



CITY OF BOTHELL

SHORELINE MASTER PROGRAM UPDATE
City Council Approved



May 2012



City of Bothell

CITY COUNCIL APPROVED

BOTHELL SHORELINE MASTER PROGRAM UPDATE



City of Bothell
Community Development Department
9654 NE 182nd Street
Bothell, WA 98011

May 2012



This report was funded in part through a grant
from the Washington Department of Ecology.
Grant No. G1000013

City of Bothell

ACKNOWLEDGEMENTS

Prepared by the Bothell Shorelines Board:

Adam Brauch
Suzanne Burnell
Eric Christensen, Vice Chair
David Cox
Apollo Fuhrman
Sarah Larsen, Executive Secretary
Walt Wojcik, Chair

Authorized by the Bothell City Council:

Mark Lamb, Mayor
Joshua Freed, Deputy Mayor
Andy Rheaume
Del Spivey
Bill Evans
Patrick Ewing
Thomas Agnew

In Consultation with:

Bothell Parks & Recreation Board
Bothell Planning Commission

Technical Support provided by:

City of Bothell
Bruce Blackburn, Senior Planner, Community Development Department
Julie Ewijk, Administrative Support Manager Community Development
Andy Loch, Surface Water Management, Public Works Department
Liz Scanlon, Sr. Office Specialist, Community Development Department

BERK
2025 First Avenue, Suite 800
Seattle WA 98121
Contact: Lisa Grueter, Built Environment Topics

The Watershed Company
750 Sixth Street South
Kirkland, WA 98033
Contact: Amy Summe, Natural Environment Topics

In association with:

ICF
710 Second Avenue, Suite 550
Seattle, WA 98104
Role: GIS Maps

City of Bothell, BERK, The Watershed Company, and ICF International. 2012. *City Council Approved – Bothell Shoreline Master Program Update*. May. Prepared for City of Bothell.

Contents

List of Tables..... iii
 List of Acronyms and Abbreviations vii

Shoreline Master Program Element1

Introduction1

Purpose and Relationship to GMA and SMA1
 Profile of the Shoreline Jurisdiction in Bothell's Planning Area2
 A. How to Use This Document5
 B. Goals and Policies8
 C. Overarching Shoreline Goal for City of Bothell9
 D. Shoreline Uses and Modifications Element9
 1. Shoreline Environment Designations11
 2. Agriculture14
 3. Aquaculture14
 4. Boating Facilities (marinas/community docks/boat launches)15
 5. Breakwaters, Jetties, Groins and Weirs15
 6. Dredging and Dredge Material Disposal15
 7. Fill16
 8. Forest Practices16
 9. In-Stream Structures16
 10. Mining16
 11. Private Residential Docks16
 12. Residential Development17
 13. Shoreline Habitat and Natural Systems Enhancement Projects17
 14. Shoreline Stabilization17
 15. Utilities17
 16. Existing Development18
 E. Economic Development Element18
 1. General Economic Policies19
 2. Commercial Development19
 3. Industry19
 F. Public Access Element20
 G. Recreation Element21
 H. Circulation Element22
 I. Conservation Element23
 1. Environmental Protection23

2. Critical Areas24
 Wetlands24
 Fish and Wildlife Habitat Conservation Areas24
 Geologically Hazardous Areas24
 Frequently Flooded Areas24
 Channel Migration Zones24
 3. Shoreline Vegetation Conservation24
 4. Water Quality, Stormwater, and Nonpoint Pollution25
 J. Historic / Cultural / Scientific / Educational Element25
 K. Flood Hazard Management Element26
 L. Restoration Element26
 M. Shoreline Process and Administration Element27

Shoreline Regulations29

Title 13 –SHORELINE MANAGEMENT29

Reader's Guide29

13.01 Authority and Purpose31
 13.01.010 Authority31
 13.01.020 Applicability31
 13.01.030 Findings31
 13.01.040 Purpose33
 13.01.050 Relationship to Other Codes, Ordinances and Plans34
 13.01.060 Liberal Construction34
 13.01.070 Effective Date34
 13.03 Definitions34
 13.05 Shoreline Jurisdiction66
 13.07 Shoreline Environment Designations67
 13.07.010 Natural67
 13.07.020 Urban Conservancy68
 13.07.030 Shoreline Residential69
 13.07.040 Marina70
 13.07.050 High Intensity71
 13.07.060 Aquatic72
 13.07.070 Use Environment Interpretation72
 13.07.080 Use Matrix85
 13.07.090 Development Standards93
 13.09 General Regulations and Performance Standards94
 13.09.010 Archaeological and Historic Resources94
 13.09.020 Environmental Protection95
 13.09.030 Shoreline Vegetation Conservation96

| | | |
|--|--|-----|
| 13.09.040 | Water Quality, Stormwater, and Nonpoint Pollution..... | 99 |
| 13.09.050 | Public Access | 101 |
| 13.09.060 | Flood Hazard Reduction | 108 |
| 13.11 | Use-Specific and Modification Regulations and Performance | |
| Standards | | 111 |
| 13.11.010 | Agriculture..... | 111 |
| 13.11.020 | Aquaculture..... | 111 |
| 13.11.030 | Boating Facilities..... | 112 |
| 13.11.040 | Breakwaters, Groins, and Weirs | 118 |
| 13.11.050 | Commercial Development | 118 |
| 13.11.060 | Dredging and Dredge Material Disposal | 120 |
| 13.11.070 | Fill | 123 |
| 13.11.080 | Forest Practices..... | 124 |
| 13.11.090 | Industry..... | 124 |
| 13.11.100 | In-Stream Structures..... | 124 |
| 13.11.110 | Private Residential Docks..... | 126 |
| 13.11.120 | Recreational Development | 132 |
| 13.11.130 | Residential Development..... | 133 |
| 13.11.140 | Shoreline Habitat and Natural Systems Enhancement | |
| Projects | | 134 |
| 13.11.150 | Shoreline Stabilization | 136 |
| 13.11.160 | Transportation | 144 |
| 13.11.170 | Utilities | 145 |
| 13.13 | Critical Areas in Shoreline Jurisdiction | 148 |
| 13.13.010 | General | 148 |
| 13.13.020 | Wetlands..... | 164 |
| 13.13.030 | Critical Aquifer Recharge Areas | 177 |
| 13.13.040 | Frequently Flooded Areas | 178 |
| 13.13.050 | Geologically Hazardous Areas | 184 |
| 13.13.060 | Fish and Wildlife Habitat Conservation Areas..... | 194 |
| 13.15 | Legal Pre-Existing Uses and Structures | 228 |
| 13.15.010 | Purpose | 228 |
| 13.15.020 | Applicability..... | 228 |
| 13.15.030 | Determination of Legal Pre-Existing Use, Site or Structure | 229 |
| 13.15.040 | Legal Pre-Existing Uses of Land..... | 229 |
| 13.15.050 | Legal Pre-Existing Structures and Other Improvements..... | 230 |
| 13.15.060 | Maintenance Repair or Reconstruction of Damaged Legal | |
| Pre-Existing Structures or Other Improvements..... | | 230 |
| 13.15.070 | Lots of Record..... | 231 |
| 13.15.080 | Illegal Use, Structure, or Other Improvement | 231 |

| | | |
|-----------------------|--|-----|
| 13.15.090 | Vested Development | 231 |
| 13.17 | Administration, Permits, and Enforcement | 231 |
| 13.17.010 | Purpose | 231 |
| 13.17.020 | Administrative Responsibilities | 232 |
| 13.17.030 | Review and Processing Requirements..... | 232 |
| 13.17.040 | Exemption from Permit Requirements | 232 |
| 13.17.050 | Pre-Application Conference..... | 242 |
| 13.17.060 | Jurisdiction or Environment Designation Boundary Line | |
| Dispute Process | | 243 |
| 13.17.070 | Interpretations..... | 243 |
| 13.17.080 | Permit Applications | 244 |
| 13.17.090 | Procedures applicable to all shoreline permits | 246 |
| 13.17.100 | Procedures applicable to Substantial Development Permits | |
| (SDP) | | 247 |
| 13.17.110 | Procedures Applicable to Shoreline Conditional Use | |
| Permits (SCUP)..... | | 248 |
| 13.17.120 | Shoreline Variances..... | 250 |
| 13.17.130 | Revisions to Permits | 252 |
| 13.17.140 | Enforcement Authority | 254 |
| 13.17.150 | Annexation | 254 |
| 13.17.160 | Monitoring | 254 |
| 13.19 | Shorelines Board | 255 |
| 13.19.010 | Creation –Membership –Term..... | 255 |
| 13.19.020 | Compensation..... | 255 |
| 13.19.030 | Organization | 255 |
| 13.19.040 | Advisory body | 255 |
| 13.19.050 | Rules, regulations..... | 256 |
| 13.19.060 | Meeting –Regular - Quorum | 256 |
| 13.19.070 | Meetings –Notices | 256 |

