonwater-oriented industry shall be prohibited in all designations.
2. Where industrial development is allowed, it shall be located, designed and constructed in a manner that minimizes adverse impacts to shoreline resources and shall include mitigation to ensure no net loss of shoreline ecological functions and ecosystem-wide processes.

a. Water-dependent industrial uses, such as small boat haul-out and repair facilities, or vessel fueling facilities, shall be given preference over water-related and water-enjoyment industrial and port uses.

b. A use or development shall not be considered water-dependent, water-related or water-enjoyment until the Administrator makes the determination that the proposed design, layout and operation of the use or development meets the definition and intent of the water-dependent, water-related or water-enjoyment designation.

3. Proposed industrial development shall be consistent with any applicable comprehensive waterfront and/or long-range harbor development plans, and should be coordinated with applicable adopted regional and state plans.

4. New industrial development shall be compatible with existing adjacent uses of the shoreline designation in which it is located.

5. Proposed industrial development shall:

    a. Be located to maximize the use of legally established, existing industrial facilities; and

    b. Be located in areas where environmental cleanup and restoration can be accomplished; and

    c. Avoid duplication of pier and dock facilities before expanding into undeveloped areas or building new facilities.

6. Water-related industrial development shall be set back from the OHWM a sufficient distance to avoid disturbance of the Shoreline Buffer or Shoreline Vegetation Management Area. (See and Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.3 Vegetation Management; and Tables 4-1 through 4-3, for dimensions.)

7. Accessory industrial development which does not require a location at or near the water's edge shall be located upland of the water-dependent portions of the development, and outside of the Shoreline Buffer or Vegetation Management Area as established in Section 4.0, General (Island-wide) Policies and Regulations and Table 4-3.

8. New industrial development that includes offshore facilities, floating docks and deep-water port expansion, shall be permitted by conditional use permit, and only when it can be demonstrated that:

    a. Such development is fundamental for the allowed industrial operation; and

    b. Such development results in no net loss of shoreline ecological functions or ecosystem-wide processes.

9. At new or expanded port and/or industrial developments the best available facilities practices and procedures, as specified by state and local agencies, shall be employed for the safe handling of fuels and toxic or hazardous materials to prevent them from entering the water, and optimum means shall be employed for prompt and effective clean-up of those spills that do occur.

5.6.5 Regulations - Design and Location

1. The design and location of industrial facilities shall meet the following:
    a. Those portions of the industrial development that are accessory to and not considered water-dependent and/or do not require direct contact with the water shall be set back from the shoreline at a sufficient distance to minimize impacts to water quality, to other shoreline uses and to the shoreline as a scenic view. (See Section 3.0, Shoreline Designation Policies and Regulations; Section 4.1.6, Water Quality and Stormwater Management; and Tables 4-1 through 4-3.)
    b. Industrial facilities shall be designed and operated to promote joint use of over-water and accessory facilities, whenever practicable, such as:
        i. Piers
        ii. Docks
        iii. Storage
        iv. Restrooms; and
        v. Parking.
    c. Consistent with provisions in Section 4.2.4, Public Access – Visual and Physical, ports and/or water-dependent industry shall provide public access to the shoreline.
    d. Documentation of compliance with noise standards of BIMC 16.16.
2. Display and other exterior lighting shall be designed and operated to minimize glare impacts to nearby properties and local traffic, and shall meet the lighting standards of BIMC Section 18.15.040.

5.6.6 Regulations – Ship and Boat Building and Repair Yards

1. Boatyards and mobile services shall employ best management practices (BMPs) concerning the various services and activities performed and to address potential impacts on the surrounding water quality. Standards for BMPs shall be found in the Washington State Department of Ecology's most recent editions of the "*Boatyard General Permit, National Pollution Discharge Elimination System (NPDES)*" and the "*Storm Water Pollution Prevention Plan for Facilities Covered Under the Boatyard General Permit*".

5.7 Mining

5.7.1 Applicability

Mining is the removal and primary processing of naturally occurring materials from the earth for economic use. For purposes of this definition, "processing" includes screening, crushing, stockpiling, all of which utilize materials removed from the site where the processing activity is located. Mining activities also include in-water dredging activities related to mineral extraction. Processing does not include general manufacturing, such as the manufacture of molded or cast concrete or asphalt products, asphalt mixing operations, or concrete batching operations.

5.7.2 Policies

1. Mining is prohibited within the shoreline jurisdiction.

5.7.3 Regulations - General

1. Mining, including the excavation of sand, gravel, and other minerals, shall be prohibited within the shoreline jurisdiction.
2. Impacts to shorelands and water bodies due to mining operations upland of the shoreline jurisdiction shall be minimized and meet "no net loss" provisions of Section 4.1.2, Environmental Impacts.

5.8 Recreational Development

5.8.1 Applicability

These provisions apply to recreational development, not to casual use of undeveloped open space. They also apply to both publicly- and privately-owned facilities intended for use by the general public, private clubs, groups, associations, or individuals. Recreational development will be reviewed under the "no net loss" provisions of Section 3.0, Shoreline Designation Policies and Regulations; Section 4.0, General (Island-wide) Policies and Regulations; Tables 4-1 through 4-3; Section 4.1.2, Environmental Impacts; and may also be reviewed under Section 4.1.3, Vegetation Management; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 6.0, Shoreline Modification Policies and Regulations; and BIMC Chapter 15.18, Land Clearing, Chapter 16.16 Noise Impacts and BIMC Section 18.15.040 Lighting Impacts, when applicable. Other portions of this Program may also apply.

5.8.2 Goal

Provide substantial recreational opportunities for the public along the shoreline and manage the development of recreational uses to assure that shoreline ecological functions and ecosystem-wide processes are not adversely impacted.

5.8.3 Policies

1. Recognize public recreation on public lands as a preferred use of the shoreline. Water-dependent recreational uses, such as swimming, boating and fishing, are priority uses and should be encouraged.
2. Encourage the coordination of local, state, and federal recreation planning to mutually satisfy recreational needs. Shoreline recreational developments should be consistent with all adopted park, recreation, and open space plans.
3. Encourage a variety of compatible recreational experiences and activities to satisfy diverse recreational needs. The location and design of shoreline recreational development should relate to local population characteristics, density, and special activity demands. Acquisition priorities should consider these needs, demands, and special opportunities, as well as public transit access and access for the physically impaired, where planned or available.

4. Identify shoreline areas with potential for recreation or public access. Acquire identified areas through lease, purchase, or easement, and incorporate these areas into the public park and open space system.
5. Where feasible, link shoreline parks, recreation areas, and public access points as linear systems, such as hiking paths, bicycle paths, easements, and/or scenic drives.
6. Locate, design and operate recreational development to facilitate appropriate use of shoreline resources while also conserving those resources by minimizing adverse impacts to ecological functions and ecosystem-wide processes. Design recreational development to preserve, enhance or create scenic shoreline views and vistas.
7. Where appropriate, passive recreational uses may be permitted in floodplain areas.
8. Encourage the use of shoreline road-ends and publicly-owned lands for public shoreline access and promote the development of shoreline recreational opportunities in suitable areas.
9. Limit or prohibit shoreline use of off-road recreational vehicle or recreational water equipment, such as jet skis and wake boards, where needed to protect the ecological functions or ecosystem-wide processes of the shoreline or protect sensitive wildlife habitat areas.
10. Ensure all recreational developments make adequate provisions for:
    a. Vehicular and pedestrian access, both on-site and off-site;
    b. Proper wastewater and solid waste disposal methods;
    c. Security and fire protection;
    d. The prevention of overflow and trespass onto adjacent properties, including but not limited to, landscaping, fencing, posting of property and screening (through native vegetation or shoreline buffers) of such development from adjacent private property.
11. Ensure trails and pathways on landslide hazard areas are located, designed, and maintained to protect bank stability.
12. Protect and restore publicly-owned natural resource areas located within the shoreline area and include public access and public use as appropriate for the particular resource area.
13. Promote shoreline conservation through acquisition, preservation, and rehabilitation of important natural areas and manage natural areas of public shoreline parks to protect and restore ecological functions, values and features.
14. Use best management practices and low impact development technologies in the construction, maintenance or renovation of recreational grounds or facilities of public shoreline parks.
15. Incorporate opportunities for educational and interpretive information regarding shoreline ecological functions and ecosystem-wide processes in the design and operation of public recreation facilities and other amenities such as nature trails.

5.8.4 Regulations – Prohibited

1. Motorized vehicular access on all beaches and spits, except at approved boat launching facilities (Section 5.3, Boating Facilities).
2. Golf courses in the Natural designations.
3. Golf course fairways which cross streams.
4. Use of fertilizers, pesticides, or other toxic chemicals is prohibited unless an exception-is provided pursuant to Section 4.1.6, Water Quality and Stormwater Management.
5. The use of jet skis and similar recreational equipment shall be prohibited in the Priority Aquatic Categories A and B designations.

5.8.5 Regulations - General

1. Water-oriented recreational development is a priority use of the shoreline, and the primary focus shall be to provide access to and enjoyment of the water and shorelines of the state and shall be consistent with the development regulations for the shoreline designation in which it occurs. Valuable shoreline resources and fragile or unique areas such as marshes, bogs, swamps, estuaries, wetlands, and accretion shoreforms (such as sand spits or accretion beaches), shall be used only for passive and nondestructive recreational activities.
    a. Active water-oriented recreational uses shall be consistent with the shoreline designation in which it is being proposed and shall be permitted in the Island Conservancy, Shoreline Residential Conservancy, Shoreline Residential, Urban, and Aquatic designation. Active recreational development is prohibited in the Priority Aquatic designation; however, vessels shall be allowed:
        i. As provided in BIMC 12.40.060; or
        ii. In Priority Aquatic Category B when:
            A. Operated at 5 knots or less or such that a wake is not created; and
            B. Operated at a noise decibel that does not cause adverse impact to wildlife.
    b. Recreational development to accommodate passive (non-intensive) water-dependent and/or water-oriented recreational or educational uses shall be allowed as a conditional use in the Natural designation, except public trails and public stairways are permitted as a shoreline substantial development or shoreline exemption, when designed to minimize adverse environmental impacts in accordance with Section 4.1.2 Environmental Impacts.
    c. Passive recreational development shall be allowed in the Priority Aquatic designation;
2. Water-oriented recreational use and/or development shall be allowed when the proponent demonstrates that it will not result in a net loss of shoreline ecological functions or processes or have adverse impacts on other shoreline uses, resources and/or values such as navigation and public access, and will provide mitigation in accordance with Section 4.1.2, Environmental Impacts.

3. Activities provided by recreational facilities must have a substantial relationship to the shoreline, or provide physical or visual access to the shoreline. Facilities for water-dependent recreation such as fishing, clamming, swimming, boating, and wading, and water-related recreation such as picnicking, hiking, and walking should be located near the shoreline, while non-water-related recreation facilities shall be located upland.
    a. Within the Natural Designation a single active use area shall be allowed with appropriate compensatory mitigation to accommodate water oriented and non-water oriented cultural events and water related passive recreational uses near the log pond at Blakely Harbor Park, as shown in Appendix E.
4. Recreational development on the shoreline shall provide physical or visual public access consistent with this Program, and Section 4.2.4, Public Access – Visual and Physical.
5. Recreational development on the shoreline shall protect existing shoreline vegetation consistent with this Program, and Section 4.1.3, Vegetation Management.
6. The City shall consult applicable state and local health regulations when issuing shoreline permits for recreational facilities (Title 248 WAC or its successor).
7. Recreational development is required to comply with local and regional recreation plans and link to linear open space, recreational, or scenic systems as provided in the State Comprehensive Outdoor Recreation Planning (SCORP) document, Bainbridge Island Metropolitan Park and Recreation District Comprehensive Park, Recreation, and Open Space Plan, the City of Bainbridge Island's Winslow Master Plan, and the City of Bainbridge Island's Non-Motorized Transportation Plan.
8. The use of motor vehicles including unlicensed off-road vehicles is permitted only on roads and trails specifically designated for such use. Such use is prohibited on tidelands, backshore beaches, streams, or wetlands, except as necessary for public health and safety or maintenance or as provided in Section 5.8.7(1), Regulation-Operations (1), below.

5.8.6 Regulations – Design and Location

1. Recreational development shall be located, designed and constructed to maintain, enhance, or restore scenic views, aesthetic values, and public access, as appropriate. Through the site planning and permit review process, the City may adjust and/or prescribe project dimensions or location of on-site project components, intensity of use, screening, parking requirements, and setbacks as deemed appropriate to meet the recreational needs of the project and the standards of this Program.
2. Recreational developments shall provide vehicular access and parking in accordance with Section 4.2.3, Parking, and shall provide facilities for non-motorized access to the shoreline, such as bicycle and/or pedestrian paths, as prescribed in the City's Non-Motorized Transportation Plan.
3. Shoreline trails and pathways shall be located, designed, constructed and maintained to protect bank stability.
4. All permanent active recreational structures and facilities shall be located outside officially mapped floodplains and floodways. Passive recreation structures, such as picnic tables, benches, viewing platforms may be allowed provided mitigation is provided.

5. Substantial accessory use facilities, such as restrooms, recreation halls and gymnasiums, commercial services, across roads and parking areas, shall be set back from the OHWM according to Table 4-2. These areas may be linked to the shoreline by walkways.
6. Trails utilized for motorized vehicles, including golf carts, shall be set back two hundred (200) feet from OHWM, unless these are combined with a public access trail system. If combined with a public access trail, trails shall be located at least one hundred (100) feet from OHWM.
7. The removal of on-site vegetation shall be limited to the minimum necessary for recreational development areas and pursuant to Section 4.1.3, Vegetation Management.
8. Recreational buildings or structures shall not be built over water, except as provided in Section 5.3, Boating Facilities, and Section 6.0, Shoreline Modification Policies and Regulations.
9. Proposals for recreational development shall include adequate facilities for water supply and sewage and garbage disposal and recycling commensurate with the intensity of the proposed use. Where sewage treatment facilities are not available, the appropriate reviewing authority shall limit the intensity of development to meet local and state on-site sewage disposal requirements. On-site sewage disposal systems shall be located landward of the development, unless not feasible due to site or development constraints and provided that the location is on-site disposal system is consistent with requirements of the reviewing and permitting authority.
10. Recreational facilities shall incorporate appropriate mitigation to minimize light and noise impacts on adjacent and nearby public and private property through the use of screening, native vegetation, fences, signs and related measures.
11. Recreational proposals for publicly-owned shoreline parks shall provide the following:
    a. Recreational development and activities shall provide appropriate public recreational opportunities and promote the ecological restoration of the shoreline environment. Public shoreline areas are intended to provide access to, and enjoyment and use of the water and shorelines while conserving ecological functions and processes, and protecting shoreline resources and fragile areas.
    b. Best management practices (BMPs) and low impact development (LID) techniques shall be incorporated into the design, construction, and operation of public recreation proposals in order to reduce erosion impacts and prevent harmful concentrations of chemicals and sediments from entering water bodies and meet the standards of Section 4.1.6, Water Quality and Stormwater Management.
    c. Educational and historical interpretation specific to the site's shoreline ecology and local history shall be incorporated into the design and operation of a public shoreline recreational development through site amenities such as interpretive signs or other amenities.

5.8.7 Regulations – Operations

1. Operation of motorized vehicles, including utility and maintenance vehicles, shall only be allowed in designated areas specifically designed for vehicular use.
2. The use of jet skis and similar recreational equipment shall be restricted in critical saltwater habitat areas.
3. A chemical management plan designed to eliminate the possibility of damage to riparian vegetation, wildlife, and surface and ground water quality shall be prepared and implemented for golf courses located in shoreline jurisdiction.
4. Recreational fires in commercial uses, public parks and common areas shall only be allowed in accordance with Fire Code regulations in Title 20.12, Burning Restrictions, and within designated barbeque\fire pits, which shall be designed and spaced to facilitate the control of fires both within recreational facilities, between adjacent properties, and on public lands.

5.8.8 Regulations – Golf Courses – Design & Location

1. Golf courses shall be a conditional use requiring both a conditional use permit and a substantial development permit in the upland shoreline designations of Island Conservancy, Residential Conservancy, Residential, and Urban designations.

5.9 Residential Development

5.9.1 Applicability

All development in the shoreline jurisdiction must comply with the Shoreline Management Act (Chapter 90.58 RCW or its successor) and the Master Program. While an individual owner-occupied, single-family residence and its "normal appurtenances" are exempt from the requirement that a Shoreline Substantial Development Permit (SSDP) be obtained from the local government (WAC 173-27-040, or its successor), it must comply with this section and other provisions of the Master Program. Subdivisions and short plats must also comply with all applicable provisions.

Residential development, when permitted by BIMC Title 18, Zoning, and this Master Program, will be reviewed under the "no net loss" provisions of Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.2, Environmental Impacts; and may also be reviewed under Section 4.1.3, Vegetation Management; Section 4.1.4, Land Modification; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater; Section 4.2.4, Public Access, 4.2.7 Utilities Primary; and Accessory. Other portions of this Program may also apply.

5.9.2 Goal

Promote residential development opportunities along the shoreline that are consistent with controlling pollution and preventing damage to the natural environment, recognizing that single-family residential development is a priority use in the shoreline and that impacts to other shoreline priority uses such as, shoreline views, aesthetics, and access, should be considered and minimized.

5.9.3 Policies

1. Consider single-family residential use as a priority use in the shoreline. Develop single-family residences in a manner consistent with producing no net loss of shoreline functions or ecosystem-wide processes, and in conformance with the requirements of this Shoreline Master Program.
2. Locate residential development where there are suitable provisions for utilities, circulation and access, and require development to be designed to:
    a. Maintain or improve shoreline ecological functions and ecosystem-wide processes to assure no net loss;
    b. Provide building setbacks;
    c. Be visually compatible with adjacent cultural and shoreline features, reasonable in size and purpose;
    d. Preserve and enhance shoreline vegetation;
    e. Protect water quality;
    f. Control erosion and provide stormwater management; and
    g. Preserve shoreline open space, views from the shoreline, and vistas of the shoreline, and provide ample open space in side setbacks to preserve views from both the land and water.
3. Ensure the overall density of development, location of structures and access, lot coverage, and height are consistent with Bainbridge Island Comprehensive Plan goals and policies, the provisions of BIMC Title 18, Zoning, and this Program. Development should be appropriate to the physical capabilities and characteristics of the site.
4. Restrict the development of side yards in order to preserve vegetation between developments, mitigate the effect of a "wall" of structures along the shoreline, and enhance public and private view potential.
5. When waterfront properties are divided, ensure common access to the water is provided to all resulting lots.
6. Prohibit new residential development and accessory uses from locating in critical areas including critical saltwater habitat, wetlands, steep or unstable slopes, floodways, migratory routes and marine vegetation areas.
7. Ensure existing legally established overwater residences do not increase intensity of use.
8. Configure new residential land subdivisions within the shoreline to:
    a. Prevent the loss of shoreline ecological functions and ecosystem-wide processes at full build-out of the subdivision;
    b. Reduce the impacts to shoreline processes by preventing the need for new shoreline stabilization or flood hazard reduction measures;
    c. Maintain waterfront areas for the common use of all property owners within the development, and,

d. If creating more than four lots, provide public access to the shoreline, and minimize individual docks and promote community docks.

9. Ensure new multi-family residential development provides public access to the shoreline.
10. Promote residential development that includes measures to protect existing native vegetation and/or restore vegetation along shorelines. Conservation measures should require that residential development avoid, minimize, mitigate, or restore shoreline vegetation functions and achieve no net loss of shoreline ecological functions and ecosystem-wide processes. Vegetation conservation may include avoidance or minimization of clearing or grading, restoration of shoreline vegetation, and/or control of invasive or non-native vegetation.
11. For new residential development and alterations to existing residential development, use non-regulatory methods when possible to protect, enhance, and restore shoreline ecological functions and ecosystem-wide processes and other shoreline resources. Such methods may include voluntary alternatives to address impacts to shoreline ecological functions and ecosystem-wide processes, low impact development techniques, voluntary protection and enhancement projects, habitat management planning, education, or other incentive programs. Such programs must be supported by current scientific and technical information, as described in WAC 173-26-201(2)(a).

5.9.4 Regulations - Prohibited

1. New overwater residential development, including floating homes.
2. New land subdivision that would require shoreline stabilization [WAC 173-26-231(3)(a)(iii)(A)].
3. Increase in intensity, including height or bulk, for any existing legally established overwater residence, or for those portions of a residence that are located over the water.
4. New accessory dwelling units in the Point Monroe District.

5.9.5 Regulations - General

1. Residential development shall be permitted in the Shoreline Residential, Shoreline Residential Conservancy, and Urban designations; shall be conditional use~~s~~ in the Island Conservancy designation; and shall be prohibited in the Natural, Aquatic, and Priority Aquatic designations.
2. Multifamily development shall be permitted in the Shoreline Residential and Urban designations, and prohibited in the Shoreline Residential Conservancy, Island Conservancy and Natural designations.
3. Accessory dwelling units shall be allowed as a conditional use in the Shoreline Residential Conservancy Shoreline Residential and Urban designations and prohibited in the Point Monroe District, Natural designation, and Island Conservancy designation.
4. Land subdivision, consistent with BIMC Title 17, is permitted in the Shoreline Residential, Shoreline Residential Conservancy, and Urban designations, and shall be allowed as a conditional use in the Natural and Island Conservancy designations.

5. Residential development shall meet setback and height standards in Table 4-2 and dimensional provisions of BIMC Title 18, Zoning.
6. Residential development shall meet all provisions of the Section 4.1.2, Environmental Impacts, such that the development results in "no net loss" to shoreline environmental functions and processes.
7. The buffer dimensional requirements in Table 4-1 of this Program shall apply to residences and appurtenances, except when a site-specific analysis is provided in accordance with Section 4.1.3, Vegetation Management, or for new development proposed for the Point Monroe District, which shall meet vegetation requirements of Section 4.1.3.5(9), Vegetation Management; Special Provisions for Point Monroe District. Residential development shall retain and protect existing native vegetation, or restore and enhance native vegetation according to the Vegetation Management and Land Modification provisions of Sections 4.1.3 and Section 4.1.4.
8. Side setbacks, except in the Urban designation and the Point Monroe District, shall total at least thirty percent (30%) of the lot width. Side setback requirement for the Point Monroe District shall total at least fifteen percent (15%) of the lot width. These yards shall remain free of buildings and impervious surfaces as described below.
    a. Building. The minimum side setback shall be established by BIMC Title 18, Zoning. Setbacks for each accessory building shall conform to the side setbacks required of, or established by, the primary residential building. Structures in the side setbacks may not exceed four feet in height from existing grade, except that fences on the side property line may have an additional two feet (2') of non-screening material for a total of six feet (6'). Approved Shoreline Stabilization measures may be installed within the side setbacks.
    b. Impervious Surfaces. No more than a total of two hundred (200) square feet of impervious surface is allowed in the side yard setback outside of the Shoreline Standard Buffer, Site-specific Vegetation Management Area or Point Monroe Vegetation Management Area.
    c. Average Lot Width Measurement. In determining allowed setback for this subsection, lot width shall be measured as depicted BIMC Chapter 18.12, Dimensional Standards.
9. All residential development shall meet BIMC Chapter 15.20, Surface and Storm Water Management, and Section 4.1.6, Water Quality and Stormwater Management of this Program.
10. Home occupations meeting the criteria of BIMC Title 18 shall be considered a residential use.

5.9.6 Regulations – Primary Residential Design and Location

1. Residential Development, except in the Point Monroe District (5.9.6 (2)) below, shall follow the provision for Shoreline Exemptions pursuant to the Shoreline Master Program Administrative Section, BIMC Section 2.16.165, and shall:

a. Be located and designed to avoid the need for shoreline stabilization and flood protection works for the life of the structure, as provided for in Section 6.2.9 Shoreline Stabilization; Regulations – Subdivisions and Section 4.1.7, Flood Hazard Management.

b. Be located and designed to protect existing ecological function in accordance with Section 4.1.2, Environmental Impacts, and Section 4.1.3, Vegetation Management, and use low impact development techniques of Section 4.1.6.6(3) to:

    i. Minimize area of disturbance as provided in Section 4.1.4, Land Modification; and

    ii. Minimize soil compaction; and

    iii. Infiltrate stormwater runoff when the site is suitable for infiltration.

c. Provide a stormwater conveyance that is designed according to the provisions of Section 4.1.6, Water Quality and Stormwater Management.

d. Be located to protect existing views from primary structures on adjacent properties.

    i. Primary Structures shall meet the provisions for structure setback line as provided in Section 4.1.3, Vegetation Management, and shall follow the provisions for Shoreline Exemption permit in the Shoreline Master Program Administration Section of BIMC Section 2.16.165.

e. Designed to provide a physical separation to reinforce the distinction between public and private space. Including but not limited to:

    i. Providing vegetation screening in a landscape plan approved by the Administrator and developed in accordance with requirements in Section 4.1.3, Vegetation Management, and BIMC Section 18.15.010, Development Standards and Guidelines; Landscaping, Screening and Tree Retention, Protection, and Replacement.

    ii. Providing an open space setback recorded on plat or title; or

    iii. Fencing or other means.

2. **Special Provisions for Point Monroe District** – Primary and Accessory Structures. Residential development within the Point Monroe District shall follow the provisions for Shoreline Exemption permit in BIMC 16.12 Part VII, Shoreline Master Program Administration, and shall meet provisions of subsection 5.9.6(1)(a)-(c)&(e) and the following:

    a. Each lot is permitted a development area that is intended to accommodate the primary residence, garage, accessory structure, parking and driveway that does not exceed fifty percent (50%) of the upland lot area, up to a maximum development area of fourteen hundred (1400) square feet. On-site septic systems may be located outside of this development area.

b. All new primary structures shall be located a minimum of thirty feet (30') from the OHWM.

c. Stabilization and flood protection works may be allowed provided the need is demonstrated as specified in Section 6.2.8.1 or 6.2.8.2, Shoreline Stabilization, and 4.1.7, Flood Hazard Management.

d. Overwater structures may be allowed pursuant to Sections 4.1.2, Environmental Impacts and 6.3.4, in Overwater Structures.

5.9.7 Regulations – Accessory Design and Location

1. Except in the Point Monroe District, accessory uses and structures proposed within the Shoreline Buffer or site-specific vegetation management areas shall meet the standards of Section 4.1.3, Vegetation Management.

    a. Accessory structures allowed in the Shoreline Buffer in Table 4-1 shall follow the provision for a Shoreline Exemption in the Shoreline Master Program Administration, BIMC Section 2.16.165.

2. In the Point Monroe District accessory structures, except approved docks or shoreline stabilization, shall be located a minimum of fifteen feet (15') from the OHWM.

5.9.8 Regulations – Residential Subdivisions (Single-Family and Multifamily, including ADU)

1. Subdivision of properties in water designations, Aquatic and Priority Aquatic, shall be regulated the same as the adjacent upland.
2. Land subdivision shall be designed to assure future development will not require shoreline stabilization for one hundred (100) years from date of submittal as demonstrated by a geotechnical report.
3. All new subdivisions shall provide for vegetation management to mitigate cumulative impacts of intensification of use and open space to assure establishment and continuation of a vegetation community pursuant to Section 4.1.3, Vegetation Management.
4. Accessory dwelling units are conditional uses for all lots wholly or partially within the shoreline jurisdiction.
5. New subdivisions or all multifamily residential developments shall provide a community recreation and/or open space area for the benefit of all residents or property owners in the development; provided that, such provisions shall not apply to lot line adjustment, lot consolidation, and subdivision of land into four (4) or fewer lots.
6. New subdivisions or all multifamily residential development of less than four (4) lots and shall provide a common physical or visual access for the benefit of all residents or property owners in the development, which also-meets the provisions of No Net Loss in Sections 4.1.2, Environmental Impacts. An access easement shall be recorded on the face of the plat or title report.

a. If one or more dwelling unit exists prior to the division of land or further residential development, the feasibility of providing a common access shall be determined by the Administrator.

7. New or altered residential developments of more than four (4) dwelling units adjacent to the waterfront, shall dedicate, improve, and maintain public access area sufficient to ensure usable access to the shoreline for all residents of the development and the general public. The amount and configuration of public access shall depend on the proposed use(s), provisions in Section 4.2.4, Public Access – Visual and Physical, and the following criteria:

    a. Subdivisions within the shoreline jurisdiction that have views of water areas shall provide a public pedestrian viewing area.

    b. Subdivisions adjacent to public waterways and marine waters shall provide visual and physical access to public waterways, public marine waters, and public tidelands that are physically accessible at low tide or low water.

    c. Subdivisions subject to requirements for dedication of land to provide open space or mitigate recreation demands of the development shall dedicate such land on or adjacent to public waterways or marine shorelines, as applicable, unless the ecological sensitivity of such land precludes public access. Portions of the dedicated area may be fenced or otherwise restricted to limit public access to ecologically sensitive areas.

5.9.9 Regulations – Residential Development Overwater

1. Live-aboard vessels, shall be allowed only at marinas or in the public open water marina in Eagle Harbor in accordance with Section 5.3, Boating Facilities.

2. All subdivisions shall record a prohibition on new single use private docks on the face of the plat. Shared moorage with less than 6 slips shall meet provisions for community docks in Section 5.3, Boating Facilities. Shared moorage with six (6) or more slips shall meet provisions in Section 5.3

3. An existing overwater primary residential use may continue, and the structure may be repaired, maintained, increased in height and remodeled in accordance with Section 4.2.1, Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots but the use may not be intensified and the overwater structure may not be enlarged or expanded over water.

4. The upland portion of an existing primary residential structure that is partially located over water may be repaired, maintained, remodeled or expanded to the extent allowed by this program and in accordance with Section 4.2.1 Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots.

6.0 SHORELINE MODIFICATION POLICIES AND REGULATIONS

6.1 General Shoreline Modification Provisions

6.1.1 Applicability

Shoreline modifications are generally related to construction of a physical element such as residential development, a dike, bulkhead, dredged basin, pier or fill, but they can include other actions such as clearing, grading, application of chemicals, or vegetation removal. Shoreline modifications usually are undertaken in support of or in preparation for a shoreline use; for example, fill (shoreline modification) required for a ferry terminal (industrial use) or dredging (shoreline modification) to allow for a marina (boating facility use).

The provisions in this section apply to all shoreline modifications within the shoreline jurisdiction. They also apply to projects in which the chief intent is to protect the shoreline of a particular property for which the permit applies such as shoreline stabilization, flood control projects, and flood control programs. Shoreline modification proposals-will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts; Section 4.0, General (Island-wide) Policies and Regulations; and may also be reviewed under Section 4.1.3, Vegetation Management; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; Section 4.1.7, Flood Hazard Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

6.1.2 Goal

Manage shoreline modifications and flood protection to avoid, minimize or mitigate adverse impacts and assure that individually and cumulatively, shoreline modifications do not result in a net loss of ecological function.

6.1.3 Policies

1. Allow structural shoreline modifications only where it is demonstrated to be necessary to support or protect an allowed primary structure and primary appurtenances, or a legally existing principal use that is in danger of loss or substantial damage or are necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.
2. Reduce the adverse effects of shoreline modifications and, as much as possible, limit shoreline modifications in number and extent.
3. Allow only shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions for which they are proposed.
4. Give preference to those types of shoreline modifications that have a lesser impact on ecological functions and ecosystem-wide processes. Require mitigation of identified impacts resulting from shoreline modifications.
5. Plan for the enhancement of impaired ecological functions and ecosystem-wide processes where feasible and appropriate while accommodating permitted uses. As shoreline modifications occur, incorporate all feasible measures to protect ecological shoreline functions and ecosystem-wide processes

6. Avoid and reduce significant ecological impacts according to the mitigation sequence in Section 4.1.2.6.
7. Ensure shoreline modification projects provide for long-term multiple use and shoreline public access, where appropriate.
8. Ensure natural features such as snags and stumps which support fish and other aquatic systems, and which do not intrude on navigational uses or threaten other permitted uses, are left undisturbed except in cases of an approved beach stabilization project.

6.1.4 Regulations – Prohibited Uses

1. Shoreline modifications in or adjacent to wetlands (located in both the upland and the shoreline jurisdiction) and in salmon and trout spawning areas, except for fish or wildlife habitat enhancement.
2. Beach enhancement when it interferes with the normal public use of the navigable waters of the state.
3. Shoreline Modification located on feeder bluffs, except when the area is already developed with a primary residential structure, an essential public facility or transportation facility, in which case stabilization may be allowed pursuant to the provisions in Section 6.2, Shoreline Stabilization.

6.1.5 Regulations - General

1. A pre-application meeting shall be required prior to submitting an application for a replacement, repair or new shoreline modification project.
2. All shoreline modification activities must be necessary to support or protect an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial damage, except shoreline stabilization may be allowed as a shoreline use provided it can be demonstrated that it is necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.
3. All applicable federal and state permits, including the Army Corps of Engineers and the Washington Department of Fish and Wildlife, Washington Department of Natural Resources shall be obtained and complied with in the construction and operation of shoreline stabilization and flood protection works.
4. All new development activities, including additions to existing structures, shall be located as allowed in Section 4.1.5 and located or designed to prevent the need for shoreline stabilization for the life of the development or one hundred (100) years, whichever is greater.
5. All new, replacement, and repair modification activities shall be limited to the minimum footprint necessary to protect an allowed primary structure or legally existing shoreline use.
6. All applications for new, replacement and repair modification activities shall examine and implement alternatives as specified in their specific use sections.

7. All applications for new, replacement and repair modification activities shall be designed, located, sized, and constructed to assure no net loss of ecological functions and processes pursuant to Section 4.1.2, Environmental Impacts.
8. Shoreline stabilization shall be designed in a manner that minimizes:
    a. Scouring of the beach at the toe of the structure; and
    b. Erosion of the waterward beach; and
    c. Impact to adjacent properties; and
    d. The need for mitigation measures.
9. Upon project completion, all disturbed shoreline areas shall be restored and replanted pursuant to Section 4.1.2.5, Regulations – Revegetation Standards.
10. Publicly financed or subsidized works should provide for long-term multiple use and public pedestrian shoreline access.

6.2 Shoreline Stabilization

6.2.1 Principles

Shorelines are by nature unstable, although in varying degrees. Erosion and accretion are natural processes that provide ecological functions and thereby contribute to sustaining the ecology of the shoreline. Human use of the shoreline has typically led to hardening of the shoreline for various reasons including, reducing erosion, providing useful space at the shore, or for access to docks and piers. The impacts of hardening on any one property may be minimal, but cumulatively the impact of this type of shoreline modification is significant.

Shoreline hardening typically results in adverse impacts to shoreline ecological functions and habitat degradation, such as:

- Starvation and/or impoundment of beach sediment which diminishes longshore sediment transport;
- Loss of shoreline vegetation and large woody debris;
- Ground water and hydraulic impacts; and
- Exacerbation of erosion.

There are nonstructural and structural methods of shoreline stabilization. Nonstructural methods include building setbacks, relocation of the structure to be protected, groundwater management, and planning and regulatory measures to avoid the need for structural stabilization. Structural stabilization methods can be “hard” or “soft”. “Hard” structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while “soft” structural measures rely on less rigid materials, such as bioengineering vegetation or beach enhancement. Generally, the harder the construction measure the greater the impact on shoreline processes, such as sediment transport, geomorphology, and biological functions.

The range of non-structural and structural measures varying from soft to hard:

“Soft”

- Upland drainage control;
- Vegetation enhancement;
- Beach enhancement;
- Bioengineering measures;
- Anchor trees; and
- Gravel placement.

"Hard"

- Rock revetments;
- Gabions;
- Groins (rock or concrete);
- Retaining walls and bluff walls;
- Bulkheads; and
- Seawalls.

6.2.2 Applicability

Shoreline stabilization includes actions taken to address erosion impacts to property and dwellings, businesses, or structures resulting from natural processes, such as currents, flood tides, wind, or wave action. These actions include structural and nonstructural methods. Nonstructural methods include building setbacks, relocation of the structure to be protected, ground water management, and planning and regulatory measures to avoid the need for structural stabilization. The provisions of this section apply to the construction, replacement and repair of structures intended to stabilize shorelines for protection of primary structures and primary appurtenances from shoreline erosion caused by wind, waves, and currents. For this section, repair, replacement and new stabilization are defined in Section 8.0, Definitions. Even when exempt from the shoreline substantial development process, however, these structures must comply with all applicable Master Program regulations. A statement of exemption, shoreline conditional use, or shoreline substantial development permit must be obtained from the City before commencing construction of any shoreline stabilization. All proposed shoreline stabilization will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts; Section 4.0, General (Island-wide) Policies and Regulations; Section 6.1, Shoreline Modification and may also be reviewed under Section 4.1.3, Vegetation Management; Section 4.1.5, Critical Areas; Section 4.1.6, Water Quality and Stormwater Management; and BIMC Chapter 15.18, Land Clearing, when applicable. Other portions of this Program may also apply.

6.2.3 Policies

1. Discourage shoreline stabilization, particularly "hard" structural stabilization, through application of appropriate shoreline designations, development standards, and public education.
2. Design, locate, size and construct new, repaired or replacement shoreline stabilization to minimize and mitigate adverse impacts on shoreline ecological functions and shoreline

ecosystem-wide processes. An evaluation of the proposal should consider causes and effects of erosion, including upland erosion, and beach dynamics, such as sediment conveyance, geo-hydraulic processes and ecological relationships, and address these on a reach-specific basis.

3. Design and locate new development, including the creation of new lots, in a manner that prevents the need for shoreline stabilization and armoring.
4. Permit structural shoreline stabilization only when it has been demonstrated that shoreline stabilization is necessary for the protection of existing legally established primary structures, principal uses or public improvements in danger of loss, and when it can be demonstrated that there are no alternative options to the proposed shoreline stabilization that have less impact on the shoreline environment.
5. Allow existing "hard" shoreline stabilization structures to be replaced if there is a demonstrated need to protect the principal use or primary structure from erosion and the replacement structure is designed, located, sized and constructed to assure no net loss of ecological functions and ecosystem-wide processes.
6. Give preference to those types of shoreline stabilization that have a lesser impact on ecological functions and ecosystem-wide processes. To protect ecological functions and ecosystem-wide processes, alternatives to shoreline stabilization should be considered and be based on the following sequencing of solutions:
    a. Avoidance (allow the shoreline to retreat naturally, increase building setbacks or relocate structures);
    b. Flexible defense works constructed of natural materials including, "soft" shore protection, bioengineering, beach nourishment, protective berms or vegetative stabilizations;
    c. Combination of "soft" and structural "hard" shoreline stabilization or hybrid design measures, which excludes structural stabilization below the ordinary high water mark;
    d. "Hard" structural stabilization or rigid works constructed of artificial materials, such as riprap or concrete;
7. Select materials used for construction of shoreline stabilization for long term durability, ease of maintenance and compatibility with local shore features, including aesthetic values and flexibility for future uses.
8. Ensure that publically financed or subsidized shoreline stabilization measures do not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions or ecosystem-wide processes. Where feasible, incorporate ecological restoration and public access improvements into the project.
9. Avoid shoreline stabilization that is constructed waterward of feeder bluffs.
10. Encourage neighboring property owners within an entire drift cell or shoreline reach to coordinate planning and development of shoreline stabilization or other solutions to avoid

erosion of down-drift properties and to address ecological and geo-hydraulic processes, sediment conveyance, and beach management.

11. Where feasible, remove any failing, harmful, unnecessary or ineffective structures and restore shoreline ecological functions and ecosystem-wide processes consistent with the priorities of an ecosystem-wide restoration plan, and replace structures using shoreline stabilization measures that result in less impact to ecological functions and ecosystem-wide processes.
12. Encourage non-structural stabilization using non-regulatory methods to protect, enhance and restore shoreline ecological functions and ecosystem-wide processes, and other shoreline resources. Non-regulatory methods should include incentive programs to utilize low impact development techniques and encourage habitat/resource planning, voluntary enhancement and restoration projects, or programs that provide technical assistance and education to shoreline property owners.
13. Promote shoreline stabilization that incorporates beach restoration or enhancement in accordance with the restoration provisions of Section 4.1.8, Shoreline Restoration and Enhancement, and this Program.

6.2.4 Regulations – Prohibited

1. Gabions, groins, vertical, concave, and flat (hard) faced structures not including near-vertical rock riprap bulkheads in shoreline stabilization construction. Sheet pile style hard stabilization may be allowed for remediation and hybrid shoreline stabilization projects in accordance with Section 6.2.5.
2. Revetments for any purpose unless part of a public facilities project.
3. Construction of a bulkhead, revetment, or other structure for the purpose of retaining a landfill or creating dry land; unless it is proposed in conjunction with an approved commercial or industrial water-dependent use or public use.
4. Shoreline stabilization proposed on shores where valuable geo-hydraulic or biological processes are sensitive to interference or critical to shoreline conservation, such as: feeder bluffs; barrier estuaries, barrier lagoons, wetlands; or accretion shore forms such as sand spits, hooks, bars, or barrier beaches. Except that stabilization proposals to protect a primary single-family residence, primary appurtenance or primary public or transportation facilities, may be allowed on feeder bluffs and spits provide provisions of this Program are met.
5. The use of hard structural stabilization or the hard portions of hybrid stabilization intended to protect a vacant platted lot or to protect a developed lot where a primary structure or primary appurtenance is not in danger from erosion as demonstrated through a geotechnical report.
6. Stabilization that would cause significant impacts to adjacent or down current properties.

6.2.5 Regulations - General

1. All shoreline stabilization proposals shall meet applicable provision of Section 6.1, Shoreline Modifications, and assurance of no net loss of ecological functions and processes, Section 4.1.2, Environmental Impacts.
2. Soft-treatment stabilization shall be used to the maximum extent feasible.
3. New or replacement shoreline stabilization measures are a conditional use for the following:
    a. Proposed shoreline stabilization is adjacent to a feeder bluff.
    b. The nearest adjacent existing shoreline stabilization is greater than one hundred (100) feet of the subject property.
    c. Sheet pile style hard stabilization may be used in:
        i. Remediation projects to contain contaminated soils or sediments when demonstrated to the satisfaction of the Administrator to be the most appropriate solution; or
        ii. Hybrid stabilization when used as a stop-gap measure at or near extreme high water.