Tables and Figures

| | |
|--|-----|
| Table 13.07.080-1. Use Matrix..... | 87 |
| Table 13.07.090-1. Development Standards | 93 |
| Table 13.09.030-1. Significant Tree Retention Requirements outside of Wetlands and Wetland, Stream or Shoreline Buffers (percent by number)..... | 97 |
| Table 13.09.030-2. Tree Diameter and Bonding Required | 98 |
| Table 13.11.110-1. Private residential dock dimension and design standards..... | 128 |
| Table 13.13.020-1. Wetland Buffer Widths (in feet)..... | 169 |
| Table 13.13.020-2. Wetland mitigation ratios. | 176 |
| Table 13.13.050-1. Geologic Hazard Classification..... | 186 |
| Table 13.13.060-1. Activity buffer options..... | 203 |
| Table 13.09.050-1. Incentives for parallel trails along shoreline water bodies | 107 |
| Table 13.13.060-2. Stream Buffer Widths ^{1,2} | 205 |
| Table 13.13.060-3. Buffer Reduction Options Applicable to SR and HI/Hi-P Environments..... | 206 |
| Table 13.17.040-1. Letter of Exemption –When Required ⁶ | 240 |
| | |
| Figure SMP-1. Shoreline Jurisdiction..... | 4 |
| Figure SMP-2. Flow Chart..... | 7 |
| Figure 13-1. Flow Chart | 30 |
| Figure 13.03-1. Dock Definition Illustration | 42 |
| Figure 13.05-1. Shoreline Jurisdiction Illustration..... | 66 |
| Figure 13.07.070-1. Shoreline Environment Designations Reach 1 | 75 |
| Figure 13.07.070-2. Shoreline Environment Designations Reach 2 | 76 |
| Figure 13.07.070-3. Shoreline Environment Designations Reach 3 | 77 |
| Figure 13.07.070-4. Shoreline Environment Designations Reach 4 | 78 |
| Figure 13.07.070-5. Shoreline Environment Designations Reach 5..... | 79 |
| Figure 13.07.070-6. Shoreline Environment Designations Reaches 6 and 15..... | 80 |
| Figure 13.07.070-7. Shoreline Environment Designations Reaches 9 and 10..... | 81 |
| Figure 13.07.070-8. Shoreline Environment Designations Reaches 11-14..... | 82 |
| Figure 13.07.070-9. Shoreline Environment Designations Reaches 7a and 8..... | 83 |
| Figure 13.07.070-10. Shoreline Environment Designations Reach 7b..... | 84 |
| Figure 13.09.050-1. Illustration of View Corridors..... | 103 |
| Figure 13.09.050-2. Public Access Illustration, Visual and Physical | 104 |
| Figure 13.09.050-3. Density Bonus Study | 108 |
| Figure 13.11.110-1. Float Illustration | 131 |
| Figure 13.11.120-1. Illustration of Fishing or Viewing Platform | 133 |
| Figure 13.13.060-1. Buffer width flow chart..... | 204 |
| Figure 13.13.060-2a. Buffer Reduction Option Sammamish River –Plan View: Vegetation Enhancement | 215 |
| Figure 13.13.060-2b. Buffer Reduction Option: Vegetation Enhancement Sammamish River – Cross Section | 216 |
| Figure 13.13.060-2c. Buffer Reduction Option: Vegetation Enhancement Sammamish River - Cross Section | 217 |
| Figure 13.13.060-2d. Buffer Reduction Option: Vegetation Enhancement All Other Streams – Cross Section | 218 |
| Figure 13.13.060-3a. Buffer Reduction Option: Replace hard structural stabilization with soft stabilization | 219 |
| Figure 13.13.060-3b. Buffer Reduction Option: Set back hard structural stabilization 5 feet from OHWM | 220 |

| | |
|---|-----|
| Figure 13.13.060 –3c. Photos of North Creek soft shoreline stabilization | 221 |
| Figure 13.13.060-4. Restore Area outside of Buffer | 222 |
| Figure 13.13.060-5. Measurement of Alternative Buffer –SR and HI Use Environments..... | 223 |
| Figure 13.13.060-6a. Alternative Buffer Reduction –SR Use Environment..... | 224 |
| Figure 13.13.060-6b. Alternative Buffer Reduction –SR Use Environment –Elevation..... | 225 |
| Figure 13.13.060-7a. Expansion Illustrations..... | 226 |
| Figure 13.13.060-7b. Illustration of vegetation required for lateral expansion of legal pre-existing building..... | 227 |
| Figure 13.13.060-8. Example Accessory Structure Illustration | 228 |

Acronyms and Abbreviations

| | |
|---------|--|
| ACZA | ammoniacal copper zinc arsenate |
| BiOp | biological opinion |
| BMFs | best management practices |
| CCA | chromated copper arsenate |
| CFS | Cubic feet per second |
| City | City of Bothell |
| Ecology | Washington State Department of Ecology |
| FBMA | Federal Emergency Management Agency |
| GMA | Growth Management Act |
| NFIP | National Flood Insurance Program |
| NMFS | National Marine Fisheries Service |
| NOAA | National Oceanic and Atmospheric Agency |
| OHWM | Ordinary high water mark |
| ppm | parts per million |
| PROSAP | Parks, Recreation and Open Space Action Program |
| RCW | Revised Code of Washington |
| SEPA | State Environmental Policy Act |
| SMA | Shoreline Management Act |
| SMP | Shoreline Master Program |
| TESC | Temporary erosion and sediment control |
| WAC | Washington Administrative Code |
| WDFW | Washington State Department of Fish and Wildlife |
| WRIA | Water Resource Inventory Area |

This page intentionally blank

Shoreline Master Program Element

Introduction

Purpose and Relationship to GMA and SMA



The Growth Management Act (GMA) was amended in 1995 to add the goals and policies of the state Shoreline Management Act (SMA) as one of the goals of the GMA.

The purpose of the SMA is stated in RCW 90.58.020 as follows:

"The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition it finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state.

The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. There is, therefore, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.

It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto. ***

In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's

City of Bothell

shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single-family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. Alterations of the natural condition of the shorelines and shorelands of the state shall be recognized by the department. Shorelines and shorelands of the state shall be appropriately classified and these classifications shall be revised when circumstances warrant regardless of whether the change in circumstances occurs through man-made causes or natural causes. Any areas resulting from alterations of the natural condition of the shorelines and shorelands of the state no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of chapter 90.58 RCW.

Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water."

The SMA policy has been refined to include provisions for uses along the shoreline, public access to shorelines, preservation and restoration of the shoreline resources and ecology, promotion of long term over short term benefit, and other actions to promote the state-wide interest of appropriate use of shoreline over local interest.

In addition to incorporating the state SMA goals and policies, the Growth Management Act also provides that "the goals and policies of a shoreline master program for a county or city shall be considered an element of the county or city's comprehensive plan". The City of Bothell's Shorelines Master Program (SMP) was originally approved by the Washington State Department of Ecology in February, 1975 and was amended in July, 1986, March, 1990, and most recently in July, 1998. The City's shoreline goals and policies were incorporated in the Natural Environment Element of the *Imagine Bothell...Comprehensive Plan* in June, 1996. In the 2004 Plan Update, the goals and policies of Bothell's Shorelines Master Program were made a stand-alone element. In 2012, the SMP was updated consistent with Washington Administrative Code (WAC) Chapter 173-26, State master program approval/amendment procedures and master program guidelines (Guidelines). The Guidelines are administered by the Washington State Department of Ecology (Ecology). The SMP becomes effective after conclusion of both the City's SMP development and adoption process followed by Ecology's review and approval process.



Profile of the Shoreline Jurisdiction in Bothell's Planning Area

The entire shoreline jurisdiction within the city limits and Bothell Planning Area, including unincorporated territory and excluding aquatic areas, amounts to 782.8 acres, and is depicted in

Figure SMP-1. The City of Bothell has three streams identified as "shorelines of the state": the Sammamish River, which runs for approximately 3.34 lineal miles through the City and is classified as a navigable water; North Creek, which runs for approximately 6.76 lineal miles through the City and Planning Area; and Swamp Creek, which runs for approximately 3.36 lineal miles through the Planning Area.

In accordance with state law, the jurisdiction of Bothell's Shoreline Master Program (SMP) encompasses the Sammamish River, North Creek, and Swamp Creek; land within 200 feet of the ordinary high water mark of these waterways; and their floodways, 100-year floodplains and associated wetlands.

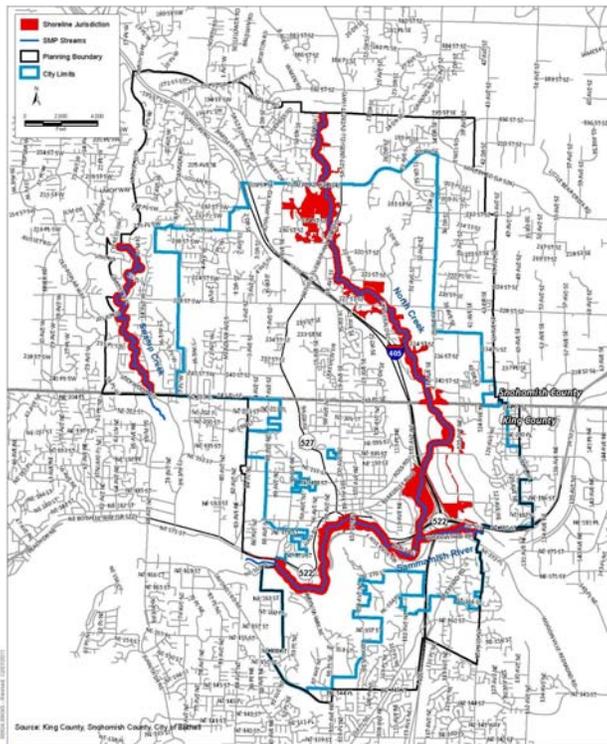


Figure SMP-1. Shoreline Jurisdiction

A. How to Use This Document

1. The Shoreline Master Program (SMP) is divided into five sections (see Figure SMP-2):

□ Goals and Policies

Goals and Policies define the community's vision for the City's shorelines and provide guidance to the City when evaluating shoreline variances, conditional use permits, interpretations, and future amendments to the SMP.

□ Environment Designations -Chapter 13.07

Are analogous to zoning districts and divide the City's shorelines into 6 different environments: Aquatic, Natural, Urban Conservancy, Shoreline Residential, High Intensity, and Marina. Each environment designation contains specific use, development and operating requirements.

□ General Development Regulations - Chapter 13.09

Are those regulations and standards applicable to all shoreline developments, uses, and activities. The General Development Regulations are organized by shoreline environments and specific land use and activity regulations

□ Use-Specific and Shoreline Modification Regulations and Performance Standards – Chapter 13.11

Are the use-specific regulations applicable to categories of uses such as residential, commercial, boating, recreational and other uses or activities? For example, development of residential uses is addressed under Section 13.11.130. This section contains requirements that are applied to residential developments.

□ Administrative Procedures –Chapter 13.17

Are the regulations used in the City's administration and enforcement of the Shoreline Management Program, implementation of the SMP Regulations within Title 13, and the permit application administration and processing procedures for shoreline developments.

2. How to determine the applicable regulations and standards that apply to an individual property

A. Locate the property on the environment designations maps in Chapter 13.07.

Water-oriented uses generally include:

- Water-Dependent: A water-dependent use is a use that is dependent on the water by reason of the intrinsic nature of its operations, and cannot exist in any other location.
- Water-Related: A water-related use is not intrinsically dependent on a waterfront location, but its economic viability is dependent upon a waterfront location.
- Water-Enjoyment: A water-enjoyment use is a use that facilitates public access to the shoreline, or draws substantial numbers of people to the shoreline and provides opportunities for the public to enjoy the shoreline.
- Non-water oriented uses are those uses that do not rely upon a shoreline location and can exist equally well in non-shoreline areas.

- B. Turn to the use matrix (Section 13.07.080) to determine whether the proposed use or activity is Permitted (P), Conditional (C) or Prohibited (X). If prohibited, an alternative location for the use or activity is necessary;
- C. Review the general regulations and performance standards within Chapter 13.09. These requirements, such as environmental protection, vegetation retention, public access, and stormwater requirements, are applied to all shoreline uses, activities and developments. For example, all uses and activities are required to protect the ecological functions of shoreline areas.
- D. Review the requirements for the specific proposed use or activity within Chapter 13.11. Uses and activities have been divided into general categories. For example, development of residential uses is addressed under Section 13.11.130. This section contains standards and requirements applied to residential development, and makes reference to other relevant provisions.
- E. Determine what affect, if any, the critical areas requirements under Chapter 13.13 will have upon the proposed use or activity. For example, buffers are required from critical areas like wetlands, streams, and habitat areas. These buffers vary in dimension and vary upon the specific characteristics of the property such as the size and type of critical area and the environmental designation assigned to the property.

3. How to determine the type of shoreline permit that will be required for the activity

- A. Review the use matrix table (BMC Table 13.07.080-1) and determine whether the use in the specific environment designation is Permitted (P), Conditional (C) or Prohibited (X).
- B. Review 13.15 Administrative requirements to obtain details on the specified review process. There are three types of permit actions:
- i. Exempt activities. These are activities that are not required to obtain a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit, but must be consistent with the requirements and standards of the Bothell SMP.
 - ii. Shoreline Substantial Development Permit. If the activity is not exempt per BMC 13.17.040 and is identified as "Permitted" (P) within the use matrix, the activity must obtain a Shoreline Substantial Development Permit as outlined with BMC 13.17.100.
 - iii. Shoreline Conditional Use Permit. If the activity is identified as "Conditional" (C) within the use matrix, or the use is not listed within the use matrix, the activity must obtain a Shoreline Conditional Use Permit (SCUP). A SCUP requires approval by the Bothell Hearing Examiner after a public hearing, and approval by the Washington State Department of Ecology.

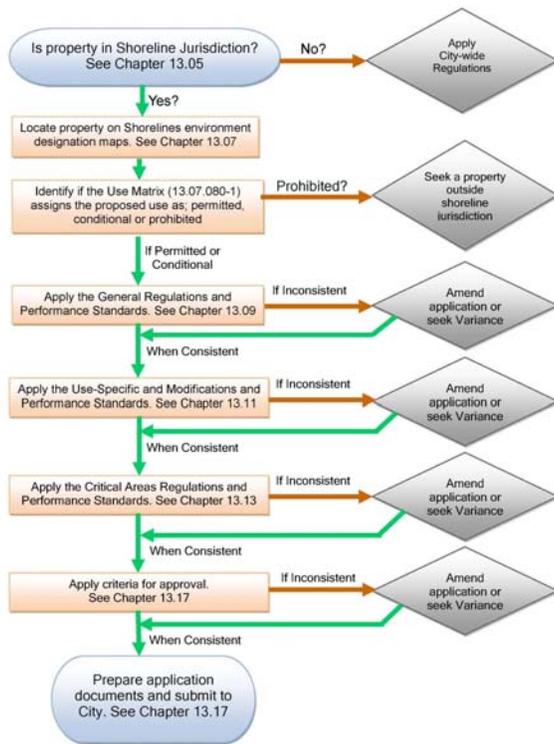


Figure SMP-2. Flow Chart

B. Goals and Policies

The goals and policies presented here are categorized according to Master Program elements as mandated by the SMA. The first eight elements are identified in the SMA as generic classes of activities for which goals and policies shall be developed and systematically applied to different shoreline uses in these classes, when deemed appropriate by the local jurisdiction. The other elements are encouraged or allowed by the SMA when also identified as appropriate by the local jurisdiction.

The general goal and policy statements found within each element of the Master Program are intended to provide the policy basis for administration of the City of Bothell SMP. All elements are equal in their importance and no element has a greater standing or relevance than any other element. The SMP Elements are as follows.

1. **Shoreline use element** for considering:
 - A. The proposed general distribution and general location and extent of the use on shorelines and adjacent land areas, including, but not limited to, housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;
 - B. The pattern of distribution and location requirements of water uses including, but not limited to, aquaculture, recreation, and transportation; and
 - C. Establishing the importance of locating water-oriented uses, particularly those that are water-dependent, within the shoreline jurisdiction area.
2. **Economic development element** for the location and design of industries, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state;
3. **Public access element** for provision for public access to shorelines, particularly publicly owned areas;
4. **Recreational element** for preserving and enlarging recreational opportunities including but not limited to parks, beaches, and recreational areas;
5. **Circulation element** consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element;
6. **Conservation element** for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and critical areas' functions and values, fisheries and wildlife protection, and shoreline ecological functions;
7. **Historical/cultural/scientific/and educational element** for protecting and restoring buildings, sites and areas having historic, archaeological, cultural, scientific, or educational values;
8. **Flood control element** for giving consideration to the state-wide interest in the prevention and minimization of flood damages, and construction, modification, and restoration of flood-damaged structures consistent with FEMA Standards;

9. **Restoration element** for providing for restoring natural resources and ecological functions of the shoreline which have been degraded by human or natural actions; and
10. **Process element** for maintaining the Master Program and administration of the permit process.

C. Overarching Shoreline Goal for City of Bothell

SMP-G1. To provide a high quality shoreline environment where:

- A. Recreational opportunities are abundant.
- B. The public enjoys access to and views of shoreline areas.
- C. Natural systems are preserved, restored or enhanced.
- D. Ecological functions of the shoreline are maintained and improved over time.
- E. Water-oriented uses are promoted consistent with the shoreline character and environmental functions.

D. Shoreline Uses and Modifications Element

Land use allocations within the different environmental designations along the shorelines of the state within Bothell's jurisdiction should be applied in the order of priority listed below in SMP-P1 and considering existing development and the *Imagine Bothell... Comprehensive Plan* land use designation. There are four important types of uses discussed within the SMP which are briefly described below and defined in more detail later in SMP-P1:

- **Water-Dependent:** A water-dependent use is a use that is dependent on the water by reason of the intrinsic nature of its operations, and cannot exist in any other location.
- **Water-Related:** A water-related use is not intrinsically dependent on a waterfront location, but its economic viability is dependent upon a waterfront location.
- **Water-Enjoyment:** A water-enjoyment use is a use that facilitates public access to the shoreline, or draws substantial numbers of people to the shoreline and provides opportunities for the public to enjoy the shoreline.
- **Non-Water-Oriented:** A non-water-oriented use is a use that does not rely upon a shoreline location and can exist equally well in non-shoreline areas.