6.2.6 Regulations – Location and Design of Shoreline Stabilization

1. Shoreline stabilization shall not be approved in any known or probable midden site without the written permission of the Director of the State Office of Archaeology and Historic Preservation (the State Historic Preservation Officer) (RCW 27.53.060 or its successor).
2. On all shorelines, hard structural stabilization or hard portions of hybrid stabilization shall be located landward of the OHWM. Other structural stabilization shall be located landward of protective berms (artificial or natural), and generally parallel to the natural shoreline except as allowed below:
    a. On high bluffs where no other shoreline stabilization structures are adjoining, hard structural stabilization or hard portions of hybrid stabilization shall be as close to OHWM as feasible to accommodate the design of the shoreline stabilization. However, a revetment footing may extend waterward only the minimum extent necessary to dissipate wave energy.
    b. Shoreline stabilization shall connect flush with existing stabilization on adjoining properties, except when the action will create dry land, in which case the location requirements of the above shall apply.
    c. Soft-treatment stabilization may be permitted waterward of the OHWM if the stabilization measures provide restoration of shoreline ecological functions and processes.
3. Hard structural stabilization, including hard portions of hybrid stabilization, shall be limited to the areas of the site where the stabilization is demonstrated to be necessary, according to Section 6.2, Shoreline Stabilization.

a. When allowed on feeder bluffs, hard structural stabilization, including hard portions of hybrid stabilization shall be located landward of the OHWM.

b. Hard structural stabilization, including hard portions of hybrid stabilization located in a shoreline area that does not include a feeder bluff, shall be constructed landward of the ordinary high water mark and shall follow the natural contours of the shoreline; unless it is demonstrated to the satisfaction of the Administrator to be infeasible to locate the entire hard structural stabilization landward.

4. Replacement stabilization structures may be constructed in the same location if placement landward of OWHM is infeasible as demonstrated to the satisfaction of the Administrator.

5. Shoreline stabilization shall be designed to allow the passage of surface or ground water without causing ponding or saturation of retained soil materials and meet the following design criteria:

   a. The size and quantity of the material shall be limited to only that necessary to withstand the estimated energy intensity of the hydraulic system;

   b. Filter cloth or adequate smaller filter rock shall be used to aid drainage and help prevent settling; and

   c. Provide adequate toe protection to ensure future mitigation or hard structural stabilization measures are not required.

6. Revetments shall be sited and designed consistent with appropriate engineering principles. Professional, geologic, site studies or design shall be required.

7. When a hard structure is required at a public access site, provision for safe access to the water shall be incorporated into the design for stabilization.

8. Stairs or other permitted upland structures may attach to existing hard structural stabilization, but shall not extend waterward, unless it is demonstrated to the satisfaction of the Administrator to be infeasible to locate the entire stairway landward.

9. Overwater structures may attach to existing hard structural stabilization.

10. Hard shoreline stabilization construction shall utilize stable, non-erosion prone, homogeneous materials such as concrete, wood, rock riprap, or other suitable materials which will accomplish the stabilization needs with the maximum preservation of natural shoreline characteristics. See Section 4.1.6, Water Quality and Stormwater Management for additional provisions related to material.

6.2.6.1 Regulations – Location Specific for Replacement of Hard Structural Stabilization

1. Replacement of hard structural stabilization shall not encroach waterward of the OHWM or waterward of the existing shoreline stabilization measure unless the primary structure requiring protection was constructed prior to January 1, 1992, and there is overriding safety or environmental concerns if the stabilization measure is moved landward of the OHWM. In such cases, the replacement structure shall be constructed to abut the existing

shoreline stabilization structure. All other replacement structures shall be located landward of the existing shoreline stabilization structure.

6.2.7 Regulations – Repair of Existing Shoreline Stabilization

1. The Administrator shall allow repair or maintenance of soft-treatment stabilization.
2. Repair of existing structural stabilization shall be allowed as follows:
    a. Existing shoreline stabilization which no longer adequately serves its intended purpose shall be considered a replacement.
    b. Damaged structural stabilization may be repaired up to fifty percent (50%) of the linear length within a Five (5) year period. Repair area that exceeds fifty percent (50%) shall be considered a replacement. Stabilization repair applications shall consider cumulative approvals of each successive application within a five year period
    c. Stabilization repairs may require mitigation pursuant to Section 4.1.2, Environmental Impacts.

6.2.8 Regulations – New or Replacement Shoreline Stabilization

1. When evaluating the need for new, expanded or replacement stabilization measures, the applicant shall provide an analysis from a qualified professional that examines and implements preferred alternatives in the following sequence:
    a. No action (allow the shoreline to retreat without intervention).
    b. Non-structural measures such as vegetation enhancement or addressing upland drainage concerns.
    c. Increase building setbacks and/or relocate structures to a feasible location and/or elevate the structures.
    d. Implement flexible/natural materials and methods, beach nourishment, protective berms, bioengineered stabilization or other soft-treatment measures.
    e. Hybrid structure.
    f. Exclusively hard stabilization materials.
2. An analysis for these alternatives shall be submitted with each replacement or new stabilization application.
3. Point Monroe District properties shall also meet provisions in Section 6.2.8.3, Specific Regulations for Point Monroe District.

6.2.8.1 Specific Regulations: Replacement of Existing Structural Stabilization

1. Replacement of existing structural stabilization is allowed to protect public transportation infrastructure, essential public facilities, and primary structures when all the following apply:

a. The replacement is located landward of OHWM, unless demonstrated to the satisfaction of the Administrator to be infeasible, then it may be located in the same location, except as provided in subsection (3), below; and

b. The danger of loss or substantial damage from shoreline erosion is caused by tidal action, current, and waves rather than landslides, sloughing or other forms of shoreline erosion unrelated to water action at the toe of the slope and such has been identified through a geotechnical report except as provided in subsection (c), below; and

c. A geotechnical report demonstrates a need to protect the primary structure and primary appurtenance from danger of loss or substantial damage within five (5) years due to shoreline erosion, (b) above, in the absence of hard structural stabilization; except the following is not required to identify danger of loss or substantial damage through a geotechnical report:

   i. An existing primary single-family residence located within ten feet (10') or less from the OHWM; or

   ii. An existing primary single-family residence located within ten feet (10') or less from the top of a high bluff (greater than fifteen feet (>15); or

   iii. An existing primary single-family residence located with the Point Monroe District may use the *Spit Science Summary – Point Monroe*, Herrera Environmental, 2012, to substitute for a site-specific geotechnical report.

d. The replacement structure is designed, located, sized and constructed to assure no net loss of ecological functions and processes; and

e. Hard structural shoreline stabilization, including hard partitions of hybrid stabilization, is limited to the 'zone of impact' for protecting a primary structure and its primary appurtenances. See Section 8.0 for 'zone of impact' definition.

2. When a geotechnical report confirms a need to prevent potential loss of or damage to a primary structure, but the need is not as immediate as five (5) years, the report may be used to justify more immediate authorization to protect against erosion using soft-treatment stabilization or hybrid structural measures.

6.2.8.2 Specific Regulations: New Shoreline Stabilization

1. The City may approve new or enlarged structural stabilization measures to protect non-water-dependent public transportation infrastructure, essential public facilities, and primary structures when all the following apply:

   a. The danger of loss or substantial damage from shoreline erosion is caused by tidal action, current, and waves rather than landslides, sloughing or other forms of shoreline erosion unrelated to water action at the toe of the slope and such has been identified through a geotechnical report except as provided in subsection (b), below.

   b. A geotechnical report demonstrates there is significant possibility that the primary structure or primary appurtenance structures will be damaged within three (3)

years as a result of shoreline erosion, (a) above, in the absence of hard structural stabilization measures; except the following is not required to identify danger of loss or substantial damage through a geotechnical report:

i. an existing primary single-family residential structure located within ten feet (10') or less from the OHWM; or

ii. An existing primary single-family residential structure located within ten feet (10') or less from the top of a high bluff (greater than fifteen feet (>15)~~(top of bluff as defined in Appendix B)~~.

c. The new or expanded structure is designed, located, sized and constructed to assure no net loss of ecological functions and/or processes; and

d. Hard structural shoreline stabilization, including hard portions of hybrid stabilization, is limited to the 'zone of impact' for protecting a primary structure and/or its primary appurtenances.

2. Where a geotechnical report confirms a need to prevent potential loss of or damage to a residential primary structure, but the need is not as immediate as three (3) years, the report may be used to justify more immediate authorization to protect against erosion using soft-treatment structural measures.

6.2.8.3 Specific Regulations for the Point Monroe District

1. New foundations and redevelopment of existing foundations that impede the natural over-wash process with the Federal Emergency Management Administration (FEMA) flood zone are considered flood protection works and shall meet provisions in Section 5.9, Residential Development.
2. New hard shoreline stabilization measures are prohibited in Area I, II, and IV of the Point Monroe District, as depicted in the Point Monroe District Map in Appendix E.
3. A conditional use permit shall be required for hybrid structural stabilization within Area III of the Point Monroe District, as depicted in the Point Monroe District Map, Appendix E.

6.2.9 Regulations – Subdivisions

1. Land subdivision shall be designed to assure future development will not require shoreline stabilization for the next one hundred (100) years from date of building permit approval as demonstrated by a geotechnical report.

6.2.10 Submittal Requirements for Shoreline Stabilization Project Applications

1. In addition to the general submittal requirements for all applications specified in BIMC Section 2.16.020(H), the following shall be submitted to the City. Applications for repair of existing stabilization will be required to submit only the first six (6) items. The Administrator may waive some or all of the following based on specific project requirements:

a. Purpose of the project including a calculation that demonstrates the amount proposed to be repaired and past amounts repaired and a summary of replacement and/or repair materials proposed; and

b. Plan and cross section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWM, including an indication of the amount of area proposed to be repaired; and

c. Documentation of pre-construction shoreline characteristics; and

d. Description of physical, geological and/or soil characteristics of the site including existing and proposed slope profiles; and

e. A description of any waste and debris disposal sites for materials generated during construction; and

f. For repair of shoreline stabilization, the design recommendations for minimizing impacts and ensuring the new construction, replaced or repaired stabilization measure is designed, located, sized and constructed to assure no net loss of ecological functions and processes; and

g. Examination and implementation of alternatives in the order of preference as described in Section 6.2.8, Specific Regulations: Replacement of Existing Structural Stabilization, including a description of cost, mitigation cost, maintenance needs and success in protecting the primary structure; and

h. Existing shoreline stabilization within the reach of the proposed project; and

i. Any outreach efforts to coordinate with property owners within the shoreline reach to address an ecosystem-wide restoration plan; and

j. A description of any waste and debris disposal sites for materials generated during construction; and

k. A discussion of the cause of shoreline erosion including assessment of ecosystem-wide processes occurring both waterward and landward of the OHWM and an analysis of on-site and/or adjacent upland drainage.

l. Impact analysis and mitigation report as specified by Section 4.1.2, Environmental Impacts; and

m. Geotechnical report including the estimated rate of erosion and eminent danger within the time threshold as provided in Section 6.2 and the following:

    i. Proof of a geotechnical design of the structural stabilization; and

    ii. Washington State licensed civil engineer with a specialty in coastal engineering or a qualified Washington State licensed geologist with a specialty in coastal geology and a qualified marine habitat biologist shall evaluate the cumulative effects of stabilization methods within a drift cell; and

    iii. Maintenance, Monitoring and Planting Plan as required by Section 4.1.2, Environmental Impacts.

6.3 Overwater Structures

6.3.1 Applicability

Uses which may employ a pier or dock are subject to the provisions herein as well as to the provisions contained in Section 5.0, Specific Shoreline Use and Development Policies and Regulations. Single use, community, or joint-use docks which provide moorage for six (6) or more vessels also must comply with the provisions of Section 5.3, Boating Facilities.

Pursuant to RCW 90.58.030(3)(e)(vii), or its successor, and WAC 173-27-040(2)(h), or its successor, certain activities are exempt from obtaining a Shoreline Substantial Development Permit (SSDP). For the benefit of the lot owner, surrounding properties, and water body users, the City will review all proposals for piers and docks to determine whether:

1. The proposal is or is not exempt from the requirements for a shoreline permit;
2. The proposal is suitably located and designed and that all potential impacts have been recognized and mitigated; and
3. The proposal is consistent with the intent, policies, and regulations of the Act (RCW 90.58.140(1) or its successor) and this Program.

Activities that are exempt from a shoreline substantial development permit must still meet the provisions of the Master Program. A pier, dock or float associated with a single-family residence is considered a water-dependent use provided that it is designed and intended as a facility for to tie up watercraft. Overwater structure activities will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts and Section 4.0, General (Island-wide) Policies and Regulations; Section 4.4.1 Shorelines of Statewide Significance, and may also be reviewed under Section 4.1.5, Critical Areas; and Section 4.1.6, Water Quality and Stormwater Management. Other portions of this Program may also apply.

6.3.2 Goal

Limit the number and size of piers, docks, and floats to the extent necessary to accommodate the proposed use and avoid adverse impacts to shoreline ecological functions and ecosystem-wide processes. Allow overwater structures only when part of a permitted water-dependent use or for public access. Ensure consistency with federal and state regulations.

6.3.3 Policies

1. Encourage multiple-use and expansion of existing conforming piers, docks, and floats over the addition of new facilities. Joint-use facilities are preferred over new, single-use piers, docks and floats.
2. Mooring buoys are preferred to either piers or docks. Locate and design buoy installation to avoid or minimize adverse impacts on ecological functions and ecosystem-wide processes.
3. Locate and design piers, floats, and docks to avoid and minimize possible adverse impacts on ecological functions and ecosystem-wide processes, including fish and wildlife habitat, and impacts to ecosystem-wide shoreline processes such as littoral drift and sand movement. Ensure that piers, floats and docks are:

a. Designed in consideration of the proposed intensity of use, the shoreline characteristics, tidal action, aesthetics and minimization of impacts to adjacent land and public use of the waters of the state.

b. Prohibited at locations where physical limitations exist, such as shallow, sloping tidelands bottoms; high littoral drift areas; landslide-prone areas and/or feeder bluffs.

c. Designed and maintained to mitigate adverse impacts to the environment such as eelgrass beds and fish habitats, shoreline aesthetics, and water quality, and to minimize interference with navigable waters and the public's use of the water and shoreline. Design considerations should:

    i. Limit pier and float length & width to extent necessary for the intended use;

    ii. Provide functional grating for light penetration;

    iii. Configure pier and float orientation to minimize shading;

    iv. Prohibit auxiliary structures on piers and floats;

    v. Provide a mechanism to prevent floats from resting on tidelands;

    vi. Encapsulate floatation to prevent to breakup and loss of material; and

    vii. Use a site-specific distance between piles to avoid adverse impacts to salt water critical habitat.

d. Designed, constructed, and maintained to provide a reasonable level of safety to users.

4. Encourage proponents of commercial pier, float, and dock projects to provide for public docking, launching, or recreational access.

5. Encourage the development of public docks with floats at appropriate road-end locations. Local programs and coordinated efforts among private and/or public agencies should be initiated to develop new public access docks, and to remove or repair failing, hazardous, or nonfunctioning piers and docks and restore such facilities and/or shore resources to a natural and/or safe condition.

6. Encourage the use of natural materials in pier and dock construction. Chemical wood treatments, such as creosote or pentachlorophenol are prohibited on all new structures or repair projects. Plastics and other non-biodegradable materials may be used; however, precautions should be taken to ensure their containment as provided in Section 4.1.6, Water Quality and Stormwater Management.

7. Implement an education program for boat owners and operators on best management practices for use of boat and overwater structure maintenance products.

8. Limit the development of new docks and piers in harbors and encourage public docks and private community docks, except that in Blakely Harbor:

    a. New docks shall be prohibited between Restoration Point and the most eastern point along the north shore of Blakely Harbor; except

i. Two community docks should be allowed, one along each the north and south shores, provided that all residents along each shore are provided a non-extinguishable option to access the community dock located along their respective shore; and

ii. One small public dock and/or pier for the mooring of dinghies and loading or unloading of vessels should be allowed for daytime use.

6.3.4 Regulations - Prohibited

1. Overwater structures in the Priority Aquatic designations and adjacent to the Natural designation except:
    a. New individual, community or joint-use residential docks or piers are permitted in the Priority Aquatic B designation, only in areas where salt marsh vegetation, such as pickleweed (Salicornia sp.), does not exist.
    b. Two mooring buoys per parcel are allowed for public access when upland property is owned by a public entity.
2. Overwater Structures at locations where critical physical limitations exist, such as shallow sloping tidelands with gradients of 3% or less; or areas mapped for high levels of accretion; or geological hazardous areas located outside of harbors and/or feeder bluffs, except when specifically allowed in Section 4.2.4, Public Access – Visual and Physical, or Section 5.3, Boating Facilities.
3. Development of new docks and piers within all shoreline designations within Blakely Harbor between Restoration Point and the most eastern point along the north shore of Blakely Harbor (sometimes referred to as “Pigott Point” or “Jasmine Point”), except as provided in this section.
4. New docks and piers within Murden Cove as shown on the Shoreline Designation Map.
5. New boat houses and/or new covered moorage on either existing or new piers or docks.
6. Hydraulic water jets cannot be used to remove piling.
7. Use of arsenate compounds or creosote-treated members.
8. Over-water field applications of paint, preservative treatment, or other chemical compounds, except in accordance with best management practices set forth in the Boating Facility section of the Master Program or when allowed by a current National Pollution Discharge Elimination System (NPDES) permit from the Department of Ecology.
9. Bulk storage for gasoline, oil and other petroleum products for any use or purpose on piers and docks. Bulk storage means non-portable storage in fixed tanks.

6.3.5 Regulations - General

1. Except for the provisions contained in this chapter, new piers and docks shall be a permitted use in the Urban, Shoreline Residential, and Aquatic designations, and shall be a conditional use in the Shoreline Residential Conservancy and Island Conservancy designations.

2. Mooring buoys are a preferred use, over docks, where feasible.
3. Piers and docks shall be located and designed to minimize interference with the use of navigable waters and may be limited in length or prohibited, where necessary, to protect navigation, public use, or habitat values including critical saltwater habitat.
4. If a bulkhead-like base is proposed for a fixed pier or dock the base shall be built landward of the ordinary high water mark or protective berg and is considered shoreline stabilization and must meet provisions of Section 6.2 Shoreline Stabilization.
5. Structures on piers and docks shall be strictly limited in size to avoid impacting shoreline views.
6. Piers and docks shall require a building permit and shall meet standards set by the building official, except public ferry terminals as part of the state highway system.
7. Lighting shall:
    a. Satisfy the provisions of BIMC 18.15.040;
    b. Be the minimum necessary, or as required by the Coast Guard, to locate the dock at night; and
    c. Should minimize glare.
8. Mitigation requirements of Section 4.1.2, Environmental Impacts, may be met through mitigation standards for the United States Army Corps of Engineers (USACE) permit process.
9. New docks and piers shall be allowed only for water-dependent uses or public access. As used here, a dock associated with a single-family residence is a water-dependent use and may be permitted, provided that it is designed and intended as a facility for access to watercraft and otherwise complies with the provisions of the Act and this Program.
10. Piers and dock construction shall adhere to Fish Window provisions found in WAC 220-110 by the Washington Department of Fish and Wildlife

6.3.6 Regulations – Location, Design and Construction Standards – Pier, Dock, Float

1. A single use dock consists of pier, ramp, float, and one boat lift. An additional boat lift may be added per dwelling unit for joint-use docks.
2. When plastics or other non-biodegradable materials are used in float, pier, or dock construction, precautions shall be taken to ensure their containment.
3. Overhead wiring or plumbing is not permitted on overwater structures.

6.3.7 Regulations – Specific

6.3.7.1 Piling Regulations

1. Principle: Piles are physical barriers to fish migration and have the potential to leach contaminants into aquatic and nearshore environments. Piling installed close together can cause floating debris to accumulate, which can lead to increased shading and predator

protection. The fewest number of pilings necessary should be installed and spacing between piling should be maximized. Projects must be designed to minimize abrasion between the pier, ramp and float caused by tidal fluctuations because this can result in the deposition of contaminants into the water and over time will cause a loss of structural integrity requiring additional maintenance by the applicant.

a. Replacement or new piling shall be steel, concrete, plastic or untreated or approved treated wood, if approved by USACE. Any piling subject to abrasion (and subsequent deposition of material into the water) must incorporate design features to minimize contact between all of the different components of overwater structures during all tidal elevations.

b. New piling associated with a new pier, except large water-dependent ferry terminals, must be spaced at least twenty feet (20') apart (lengthwise along the structure) unless the length of structure itself is less than twenty feet (20'). If the structure itself is less than twenty feet (20') in length, piling can only be placed at the ends of the structure. Piles in forage fish spawning areas need to be spaced at least forty feet (40') apart.

c. If the project includes the replacement of existing piling, they should be either partially cut with a new piling secured directly on top, fully extracted, or cut 2-feet below the mudline. If treated piling are fully extracted or cut, the holes or piles must be capped with clean, appropriate material.

d. A maximum of two moorage pilings may be installed to accommodate the moorage of boats exceeding the length of the floats.

e. Piles, floats, or other components in direct contact with water shall not be treated or coated with biocides such as paint or pentachlorophenol. In saltwater areas characterized by shellfish populations or in shallow embayments with poor flushing characteristics, untreated wood, used pilings, precast concrete, or other nontoxic alternatives shall be used. In all cases where toxic-treated products are allowed, products, methods of treatment, and installations shall be limited to those that are demonstrated as likely to result in the least possible damage to the environment based on current information.

f. Piling employed in piers or any other structure shall have a minimum vertical clearance of 18 inches above extreme high water.

6.3.7.2 Pier Regulations

1. Principle: In the Puget Sound, the intertidal and sub-tidal substrate supports a complex web of plant and animal species. Juvenile salmon, called "salmonids," young and adult bull trout, and juvenile rockfish use nearshore marine areas for feeding, rearing, and as migratory corridors. Their predators are generally located in deeper waters that young fish tend to avoid. As they mature they become less dependent on shallow areas and begin preying on forage fish, many of which spawn on the intertidal substrate around eelgrass, kelp beds and macroalgae. Piers create shadows that can impact the viability of marine vegetation that require sunlight to grow. This subsequently adversely impacts the habitat of fish that so many other species (including human beings) rely upon. In

addition, large shaded areas provide cover for predators so for these reason the amount of shade created by piers must be minimized.

a. The width of the modified portion of a pier or proposed new pier must not exceed four (4) feet for single use or six (6) feet for joint use. Pier width for marinas or public use docks may exceed these restrictions if they provide mitigation, which may include artificial lighting under the pier during daytime hours.

b. Functional grating resulting in a total open area of a minimum of thirty percent (30%) must be installed on all new or replacement piers that are four to six feet (4-6') wide. For example, this can be achieved by installing grating with sixty percent (60%) open area on at least fifty percent (50%) of the pier or by grating a larger percentage of the pier with grating with openings of less than sixty percent (60%). Site conditions may require pier to be one hundred (100%) or fully grated.

c. For all sections of the pier that span upper intertidal areas with obligate vegetation, that pier section shall be fully grated with grating having sixty percent (60%) open area.

6.3.7.3 Float Regulations

1. Principle: Sharp shadows cast by floats and float tubs have been shown to discourage salmonids and other young fish from passing underneath, forcing them into deeper water where their chance of being preyed upon is increased and water temperature and conditions are different. In the case of rockfish, they give birth to live larval young that spend several months being passively dispersed by tidal fluctuations, as they mature they move out to deeper water but initially are at a high risk of predation. Manmade shade creates artificial pockets of opportunity for the predators of young fish and unlike the shade from overhanging vegetation the negative impacts outweigh the benefits. Finally, to prevent damage to the substrate, benthic invertebrate communities and vegetation, floats should not rest on substrate low tide and should be fully encased to prevent the deterioration and dispersion of floatation materials.

   a. For a single-use structure, the float width must not exceed eight (8) feet and the float length must not exceed thirty feet (30'). Functional grating must be installed on at least fifty percent (50%) of the surface area of the float.

   b. For a joint-use structure, the float width must not exceed eight (8) feet and the float length must not exceed sixty feet (60'). Functional grating must be installed on at least fifty percent (50%) of the surface area of the float.

   c. To the maximum extent practicable, floats must be installed with the length in the north-south direction.

   d. If the float is removed seasonally, the applicant needs to indicate this in their application along with the proposed storage location. Floats should be stored above mean high/high water/ordinary high water line at a City approved location. City authorization may be required if the float will be stored within City jurisdiction (even within a marina).

   e. Flotation for the float shall be fully enclosed and contained in a shell (e.g., polystyrene tubs not shrink wrapped or sprayed coatings) that prevents breakup or

loss of the flotation material into the water and is not readily subject to damage by ultraviolet radiation and/or abrasion caused by rubbing against piling and/or waterborne debris.

f. Flotation components shall be installed under the solid portions of the float, not under the grating.

g. If the float is positioned perpendicular to the ramp, a small float may be installed to accommodate the movement of the ramp due to tidal fluctuations. The dimensions of the small float cannot exceed six (6) feet in width and ten (10) feet in length.

6.3.7.3.1 Float Stop Regulations

1. Principle: Floats need to be above the substrate, the preferred and least impacting option is to suspend the float above the substrate by installing float stops on pilings designed to anchor floats, installing a few stub pilings, or in certain situations it could be appropriate to install float feet. In all cases, the stops must be able to fully support the entire float during all tidal elevations.

    a. Floats need to be suspended a minimum of one foot (1') above the tidal substrate at all tide levels.

    b. To suspend the float above the substrate, the preferred and least impacting option is to suspend the float above the substrate by installing float stops (stoppers) on piling anchoring new floats. The stops must be able to fully support the entire float during all tidal elevations.

    c. If float stops attached to pilings are not feasible, then up to four 10 inch diameter stub pilings can be installed instead, except an additional two may be installed for joint-use floats.

    d. Float feet attached to the float may be considered an option only under these circumstances:

        i. In coarse substrate, D252 of 25mm or larger for a grain size sample taken from the upper one foot of substrate;

        ii. For elevations of minus 3 MHHW and lower at D25 of 4mm or larger for a grain size sample taken from the upper one foot of the substrate (intent is to exclude muck);

        iii. For repair or replacement of existing float feet if the following two conditions are met: (1) substrate looks like it contains mostly gravel (no analysis needed, picture sufficient), and if (2) proposed replacement or repair includes other improvements of the environmental baseline like the removal of creosote-treated piling and increased amounts of grating.

    e. Floats can be held in place with lines anchored with a helical screw or "duckbill" anchor, piling with stoppers and/or float support/stub pilings.

i. For a single-use float, a maximum of four (4) pilings (not including stub piling), helical screws, or "duckbill" anchors can be installed to hold the float in place.

ii. For a joint-use float, a maximum of eight (8) piling or helical screw or "duckbill" anchors can be installed to hold the float in place.

iii. If anchors and anchor lines need to be utilized, the anchor lines shall not rest on the substrate at any time.

iv. In rocky substrates where a helical screw or "duckbill" anchor cannot be used, if the applicant submits a rationale why these types of anchors cannot be used and the Administrator concurs with this rationale, an approved anchor of another type (i.e., concrete block) may be permitted.

6.3.7.4 Regulations – Residential Community and Joint-use Piers and Docks

1. Any hotel, motel, and/or multifamily residential development proposing to provide moorage facilities shall be required to construct a single, joint-use moorage facility. The Administrator may authorize more than one joint-use moorage facility if a single facility would be inappropriate or undesirable, given the specific conditions of the site. Facilities for moorage of six (6) or more vessels are considered a marina and must meet regulations in Section 5.3, Boating Facilities.

2. Proposals for community or joint-use piers and docks shall demonstrate, by proof of recording of a covenant binding current and future parties, that adequate maintenance of the structure and the associated upland area will be provided by identified responsible parties. The proposed covenant shall be filed as part of the permit application and recorded after final approval. An access easement to joint use dock shall be granted for all lots or dwelling units.

3. In Blakely Harbor:

   a. A total of two (2) community docks shall be a conditional use within the upland, and aquatic designations with no more than one along each the north and south shores, respectively, provided that all residents along each shore shall have a non-extinguishable option to access the community dock located along their respective shore;

   b. One day time use public dock and/or pier for the mooring of dinghies and loading or unloading of vessels shall be a conditional use within the upland and aquatic designations; and

   c. Such community and public docks shall comply with this master program and other applicable laws; shall be the minimum size necessary; and shall be sited and designed to mitigate adverse impacts to navigation, views, scenic character, and natural resources as much as possible. Such community and public docks shall also be reasonably passable to swimmers, beach walkers, and human-powered water craft.

6.3.7.5 Regulations – Commercial/Industrial Facilities Piers and Docks

These standards apply to piers and docks intended for any commercial or industrial use other than commercial moorage of boats in marinas. (See also Section 5.3, Boating Facilities, Section 5.4, Commercial Development, and Section 5.6 Industrial Development.)

1. Substantial development permits for docks or piers serving single commercial or industrial enterprises shall not be granted until the access needs of adjacent commercial and/or industrial enterprises have been determined.
2. Commercial or industrial piers or docks shall not extend offshore farther than the most shoreward of the following:
    a. The average length of the piers on the two adjoining properties;
    b. In Eagle Harbor, the Constriction Limit Line;
    c. Elsewhere, the distance necessary to obtain a depth of four feet (4.0') of water as measured at extreme low tide at the landward limit of the moorage slip; or
    d. The line of navigation; and
    e. In no case shall piers and their associated ramps and floats extend greater than 15% of the perpendicular shore-to-shore distance across a water body, except where a navigational study has been submitted for City review and approval.
3. Facilities and procedures for receiving, storing, dispensing, and disposing of oil and other toxic products shall be designed to ensure that such oil and other toxic products are not introduced into the water body.
4. Spill clean-up facilities shall be available for prompt response and application at all piers and docks involved in oil and hazardous products transfer.

6.3.7.6 Regulations – Residential (Joint, Community and Individual) Piers and Docks

1. New subdivisions and short subdivisions with shoreline frontage shall be required to provide community docks rather than individual, private docks.
2. Size.
    a. Maximum width of a pier or dock shall be the minimum necessary to accomplish moorage for the intended boating use. (See 6.3.7.1 Regulations – Specific, above, for additional restrictions.); and
    b. The length shall not extend beyond the average length of adjacent docks, within five hundred feet (500') of the proposed location or the distance necessary to obtain a depth of nine feet (9') of water as measured at mean lower-low water (MLLW) at the landward limit of the moorage slip, whichever is closer to shore. A dock shall not extend beyond the adjoining property dock or the line of navigation and in no case shall piers and their associated ramps and floats extend greater than 15% of the perpendicular shore-to-shore distance across a water body, except where a navigational study has been submitted for City review and approval; and

c. In Eagle Harbor, a pier or dock shall not extend beyond the Construction Limit Line; and

d. A pier or dock shall not extend beyond the Harbor Structure Limit line shown in Appendix E.

3. Side-yard Setbacks.

   a. Docks, piers and floats shall be set back a minimum of ten feet (10') from side property lines, except that community piers, docks, and floats may be located adjacent to or upon a side property line when mutually agreed to by covenant with the owners of the adjacent property. A copy of the covenant must be recorded with the County Auditor and filed with the application of the permit.

4. Community docks and piers shall include no more than one (1) moorage space per dwelling unit or lot.

6.3.7.7 Regulations – General Mooring Buoys and Recreational Floats

1. Mooring buoys and recreational swim floats use shall be permitted in the Aquatic environment offshore from Island Conservancy, Shoreline Residential, Shoreline Residential Conservancy, and Urban designations.
2. Mooring buoys for commercial use shall be permitted only as conditional uses offshore from the Urban designation. Mooring buoys for public open water moorage and anchorage areas shall be permitted in the Aquatic designation offshore of all upland designations.
3. No more than one structure may be installed for each ownership. However, properties that contain at least two hundred (200) linear feet as measured along the shoreline may be permitted more installations on a case by case basis as determined by the City and the State Department of Natural Resources [WAC 332-30-148(3) or its successor], Properties where the waterfront lot is owned in community, may be permitted, additional mooring buoys with the total not more than one (1) per one hundred (100) linear feet of shoreline ownership.
4. Mooring buoys for commercial vessels adjacent to commercial or industrial zones are a Shoreline conditional use. One buoy is allowed per ownership.
5. A contractor doing waterfront work involving floating equipment may have one (1) temporary mooring buoy provided it is the responsibility of the contractor to ensure that all necessary permits are obtained from all agencies with jurisdiction.

6.3.7.8 Regulations – Location, Design and Construction Standards Mooring Buoys and Recreational Floats

1. In order to protect shellfish beds, new moorings buoys shall not be permitted where density will exceed one buoy per one hundred (100) linear feet.
2. Buoys shall not interfere with navigation, shall be visible in daylight one hundred (100) yards away, and shall have reflectors for night visibility.

3. If a buoy is located offshore of the extreme low tide line, the owner shall obtain a lease for the bed of navigable waters from the Department of Natural Resources. [RCW 79.105.430 or its successor].
4. Buoys shall lie between the waterfront property side lot lines extended beyond the shoreline, except those on state waters. Buoys shall not swing across the extended side lot lines. Where the configuration of the waterfront lot precludes these requirements, authorization from the affected adjacent waterfront property owners must be obtained. This provision shall not apply to buoys for public open water moorage and anchorage areas.
5. Mooring buoys shall be installed at least sixty (60) feet from other permitted piers, docks, or floats.
6. Buoys shall be located:
    a. At a minimum depth of nine feet (9') MLLW with a standard single mid line float; the minimum depth may be reduced with an alternate system approved by the Administrator; and
    b. Landward of the Construction Limit Line in Eagle Harbor;
    c. Landward of the Harbor Structure Limit Line shown in Appendix E;
    d. Elsewhere not more than two hundred feet (200') beyond extreme low tide, the -18 feet MLLW depth contour, or the line of navigation, whichever is appropriate. The placement of rafts and buoys beyond the -18 feet MLLW contour or 200 feet will be evaluated on a case by case basis. [WAC 332-30-148(2) or its successor]; and
    e. Buoys for public open water moorage and anchorage areas shall be allowed waterward of the Construction Limit Line in Eagle Harbor.
7. Recreational floats shall be located as close to shore as possible. and no farther waterward than the following limits:
    a. In Eagle Harbor, the Construction Limit Line; or
    b. Elsewhere, the distance necessary to obtain a depth of four feet (4') of water as measured at extreme low tide at the landward end of the float, or the line of navigation, whichever is closer to shore.
8. Recreational floats must be built so that the deck surface is one foot (1') above the water's surface and shall have reflectors for night visibility.
9. Recreational floats shall not exceed eight feet (8') by feet (8').
10. All recreational floats shall include stops, or device or system approved by the Administrator, which serve to keep the floats off the bottom of tidelands at low tide, see Section 6.3.7.3.1, Float Stop Regulations.

5. Survey of littoral boundary lines;
6. Location, width, height, and length of piers or docks on adjacent properties within five hundred feet (500') of proposed structure;

7. Agreements, if any, for cooperative use; and
8. Method of removing piling, if applicable.

6.4 Dredging and Dredge Material Disposal

6.4.1 Applicability

Dredging is the removal of material from the bottom of a water body. The purposes of dredging might include: deepening a navigational channel, berth, or basin; streambed maintenance; use of dredged material for fill or habitat enhancement (effective reuse); and removal of contaminated sediments. Dredged material disposal on land is also subject to the fill policies and regulations of this program. Pursuant to WAC 173-27-040 or its successor, certain activities, such as those associated with normal maintenance and repair, are exempt from the requirements for a SSDP, but may still require a letter of exemption, shoreline conditional use permit or variance.

All actions are required to comply with the Shoreline Management Act and all provisions of the Master Program. Department of Ecology and US Army Corps of Engineers notifications of dredging proposals will be reviewed by the City to determine whether the activity is exempt from the requirements for a substantial development permit and to ensure compliance with regulations of the Act and the Master Program.

Dredging activities will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.3, Vegetation Management; Section 4.1.4, Land Modification; Section 4.1.5, Critical Areas; and Section 4.1.6, Water Quality and Stormwater Management; Section 6.5 Fill. Other portions of this Program may also apply.

6.4.2 Goal

Minimize dredging and dredge material disposal within the shoreline jurisdiction.

6.4.3 Policies

1. Design and locate new development to avoid dredging and discourage operations, including disposal of dredge materials. When dredging cannot be avoided, the operations and dredged material disposal shall be located and conducted in a manner which minimizes damage to the ecology and natural resources of both the area to be dredged and the disposal site.
2. Prohibit dredging for the primary purpose of obtaining fill material except for projects associated with state or federal environmental remediation operations or authorized habitat restoration.
3. Plan and conduct dredging operations to minimize interference with navigation and adverse impacts to other shoreline uses, properties, and values.
    a. Dredging for the purpose of establishing, expanding, relocating or reconfiguring a navigation channel should be allowed where necessary to assure safe and efficient accommodation of existing or proposed navigational uses and then only when ecological impacts are minimized and mitigation is provided to offset adverse impacts.

b. Maintenance dredging of established navigation channels should be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

6.4.4 Regulations – Prohibited

1. New dredging activity is prohibited in the following:
    a. In environmentally sensitive habitats (e.g., stream mouth estuaries, wetlands) except by shoreline conditional use permit.
    b. Along net-positive drift cells and/or where geo-hydraulic processes are active and accretion shoreforms would be damaged, altered, or irretrievably lost.
    c. In shoreline areas with bottom materials that are prone to significant sloughing and refilling due to currents or tidal activity, thus resulting in the need for continual maintenance dredging.
    d. In habitats identified as critical to the life cycle of officially designated or protected fish, shellfish, or wildlife.
    e. In areas where concentrations of environmental pollutants or toxic chemicals are present in the bottom of sediments and would be released in dredging operations, except as part of a permitted environmental enhancement or remediation program.
    f. For the primary purpose of obtaining material for landfill, upland construction, or beach nourishment is prohibited.
    g. On or in archaeological sites
2. Dredging shall be prohibited in the Priority Aquatic Category A designation.

6.4.5 Regulations - General

1. Dredging is a conditional use in the Aquatic designation if permitted in the upland designation and shall be for the restoration, enhancement, or maintenance of natural resources and navigational channels or for publicly-owned ferry terminals. Dredging shall be permitted as a conditional use in the Priority Aquatic Category B designation as part of an approved restoration proposal.
2. Proposals for dredging and dredge spoil disposal, when permitted, shall:
    a. Be kept to the minimum necessary to accommodate the proposed use;
    b. Comply with applicable federal, state, and other local regulations;
    c. Employ appropriate measures to protect public safety and prevent adverse impacts on other approved shoreline uses;
    d. Taken appropriate measures to ensure the activity will not interfere with fishing or shellfish harvesting;
    e. Employ appropriate best management practices to protect marine, estuarine, freshwater and terrestrial species and critical saltwater habitats and to minimize adverse impacts such as turbidity, release of nutrients, heavy metals, sulfides, organic materials, or toxic substances, depletion of oxygen, disruption of food

chains, loss of benthic productivity, and disturbance of fish runs and important localized biological communities;

f. Be scheduled so as to not materially interfere with the migratory movements of anadromous fish;

g. Not adversely alter natural drainage and circulation patterns, currents, and tidal flows, or significantly reduce flood water capacities.

h. Utilize techniques that cause minimum dispersal and broadcast of bottom material; hydraulic dredging shall be used wherever feasible in preference to agitation dredging;

i. Not interfere with geohydraulic processes;

j. Be found, through analysis by a qualified professional, to be minimally or nonpolluting; and

k. Revegetate land disposal sites with native vegetation species and other approved plants shall be required according to Section 4.1.2.5, Regulations – Revegetation Standards.

6.4.6 Regulations – Specific Dredging

1. Dredging, when allowed in Section 6.4.5, Regulations – General, shall support the following uses and developments:

   a. Approved harbors, marinas, ports, and water-dependent industries;

   b. Development or maintenance of essential public infrastructure and facilities;

   c. Environmental clean-up activities required by the Model Toxics Control Act (MTCA) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);

   d. Underground utility installation requiring trenches when boring, directional drilling, and other installation methods are not feasible;

   e. Maintenance dredging for the purpose of restoring a lawfully established industrial or commercial water-dependent development;

   f. Maintaining, establishing, expanding, relocating or reconfiguring navigation channels and basins where necessary to assure the safety and efficiency of existing navigational uses;

   g. Ecological restoration and enhancement projects benefiting water quality and/or fish and wildlife habitat; or

   h. Public access and public water-oriented recreational developments/uses, including construction of public piers and docks.

2. New development shall be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.

3. Maintenance dredge options shall occur in the same location, depth, and width as previously permitted.

6.4.7 Regulations – Dredge Material Disposal

1. All unconfined, open water dredge disposal activities shall comply with the Puget Sound Dredged Disposal Analysis (PSDDA) criteria and guidelines and other applicable local, state and federal regulations.
2. When consistent with this Program, disposal of dredged materials in water areas other than PSDDA sites may only be allowed for the following reasons:
    a. To restore or enhance habitat;
    b. To reestablish substrates for fish and shellfish resources;
    c. To nourish beaches that are starved for sediment; or
    d. To remediate contaminated sediments.

6.5 Fill

6.5.1 Applicability

Fill is the placement of soil, sand, rock, gravel, existing sediment, or other material (excluding solid waste) along the shoreline below the OHWM, or on wetland or upland of the OHWM Fill activities shall only be allowed as part of an approved shoreline use and/or development activity and shall be subject to the requirements of the principal use/development. Speculative fill activity is prohibited. Any fill activity conducted within shoreline jurisdiction must comply with the following policies and regulations. Beach nourishment as defined in the Shoreline Master Program shall not be considered fill. Excavation waterward of the ordinary high water mark is regulated under Section 6.4, Dredging and Dredge Material Disposal. Fill activities will be reviewed under the "no net loss" provisions of Section 4.1.2, Environmental Impacts, and may also be reviewed under Section 4.1.4, Land Modification; Section 4.1.5, Critical Areas; and Section 4.1.6, Water Quality and Stormwater Management. Other portions of this Program may also apply.

6.5.2 Policies

1. Allow fill waterward of the OHWM only when necessary to facilitate commercial or industrial water-dependent and/or public access uses, and/or cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan, and is a conditional use.
2. Permit landfill landward of OHWM when necessary to support permitted uses, and when significant impacts can be avoided or mitigated.
3. Limit fills to the minimum extent necessary to accommodate an approved shoreline use or development and ensure fills are designed and located so that there will be no significant damage to existing natural resources, including surface water drainage systems, and with assurance of no net loss of shoreline ecological functions and ecosystem-wide processes.
4. Ensure the evaluation of fill projects addresses the following factors:
    a. Impacts to shoreline ecological functions and ecosystem-wide processes;

b. Conflict with potential and current public use of the shoreline and water surface area as identified in adopted City plans, policies, and programs; and

c. Navigation restriction.