SMP-G2. To provide a land use management system which will plan for and foster reasonable and appropriate shoreline uses and provide guidance to shoreline property owners and the community.

SMP-G3. To give priority to water-dependent, water-related, and water-enjoyment uses, particularly shoreline recreation. Commercial development, multifamily residential, and other development that provides opportunity for

substantial numbers of people to enjoy the shorelines of the state are preferred over nonwater-oriented uses.

SMP-G4. To establish open space corridors along the Sammamish River, North Creek, and Swamp Creek through application of critical area buffers, reservation of easements, acquisition of property by the City or other entity, transfer of development rights, location within otherwise established buffer areas, or other mechanisms.

SMP-G5. To manage shoreline uses to prevent adverse impacts upon water quality, fish and wildlife habitats, and encourage restoration of ecological functions.

SMP-P1 When assigning environment designations, determining permitted uses within the different designations and use categories, and reviewing individual applications, prefer uses which are consistent with preserving and enhancing the natural and aesthetic quality of important shoreline areas while allowing for reasonable development to meet the needs of the City and its residents. Give priority to shoreline uses as follows:

A. Water-oriented uses, which are sub-prioritized as follows:

1. Water-dependent uses. A water-dependent use is dependent on the water by reason of the intrinsic nature of its operations, and cannot exist in any other location. Examples include swimming beaches, boat launches, docks, and marinas.
2. Water-related uses. A water-related use is one that is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location. Examples of water-related uses may include dry boat storage with onsite launching mechanisms, boat repair and maintenance, warehousing of goods transported by water, hydroelectric generating plants, and agriculturally related water transportation systems.
3. Water-enjoyment uses. A water-enjoyment use is a recreational use or other use that facilitates public access to the shoreline, or draws substantial numbers of people to the shoreline and provides opportunities for the public to enjoy the physical and aesthetic benefits of the shoreline. Examples include parks and trails, museums, restaurants, aquariums, and golf courses.

B. Single family residences and their accessory structures,

C. Shoreline recreational uses facilitating public access to the shorelines of the state,

D. Other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state.

SMP-P2 Maintain existing and foster new uses that are dependent upon, or have a more direct relationship with shoreline areas.

SMP-P3 Allow for a diversity of appropriate uses within shoreline jurisdiction consistent with the varied character of the shorelines within the City and Planning Area.

SMP-P4 Ensure that all uses on the shoreline will protect and improve water quality by proper design of drainage, sewer connections, and other measures as promulgated

by this SMP, the National Pollutant Discharge Elimination (NPDES) Phase II Permit, the Bothell Surface Water Design Manual, and other City plans, programs and regulations.

- SMP-P5 Ensure that development regulations adequately protect the aesthetic and natural characteristics of the water and shoreline and promote no net loss of shoreline ecological function.
- SMP-P6 Promote coordination of the City's SMP, *Imagine Bothell... Comprehensive Plan*, and Parks, Recreation and Open Space Action Program to ensure consistency between land uses, recreation, and public access.

1. Shoreline Environment Designations

SMP-P7 Provide a comprehensive shoreline environment designation system to categorize Bothell shorelines into environments based upon the primary characteristics of shoreline areas to guide the use and management of these areas.

SMP-P8 Designate properties as Natural in order to protect and restore those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions that are sensitive to potential impacts from human use.



- A. Any use or development activity that would degrade the ecological functions or adversely alter the natural character of the shoreline area should be severely limited or prohibited.
- B. Development activity in the natural environment should only be permitted when no suitable alternative site is available on the subject property outside of shoreline jurisdiction.
- C. Development, when feasible, should be designed and located to preclude the need for shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications.
- D. Development activity or land surface modification that would reduce the capability of vegetation to perform normal ecological functions should be prohibited.
- E. Restrictive access may be permitted for scientific, historical, cultural, educational and low-intensity water-oriented recreational purposes, provided there are no significant adverse ecological impacts.

SMP-P9 Designate properties as Urban Conservancy to protect and restore ecological functions of open space, parks, flood plains and floodways, and lands containing critical areas, while allowing a variety of compatible uses. This designation is appropriate for lands, such as waterfront parks, low density single-family, and open space, provided specific management policies to guide development and use of these areas is created, including but not limited to:

- A. Allowed uses should be those that preserve the natural character of the area and/or promote restoration within critical areas and public open spaces either directly or over the long term.
- B. Restoration of shoreline ecological functions should be a priority.
- C. Development, when feasible, should be designed to ensure that any necessary shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications do not result in a net loss of shoreline ecological function or further degrade other shoreline values.
- D. Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.
- E. Water-oriented uses should be given priority over non-water-oriented uses. For shoreline areas adjacent to navigable waters, water-dependent uses should be given highest priority.
- F. Commercial and industrial uses, other than small scale commercial activities conducted accessory to a public park, should be prohibited.



SMP-P10 Designate properties as Shoreline Residential to accommodate residential development and recognize existing land uses. This designation is appropriate for residential uses on lands with zoning classifications for detached and attached residential, excepting residential lands within established activity centers. The following management policies should guide development within these areas:

- A. Standards for buffers, lot coverage limitations, shoreline stabilization, vegetation conservation, critical area protection, and water quality should mitigate adverse impacts to maintain shoreline ecological functions.
- B. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
- C. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Within attached residential developments, continuous public access along the shoreline should be provided, preserved or enhanced.
- D. Water-dependent recreational uses should be permitted.
- E. Limited water-oriented commercial uses which depend on or benefit from a shoreline location should also be permitted provided the underlying zoning classifications permit such uses.



SMP-P11 Designate properties as High Intensity to accommodate intensive land uses, such as residential - activity centers, commercial, office, retail, transportation, warehouse, manufacturing, and mixed-used developments. Designate a portion of

the Park at Bothell Landing as High Intensity –Park to accommodate the unique features and shoreline public access of this waterfront park that links the downtown area with the Sammamish River. The following management policies should guide development within these areas:

- A. Manage development so that it enhances and maintains the shorelines for a variety of urban uses, with priority given in the following hierarchical order water-dependent, water-related and water-enjoyment uses. Non-water-oriented uses should not be allowed except as part of an existing development as of the effective date of this SMP [Ordinance XXXX, MM, DD, YY(XXXX)] or when associated with public access or ecological restoration, but such uses should not conflict with or limit opportunities for water-oriented uses or limit direct access to the shoreline.
- B. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced.
- C. Aesthetic objectives should be implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers.
- D. For the High Intensity –Park designation ensure that park uses, activities, and development maintain high levels of public access and activities near the Sammamish River, in a manner that is consistent with any City-adopted Park Master Plan and this SMP.



- SMP-P12 Designate the Blue Heron Landing property and boat basin as Marina to accommodate an ongoing water-dependent and water-related business that provides services related to boat moorage, boat repair, and upland boat storage. The following management policies should guide development within this area:
- A. Provisions for the operation and management of the Marina environment should be directed towards maintaining and enhancing water-dependent and water-related services, while ensuring that existing and future activity does not degrade ecological functions.
 - B. Dimensional standards for new or modified over-water structures should allow for safe and efficient use of the marina, while contributing to the maintenance or improvement of current ecological conditions.
 - C. Allow application of the Marina designation to other properties when a SMP amendment is accomplished.
 - D. Aesthetic objectives should be implemented by means such as sign control regulations, screening and architectural standards, and maintenance of natural vegetative buffers where such buffers do not interfere with the marina use and operation.



- SMP-P13 Designate properties as Aquatic to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high water mark.

The following management policies should guide development within these areas:

- A. Provisions for the management of the Aquatic environment should be directed towards maintaining and restoring shoreline ecological functions.
- B. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
- C. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to minimize adverse visual impacts, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
- D. New overwater structures for water-dependent uses and public access are permitted, provided they will not preclude attainment of ecological restoration.
- E. Public recreational uses of the water should be protected against competing uses that would interfere with these activities.
- F. Underwater pipelines and cables should be allowed when demonstrated that there is no feasible alternative location based on an analysis of technology and system efficiency, and that the adverse environmental impacts are not significant or can be shown to be less than the impact of upland alternatives.



2. Agriculture

- SMP-P14 In support of existing agricultural activities, locate and design agricultural development, clearing, and grading to avoid significant ecological impacts.
- SMP-P15 Encourage Integrated Pest Management and best management practices in the application of pesticides and herbicides.
- SMP-P16 Ensure new agricultural activities are consistent with shoreline resources and values, consistent with the use environment, and located and designed to assure no net loss of ecological functions and avoid adverse impacts on other shoreline resources and values.
- SMP-P17 Separate tilled areas from shoreline waterbodies by a suitable buffer strip of indigenous non-invasive vegetation in order to reduce harmful bank erosion and resulting sedimentation, enhance water quality by slowing and filtering runoff, and thereby maintaining habitat for fish and wildlife.

3. Aquaculture

- SMP-P18 Due to the potential for introduction of additional contaminants into Bothell waters, only permit non-commercial aquacultural activities and uses, such as state-approved fish hatcheries and fish-rearing operations.

- SMP-P19 Give preference to non-commercial aquaculture operations that minimize environmental impacts through use of fewer visible structures or less extensive substrate and vegetation modifications.
- SMP-P20 Do not allow aquaculture in areas where it would degrade water quality, result in a loss of shoreline ecological function, impair navigation, or conflict with other water-dependent uses.
- SMP-P21 Design aquaculture facilities to minimize nuisance odors and noise, as well as visual impacts.

4. Boating Facilities (marinas/community docks/boat launches)

- SMP-P22 Locate new boating facilities and allow expansion of existing facilities at sites with suitable environmental conditions, shoreline configuration, access, and neighboring upland and aquatic uses.
- SMP-P23 Require mitigation for any adverse impacts to ecological functions that may result from new, expanded or modified boating facilities.
- SMP-P24 Boating facilities that minimize the amount of shoreline modification, in-water structure, and overwater cover are preferred.
- SMP-P25 Promote use of best management practices to control pollutants from boat maintenance, repair and use, including proper sewage disposal for boats.
- SMP-P26 Prohibit live-aboard boats, barges, houseboats, and other floating vessels in marinas and along private and public docks.
- SMP-P27 Encourage joint use boating facilities for developments containing five or more dwelling units.



5. Breakwaters, Jetties, Groins and Weirs

- SMP-P28 To the extent feasible, limit the use of breakwaters, jetties, groins, weirs and other similar structures to those projects providing ecological restoration or other public benefits.

6. Dredging and Dredge Material Disposal

- SMP-P29 Design and locate new shoreline development to avoid the need for dredging.
- SMP-P30 Limit dredging and dredge material disposal to the minimum necessary to allow for shoreline restoration, flood hazard reduction, and maintenance of existing legal moorage and retention of the Sammamish River as a navigable waterbody.
- SMP-P31 Recognize the status of the Sammamish River as a navigable waterbody as established by the U.S. Army Corps of Engineers, and the need to maintain the Sammamish River flood flow improvements constructed by the agency.

7. Fill

- SMP-P32 Limit fill waterward of the ordinary high water mark to support ecological restoration or to facilitate water-dependent or public access uses.
- SMP-P33 Fill upland of the ordinary high water mark should be allowed provided it is located, designed and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration, and is the minimum necessary to implement an approved project.

8. Forest Practices

- SMP-P34 Ensure compliance with the City's and State's Forest Practices Act for all forest management.
- SMP-P35 Conduct forest practices within shoreline areas in a manner that ensures water quality, and maintain vegetative buffer strips to protect fish populations and to avoid erosion of stream banks.
- SMP-P36 Ensure forest practices are conducted in a manner that assures no net loss of shoreline ecological functions or significant adverse impacts to other shoreline uses, resources and values such as navigation, recreation and public access.

9. In-Stream Structures

- SMP-P37 Locate, plan and permit in-stream structures only when consistent with the full range of public interests, ecological functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.

10. Mining

- SMP-P38 Prohibit mining facilities within shoreline jurisdiction within the City and Planning Area.

11. Private Residential Docks

- SMP-P39 Design and locate private residential docks so that they do not interfere with shoreline recreational uses, navigation, or the public's safe use of the Sammamish River. Private residential docks should be prohibited on North and Swamp Creeks.
- SMP-P40 Design and construct new or expanded residential docks and their accessory components, such as boatlifts and canopies, to minimize impacts on native fish and wildlife and their habitat.
- SMP-P41 Encourage sharing of new private residential docks within new development and through consolidation and multiple use of existing residential docks.
- SMP-P42 Minimize adverse aesthetic impacts of private residential docks and their accessory components.

12. Residential Development

- SMP-P43 Recognize single family uses as a preferred use when developed without adverse impacts to ecological functions.
- SMP-P44 Design residential development to preserve existing shoreline vegetation and minimize the need for shoreline stabilization and flood control measures.
- SMP-P45 Prohibit over-water residential structures and floating residences.
- SMP-P46 Ensure new multifamily and single family residential development in shoreline jurisdiction, comprising 5 or more dwelling units, provides for public access to the shoreline consistent with this SMP. When such development is capable of providing public access improvements consistent with the Parks and Recreation Open Space Action Plan (PROSAP) Trails and Walking Routes, such access comprises the development's public access.



13. Shoreline Habitat and Natural Systems Enhancement Projects

- SMP-P47 Include provisions for shoreline vegetation restoration, fish and wildlife habitat enhancement, and Low Impact Development techniques in projects located within the shoreline, where feasible.
- SMP-P48 Encourage and facilitate implementation of projects and programs included in the SMP Shoreline Restoration Plan.

14. Shoreline Stabilization

- SMP-P49 Limit use of hard structural stabilization measures to reduce shoreline damage.
- SMP-P50 Design, locate, size and construct new or replacement structural shoreline protection structures to minimize and mitigate the impact of these modifications on the City's shorelines.
- SMP-P51 Locate and design new development to eliminate the need for new shoreline modification or stabilization.
- SMP-P52 Encourage salmon-friendly shoreline design during new construction and redevelopment by offering incentives and regulatory flexibility.

15. Utilities

- SMP-P53 Whenever feasible, locate new non-water-oriented domestic water, electrical, communication, natural gas and other utilities outside shoreline jurisdiction. Utilities

that must be located within shoreline jurisdiction should be located within existing rights-of-way or corridors whenever feasible.

- SMP-P54 Locate and design utility facilities and corridors to protect scenic views and minimize aesthetic impacts.
- SMP-P55 Locate utility facilities and corridors to prevent loss of ecological function and preserve the natural landscape, including avoiding impacts to critical areas and minimizing clearing of vegetation.
- SMP-P56 Ensure utilities in shoreline jurisdiction do not adversely affect water quality or prevent public use of the shoreline area.

16. Existing Development

- SMP-P57 Allow legal pre-existing uses and structures to continue in accordance with this SMP.
- SMP-P58 Allow alterations of legal pre-existing structures, uses, and lots in consideration of: a) historic development patterns, or b) occupation by preferred uses pursuant to Policy SMP-P1, or c) provision of ecological restoration, or d) public safety or other public purposes.
- SMP-P59 Encourage transitions from non-water-oriented uses to water-oriented uses.
- SMP-P60 Allow for legal pre-existing structures to expand when they do not increase inconsistencies with the SMP requirements.
- SMP-P61 Consider the no-net-loss of ecological function objective to guide review of proposed expansions or other changes to legal pre-existing uses and new development on legal vacant lots. This objective may be addressed in an areawide manner consistent with the SMP cumulative impacts analysis.

E. Economic Development Element

- SMP-G6. To encourage appropriate economic activity and provide both public access to the shoreline and continued maintenance of the tax base while respecting the natural environment and preserving or enhancing public access to the shoreline.
- SMP-G7. To provide for and encourage economic activity and development of water-dependent uses and/or water-related uses in appropriate shoreline locations, which take into consideration the capacities of the area's natural resources, public services, and public facilities.
- SMP-G8. To concentrate economic development activities that are water-oriented or water-dependent on shoreline locations containing suitable infrastructure and similar economic pursuits.

1. General Economic Policies

- SMP-P62 Implement the multiple use concept consistent with the *Imagine Bothell... Comprehensive Plan's* land use designations and urban design criteria so that public purposes can be served in a way that is compatible with securing a return on private investment.
- SMP-P63 Ensure upland uses designated by the *Imagine Bothell... Comprehensive Plan* on adjacent lands outside of immediate shoreline jurisdiction (in accordance with RCW 90.58.340) are consistent with the purpose and intent of the SMP as they affect the shoreline.
- SMP-P64 Explore ways in which economic activity areas might benefit and link to Bothell shorelines.
- SMP-P65 Develop a priority system which gives preference to economic activities which either leave natural shoreline features such as indigenous trees, shrubs, grasses and wildlife habitat unmodified, or which modify them in a way which enhances ecological functions and human awareness and appreciation of the river's or stream's beauty and relation to other natural and non-natural surroundings.
- SMP-P66 Give preference to water-oriented economic activities in areas where limited commercial development space along shorelines is in demand for a number of competing uses.
- SMP-P67 Develop a program and regulations to encourage the location of water-oriented economic activity uses within Bothell shorelines.

2. Commercial Development

- SMP-P68 Assure that commercial structures and site developments comply with design criteria and policies contained in the City's *Imagine Bothell... Comprehensive Plan* and adopted development regulations.
- SMP-P69 When considering use environment amendments, determine whether commercial development is feasible within or contiguous to existing commercial areas before locating in undeveloped areas.
- SMP-P70 New commercial development that is not water-oriented should be discouraged in shoreline jurisdiction unless such development provides a significant public benefit, such as public access or ecological restoration, or if the site is physically separated from the shoreline by another property or public right-of-way.
- SMP-P71 Commercial use of the shoreline should be designed to avoid environmental impacts and prevent loss of shoreline ecological function.

3. Industry

- SMP-P72 Assure that industrial structures and site developments comply with design criteria and policies contained in the City's *Imagine Bothell... Comprehensive Plan* and adopted development regulations.
- SMP-P73 New industrial development should be located within or contiguous to existing industrial areas before locating in undeveloped areas.

- SMP-P74 New industrial development that is not water-oriented should be discouraged in shoreline jurisdiction unless such development provides a significant public benefit, such as public access or ecological restoration, or if the site is physically separated from the shoreline by another property or public right-of-way.
- SMP-P75 Design industrial use of the shoreline to avoid environmental impacts and prevent loss of shoreline ecological function.
- SMP-P76 Ensure industrial development provides public access to the shoreline where it can be done safely and without interfering with operation of the use.