5. Ensure fill projects are designed to avoid or eliminate erosion and sedimentation impacts, both during initial landfill activities and over time.

6.5.3 Prohibited

1. Speculative fill activity.
2. Fill that will result in significant adverse impacts that cannot be avoided or mitigated.
3. Fill in the Priority Aquatic designations.

6.5.4 Regulations - General

1. Fill is allowed as a conditional use as follows:

   a. In the Urban, Shoreline Residential, and Shoreline Residential Conservancy designations.

   b. In the Island Conservancy and Natural designations only for the restoration, enhancement, or maintenance of natural resources. See Section 4.1.8, Shoreline Restoration and Enhancement for additional requirements and permit requirements.

   c. In the Aquatic designation, for commercial or industrial water-dependent or essential public facilities, or as part of a permitted environmental enhancement or remediation project.

2. When allowed in (1) above, fill waterward of the OHWM shall be necessary for:

   a. Approved marinas, ports, and other water-dependent industries where upland alternatives or structural solutions including pile or pier supports are infeasible.

   b. Development or maintenance of essential public infrastructure and facilities.

   c. Environmental clean-up activities required by MTCA and CERCLA.

   d. Maintenance of a lawfully established use or development.

   e. Ecological restoration and enhancement projects benefiting water quality and/or fish and wildlife habitat.

   f. Public access and public water-oriented recreation projects benefiting substantial numbers of people.

3. Pile or pier supports shall be utilized whenever feasible in preference to fills. Fills for approved road development in floodways or wetlands shall be permitted only if the pile or pier supports are demonstrated to be infeasible.

6.5.5 Regulations – Location, Design and Construction

1. When allowed in 6.5.4, above, filling and/or excavation shall be located, designed, and carried out in a manner that;

a. Minimizes adverse impacts on the shoreline environment including significant damage to water quality, critical saltwater habitat;

b. Blends in physically and visually with natural topography, so as not to interfere with appropriate use, impede public access, or degrade the aesthetic qualities of the shoreline;

c. Does not require shoreline stabilization to protect materials placed unless it is part of an approved shoreline restoration project and shoreline stabilization measures are needed to keep the material in place; and

d. Does not adversely alter natural drainage and circulation patterns, currents, river and tidal flows, or significantly reduce flood water capacities.

2. Where fills are permitted, the fill shall be the minimum necessary to accommodate the proposed use. Fills shall be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes.

3. Where fills reduce public access, compensatory public access shall be provided as part of the development project.

4. Fill proposals shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area. Perimeters of permitted fill projects shall be designed and constructed with silt curtains, vegetation, retaining walls, or other mechanisms, and appropriately sloped to prevent erosion and sedimentation both during initial landfill activities and afterwards. Such containment practices shall occur during the first growing season following completion of the landfill.

5. Fill materials shall be sand, gravel, soil, rock, or similar material. Use of contaminated dredge material is prohibited. (See Section 5.6, Industry and Section 6.4 Dredging and Dredge Disposal)

6. The timing of any fill construction shall be regulated to minimize damage to water quality and aquatic life within the time restraints recommended by the Washington State Department of Fish and Wildlife.

7.0 VIOLATIONS, ENFORCEMENT, AND PENALTIES

7.1 General

The Administrator and the Department of Ecology are authorized to adopt such rules as are necessary and appropriate to carry out the provisions of the Shoreline Management Act (RCW 90.58.200) and Chapter 173-27, Part II, WAC. The act calls for a cooperative program between local government and the state. It provides for a variety of means of enforcement, including civil and criminal penalties, orders to cease and desist, orders to take corrective action, and permit rescission. The following should be used in addition to other mechanisms available to the City in accordance with WAC 173-27-240 through WAC 173-27-300, or its successor. The City and/or the Department of Ecology shall have the authority to serve upon a person a cease and desist order if an activity being undertaken on shorelines of the state is in violation of chapter 90.58 RCW or the this Master Program, in accordance with WAC 173-27-270, or its successor.

When joint-enforcement actions between the state and the city are undertaken, the provisions in RCW 90.58.210-230 and WAC 173-27-240-300 shall apply.

7.2 Regulations

7.2.1 Site Investigations

The Administrator is authorized to make site inspections and take such actions as are necessary to enforce this Master Program in accordance with BIMC Chapters 1.16, Right of Entry for Inspection, and 1.26, Code Enforcement.

7.2.2 Violations -- General

It is unlawful for any person to initiate or maintain, or cause to be initiated or maintained, the use, construction, placement, removal, alteration, or demolition of any structure, land, vegetation or property within the city contrary to the provisions of this Master Program.

7.2.3 Violations -- Specific

It is unlawful for any person to:

1. Initiate or maintain, or cause to be initiated or maintained, the use, construction, placement, removal, alteration, or demolition of any structure, land, vegetation or property within the city without first obtaining permits or authorizations required by this Master Program, or in a manner that violates the terms or conditions of such permits or authorizations.
2. Misrepresent any material fact in any application, plans or other information submitted to obtain permits or authorizations under this Master Program.
3. Remove or deface any sign, notice, complaint, or order required by or posted in accordance with this Master Program.

7.2.4 Stop Work Order

The city shall have the authority to issue a stop work order to cease all development work, and order restoration, rehabilitation, or replacement measures, including applicable sureties, at the

owner's or other responsible party's expense to compensate for the use, construction, placement, removal, alteration, or demolition of any structure, land, vegetation or property within the city contrary to the provisions of this Master Program.

7.2.5 After the Fact Permit Fee

After the fact application fees shall be triple the amount established by City Council resolution.

7.2.6 Violation Mitigation/Restoration Plan

Any Mitigation/Restoration Plan (Plan) required for a disturbance not authorized by this shoreline management program or approved by the City shall meet the provisions in Sections 4.1.2, Environmental Impact; 4.1.5 Critical Areas; and 6.0, Shoreline Modification Policies and Regulations, and provide an analysis of lost functions over the period of violation.

All development work shall remain stopped until a Plan is approved by the Administrator. The Plan must be prepared at the expense of the violator, and submitted by the owner or other responsible party for approval by the Administrator. Such a Plan shall be prepared by a qualified professional using the best available science. The Administrator may, at the violator's expense, seek expert advice, including an independent third party review, in determining the adequacy of the Plan. Inadequate plans shall be returned to the applicant or violator for revision and re-submittal.

Any person, party, firm, corporation, or other legal entity that willfully refuses to complete a required restoration plan pursuant to this section, shall be guilty of a misdemeanor and provide shoreline restoration, in accordance with provision of this program, at a rate of 200% (ratio of 2 to 1) the impacted area.

7.2.7 Civil Infraction

Except as provided in subsection 7.2.8, Misdemeanor, conduct made unlawful by the city under this Master Program shall constitute a civil infraction and is subject to enforcement and fines as provided in BIMC 1.26.035. A civil infraction under this section shall be processed in the manner set forth in BIMC Chapter 1.26, Code Enforcement and in compliance with WAC 173-27-280.

7.2.8 Misdemeanor

Any person who again violates this Master Program within 12 months after having been found by the Bainbridge Island Municipal Court to be in violation of this Program, commits a misdemeanor and any person who is convicted of that violation shall be punished as provided in BIMC 1.24.010.A.

7.2.9 Civil Penalty

In addition to any civil infraction fine, criminal penalty, and/ or other available sanction or remedial procedure, any person who shall fail to conform to the terms of a permit or exemption issued under this shoreline master program or who shall undertake development on the shorelines of the state without first obtaining any permit or exemption required under this shoreline master program shall also be subject to a civil penalty in the amount not to exceed $1,000 per day for each violation, each permit violation or each day of continued development

without a required permit shall constitute a separate violation [RCW 90.58.210 or successor]; from the date set for compliance until the date of compliance. Any such civil penalty shall be collected in accordance with BIMC 1.26.090

7.2.10 General Penalties

In addition to incurring civil liability under section 7.2.9 Civil Penalty, any person, party, firm, corporation, or other legal entity found to have willfully engaged in activities on the shorelines of the state in violation of the provisions of this shoreline master program's rules, or regulations as adopted shall be guilty of a gross misdemeanor and shall be punished by a fine of not less than twenty-five nor more than one thousand dollars or by imprisonment in the county jail for not more than ninety days, or by both such fine and imprisonment: PROVIDED, That the fine for the third and all subsequent violations in any five-year period shall be not less than five hundred nor more than ten thousand dollars [RCW 90.58.220, or successor].

7.2.11 Additional Remedies

In addition to any other remedy provided by this chapter or under the Bainbridge Island Municipal Code, the City may initiate injunction or abatement proceedings or any other appropriate action in courts against any person who violates or fails to comply with any provision of this Master Program to prevent, enjoin, abate, and/or terminate violations of this Master Program and/or to restore a condition that existed prior to the violation. In any such proceeding, the person violating and/or failing to comply with any provisions of this Master Program shall be liable for the costs and reasonable attorneys' fees incurred by the city in bringing, maintaining and/or prosecuting such action.

7.2.12 Conflicts

In the event and to the extent the language of this section conflicts with language of the codes and/or appendices adopted by reference in this Master Program, the language of this section shall prevail over the language it conflicts with in any said code and/or appendix.

7.2.13 Financial Surety Procedure

After reviewing any application or exemption for a shoreline development, the Administrator may require the posting of a financial surety to ensure continued compliance with any conditions imposed, including the construction of improvements, the adherence to city standards, and/or maintenance, repair or replacement of such improvements in accordance with Section 4.1.2.7, Bonding. The financial surety shall be in a form acceptable to the city attorney. In the event a condition occurs warranting the use of financial surety, the Administrator may act under such financial surety or may perform the work required at city expense, which expense shall be a lien against the property, enforceable as would be a judgment thereon.

8.0 DEFINITIONS

A

Abutting –Bordering or touching, such as by sharing a common lot line. Lots that are separated by a street or right-of-way are not abutting.

Accessory Structure or Building – A subordinate building or structure that is incidental to the primary or principal building or structure on the same lot, or an abutting lot that meets the requirements in BIMC Section 18.09.030(I)(14)(c). Accessory structures include, but are not limited to, solar panels, small wind devices, barns and sheds. Accessory dwelling units are not considered accessory buildings or structures.

Accessory Dwelling Unit – Accessory dwelling unit means separate living quarters containing kitchen facilities, where the living quarters are contained within or detached from a single-family dwelling on a single lot.

Accessory Development – Any development incidental to and subordinate to a principal use of a shoreline site and located on adjacent thereto.

Accessory Use – A use that is customarily incidental and related to the principal use on the same lot. Accessory dwelling units are not considered accessory uses.

Accretion – The growth, expansion, build up, or deposit of material associated with a natural fluid flow process.

Accretion Beach – A place where sediment, usually sand, falls out or accumulates, causing the beach to widen. These sinks are usually, but not always, at the terminal end of littoral drift cell.

Accretion Shoreform – The growth of a beach by the addition of material transported by wind and/or water. A shoreline with a relatively stable berg and backshore that has been built up by long term deposition of sand and gravel transported by wind and/or water from a feeder bluff or other material source. Examples of accretion shoreforms include~~s~~ shoreline features such as barrier beaches, accretion beaches, points, sand spits, hooks, and tombolos.

Act – The Shoreline Management Act of 1971, Chapter 90.58 RCW, or its successor [WAC 173-26-020(1), or its successor].

Activity – Human activity associated with the use of land or resources regulated by this Program.

Adjacent –That which is near or close; for example, a property located across the road or highway shall be considered ~~as~~ adjacent.

Adjacent Lands – Lands adjacent to the shorelines of the state (outside of shoreline jurisdiction).

Adjoining – Immediately abutting or separated only by a street right-of-way.

Administrator – Director of the Department of Planning and Community Development, or designee, charged with responsibility for administering the Shoreline Master Program.

Anthropogenic – Landscape alteration relating to, or from human development, use, action or activity.

Adverse Impact – An impact that can be measured or is tangible and has a reasonable likelihood of causing moderate or greater harm to ecological functions or processes or other elements of the shoreline environment.

Agricultural Land – Land primarily devoted to agricultural operations.

Agriculture Operations – Any facility or activity for the production for production for commercial or family use purposes of dairy, apiary, livestock, camelids, ratites, vegetable or animal products, and crop products including, but not limited to, ornamental crops. Incidental vegetable gardening, landscaping and keeping common pets are not defined as agriculture. Agriculture operations include upland fish farms which are self-contained, meaning they do not connect with waters of the state such as: natural or channelized stream, tributary, wetland, or marine water body.

Agricultural Activities – Agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation.

Alteration – Any human induced change in an existing condition of a shoreline, critical area and/or its buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), draining, construction, compaction, excavation, or any other activity that changes the character of the area.

Alteration, Structure – A change, modification, expansion, or adjustment.

Anadromous Fish – Species such as salmon, which are born in freshwater, spend most of their life cycle in saltwater, and return to freshwater to reproduce.

Applicant – An individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or agency, or the state or local governmental unit, however designated [RCW 90.58.030(1)(d) or its successor].

Appurtenance – A structure or development which is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the OHWM and/or the perimeter of a wetland. An appurtenance can include a garage, boat house, deck, driveway, utilities, fences, and grading which does not exceed two hundred fifty (250) cubic yards (except to construct a conventional drainfield) [WAC 173-27-040(2)(g), or its successor].

Appurtenance, Primary – A structure or development connected to a single-family residence and considered essential to the principal residential use when protecting the appurtenant structure from danger from active shoreline erosion. An attached garage or one detached garage and a septic drainfield are primary residential appurtenances. [WAC 173-26-231(3)(a)(ii), or its successor].

Aquaculture – The culture or farming of fish, shellfish, or other aquatic plants and animals. Aquaculture does not include the harvest of wild geoduck associated with the state-managed wildstock geoduck fishery. Upland finfish rearing facilities are included in the definition of agriculture and are not considered aquaculture for the purpose of this SMP. Aquaculture activities include, but are not limited to, the hatching, cultivating, planting, feeding, raising, and harvesting of aquatic plants and animals, and the maintenance and construction of necessary equipment and buildings. Cultivation methods include, but are not limited to, fish pens, shellfish rafts, racks and long lines, seaweed floats and nets, and the planting and harvesting of clams and oysters.

Aquaculture, Shellfish Garden – The cultivation, harvesting, and incidental preparation of shellfish for personal human use and consumption on public and private tidelands

Aquaculture Practices – Any activity directly pertaining to growing, handling, or harvesting of aquaculture produce including, but not limited to, propagation, stocking, feeding, disease treatment, waste disposal, water use, development of habitat and structures. Excluded from this definition are related commercial or industrial uses such as wholesale and retail sales, or final processing and freezing.

Aquaculture Processing – A commercial or industrial activity that involves preparing, fish or shellfish for human use or consumption by packaging, canning, freezing or other means of final wholesale or retail production.

Aquifer Recharge Protection Area – A portion of a development site comprised of native or equivalent vegetation in which existing vegetation, topography and supporting soils are free of development, uses or activities detrimental to the aquifer recharge of the total site area.

Arborist – An individual engaged in the profession of arboriculture who, through experience, education, and related training, possesses the competence to provide for or supervise the management of trees and other woody plants. Must be concurrently an International Society of Arboriculture (ISA) Certified Arborist to perform any role required of a Certified Arborist.

Arborist, ISA Certified – An arborist holding a current International Society of Arboriculture (ISA) Certified Arborist credential.

Arborist, Tree Risk Assessment Qualified (TRAQ) – An arborist who has successfully completed the International Society of Arboriculture (ISA) TRAQ training course and assessment and holds a valid ISA TRAQ credential.

Archaeological – Having to do with the scientific study of material remains of past human life and activities.

Archeological Resource – Any material remains of human life or activities which are at least fifty (50) years old and which have potential to provide new information in the fields of history and archaeology. This shall include all sites, objects, structures, artifacts, implements and locations of prehistoric or archeological interest. This shall include but not be limited to burial grounds, campsites, dwellings, and implements, such as projectile points, basketry, grinding stones or pestles, carvings and paintings. This shall include material remains of human life or activities from historic periods that are located at least partially below the ground surface necessitating the use of archeological methods for study or recovery. "Significant" is that quality in American history, architecture, archaeology, engineering, and culture that is present in

districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and;

1. That are associated with events that have made a significant contribution to the broad patterns of our history; or
2. That are associated with the lives of significant persons in our past; or
3. That embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. That have yielded or may be likely to yield, information in history or prehistory.

Archaeologist, Professional – A person who meets the minimum qualifications of the secretary of the interior's standards for a professional archaeologist [WAC 27.53.030, or its successor] and the following: who has designed and executed an archaeological study as evidenced by a thesis or dissertation and has been awarded an advanced degree such as an M.A., M.S., or Ph.D. from an accredited institution of higher education in archaeology, anthropology, or history or other germane discipline with a specialization in archaeology; has a minimum of one (1) year of field experience with at least twenty-four (24) weeks of field work under the supervision of a professional archaeologist, including no less than twelve (12) weeks of survey or reconnaissance work, and at least eight (8) weeks of supervised laboratory experience. Twenty (20) weeks of field work in a supervisory capacity must be documentable with a report produced by the individual on the field work.

Architectural Element – Aesthetic components of a primary building or structure that accents the overall design of the structure. A chimney may be considered an architectural element.

Associated Wetlands – Wetlands that are in proximity to tidal water, lakes, rivers or streams that are subject to the Shoreline Management Act and either influence or are influenced by such waters. Factors used to determine proximity and influence include, but are not limited to: location contiguous to a shoreline water body, formation by tidally influenced geo-hydraulic processes, presence of a surface connection including through a culvert or tide gate, location in part or whole within the one hundred (100) -year floodplain of a shoreline, periodic inundation, and/or hydraulic continuity.

Aquatic – Those areas waterward of the ordinary high water mark.

Average Grade Level – The average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure, provided that, in case of structures to be built over water, average grade level shall be the elevation of ordinary high water. Calculation of the average grade level shall be made by averaging the elevations at the center of all exterior walls of the proposed building or structure [WAC 173-27-030(3) or its successor]. Note: This definition of "average grade level" differs from the definition in the City of Bainbridge Island Zoning Code (Chapter 18 of the City of Bainbridge Island Municipal Code). Structures within shoreline jurisdiction shall comply with the definition contained herein.

B

Backshore – The accretion or erosion zone, located landward of the line of ordinary high water, which is normally wetted only by storm tides. A backshore may take the form of a more or less narrow storm berg (ridge of wave-heaped sand and/or gravel) under a bluff, or it may constitute a broader complex of berms, marshes, meadows, or dunes landward of the line of ordinary high water. It is part of the littoral drift process along its waterward boundary.

Backshore Marina – See Marina

Bank Stabilization – Modification used for the purpose of preventing erosion, protecting channels, and retaining uplands.

Barrier Beach – A linear ridge of sand or gravel extending above high tide, built by wave action and sediment deposition seaward of the original coast line; includes a variety of depositional coastal landforms.

Barrier Estuary – estuary isolated from open bodies of water by a barrier, with tidal exchange occurring through a narrow entrance channel. Usually but not always associated with a significant fresh water source.

Barrier Lagoon – barrier built lagoons that lack significant freshwater source, only coincidentally associated with streams of significant upland catchment areas. See Lagoon and Tidal Lagoon.

Bathymetry – Depth of a water body relative to sea level, may include underwater features and shapes.

Beach – The zone of unconsolidated material that is moved by waves, wind, and tidal currents, extending landward to the coastline.

Beach Face – The steep part of the beach profile below the berg, which is normally exposed to the swash of waves and generally composed of gravel, although it can contain sand or boulders.

Beach Enhancement – The alteration of terrestrial, tidal shorelines or submerged shorelines for the purposes of habitat improvement, creation, recreational enhancement, or soft-treatment stabilization. The materials used depend upon the intended use. The following are examples of materials which may be used in enhancement projects:

1. Various grades of clean sand or pea gravel to create a beach for recreational purposes.
2. A combination of a rock matrix and sand or other materials to restore or recreate a shore feature or an underwater aquatic environment (e.g. a reef).
3. Use of native vegetation to restore marine riparian habitat functions native vegetation.

Beach Nourishment – The process of replenishing a beach by artificial means; e.g., by delivery of selected materials excavated from elsewhere and depositing it at one or several locations in the updrift portion of a drift cell. The material is then naturally transported by waves or currents downdrift to stabilize or restore accretion shoreforms and other berms, which may be eroding due to artificial obstructions in the shore process corridor.

Beach Profile – A vertical cross section of a beach measured perpendicular to the shoreline.

Beach Restoration – The alteration of terrestrial and tidal shorelines or submerged shorelines for the purposes of aquatic habitat, re-establishing ecological function and ecosystem wide processes such that the ecosystem is self-sustaining.

Beach Scarp – A steep slope formed in response to the lowering of the beach profile and landward expansion of the beach face into the backshore as a result of wave erosion. A beach scrap is normally associated with a beach berg.

Bedlands – Those submerged lands below the line of extreme low water in marine waters.

Benthic Community – A grouping of benthic organisms that live in and on the bottom of the ocean floor.

Benthic Organisms – Organisms that live in or on the bottom of a body of water.

Berm (Beach Berm) – The nearly horizontal portion at the beach or backshore formed by the deposition of sediments by waves. Some beaches have more than one berg at slightly different levels, separated by a scarp. A berg is also, a soft-treatment form of shoreline stabilization or a linear mound used to screen an adjacent activity, such as a parking lot, from transmitting excess noise and glare.

Best Available Technology – The most effective method, technique, or product available which is generally accepted in the field, and which is demonstrated to be reliable, effective, and (preferably) low maintenance.

Best Available Science (BAS) – Scientifically valid information derived in accordance with WAC 365-195-900 through 925, or as amended, that is used to develop and implement critical areas policies or regulations.

Best Management Practice (BMP) – Industry-established guidelines that are advised to reduce or eliminate anticipated adverse impacts to the environment from construction, development or other human activity.

BIMC – Bainbridge Island Municipal Code.

Biocide – See pesticide

Biodiversity Areas and Corridors – Areas of habitat that are relatively important to various species of native fish and wildlife.

1. Biodiversity Areas
    a. The area has been identified as biologically diverse through a scientifically based assessment conducted over a landscape scale (e.g., ecoregion, county- or city-wide, watershed, etc.). Examples include but are not limited to WDFW Local Habitat Assessments, Pierce County Biodiversity Network, and Spokane County's Wildlife Corridors and Landscape Linkages; or
    b. The area is within a city or an urban growth area (UGA) and contains valuable fish or wildlife habitat and is mostly comprised of native vegetation. Relative to other vegetated areas in the same city or UGA, the mapped area is vertically diverse (e.g., multiple canopy layers, snags, or downed wood), horizontally diverse (e.g., contains a mosaic of native habitats), or supports a diverse community of species as identified by a qualified professional who has a degree

in biology or closely related field and professional experience related to the habitats or species occurring in the biodiversity area. These areas may have more limited wildlife functions than other priority habitat areas due to the general nature and constraints of these sites in that they are often isolated or surrounded by highly urbanized lands.

2. Corridors. Corridors are areas of relatively undisturbed and unbroken tracts of vegetation that connect fish and wildlife habitat conservation areas, priority habitats, areas identified as biologically diverse, or valuable habitats within the city.

Biofiltration System – A stormwater or other drainage treatment system that utilizes as a primary feature the ability of plant life to screen out and metabolize sediment and pollutants. Typically, biofiltration systems are designed to include grassy swales, retention ponds, and other vegetative features.

Biological Diversity; Biodiversity – The range of physical (habitat) and biological (species, communities) components, the ways that species interact with the physical environment, and the processes necessary to maintain these interactions through time.

Bioengineering – See Shoreline Stabilization, Bioengineered

Biophysical – Physics of biological functions and ecosystem-wide processes.

Biota –The animals and plants that live in a particular location or region.

Bluff, Marine – A high, steep bank or cliff.

BMP – See Best Management Practices.

Boat House – A building used primarily for boat storage.

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

Boat Lift – An in-water structure used for the dry berthing of vessels above the water level and lowering of vessels into the water. A boat lift as herein defined is used to berth and launch a single vessel, suspended over the water's surface. A boat lift is a manufactured unit without a canopy cover and may be place in the water adjacent to a dock, attached to the dock, or as stand-alone structure. A boat lift may be designed either for boats or personal watercraft. A boat lift with a canopy cover shall be considered moorage for the purposes of this Program.

Boating Facilities – Includes marinas, boat launch facilities, dry storage facilities, marine travel lifts, and fixed marine railways serving commercial, industrial uses or serving five or more single-family residences.

Boat Storage Deck – A deck used for the storage of boats.

Bog – A low-nutrient, acidic wetland with organic soils and characteristic bog plants, as described in Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-29, October 2014).

Breakwater – Offshore structure, usually aligned parallel to shore, sometimes shore-connected, that provides protection from waves. The primary purpose is to protect harbors, moorages and navigation activity from wave and wind action by creating stillwater areas along shore. A secondary purpose is to protect shorelines from wave caused erosion.

Buffer – An area of land that is designed and designated to permanently remain vegetated in a predominantly undisturbed and natural condition and/or an area that may need to be enhanced to support ecological processes, or ecosystem-wide functions and to protect an adjacent aquatic or wetland area from upland impacts and to provide habitat for wildlife. Buffer widths vary depending on the relative quality and sensitivity of the area being protected. The "Shoreline Buffer" is a buffer protecting the ecology and resources of and along the Puget Sound. A buffer may be used to protect any sensitive area, including geological hazardous areas.

Building – Any structure having a roof, designated for shelter of persons, animals or property.

Bulkhead – A wall erected generally parallel to and located at or close to the ordinary high water mark for the purpose of containing and preventing the loss of soil due to shoreline erosion caused by tidal action, current or waves. Bulkheads are usually constructed of hard materials and may be built of concrete, large rocks (riprap), or other materials. See also Seawall.

C

Canopy Area – See canopy coverage.

Canopy Coverage – The crown area of native shrubs and trees as measured from plan view.

Central Puget Lowland – The low areas between the Olympic and Cascade Mountain ranges extending from Admiralty Inlet and the Tacoma Narrows.

Channel – An open conduit for water either naturally or artificially created, but not including artificially created irrigation, return flow, or stock watering channels. [WAC 173-22-030(8b) or its successor]. See also Stream.

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

City – The City of Bainbridge Island.

Clean Water Act – The primary federal law providing water pollution prevention and control. This was previously known as the Federal Water Pollution Control Act. (See 33 USC 1251 et seq.)

Clearing – Clearing means the destruction or removal of vegetation or plant cover including, but not limited to, root material removal by manual, mechanical, or chemical means. Clearing includes, but is not limited to, actions such as cutting, felling, thinning, flooding, killing, poisoning, girdling, or uprooting.

Coastal Dune – A transitional zone between the marine and the continental processes and are a part of the sand sharing system between the dune, the beach, and the offshore bars.

Coastal Landform, Depositional – See accretion shoreform.

Coastal Processes – Collective term including the action of natural forces on the shoreline, and the nearshore seabed.

Coastline – The line where terrestrial processes give way to marine processes – tidal currents, wind waves, etc.

Commercial Development – Those developments whose principal use is for retail, personal and professional service or other commercial business activities. Included in this definition are developments such as hotels, motels, shops, restaurants, banks, professional offices, grocery stores, and laundromats. Not included, marinas, home occupations, utilities, and related utility development.

Commercial Fish – Those species of fish that are classified under the Washington Department of Fish and Wildlife Food Fish Classification as commercial fish (WAC 220-12-010).

Community Structure – A building, dock, or other structure which is intended for the common use of the residents of a particular subdivision or community. It is not intended to serve as a public facility.

Community or Joint-use Dock – A structure or structures which consists of a system of piers, buoys, or floats that is intended for the common use of the residents of adjoining parcels or subdivision, short subdivision or community located on adjacent uplands. A community dock is not a commercial endeavor or for the purpose of serving the public. If a community or joint-use dock is designed to accommodate six (6) or more vessels, it is no longer considered a community or joint-use dock, and it shall be considered a marina.

Compensatory Mitigation – A project for the purpose of mitigating, at an equivalent or greater level, unavoidable impacts that remain after all appropriate and practicable avoidance and minimization measures have been implemented. Compensatory mitigation includes, but is not limited to, wetland creation, restoration, enhancement, and preservation; stream restoration and relocation, rehabilitation; and buffer enhancement.

Conditional Use – A use or the expansion of a use permitted on shorelines which, because of certain characteristics, requires a special degree of review and consideration, and may require special conditions to assure that it is consistent with the intent and provisions of the Act and these regulations, and compatible with other uses permitted on shorelines.

Conditional Use Permit – A permit for a use, development or substantial development listed in the regulations as being permitted only as a conditional use, or not classified in this Program. Conditional uses are subject to review and approval pursuant to the provisions of BIMC Section 2.16.165(H) regardless of whether or not the proposal requires a substantial development permit.

Conservation Easement – A legal agreement that the property owner enters into to restrict uses of the land for purposes of natural resources conservation. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property.

Construction Limit Line – In Eagle Harbor, defined on U.S. Army Corps of Engineers, Drawing, File No. E-8-5-6, dated December 22, 1939, approved by the Secretary of War, July 2, 1940. Used in the Master Program for local regulatory purposes.

Contaminant – Any chemical, physical biological, or radiological substance that does not occur naturally in ground water, air, or soil or that occurs at concentrations greater than those in the natural levels [WAC 173-200-020(7)].

Coppicing – Managing of strongly-regenerative species of trees and shrubs by an initial heading cut (leaving a stump) and allowing new shoots to grow to maintain live roots. Shoots may be

reduced to their point of origin at appropriate intervals of time without disturbing the resulting coppice head (stump).

Council – Legislative body of the City of Bainbridge Island.

Covered Moorage – A roofed floating or fixed offshore structure with or without walls, for boat moorage or moorage of other watercraft or float planes, designed to protect a vessel or vessels.

Critical Aquifer Recharge Area – Areas designated by WAC 365-190-080(2) that are determined to have critical recharging effect on aquifers (i.e., maintain the quality and quantity of water) use for portable water as defined by WAC 365-196-485(1)(d).

Critical Areas – The following areas are designated as critical areas:

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

Critical Facilities – Facilities that are essential to the health and welfare of the community, including services that protect life and property. Such facilities include, but are not limited to, hospitals, emergency clinics, police and fire stations, emergency vehicle and equipment storage facilities, emergency operations centers, aviation control centers, and utility facilities such as sewage treatment plants and electric transmission substations.

Critical Habitat – Habitat areas identified by U.S. Fish and Wildlife Service or the National Marine Fisheries Service as habitat necessary for survival of endangered or threatened species.

Critical Saltwater Habitat - Critical saltwater habitats include all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sand lance; subsistence, commercial and recreational shellfish beds; mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association [WAC 173-26-221(2)(c)(iii)].

Cultural Resource – Evidence of human occupation or activity that is important in the history, architecture, archaeology or culture of a community or region. Cultural resources include, but are not limited to, the following:

1. Archaeological resources. Physical evidence of ruins of human occupation or activity that are located on or below the surface of the ground and are at least 50 years old.
    a. Archaeological resources include, but are not limited to, the remains of houses, villages, camp and fishing sites, and cave shelters; rock art such as petroglyphs and pictographs; artifacts such as arrowheads, utensils, tools, fragments of tools and utensils, obsidian flakes or other material by-products from tool and utensil-making activities; and graves, human remains, and associated artifacts.
2. Historic buildings and structures. Standing or above-ground buildings and structures that are at least 50 years old.

a. Historic buildings and structures include, but are not limited to, log cabins, barns, canals, flumes, pipelines, highways, and tunnels.

3. Traditional cultural properties. Locations, buildings, structures, and objects that are associated with cultural beliefs, customs, or practices of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community.

    a. Traditional cultural properties include, but are not limited to, a location associated with the traditional beliefs of a Native American group about its origins or its cultural history; a location where a community has traditionally carried out artistic or other cultural practices important in maintaining its historical identity; and a location where Native American religious practitioners have historically gone, and go today, to perform ceremonial activities. Objects may include petroglyphs, pictographs, rock cairns or other rock structures, trees, and rock outcrops.

Cumulative Effects – The combined environmental impacts that accrue over time and space from a series of similar or related individual actions, contaminants, or projects. Although each action may seem to have negligible effect, the combined effect can be significant.

Cutting, Vegetation – The removal of the main trunk or stem of a small tree for the purposes of controlling aggressive or weedy species.

D

Dam – A barrier across a stream or river to confine or regulate flow or raise water levels for purposes such as flood or irrigation water storage, erosion control, power generation, or collection of sediment or debris.

Davit – A fixed crane intended to lift boats or cargo.

Degrade – To scale down in desirability or salability, to impair in respect to some physical property, or to reduce in structure or function.

Department – The city's Department of Planning and Community Development.

De Minimis – Minor or trivial impact which cannot be measured or is not quantifiable.

Deposition – The deposit of sediment in an area though natural means such as wave action or currents; may also be done through mechanical means by humans.

Development – A use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or materials; bulkheading; pile driving; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to the Act at any state of water level, subject to RCW Chapter 90.58 or its successor [RCW 90.58.030(3)(d) or its successor]. This term may include activities related to subdivisions and short subdivisions; clearing activity; land modification (grade and fill work); building or construction; and activities that are exempt from the substantial development permit process or that require a shoreline variance or conditional use.

Development Area – the approved portion of a project site that is developed, including the building pad and all graded slopes, all structures, landscaped areas, driveway and parking areas.

Development Regulations – The controls placed on development or land uses by the City, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under RCW Chapter 90.58 , and subdivision ordinances together with any amendments thereto.

Dike – an artificial embankment placed at a stream mouth or delta area to hold back sea water for purposes of creating and/or protecting land from flooding.

Director – The director of the city's Planning and Community Development Department or their designee.

Dock – A fixed platform structure anchored in and floating upon a water body that abuts the shore intended to provide landing which may include a ramp, pier, and float; generally used as a landing for water-dependent recreation or moorage for commercial and/or pleasure craft. Excluded are boat launch or boat ramps.

Dock, Joint or Community – A dock, pier and/or float for pleasure craft moorage or water recreation for exclusive personal use of multiple waterfront lot owners.

Downdrift – The direction of predominant alongshore sediment transport.

Dredge – To excavate or deepen a water body by removing aquatic substrate material. Also mechanical or hydraulic equipment used for excavation.

Dredge Spoil – The material removed by dredging. Same as dredge material.

Dredged Material Disposal – Depositing of dredged materials on land or into water bodies.

Dredging – Removal or displacement of earth or sediments such as gravel, sand, mud or silt, and/or other materials or debris from any stream, river, lake or marine water body, and associated shorelines and wetlands. Dredging is normally done for specific purposes or uses such as constructing and maintaining navigation channels, turning basins, harbors and marinas; installing submarine pipelines or cable crossing; or repairing and maintaining dikes or drainage systems. Dredging can be accomplished with mechanical or hydraulic machines. Most dredging is done to maintain channel depths or berths for navigational purposes; other dredging is for shellfish harvesting or cleanup of polluted sediments.

Drift Cell or Drift Sector – Drift cell, drift sector or littoral cell means a particular segment or reach of marine shore in which littoral sediment movement or drift may occur without significant interruption, and which contains any and all natural sources of such drift as well as any shoreform(s) accreted by such drift. Each normal drift cell contains these shore process elements: a feed source that supplies the sediments (feeder bluff or estuary), a driftway, along which the sediment can move, and accretion terminal where the drift material is deposited (accretion shoreform).

Drift Sills – Small groins which hold sediments in place without blocking longshore drift.

Driftway – That portion of the shore process corridor, primarily that lower backshore and the upper intertidal area, through which sand and gravel are transported by the littoral drift process. It is the critical link between the feeder bluff and the accretion shoreform.

Dune – A hill or ridge of sand piled up by the wind and/or wave action.

E

Ecologically Intact – Those shoreline areas that retain the majority of their natural processes as evidenced by the shoreline configuration and the presence of vegetation or retain the ability to support vegetation. These areas may be partially developed.

Ecological functions or shoreline functions – The work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem. See WAC Section 173-26-201(2)(c). Functions include, but are not limited to, habitat diversity and food chain support for fish and wildlife, ground water recharge and discharge, high primary productivity, low flow stream water contribution, sediment stabilization and erosion control, storm and water quality enhancement through biofiltration and retention of sediments, nutrients, and toxicants. These beneficial roles are not listed in order of priority.

Ecology (Washington State Department of Ecology) – Use of "Ecology" or "Washington State Department of Ecology".

Ecosystem-wide processes – The suite of naturally occurring physical and geologic processes of erosion, transport, and deposition; and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.

Educational or Scientific Activities – Controlled and/or supervised scientific activities or educational activities that are associated with an educational or scientific program that result in no adverse impacts to critical areas or their buffers.

Embankment – An artificial bank such as a mound or dike, generally built to hold back water or carry a roadway.

Embayment - A broad term for an inlet or indentation in the coastline. In this Program, it is restricted to features partly isolated from the rest of Puget Sound by their configuration and sufficiently small to limit wave action and beach processes. Also included are wetlands or other back-barrier water bodies isolated from direct tidal influence (surface exchange). Embayments include barrier estuaries and lagoons and may include some stream mouths and the heads of small bays.

Emergency – An unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a timer too short to allow full compliance with the Master Program. Emergency construction is construed narrowly as that which is necessary to protect property from the elements and does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the Administrator to be the appropriate means to address the emergency situation, upon abatement of the emergency, pursuant to the Master Program and RCW 90.58.030(3)(e)(iii); WAC 173-27-040(2)(d), or its successor. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not considered an emergency.

Engineering Geologist – A practicing engineering geologist who has at least four years of professional employment as an engineering geologist with experience in landslide evaluation, and a Washington State specialty license in engineering geology as specified in Chapter 18.220 RCW.

Enhancement – An action or alteration performed within an existing degraded shoreline, critical area, habitat and/or buffer to intentionally improve, increase or augment one or more functions or values of the existing area without degrading other functions. Enhancement actions include, but are not limited to, increasing plant diversity and cover, increasing wildlife habitat and structural complexity (snags, woody debris), installing environmentally compatible erosion controls, or removing non-indigenous plant or animal species. Enhancements are to be distinguished from wetland/habitat creation or restoration projects by the need for on-going assistance to maintain the improved function.

Envelope – The enclosing shell of a building's volume.

Erosion – The wearing a way of land by the action of natural forces, such as wind, rain, water and other natural agents that mobilize, transport, and deposit soil particles; On a beach, the carrying away of beach material by wave actions, tidal currents, or littoral currents.

Erosion Hazard Area – A landform or soil type subject to being worn away by the action of water, wind, freeze-thaw, or ice, including areas rated in the Soil Survey of Kitsap County Area, Washington, USDA (1980), as having severe hazard of water erosion; areas classified in the Department of Ecology Coastal Zone Atlas as Class 3, unstable, Class 3, unstable old slides, or Class 5, unstable recent slide; soils identified by the U.S. Department of Agriculture Natural Resource Conservation Service (NCRS) as having "severe" or "very severe" erosion hazards; and/or soils subject to impacts from shoreline retreat.

Estuary – A semi-enclosed coastal body of water in which fresh water and salt water mingle and affect the ~~total~~ land and water habitat. See also Pocket Estuary.

Estuary, Pocket – see Pocket Estuary

Essential Public Facility – Essential public facilities include those facilities that are typically difficult to site, such as airports, state education facilities and state or regional transportation facilities as defined in RCW 47.06.140; regional transit authority facilities as defined in RCW 81.112.020; state and local correctional facilities, solid waste handling facilities, and inpatient facilities including substance abuse facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.09.020.[RCW 36.70A.200, or its successor]

Essential Single-Family Residential Accessory Structure – An accessory structure that contains a use or is intended for a use that is essential to a single-family residential principal use. The following structures shall be considered an essential residential structure: a garage or carport, one septic system (including one tank and one on-site septic drainfield), one well house and associated well head, and existing decks attached to the primary structure.

Estuarine, Wetland – A vegetated wetland that is predominantly tidal, as described in Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-29, October 2014).

Estuarine Zone, Estuary – The zero-gradient sector of a stream where it flows into a standing body of water, together with associated wetlands. Tidal flows reverse flow in this zone twice daily, determining its upstream limit. It is characterized by low bank channels branching off the main streamway to form a broad, near-level delta. The bank, bed, and delta materials are typically silt and clay. Banks are stable with vegetation ranging from marsh to forest, and the water is usually brackish due to daily mixing and layering of fresh and salt water. Estuarine

shores are rich in aquatic and other bird and animal life, and in their natural condition are the most productive of all shoreline habitats in terms of the marine food chain.

Excavation –The disturbance, displacement and/or disposal of unconsolidated earth material such as silt, sand, gravel, soil, rock or other material from all areas landward of OHWM.

Exemption or Exempt Development – Certain developments as listed in WAC 173-27-040 and Chapter 90.58 RCW are exempt from the definition of substantial developments and, therefore, are exempt from the substantial development permit process of the Shoreline Management Act. An activity that is exempt from the substantial development provisions of the Shoreline Management Act must still be carried out in compliance with policies and standards of the Act and the local master program. Conditional use and/or variance permits may also be required even though the activity does not need a substantial development permit. [RCW 90.58.030(3)(e) or its successor; WAC 173-27-030(7) and WAC 173-27-040, or its successor].

Extreme High Tide – The highest tide level reached in a nineteen (19) year tidal cycle.

Extreme Low Tide – The lowest line on the land reached by a receding tide [RCW 90.58.030(2)(a) or its successor]. For the purposes of the Shoreline Master Program, it is the contour 4.5 feet below Mean Lower Low Water (datum Plane 0.0) [WAC 332-30-106 (18), or its successor].

F

Fair Market Value – The expected price at which the development can be sold to a willing buyer. For developments which involve nonstructural operations such as dredging, drilling, dumping, or filling, the fair market value is the expected cost of hiring a contractor to perform the operation, or where no such value can be calculated, the total of labor, equipment use, transportation, and other costs incurred for the duration of the permitted project [WAC 173-27-030(8), or its successor].

Feasible – When an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions: (a) The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results; (b) The action does not physically preclude achieving the project's primary intended legal use. In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

Feasible Location – A location that accommodates a development in a manner that achieves its intended purpose consistent with the constraints of the applicable land use regulations and characteristics of the property, including but not limited to lot size, configuration, presence/absence of critical areas and compatibility with adjacent land use/development. Feasibility shall take into account both short and long-term monetary and non-monetary costs and benefits.

Feeder Bluff, Erosional Bluff – Any bluff (or cliff) experiencing periodic erosion from waves, sliding, or slumping, whose eroded earth, sand, or gravel material is naturally transported (littoral

drift) via a driftway to an accretion shoreform. These natural sources of beach material are limited and vital for the long-term stability of driftways and accretion shoreforms.

Fetch – The distance over unobstructed open water on which waves are generated by a wind having constant direction and speed.

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

Fill Material – Any solid or semi-solid material, including rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure that, when placed, changes the grade or elevation of the receiving site.

Fish – Species of the vertebrate taxonomic groups Cephalospidomorphi and Osteichthyes.

Fish and Wildlife Habitat Conservation Areas – Areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

Fish Habitat – Habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.

Fisheries – All species of fish and shellfish commonly or regularly originating or harvested commercially or for sport in Puget Sound and its tributary freshwater bodies, together with the aquatic plants and animals and habitat needed for continued propagation and growth of such species.

Fisheries Biologist – A person with experience and training in fisheries who is able to submit substantially correct reports on fish population surveys, stream surveys and other related data analyses of fisheries resources. “Substantially correct” means that technical or scientific errors, if any, are minor and do not delay or affect the site plan review process. Qualifications of a fisheries biologist include either (1) or (2), below, and the prior successful completion of at least three habitat management plans.

1. Certification by the American Fisheries Society.
2. Bachelor of Science degree in fisheries or the biological sciences from an accredited institution and five years of professional fisheries experience.

Fisheries Enhancement – Actions taken to rehabilitate, maintain or create fisheries habitat, including but not limited to hatcheries, spawning channels, lake rehabilitation, planting of fisheries stocks. Fisheries Enhancement differs from Aquaculture in that the increase in fisheries stocks eventually becomes available for public harvest.

Float – A floating platform that moves vertically with a tide and is anchored or attached to a fixed or anchored overwater structure or an anchoring system.

Float, Recreational – A float used primarily for swimming, diving, water skiing, or other recreational purpose and not for the moorage of watercraft.

Floating Aquaculture Facility – Open water aquaculture facility which is consists of a mooring system and/or floats.

Floating house - any floating structure that is designed, or has been substantially and structurally remodeled or redesigned, to serve primarily as a residence. "Floating houses" include house boats, house barges, or any floating structures that serve primarily as a residence and do not qualify as a vessel as provided in subsection (74) of this section. A floating structure that is used as a residence and is capable of navigation, but is not designed primarily for navigation, nor normally is capable of self propulsion and use as a means of transportation is a floating house, not a vessel.

Flood or Flooding, Coastal – A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

Flood Protection Measures – All development on water bodies, usually rivers and streams, designed to retard bank erosion, to reduce flooding of adjacent lands, to control or divert stream flow, or to create a reservoir, including but not limited to revetments, dikes, levees, channelization, dams, vegetative stabilization, weirs, flood and tidal gates. Excluded are water pump apparatus.

Flood Hazard; Flood Hazard Management – A long term program or major project carried out on a single parcel or coordinated on a series of parcels for the primary purpose of preventing or mitigating damage to life and property and to minimize public expenses due to flooding through a comprehensive system of planning development regulations, building standards, structural works, and monitoring and warning systems. Flood hazard management projects or programs may employ physical and/or regulatory controls.

Floodplain – Synonymous with one hundred-year floodplain, this is the land area susceptible to being inundated by stream-derived waters with a one percent chance of being equaled or exceeded in any given year. The limits of this area are based on flood regulation and ordinance maps or a reasonable method that meets the objectives of the Shoreline Management Act [WAC 173-26-020(17) or its successor].

Floodway – Those areas or portions of the areas as identified in the Master Program that are either (a) established in federal emergency management agency flood insurance rate maps or floodway maps or (b) those portions of a river valley lying streamward from the outer limits of a watercourse, and upon which flood waters are carried during periods of flooding that occur with reasonable regularity, through not necessarily annually. The floodway is identified, under normal conditions, by changes in surface soil conditions, or changes in types or quality of vegetative ground cover conditions. The floodway does not include lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or under license from the federal government, the state, or a political subdivision of the state. The limits of the floodway are based on flood regulation ordinance maps or by a reasonable method which meets the objectives of the Shoreline Management Act. [RCW 90.58.030(2)(g) or its successor].

Foreshore – In general terms, the intertidal area between mean higher high water and mean lower low water.

Foreshore Marina – See Marina.

Forest Practice – Any activity conducted on, or directly related to, forest land and relating to growing, harvesting, or processing timber. This includes (1) site preparation and regeneration, (2) protection from insects, fire, and disease, (3) silvicultural practices such as thinning, fertilization, and release from competing vegetation, and (4) harvesting. Forest practices do not include log storage. (See industrial use.) These activities include, but are not limited to, road and trail construction, final and intermediate harvesting, pre-commercial thinning, reforestation, fertilization, prevention and suppression of disease and insects, salvage of trees, and brush control. See WAC 222-16-010or its successor.

Forest Land – All land which is capable of supporting a merchantable stand of timber and is not being actively used in a way which is incompatible with timber growing [WAC 222-16-010 or its successor].

Frequently Flooded Areas – Lands subject to a one percent or greater chance of flooding in any given year, as determined by the Federal Emergency Management Agency. These areas include, but are not limited to, floodplains adjacent to streams, lakes, coastal areas, and wetlands. (Also see BIMC Chapter 15.16, Flood Damage Prevention.)

Functional Grating – A floor or decking material which is permeable.

Functions and Values – The natural processes and beneficial roles performed or provided by critical areas including, but not limited to, water quality and quantity protection and enhancement, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains, providing flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, protecting aesthetic value, and providing recreational and educational opportunities. These roles are not listed in order of priority.

G

Gabions – Structures composed of masses of rocks, rubble, or masonry held tightly together, usually by wire mesh, to form blocks or walls. Sometimes used on heavy erosion areas to retard wave action, or as foundations for breakwaters or jetties.

Geologically Hazardous Areas – Areas susceptible to significant erosion, sliding, or other geological events. They pose a threat to the health and safety of citizens when used as sites for incompatible commercial, residential or industrial development. Geologically hazardous areas include erosion hazard areas, landslide hazard areas, and seismic hazard areas.

Geomorphology – The shape or form of a natural surface or object. Also, the study of the forms of the land surface and the processes producing them.

Geotechnical Engineer – Practicing geotechnical/civil engineer who has a valid Washington State engineering license and a valid certificate of registration in civil engineering, at least four years of professional employment as a geotechnical engineer with experience in landslide evaluation, and appropriate training and experience as specified in RCW Chapter 18.43.

Geotechnical report or geotechnical analysis – A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the

affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

Grading – An activity associated with land modification or maintenance; grading means the physical movement or redistribution or the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

Grassy Swale – A vegetated drainage channel that is designed to remove various pollutants from stormwater runoff through biofiltration.

Groins – This is a rigid, barrier-type structure extending on an angle waterward from the shore into the intertidal zone. Their purpose is to build or preserve an accretion shoreform or berg on their updrift side by trapping littoral drift to protect a shoreline and adjacent upland by influencing the movement of water and/or deposition of materials. Groins are relatively narrow in width but vary greatly in length. Groins are sometimes built in series as a system, and may be permeable or impermeable, high or low, and fixed or adjustable.

Growth Management Act – RCW 36.70A, as amended

Guidelines – Those standards adopted by the Washington State Department of Ecology under WAC 173-26, intended to implement the policy of the Shoreline Management Act, RCW Chapter 90.58, for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards provide criteria for local governments and the Department of Ecology in developing and amending master programs.

H

Habitat – The place or type of site where a plant or animal naturally or normally lives and grows.

Habitat Function – The use and benefits of physical and biological factors to associated biological communities of organisms.

Habitat Management Plan (HMP) – A report prepared by a professional wildlife biologist or fisheries biologist which discusses and evaluates critical fish and wildlife habitat functions and identifies and evaluates measures necessary to maintain, enhance and improve terrestrial and/or aquatic habitat on a proposed development site.

Habitat of Local Importance – An area representing either high quality habitat for native terrestrial or aquatic species or habitat which is of limited availability, highly vulnerable to alteration, or provides landscape connectivity which contributes to the integrity of the surrounding landscape and which is not adequately protected by other city, state or federal policies, laws, regulations, or non-regulatory tools that prevent degradation of the habitat or its associated species. These may include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors such as breeding areas or human-made ponds.

Harbor Area – The area of navigable tidal waters as determined in Section 1 of Article 15 of the Washington State Constitution, which is forever reserved for landings, wharves, streets, and other

Harbor Structure Limit Line – A line defined in a harbor to demarcate the limits of overwater structures in aquatic areas and maintain navigation, as recommended by the Harbor Commission and approved by the City of Bainbridge Island City Council.

Hazard Tree – A tree that has significant structural defects that are likely to lead to failure and possibly cause injury or damage as identified in a report from an International Society of Arboriculture (ISA) Tree Risk Assessment Qualified (TRAQ) arborist, which could strike a "target." A target can be a building or a place where people gather such as a park bench, picnic table, street, or backyard. In the case of steep slopes, a hazard tree can also be a tree that is a hazard to the stability of the slope, as determined by a geotechnical engineer.

Hazardous Materials – Any substance containing such elements or compounds which, when discharged in any quantity in shorelines, present to imminent and/or substantial danger to public health or welfare; including but not limited to: fish, shellfish, wildlife, water quality, and other shoreline features and property.

Hazardous Substance – Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless or quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

Hedge – A line of closely-spaced trees and/or shrubs intentionally planted and/or maintained along a property boundary or landscape border for privacy, screening, safety, or similar function, which typically requires ongoing pruning or shearing to maintain its intended function and/or reasonable use of nearby developed areas.

Height – The distance measured from the average grade level to the highest point of a structure. Television antennas, chimneys, and similar structures or appurtenances shall not be used in calculating height except where they obstruct the view of residences adjoining such shorelines. Temporary construction equipment is excluded in this calculation [WAC 173-27-030(9) or its successor]. For all over-water structures, height shall be measured from ordinary high water mark.

High Bluff – An area with slope greater than 40%; height greater than fifteen feet (15'), often unstable or with visible face sediment source often from backshore. This term is used to identify geomorphic classes for the 2004 Nearshore Assessment completed by Battelle for the City.

Hook – A spit or narrow cape of sand or gravel which turns landward at its outer end.

HPA – Hydraulic Project Approval. The permit issued by the Washington State Department of Fish and Wildlife pursuant to the State Hydraulic Code Revised Code of Washington Chapter 75.20, or its successor.

Hydric Soils – Soils which are, saturated flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part or have had a history of being, wet long enough to periodically produce anaerobic conditions, thereby influencing the growth of plants [WAC 173-22-030(5) or its successor]. The presence of hydric soil shall be determined following methods identified by the Department of Ecology.

Hydrogeologist – A practicing hydrogeologist who has at least four years of professional employment as a hydrogeologist with experience in the specific subject area in which they are providing a report, and a Washington specialty license in hydrogeology as specified in RCW Chapter 18.220.

Hydrophytes – Those plants capable of growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined flowing methods identified by the Department of Ecology.

I

Infeasible – Not feasible, see feasible.

Impact – An action producing a significant causal effect of the whole or part of a given area.

Impoundment – The retention or trapping of sediment in a location, either by natural or structural means.

Industrial Development – Facilities for processing, manufacturing, fabrication or storage of goods or materials, including but not limited to oil, metal or mineral product refining, power generating facilities, including hydropower, ship building and major repair, storage and repair of large trucks and other large vehicles or heavy equipment, related storage of fuels, commercial storage and repair of fishing gear, warehousing construction contractors' offices and material/equipment storage yards, wholesale trade or storage, and log storage on land or water, together with necessary accessory uses such as parking, loading, and waste storage and treatment. Excluded from this definition are mining, including on-site processing of raw materials, and off-site utility, solid waste, road or railway development, and methane digesters that are accessory to an agricultural use.

Industrial Use – Uses intended primarily to provide for heavy commercial water-dependent uses such as ship and boat building, haul out and repair and related uses serving boating needs.

In-kind Compensation – To replace wetlands, biota, or other organisms with substitute flora or fauna whose characteristics closely match those destroyed, displaced, or degraded by an activity.

Inshore – The zone of the beach profile extending waterward from the foreshore to just beyond the breaker.

Intertidal – The substream area exposed at low tides and inundated at high tides, situated from the extreme low water of spring tides (mean lower-low water, MLLW) to the upper limit of spray or influence of ocean-driven salts (mean higher-high water, MHHW).

Invasive Species – 1) non-native (or alien) to the ecosystem under consideration and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health, or as amended by the United States Department of Agriculture National Invasive Species Information Center (NISIC).

J

Jetty – A structure that is generally perpendicular to shore extending through or past the intertidal zone. It is built at harbor entrances or river mouths mainly to prevent shoaling or accretion from littoral drift in entrance channels, which may or may not be dredged. A jetty also

serves to protect a channel from storm waves or cross currents, and stabilize inlets through barrier beaches. On the West Coast and in this region, most jetties are riprap mound construction.

K

L

Lagoon – A shallow body of water, such as a pond or a lake, isolated from Puget Sound by a barrier beach or other narrow body of land. Lagoons may or may not have a permanent tidal connection to the sea. See also Tidal Lagoon and Barrier Lagoon.

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

Land Divisions – Any division of land subject to the city's subdivision design standards (BIMC Chapter 17.12).

Landfill – The placement of soil, sand, rock, gravel, existing sediment or other material (excluding solid waste) in upland areas, landward of OHWM, generally to raise the elevation.

Landslide – A general term covering a wide variety of mass movement landforms and processes involving the downslope transport, under gravitational influence of soil and rock material en masse; included are debris flows, debris avalanches, earthflows, mudflows, slumps, mudslides, rock slides, and rock falls.

Landslide Hazard Areas – Areas which are at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. Landslide hazard areas include the following:

1. Areas characterized by slopes greater than 15 percent having springs or groundwater seepage and having impermeable soils (typically silt and clay) overlain or frequently interbedded with permeable granular soils (predominantly sand and gravel);
2. Any area potentially unstable due to rapid stream incision or stream bank erosion;
3. Any area located on an alluvial fan, debris flow deposit, or in a debris flowpath, presently or potentially subject to impacts or inundation by debris flows or deposition of stream-transported sediments;
4. Any area with a slope of 40 percent or greater and with a vertical relief of 10 or more feet except areas composed of competent consolidated rock;
5. Any area designated or mapped as class U, UOS, or URS by the Department of Ecology Coastal Zone Atlas and/or mapped as a landslide or scarp on the USGS Surface Geology Map of Bainbridge Island (Haugerud, 2001).

Landslide Hazard Area Setback – An area contiguous to a landslide hazard area sufficient in depth to meet the development standards set forth in Section 4.1.5.11 as determined by a geological hazards assessment prepared in accordance with Section 4.1.5.14.5.

Land Use – The development or activities that occur or are allowed to occur on a particular property.

Landward – In a direction toward shoreland areas.

Launch – see boat launch

Large Woody Debris (LWD) – Generally naturally occurring material that is recruited from during storms from downed trees in rivers, streams or other waters.

Levee – A large dike or embankment, often having an access road along the top, which is designed as part of a system to protect land from floods.

Limited Utility Extension – The extension of natural gas, electricity, telephone, water, or sewer service where all of the following are met: (1) the extension is categorically exempt under the Washington State Environmental Policy Act (SEPA) (See WAC 197-11-800 (24 or its successor) for the utility improvements which are categorically exempt under SEPA), (2) the extension will serve existing uses that are in compliance with the Shoreline Management Act, and (3) the project does not involve the construction of more than twenty-five hundred (2,500) linear feet of utility lines or pipes within shoreline jurisdiction.

Liquefaction – A process in which a water-saturated soil, upon shaking, suddenly loses strength and behaves as a fluid.

Littoral – of or pertaining to the shore.

Littoral Cell – See Drift Cell.

Littoral Drift – The natural process of sediment movement, particularly sand and gravel along the shoreline in the nearshore zone by waves and currents (see also Drift Cell and Driftway).

Littoral Transport – see Longshore Transport

Live-aboard Vessel – A vessel licensed and designed for use as a mobile structure with adequate self-propulsion and steering equipment to be operated as a vessel, but which is principally used as an over-water residence. Principal use as an over-water residence means essentially full-time occupancy within the City's jurisdiction for a total of more than sixty (60) days, whether or not consecutive, in any calendar year.

Longshore Current – The littoral current in the breaker zone moving essentially parallel to the shore.

Longshore Transport – Transport of sedimentary material parallel to the shore.

Low Bank – An area with a slope often greater than fifteen percent (15%) and less than fo~~u~~rty percent (40%), height fifteen feet (15') or less, generally narrow beach with high water line at or on the bank. Bedrock terrace considered low bank if characterized by a sand and gravel beach; backed by low scarp. This term is used to identify geomorphic classes for the 2004 Nearshore Assessment completed by Battelle for the City.

Low Impact Development (LID) – A stormwater and land use management strategy that strives to mimic predisturbance hydrologic processes of infiltration, filtration, storage, evaporation and

transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low Impact Development Best Management Practices (LID BMPs) – Distributed stormwater management practices, integrated into a project design, that emphasize predisturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration. LID BMPs include, but are not limited to: bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, minimal excavation foundations, vegetated roofs, and water reuse.

M

Maintenance – See Normal Maintenance and Normal Repair.

Marina – A facility with the primary purpose of providing moorage for six (6) or more vessels, which consists of a system of piers, docks, buoys, or floats. Foreshore marinas are located landward of OHWM. There are two common types of backshore marinas, one with wet moorage that is dredged out of the land to artificially create a basin, and the other, dry moorage, which has upland storage with a hoist, marine travel lift, or ramp for water access. Open water marinas, including open water moorage and anchorage areas, are generally located in the center of a water body to provide moorage in addition to any marinas and docks along the edge of the water body.

Marine Bluffs – see Bluff, Marine

Marine Travel Lift – A mechanical device that can hoist vessels off trailers and transport them into the water. Often associated with dry land moorage.

Marine Railway – A fixed set of rails running from the upland area into the water upon which a cart or dolly can carry a boat to be launched.

Marine Riparian Zone – The transition zone between the nearshore and terrestrial ecotones. See also Riparian Vegetation.

Marshes, Bogs, and Swamps – Lands transitional between terrestrial and aquatic systems where saturation with water is the dominant factor determining plant and animal communities and soil development. Such lands must have one or more of the following attributes: a) at least periodically, the land predominately supports hydrophytes, and/or 2) the substrate is predominantly undrained hydric soil. [WAC 173-22-030(10) or its successor]. See Hydrophyte, Hydric Soil.

Marsh/Lagoon – Protected embayment often fluvial sediment sources, substrate is composed of fines, diagnostic salt marsh vegetation, lagoons may empty completely at low tide (extensive tide flats) and may have a residual basin that holds water at low tide. This term is used to identify geomorphic classes for the 2004 Nearshore Assessment completed by Battelle for the City.

Mean Higher-High Water (MHHW) – The plane of the arithmetic mean of the higher of two (2) daily high tides calculated from the most recent 19-year tidal cycle.

Mean Low Water (MLW) – The plane of the arithmetic mean of all low tides calculated from the most recent 19-year tidal cycle.

Mean Lower-Low Water (MLLW) – The plane of arithmetic mean of the lower of two (2) daily low tides calculated from the most recent 19-year tidal cycle (datum plane 0.0).

Mean Sea Level – The average height of the surface of the sea for all stages of the tide over a 19–year period, usually determined from hourly height readings.

Midden – An ancient refuse heap. Often a source of archaeological material.

Mining – Removal and primary processing of naturally occurring materials from the earth for economic use. "Processing" includes screening, crushing, stockpiling – all of which utilize materials removed from the site where the processing activity is locate. Processing does not include the manufacture of molded or cast concrete, or asphalt products, asphalt mixing operations, or concrete batching operations.

Mitigation – Measures used to avoid, minimize or alleviate adverse impacts of development on ecological functions or ecosystem-wide processes. Mitigation must follow mitigation sequencing requirements of WAC 173-26-201(2)(e) and includes:

1. Avoiding, minimizing or compensating for adverse impacts, in the following order of preference:
    a. Avoiding the impact altogether by not taking a certain action or parts of an action.
    b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
    c. Rectifying the impacts by repairing, rehabilitating or restoring the affected environment;
    d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
    e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
    f. Monitoring the impact and the compensation project and taking appropriate corrective measures. Mitigation for individual action may include a combination of the above measures; and
2. The following specific categories:
    a. Mitigation, compensatory: replacing project-induced critical area losses or impacts, including, but not limited to, establishment, re-establishment, rehabilitation or enhancement.
    b. Mitigation, establishment: mitigation performed to intentionally establish a critical area (e.g., wetland) at a site where it does not currently exist.
    c. Mitigation, 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 critical area.
    d. Mitigation, rehabilitation: the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural of historic functions and processes to a degraded critical area.
    e. Mitigation, enhancement: the manipulation of the physical, chemical, or biological characteristics of a biological wetland to heighten, intensify or improve

specific function(s) or to change for specific purposes such as water quality improvement, flood water retention, or wildlife habitat.

Mitigation Sequence – Individual action that may include a combination of the following measures, listed in order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;
2. Minimizing impacts by limiting the degree of magnitude of an action and its implementation;
3. Rectifying impacts by repairing, rehabilitating, or restoring the affected environment;
4. Reducing or eliminating an impact over time by preservation and maintenance operations;
5. Compensating for an impact by replacing enhancing, or providing substitute resources or environments; and
6. Monitoring the impact and compensation projects and taking appropriate corrective measures when necessary.

Mitigation Plan – A detailed plan indicating actions necessary to mitigate adverse impacts of development.

Monitoring – Evaluating the impacts of development proposals over time on the biological, hydrological, pedological, and geological elements of ecosystem functions and processes and/or assessing the performance of required mitigation measures through the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features compared to a baseline or pre-project conditions and/or reference sites.

Mooring Buoy – A floating object anchored to the bottom of a water body that provided tie-up capabilities for vessels.

Muds – Sediments in which the size of the particles is smaller than 0.0625mm.

Mudflat – Low, unvegetated mud substrate that is flooded at high tide and uncovered at low tide.

Multi-family Dwelling or Residence – A building containing two or more dwelling units or more than one dwelling unit on one lot, including, but not limited to, duplexes, apartments, and condominiums.

N

Natural Riparian Habitat Corridor – The waterside environment maintained in its natural state, primarily for fisheries and wildlife habitat, and water quality improvements, and, secondarily, for flood control works, while allowing controlled access to avoid damage to the resource.

Native Vegetation – Plant species typically found on an undeveloped marine shoreline that are indigenous to the Central Puget Lowland eco-region and suitable to the specific site conditions.

Native Vegetation Equivalent – Plant species that are equivalent in providing the same site-specific functional arrays as would a native species. Functional arrays may include forage, floodwater restraint, hiding habitat, or other physical or biologic roles in the ecosystem, that

individually or in combination correspond to those of the native species. As with natives, the role and mix of an alternative species may vary depending on the site and its surrounding ecosystem. Invasive/exotic species shall not be considered equivalent species.

Nearshore or Nearshore Zone – The area of marine and estuarine shoreline, generally extending from the top of the shoreline bank or bluff to the depth offshore where light penetrating the water falls below a level supporting plant growth, and upstream in estuaries to the head of the tidal influence. It includes bluffs, beaches, mudflats, kelp and eelgrass beds, salt marshes, gravel spits, and estuaries.

Not Net Loss – As a public policy goal, the maintenance of the aggregate total of the City's shoreline ecological functions at its current level of environmental resource productivity. As a development and/or mitigation standard, no net loss requires that the impacts of a particular shoreline development and/or use, whether permitted or exempt, be identified and prevented or mitigated, such that it has no resulting adverse impacts on shoreline ecological functions or ecosystem-wide processes. Each project shall be evaluated based on its ability to meet the no net loss standard commensurate with its scale and character.

Nonconforming Development or Nonconforming Structure – An existing structure that was lawfully constructed at the time it was built but is no longer fully consistent with present regulations such as setbacks, buffers or yards; area; bulk; height; or density standards due to subsequent changes to the Program.

Nonconforming Lot – A lot that met dimensional requirements of the applicable SMP at the time of its establishment (November 26, 1996), as amended, but now contains less than the required width, depth, or area due to subsequent changes to the Program.

Nonconforming Use – An existing shoreline use that was lawfully established prior to the effective date of this Program (November 26, 1996), as amended, but which does not conform to present use regulations due to subsequent changes to the Program.

Nonwater-oriented – Nonwater-oriented uses serve to describe those uses which have little or no relationship to the shoreline and are not water-dependent, water-related, or water-enjoyment, or considered priority uses under the Shoreline Management Act. Nonwater-oriented uses, means those uses that are not water-dependent, water-related, or water-enjoyment. Nonwater-oriented use examples include professional offices, automobile sales or repair shops, storage facilities, and automobile gas stations.

Normal Appurtenance – See Appurtenance.

Normal Maintenance – Those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. [WAC 173-27-040(2)(b), or its successor]. (See Normal Repair.) Normal maintenance does *not* include:

1. Use of fertilizer or pesticide application in wetlands, fish and wildlife habitat conservation areas, or their buffers;
2. Re-digging ditches in wetlands or their buffers to expand the depth or width beyond the original ditch dimensions;

Normal Repair – To restore a structure or development to a lawfully established state comparable to its original condition within a reasonable period after decay or partial destruction, except where repair involves total replacement which is not common practice, or causes

substantial adverse effects to the shoreline resource or environment. This does not include any activities that change the character, scope or size of the original structure or development beyond the original design. [WAC 173-27-040(2)(b), or its successor]. (See Normal Maintenance).

Normal Protective Bulkhead – See Bulkhead.

O

Obligate Vegetation – The sum total of macrophytic plant life that occurs in areas where the frequency (>99% of the time in wetlands) and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present. USACE 1987 Wetland Delineation Manual.

OHWM, Ordinary High Water Mark – That mark that will be formed by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil has a character distinct from that of the abutting upland in respect to vegetation as that condition existed on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by the City or Washington State Department of Ecology, provided that in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high water and the ordinary high water mark adjoining fresh water shall be the line of mean high water. [See RCW 90.58.030(2)(b), or its successor and WAC 173-22-030(6), or its successor].

Offshore – The area waterward of the breaker zone, extending in a direction waterward form the shore.

Oil/Water Separator – Specialized catch basins that are designed to trap oil and other materials lighter than water in the basin while allowing the water to escape through the drainage system.

Open Coastal Inlets - These describe inlets or estuaries whose size or configuration precludes significant wave action, but where the inlet itself is not significantly enclosed by a barrier or other restriction.

Open Space – See BIMC Title 18.

Open Water Moorage and Anchorage Area – A designated area of state-owned aquatic lands leased for the moorage and anchorage of vessels that does not abut uplands and does not include a built connection to the uplands. Open water moorage and anchorage areas are leased only by municipalities in accordance with WAC 332-30-139 and subject to the restrictions therein.

Outfall – A structure extending into a body of water for the purpose of discharging an effluent (sewage, storm runoff, cooling water).

Overwash - The flow of marine waters and associated sediment over the top of a barrier beach, usually when storms coincide with high tides. Leads to deposition of sediment in backshore areas and the gradual shifting of a barrier beach landward.

Overwater structures – Human-made structures that extend over all or part of the surface of a body of water, such as a pier.

P

Parking – The temporary storage of automobiles or other motorized vehicles.

Periodic – Occurring at regular intervals.

Person(s) – Includes organizations and corporations.

Pier – A platform structure or anchored device that is fixed above the water extending waterward from ordinary high water, and which is generally used as a landing or moorage place for industrial, commercial, and/or pleasure craft; including but not limited to ; wharves and quays.

Plant Community – Association of plants in a given area or region in which various species are more or less dependent upon each other.

Pocket Beach – An isolated beach, existing usually, without benefit of littoral drift from sources elsewhere. Pocket beaches are produced by erosion of immediately adjacent bluffs or banks and are relatively scarce and therefore valuable shoreforms on the Island; they are most common between rock headlands and may or may not have a backshore.

Pocket Estuary – Term used in the Puget Sound region to describe small estuaries and lagoons, partially isolated by their configuration from the main body of Puget Sound.

Point – A low profile shoreline Promontory of more or less triangular shape, the top of which extends waterward.

Primary Structure – A structure that includes the principal use of a property, or is intended to be occupied with the principal use of the property.

Priority Habitat – A habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes:

1. Comparatively high fish or wildlife density;
2. Comparatively high fish or wildlife species diversity;
3. Fish spawning habitat;
4. Important wildlife habitat;
5. Important fish or wildlife range;
6. Important fish or wildlife movement corridor;
7. Rearing and foraging habitat;
8. Important marine mammal haul-out;
9. Refugia habitat;
10. Limited availability;
11. High vulnerability to habitat alteration;
12. Unique or dependent species; or
13. Shellfish bed.

A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows).

A priority habitat may also be described by a successional stage (such as, old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

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

1. Criterion 1. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014, or its successor), threatened (WAC 232-12-011, or its successor), or sensitive (WAC 232-12-011, or its successor). State proposed species are those fish and wildlife species that will be reviewed by the Department of Fish and Wildlife (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.
2. Criterion 2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or state-wide, by virtue of their inclination to congregate. Examples include heron colonies, seabird concentrations, and marine mammal congregations.
3. Criterion 3. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.
4. Criterion 4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

Pruning – The selective removal of plant parts to achieve defined objectives.

Pruning Amount – The quantity of plant parts removed at one pruning, expressed in terms of a number of branches or other parts removed, and/or percentage of the crown or buds removed on an entire tree or specific branches.

Public Access – The public's right to get to and use the state's public waters, both saltwater and freshwater, the water/land interface and associated shoreline area. It includes physical access that is either lateral (areas paralleling the shore) or perpendicular (an easement or public corridor to the shore), and/or visual access facilitated by means such as scenic roads and overlooks, viewing platforms, decks or towers and other public sites or facilities.

Public Interest – The interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected including, but not limited to , an effect on public property or on health, safety, or general welfare resulting from adverse effects of a use or development.

Puget Lowland, Central – The low area between the Olympic and Cascade Mountain ranges.

Puget Sound – All marine water contained south and east of Admiralty Inlet and Deception Pass.

Q

Qualified Professional – A person with experience and training with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). A qualified professional must possess the required education and experience stipulated for that profession pursuant to this Program for the following:

1. Fisheries Biologist;
2. Geotechnical Engineer;
3. Hydrogeologist;
4. Wetland Specialist;
5. Wetland Biologist;
6. Professional Archeologist;
7. Certified Arborist;
8. Engineering Geologist.

R

RCW – Revised Code of Washington.

Ravine – A V-shaped landform generally having little to no floodplain and normally containing steep slopes, which is deeper than 10 vertical feet as measured from the centerline of the ravine to the top of the slope. Ravines are typically created by the wearing action of streams. The top of the slope is determined where there is a significant change in the slope to generally less that a 15 percent slope.

Recharge – The process involved in the absorption and addition of water from the unsaturated zone to ground water.

Recreation – An experience or activity in which an individual engages for personal enjoyment and satisfaction through forms of play, sports, relaxation, amusement or contemplation, Most shore-based recreation included outdoor recreation such as: fishing, hunting, clamming, beach combing, and rock climbing; various forms of boating, swimming, hiking, bicycling, horseback riding, camping, picnicking, watching or recording activities such as photography, painting, bird watching or viewing or water or shorelines, nature study and related activities.

Recreational Development, Active – activities that generally require the use of constructed facilities such as playgrounds, athletic fields, boat ramps, and marinas, and/or the use of specialized equipment.

Recreational Development, Passive – activities that require a minimum of facilities such as swimming, picnicking, hiking, canoeing and fishing, and other low impact activities.

Recreational Fishing –Fishing for personal use as allowed by Personal Fishery Chapter 220-56 WAC.

1. Hand Line or Angling - shall be identical in meaning and, except as provided in WAC 220-56-115, shall be defined as the use of not more than one line with three hooks attached to a pole held in hand while landing fish, or the use of a hand operated line

without rod or reel, to which may be attached not more than three hooks. When fishing for bottom fish, "angling" and "jigging" shall be identical in meaning [WAC 220-56-100(17), or its successor].

2. Spear Fishing - means an effort to take fish or shellfish by impaling the fish or shellfish on a shaft, arrow or other device [WAC 220-56-100(29), or its successor].
3. Bow and Arrow Fishing - any method of taking, or attempting to take, fish by the use of an arrow equipped with a barbed head and a line attached, and propelled by a bow, as in the sport of archery, while the fisher is above the surface of the water [WAC 220-56-100(6), or its successor]

Redevelopment – On a site that is already substantially developed (i.e., has 35 percent or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

Removal, Vegetation – To eliminate the presence or hazard of unwanted vegetation.

Repair – See "Normal Repair"

Residential Development – Construction or alteration, earth modification, subdivision and use of land primarily for human residence; including but not limited to single-family residences and multifamily dwellings, accessory uses, and structures normally associated with residential uses and structures. Residential development includes land divisions, including short plats, of residentially zoned land. It also includes all modifications to land and vegetation associated with construction, preparation, or maintenance or residential structures or accessory structures.

Restoration or Ecological Restoration – To revitalize, reestablish or upgrade ecological shoreline functions and/or natural processes of a degraded shoreline resource to a condition that sustains the ecological functions and process at a state of equilibrium.

This may be accomplished through measures including, but not limited to, revegetation, removal of intrusive shoreline structures, and removal or treatment of toxic materials.

Retaining Wall – A built structure designed to retain an earth bank from sliding or to resist the lateral pressure of soil when there is a desired change in ground elevation.

Revetment – A sloping structure built to protect a scarp, embankment, or shore against erosion by waves or currents. Usually built of riprap, with heavy armor layer, one or more filter layers of smaller rock or filter cloth, and "toe" protection. A revetment slopes shoreward and has a rough or jagged facing. Its sloping face absorbs wave energy and differentiates it from a bulkhead, which is a vertical structure.

Riparian – Of, pertaining to, or situated or living on the banks of a river or other body of water, including tidewater.

Riparian Management Zone – The area adjacent to a water body (stream, lake or marine water) that contains vegetation that influences the aquatic ecosystem, nearshore area and/or fish and wildlife habitat. The zone include terrestrial habitat and riparian vegetation.

Riparian Vegetation – Vegetation that tolerates and/or requires moist conditions and periodic free flowing water thus creating a transitional zone between aquatic and terrestrial habitats which

provides cover, shade and food sources for aquatic and terrestrial insects for fish species. Riparian vegetation and their root systems stabilizes banks, attenuates high water flows, provide wildlife habitat and travel corridors, and provide a source of limbs and other woody debris to terrestrial and aquatic ecosystems.

Riprap – A layer, facing, or protective mound of stones placed to prevent erosion, scouring, or sloughing of a structure or embankment.

Rock Weir – See Groin.

Runoff – Water that is not absorbed into the soil, but rather flows along the ground surface following the topography.

S

Salish Sea – Broadly defined as the confined water body inland from Cape Flattery, including Puget Sound, the Strait of Juan de Fuca and the Strait of Georgia.

Salmon and Steelhead Habitats – Gravel bottom streams, creeks, and rivers used for spawning; streams, creeks, rivers, side channels, ponds, lakes, and wetlands used for rearing, feeding, cover and refuge from predators and high water; streams creeks, rivers, estuaries, and shallow areas of saltwater bodies used as migration corridors; and salt water bodies used for rearing, feeding, and refuge from predators and currents.

Salt Tolerant Vegetation – Vegetation which is tolerant of interstitial soil salinities greater than or equal to 0.5 parts per thousand. [WAC 173-22, or its successor].

Seawall – Structure separating land and water areas primarily to prevent erosion and other damage by wave action. Generally more massive and capable of resisting greater wave forces than a bulkhead or revetment.

Sediment – The material, such as sand, silt, or clay, suspended in or settled on the bottom of a water body, generally deposited by erosion, water or wind.

Sediment Transport – The movement of sediment along a current pathway.

Seismic Hazard Areas – Areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, or surface faulting. While ground shaking is the principal risk because the entire island will shake significantly, severe damage will occur where slope failure, liquefaction, and settlement are induced by the shaking and surface rupture is created by fault movement. The following areas are considered seismic hazard areas:

1. Seismic Landslide Hazard Areas. Slopes which are stable in non-earthquake periods, but fail and slide during ground shaking;
2. Liquefaction Hazard Areas. Areas of non-cohesive, loose or soft, saturated soils of low density in association with a shallow groundwater table that are subject to settlement and/or liquefaction from ground shaking; or
3. Fault Hazard Areas. Areas of known surface rupture or significant surface deformation as a result of an active fault movement, including fifty feet (50’) on either side.

Sensitive Areas – See Critical Areas

Sensitive Land – See Critical Areas

Setback – The required space that is left open and unoccupied between the nearest projection of a structure and the property line of the lot on which the structure is located, and that are required to remain unobstructed from the ground to the sky except for modification to setbacks and height specifically allowed by code.

Shall – A mandate; the action that must be done.

Shared Moorage – Moorage for pleasure craft and/or landing for water sports for use in common by shoreline residents of a certain subdivision or community within shoreline jurisdiction or for use by patrons of a public park or quasi-public recreation area, including rental of non-powered craft. If a shared moorage provides commercial services of six or more slips, it shall be considered a marina.

Shellfish – Invertebrates of the phyla Arthropoda (class Crustacea), Mollusca (class Pelecypoda) and Echinodermata.

Shellfish Habitat Conservation Area – All public and private tidelands suitable for shellfish, as identified by the Washington Department of Health classification of commercial growing areas, and those recreational harvest areas as identified by the Washington Department of Ecology are designated as Shellfish Habitat Conservation Protection District created under RCW 90.72 is also a Shellfish Habitat Conservation Area.

Shoreland Areas – Those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands, including river deltas associated with streams, rivers and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology.

Shorelands – See "Shoreland areas."

Shoreline Armoring – Structural protection from erosion caused by tidal action, current or waves, including but not limited to, revetments, bulkheads, sea walls, gabions.

Shoreline Designation – The categories of shorelines established by the Shoreline Master Programs in order to provide a uniform basis for applying policies and use regulations within distinctively different shoreline areas. [WAC 173-16-040(4), or its successor].

Shoreline Jurisdiction (Associated Wetlands [Jurisdictional]) – The proper term describing all of the geographic areas covered by the Shoreline Management Act, related rules, and the applicable master program. Those lands extending landward for two hundred feet (200') in all directions, as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred (200) feet from such floodways; and all marshes, bogs, swamps and deltas associated with the streams, lakes, and tidal waters subject to the Shoreline Management Act. See RCW 90.58.030(2)(f), or its successor; WAC 173-16-030(17), or its successor; and WAC 173-22-030(10), or its successor. Also, such areas within a specified local government's authority. See definitions of shorelines, shorelands, shorelines of the state, and Shorelines of State-wide Significance, and wetlands, jurisdictional.

Shoreline Management Act – The Shoreline Management Act of 1971, RCW Chapter 90.58, as amended.

Shoreline Master Program or Master Program – The comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material

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

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

Shoreline Permit – A substantial Development, Conditional Use, Revision, Variance, or any combination thereof [WAC 173-27-030(13), or its successor].

Shoreline Stabilization and Flood Protection – Structural or non-structural modifications to the existing shoreline intended to reduce or prevent erosion impacts to property and dwellings, businesses, or structures of upland beaches or reduce adverse impacts caused by natural processes, such as current, flood, tides, wake, wind, or wave action. These are generally located parallel to the shoreline at or near the OHWM. Examples of specific structural and nonstructural shoreline modification activities include revetments, riprap, bulkheads, and bank stabilization.

Shoreline Stabilization, Bioengineered – Biostructural and biotechnical alternatives to hardened structures (bulkheads, walls) for protecting slopes or other erosive features including soft – treatment techniques. Bioengineered stabilization uses Vegetation Reinforced Soil Slopes (VRSS), which uses vegetation arranged embedded in the ground to prevent shallow mass-movements and surficial erosion.

Shoreline Stabilization, Hard structure – Shore erosion control practices using hardened structures that armor and stabilize the shoreline landward of the structure from further erosion.

Shoreline Stabilization, Hybrid structure – An approach to erosion control that combines soft-treatment shoreline treatment placed waterward of more conventional structural shoreline stabilization elements. The soft treatment preserves natural beach contours and mimics habitat structure in order to preserve ecological functions. The hard structure provides long-term stability to the upland site, but is located sufficiently landward of the OHWM as not to impair ecological processes.

Shoreline Stabilization, New – Placement of shoreline stabilization where no such structure previously existed, including additions to or increases in size of existing shoreline stabilization measures are considered new structures.

Shoreline Stabilization, Non-structural – This is a soft treatment which does not use driftwood, logs, geotextile fabric, or other organic or non-organic structural materials. Examples include:

1. Addressing upland drainage issues;
2. Planting stabilization vegetation without fill, grading, or use of non-biodegradable geotextile fabric, gabions other stabilizing structures to provide temporary erosion control;

Shoreline Stabilization, Replacement – The construction of a new structure to perform a shoreline stabilization function of an existing legally-established shoreline stabilization structure which can no longer adequately serve its purpose.

Shoreline Stabilization, Soft-treatment – Shore erosion control and restoration practices using only plantings or organic materials to restore, protect or enhance the natural shoreline environment. This technique mimics natural conditions for ecological functions and ecosystem-wide processes. When used organic/biodegradable structural components are to be place to avoid significant disruption of sediment recruitment, transportation, and accretion. Examples include:

1. Bioengineered Shoreline Stabilization;
2. Beach Nourishment/Replenishment;
3. Vegetated Soil Stabilization Retention Methods;
4. Driftwood;
5. Coir fiber logs or other natural materials;
6. Nonstructural Shoreline Stabilization.
7. Beach Berm.

Shoreline Stabilization, Structural – Shoreline stabilization which includes a footing, foundation, or anchors. Materials are typically hardened structures which armoring the shoreline. See also Shoreline Stabilization, Hard structure and Shoreline Stabilization, Hybrid structure.

Shoreline Substantial Development Permit – A mechanism through which the City determines whether a proposed development or activity complies with the State of Washington Shoreline Management Act (RCW Chapter 90.58,or its successor) and the Master Program.

Shorelines – All of the water areas of the state, including reservoirs and their associated wetlands, together with the lands underlying them, except those areas excluded under RCW 90.58.030(2)(d) or its successor and shorelines of state-wide significance.

Shorelines Hearings Board (SHB) – A quasi-judicial body which hears appeals by any aggrieved party on the issuance of a shoreline permit and appeals by local government on Washington State Department of Ecology approval of master programs, rules, regulations, guidelines, or designations under the Shoreline Management Act. [RCW 90.58.170, or its successor; RCW 90.58.180, or its successor; and WAC 173-04-01, or its successor].