F. Public Access Element

- SMP-G9. To provide public access, both physical and visual, to the shorelines as part of a total system, consistent with the *Imagine Bothell... Comprehensive Plan*, the Parks, Recreation and Open Space Action Program, the needs of other shoreline uses, and to preserve ecological functions.
- SMP-G10. To ensure that the creation of public access will not endanger natural features or contribute to a loss of ecological functions.
- SMP-G11. To provide a comprehensive system of physical, visual and cultural access to Bothell's shorelines.
- SMP-P77 Provide public access, physical and visual, in the shoreline jurisdiction in association with the following uses: developments with 5 or more dwelling units; commercial development; industrial development; and public agency development. Ensure public access is consistent with the *Imagine Bothell... Comprehensive Plan* and Bothell's Parks, Recreation and Open Space Action Program.
- SMP-P78 Ensure that development occurring on properties which front both the Sammamish River and lands frequented by the public (for example, street, pedestrian path, recreation or park area or lands containing large numbers of residents) provide visual access in the form of view corridors, wherein buildings are excluded to provide visual access to and from the River in line with the reasonable needs for privacy, property rights, and security.
- SMP-P79 Continue acquisition of land for the public along the Sammamish River in concert with the City's Parks, Recreation, and Open Space Action Program to preserve a visual corridor, increase parklands, enhance shoreline ecological functions, and expand trail linkages.
- SMP-P80 Encourage footbridges in areas where opposite banks of the Sammamish River, North Creek, or Swamp Creek have compatible uses and/or related economic



activities or recreational uses, or any combination of the two subject to the permission of all properties and agencies (including, but not limited to, the U.S. Army Corp of Engineers; the State Department of Natural Resources, Department of Ecology, Department of Fish and Wildlife; and King or Snohomish County).

- SMP-P81 Expand the number of safe pedestrian linkages between the Downtown/Main Street retail activity area and the riverfront activity area.
- SMP-P82 Utilize as many existing public rights-of-way and easements as possible to expand the network of public access to shoreline amenities. Efforts to vacate these types of rights-of-way, should be discouraged unless equivalent or improved public access is provided in exchange and should only be allowed in strict compliance with applicable Bothell Municipal Code provisions for vacation of public rights-of-way.
- SMP-P83 Discourage public access that damages the shoreline's natural features on either private or public property.
- SMP-P84 Public Access can be provided in many forms including physical or visual access.

G. Recreation Element

- SMP-G12. To provide substantial recreational opportunities for the public in the shoreline area.
- SMP-P85 Give priority to shoreline recreational development in order to provide access, use, and enjoyment of Bothell's shorelines.
- SMP-P86 In providing space for public recreation along Bothell's shorelines, give primary emphasis to providing for the local recreation needs of Bothell citizens for boating, kayaking, canoeing, swimming, bicycling, fishing, picnicking, and other activities benefiting from shoreline access as well as retaining and expanding regional trail systems.
- SMP-P87 Continue to work with neighboring jurisdictions and other governments to support local and regional opportunities for public recreation, shoreline access and use.
- SMP-P88 Develop recreational activity areas in a manner which complements commercial and residential uses and/or natural habitats.
- SMP-P89 Ensure provision of recreational space and uses is coordinated and consistent with the City's *Imagine Bothell... Comprehensive Plan* and the Parks, Recreation and Open Space Action Program (PROSAP).
- SMP-P90 Identify unique shoreline features (views, topography, vegetation, wildlife, etc.) and assign acquisition and preservation priorities for each feature. Assure recreational facilities are developed in a manner consistent with the use environment and shoreline ecological functions.



- SMP-P91 Utilize the physical characteristics of Bothell's shorelines to guide the type of plant materials and landscaping of public recreation land. Use indigenous trees, shrubs and grasses, which thrive in that environment, require minimum maintenance, and provide cover, shading, and habitat along the shoreline.



- SMP-P92 Encourage the continued operation of the Wayne Golf Course as a shoreline recreation use. This facility was originally constructed in c.1939 and has been operated by the same family since 1950. The City of Bothell acquired the development rights to the "front nine" of the Golf Course in 1998 with the objective of continuing the front nine as a public golf course. Expansion and/or alteration of the existing golf course should be allowed consistent with the following:

- A. Any expansion and/or alteration results in no net loss of ecological functions;
- B. The special features of a waterfront golf course are recognized and accommodated; and
- C. Maintenance procedures consistent with this SMP are developed.

- SMP-P93 Utilize shoreline characteristics to guide the design of new recreation facilities installed within shoreline areas including:

- A. Install groves of indigenous trees appropriate to the soil and moisture characteristics of the former floodplain;
- B. Consider kayak or canoe launching facilities that take into account currents and stream-bank characteristics to maximum advantage;
- C. Develop public access to habitat areas without excessive intrusion into those habitats; and
- D. Assure that recreation areas are located where they make optimum use of water for recreation purposes.

H. Circulation Element

- SMP-G13. To plan and develop a circulation network which is compatible with the shoreline environment.

- SMP-G14. To design circulation facilities to meet the following criteria:

- A. Minimal disruption of public access to shoreline areas and retention of current public access;
- B. Provide for no net loss of existing ecological systems and the physical characteristics of shorelines;

C. Complementary to the economic and recreational usage of shorelines as set forth in the SMP and the Imagine Bothell... Comprehensive Plan.

- SMP-G15.** To encourage relocation or improvement of those circulation elements that is functionally or aesthetically disruptive to the shoreline, public waterfront access, and ecological functions.
- SMP-P94** Discourage impervious areas such as parking lots within the 100-year floodplain or floodway, and promote designs to enhance the shoreline's aesthetic potential, and to minimize degradation of water quality.
- SMP-P95** Allow parking facilities within shoreline jurisdiction only to support an authorized use.
- SMP-P96** Where possible, locate land circulation systems as far from the shoreline as feasible to reduce interference with natural shoreline resources or appropriate shoreline uses.
- SMP-P97** Ensure access to shoreline areas is consistent with widely adopted street, sidewalk and pathway engineering standards, and is an integral feature of all circulation improvements within shoreline jurisdiction. When consistent and compatible with the City's *Imagine Bothell... Comprehensive Plan* Transportation Element and Parks and Recreation Element, encourage multiple-transportation mode corridors.

I. Conservation Element

- SMP-G16.** To preserve, enhance, and/or restore natural resources which make Bothell shorelines uniquely attractive and valuable to a large, regional ecosystem.
- SMP-G17.** To protect the scenic and aesthetic qualities of shorelines to the fullest extent practicable and implement restoration to achieve no net loss of ecological functions.

1. Environmental Protection

- SMP-P98** Protect shoreline processes and ecological functions through regulatory and non-regulatory means that may include acquisition of key properties, conservation easements, regulation of development within shoreline jurisdiction, and incentives to private property owners to encourage ecologically sound design.
- SMP-P99** Work with other jurisdictional agencies in the region and with the private sector to deal effectively with regional and watershed-wide natural environment issues and the protection, preservation, and enhancement of all shorelines as fish and wildlife habitat.
- SMP-P100** Enhance and restore areas which are biologically and aesthetically degraded to the greatest extent feasible while maintaining designated uses of the shoreline.

2. Critical Areas

- SMP-P101** Conserve and protect critical areas within shoreline jurisdiction from loss or degradation.
- SMP-P102** Locate and design public access within and adjacent to critical areas to ensure that ecological functions are not adversely impacted.



Wetlands

- SMP-P103** Protect and manage shoreline-associated wetlands, including maintenance of sufficient volumes of surface and subsurface drainage into wetlands, to sustain existing vegetation and wildlife habitat.

Fish and Wildlife Habitat Conservation Areas

- SMP-P104** Protect and restore critical freshwater habitat and other areas that provide habitat for endangered, threatened or sensitive fish and wildlife species.

Geologically Hazardous Areas

- SMP-P105** Manage development to avoid erosion and adverse water quality impacts to shoreline waterbodies, as well as to avoid risk and damage to property and loss of life from hazardous geological conditions.

Frequently Flooded Areas

- SMP-P106** Limit new development in floodplains.
- SMP-P107** Regulate development within the 100-year floodplain to avoid adverse impacts to shoreline ecological functions and to avoid risk and damage to property and loss of life.

Channel Migration Zones

- SMP-P108** Recognize that geologic conditions, topography, existing development, constructed levees, and some areas of armoring will limit channel migration in most reaches of Bothell's shorelines. In reaches where channel migration is possible, such as along North Creek at Centennial Park and the University of Washington Bothell campus, limit development and shoreline modifications that would result in interference with the process of channel migration that may cause significant adverse impacts to property or public improvements or result in a net loss of ecological functions associated with the shoreline waterbody.

3. Shoreline Vegetation Conservation

- SMP-P109** As appropriate, ensure new and existing shoreline development and restoration activities protect, preserve, and/or restore large portions of a site's vegetative cover within Bothell shoreline jurisdiction for its habitat, aesthetic and recreational values. Select and encourage retention of plant material which provides food and cover for birds, fish, and other wildlife. The introduction of invasive plant species in shoreline jurisdiction is prohibited.