Shorelines of State-wide Significance – A select category of shorelines of the state, defined in RCW 90.58.030(2)(e) or its successor, where special preservation policies apply and where greater planning authority is granted by the Shoreline Management Act [RCW 90.58.020 or its successor]. Within the City's jurisdiction all those areas lying seaward from the line of extreme low tide are shorelines of state-wide significance [RCW 90.58.030(1)(e)(iii) or its successor].

Shorelines of the State – Shorelines and shorelines of state-wide significance.

Shoreward – See landward

Should – A particular action is required unless there is demonstrated, compelling reason, based on policy of the Shoreline Management Act and this Program, against taking the action.

Shrub – A woody perennial plant, usually with several stems that may be erect or close to the ground, generally smaller than a tree.

Sign – Any letter, figure, design, symbol, trademark or other device which is intended to attract attention to any activity, service, place, political office, subject, firm, corporation or merchandise, except traffic signs or signals, public or court notices, signs not visible from the public right-of-way or adjacent properties, signs on moving vehicles, newspapers, leaflets or other printed materials intended for individual use or individual distribution to members of the public, government flags, flags and buntings exhibited to commemorate national patriotic holidays and temporary banners announcing charitable or civic events.

Significant Removal of Vegetation – The removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. The approved removal of trees determined to be hazardous does not apply. Tree pruning, not including tree topping, where it does not affect ecological functions, does not contribute significant vegetation removal in the Washington State Shoreline Master Program Guidelines, Chapter 173-26 WAC 99 of 100.

Single-family Residence (SFR) – A detached dwelling designed for and occupied by one family, including those structures and developments within a contiguous ownership which are normal appurtenance [WAC 173-27-040(2)(g), or its successor].

Site – The entire lot, series of lots, or parcels on which a development is located or proposed to be located, including all contiguous undeveloped lots or parcels under common ownership.

Soil Bioengineering – An applied science that combines structure, biological, and ecological concepts to construct living structures that stabilize the soil to control erosion, sedimentation, and flooding using live plant materials as a main structural component.

Solid Waste Disposal – Discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste, including hazardous waste, on land or in the water.

Solid Waste – Solid and semi – solid wastes, including garbage, rubbish, ashes, industrial wastes, wood wastes, and sortyard wastes associated with commercial logging activities, swill, demolition and construction wastes, abandoned vehicles and parts of vehicles, household appliances, and other discarded commodities. Solid waste does not include wastewater, dredge material, agricultural, or other commercial logging wastes not specifically listed above. See landfill and dredging material.

Species of Local Importance – Those species that are of local concern due to their population status or their sensitivity to habitat alteration.

Spit – An accretion shoreform which extends seaward from and parallel to the shoreline. They are usually characterized by a wave-built berg on the windward side and more gently sloping, muddy, or marshy shore on the leeward side. A curved spit is normally called a hook.

Spit/Barrier/Backshore – An area with a wide beach face and slope of less than fifteen percent (15%), distinguishable backshore. This term is used to identify geomorphic classes for the 2004 Nearshore Assessment completed by Battelle for the City.

Spur Dock – See Groin.

SSDP – Shoreline Substantial Development Permit.

Starvation – See Impoundment

Statement of Exemption or Letter of Exemption – A written statement by the Administrator that a particular development proposal is exempt from the substantial development permit requirement and is generally consistent with this Program including the policy of the Act [RCW 90.58.020, or its successor].

Steep Slope – A forty percent (40%) or greater slope. See also Landslide Hazard

Storm Surge – A rise above normal water level on the open coast due to the action of wind forces on the water surface or to atmospheric pressure reduction.

Stormwater Management – The control of stormwater drainage through a systematic design that performs a particular function, or multiple functions, and includes but not limited to, pipes, swales, ditches, culverts, street gutters, detention basins, retention basins, constructed wetlands, infiltration devices, catch basins, oil/water separators, sediment basins and modular pavement.

Streams – Those areas in the City of Bainbridge Island where the surface water flows are sufficient to produce a defined channel or bed. A defined channel or bed is an area which demonstrates clear evidence of the passage of water and includes but is not limited to bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices, or other artificial watercourses unless they are used by fish or used to convey streams naturally occurring prior to construction.

Stream Types – A stream classification system based on fish usage and perennial or seasonal water regime as found in WAC 222-16-030 and meeting the standards listed below.

1. "Type F Stream" means a stream that has fish habitat. Waters having the following characteristics are presumed to meet the physical criteria for fish use: Stream segments having a defined channel of 2 feet or greater within the bankfull width and having a gradient of 16 percent or less. Also, stream segments having a defined channel of 2 feet or greater within the bankfull width and having a gradient greater than 16 percent and less than or equal to 20 percent, and having greater than 50 acres in contributing basin size based on hydrographic boundaries.
2. "Type Np" means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.
3. "Type Ns" means all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np Water. Ns Waters must be physically connected by an above-ground channel system to marine waters, Type F, or Np Waters.

Structure – A permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or

below the surface of the ground or water, except for vessels. [WAC 173-27-030(15) or its successor].

Subdivision – The division or redivision of land, including short subdivisions, for the purpose of sale, lease, or conveyance.

Substantial Development – Any development of which the total cost or fair market value exceeds the amount specified in WAC 173-26-040(2)(a); or any development which materially interferes with the normal public use of the water or shorelines of the state, except as specifically exempted pursuant to RCW 90.58.030(3)(e), or its successor, and WAC 173-27-040, or its successor. See definitions for Development and Exemption.

Substantial Progress – Substantial progress toward completion of a permitted activity includes all of the following, where applicable: the making of contracts, signing of notice to proceed, completion of grading and excavation and the laying of major utilities; or, where no construction is involved, commencement of the activity [WAC 173-27-090, or its successor].

Subtidal – The area of the marine environment below extreme low tide.

Sub-estuary – See Pocket Estuary

Sustainable Development – Development which maintains a balance between the health of the natural environment and the needs of the human community which lives within it.

Surface Water – Water that travels across the surface of the ground, rather than infiltrating.

Swell – Wind-generated waves that have traveled out of their generating area. Swell characteristically exhibits a more regular and longer period and has flatter crests than waves with their fetch.

T

Terrestrial – Of or relating to land as distinct from air or water.

Tidal Inlet – A shore feature subject to the daily influence of the tides, whose mouth is narrower than its length. The inlet is considered to be all lands and waters seaward of the ordinary high water mark, and extending to its mouth. Within tidal inlets, specific areas that constitute critical habitat are designated for special protection under the Master Program.

Tidal Flats – Marshy or muddy areas of the seabed which are covered and uncovered by the rise and fall of tidal water.

Tidal Lagoon – A body of saline water (salinity greater than 0.5 parts per thousand) with a constricted or subsurface outlet that is subject to the periodic, but not necessarily daily, exchange of water with Puget Sound or a tidal inlet. The exchange may occur seasonally, during storms, or during the highest spring tides. The connection between the sea and the lagoon does not necessarily have to be on the surface; the connection can be subsurface through permeable gravel and sand berms.

Tidal Range – The difference in height between consecutive high and low water.

Tidal Water – Includes marine and estuarine water bounded by the ordinary high water mark. Where a stream enters the tidal water, the tidal water is bounded by the extension of the elevation of the marine ordinary high water mark within the stream [WAC 173-22-030(9), or its successor].

Tidelands – Land on the shore of marine water bodies between the line of ordinary high water and the line of extreme low tide.

Toxic Material – Any material damaging to marine life including, but not limited to, paints, varnishes, anti-fouling agents, bleaches, petroleum, and contaminated bilge waste water.

Transient Moorage – Moorage for a stay of less than two (2) weeks.

Transportation Facilities – Those structures and developments that aid in land and water surface movement of people, goods, and services. They include roads and highways, bridges and causeways, bikeways, trails, railroad facilities, ferry terminals, float plane terminals, heliports, and other related facilities.

Tree – A woody perennial plant with a single or multiple trunks, which typically develop a mature size of over several inches diameter, and ten (10) or more feet in height.

U

Unavoidable – Adverse impacts that remain after all appropriate avoidance and minimization measures have been implemented.

Updrift – In the direction opposite of dominant alongshore sediment transport.

Upland – Generally described as the area above and landward of the OHWM.

Upland Finfish Rearing Facilities – Those private facilities not located within waters of the state where finfish are hatched, fed, nurtured, held, maintained, or reared to reach the size for commercial market sale. This shall include fish hatcheries, rearing ponds, spawning channels, and other similarly constructed or fabricated facilities.

Utilities, Accessory – Small scale distribution systems directly serving a permitted shoreline use. These include power, telephone, cable, water, sewer, septic, and stormwater lines.

Utilities, Primary – Facilities that produce, transmit, carry, store, distribute, or process electric power, gas, water, sewage, or information. Primary utilities include solid waste handling and disposal facilities, wastewater treatment facilities, utility lines, electrical power generating or transfer facilities, radio, wireless telephone and microwave tower, and gas distribution and storage facilities.

V

Variance – A means to grant relief from the specific bulk, dimensional, or performance standards specified in the applicable Master Program. Variance permits must be specifically approved, approved with conditions, or denied by the Washington State Department of Ecology. (See WAC 173-14-150, or its successor).

Vascular Plant – Any plant that has a specialized conducting system consisting mostly of phloem (food-conducting tissue) and xylem (water-conducting tissue), collectively called vascular tissue. These plants have true stems, leaves, and roots, modifications of which enable species of vascular plants to survive in a variety of habitats under diverse, even extreme, environmental conditions.

Vegetative Stabilization – Planting of vegetation to retain soil and retard erosion, reduce wave action, and retain bottom material. It also means utilization of temporary structures or netting to enable plants to establish themselves in unstable areas.

Vessel – A floating structure that is designed primarily for transportation, is normally capable of self propulsion and navigation, and meets all applicable laws and regulations pertaining to navigation and safety equipment on vessels, including, but not limited to, registration as a vessel by an appropriate government agency, and does not interfere with normal public use of the water. [WAC 173-27-030(18), or its successor].

View Corridor – An area free of buildings and other view-blocking structures which provides visual access to water and/or the shoreline.

W

WAC – Washington Administrative Code.

Water-dependent Use – A use or a portion of a use which cannot exist in a location that is not adjacent to the water which is dependent on the water by reason or the intrinsic nature of its operation. Examples of water-dependent uses may include ship cargo terminal loading areas, ferry and passenger terminals, barge loading facilities, ship building and dry docking, marinas, aquaculture, float plane facilities, and sewer outfalls.

Water-enjoyment Use – A recreational use, or other use facilitating public access to the shoreline as a primary characteristic of the use, or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as general characteristic of the use and which through the location, design, and operation ensure the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public, and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that foster shoreline enjoyment. Primary water-enjoyment uses may include, but are not limited to, parks, piers, and other improvements facilitating public access to shorelines of the state. General water-enjoyment uses may include, but not limited to, restaurants, museums, aquariums, educational/scientific reserves, resorts, and mixed use commercial, provided that such uses conform to the above water-enjoyment specifications and the provisions of the Master Program.

Water-oriented Use – Refers to any combination of water-dependent, water-related and/or water-enjoyment uses and serves as an all-encompassing definition for priority uses under the Shoreline Management Act.

Waterward – To, toward, or continuing into the water body.

Water Quality – The physical characteristics of water within shoreline jurisdiction, including water quality, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this chapter, the term "water quantity" refers only to development and uses regulated under this chapter and affecting water quantity, such as impermeable surfaces and stormwater handling practices. Water quantity, for purposes of this chapter, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.3.250 through 90.03.340.

Water-related – A use or portion of a use which is not intrinsically dependent on a waterfront location, but whose economic viability is dependent upon a waterfront location because:

1. Of a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water or,
2. The use provides a necessary service supportive of the water-dependent commercial activities and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Examples include: (1) manufacturers of ship parts large enough that transportation becomes a significant factor in the product(s) cost, (2) professional services serving primarily water-dependent activities, and (3) storage of water-transported foods. Examples of water-related uses may include warehousing of goods transported by water, seafood processing plants, hydroelectric generating plants, gravel storage when transported by barge, oil refineries where transport is by tanker, and log storage.

Wave Direction – The direction from which waves approach an observer.

WDFW – Washington State Department of Fish and Wildlife.

Washington State Department of Ecology – See Ecology.

Weir – A structure in a stream or river for measuring or regulating stream flow.

Wetlands – Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support~~,~~ a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, estuaries, marshes, bogs, ponds less than twenty acres, including their submerged aquatic beds and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands include those legally established artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. [WAC 173-22-030(10) and (11), or their successors]

Wetland Boundary – The boundary or outer edge of a wetland as delineated in accordance with the federal wetland delineation manual and applicable regional supplements (as updated), as required by WAC 173-22-035, or its successor.

Wetland Category – Category as defined in Washington State Wetland Rating System for Western Washington – 2014 Update (Ecology Publication No. 14-06-029, October 2014), or as revised and adopted by the department.

Wetlands Specialist – A person with experience and training in wetland issues who is able to submit substantially correct reports on wetland delineations, classifications, functional assessments and mitigation plans. "Substantially correct" means that errors, if any, are minor and do not delay or affect the site plan review process. Qualifications of a wetlands specialist include either (1) or (2), below, and the prior successful completion of at least three wetland reports.

1. Certification as a Professional Wetland Scientist (PWS) or Wetland Professional in Training (WPIT) through the Society of Wetland Scientists.

2. Bachelor of science degree in the biological sciences from an accredited institution and five years of professional field experience.

Wildlife Biologist – A person with experience and training in the principles of wildlife management and with practical knowledge in the habits, distribution and environmental management of wildlife. Qualifications include either (1) or (2), below, and the prior successful completion of at least three habitat managements plans.

1. Certification as a professional wildlife biologist through The Wildlife Society.
2. Bachelor of science or bachelor of arts degree in wildlife management, wildlife biology, ecology, zoology, or a related field, from an accredited institution and five years of professional field experience.

Wildlife Habitat – A seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long-term. These include areas of relative density or species richness, breeding habitat, winter range, and movement corridors. These also include habitats of limited availability or high vulnerability to alteration, such as cliffs, streams and wetlands.

X

Y

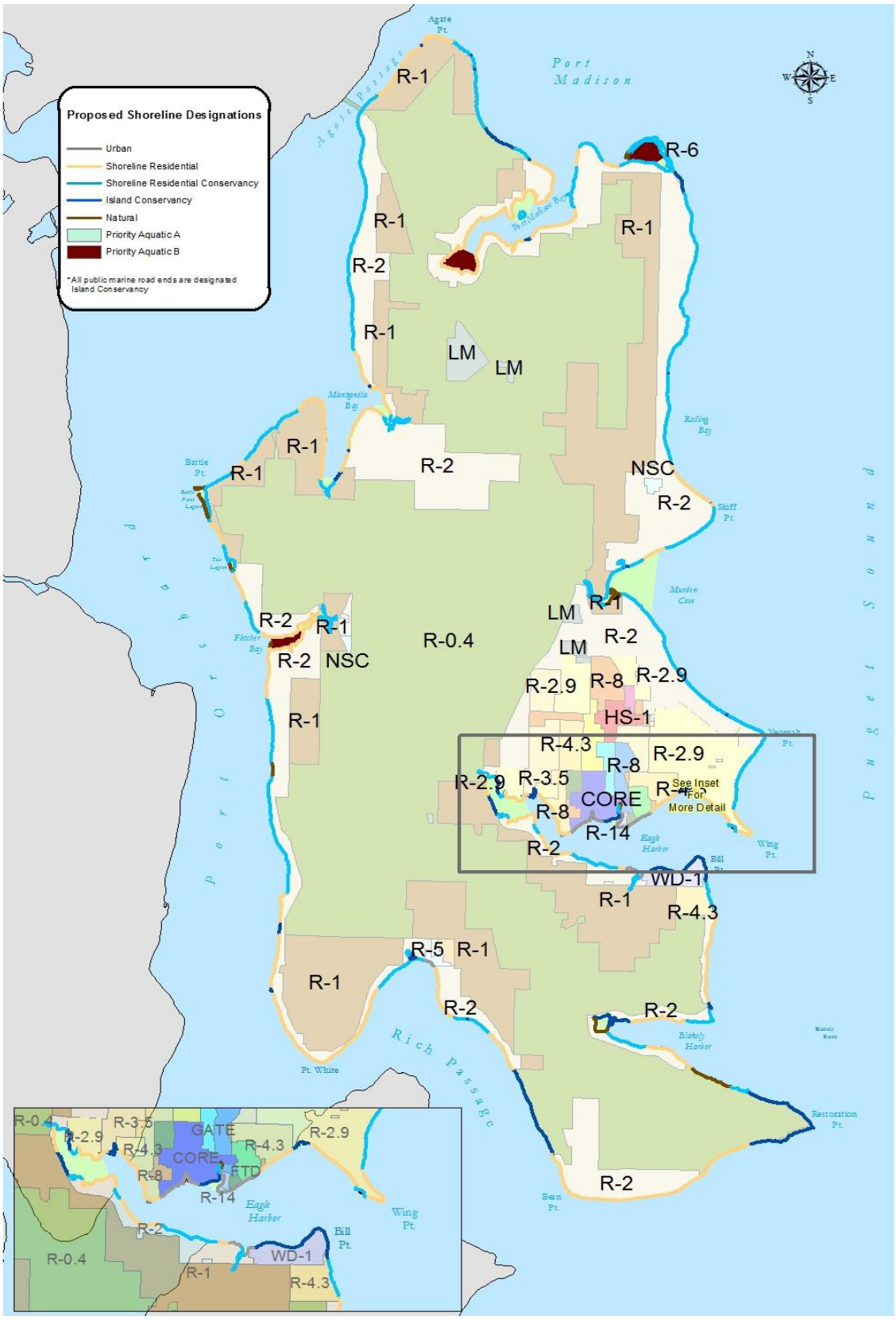
Z

Zone of Impact –The area of the subject property where the incident wave energy is distributed, in relation to the primary structure and primary appurtenances and the angle of the incident wave.

Zone of Influence – The zone of influence means an area usually upslope from a geologically hazardous area, where changes in land use and hydrology can affect the stability of the geologically hazardous area. The zone of influence is defined as 300 feet upslope from slopes greater than forty percent (40%), and two hundred feet (200') upslope from slopes greater than 15 percent but less than 40 percent that are determined to be geologically hazardous areas.

Zoning – To designate by ordinance, including maps, areas of land reserved and regulated for specific land uses.

Appendix A - Shoreline Designation Map



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Appendix B – Reserved

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Appendix C - Buffer Recommendation Memorandums

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City of Bainbridge Island
PLANNING & COMMUNITY DEVELOPMENT

MEMORANDUM

TO: City Council

FROM: Libby Hudson, Long Range Planning Manager
Ryan Ericson, Associate Planner

DATE: August 11, 2011

RE: Herrera Environmental Consultants Memorandum documenting
Marine Shoreline Buffer Recommendation Discussions
City Council Special Meeting of August 16, 2011

The attached memorandum has been provided by the City's scientific consultants, Herrera Environmental Consultants, to assist the City in developing buffer recommendations as part of the Shoreline Master Program Update process. The memo is intended to be utilized by the citizen workgroups, Planning Commission and City Council in reviewing and updating the vegetation conservation buffer and management standards.

This memo is informed by the science summarized in two documents that the City commissioned, the *Nearshore Assessment Summary of Best Available Science* (Battelle, October 2003) and the *Summary of Science Addendum* (Herrera, 2011). The memo reflects the outcome of buffer requirement discussions with Herrera and City staff, the requirements of the state Shoreline Master Program (SMP) Guidelines (WAC 173-26), and the policy direction of the citizen workgroups. In respect to vegetation conservation for the SMP Update, the state Guidelines [WAC 173-26-201(3)(d)(viii) and 173-26- 221(5)(b)] direct that the City should:

- Identify measures and regulations that address conservation of vegetation and ensure that new development meets vegetation conservation objectives;
- Assure no net loss of shoreline ecological functions and ecosystem-wide processes through a variety of measures, including setback and buffer standards;
- Identify ecological processes and functions of vegetation that are important to the local aquatic and terrestrial ecology and provide measures that conserve sufficient vegetation to maintain these functions;

- Vegetation conservation areas are not necessarily intended to be closed to use and development, but should provide for management of vegetation in a manner adequate to assure no net loss of shoreline function.

The City's existing SMP utilizes vegetation buffers known as Native Vegetation Zones (NVZ). The policy direction from the SMP Vegetation Conservation Workgroup suggests that in updating these buffers, the City should:

- Protect and restore shoreline vegetation to maintain and enhance ecological functions, human safety, personal property protection, and shoreline views and vistas. (Vegetation Conservation and Management Zones Draft Goal); and
- Establish shoreline vegetation conservation and management zones immediately upland of ordinary high water mark (OHWM) for each shoreline use and shoreline characterization, recognizing the pattern of development, shoreline ecological and ecosystem wide processes, and using current science and technical information, as described in WAC 173-26-201(2)(a). (Vegetation Conservation and Management Zones Draft Policy #6).

Developing Marine Shoreline Buffer Recommendations

The process used to develop the memorandum and the suggested range of buffers included several stages and was completed during a series of discussions with the consultant team and staff, including the following:

1. Reviewing the science related to buffers (summarized at the beginning of the memo, page 1). This was completed by Herrera.

2. Developing a concept for a two-zoned management area (buffer) that is comprised of a more protective (and more restricted use and activity) zone adjacent to the OHWM, and a more flexible zone (allowing minimal use, activity and alteration to vegetation) situated within the remaining portion of the management area. This concept is described on page 6 of the Herrera memo, under *Marine Shoreline Buffer and Riparian Protection Zone Recommendations*. The two-zoned management area concept was developed with Herrera and City staff, first agreeing on principles that met the SMP Guidelines and the policy direction of the citizen workgroup. These are outlined in the section *Agreed Principles,* page 9 of the Herrera memo.

3. Developing dimensional recommendations. The *Buffer Considerations and Recommend*ations section of the memo, page 11, was developed using the two-zone concept and developing principles that are informed by the science and the characteristics of the Bainbridge Island shoreline. Widths were then established for the management areas and applied to the proposed shoreline designations, (Table 1, page 12). This was completed by Herrera and modified by City staff to reflect the policy direction of the citizen workgroups and the proposed shoreline designation map.

Terminology

Vegetation conservation is important for managing and retaining shoreline vegetation in both the state SMP Guidelines and in the City's existing SMP (which included Native Vegetation Zones established for all shoreline designations). These management areas are intended to protect shoreline functions, primarily related to vegetation. In the scientific literature and within local

shoreline master programs, these areas might be called different names, including “buffers”, “setbacks” or “management areas”. This can be confusing since the terms for different management tools are frequently interchanged. Technical and scientific literature refer to buffers as relatively undisturbed areas that protect ecologically sensitive areas, while planning and regulatory terminology often allows some limited disturbance of the buffer area. This document uses the planning and regulatory definition of buffers.

As a management tool, these protective areas have the following in common: the area is a designated dimensional area situated along the shoreline, measured from the OHWM landward, with adopted regulations that limit uses and activities within these areas. The width of this area may be a fixed width or a flexible width (as is proposed here).

The Herrera memo uses terminology for this protective area, describing it as a marine shoreline buffer or *Standard Buffer*, that includes an inner zone, the *Riparian Protection Zone* (RPZ), which is measured adjacent to the OHWM.

These terms are slightly different in the draft Vegetation Conservation and Management Zones regulations, in which the entire buffer is called the *Standard Shoreline Buffer* (SSB) and is comprised of two zones, the *Riparian Protection Zone* (RPZ) and the *Marine Shoreline Zo*ne (MSZ).

Revised Memorandum

The Herrera Memorandum was revised on August 11, 2011 to provide additional clarification and to correct or clarify some citations used in the document.

Herrera Environmental Consultants, Inc.

Memorandum

To Ryan Ericson, Associate Planner, and Libby Hudson, Division Manager
City of Bainbridge Island

From Amanda Azous, José Carrasquero, and Jeff Parsons,
Herrera Environmental Consultants;
Lisa Grueter, BERK

Date August 2, 2011

Subject Documentation of Marine Shoreline Buffer Recommendation Discussions

The following discussion documents thoughts and considerations with respect to marine shoreline buffers for different shoreline use designations. The discussion is based on a review of the City of Bainbridge Island's (City) existing marine shoreline buffer regulations, the City's shoreline character, nearshore assets, existing and future land uses, scientific recommendations for marine buffers, as well as discussions with City staff. This memo begins with describing what a marine shoreline buffer is and how it differs from a riparian area; followed by a summary discussion of science-based buffer recommendations; and closes with buffer recommendations for the City's shoreline management plan update. For reference, marine shoreline buffer widths currently required by the City's shoreline regulation are provided in Attachment A, and are taken from Chapter 16.12 BIMC.

Marine Shoreline Buffers and Riparian Areas

Marine shoreline buffers are used in the City to regulate areas to protect the marine nearshore from the effects of land use activities (such as construction of buildings, driveways, and other infrastructure). Marine shoreline buffers may have variable widths, and use restrictions generally apply uniformly to the entire buffer area. This discussion in part serves to distinguish the concept of a marine shoreline buffer from that of a riparian area, which is an integral part of an aquatic ecosystem and, therefore, requires a more protective level of regulation.

A riparian area differs from a marine shoreline buffer in that it describes the terrestrial ecosystem directly adjacent to the marine nearshore that interacts with the aquatic environment. For example, intact riparian areas have native plant communities comprised of varying species of herbs and grasses, shrubs, deciduous trees, and coniferous stands of various ages and they are integral to the proper functioning of the nearshore. Native plant species are those species that occur or historically occurred on Bainbridge Island before European contact based upon the best available scientific and historical documentation.

Key functions supplied by riparian areas include providing large woody debris (LWD), bank stability, marine species food sources such as detritus and insects, and temperature moderation of beach substrate. This includes providing an overhanging, complex network of branches, trunks, stems and roots that act to moderate nearshore wave energy. In contrast, marine shoreline buffers

may include non-native landscaping, vegetable gardens, and lawns as well as possibly, native vegetation communities.

Because the functions provided by a riparian area are fundamental to maintaining a healthy functioning marine nearshore, it is recommended that the City designate a riparian protection zone (RPZ) with more restricted uses and assign a separate marine shoreline buffer to protect the RPZ. This would be done to protect such areas that are currently intact, and to establish an RPZ where such areas do not currently exist such as when properties re-develop, remodel or otherwise expand development. The RPZ would be treated as a conservation area to preserve the essential relationship between nearshore and shoreline ecological functions.

Some activities allowed within the RPZ would be weed removal, hazardous tree or limb removal, or shoreline oriented uses that are a high priority such as water dependent uses on private parcels or nearshore access and water enjoyment uses in public park areas.[2] This approach will help to ensure the protection of what remains of the City's intact riparian zones and will facilitate and provide more flexibility for uses within marine shoreline buffers. Policies, incentives and regulations that support restoration of riparian areas (such as through restoration of native plant communities) would benefit increases in nearshore habitat and functions and assist with showing no net loss.

Scientific Importance of Marine Shoreline Buffers and Riparian Areas

Sustaining habitats and species requires protection of the ecological functions and processes that support survival and population success, in addition to the direct protection of the habitats themselves. Without adequate habitat protection, ecological functions and key natural processes become degraded. In response to this risk, scientifically based recommended buffer widths and site-specific methods for determining buffers have been established in several sources. These sources were reviewed and reported in the City's Addendum to the Summary of Science Report (Herrera 2011) and are briefly summarized here.

Marine Shoreline Buffers

Factors relevant to the effectiveness of marine shoreline buffers, or of a given buffer width, include the type and intensity of surrounding land development, influence of groundwater, stability of slopes or bluffs, types of pollutants and their sources, vegetation dynamics (such as type and density), and geomorphic functions of driftwood or other habitat features that might affect the functions and values of the buffer (Brennan et al. 2009). For example, slopes that are more susceptible to massive failure may require a larger buffer, particularly if existing development is contributing to an increased rate of erosion such as from poor stormwater management and a lack of stabilizing vegetation. Feeder bluffs contributing to spawning beaches may require a larger buffer in order to protect future development while also decreasing the future need for shoreline armoring. Parcels with marshes, lagoons, or spit / barrier / backshores likewise may require wider buffers to protect these important ecological features. Steep slopes comprised of bedrock (relatively rare in the City) or stable high bluffs (greater than 5 meters)

[2] Allowances in the RPZ are more fully discussed in recommendations starting on page 6.

may allow for a narrower buffer as slope stability and sediment sources would not be impacted by development.

Much of the existing riparian and buffer literature is related to freshwater systems therefore, Washington Department of Fish and Wildlife (WDFW) established a panel of scientists in 2008 to assess the freshwater riparian scientific literature to determine its applicability to marine shoreline systems. The result of the literature review, and the Marine Riparian Workshop Proceedings conducted by the scientific panel in 2008 was a common consensus that freshwater riparian buffer research was conceptually applicable to marine shorelines (Brennan et al. 2009). The data provided by the WDFW panel (Brennan et al. 2009) suggest that necessary buffer widths vary considerably depending on the site-specific characteristics and the functions to be protected. For example, in order to achieve at least 80 percent effectiveness at removing pollutants from stormwater runoff, recommended buffers varied from as little as 16 feet to as large as 1,969 feet depending on the slope, depth and type of soil, surface roughness, density of vegetation and the intensity of the land use. Buffer widths for organic matter contributions (such as plant litter and terrestrial insects) ranging between 16 and 328 feet from the shoreline, depending on site conditions, were reported by Bavins et al. (2000) for providing this function. Buffers to protect the large woody debris function important to habitat structure and shoreline stability were suggested to be between 33 and 328 feet. However, given that trees located 300 feet landward from the edge of a bluff or bank would not immediately be recruited on the nearshore, consideration should be given to the site's potential tree height and the current and expected rate of bluff or bank retreat when establishing buffers for providing large woody debris. The WDFW panel found that buffer widths to support a number of specific riparian functions were identified by May (2003) and Knutson and Naef (1997). May recommended 98 feet for fine sediment control, and shade and microclimate control and 164 feet for the LWD function. Knutson and Naef recommended 138 feet for fine sediment control, 90 feet for temperature moderation, and 147 feet for LWD and litter fall functions. The panel's review indicated that recommendations for wildlife habitat protection ranged from 50 feet (specific to highly rural areas) to 328 feet.

Riparian Areas

An extensive body of research and literature has emerged over the last three decades which documents the specific importance of riparian areas in providing ecological functions related to waters of the state. These functions include the following (Romanuk and Levings 2010; Brennan et al. 2009; Lemieux et al. 2004):

- Water quality maintenance
- Fine sediment control
- Large woody debris delivery and retention
- Microclimate moderation
- Nutrient delivery and retention
- Terrestrial carbon source to nearshore food webs
- Fish and wildlife habitat creation and maintenance
- Direct food support for juvenile salmonids
- Hydrologic based slope stability

There is consensus in the scientific community that marine riparian areas are critical to sustaining many ecological functions (Desbonnet et al. 1994; Brennan and Culverwell 2004; Lemieux et al. 2004; Brennan et al. 2009). Marine riparian shoreline vegetation is an important component of nearshore habitat throughout the Puget Sound region (Herrera 2007; Lemieux et al. 2004; Levings and Jamieson 2001; Redman et al. 2005) and includes both upland forested plant communities occurring on the shoreline as well as unique vegetation found only in the marine nearshore (Lemieux et al 2004). Marine riparian areas contain elements of both aquatic and terrestrial ecosystems that mutually influence each other (Knutson and Naef 1997; Fresh et al. 2004; Lemieux et al. 2004). For example, juvenile salmon consume terrestrially derived carbon which can extend into the low intertidal zone (Romanuk and Levings 2010), and salmon are well known conduits for returning marine derived nutrients into freshwater systems (Chaloner et al. 2002; Wipfli 2003). Beach wrack and detritus accumulated in driftwood and tree fall in the nearshore zone, provide both terrestrial and marine derived food sources for invertebrates, fish, birds, and other organisms (Lewis 2007; Brennan et al. 2009). Riparian vegetation also provides contributions of organic matter, moisture, and nutrients that assist in the establishment and maintenance of estuarine marsh plants (Eilers 1975; Williams and Thom 2001).

These interactions between riparian vegetation and the nearshore marine environment are important to the survival and population success of numerous species that depend on marine habitats. Conservation efforts which, preserve the natural processes of detritus and nutrient conveyance, and organic debris accumulation, are therefore important in the marine environment. The establishment of significant protection for marine riparian areas is an important management strategy for protecting marine habitat conservation areas.

In literature reviews conducted to evaluate the potential impacts of removing riparian vegetation on numerous sensitive species, several mechanisms of impact have been identified (Herrera 2007b, 2008b). The degree of impact to the aquatic environment depends upon the magnitude of the vegetation removal or alteration (such as size and number of trees affected, and total area cleared of vegetation). At more severe levels, riparian vegetation modification could result in the following impacts, which would have subsequent implications for species survival and overall habitat condition:

- **Altered shade and temperature regime:** Caused by direct removal of vegetation.

- **Reduced bank and shoreline stability:** Caused by degradation of riparian vegetation, loss of vegetative cover and root cohesion, and reduced resistance to erosion. This may in turn affect aquatic habitat by increasing suspended sediments and altering riparian habitat structure.

- **Altered organic material contributions:** Caused by reduced source of leaf litter, woody debris, terrestrial insects, and other biota.

- **Altered habitat complexity and increased habitat fragmentation:** Caused by removal of native vegetation and creating habitat favored by invasive species.

There are geologic constraints on the type and density of vegetation that can establish on some areas of marine shoreline. For example, many bedrock shorelines are limited in the development of functional densities of vegetation. This is particularly relevant along the southern shoreline of the City where bedrock and overconsolidated sediments are common.

It has been shown that detritus feeding organisms may not be adapted to the leaf fall patterns or the chemical characteristics of leaves from non-native trees suggesting that riparian areas are most effective when comprised of native vegetation (Karr and Schlosser 1977). In addition, native plant species have adapted to local physical conditions such as soil, geology, and climate and therefore require less maintenance, are resistant to most pests and diseases, and require little or no irrigation or fertilizers, once established. Thus maintaining native plant species in marine riparian areas can also have consequent benefits on maintaining water quality.

In a meta-analysis review of 73 peer-reviewed studies of vegetated buffer efficacy in protecting water quality, Zhang et al. (2010) reported that forested buffers were generally found to remove more nitrogen (a limiting nutrient in marine waters) as well as phosphorus than grassed buffers. For areas with slopes up to 10 percent, predicted sediment removal efficiencies for a 33-foot (10-meter) vegetated buffer ranged from 76 to 100 percent. Removal efficiencies for nitrogen were 71 to 85 percent, and for phosphorus were 69 to 98 percent. Steeper slopes had declining removal rates.

By maintaining bank stability and contributing large wood to the aquatic environment, riparian vegetation forms and maintains habitat complexity. Riparian vegetation and large wood improve beach stability and contribute to roughness and sediment trapping (Brennan and Culverwell 2004; Gonor et al. 1988; Herrera 2005). This includes improved capacity of beaches to retain sand, a crucial substrate for forage fish spawning (Pentilla 2007).

Herrera (2005) suggested that driftwood and tree fall at the top of the beach may also stabilize the upper beach area by slowing littoral drift and reducing wave-induced erosion). It has been suggested that estuarine wood can affect water flow and the subsequent formation of bars and mudbanks (Gonor et al. 1988). The contribution to habitat complexity along marine shorelines may be maximized if trees that fall to beaches remain in place (Herrera 2005).

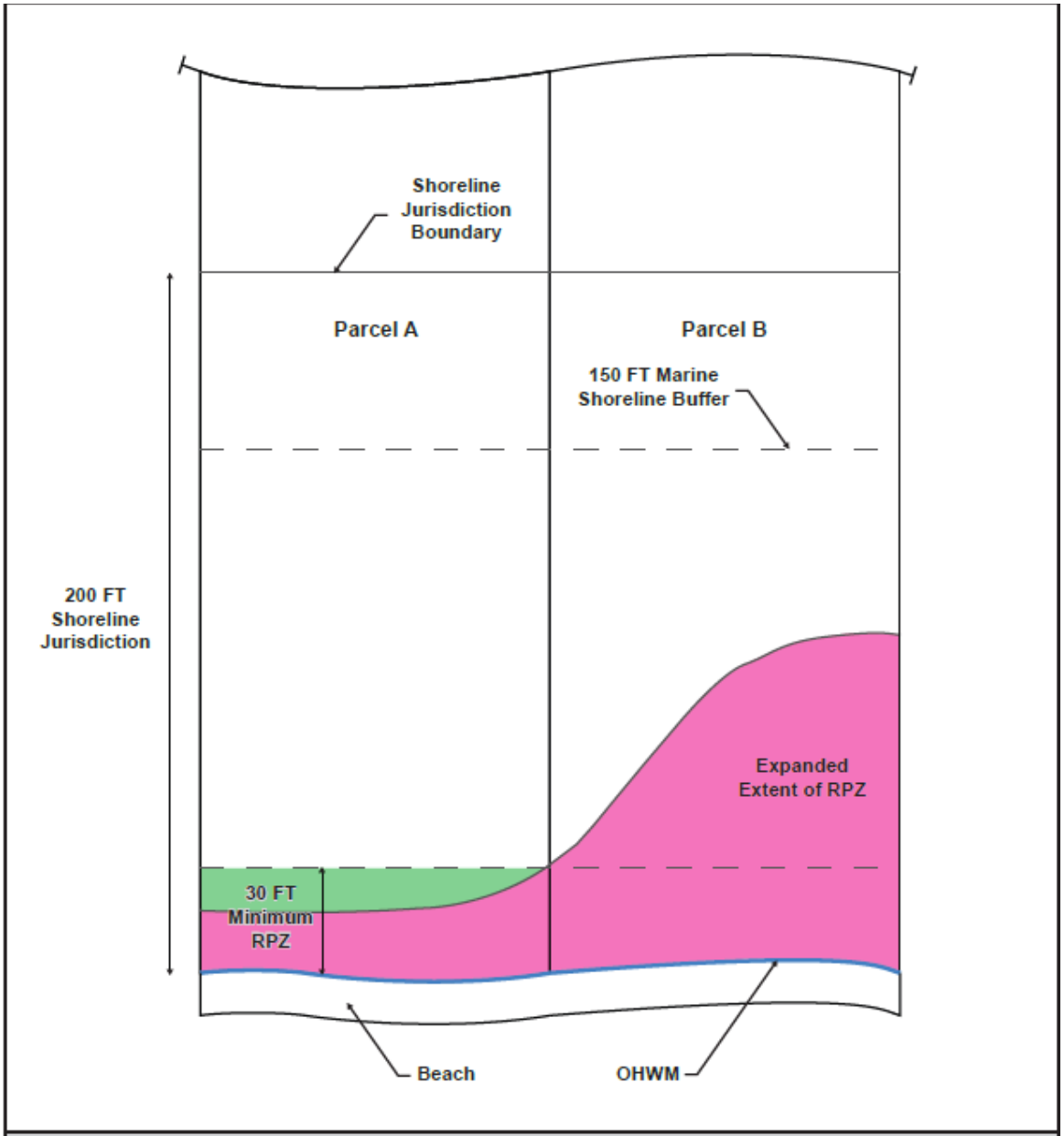
Marine Shoreline Buffer and Riparian Protection Zone Recommendations

City of Bainbridge Island shorelines are predominantly developed (over 82 percent [Battelle 2003]) which limits the City's ability to require wide buffers that are protected through regulation as conservation areas. Therefore, our recommendations have focused on protecting intact riparian habitat by limiting uses within this ecologically important zone, allowing for a less restrictive marine shoreline buffer landward of the riparian area that would protect the RPZ as well as provide some buffer functions; and by suggesting the City provide regulatory thresholds and landowner incentives to restore native riparian habitat whenever possible. In addition, the recommendations are informed by the City's desire to limit the number of non-conforming structures therefore, existing distances to residential structures from the shoreline are

considered. These agreements and assumptions are described in *Agreed Principles* on page 8 and *Buffer Assumptions and Recommendation* on page 10.

We recommend that in areas with existing properly functioning riparian habitat, the RPZ would be a minimum of 30 feet but it could extend up to the full width of a standard marine shoreline buffer if intact native riparian vegetation were present. This recommendation is based on the minimum area necessary to achieve a measure of riparian functions including protecting water quality, and providing shade, microclimate moderation, LWD, litterfall and insect food sources (Christensen 2000; Bavins et al. 2000; Zhang et al. 2010). Any areas not comprised of intact native riparian vegetation would be limited by the provisions of a standard marine shoreline buffer for the shoreline use designation. In areas entirely lacking native riparian vegetation, the City would still establish a minimum 30-foot RPZ zone and, as parcels meet re-development thresholds, the City would require that native vegetation be established within the minimum 30-foot RPZ. In the Natural shoreline designations, the RPZ would be a minimum of 100 feet because of the heightened ecological values found in these areas and their absence of existing development.

Figure 1 illustrates two typical parcels (for this example, they are located within a Shoreline Residential Conservancy use designation) where intact native vegetation varies between 20 feet and 95 feet. For these parcels, the RPZ would range from 30 to 95 feet. In the area currently lacking native vegetation within the 30-foot minimum RPZ, landowners would be required through mitigation, or encouraged through incentives to restore native plant species as described above. In cases where riparian habitat is restored such as to provide mitigation for development impacts or in response to Shoreline Restoration Plan recommendations, such activities could potentially provide the City with no net loss of shoreline ecological functions and potentially a net gain.



Legend

Extent of Native Vegetation

Area to be Restored Over Time

Shoreline Use Designation: Shoreline Residential Conservancy

Lot type: Deep (greater than 200 feet)

Bank type: Low

Figure 1.
Example of Riparian Protection Zone (RPZ)

N

0 20 40 80

Approximate scale in feet

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Marine shoreline buffers are recommended to be specific to each shoreline use designation and to be as wide as possible to provide as much protection as is feasible with consideration of existing structure setbacks from the shore.

Agreed Principles

Following is a list of other generally agreed on principles:

1. The ability of a buffer to provide multiple functions and benefits is closely linked to its width, although other factors such as topography, slope, vegetation (type and condition), soil type, and buffer management also determine its effectiveness. In general, wider buffers are more protective of nearshore resources.

2. Buffers widths could be established on each reach or within a management area based on site-specific characteristics. The type and condition of riparian vegetation (coverage of native forest and shrubs) or upland topography (high bluff/low bank) will guide the buffer width as well as adjacency to important ecological features such as marshes, lagoons, and spit / barrier / backshores. Buffers on stable high bluffs could potentially be narrower than on low banks because the elevation difference is more protective of the nearshore. Other factors that could be considered include soil type, slope, degree of anthropogenic disturbance, and adjacent land uses.

3. Buffer widths can vary but should have a more protective inner zone such as the suggested RPZ that protects native riparian vegetation and could have a more permissive outer zone where decks, gardens, and some amount of impervious area is allowed potentially contingent on use of Low Impact Development stormwater management techniques.

4. The goal of the RPZ is to protect native vegetation to the extent possible, however limited water dependent uses would be allowed due to their intrinsic need to be in-water or at the water's edge.

5. Protection and restoration of the RPZ is also intended to provide habitat connectivity such that over time there would be long stretches of native riparian habitat along the City's shore. Therefore, where intact native vegetation is present wider buffers are recommended for some use designations.

6. The RPZ would allow for limited development, subject to a maximum of 300 square feet or 10 percent of the RPZ whichever is less, of structures per parcel related to water dependant uses such as boathouses, ramps, and stairways to the beach. In addition, one 4-foot wide trail would be allowed

for beach access. Structures or trails exceeding those thresholds would require a variance.

7. While there will be prescriptive standards, flexibility will be achieved by a marine shoreline buffer range that considers different development conditions and uses, and by allowing an option for a qualified professional to prepare a "critical areas stewardship plan" similar to Jefferson County's SMP example.

8. Properties along the Aquatic Conservancy use designation would not be allowed to have reduced buffers.

9. Properties within a Natural Area use designation would be prohibited from any shoreline development in the RPZ except for one 4-foot wide trail for beach access.

10. When a project will result in impacts and require mitigation measures, the mitigation would include restoration of the native plant ecosystem. For example mitigation activities could include re-establishing native dune grasses, forests or other habitat communities, as natural conditions would warrant for the site.

11. Lots may be provided an exception to buffer standards (e.g., lots less than a certain depth where the combination of setbacks and typical building footprint would not allow for use of the property).

12. Buffer averaging allowing variable widths would provide flexibility and can be protective of nearshore functions and resources.

13. Existing developed properties with wider shoreline parcels would be allowed to have variable buffer widths (narrower in front of existing structures and wider when moving laterally from the building and perpendicular from the shoreline).

14. We note that critical saltwater environments are based on presence of primary species which means most if not all of the City shoreline areas need some level of nearshore habitat protection (based on WAC173-26).[3]

[3] **From 173-26 WAC:** Critical saltwater habitats include all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sandlance; subsistence, commercial and recreational shellfish beds; mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association. Critical saltwater habitats require a higher level of protection due to the important ecological functions they provide. Ecological functions of marine shorelands can affect the viability of critical saltwater habitats. Therefore, effective protection and restoration of critical saltwater habitats should integrate management of shorelands as well as submerged areas.

Buffer Assumptions and Recommendations

To bracket the range of various buffer widths from the scientific literature, we considered the following:

- Existing development regulations
- Future land use
- The City's existing environmental buffers
- Existing shoreline character (physical & biological) and nearshore assets
- Recently adopted marine shoreline management plans from Puget Sound jurisdictions
- A review of the distance of existing residential structures from the OHWM (to consider the City's desire to limit the number of new non-conforming structures)

Table 1 shows the mean, median, and standard deviation of the distance between the ordinary high water mark (OHWM) and existing primary residential structures for each shoreline use designation as determined by a GIS analysis of 2009 aerial photographs of land cover on the City's shorelines (data provided by the City). These distances were used to identify typical existing conditions for each proposed use designation.

Table 1 also indicates the suggested RPZ and marine shoreline buffer widths for each proposed use designation that resulted from our review of scientific literature, the City's existing shoreline regulations, existing shoreline character, the distance of existing structures from the shoreline, nearshore assets, existing and future land uses, and discussions with City staff. A minimum and a maximum marine shoreline buffer is offered that would vary based on existing parcel conditions where shallow lots (lots less than 200 feet from the OHWM) or high bluff shoreline parcels would have narrower buffers and deeper lots (lots greater than 200 feet from the OHWM) or those with 65 percent coverage of native trees and shrubs within the RPZ, low banks, marshes, lagoons or spit / barrier / backshores would have wider buffer requirements. The table also distinguishes buffer requirements for developed lots versus undeveloped lots in the Shoreline Residential Conservancy use designation. Existing City regulations require a 115-foot buffer on estuarine wetlands. That requirement is recommended for developed lots in the Shoreline Residential Conservancy use designation in order to reduce the number of non-compliant structures, and it is expanded to 150 feet for undeveloped lots in order to advance shoreline protection when future development occurs.

Figure 2 illustrates an example configuration of the RPZ and marine shoreline buffer for a parcel with low bank waterfront, 65 percent canopy cover, and a Shoreline Residential use designation. The recommendations do not distinguish between water-oriented and non-water oriented uses. Allowances for water-oriented uses would be part of the formal code development process.

Table 1. Suggested Range of Riparian Protection Zones and Marine Shoreline Buffers by Use Designation.[a]

Existing Distances from Shoreline to Primary Residential Structures (use designations are **bold**)	Riparian Protection Zone (RPZ) (inner buffer zone)	Minimum Standard Buffer (encompasses inner RPZ and outer marine shoreline buffer)	Maximum Standard Buffer (encompasses inner RPZ and outer marine shoreline buffer)
Urban Mean 59.8 feet Median 20.1 feet STD 72.1 feet	Minimum 30 feet from OHWM	Minimum 30 feet from OHWM [b]	30 feet from OHWM [b]
Shoreline Residential Mean 69.7 feet Median 60.2 feet STD 46.2 feet	Minimum 30 feet from OHWM up to standard buffer width	Condition: Shallow lots [c] or high bluff Standard Buffer: 50 feet from OHWM [b]	Condition: 65% coverage of native forest and shrub vegetation in RPZ [d], and low bank, or marshes, or lagoons, or spit / barrier / backshores Developed - Standard Buffer: 75 feet from OHWM Undeveloped - 75 feet from OHWM unless adjacent to Aquatic Conservancy then 150 feet
Shoreline Residential Conservancy Mean 88.2 feet Median 86.3 feet STD 55.9 feet	Minimum 30 feet from OHWM up to standard buffer width	Condition: Shallow lots [c] or high bluff Standard Buffer: 75 feet from OHWM [b]	Condition: 65% coverage of native forest and shrub vegetation in RPZ [d], and low bank, or marshes, or lagoons, or spit / barrier / backshores Standard Buffer: 115 feet from OHWM for developed lots 150 feet from OHWM for undeveloped lots
Island Conservancy Mean 144.9 feet Median 180.8 feet STD 62.9 feet	Minimum 50 feet from OHWM up to standard buffer width	Condition: Shallow lots [c] or high bluff Standard Buffer: 100 feet from OHWM [b]	Condition: Deeper lots [c], low bank, marshes, lagoons, spit / barrier / backshores Standard Buffer: 150 feet from OHWM
Natural Mean 145.3 feet Median 169.7 feet STD 53.8 feet	Minimum 100 feet from OHWM up to standard buffer width	Condition: High bluff Standard Buffer: 200 feet from OHWM [b]	Condition: Low bank or feeder bluff, marshes, lagoons, spit / barrier / backshores Standard Buffer: 200 feet from OHWM [b]

[a] The suggested minimum and maximum buffers are based on existing distances to residential structures from the shoreline in addition to science-based recommendations for shoreline and nearshore protection. The suggested ranges could be refined further based on additional GIS based analysis of City shoreline conditions.

[b] Or 50 feet from edge of geologic hazard; whichever is greater.

[c] Shallow lots measure 200 feet or less from the OHWM and deeper lots measure greater than 200 feet from the OHWM.

[d] 65 percent coverage of native forest and shrub vegetation in the RPZ based on the 2009 aerial image or an approved clearing permit since 2009.

Figure 2. Example Configuration of RPZ in Relation to Marine Shoreline Buffer.

8.5x11

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ATTACHMENT A

Current Marine Shoreline Buffer Requirements and Allowed Buffer Uses in the City of Bainbridge Island

Current Marine Shoreline Buffer Requirements and Allowed Buffer Uses in the City of Bainbridge Island

16.20.130 Fish and wildlife habitat conservation areas:

C.1. Development standards for marine critical areas are defined in the city's shoreline master program, Chapter 16.12 BIMC and are summarized in SMP Table 4-2 below.

SMP Table 4-2. Use-related Development Standards Matrix from Chapter 16.12 BIMC.

Key (See Key in Table 4-1) of current SMP

	Upland Environments				
Development Standards	Natural	Conservancy	Rural	Semi-rural	Urban
Aquaculture					
Setback					
Water-dependent	N/A	0	0	0	0
Water-related	N/A	25	25	25	25
Nonwater-oriented	N/A	100	100	100	100
Upland	N/A	30	30	30	30
Boating Facilities					
Setbacks					
Accessory structures	N/A	50	N/A	50	25
Water-dependent	N/A	0	N/A	0	0
Dry moorage	N/A	N/A	100	100	100
Height Limits					
Dry Moorage	N/A	N/A	N/A	30	30
Buildings	N/A	N/A	20	20	20
Commercial					
Native vegetation zone (from OHWM)					
Water-dependent	N/A	N/A	N/A	0	0
Water-enjoyment	N/A	N/A	N/A	50	25
Nonwater-oriented	N/A	N/A	N/A	50	50
Buildings	N/A	N/A	N/A	30	30
Forest Practices					
Native vegetation zone:	N/A	N/A	100	100	100
Industrial Development					
Native vegetation zone (from OHWM)					
Water-dependent	N/A	N/A	N/A	N/A	0
Water-related	N/A	N/A	N/A	N/A	25
Recreational Development					
Native vegetation zone					

Development Standards	Upland Environments				
	Natural	Conservancy	Rural	Semi-rural	Urban
Nonwater-oriented, general	N/A	200	200	200	100
Campsites, picnic areas, and related	N/A	50	50	50	25
Access roads, restrooms, and accessory structures	N/A	75	75	75	50
Parking	N/A	100	100	100	50
Golf course, playfields, intensive use areas	N/A	100	100	100	100
Residential Development (dwellings)					
Native vegetation zone	N/A	100	50	50	25
Transportation					
Native vegetation zone					
Trails	0	0	0	0	0
Water-dependent	N/A	0	0	0	0
Utilities (primary)					
Native vegetation zone					
Distribution lines	N/A	N/A	N/A	50	25
Buildings	N/A	N/A	N/A	50	25
Height Limits:					
Buildings, storage tanks, accessory uses	N/A	N/A	50	20	20
Distribution poles	N/A	N/A	50	30	30

Herrera Environmental Consultants, Inc.

Memorandum

To Ryan Ericson, Associate Planner, and Libby Hudson, Division Manager
City of Bainbridge Island

From Amanda Azous, Herrera Environmental Consultants

Date August 31, 2011

Subject Clarification on Herrera August 11, 2011 Documentation of Marine Shoreline Buffer Recommendation Discussions Memo

This memo is to provide further explanation of the scientific basis for the recommendation to the City of Bainbridge Island (City) that a minimum 30-foot Riparian Protection Zone (RPZ) be instituted as part of a dual-zone management system (provided in Herrera's August 11, 2011, memo to the City: *Documentation of Marine Shoreline Buffer Recommendations*). It is important to note that the RPZ is intended to be a subset of a regulated buffer (which is wider than 30 feet for all use designations except for Urban). The RPZ has the specific purpose of protecting existing intact native vegetation that is directly adjacent to the marine environment. The RPZ also provides a regulatory framework for restoring native vegetation to this zone as future development and re-development occurs, particularly where this zone has been degraded. Restoring native vegetation to this zone would help the City achieving its goal of no net loss of shoreline ecological functions over time.

The RPZ is intended to be more restrictive of uses and development than the remainder of the regulated buffer required in each use designation. Any disturbances or allowed activities within this zone would include mitigation that restores native vegetation within and/or adjacent to the RPZ to the extent feasible. The goal of regulating vegetation characteristics in the RPZ is to strengthen the functions provided by native vegetation in the portion of the 200-foot shoreline jurisdiction where the most benefit would accrue, which is the area directly adjacent to marine waters.

Scientific Recommendations for Marine Riparian Buffers

Both Battelle (2003) and Herrera (2011) review and discuss science-based recommendations for buffer widths to protect various shoreline functions. In general, the reviews found that the wider the buffer, the more effective it will be for protecting the marine environment. Nevertheless, in developed environments it is not always possible to prescribe the largest buffer one might find recommended in the literature. Both literature reviews clearly establish that buffers have a key role in protecting aquatic habitat and resources and both suggest that necessary buffer widths vary considerably depending on the site-specific functions and characteristics. For example, in order to achieve at least 80 percent effectiveness at removing pollutants from stormwater runoff, the buffer required can vary from as little as 16 feet to as large as 1,969 feet depending on the slope, depth and type of soil, surface roughness, density of vegetation and the intensity of the

land use. Table 1 provides a summary of a number of studies that examined buffer requirements that were reviewed for both documents, as well as for the August 11, 2011, buffer recommendations memo. The table indicates that suggested buffers are dependent on the function being protected as well as site-specific characteristics but that in general, the wider buffers are, the more effective they are in providing a diversity of functions. In addition, studies Herrera reviewed suggest that a narrower buffer, fully vegetated with native trees and shrubs, may perform more effectively than a wider buffer comprised of non-native landscaping and/ or lawn.

Table 1. Riparian buffers functions and width recommendations in the literature.

Riparian Function	Range of Buffer Widths (feet) to Achieve ≥ 80% Effectiveness and Literature Cited	Minimum Buffer Width (Approximate) Based on FEMAT Curve to Achieve ≥ 80% Effectiveness [a]
Water quality	16 ft: Schooner and Williard (2003) for 98% removal of nitrate in a pine forest buffer 1969 ft: Desbonnet et al (1994, 1995) for 99% removal 33 ft: Zhang et al. (2010) for 85% removal of nitrogen with trees (71% with mixed grass and trees) 33 ft: Zhang et al. (2010) for 98% removal of phosphorus with trees (69% with mixed grass and trees)	82 ft: sediment 197 ft: TSS 197 ft: nitrogen 279 ft: phosphorus
Fine sediment control	82 ft: Desbonnet et al (1994/1995) for 80% removal 299 ft Pentec Environmental (2001) for 80% removal 33 ft: Zhang et al. (2010) for 91% removal of sediment on 5% slope with grass and trees; 86% removal on 10% slope with grass and trees	82 ft: (sediment) 197 ft: (TSS)
Shade/Microclimate	56 ft: Belt et al 1992 IN Eastern Canada Soil and Water Conservation Centre (2002) for 90% effectiveness 125 ft: Christensen (2000) for 80% temperature moderation	121 ft (0.6 SPTH*)
Large woody debris	33 ft: Christensen (2000) for 80-90% effectiveness 328 ft: Christensen (2000) for 80-90% effectiveness	131 ft (0.65 SPTH*)
Terrestrial carbon source to nearshore food webs	16 to 328 ft: Bavins et al (2000)	80 ft (0.4 SPTH)
Hydrology/slope stability	Consensus is that for steep slopes affecting critical areas such as feeder bluffs, a site specific analysis by a qualified professional is necessary to determine a specific buffer width.	Recommendations are based on protecting property and not critical areas. Buffers widths are provided for a range of slope conditions but do not consider underlying geology.

[a] FEMAT data in this table are based on Site Potential Tree Height (SPTH) equal to 200 feet.

Scientific Basis for 30-foot Riparian Protection Zone

Based on the significant variability in buffer recommendations, we endeavored to develop a strategy for the City that would, over time, improve the ecological functions within the current residential development pattern found along most of the City's shoreline (over 82 percent developed [Battelle 2003]), while also allowing for some flexibility for landowners to make use of the shoreline. Therefore, we focused on maintaining and restoring intact riparian habitat located directly adjacent to marine waters by designating it an RPZ, limiting uses within this ecologically important zone, and providing mechanisms and strategies for increasing native vegetation within and adjacent to the RPZ over time.

This minimum RPZ width of 30 feet is based on the ability to achieve 70 percent or greater effectiveness at protecting water quality, and providing shade, microclimate moderation, large woody debris, litterfall and insect food sources (Christensen 2000; Bavins et al. 2000; Zhang et al. 2010) (see Table 2). The remainder of the regulated buffer required for each shoreline designation augments the protection for ecological functions provided by the RPZ, and therefore provides added conservation strategies for protecting marine riparian functions and critical saltwater habitats. This dual-zone management system described in Herrera's August 11, 2011, memo and illustrated in Figures 1 and 2 within that memo, works together to increase the functions typically provided by a single standard marine shoreline buffer through conserving and, over time, adding native vegetation in the most critical zone of the buffer.

Table 2. Approximate effectiveness provided by 30-foot RPZ (Christensen 2000; Bavins et al. 2000; Zhang et al. 2010).

Function	Percent Effectiveness within 30 Feet of OHWM	Comment
Water quality maintenance	71 - 98	Assumes trees or mixed grass and trees
Fine sediment control	86 - 91	Assumes trees or mixed grass and trees
Shade and microclimate moderation	100	Trees and other over-hanging vegetation must be present on the shore.
Large woody debris	80 -90	Trees must be present on the shore
Terrestrial carbon source to nearshore food webs	80	Trees and other over-hanging vegetation must be present on the shore.
Terrestrial wildlife habitat	Unknown	Highly dependent on species of wildlife to be protected
Hydrologic based slope stability	Unknown	Highly dependent on specific site conditions

OHWM = Ordinary High Water Mark

An RPZ containing native trees and shrubs would promote the recruitment of organic matter, nutrients, and macroinvertebrate prey items to the marine environment which are reduced or absent when riparian vegetation is not present on the shoreline (Brennan et al. 2004; Sobocinski 2003; Williams et al. 2001). Detritus feeding organisms are often not able to adapt to the leaf fall

patterns or the chemical characteristics of leaves from non-native plants, which is one reason why shoreline vegetation should be native species for maximum effectiveness (Karr and Schlosser 1977). Native plant species are adapted to local physical conditions such as soil, geology, and climate and therefore require less maintenance, are resistant to most pests and diseases, and require little or no irrigation or fertilizers, once established. Thus maintaining native plant species adjacent to the shoreline helps maintain water quality. Also, trees located close to the shore, form and maintain habitat complexity by stabilizing banks and contributing large wood to the aquatic environment.

Another important protection feature is that the RPZ would extend up to the full width of a standard marine shoreline buffer wherever intact native riparian vegetation were present but would be a minimum of 30 feet.

In areas entirely lacking native riparian vegetation, the City would still establish a minimum 30-foot RPZ and, as parcels met re-development thresholds, the City would require that native vegetation be established within the minimum 30-foot RPZ. In the Natural shoreline designation, the RPZ would be a minimum of 100 feet because of the heightened ecological values found in the areas within this shoreline designation and their absence of existing development.

In summary, the 30-foot RPZ is a subset of a dual-zone system, intended to preserve existing native trees and shrubs, and restore them when possible, to increase their presence adjacent to the shoreline and protect important shoreline functions. This strategy will provide opportunity to significantly improve over time shoreline functions over existing City conditions, where degradation exists or continues to occur. The implementation of the RPZ as a component of a regulated buffer will allow the City to effectively stem the loss of shoreline resources due to loss of native shoreline vegetation and, in conjunction with regulations addressing activities allowed in the remainder of the regulated buffer, assist the City with meeting its goal of no net loss of shoreline ecological functions.

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Appendix D - Single Family Residence Mitigation Manual

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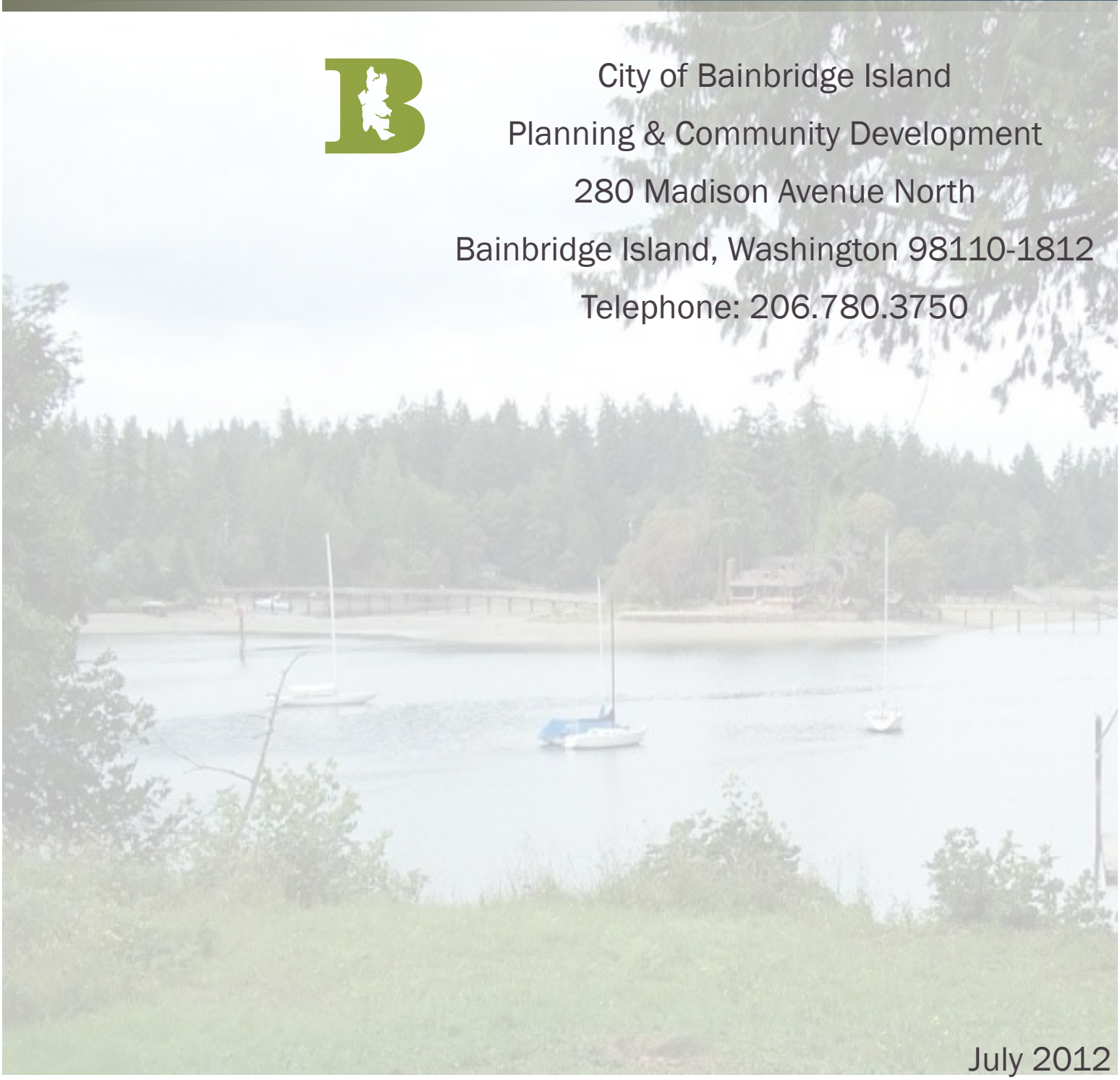
Single Family Residence Shoreline Mitigation Manual

City of Bainbridge Island
Planning & Community Development
280 Madison Avenue North
Bainbridge Island, Washington 98110-1812
Telephone: 206.780.3750



July 2012

Prepared by

Herrera Environmental Consultants, Inc

2200 Sixth Avenue, Suite 1100

Seattle, Washington 98121

Telephone: 206.441.9080

HERRERA

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Introduction

This manual provides guidance for City of Bainbridge Island (City) homeowners as well as City staff and consultants on requirements and mitigation opportunities for specific types of single-family residential (SFR) development within the shoreline jurisdiction of the City.

Under Washington State Shoreline Management Act Guidelines [WAC 173-26-186(8) & 201(2)(c)], all new development, activities and uses must meet the standard of no net loss of ecological functions and shoreline processes. To ensure the standard of no net loss is met, any adverse impacts from new, repaired, or replaced development must be mitigated in accordance with the Mitigation Sequence (see Page 2) described in WAC 173-26-201((2)(e). When there are permanent impacts not addressed in sequence number 2, 3, or 4 the applicant must provide mitigation for the remaining adverse impacts to meet the no net loss standard.

The City's Shoreline Management Program (SMP) regulations require an applicant submit a site-specific analysis to demonstrate that the no net loss standard has been met. A site-specific analysis is a technical report that identifies existing conditions and ecological functions, impacts from the project, and proposed mitigation.

To give homeowners a low cost alternative for meeting the no net loss standard, this manual was developed and provides mitigation for common types of SFR development as an alternative to submitting a site-specific analysis.

This manual provides City requirements for single family residences when mitigating construction, repair or replacement of SFR primary and accessory structures. Subdivisions, including short plats and other development, and uses or activities not associated with SFR development, are required to provide a site-specific analysis in accordance with the SMP Section 4.1.2 Environmental Impacts.

A homeowner can use this shoreline mitigation manual if:

- the SFR is not part of a new subdivision application; and
- the proposed project is located within a qualifying site (see below); and
- the proposed project is listed among the development and structure types and maximum size constraints covered by this guidance (shown in Table 1).

What sites qualify for this approach?

Sites which qualify for this manual are SFR shoreline parcels that are not adjacent to a marsh or a lagoon. Marshes and lagoons are a critical habitat feature for many protected species and therefore development proposals affecting these sites require a higher level of examination. Proposed development on SFR sites with an adjacent marsh or lagoon must complete a site-specific analysis that complies with the requirements of SMP Section 4.1.2, Environmental Impacts, and/or Appendix B, Critical Areas.

Washington State Shoreline Management Act Guidelines:

http://www.ecy.wa.gov/programs/sea/sma/guidelines/downloads/Draft_2002_SMP_Rule.pdf

What is mitigation?

Mitigation is the process of avoiding, limiting, reducing, or eliminating the adverse environmental impacts of a project over time, and ultimately compensating for impacts that remain. Mitigation for impacts follows a specific sequence described in WAC 173-26-201((2)(e) as follows:

1. **Avoid** the impact altogether by not taking a certain action or parts of an action;
2. **Minimize** impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
3. **Rectify** the impact by repairing, rehabilitating, or restoring the affected environment;
4. **Reduce** or eliminate the impact over time by preservation and maintenance operations;
5. **Compensate** for the impact by replacing, enhancing, or providing substitute resources or environments; and
6. **Monitor** the impact and the mitigation activities and take appropriate corrective measures as needed.

The mitigation strategies identified in this manual are for environmental impacts that cannot reasonably be avoided (steps 2 through 6 of this sequence).

New in-water or overwater structures (such as shoreline stabilization construction or docks) are not covered by this guidance. Applications for new in-water or overwater development must submit a site-specific analysis in accordance with the City's SMP.

An applicant must also obtain a U.S. Army Corps of Engineers (USACE) and Washington Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA) for any new in-water or overwater structure as well as for a repair or replacement of an existing structure. Mitigation is typically required by those agencies as well, however the City may determine that mitigation and permit conditions required by federal and state agencies are sufficient to meet City requirements according to provisions in the SMP. Note that the SMP prohibits new overwater covered moorage in the marine environment .

Shoreline with native vegetation.

Mitigation activities prescribed for the qualifying types of construction in this document are selected to directly compensate for environmental impacts that are not prevented through careful site design, structure design or use of best practices. Examples of best practices are low impact development methods for managing stormwater, retractable docks or beach nourishment for shoreline stabilization. For example, permanent clearing of vegetation is mitigated by replanting vegetation, and any permitted fill placed below the ordinary high water mark (OHWM) is mitigated by removing fill already located below the OHWM.

Mitigation is first required to be conducted on the same parcel (on site) as the proposed construction unless impractical. In most cases, more mitigation is required when it will occur on a different parcel (off site).

These measures ensure that mitigation is clearly linked to the type and location of impact the development would have on the shoreline. This approach also supports the City's responsibility to ensure there is no net loss of shoreline functions.

In some cases, onsite mitigation may not be feasible or offsite mitigation may be preferred based on shoreline physical processes. In either case, check with City of Bainbridge Island Planning and Community Development Department for preferred locations recommended by the City's Shoreline Restoration Plan or for other guidance related to acceptable offsite mitigation. In limited cases, a reduction in mitigation requirements for offsite compensatory mitigation may be allowed if the Administrator determines a greater ecological benefit is achieved at the proposed location.

Bainbridge Island shoreline and dock.

Homes near this marsh would not quality for the mitigation approach in this manual.

What kinds of SFR development qualify for this guidance?

SFR development that qualify for this guidance includes: a new home, accessory structure (to existing SFR), and expansion, replacement, and repair of a SFR or accessory structure. Within these SFR development categories, structures that qualify must be within specific size constraints. The types of structures and size constraints for use of this manual are provided in Table 1. Examples include construction of a new home no larger than 4000 ft^2; an accessory structure to an existing home, such as a detached garage no larger than 580 ft^2, a patio no larger than 120 ft^2; stairs to the beach between 50 ft^2 and 300 ft^2 (mitigation is not required for stairs less than 50 ft^2) ; remodel of an existing structure; and replacement or repair of shoreline structures such as a bulkhead, stairs or a dock. Note that the listed size constraints are not the maximum permitted by City regulations, but are the maximum for which this manual can be used to determine appropriate mitigation without a site-specific study.

Development of each of these structures typically results in one or more of the following shoreline and nearshore disturbances that require mitigation: 1) vegetation is cleared, 2) new impervious surface is created, 3) fill is placed below the OHWM or 4) aquatic habitat is permanently disturbed. Table 1 identifies which of these disturbances may apply based on your proposed development.

To use Table 1:

1. Select the category of development (new, accessory etc.) that applies to your project from the first column.
2. Select the type of structure from the second column.
3. Check to make sure your proposed development is within the maximum size constraints for that structure. If they are not, you will need a site-specific analysis.
4. Review the impacts requiring mitigation and identify those that apply to your project.
5. For each impact requiring mitigation, go to the corresponding section under Mitigation Requirements for a description of what is required.

Table 1. Qualified Single Family Residential (SFR) developments and associated impacts requiring mitigation.

			Impacts Requiring Mitigation			
Development Category	**Structure Type**	**Maximum Size Constraints (based on footprint)**	**Vegetation is Cleared**	**New Impervious Surface is Created**	**Permitted Fill is Placed Below OHWM**	**Aquatic Habitat is Disturbed**
New[a]	SRF including any accessory development	4,000 ft^2	♦	♦		
	Driveway or parking area	No maximum	♦	♦		
Accessory Note: the footprint of existing SRF including all accessory developments with the exception of a guest house or accessory dwelling unit (ADU) cannot exceed 4000 ft^2	Detached garage or carport	580 ft^2	♦	♦		
	Guest house or ADU	800 ft^2	♦	♦		
	Boathouse (only in upland)	200 ft^2	♦	♦		
	Patio –with or without BBQ pit or deck	120 ft^2	♦	♦		
	Hot tub + deck/ patio	120 ft^2	♦	♦		
	Sport court	200 ft^2	♦	♦		
	Gazebo, utility shed, well house, greenhouse	200 ft^2	♦	♦		
	Retaining wall – new or replacement (upland)	3.5 ft. depth and 4 ft. height with no surcharge[b]	♦	♦		
	Deck (attached to house)	400 ft^2	♦	♦		
	Stairs to beach[c]	50 ft^2 to 300 ft^2	♦	♦[d]		

Table 1. Qualified SFR developments and associated impacts requiring mitigation (CONTINUED).

			Impacts Requiring Mitigation			
Development Category	**Structure Type**	**Maximum Size Constraints (based on footprint)**	**Vegetation is Cleared**	**New Impervious Surface is Created**	**Permitted Fill is Placed Below OHWM**	**Aquatic Habitat is Disturbed**
SFR (primary) Replacement or Expansion Note: the footprint of replaced or expanded SFR including all accessory developments cannot exceed 4000 ft²	Replace (demolished)	Same size as existing structure in same location	No Mitigation Requirement			
		Expand size	♦	♦		
	Expansion of or addition to SFR	4,000 ft² including existing structure	♦	♦		
Accessory replacement[e]	Bulkhead	Same as existing	♦	♦	♦	
	Boathouse	200 ft²	♦	♦	♦	♦[f]
	Stairs to beach[c]	50 ft² to 300 ft²	♦	♦[d]	♦	
	Dock	Same as existing	♦		♦	♦[f]
Accessory repair[e]	Bulkhead	3.5 ft. depth and 4 ft. height with no surcharge[b]			♦	
	Boathouse	200 ft²			♦	♦[f]
	Stairs to beach[c]	50 ft² to 300 ft²	♦	♦[d]	♦	
	Dock	Same as existing			♦	♦[d, f]

[a] New dock, or other new in-water or overwater structures are not covered by this manual. Covered moorage is prohibited by the City.

[b] Surcharge is the slope above and behind a retaining wall or bulkhead.

[c] No mitigation is required for beach stairs with a footprint smaller than 50 ft².

[d] If stairs are grated and pass stormwater freely no mitigation for impervious area is required.

[e] This program does not cover mitigation required for use of barges. If you intend to use a barge for construction, you will need to submit a site-specific study.

[f] Repairs or replacements of this in-water and overwater structure are exempt from this mitigation requirement if the footprint and impact is reduced (such as by replacing wood decking with grating to increase light penetration and reducing the number of pilings). Specific requirements for footprint and impact reduction are explained in the section called ***Mitigation Exemption for Repair or Replacement of Overwater Structures***.

Mitigation Requirements

Review each section that follows as it pertains to your project's environmental impacts.

Vegetation is Cleared

Shoreline vegetation is considered important to supporting the ecological functions found in the nearshore. Vegetation along the shoreline at minimum infiltrates stormwater, and can provide large woody debris, bank stability, food sources such as detritus and insects for aquatic species, and temperature moderation of the beach and nearshore substrate. Multistoried vegetation can provide an overhanging, complex network of branches, trunks, stems and roots that also moderate nearshore wave energy.

Native vegetation is preferred for shorelines because native species are better adapted to local physical conditions such as soil, geology, and climate and therefore require less maintenance, are resistant to most pests and diseases, and require little or no irrigation or fertilizers, once established. Thus maintaining native plant species along the shoreline can also have consequent benefits on maintaining water quality. Native vegetation also provides more food sources for native wildlife.

Mitigation for vegetation cleared in the shoreline jurisdiction requires replacement with an equivalent or larger area of native multistoried vegetation (includes groundcovers, shrubs, and trees). Areas planted for mitigation are subject to final approval by the Administrator and must be recorded with the County Auditor on a Notice on Title, or other similar document, prior to approval of the project. Areas planted for mitigation are intended to be protected in perpetuity, although future alterations may be allowed with an approved mitigation plan.

What best describes the character of the vegetation in the area you will be clearing?

Is it predominantly:

- Mowed grass or lawn?
- Non-native landscaping?
- Native Vegetation?

Based on the dominant character of the vegetation that will be cleared and where you intend to plant, different ratios of native vegetation planted area to cleared area are required. These ratios are provided in *Mitigation Requirements for Vegetation Clearing*.

If you intend to plant native vegetation within 30 feet landward of the OHWM (called Zone 1 of the Shoreline Buffer—see Figure 1) the ratios for planting in Zone 1 are lower than if you plant outside of Zone 1. The lower ratio is intended to encourage homeowners to plant in Zone 1 where native vegetation has the greatest effect on nearshore habitat and processes. Ratios are also higher if you are clearing native vegetation, as compared with removing mowed grass or lawn, for the same reason.

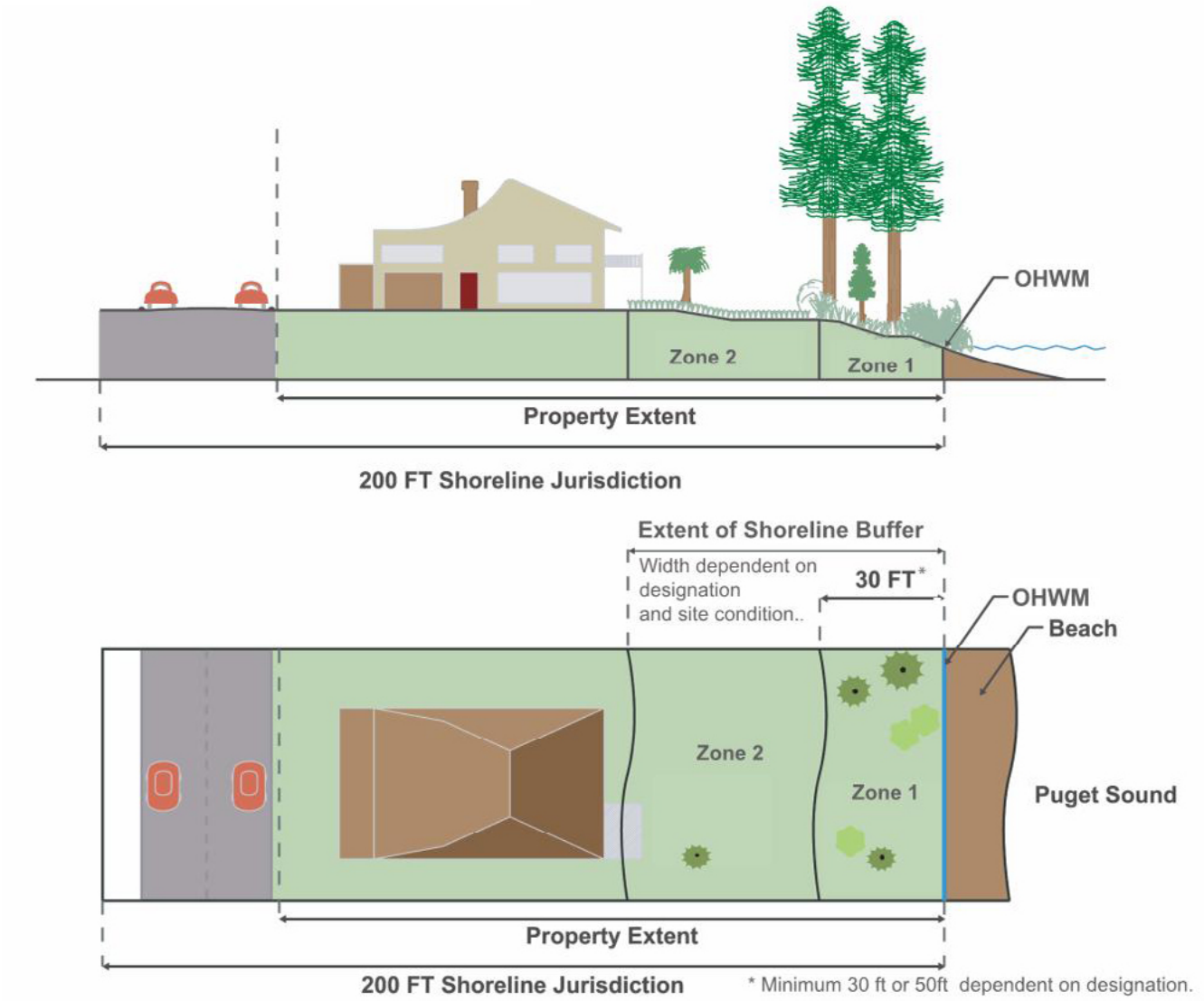


Figure 1. Zones related to the shoreline buffer area.

What is Native Vegetation?

Native vegetation is an assemblage of plants native to Bainbridge Island, which are species that occur or historically occurred on the island based upon the best available scientific and historical documentation. Native vegetation includes a selection of multistoried species (ground covers, shrubs and trees). Acceptable species are listed in Appendix A. Other species may be planted if it can be demonstrated they are native and appropriate to the site conditions.

When planting native vegetation for mitigation, you must provide a plan view of the project area showing where clearing will occur and where native vegetation will be planted for mitigation (including species, spacing and plant sizes). Species are to be planted with spacing designed to achieve a minimum 65 percent native vegetation coverage within 10 years within the replanted area. To assist you, a list of native species suitable for the City's shorelines is provided in Appendix A along with planting details showing typical tree, shrub and groundcover spacing and recommended plant sizes.

Note that your planting plan may be designed to protect views from your primary SFR.

Figure 2. Planting should incorporate trees, shrubs, and groundcovers to provide multiple layers of vegetation (multistoried).

Mitigation Requirements for Vegetation Clearing

Select character of vegetation being cleared	Will mitigation planting be located within Zone 1?	Mitigation Requirement
Area is comprised of mowed grass or lawn	YES	Plant ½ the equivalent area of mowed grass or lawn with multistoried, native vegetation
	NO	Plant the equivalent area of mowed grass or lawn with multistoried, native vegetation.
Area is comprised of non-native landscaping (including groundcovers, shrubs or trees).	YES	Plant the equivalent area of cleared non-native landscaping with multistoried, native vegetation.
	NO	Plant 2 times the area of cleared non-native landscaping with multistoried, native vegetation.
Area is comprised of native landscaping (including groundcovers, shrubs or trees).	YES	Plant 2 times the area of cleared native landscaping to multistoried native vegetation.
	NO	Plant 3 times the area of cleared native landscaping with multistoried, native vegetation

New Impervious Surface is Created

To mitigate for new impervious surface, you can:

- Remove existing impervious surface of equal area within your shoreline buffer and replant with native vegetation, or
- Install a rain garden that is sized to be at least 20 percent of the area of your new impervious surface.

The use of a rain garden for mitigating impervious surface is based on the understanding that rain gardens can help provide the water collection, retention, and infiltration capacity that are lost when vegetated areas are made impervious. The Rain Garden Handbook for Western Washington Homeowners describes how rain-gardens mimic a native forest by collecting, absorbing, and filtering stormwater runoff from rooftops, driveways, patios, and other areas that don't allow water to soak in.

To install a rain garden, follow the methods available at www.raingarden.wsu.edu/index.html. There you will find instructions for calculating your drainage area, and locating, designing (sizing), planting and maintaining your rain garden. Local landscape architects, Kitsap County WSU Extension office, Kitsap County Conservation District, and the City's Planning and Community Development Department are other resources available for assistance.