SMP-P110 Minimize tree clearing and thinning activities in shoreline jurisdiction and require mitigation for trees that are removed.

4. Water Quality, Stormwater, and Nonpoint Pollution

SMP-P111 Protect and preserve water quality in the Sammamish River, North Creek, and Swamp Creek, and take actions to ensure no net increase in pollutant loads and water quality degradation as these water bodies pass through the City of Bothell. Ensure shoreline development complies with stormwater regulations such as those implemented to meet NPDES Phase II requirements.

SMP-P112 Stormwater outfalls to shorelines or other waterbodies must be designed so that they are not aesthetically detrimental to their surroundings. Installation or retention of native vegetation and restoration of all disturbed areas is necessary.

SMP-P113 Stormwater outfalls must be set back from the water's edge and discharged onto appropriate materials such as rocks, logs, and other materials to mimic the appearance of a natural-looking creek flowing into the waterbody.

SMP-P114 Manage stormwater quantity to ensure protection of natural hydrology patterns and avoid or minimize impacts to streams and shoreline waterbodies.

SMP-P115 Promote public education efforts to protect and improve water quality such as through the City's stormwater education program.

J. Historic / Cultural / Scientific / Educational Element

SMP-G18. To protect, preserve, or restore those buildings, sites, and areas of shoreline having historic, cultural, scientific, or educational values or significance.

SMP-P116 Identify, within the City's Inventory of Historic Resources and in accordance with federal, state, and local designation criteria, and the goals and policies of the *Imagine Bothell... Comprehensive Plan*, all sites and areas of shoreline having unique historical, cultural, scientific, or educational value or significance, especially archaeological resources such as Native American sites in river and stream corridors.

SMP-P117 Ensure the use regulations of the SMP contains development regulations as necessary to encourage a compatible surrounding environment for resources identified in accordance with the Policy above, and to ensure planning for the preservation of significant archaeological resources, especially Native American sites in river and stream corridors.

SMP-P118 Due to the limited and irreplaceable nature of the resource(s), prevent the destruction of or damage to any site having historic, 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 or that have been inadvertently uncovered.

SMP-P119 Plan and carry out any proposed site development and/or associated site demolition work to avoid impacts to the cultural resource or to provide appropriate mitigation. Impacts to neighboring properties and other shoreline uses should be limited to temporary or reasonable levels. If development or demolition is proposed adjacent to an identified historic, cultural or archaeological site, then the proposed development should be designed and operated so as to be compatible with continued protection of the historic, cultural or archaeological site.

K. Flood Hazard Management Element

Flood hazard management projects are those actions taken with the primary purpose of preventing or mitigating damage due to flooding. Flood hazard management projects or programs may employ any or several physical or regulatory controls including dams, lakes, engineered floodways, bioengineering, planning, and zoning (i.e. land use management). These provisions also apply to repair and maintenance of flood hazard management systems if the systems are enlarged or otherwise modified.

SMP-G19. To manage new and existing development in floodplains consistent with Federal Emergency Management Agency (FEMA) standards.

SMP-P120 Manage development proposed within floodplains and floodways through the City's frequently flooded area regulations consistent with the SMA, the Critical Areas Regulations contained within this SMP, the FEMA standards, and the remaining sections of the City's SMP.



SMP-P121 Work with other cities, King and Snohomish Counties, and state and federal agencies to deal effectively with regional flooding issues.

SMP-P122 Control stormwater runoff in a manner consistent with Low Impact Development practices which utilize natural detention, retention and recharge techniques to the maximum extent possible.

SMP-P123 Prohibit any development within the floodplain which would individually or cumulatively cause any increase in the base flood elevation beyond FEMA standards.

SMP-P124 Encourage acquisition of properties that have experienced repetitive loss or that are valuable to acquire due to the potential for ecological restoration.

L. Restoration Element

SMP-G20. To protect and restore the natural resources and ecological functions of the shoreline, including wildlife habitat, fisheries and other aquatic life, natural hydrologic processes, and shoreline vegetation consistent with the planned uses of the shorelines. Ensure no net loss of shoreline ecological functions.

- SMP-G21.** To upgrade shoreline ecological functions and aesthetics to a level commensurate with their importance to the community and to achievement of regional goals for species and habitat recovery.
- SMP-G22.** To implement the projects, programs and plans established within the SMP Shoreline Restoration Plan as funding and staffing resources permit.
- SMP-G23.** To protect, conserve and establish indigenous vegetation along shoreline areas.
- SMP-P125** Develop zoning and other incentives which will make it economically attractive for private capital investment to enhance ecological functions as part of shoreline development. Examples of incentives include provisions which permit development to locate closer to shoreline waterbodies in exchange for specific enhancements that improve ecological functions to buffers or wetlands, and allowing clustering of development away from shoreline areas in exchange for reduced lot sizes, or other economic incentives that encourage improvements to existing ecological conditions.
- SMP-P126** Develop and implement a Shoreline Restoration Plan that contains goals, policies and prioritized actions for restoration of impaired shoreline ecological functions.
- SMP-P127** Use all available techniques, including utilization of the City's capital improvement program, pursuit of grant funding, and mobilization of community volunteers, to implement the SMP's Shoreline Restoration Plan.
- SMP-P128** Work with the public and any other interested parties to investigate and identify any environmentally sensitive areas within shoreline jurisdiction which are deserving of public reclamation, restoration, or preservation and inclusion within the City's open space system.

M. Shoreline Process and Administration Element

- SMP-G24.** To provide a process to update the SMP consistent with the update schedule of the SMA.
- SMP-P129** Within shoreline jurisdiction, in cases where a conflict occurs between the provisions contained within the SMP and other titles of the Bothell Municipal Code, including but not limited to, zoning regulations, subdivision regulations, surface water requirements, design and construction standards, and building codes, the provisions of the SMP should prevail.
- SMP-P130** When assigning environment designations and determining permitted uses within the different designations and use categories, the City shall consider the ability of the landscape to accommodate planned uses.
- SMP-P131** Encourage citizen participation in the implementation of this SMP.
- SMP-P132** Protect property rights of landowners from arbitrary and discriminatory actions.

- SMP-P133** Develop administrative procedures which will help the applicant, the City, and other interested parties reach a quick and accurate assessment of a proposed development.
- SMP-P134** Review of referred related permits (e.g., U.S. Army Corps of Engineers permits) shall be considered using the criteria set forth herein.
- SMP-P135** Reconcile conflicting public policy goals by considering the overall needs of the community including public access, infrastructure requirements, utility corridor alignments and facilities, and natural resource protection.
- SMP-P136** Implement shoreline improvements annually through the City's Capital Facilities Element and Capital Investment Program processes.

Shoreline Regulations

Title 13 –SHORELINE MANAGEMENT

- 13.01 Authority and Purpose
- 13.03 Definitions
- 13.05 Shoreline Jurisdiction
- 13.07 Shoreline Environment Designations
- 13.09 General Regulations and Performance Standards
- 13.11 Use-Specific and Modification Regulations and Performance Standards
- 13.13 Critical Areas in Shoreline Jurisdiction
- 13.15 Non-Conforming Uses and Structures
- 13.17 Administration, Permits, and Enforcement

Reader's Guide

Washington State's citizens voted to approve the Shoreline Management Act of 1971 in November 1972. The SMA seeks to provide environmental protection for shorelines, preserve and enhance shoreline public access, and encourage appropriate development that supports water-oriented uses.

A Shoreline Master Program (SMP) contains goals, policies, regulations, and a use map that guide the development of shorelines in accordance with the SMA (RCW 90.58), Washington State Department of Ecology (Ecology) SMP Guidelines (WAC 173-26) and Shoreline Management Permit and Enforcement Procedures (WAC 173-27). In accordance with state laws and rules, the jurisdiction of Bothell's SMP encompasses the Sammamish River, North Creek, and Swamp Creek; land within 200 feet of the ordinary high water mark (OHWM) of these waterways; and their floodways, 100-year floodplains and associated wetlands. Within shoreline jurisdiction, there are critical areas such as the already-mentioned flood hazard areas and wetlands as well as tributary streams, geologic hazards, and potentially aquifer recharge areas.

Consistent with RCW 36.70A.480, the goals and policies of Bothell's SMP, approved under chapter 90.58 RCW, are an element of the City's *Imagine Bothell...Comprehensive Plan* and are found in the SMP Element. All regulatory elements of this SMP, including, but not limited to, definitions and use regulations, are a part of the City's development regulations and are contained in Title 13, Shoreline Regulations. The flow chart in Figure 13-1 illustrates how an applicant could navigate the regulations to determine how it applies to a particular project and property.