The Rain Garden Handbook for Western Washington Homeowners:

www.raingarden.wsu.edu/index.html

Rain Garden Installation Guidance:

www.raingarden.wsu.edu/index.html

Rain Gardens

- Can be shaped and sized to fit your yard
- Are constructed with soil mixes that allow water to soak in rapidly and support healthy plant growth
- Can be landscaped with a variety of plants that look beautiful and help manage stormwater

Caution:

Collecting and allowing water to soak into a landslide hazard area can cause instability and potentially endanger your structure. If you need to place your rain-garden on or near a landslide hazard area (any slope greater than 15 percent), a letter or report from a qualified licensed geologist or geotechnical engineer that evaluates the site and your rain garden design must be submitted with your application for review and approval by the Administrator.

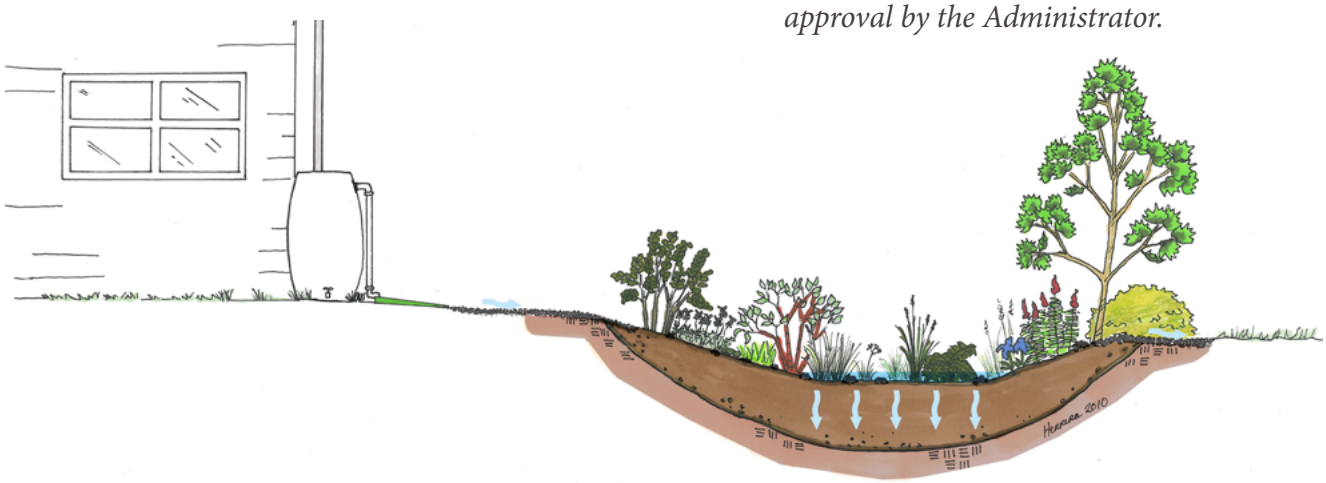


Figure 3. Rain gardens can help mitigate stormwater runoff from new impervious surfaces.

Permitted Fill Material is Placed below OHWM

Fill placed below the OHWM permanently eliminates aquatic habitat and can interrupt nearshore sediment flow. These factors both eliminate and reduce ecological functions within the area of fill and may adversely affect adjacent shorelines through reduced sediment supply and increased fragmentation of habitat.

All shoreline structures or modifications that include placing fill below the OHWM will require an equivalent volume of fill removal from below the OHWM elsewhere for mitigation (Table 2). Typical shoreline structures and modifications that include fill placed below the OHWM include stairs, boathouses, docks and bulkheads.

If mitigation for fill removal will occur within the same parcel, the volume removed must be at minimum equal to the volume of fill material placed. If the fill removal occurs on a different parcel, than the volume removed must be two times the volume of fill material placed. See Table 2. This is to encourage mitigation for fill placement at the same location as the environmental impact.

Examples of types of fill that may be removed for mitigation include construction debris such as concrete pieces, riprap, creosote logs, pilings, and failing bulkheads.

In addition to fill removal, bulkhead repair or replacement will require beach nourishment in addition to fill removal as part of mitigation (Table 2).

Beach nourishment differs from fill because it is mobile and permeable, unlike piers, concrete, riprap, or other immobile elements typically associated with nearshore structures. Beach nourishment provides spawning habitat for forage fish species, which are food sources for salmon and other fish species, birds, and marine mammals. While nearshore structures can provide a type of nearshore habitat (for example docks provide holdfasts for barnacles and mussels), these habitats do not improve impaired features of the nearshore ecosystem or support natural geomorphic processes in the way that mobile beach sand can.

Removing unused piers can provide shoreline mitigation.

Retractable Structures

In many instances structures can be constructed that can be retracted when not in use (for example retractable access stairs or docks). Retractable structures associated with a SFR are exempt from the City's requirement for mitigation for impacts occurring waterward of the OHWM.

In addition, if the footprint of fill below the OHWM is smaller than 10 square feet, the structure is exempt from providing mitigation as the area is considered too small to significantly impact aquatic resources.

Table 2. Mitigation requirements for fill material placed below the OHWM.

Development Type	Location of Fill Removal		Beach Nourishment Required?
	On Site	Off Site[a]	
• Stair construction, repair or replacement • Boathouse repair or replacement • Dock repair or replacement	Remove fill equivalent to volume placed below OHWM	Remove fill equivalent to 2 times volume placed below OHWM	No
• Bulkhead repair or replacement	Remove fill equivalent to volume placed below OHWM	Remove fill equivalent to 2 times volume placed below OHWM	Yes

[a] A reduced ratio for offsite fill removal may be used In limited instances when the Administrator determines that a greater ecological benefit is obtained at on offsite location than would occur on site.

What is beach nourishment?

Beach nourishment is where sediment (usually sand) is placed to protect an eroding beach. Beach sediment lost through alongshore drift or erosion is replaced from sources outside of the eroding beach (often an upland source). Nourishment creates "soft" (non-permanent) protection by creating a larger sand reservoir, pushing the shoreline seaward. Beach nourishment can protect beaches and your property, and avoid or minimize the negative effects of bulkheads.

A shoreline that has recently undergone beach nourishment.

How do I provide beach nourishment?

Generally, beach nourishment should be located onsite, waterward of the bulkhead; however nourishment may be located off site if the Administrator determines that a greater ecological benefit is obtained at an offsite location than would occur on site. For example, nourishment will be more effective if it is placed in the up-drift area of a drift cell. Its benefit will be longer lasting and spread over a greater portion of the drift cell. The City can help you determine the best location for beach nourishment.

Beach nourishment should cover an area, at minimum, equivalent to the length of the repaired or replaced bulkhead. It should be comprised of mobile sediments suitable for nearshore forage fish spawning habitat. Beach nourishment material should be comprised of 100 percent WDFW Fish Mix or other material approved by the Administrator.

The volume of nourishment should rise at least 1-foot above OHWM and have a foreshore slope no greater that 1 vertical unit per 5 horizontal units (1:5 slope).

The frequency of nourishment must follow WDFW recommendations or occur every five years over a 25-year period. The frequency of nourishment may be less if a sediment loss analysis completed by a qualified professional recommends otherwise. The required frequency of nourishment will be documented in an agreement between you and the City.

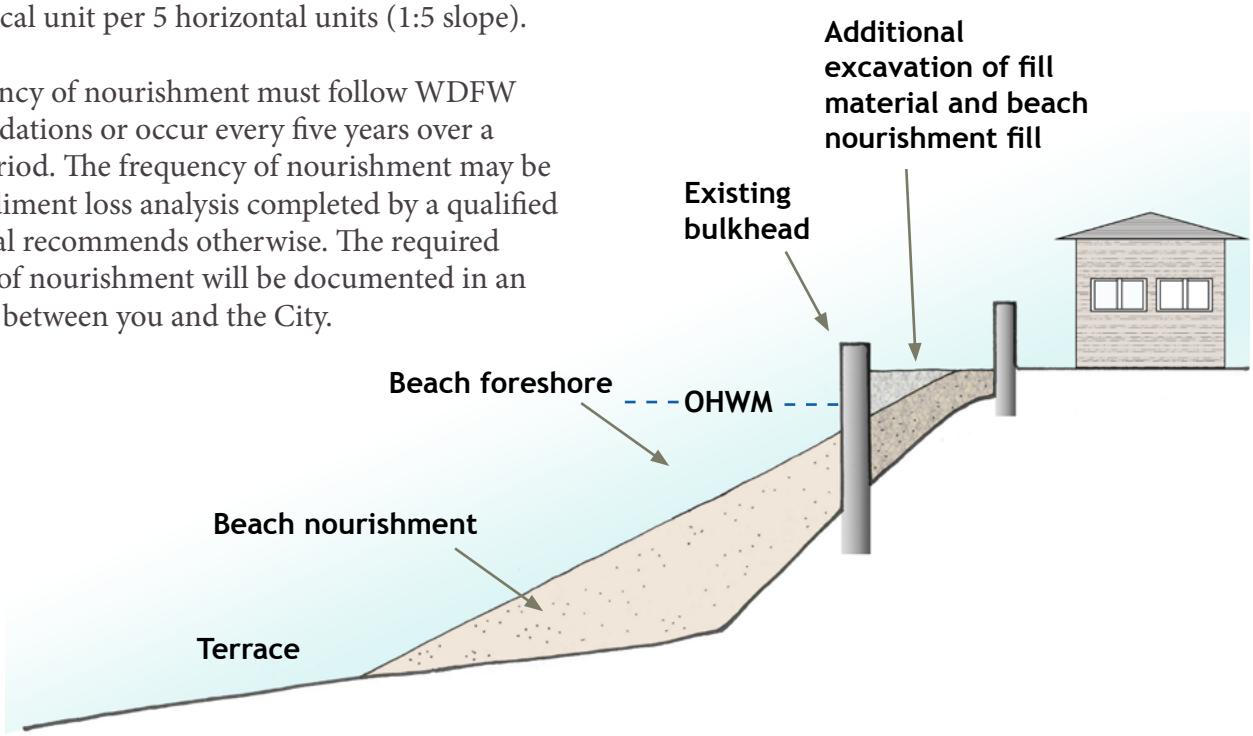


Figure 4. Beach nourishment illustration.

Aquatic Habitat is Disturbed

In-water or overwater structures have the potential to interrupt or negatively affect ecological functions and processes such as shading or eliminating aquatic habitat, increasing predator opportunities, and interrupting nearshore sediment flow and beach formation. Mitigation is required for repair or replacement because impacts continue to occur for the life of the structure. Construction activities related to repair or replacement may also temporarily affect fish and wildlife, water quality, or shoreline processes.

New in-water or overwater structures are not covered by this manual. Only repair or replacement of in-water or overwater structures are covered by this manual and they must fall within the size constraints identified in Table 1. Qualifying projects must satisfy the SMP requirements for a repair or replacement and must mitigate for the loss of ecological functions.

In-water and overwater repairs and replacements covered by this guidance include bulkheads, boathouses, stairs to the beach, and docks (the components of a dock include ramps, piers and floats, and requirements apply to all components). Note that in-water and overwater repairs and replacements of any structure may require permits from USACE and WDFW, as well as the City.

Upon project completion all areas of shoreline disturbed for the repair or replacement should be restored to as near pre-project configuration as possible and replanted with native vegetation appropriate to the site and approved by the City.

Exemption from mitigation is provided for repair or replacement of structures which meet certain structure impact reduction provisions (such as narrowing a dock or using grating to increase sunlight penetration). These are detailed in the section called *Mitigation Exemption for Repair or Replacement of Overwater Structures*. When there is no reduction of the structure, you are required to remove an equivalent or greater area of overwater structure elsewhere within the City; contact the Planning and Community Development Department for more details and appropriate locations.

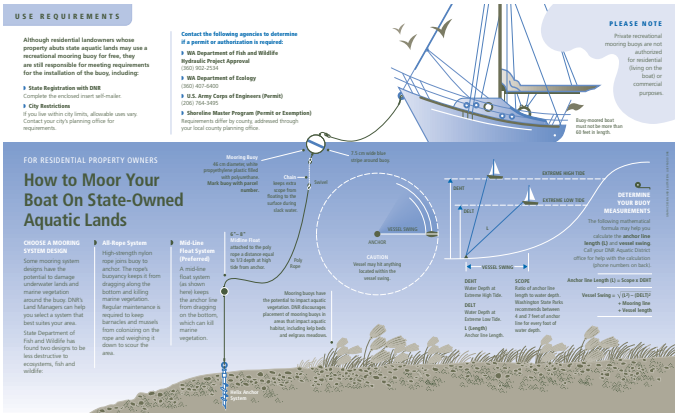
Mitigation Exemption for Repair or Replacement of Overwater Structures

Replacement of docks or stairs with retractable systems are exempt from City required mitigation for impacts to ecological functions and processes occurring waterward of OHWM. Repairs or replacements that reduce the shading footprint of an existing dock are also exempt.

To qualify, any two of the following measures may be used, in accordance with provisions in the SMP:

- Replace dock surface with grating or gridding
- Reduce dock width, to meet current SMP and USACE requirements
- Increase dock height, to meet current SMP, WDFW or USACE recommendations.

These alterations must conform to the most recent design guidance provided by the USACE found in its current *Regional General Permit for Residential Inland Marine Overwater Structures* (Permit Number CENWS-OD-RG-RGP-6) or meet City requirements, whichever standard provides a smaller footprint and greater light penetration. The Department of Planning and Community Development is available to assist with making this determination. Please contact the department if you have any questions.



Washington State Department of Natural Resources' *Recreational Mooring Buoys* brochure. Find the brochure at http://www.dnr.wa.gov/Publications/aqr_mooring_buoy_brochure.pdf.

Some considerations when planning to repair or replace your dock to avoid mitigation:

- Use a mooring buoy instead of repairing or replacing your dock.
- Replace your fixed dock with a dock that can be retracted when not in use to minimize disturbance to aquatic habitat.
- Share a neighbor's dock instead of repairing or replacing yours.

To avoid mitigation for repairs or replacements of both fixed or floating docks, the city requires that both of the following be met:

- The dock is no wider than 4 feet for a single use dock and 6 feet for a joint use dock.
- Grating or gridding and replacement floats must be installed that result in a total open area of a minimum of 30 percent. For example, this can be achieved by installing grating with 60 percent open area on at least 50 percent of the dock or by grating a larger percentage of the dock with openings of less than 60 percent. The following equation is used:

% Grating Open Area * % Dock Area = > 30%

Example 0.6 (60%) * 0.5 (50%) = 0.3 (30%)

What is the Process for Obtaining Approval to Use this Guidance?

- Submit your project proposal, completed checklist, and site plan along with your list of required mitigation activities and their proposed design to Planning and Community Development for review and approval by the Administrator.
- Obtain all required shoreline permits as outlined in Table 4-1 of the SMP.
- Submit these applications along with your project proposal.
- A preapplication conference may be required.

A checklist is provided in this manual to assist you with submitting a complete proposal that fulfills the requirements of this manual. Please contact Planning and Community Development by phone at (206) 780-3750 or by email at pcd@bainbridgewa.gov if you have any questions.

Checklists for Mitigation Approval

For each item below, please attach additional information to this checklist as needed to describe fully your project and proposed mitigation.

General Checklist for All Sites

	ITEM	NOTES
☐	Project description	Include a brief description of your proposed structure, along with its footprint.
☐	List of impacts requiring mitigation	See Table 1.
☐	Proposed mitigation description	Will mitigation be onsite or offsite? For offsite mitigation, provide location and confirmation that the property owner has agreed to have mitigation on their property.
☐	Site plan	Show locations of existing and proposed structure(s) as well as location(s) for mitigation.

Checklist for Various Impact Types

ITEM

- ☐ Vegetation Clearing
  - ☐ Areas of Clearing and Replanting
  - ☐ Species List
  - ☐ Example Spacing for Planting Species
  - ☐ Plant Sizes
- ☐ Creation of New Impervious Area
  - ☐ Provide the location and area of impervious surface to be reomoved and replanted.

    OR
  - ☐ If constructing a RAIN GARDEN
    - ☐ Drainage area calculation
    - ☐ Location and size of rain garden using methods from *Rain Garden Handbook for Western Washington Homeowners* found at www.raingarden.wsu.edu/index.html
- ☐ Permitted Fill Below OHWM
  - ☐ Provide calculation of fill volume and proposed location for removing required fill volume
- ☐ Beach Nourishment
  - ☐ Provide location and volume to be deposited
  - ☐ Provide frequency of nourishment
- ☐ USACE permit or WDFW HPA is obtained
  - ☐ Brief description of mitigation requirements
  - ☐ Provide copy of each permit and any associated conditions

Appendix A

Native Plant List and Suggested Plant Spacing

Native Plant List

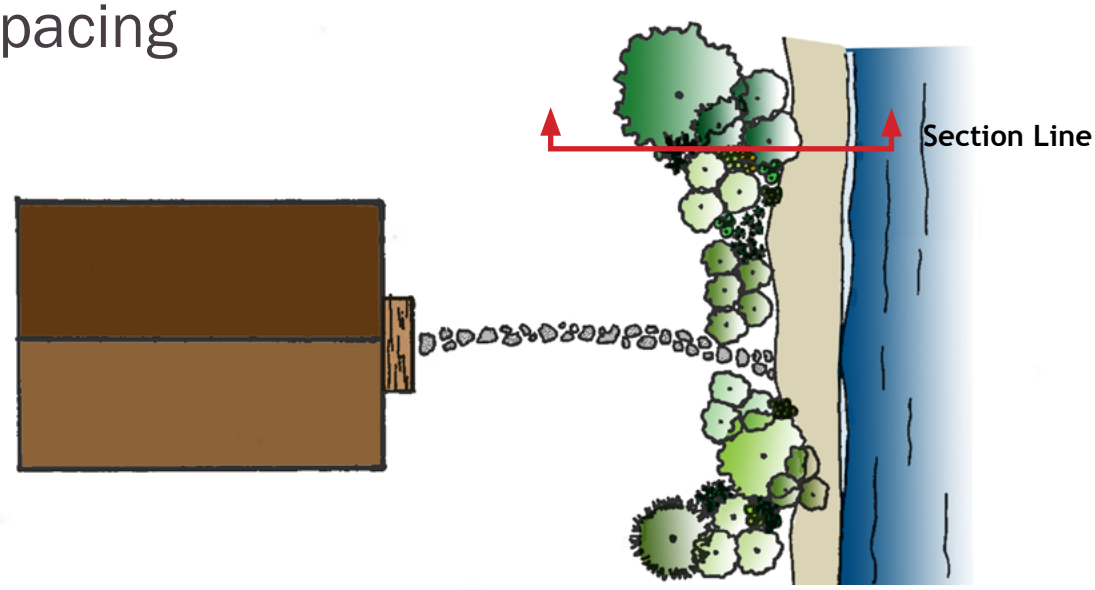
The following tables provide a list of native trees, shrubs, groundcovers, and seed mixes for different site conditions along with their recommended on-center spacing, maintenance notes, and aesthetic qualities.

Additional information on native plants appropriate for Bainbridge Island can be found at:

http://www.kitsapgov.com/dcd/lu_env/native_plants/native_plants.pdf

Examples of a plan view of a planting plan and a section view showing typical plant spacing are provided below.

Plant Spacing



Plan view of native multistoried plant clusters.

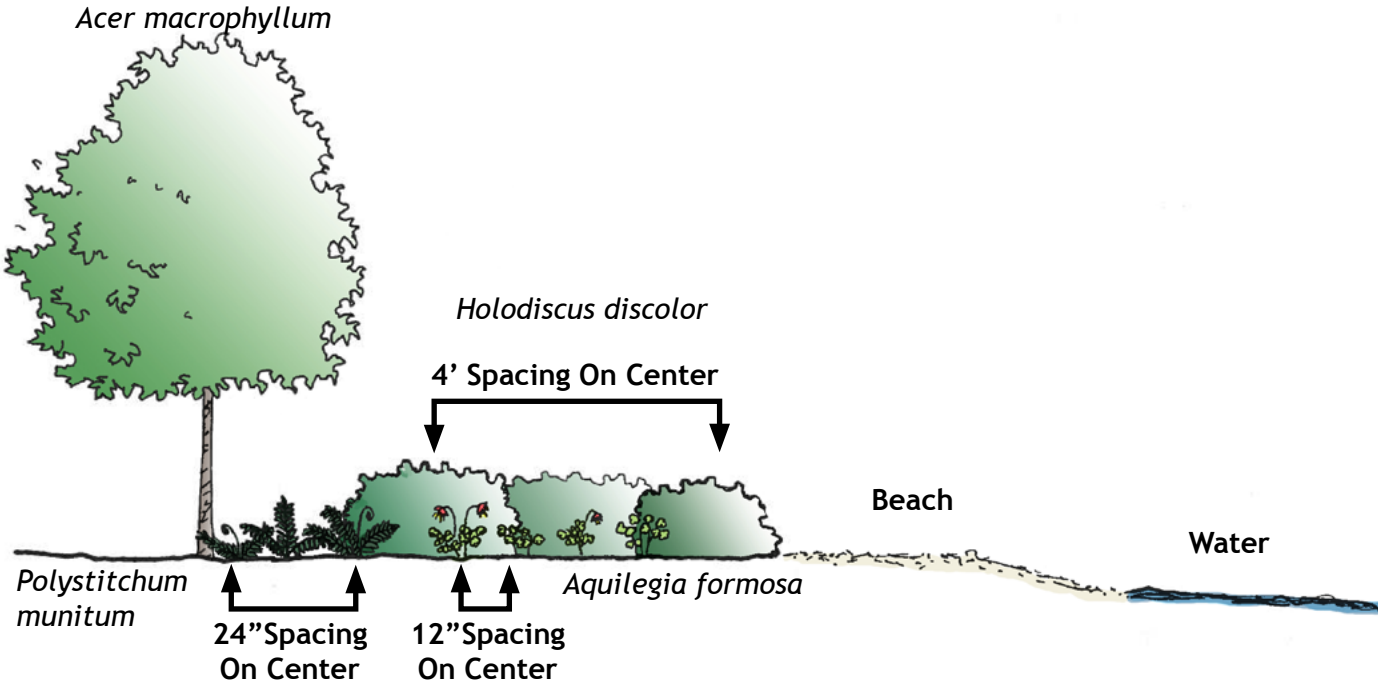


Illustration of on-center native plant spacing.

Bainbridge Island Mitigation Manual Plant List

Deciduous Trees				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Acer circinatum	Vine maple	Part shade. Moist soil.	10' to 15'	✓	✓	✓	10'	Provides vibrant fall color. Good for seasonally wet soils.	✓	✓				
Acer macrophyllum	Big-leaf maple	Part shade to full sun. Moist, well drained soils.	90'			✓	30'	Vigorous grower. Good for seasonally wet or seasonally dry soils. Plant away from pond inlets and outlets to avoid leaf litter debris clogging structures.	✓	✓				
Alnus rubra	Red alder	Full sun. Poor, moist soil.	100'			✓	15'	Short lived tree. Plan on harvesting and/or replacing in 50 year cycle. Important species for nitrogen fixation. They establish well on disturbed sites.		✓	✓			
Amelanchier alnifolia	Serviceberry	Full sun. Well drained soil. Very drought tolerant.	10'			✓	10'	Early spring bloomer. Use this tree for Spring interest. Good for seasonally dry soils.	✓	✓				✓
Arbutus menziesii	Pacific madrone	Full sun. Well drained, poor, dry rocky soil.	50'			✓	20'	Difficult species to transplant.	✓					✓
Corylus cornuta	Western hazelnut	Part shade to full sun. Well drained soil. Understory species.	20'			✓	15'	This small tree is sometime classified as a shrub. The spring flowers appear before the leaves in yellow catkins. The fall leaves are pale yellow.	✓					✓
Fraxinus latifolia	Oregon ash	Part shade to full sun. Moist to saturated soils.	75'	✓		✓	20'	Fast growing for first third of life span and long lived. Good for seasonally wet soils. This species is often found growing in dense stands.		✓				
Prunus emarginata	Bitter cherry	Part shade to full sun. Dry to moist sites.	30'	✓	✓	✓	15'	Short lived. Plan on harvesting and/or replacing within 40 to 50 years.	✓	✓				

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Deciduous Trees				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	
Rhamnus purshiana	Cascara	Part shade. Moist, well drained soils.	30'			✓	15'	Usually an understory species, Cascara is a beautiful small tree that produces berries attractive to birds and small mammals.	✓	✓				
Salix hookeriana	Hooker's willow	Full sun. Moist, sand/gravelly soil. Flood tolerant.	20'	✓	✓			Native willow that will sprout multiple stems.		✓				✓
Salix lucida var. *lasiandra*	Pacific willow	Full sun. Moist, sand/gravelly soil. Flood tolerant.	40'	✓	✓	✓	6'	This fast growing species is one of the tallest native willows.		✓	✓	✓	✓	
Salix scouleriana	Scouler's willow	Full sun. Moist, sand/gravel soil.	30'	✓	✓	✓	6'	A native to moist woodland and meadow areas, Scouler's willow grows rapidly and can reseed after soil disturbance.		✓	✓	✓		
Sorbus sitchensis	Sitka mountain ash	Full sun. Moist, rich soil.	10'	✓		✓	6'	A small tree or shrub, this species is often multi-stemmed with a rounded crown. Flowers are creamy white and the fruits persist in winter, providing important winter forage for birds and wildlife.		✓	✓			

Conifers				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	
Pinus contorta var. *contorta*	Shore pine	Full sun. Well drained soil.	50'			✓	30'	This slender evergreen has orange-brown twigs that darken with age. Cones are asymmetrical and 1" to 2" long. Good to plant along the upland border of a pond.	✓					✓
Picea sitchensis	Sitka spruce	Part shade to full sun. Moist or saturated soils.	250'	✓		✓	30'	Large evergreen with sage green or light green foliage.		✓	✓			

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Conifers				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	
Thuja plicata	Western red cedar	Full shade to full sun. Moist to swampy soil.	100'	✓	✓	✓	30'	Long-lived western native that can survive moist, mucky conditions.		✓	✓			
Tsuga heterophylla	Western hemlock	Full shade. Wet soil.	150'	✓	✓	✓	30'	Young trees have foliage with a feathery appearance. The 1" long cones are small and papery. Species can be shallow rooted and prone to blow down in some locations.		✓	✓			

Deciduous Shrubs				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	
Cornus sericea (stolonifera)	Red-osier dogwood	Shady stream banks. Moist, well drained soils.	15'	✓	✓	✓	4'	Plant minimum of 4' from all walkways, roads, and fences in order to avoid pruning. Prune 2-3 branches of a multi-stemmed specimen to the base every other year to stimulate new branch development. New branches have bright red color and will provide winter interest.		✓	✓			
Holodiscus discolor	Ocean spray	Part shade to full sun. Well drained, dry soil.	15'			✓	4'	Large, vase-shaped shrub with arching branches. The big foamy white clusters of flowers bloom throughout the summer months, making this an excellent pollinator species. Good for seasonally dry soil.	✓	✓				✓
Lonicera involucrata	Black twinberry	Part shade. Moist soils.	2' to 7'			✓	4'	This erect, thinly branches species has twin tubular yellow flowers. The shiny black fruits are cupped by two showy purplish-maroon bracts.	✓					

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Deciduous Shrubs				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	Common Name	Site Conditions	Mature Height	Wet Slopes (WS)	Dry Slopes (DS)	Top of Bank (TOB) or Upland (U)	Spacing On Center (O.C.)	Maintenance Notes and Aesthetic Qualities	Dry	Moist to Saturated	0 to 1 foot	1 to 2 feet	2 to 3 feet	
Myrica gale	Sweet gale	Part shade to full sun. Moist to wet soils.	5'	✓		✓	4'	Upright growth form. Can be used as a windbreak when planted in rows. Good nitrogen-fixing soil properties. Has a spicy scent on hot summer days. Can grow in relatively poor soils.		✓				

Deciduous Shrubs				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	Common Name	Site Conditions	Mature Height	Wet Slopes (WS)	Dry Slopes (DS)	Top of Bank (TOB) or Upland (U)	Spacing On Center (O.C.)	Maintenance Notes and Aesthetic Qualities	Dry	Moist to Saturated	0 to 1 foot	1 to 2 feet	2 to 3 feet	
Myrica californica	California gale	Part shade to full sun. Moist to wet soils.	6'-18'	✓		✓	4'	A large shrub to small tree with an upright growth pattern. Great for border planting.		✓				
Oemleria cerasiformis	Indian plum	Part shade. Moist to dry, well-drained soil.	5'- 16'			✓	4'	An early bloomer, Indian plum is one of the first shrubs to flower in the spring. The drooping chains of white flowers appear just before the leaves. Birds love the small fruit that begin as yellow-gold and transform into a bluish-black color later in the summer. In the sun, this species can grow as a large, dense plant, but in the shade it will take on a more open and sprawling growth form.	✓	✓				
Philadelphus lewisii	Mock orange	Part shade to full sun. Well drained soil.	5' -10'			✓	4'	This species is an ornamental favorite. The white flowers that appear in late spring and early summer have a lovely sweet smell. This species is great for pollinators, along borders, and clustered in odd numbers.	✓	✓				
Physocarpus capitatus	Pacific ninebark	Full sun. Moist soil.	6' -12'	✓			3'	This multi-stemmed shrub has interesting bark that looks as if it is shedding layers. The flowers appear as white clusters in later spring and early summer.		✓				

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Deciduous Shrubs				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	Common Name	Site Conditions	Mature Height	Wet Slopes (WS)	Dry Slopes (DS)	Top of Bank (TOB) or Upland (U)	Spacing On Center (O.C.)	Maintenance Notes and Aesthetic Qualities	Dry	Moist to Saturated	0 to 1 foot	1 to 2 feet	2 to 3 feet	Marine Shoreline (Saltwater Tolerant)
Ribes sanguineum	Red-flowering currant	Part shade to full sun. Moist to dry, well drained soil.	8' -10'		✓	✓	4'	The pink to deep red sprays of flowers on this shrub are a favorite early source of food for hummingbirds. Other birds eat the blue-black berries before the end of summer.	✓	✓				
Rosa nutkana	Nootka rose	Full sun. Moist soil.	3' 6'	✓	✓	✓	4'	Fast growing. Good for seasonally wet or seasonally dry soils. Bright pink flowers May through June. Rose hips are purplish-red in fall.		✓				
Rubus parviflora	Thimbleberry	Part shade to full sun. Moist to dry soil.	4' -6'		✓	✓	4'	Medium growth rate. Tolerates dry to seasonally wet soil. Spreads through rhizomes. Large leaves emerge in Spring. Flowers are large, papery, and white. Edible red berries look like raspberries.	✓					
Rubus spectabilis	Salmonberry	Full shade to full sun. Moist soil.	3'- 10'	✓	✓	✓	4'	Fast growing. Bright pink to magenta flowers appear single or in small groups from March through April. The yellow to reddish fruit provide wildlife forage.	✓	✓	✓			
Sambucus racemosa	Red elderberry	Part shade to full sun. Moist soil.	5' -8'			✓	10'	Fast growing. Good for seasonally wet or seasonally dry soils. This shrub can grow into the form of a small tree. Clusters of white flowers in May. Red berries appear June through July.		✓				
Spiraea douglasii	Douglas spirea	Full sun. Wetland or lake edge.	4' -7'	✓		✓	6'	Fast growing. Prefers moist to wet soils. Will tolerate dry soils once established, but will do best on moist or boggy sites. Needs regular water during establishment. Can form thickets in boggy areas. Large clusters of tiny pinkish red flowers. Flower plumes dry and remain on plant through winter.		✓	✓	✓	✓	

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Deciduous Shrubs				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Symphoricarpus albus	Snowberry	Part shade to full sun. Moist to dry, well drained soil.	2' -6'	✓	✓	✓	3'	Good for seasonally wet or seasonally dry soils. If pruned to ground in early spring, plant will resprout vigorously with more fruit. White to pink bell-shaped flowers. White waxy, non-edible fruit.						✓
Symphoricarpus mollis	Creeping snowberry	Full shade to full sun. Moist to dry, well drained soil.	2'	✓	✓	✓	3'	This trailing species spreads by sending out new roots from along its stem. This low-growing shrub is an excellent groundcover in areas where visibility needs to be maintained.	✓	✓				

Evergreen Shrubs				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Arctostaphyllos uva-ursi	Kinnikinnick	Full sun. Dry soil.	12"		✓	✓	2'	Low-growing evergreen shrub that is also commonly used as a groundcover.	✓					
Berberis aquifolium	Tall Oregon grape	Part shade. Well drained soil.	5' -8'			✓	4'	Tall shrub with bright yellow clusters of flowers and clusters of blue fruit in late summer and fall. Good for seasonally dry soil and open areas. Good bird forage species.	✓					
Berberis nervosa	Dull Oregon grape	Part shade. Moist, well drained soil.	2' -3'	✓	✓	✓	3'	Low-growing shrub that prefers shade, but will tolerate open areas. Flowers are bright yellow clusters and fruits are in blue berry-like clusters.	✓	✓				
Ceanothus velutinus	Snowbrush	Full sun. Moist to dry soil, well drained.	20'			✓		Large, pyramidal-shaped clusters of small white flowers. This shrub has a spicy scent. The new bark is reddish or purplish in color.	✓	✓				

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Evergreen Shrubs				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	
Gaultheria shallon	Salal	Part shade to full sun. Well drained soil.	3' -6'		✓	✓	3'	Good for seasonally dry soil. The more sun, the less the plant will spread. Spreads by layering, suckering, and sprouting. Does best with some moisture and part shade. Deer, rabbit, and snail resistant.	✓					✓
Vaccinium ovatum	Evergreen huckleberry	Shade to full sun. Moist, well drained soil.	3' in full sun. 15' in deep shade.	✓		✓	4'	This shrub has shiny, leathery leaves and tiny pink bell-shaped flowers that bloom from April through July. In areas with full sun, this shrub will have a more open form		✓				

Groundcovers				Plant Placement					Seasonal Water Level Tolerance					Marine Shoreline (Saltwater Tolerant)
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	
Adiantum aleuticum	Maidenhair fern	Full shade. Moist to wet soil.	2'	✓		✓	24"	A black-stemmed fern with delicate palmately arranged leaves.	✓	✓				
Angelica lucida	Sea-watch	Part shade to full sun. Moist to wet soil.	5'	✓			3'	Single-stemmed plant with tight clusters of small white flowers. Blooms in late spring.		✓				✓
Aquilegia formosa	Western columbine	Part shade to full sun. Moist soil.	2'	✓	✓	✓	12"	The beautiful red and yellow flowers bloom in spring and summer. The delicate leaves die back in the winter months and resprout in the spring.	✓	✓				
Armeria maritima	Sea thrift	Full sun. Dry soils.	12"	✓	✓		12"	A popular garden flower with a slow-growing spreading habit. Good for cut flower arrangements.	✓	✓				✓

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Groundcovers				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Aruncus sylvester	Goat's beard	Part shade. Moist soil.	3'- 5'	✓		✓	4'	A deciduous wildflower with large masses of airy white flowers that turn brownish-red as the seasons progress. This plant has a great form throughout the winter and resprouts new arching stems each spring.		✓				
Aster subspicatus	Douglas' aster	Part shade to full sun. Moist to dry soils.	3'	✓	✓	✓	3'	A perennial herb with bluish-purple ray flowers. Blooms in late summer.	✓					✓
Athyrium filix-femina	Lady fern	Full shade. Moist to wet soil.	2'-5'	✓		✓	24"	This fern has delicate feathery fronds and red stems. It is a reliable groundcover.		✓	✓			
Blechnam spicant	Deer fern	Full shade. Moist soil.	2'	✓		✓	24"	A low-growing, hardy fern that does well under the shade of plants.		✓				
Camassia quamash	Common camas	Part shade to full sun. Moist to moderately dry soils.	18"-24"	✓	✓	✓	12"	This pale to deep blue, occasionally white, lily has spike with 5 to many flowers. This showy plant blooms over a short few weeks in late spring.	✓	✓				
Clarkia amoena	Dwarf godetia	Full sun. Moist to moderate soils.	8"- 14"	✓	✓	✓	18"	This pink to rose-purple flower blooms in mid-summer and continues to bloom for several weeks. A taprooted species, it is good for drier sites.	✓	✓				
Dicentra formosa	Pacific bleeding heart	Full shade. Moist soil.	18"	✓	✓	✓	24"	A delicate-leaved plant with little pink heart-shaped flowers, this plant spreads by rhizomes (underground root systems).	✓	✓				

Bainbridge Island Mitigation Manual Plant List

Groundcovers				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	Common Name	Site Conditions	Mature Height	Wet Slopes (WS)	Dry Slopes (DS)	Top of Bank (TOB) or Upland (U)	Spacing On Center (O.C.)	Maintenance Notes and Aesthetic Qualities	Dry	Moist to Saturated	0 to 1 foot	1 to 2 feet	2 to 3 feet	Marine Shoreline (Saltwater Tolerant)
Epilobium angustifolium	Fireweed	Full sun. Moist to dry soil.	2'-6'		✓	✓	24"	Showy rose to purple flowers in tall spike-like clusters. This plant spreads by seed and rhizome and will continue to thrive as long as it gets sun.	✓	✓				
Fragaria chiloensis	Coastal strawberry	Part shade to full sun. Sandy soil.	6"	✓	✓	✓	12"- 18"	A hardy, small strawberry plant that will colonize open areas and create a dense groundcover.	✓	✓				✓
Heuchera micrantha	Alumroot	Full shade. Moist soil.	18"-24"	✓		✓	18"	A delicate native with a tall spike of small white flowers. Great for shady sites.	✓	✓				
Lupinus polyphyllus	Large-leaf lupine	Part shade. Moist soil.	12"-36"	✓	✓	✓	12"	Big, robust plant with bold, rich-green palmate leaves. The flowers are large spikes of deep-blue to purplish flowers. This plant blooms biennially and will spread from seed.	✓	✓				
Mimulus guttatus	Yellow monkey flower	Full sun. Moist to wet soil.	18"- 30"	✓		✓	24"	This perennial herb spread by rhizomes and has bright happy yellow flowers with crimson to reddish-brown spots.		✓	✓			
Oxalis oregana	Sorrel	Full shade. Moist soil.	12"	✓	✓	✓	14"	This clover-like species spreads by rhizomes and forms a nice groundcover. The small white flowers bloom in spring and summer.	✓	✓				

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Groundcovers				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Plectritis congesta	Sea blush	Full sun. Moist to wet soil.	6"-24"	✓		✓	12"	This small herb has an upright stem that supports a head of showy pink flowers.	✓	✓				
Polystitchum munitum	Sword fern	Moist to dry soil.	2'- 5'	✓	✓	✓	24"	One of the most adaptable, hardy ferns this species stays green year-round.	✓	✓				
Potentilla anserina var. pacifica	Silverweed	Part shade to full sun. Moist to wet soil.	18"	✓			24"	Small spreading plant with yellow flowers. Blooms late spring through mid-summer.		✓				✓
Sedum spathulifolium	Broad-leaved stonecrop	Full sun. Dry soils.	6"		✓	✓	12"	A native sedum with green and red succulent foliage. The yellow flowers bloom in June and July.	✓					✓
Sidalcea hendersonii	Henderson's checkermallow	Full sun. Moist to wet soil.	5'	✓			3'	A tall native herbaceous perennail with a stalk of pink to mauve flowers that bloom early to mid-summer.		✓				✓
Sisyrinchium idahoense	Blue eyed grass	Part shade to full sun. Moist soils.	24"	✓	✓	✓	12"	This perennial herb has grass-like leaves, but has a light blue to dark purple (sometimes white) flower.	✓	✓				
Tellima grandiflora	Fringecup	Part shade. Moist soil.	14"- 30"	✓		✓	18"	A perennial herb with a spike of fragrant, greenish-white flowers that turn pink or reddish as the flowers age.	✓	✓				
Tolmiea menziesii	Youth-on-age	Full shade. Moist soil.	6" -12"	✓		✓	12"	Small plant that forms a delicate groundcover. The tiny flowers are brownish-purple.	✓	✓				

Bainbridge Island Mitigation Manual Plant List

Grasses, Sedges, and Rushes				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Agrostis exarata	Spiked bentgrass	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	1'-3'	✓			12"	A perennial grass that grows in tufted form and has erect spikes, as its name suggests.		✓	✓			
Beckmannia syzigachne	American sloughgrass	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	1'-3'	✓			12"	A stout grass with somewhat spongy stems, this plant grows on its own or in groups. This species can be planted or seeded.		✓	✓			
Bromus sitchensis	Sitka brome	Full sun. Dry soils.	6"- 18"			✓	12"	A stout perennial grass with flowers in open, airy panicles.	✓					
Carex lyngbyei	Lyndgye's sedge	Part shade to full sun. Wet soils.	3'	✓			12"	A wetland sedge with lime to medium green foliage. Tops of leaf blades sometimes slightly arching. Brown flower stalks.		✓				✓
Carex obnupta	Slough sedge	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	1'-3'	✓			12"	A large tufted sedge with erect, then arching leaf blades and large brown arching flower heads.		✓	✓	✓		
Carex stipata	Saw beaked sedge	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	1'-3'	✓			12"	A tufted arching sedge, this plant has pyramidal flower clusters that turn from light green to golden as they mature. Flower stems are erect and leaves are bright spring green.		✓	✓			
Danthonia californica	California oat grass	Full sun. Dry to moist soil.	10"- 12"		✓	✓	12"	A delicate, native, clumping grass with purplish-red flowers.	✓	✓				
Deschampsia cespitosa	Tufted hairgrass	Full sun. Moist to wet soil.	18"- 4'	✓	✓	✓	12"	This large, clumping grass has big feathery flower heads with bronze arching flowers.	✓	✓	✓			✓
Eleocharis palustris	Common spikerush	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	1'-3'	✓			12"	A mat-forming perennial spikerush with erect slender stems.		✓	✓	✓	✓	
Elymus glaucus	Blue wildrye	Full shade to full sun. Dry to moist soil.	2'-4'	✓	✓	✓	12"	A tufted perennial grass that forms small clumps and has light blue-green green leaf blades.	✓	✓				✓

Bainbridge Island Mitigation Manual Plant List

Grasses, Sedges, and Rushes				Plant Placement					Seasonal Water Level Tolerance					
Latin Name	**Common Name**	**Site Conditions**	**Mature Height**	**Wet Slopes (WS)**	**Dry Slopes (DS)**	**Top of Bank (TOB) or Upland (U)**	**Spacing On Center (O.C.)**	**Maintenance Notes and Aesthetic Qualities**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**	**Marine Shoreline (Saltwater Tolerant)**
Elymus mollis	Dune grass	Full sun. Moist to wet soil.	3'	✓			24"	An industrial strength dune grass that forms large clumps and spreads via underground stems. A hearty weed competitor.		✓				✓
Festuca rubra	Red fescue	Full sun to full shade. Dry to moist soil.	2'	✓	✓	✓	12"	A versatile grass that spreads by rhizome. One of the few shade tolerant grasses.	✓	✓				
Glyceria occidentalis	Northwestern mannagrass	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	1'-5'	✓			12"	A tall perennial wetland grass.		✓	✓	✓	✓	
Hordeum brachyantherum	Meadow barley	Full sun. Dry to moist soil.	1'-3'	✓	✓	✓	12"	A hardy native tolerant of wet, dry, and saline sites. This species is used for erosion control and as a groundcover. Can sometimes compete with reed canary grass.	✓	✓				
Juncus ensifolius	Dagger-leaf rush	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	6" to 2.5'	✓			12"	A small rush with an erect form, this wetland species spreads by rhizome.		✓	✓	✓		
Juncus tenuis	Slender rush	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	6" to 2'	✓			12"	This rush is best planted, due to its low seed fertility rate. A clump forming perennial rush.		✓	✓	✓		
Schoenoplectus acutus	Hardstem bulrush	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	3' to 6'	✓			12"	A good wetland species to use for soil stabilization and water treatment. Birds eat the seeds, but this plant is not a preferred food of deer and elk.		✓	✓	✓	✓	
Schoenoplectus microcarpus	Soft stem bulrush	Full sun to part shade. Moist, saturated, or seasonally to permanently flooded conditions.	2' to 3'	✓			12"	A good soil stabilization and water quality species, this plant spreads readily by rhizome.		✓	✓	✓		

Bainbridge Island Mitigation Manual Plant List

Bainbridge Island Emergent Seed Mix			Seasonal Water Level Tolerance				
Latin Name	**Common Name**	**% Mix**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**
Beckmannia syzigachne	American sloughgrass	20		✓	✓	✓	
Carex obnupta	Slough sedge	10					
Eleocharis palustris	Common spikerush	10					
Elymus glaucus	Blue wildrye	20					
Glyceria occidentalis	Northwestern mannagrass	10					
Juncus ensifolius	Dagger-leaf rush	10					
Juncus tenuis	Slender rush	10					
Schoenoplectus acutus	Hardstem bulrush	5					
Schoenoplectus microcarpus	Soft stem bulrush	5					

Bainbridge Island Wetland Bottom Seed Mix			Seasonal Water Level Tolerance				
Latin Name	**Common Name**	**% Mix**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**
Agrostis exarata	Spiked bentgrass	20		✓	✓	✓	✓
Carex stipata	Saw beaked sedge	30					
Glyceria occidentalis	Northwestern mannagrass	20					
Schoenoplectus microcarpus	Soft stem bulrush	30					

Bainbridge Island Moist to Dry Slope Seed Mix			Seasonal Water Level Tolerance				
Latin Name	**Common Name**	**% Mix**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**
Deschampsia cespitosa	Tufted hairgrass	20	✓	✓			
Hordeum brachyantherum	Meadow barley	30					
Elymus glaucus	Blue wildrye	15					
Festuca rubra var *rubra*	Red fescue	20					
Bromus carinatus	California brome	15					

Bainbridge Island Mitigation Manual Plant List

Bainbridge Island Emergent Wildflower/Pollinator Seed Mix			Seasonal Water Level Tolerance				
Latin Name	**Common Name**	**% Mix**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**
Camassia quamash	Common camas	25	✓	✓			
Erigeron speciosus	Aspen daisy	25					
Lupinus polyphyllus	Large-leaf lupine	25					
Sisyrinchium idahoense	Blue eyed grass	25					

Bainbridge Island Upland Grass Seed Mix			Seasonal Water Level Tolerance				
Latin Name	**Common Name**	**% Mix**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**
Bromus carinatus	California brome	20	✓				
Festuca rubra var. rubra	Red fescue	30					
Hordeum brachyantherum	Meadow barley	50					

Bainbridge Island Upland Forb Seed Mix			Seasonal Water Level Tolerance				
Latin Name	**Common Name**	**% Mix**	**Dry**	**Moist to Saturated**	**0 to 1 foot**	**1 to 2 feet**	**2 to 3 feet**
Achillea millefolium	Yarrow	25	✓				
Clarkia amoena	Farewell-to-spring	25					
Lupinus bicolor	Bicolor lupine	25					
Solidago canadensis	Canada goldenrod	25					

Appendix E - Special Area Maps

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Port Madison
Harbor Structure Line

N

200 100 0 200 Feet

Eagle Harbor
Harbor Structure Line
N
200 100 0 200 Feet

Point Monroe Distirct Shoreline Stabiliztion Areas

N

200 100 0 200 Feet

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Adoption Documents

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ORDINANCE NO. 2020-17

AN ORDINANCE of the City of Bainbridge Island, Washington, amending the City's Shoreline Master Program related to critical areas regulations and nonconforming structures, uses, and lots; and amending several sections of Chapter 16.12 of the Bainbridge Island Municipal Code accordingly, as specifically identified in Exhibit A to this ordinance.

WHEREAS, the Washington State Shoreline Management Act (Chapter 90.58 RCW, referred to herein as the "SMA") recognizes that shorelines are among the most valuable and fragile resources of the state, and requires the City of Bainbridge Island ("City") and the Washington State Department of Ecology ("Ecology") to jointly adopt, update, and amend the Shoreline Master Program ("SMP") pursuant to Chapter 173-26 WAC; and

WHEREAS, the City adopted a comprehensive update to its SMP (Ordinance No. 2014-04) on July 14, 2014, which was approved by Ecology on July 16, 2014; and

WHEREAS, the City adopted an update to its Critical Areas Ordinance (Ordinance No. 2018-01) on February 27, 2018; and

WHEREAS, RCW 36.70A.480(4) requires that SMPs provide a level of protection to critical areas located within shorelines of the state that assures no net loss of shoreline ecological functions necessary to sustain shoreline natural resources; and

WHEREAS, the City desires to integrate the updated critical areas regulations into its Shoreline Master Program which requires a SMP amendment pursuant to WAC 173-26-090(1); and

WHEREAS, the City chose to use the optional joint review process for amending the SMP pursuant to WAC 173-26-104; and

WHEREAS, on October 12, 2017, November 16, 2017, April 26, 2018, and August 30, 2018, the Planning Commission reviewed amendments to the SMP related to critical areas; and

WHEREAS, on January 11, 2018, February 8, 2018, March 8, 2018, March 29, 2018, April 12, 2018, April 19, 2018, and August 30, 2018, the Planning Commission reviewed amendments to the SMP related to nonconforming structures, uses, and lots; and

WHEREAS, from May 8, 2018 to June 9, 2018, following timely public notification, the City and Ecology held a 30-day public comment period on the amendment related to critical areas regulations; and

WHEREAS, on May 24, 2018 and June 7, 2018, following timely public notification, the Planning Commission and Ecology held a joint public hearing on the amendment related to critical areas regulations; and

WHEREAS, on June 7, 2018, the Planning Commission recommended combining the nonconforming structures, uses, and lots revisions and the critical areas revisions into one amendment; and

WHEREAS, on July 24, 2018, the City Council directed staff to combine the nonconforming structures, uses, and lots revisions and the critical areas revisions into one amendment and to schedule a public hearing on the amendment on September 11, 2018; and

WHEREAS, from September 10, 2018 to October 10, 2018, following timely public notification, the Planning Commission and Ecology held a 30-day public comment period on the amendment related to critical areas and nonconforming structures, uses, and lots; and

WHEREAS, on September 11, 2018, following timely public notification, the Planning Commission and Ecology held a joint public hearing on the amendment related to critical areas and nonconforming structures, uses, and lots; and

WHEREAS, on October 2, 2018, October 9, 2018, October 16, 2018, November 27, 2018, December 11, 2018, and January 8, 2019, the City Council considered the proposed amendment, the recommendations of the Planning Commission, the public testimony provided, and the record; and

WHEREAS, on October 12, 2018, the City issued a Determination of Non-Significance on the amendment consistent with the State Environmental Policy Act (Chapter 43.21C RCW) and Chapter 16.04 BIMC, and no person filed an appeal; and

WHEREAS, on October 26, 2018, the City transmitted a Notice of Intent to the Washington State Department of Commerce in accordance with WAC 173-26-104 and RCW 36.70A.106; and

WHEREAS, on January 8, 2019, the City Council adopted Resolution No. 2019-05 approving the proposed SMP amendment relating to critical areas regulations and nonconforming structures, uses, and lots and directing staff to submit the draft to Ecology for initial state review pursuant to WAC 173-26-104; and

WHEREAS, on April 19, 2019, the City submitted the draft SMP amendment to Ecology for an initial determination of concurrence in accordance with the submittal requirements in WAC 173-26-110; and

WHEREAS, on December 9, 2019, Ecology determined that the City's draft SMP amendment, subject to and including Ecology's required and recommended changes, was consistent with the policy and standards of RCW 90.58.020 and RCW 90.58.090 and the applicable SMP guidelines (WAC 173-26-171 through -251 and .020 definitions); and

WHEREAS, on June 23, 2020, the City Council considered Ecology's required and recommended changes as well as those identified by City staff, and directed staff to draft an ordinance incorporating Ecology's changes and staff's edits; and

WHEREAS, on September 8, 2020, the City Council set the public hearing for this Ordinance No. 2020-17 for September 22, 2020; and

WHEREAS, on September 22, 2020, following timely public notification, the City Council held a public hearing on Ordinance No. 2020-17, including all components of the SMP amendment specified in Exhibit A to this ordinance; and

WHEREAS, on October 2, 2020, the City reissued the Determination of Non-Significance on the amendment to ensure all noticing requirements were met consistent with the State Environmental Policy Act (Chapter 43.21C RCW) and Chapter 16.04 BIMC, and no person filed an appeal; and

WHEREAS, on November 24, 2020, the City Council enacted this Ordinance No. 2020-17, thereby approving all of the changes related to this SMP amendment; and

WHEREAS, the SMP amendment will result in "no net loss" of shoreline ecological functions relative to the established baseline and may ultimately produce an improvement in shoreline ecological functions through incentive-based restoration; the SMP amendment is consistent with and meets the SMP Guidelines established under Chapter 173-26 WAC; the SMP amendment is consistent with and implements the SMA (Chapter 90.58 RCW) and the Growth Management Act (Chapter 36.70A RCW); the SMP amendment is consistent with the Bainbridge Island Comprehensive Plan; and the SMP amendment is internally consistent.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BAINBRIDGE ISLAND, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Purpose. The purpose of this ordinance is to integrate the regulations updated as a part of the City's Critical Areas Ordinance (Chapter 16.20 BIMC) and to clarify allowed actions for all nonconforming structures, uses, and lots, as well as specific allowances for nonconforming single-family residential primary structures. The majority of the amendments are located in Section 4.1.5, Critical Areas; Section 4.2.1 Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots; and Section 8.0, Definitions. Other minor changes are located throughout the Shoreline Master Program as shown on the attached Exhibit A to create consistency with the changes made to the sections above. The City's "WAC 173-26-110 Submittal Package," which includes a summary of proposed amendments to policy and regulatory language with explanatory text and other materials which document the necessity for the proposed changes to the City's Shoreline Master Program, is incorporated by this reference as findings of fact.

Section 2. Findings. The recitals set forth above are hereby adopted as the City Council's findings in support of this ordinance.

Section 3. Amendment to the Shoreline Master Program.

A. The City of Bainbridge Island Shoreline Master Program, adopted by Ordinance No. 2014-04 on July 14, 2014, is amended as shown in Exhibit A and incorporated herein by this reference.

B. Chapter 16.12 of the Bainbridge Island Municipal Code is hereby amended as shown in Exhibit A and incorporated herein by this reference.

Section 4. Codification. The City Council hereby adopts the amendments set forth in this ordinance to the Shoreline Master Program. As is the case currently, the Shoreline Master Program is part of the City's development regulations and the amendments adopted herein constitute amendments to those development regulations, including Chapter 16.12 of the Bainbridge Island Municipal Code. The Director of Planning and Community Development shall work with the codifier of the Bainbridge Island Municipal Code in order to ensure that the regulations in the Shoreline Master Program and as otherwise adopted by this ordinance are appropriately codified.

Section 5. Severability. Should any section, paragraph, sentence, clause, or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be preempted by state or federal law or regulation, such decision or preemption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

Section 6. Scrivener's Error. The City Clerk and codifiers of the ordinance are authorized to make necessary corrections to this ordinance including, but not limited to, the correction of scrivener and clerical errors, references, ordinance numbering, section and subsection numbers, and any references thereto.

Section 7. Effective Date. This ordinance shall take effect upon the date of a letter to the City of Bainbridge Island from the Washington State Department of Ecology approving the Shoreline Master Program Amendment adopted by this ordinance.

PASSED by the City Council this 24th day of November, 2020.

APPROVED by the Mayor this 24th day of November, 2020.

Leslie Schneider, Mayor

ATTEST/AUTHENTICATE:

Christine Brown, CMC, City Clerk

FILED WITH THE CITY CLERK:	September 4, 2020
PASSED BY THE CITY COUNCIL:	November 24, 2020
PUBLISHED:	November 27, 2020
EFFECTIVE DATE:	This ordinance shall take effect upon the date of a letter to the City of Bainbridge Island from the Washington State Department of Ecology approving the Shoreline Master Program Amendment adopted by this ordinance.
ORDINANCE NUMBER:	2020-17
EXHIBIT	Exhibit A

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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

February 19, 2021

The Honorable Leslie Schneider
City of Bainbridge Island
280 Madison Avenue N
Bainbridge Island, WA 98110

Re: Final Ecology Approval of the City of Bainbridge Island Shoreline Master Program Amendment

Dear Mayor Schneider:

The Department of Ecology (Ecology) is pleased to announce final approval of the City of Bainbridge Island (City) Shoreline Master Program (SMP) amendment. This is in reference to Ordinance 2020-17 amending the City's SMP related to critical areas regulations and nonconforming structures, uses, and lots provisions. Ecology finds the City's program consistent with the policy and procedural requirements of the Shoreline Management Act (RCW 90.58) and its implementing rules.

Ecology approves the City's SMP amendment as submitted. The enclosed Attachment A, Findings and Conclusions document, provides more information about our decision. This is Ecology's final action and there will be no further modifications to the proposal.

The SMP is effective 14 days from the date of this letter. This time period was established by the state legislature and is intended to provide lead time for the County to prepare to implement the new SMP.

Ecology is required to publish a newspaper notice that the City's SMP has received final approval. The publication of this notice, in the form of a legal ad, will begin a 60-day appeal period. We will provide a copy of the legal ad to the City for its amendment record.

Please send Ecology a final clean copy version of the complete approved SMP that includes the amendment changes.

If you have any questions, please contact our regional planner at Maria Sandercock (425) 679-7106 maria.sandercock@ecy.wa.gov.

Sincerely,

Laura Watson
Director

Enclosure/cc: Annie Hillier, City of Bainbridge Island
Heather Wright, City of Bainbridge Island
Misty Blair, Ecology
Joe Burcar, Ecology
Maria Sandercock, Ecology

ATTACHMENT A: FINDINGS AND CONCLUSIONS
FOR PROPOSED AMENDMENT OF THE CITY OF BAINBRIDGE ISLAND
SHORELINE MASTER PROGRAM

SMP Submittal accepted December 8, 2020, Ordinance No. 2020-17
Prepared by Department of Ecology on January 29, 2020

Brief Description of Proposed Amendment

The City of Bainbridge Island (City) has submitted locally-initiated Shoreline Master Program (SMP) amendments to Ecology for approval. The City has elected to utilize the optional joint review process for SMP amendments available per WAC 173-26-104; therefore, as part of this process on December 9, 2019 per WAC 173-26-104(3)(b) Ecology provided the City with an initial determination of consistency with applicable laws and rules. The City's final adopted ordinance incorporated all of Ecology's required and recommended changes provided as part of the initial determination. This is a locally initiated amendment intended to update critical areas regulations and improve clarity and implementation of the nonconforming provisions of the SMP. Amendments related to critical areas (SMP Section 4.1.5) focus on integrating similar updates to those completed as part of the City's critical areas ordinance (CAO, BIMC 16.20). Amendments related to nonconforming uses, structures, and lots (SMP Section 4.2.1) focus on clarification of allowed actions for all nonconforming structures and specific allowances for expansion of single-family residential primary structures. The full proposed text amendment can be found in *Ordinance No. 2020-17 – December 8, 2020*.

FINDINGS OF FACT

Need for amendment

The City's comprehensive update to their SMP went into effect in 2014. The City has proposed Shoreline Master Program amendments to update critical areas protection standards and non-conforming provisions to improve clarity and implementation effectiveness.

The City indicates that the amendment is necessary to updated critical areas provisions and to address nonconforming uses, structures, and lots. The amendment also improves internal consistency, corrects scriveners' errors, and provides clarity for more effective implementation.

SMP provisions to be changed by the amendment as proposed

The City's proposed changes fall primarily into three categories:

- those added to update critical areas provisions;
- those modifications to the nonconforming uses, developments, and lots, to address implementation issues identified by staff or the public, to provide flexibility for reasonably foreseeable development; and
- those added to improve internal consistency, fix scriveners' errors, and update internal cross-references.

Amendments related to **critical areas (SMP Section 4.1.5)** focus on integrating regulations recently updated as part of the critical areas ordinance (CAO, see BIMC 16.20). The intent of the amendment is simply to embed recently updated critical areas regulations into the SMP consistent with procedures and policies of the Shoreline Management Act (SMA). The City's existing SMP contains critical areas regulations in two places – Section 4.1.5 and Appendix B. Appendix B is essentially a carbon copy of BIMC 16.20, as it existed prior to the CAO update. Section 4.1.5 has some "shoreline-specific" critical areas provisions and some redundant regulations also present in Appendix B. A major housekeeping change in the amendment is to eliminate Appendix B and consolidate all critical areas regulations in Section 4.1.5. This improves readability of the document and eliminates redundancies and internal inconsistencies.

Amendments related to **nonconforming uses, structures, and lots (SMP Section 4.2.1)** are intended to improve clarity and implementation effectiveness of the SMP. The amendments focus on clarification of allowed actions (e.g., rebuilding) of all nonconforming structures and specific allowances for expansion of single-family residential primary structures. The majority of revisions are intended to improve clarity and eliminate vagueness, repetition, and/or internal conflict.

The City's locally initiated proposed changes modify the following SMP sections:

Table of Contents – This section will be revised when the amendment is finalized to ensure page numbers and sections titles are accurate.
***Section 4.2.1** ~~Nonconforming Uses, Nonconforming Lots, and Existing Development~~ is renamed to Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots. Every reference to this section is also modified to reflect this change.
****Appendix B**, the shoreline jurisdiction critical areas provisions incorporated into the 2014 SMP is proposed for deletion. The shoreline jurisdiction critical areas provisions are now proposed to be embedded within the SMP section 4.1.5. All references to Appendix B throughout the SMP are deleted and where appropriate new cross references to Section 4.1.5 are added.

SMP Chapter 1 Introduction

Section 1.3.5 Applicability of Bainbridge Island Shoreline Master Program–
Subsection 1.3.5.2 - Edits proposed to clarify how the SMP applies to both existing and new development, uses, lots and activities.
Subsection 1.3.5.2.a - The City proposes to further emphasize that legally existing development, uses, lots and activities are not required to meet the SMP requirements, unless new development or changes to a development, use, lot or structure occurs that would require review under the SMP.
Subsection 1.3.5.2.b - This section is streamlined to remove any confusion, it now states that all legally existing single-family residences and accessory structures are allowed to be maintained, repaired, remodeled or replaced. A Cross reference to the nonconforming provisions in section 4.2.1 is deleted, along with the following: ~~*if destroyed or damaged by natural causes*~~.
Subsection 1.3.5.2.c - References to expansions of existing structures are deleted and remaining language is modified: All proposed uses and development occurring within shoreline jurisdiction must ~~conform to~~ be consistent with Chapter 90.58 RCW, the Shoreline Management Act and this ~~Shoreline Master~~ Program.
Subsection 1.3.5.2.d - This section is reorganized and reworded without substantive change to the provision.

SMP Chapter 4 General (Island-wide) Policies and Regulations

Section 4.0.1 Regulations - General

Subsection 4.0.1.7 is modified to elaborate on how the City will resolve any unforeseen conflicts between the SMP and other BIMC provisions.

Section 4.1.2 Environmental Impacts

Subsection 4.1.2.5 is modified to remove the requirement that projects using the non-conforming allowances of Section 4.2.1 must plant the entire area of the Zone 1 buffer to obtain a 65% vegetation coverage within 10 years. This requirement will only apply to projects that alter or reduce the shoreline buffer using the vegetation management provisions of Section 4.1.3.

Subsection 4.1.2.8 is modified to delete reference to Appendix B and replace with the new reference to the embedded critical areas provision.

Section 4.1.3 Vegetation Management

Subsection 4.1.3.4.3.c.ii., Subsection 4.1.3.5.8.a.v., and Subsection 4.1.3.8.4.iv requirement for a Bluff Management Plan is deleted and replaced with a requirement for compliance with the development standards of Section 4.1.5.11.

Section 4.1.5 Critical Areas

Subsection 4.1.5.1 Applicability is modified to remove the list of all other applicable SMP and BIMC Chapters. It is not necessary to list these at the beginning of each section – they are applicable whether listed here or not. The City proposes to add the following applicability statement:

This section applies to all development, uses and activities within areas or adjacent to areas designated as critical areas. No action shall be taken by any person, company, agency, governmental body (including the city), or applicant, which results in any alteration of a critical area except as consistent with the goals, policies, purposes, intent, requirements, and development standards of this section.

Subsection 4.1.5.2 Goal the City proposes to add policy goal statements regarding avoidance and minimization for the protection of the Island's special character. An additional five (5) specific goals are listed related to biodiversity, locating development in less environmentally sensitive areas, prevention of cumulative impacts, protection of public and public resources from hazards such as landslides, erosion, seismic events, and floods, and alter owners and the public of the natural conditions that pose a hazard or otherwise limit development.

NEW Subsection 4.1.5.3 Purpose and intent the City proposes to add four (4) purpose and intent statements related to the designation, classification and protection of critical areas.

NEW Subsection 4.1.5.4 Protection of Critical Areas the City added this section identifying that all development, uses, and activities subject to this section must use mitigation sequencing and that the burden of proof that the action will not cause a net loss or harm falls on the applicant.

Subsection 4.1.5.5 Policies this section is renumbered to accommodate the new sections above. Additionally the City proposes to delete 3 policies, which currently lists the shoreline resource critical areas to be protected or are otherwise redundant to other SMP policies.

NEW Subsection 4.1.5.6 Allowed Activities within Critical Areas this new section is proposed to clarify certain repair and maintenance, forest practices, minor site investigation, improved right-of-way, low impact fencing, signs, and aquifer recharge area activities that can occur without additional critical areas review. Another section adds allowance for certain activities within an interrupted portion of a critical area buffer to be allowed without additional critical areas review.

Subsection 4.1.5.7 Regulations – General this section is modified to delete a reference to critical areas regulations contained within Appendix B, because the City is deleting Appendix B and replacing those provisions with regulations embedded directly within this section (SMP 4.1.5). The City proposes review criteria and other general standards similar to those contained within Appendix B. This includes additional information requirements for reports and site plans, as well as, Notice on Title requirements.

Subsection 4.1.5.8 Regulations – Critical Saltwater Habitat this section is modified to remove references and requirements for *Fish and Wildlife Habitat Conservation Areas* because those provisions were relocated into another section.
NEW Subsection 4.1.5.9 Aquifer Recharge Areas this new section provides the applicability of aquifer recharge area regulations and includes the list of prohibited activities and uses that is currently within Appendix B-7. This section is consistent with the SMP's existing Aquifer Recharge Areas provisions.
NEW Subsection 4.1.5.10 Fish and Wildlife Habitat Conservation Areas this new section in the SMP but carries over mostly existing language from Appendix B-8. Allows buffer averaging with mitigation sequencing, but no buffer reduction. New sections added for Utilities, Road/Street Repair and Construction, and Forest Practices. This section covers FWHCA classification, mapping, development standards, buffers, Stream buffers are increased from the version in Appendix B to:

Table 4-4. Stream Buffers

Stream Type	Buffer Width
F	200
Np	100
Ns (connected to F or Np)	75
Ns (not connected to F, Np)	50

Subsection 4.1.5.11 Regulations – Geologically Hazardous Areas this section is updated to include provisions from Appendix B-9, with minor modifications and re-organization. This section classifies geologically hazardous areas, sets review procedures, provide general standards, and specific development regulations, including setback requirements. Special Reports section was deleted, because special reports are addressed elsewhere in this section. Surface drainage section is modified to replace the term "marine bluff" with "landslide hazard area" for internal consistency of the use of this term.
Subsection 4.1.5.12 Regulations – Wetlands this section is amended to bring in applicability, identification, categorization, mapping, protection, buffer, and mitigation standards from Appendix B, except as necessarily modified to reference the updated information such as requiring the use of the 2014 Wetland Rating System.
NEW Subsection 4.1.5.13 Regulations – The Winslow Ravine – Special Rules in Mixed Use Town Center this section is new to 4.1, but is just a relocation of existing language from Appendix B-12.
NEW Subsection 4.1.5.14 Regulations –Critical areas reports this section is added to put all critical area report requirements in one place.

Section 4.2 General Use

Subsection 4.2.1. Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots this is modified to change the title from ~~Nonconforming Uses, Nonconforming Lots, and Existing Development~~ to Nonconforming Uses, Nonconforming Structures, and Nonconforming Lots,
Subsection 4.2.1.1 Applicability this is modified with minor grammar edits and additional text to provide clarity. A clarification is added providing that this section does not apply to shoreline modification or shoreline stabilization. Another addition, mimics language from **Subsection 1.3.5.2.a,** providing that nonconforming uses, lots and structures are not required to meet the SMP requirements, unless new development or changes to a use, lot or structure occurs that would require review under the SMP are proposed.
NEW Subsection 4.2.1.2 Definitions this new section is added to provide section specific definitions for Nonconforming Use, Nonconforming Lot, and Nonconforming Development or Structure. The definitions proposed are consistent with those Ecology provides for in WAC 173-27-080.

Subsection 4.2.1.3 Goal the existing language in this section is deleted and replaced with simplified language. References to having uses and structures become conforming over-time are removed. The new goal reads, *It is the purpose of this section to recognize legally established uses, lots, and structures, and to allow them to be maintained, repaired and remodeled, and, in some cases replaced and expanded, in conformance with Section 4.2.1.5 through 4.2.1.8 of this Program with due regard to unique site conditions and property rights.*

Subsection 4.2.1.4 Policies the existing policies in this section are deleted and replaced with simplified language. The proposed new policies are as follows:

1. Nonconforming structures may be repaired, maintained, or remodeled and, in some cases, nonconforming structures may be replaced or expanded provided the change meets the current regulations and standards of this Program. Decreases in nonconformity should be encouraged.

2. Once discontinued, reestablishment of nonconforming uses and nonconforming commercial structures located in the shoreline jurisdiction should be restricted or phased out over time.

3. Nonconforming overwater structures may be reconstructed to the same size and modified, reoriented or altered within the same general location to be more consistent with the provisions of this Program.

4. Nonconforming lots of record may be developed consistent with the standards and regulations of this Program.

5. Redevelopment of nonconforming public rights-of-way and associated existing transportation structures may be permitted for purposes of facilitating essential public access, development of public trails and/or public shoreline access.

Subsection 4.2.1.5 Regulations – General the existing language in this section is deleted and replaced with simplified language. The new proposed language is as follows:

1. Nonconforming uses, lots, and structures may continue subject to the provisions of this section.

2. Any alterations to nonconforming uses or structures shall meet the no net loss standard pursuant to Section 4.1.2.4. The current condition of the shoreline, including nonconforming uses and structures, shall be the starting point or baseline for determining compliance with the no net loss standard.

Subsection 4.2.1.6 Regulations – Nonconforming Uses the only change to this section is an update to a reference to reflect the new numbering of this section.

Subsection 4.2.1.7 Regulations – Nonconforming Structures this is modified to change the title from ~~Existing Development~~ to Nonconforming Structures.

Subsection 4.2.1.7.1 General Provisions – Nonconforming Structures the existing language in this section is deleted and replaced with expanded language to provide additional clarity and improve implementation. This section provides standards and review criteria for the maintenance, repair, renovation, remodeling or replacement of nonconforming structures.

Subsection 4.2.1.7.2 Nonconforming Structures – Residential Single-Family: Primary structures the title is modified to use the term "nonconforming structures" instead of "existing structures." The entire existing language in this section is deleted and replaced with expanded language to provide additional clarity and improve implementation. Standards and approval criteria for the alteration, expansion or replacement or nonconforming primary residential structures are provided in this section. Including a new limitation of 500 square feet for expansions of existing non-conforming primary residential structures.

Subsection 4.2.1.7.3 Nonconforming Structures – Residential: Accessory the title and subsequent subsections are modified to use the term "nonconforming structures" instead of "existing structures." The proposed language in this section is trying to make a distinction between "accessory structures" which must meet the current SMP when reconstructed and "essential single-family residential accessory structures" which can be replaced in the same location. This term is defined within the SMP-

Essential Single-Family Residential Accessory Structure *– An accessory structure that contains a use or is intended for a use that is essential to a single-family residential principal use. The following structures shall be considered an*

essential residential structure: a garage or carport, one septic system (including one tank and one on-site septic drainfield), one well house and associated well head, and existing decks attached to the primary structure.

Subsection 4.2.1.7.4 Nonconforming Structures – Residential and Commercial Overwater Structures this subsection title is added. The entire existing language in this section is deleted and replaced with simplified language to improve clarity and implementation. This includes allowances for the replacement of existing nonconforming docks, piers, floats, and buoys either within the same footprint or within a more conforming footprint provided the replacement materials and methods meet substantive SMP standards.

Subsection 4.2.1.7.5 Nonconforming Structures – Multifamily Residential: Primary Structures & Subsection 4.2.1.7.6 Nonconforming Structures – Commercial and Industrial (Primary and Accessory) the existing language in these sections are deleted and replaced with simplified language to improve clarity and implementation. This includes clarification that nonconforming structures can be reconstructed to the footprint and bulk dimensions existing prior to a catastrophic event and any elective reconstruction must be completed in conformance with the SMP.

Subsection 4.2.1.7.8 Regulations – Encumbered and Nonconforming Lots this section is re-worded and slightly re-organized to improve implementation, but substantive standards are not changed.

SMP Chapter 8 Definitions

The following definitions are modified:

Activity, Director, Fish and Wildlife Habitat Conservation Areas, Hazard Tree, Invasive Species, Landslide Hazard Areas, Low Impact Development (LID), Nonconforming Development or Nonconforming Structure, Normal Maintenance, Qualified Professional, Wetlands.

The definitions for the following terms are added:

Alteration, Aquifer Recharge Protection Area, Arborist, Bank Stabilization, Best Available Science, Biodiversity Areas and Corridors, Bog, Coppicing, Critical Facilities, Cutting Vegetation, Education or Scientific Activities, Engineering Geologist, Estuarine Wetland, Fish, Fish Habitat, Fisheries Biologist, Functions and Values, Habitat Management Plan (HMP), Habitat of Local Importance, Hedge, Hydrogeologist, Land Disturbing Activity, Land Divisions, Landslide Hazard Area Setback, Liquefaction, Low Impact Development Best management Practices (LID BMPs), Nonconforming Lot, Nonconforming Use, Pruning, Pruning Amount, Ravine, Redevelopment, Removal Vegetation, Shrub, Site, Species of Local Importance, Streams, Stream Type, Tree, Wetland Boundary, Wetland Category, Wetlands Specialist, Wildlife Biologist, Wildlife Habitat.

The following terms are removed from the definitions section:

Existing Development, Wetlands Jurisdictional.

Amendment History, Review Process

The record indicates that the proposed SMP amendments originated from a local planning process related to the City's Comprehensive Plan and Critical Areas Ordinance (CAO) updates. The SMP CAO provision update process began in conjunction with the citywide CAO provision update which was completed in April 2018. The City had originally planned to eliminate SMP Appendix B, which contains the SMP CAO provisions, and replace it with the updated CAO provisions via an incorporation by reference. The City later decided to eliminate Appendix B and replace it with CAO provisions imbedded directly into SMP section 4.1.5 Critical Areas.

Public Process

The Planning Commission discussed the CAO integration SMP amendment at the following meetings: October 12, 2018, November 16, 2018, April 19, 2018, and April 26, 2018. The City elected to use the optional joint review process of WAC 173-26-104 for this amendment. The City and Ecology held a joint local/state comment period on the proposed critical areas provisions SMP amendment following procedures outlined in WAC 173-26-104. The joint comment period began on May 11, 2018 and continued through June 11, 2018. A joint local/state public hearing was held on May 24, 2018 during the City Planning Commission Meeting. Affidavits of publication provided by the City indicate notice of the hearing was published in the *Bainbridge Island Review*. The City Planning Commission elected to continue the Public Hearing to the following meeting on June 7, 2018.

The City provided notice to local interested parties, created a list-serve for email notifications, and maintained a webpage dedicated to this SMP amendment. Ecology distributed notice of the joint comment period and public hearing to state interested parties, including emails and postcards sent on May 10, 2019. Tribal request for comment notifications letters were sent directly to the following potentially interested Tribes on May 7, 2018: the Port Gamble S'Klallam, Skokomish, Squaxin-Island, and Suquamish Tribes. Public comments and concerns received were focused on why this amendment was proceeding separate from another amendment the City was working on related to nonconforming structures, uses, and lots. As a result of these concerns, the City modified its proposed SMP amendment to include changes to the nonconforming provisions.

The Planning Commission decided not to send the original CAO related SMP amendment to Ecology for initial determination of consistency. Instead the City decided to combine the CAO and Nonconforming provisions amendment into one and elected to re-notice the joint local/state comment period and public hearing with the new expanded scope.

The second joint comment period began on September 10, 2018 and continued through October 10, 2018. A joint local/state public hearing was held on September 11, 2018 during the City Council Meeting. Affidavits of publication provided by the City indicate notice of the hearing was published in the *Bainbridge Island Review*. The City Council elected to extend the comment period, for an additional 30-days, until November 9, 2018 at 5:00 pm.

The City provided re-notice to local interested parties via email notifications and updated the webpage dedicated to this SMP amendment. Ecology distributed re-notice of the joint comment period and public hearing to state interested parties, including emails and postcards sent on September 10, 2018 and letters to potentially interested Tribes on September 6, 2018. Both the City and Ecology webpages were updated to reflect the public comment period extension.

The City also issued a SEPA non-project action Determination of Non-Significance (DNS) for the City of Bainbridge Island Shoreline Master Program Amendment on October 12, 2018. The DNS describes the scope of the amendments as updates to the critical areas provisions and revisions to provisions related to nonconforming structures, uses, and lots. A copy of this DNS was provided to Ecology for this SMP Amendment adoption record.

The nonconforming language was the subject of further discussion at meetings on November 27, 2018 and January 8, 2019 and City staff prepared a comparison of other jurisdictions as part of their

November 27, 2018 staff memo and prepared additional responses to City Council questions within a *Nonconforming Policy Questions* matrix, dated December 11, 2018.

The City consulted with Ecology and solicited comments throughout the review process.

The City prepared a comment summary and provided City responses to comments. According to the record, the City identified 37 individuals, organizations, groups, or Tribes that provided comment on the combined CAO/Nonconforming provisions SMP Amendment between May 8th 2018 and November 12, 2018. The City prepared a comment summary, which included responses to comments, as needed. This summary identifies 51 topics listed by commenter in chronological order. Ecology concurs with the City's responses to comments.

Several suggestions intended to improve clarity within the Nonconforming SMP Section 4.2.1, made prior to September 11th, were incorporated into the 9/11/2018 Public Comment Draft. The following additional revisions were made to the draft SMP as a result of public comments received on the 9/11/2018 draft SMP:

- The direct reference to a November 26, 1996 SMP effective date was removed and replaced with language similar to the Ecology default nonconforming language found in WAC 173-27-080.
- The term "rebuilt" is replaced with "replaced" in numerous places.
- The city-wide Aquifer Recharge Protection Area (ARPA) standards were determined to inapplicable to the shoreline jurisdiction and were removed from this proposed amendment.
- Most restrictive clause of SMP 4.0.1.7 is revised for clarity and to improve consistency with the purpose and intent of the SMA.

Initial Determination

The City provided their initial submittal of the proposed SMP amendments to Ecology pursuant to WAC 173-26-104 via regular mail on April 22, 2019 and the submittal was determined to be complete. This began Ecology's review and initial determination.

Ecology prepared an initial determination of consistency with the policy of the SMA and applicable guidelines. Ecology concluded the proposal was not entirely consistent with applicable laws and rules, and provided a written statement describing the specific areas of concern. This written statement of initial concurrence, including required and recommended changes, was sent to the City on December 9, 2019. Ecology identified the following issues as relevant to the proposed SMP amendment's consistency with the SMA and implementing rules of WAC 173-26:

1. *Critical Areas Protection Standards of the SMP*

   The City proposes to eliminate Appendix B and relocate critical areas provisions within the SMP to address SMA required critical areas protection standards. Ecology identified two changes necessary for consistency with WAC 173-26-201(2)(a) & (c), WAC 173-26-221, and WAC 173-26-191(2)(b) & (c).

2. *Additional items identified as recommended changes*

   In addition to the issues identified above as requiring changes to ensure consistency with the SMA and its implementing guidelines, Ecology has also identified five changes recommended to fix minor errors, provide clarity or improve implementation.

Final Local Adoption Process

In response to Ecology's Initial Determination, the City Council directed staff to prepare an ordinance for the City's Shoreline Master Program ("SMP") Amendment, incorporating Ecology's required and recommended changes, as well as edits recommended by staff to correct internal references and ensure

consistency between the amended policies and regulations. The City Council deliberated on the final Ordinance at Council meetings on June 23, 2020 and September 22, 2020. An additional public hearing occurred at the September 22, 2020 meeting. Following the public hearing, the City re-issued the October 2018 SEPA determination, to ensure all public noticing requirements were met in accordance with Chapter 16.04 BIMC. No additional SEPA comments were received, and no appeal was filed.

The City identified an additional 7 comments received between June 23, 2020 and September 24, 2020 during the final local adoption process.

These final comments were related to the concept of "grandfathered" uses and how that relates to "nonconforming" uses, a request to increase the allowances for building area on nonconforming or encumbered lots, questions about the applicability of the Aquifer Recharge Protection Area designation. A few additional comments were related to topics outside the scope of this locally initiated amendment including sea-level rise, wildfire mitigation activities, and aquaculture regulations, all of which the City identified as topics that will be considered as part of their SMP Periodic Review work plan for 2021.

With passage of Ordinance No. 2020-017, on November 24, 2020, the City authorized staff to forward the proposed amendment to Ecology for formal approval.

Final Submittal

Ecology received the City's formal SMP Amendment final submittal via email on December 8, 2020. Ecology is required under WAC 173-26-110 to determine if SMP submittals are complete. On December 28, 2020, Ecology provided the City with an email confirmation that this submittal package was complete.

According to the record, the City identified a total of 58 written comments submitted by of individuals, organizations, groups, and Tribes between May 8, 2018 and September 24, 2020. The City prepared a comment summary, arranged by topic in chronological order and included City staff responses to comments as required by WAC 173-26-104. Ecology considered comments and the city's response as part of the above referenced Initial Determination process and again as part of the final submittal review. As noted in the above amendment history and public process information, the City addressed substantive comments and included many of the changes suggested by commenters throughout the review and local adoption process. Ecology finds that the City adequately considered comments and appropriately incorporated changes into the draft to address comments as necessary or warranted. Ecology further finds that no additional modifications are necessary to address comments or to achieve consistency with the SMA or implementing guidelines.

Please note that the locally adopted ordinance includes the changes recommended and required by Ecology as a result of its initial determination of consistency, as well as City staff recommended edits to adjust hierarchical outline numbering/style, fix formatting, ensure internal consistency of cross references, and to correct scriveners' errors. Some of these City staff recommended changes occurred after Ecology issued our Initial Determination of Consistency; however these changes were not substantive and did not change Ecology's previous determination.

Consistency with Chapter 90.58 RCW

The proposed amendment has been reviewed for consistency with the policy of RCW 90.58.020 and the approval criteria of RCW 90.58.090(3), (4) and (5). The City has also provided evidence of its compliance with SMA procedural requirements for amending their SMP contained in RCW 90.58.090(1) and (2).

Consistency with applicable guidelines (Chapter 173-26 WAC, Part III)

The proposed amendment has been reviewed for compliance with the requirements of the applicable Shoreline Master Program Guidelines (WAC 173-26-171 through 251 and 173-26-020 definitions).

Consistency with SEPA Requirements

The City submitted evidence of SEPA compliance in the form of a SEPA checklist and issued a Determination of Non-Significance (DNS) for the proposed SMP amendments. Ecology did not comment on the DNS.

CONCLUSIONS OF LAW

After review by Ecology of the complete record submitted and all comments received, Ecology concludes that the City proposed amendments are consistent with the policy and standards of RCW 90.58.020 and RCW 90.58.090 and the applicable SMP guidelines (WAC 173-26-171 through 251 and .020 definitions). This includes a conclusion that approval of the SMP amendments will assure that no net loss of shoreline ecological functions will result from implementation of the amended master program (WAC 173-26-201(2)(c)).

Ecology concludes that those SMP segments relating to shorelines of statewide significance continue to provide for the optimum implementation of Shoreline Management Act policy (RCW 90.58.090(5)).

Ecology concludes that the City has complied with the requirements of RCW 90.58.100 regarding the SMP amendment process and contents. Ecology concludes that the City has complied with the requirements of RCW 90.58.130 and WAC 173-26-090 and WAC 173-26-104 regarding public and agency involvement in the SMP review and amendment process.

Ecology concludes that the City has complied with requirements of Chapter 43.21C RCW, the State Environmental Policy Act.

Ecology concludes that the City SMP submittal to Ecology was complete pursuant to the requirements of WAC 173-26-090, WAC 173-26-104, and WAC 173-26-110.

Ecology concludes that it has complied with the procedural requirements for review and approval of shoreline master program amendments as set forth in RCW 90.58.090 and WAC 173-26-104, WAC 173-26-110, and WAC 173-26-120.

DECISION AND EFFECTIVE DATE

Based on the preceding, Ecology has determined the proposed amendments are consistent with Shoreline Management Act policy, the applicable guidelines and implementing rules. Ecology approval of the proposed amendments is effective 14 days from Ecology's final action approving the amendment.