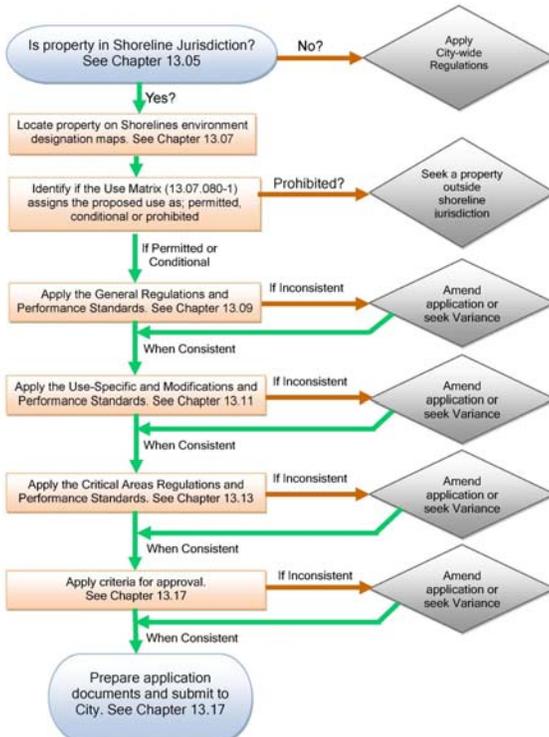


Figure 13-1. Flow Chart

13.01 Authority and Purpose

13.01.010 Authority

The Shoreline Management Act (SMA) of 1971, Chapter 90.58 RCW, is the authority for the enactment and administration of this Shoreline Master Program (SMP).

13.01.020 Applicability

All proposed uses, activities, or development occurring within shoreline jurisdiction must conform to the intent and requirements of Chapter 90.58 RCW, the SMA, and this SMP whether or not a permit or other form of authorization is required. See Chapter 13.05 for the shoreline jurisdiction description and Chapter 13.03 for the definition of uses, activities, and development. Uses, activities or development that would not result in exterior alteration of structures, nor alter soils, vegetation, critical areas, nor interfere with the normal public use of the surface of the waters are not subject to the SMP.

The SMP applies to shoreline jurisdiction in the city limits and predesignates shoreline jurisdiction in the Bothell Planning Area; this SMP will apply to shorelines in the planning area upon annexation.

Pursuant to WAC 173-27-060, direct federal agency activities, such as adopting a management plan for a wildlife sanctuary, dredging a new navigation channel or purchasing land for a recreation area, affecting shoreline jurisdiction must be consistent with the SMA, SMP Guidelines, and this SMP.

As recognized by RCW 90.58.350, the provisions of this SMP shall not affect treaty rights of Indian Nations or tribes.

13.01.030 Findings

The SMP is based on the SMA, SMP Guidelines, a Shoreline Analysis Report,¹ and a public visioning process². Key findings are identified below.

- A. The City of Bothell is located in King and Snohomish Counties and has a Municipal Urban Growth Area (MUGA) in Snohomish County and a Potential Annexation Area (PAA) in King County. The city limits together with the MUGA and PAA are considered Bothell's Planning Area.
- B. The Planning Area contains freshwater shorelines associated with Washington State's Water Resource Inventory Area (WRIA) 8 –Cedar/Sammamish. WRIA 8 encompasses 692 square miles and collects water from two major rivers (Cedar and Sammamish Rivers) before flowing through Lake Union and ultimately into Puget Sound via the Lake Washington Ship Canal and Hiram M. Chittenden locks.

¹The Watershed Company and ICF International, February 2011. Final Shoreline Analysis Report for the Cities of Bothell and Brier Shorelines: Sammamish River, North Creek, and Swamp Creek. Prepared for the City of Bothell Community Development Department, Bothell, WA.

²Melinda Posner Consulting, September 30, 2010. Bothell Shoreline Master Program Update: Visioning Workshops Summary. September 2010. Prepared for the City of Bothell Community Development Department, Bothell, WA.

- C. Several shoreline units in North Creek and Swamp Creek have moderate functions, and some on North Creek have moderate-high functions. These shorelines would benefit from additional protection. All of the Sammamish River units have somewhat degraded riparian conditions that would benefit from restoration, in addition to protection of existing conditions.
- D. All of the shoreline units in Swamp Creek and the Sammamish River have low to low/moderate flood storage potential. North Creek has a history of flooding that has been managed in several areas through installation and maintenance of structural flood hazard reduction measures. Because of existing development along North Creek and the potential for additional increases in peak stream flows, flood hazard reduction, structural and otherwise, is important to consider in the SMP.
- E. Adding fill above or below the Ordinary High Water Mark (OHWM) could reduce floodplain and in-stream storage and conveyance functions.
- F. High temperatures throughout many of the shoreline units result from degraded vegetation cover. Conservation of existing shoreline vegetation is an essential component to stabilize water temperatures.
- G. Fecal coliform and dissolved oxygen levels are the most common water quality impairments within the City's shoreline jurisdiction. Stormwater management and non-point source pollution prevention are key issues to address water quality concerns and avoid further degradation.
- H. The Sammamish River has a continuous network of public parks, open space, and trails with a private golf course near the west end of the City. South of 228th Street SE, North Creek shorelines have a fairly continuous corridor of public and private open space and trails. North of 228th Street SE, recreation opportunities are mostly associated with Centennial Park. Swamp Creek is largely developed with residential uses and does not have as much park and recreation space. Private open space is located along some portions of the creek north of 228th Street SW, and public parks are located near Locust Way.
- I. There are some known areas of shoreline stabilization on North Creek and the Sammamish River. Armoring typically occurs along the banks at stream/road crossings and outfalls.
- J. Several small docks occur along the Sammamish River, but none exist in North Creek or Swamp Creek. While all docks will have some adverse impact on the aquatic conditions around and beneath them, including providing habitat for non-native and/or predatory fish species, the size, design, and materials will determine the extent of adverse impact on aquatic habitat.
- K. Historically, dredging has occurred along the Sammamish River to maintain its flood carrying capacity. Such dredging has resulted in a uniform channel lacking many beneficial habitat features. Removing sediment by dredging, or adding sediment through the disposal of dredge materials without an explicit beneficial purpose and thorough review of adverse impacts, is likely to result in unintended, adverse consequences onsite or downstream. However, flood management practices should account for the fact that the Sammamish River is a navigable waterbody that is used by the public for boating and recreation. Navigation impediments exist along the Sammamish River which may jeopardize the River's ability to accommodate boat traffic.

- L. Many of the City's shoreline units in North Creek presently have moderately well-functioning shoreline habitats, shorelines in Swamp Creek have moderate habitat functions, and the Sammamish River shorelines are generally somewhat degraded. The type of recommended enhancement will vary according to the present conditions, but all of the shoreline units would benefit from shoreline habitat enhancement projects.
- M. The most significant boating facility in the City is the Blue Heron Landing on the north bank of the Sammamish River. There are three private motorized boat launching facilities in other locations.
- N. The character of the North Creek shoreline is mixed, with reaches of residential areas interspersed with reaches of an office/commercial/industrial pattern. The Swamp Creek land use pattern is predominantly residential with some public and private parks, recreation and open space. The Sammamish River land use pattern is mostly flanked by public and private parks, recreation and open space with occasional residential and commercial uses.
- O. Residential development is found along all three shorelines but is concentrated along Swamp Creek. Existing commercial development is common throughout the Bothell shoreline jurisdiction, but is concentrated along North Creek. There are no significant water-dependent or water-related commercial uses in Bothell other than the Blue Heron Landing marina located on the Sammamish River. Industrial development in shoreline jurisdiction is concentrated along North Creek with none of this industry considered water-oriented.
- P. Portions of shoreline jurisdiction are forested, particularly the following reaches: Centennial Park, Fitzgerald, Swamp Creek, Sammamish River Park, and Bothell Way Corridor.
- Q. Roadways, bridges, and parking areas are located in some portions of the shoreline, including four major transportation features: I-405, SR-527, SR-524, and SR-522.
- R. Many shoreline jurisdiction parcels are served by City stormwater, water and sewer systems, which may require repair or expansion as development in these areas continues.

13.01.040 Purpose

The purposes of this SMP are:

- A. To promote the public health, safety, and general welfare of the City by providing comprehensive policies and effective, reasonable regulations for development, use and protection of jurisdictional shorelines; and
- B. To further assume and carry out the local government responsibilities established by the SMA in RCW 90.58.050 including planning and administering the regulatory program consistent with the policy and provisions of the SMA in RCW 90.58.020; and
- C. To provide a high quality shoreline environment where:
1. Recreational opportunities are abundant;
 2. The public enjoys access to and views of shoreline areas;
 3. Natural systems are preserved, restored or enhanced;
 4. Ecological functions of the shoreline are maintained and improved over time;

5. Water-oriented uses are promoted consistent with the shoreline character and environmental functions; and
- D. To apply special conditions to those uses which are not consistent with the control of pollution and prevention of damage to the natural environment or are not unique to or dependent upon use of the state's shoreline; and
- E. To assure no net loss of ecological functions associated with the shoreline.

13.01.050 Relationship to Other Codes, Ordinances and Plans

- A. All applicable federal, state, and local laws shall apply to properties in the shoreline jurisdiction.
- B. In the event provisions of this SMP conflict with provisions of federal, state, county or City regulations, the provision that is most protective of shoreline resources shall prevail. It is understood that the provisions of this chapter may not allow development to occur at what otherwise might be the property's full zoning potential.
- C. The Shorelines Master Program Element contains the SMP policies, and these state the underlying objectives the Title 13 Shoreline Management regulations are intended to accomplish. The Shorelines Master Program Element policies guide the interpretation and enforcement of Title 13 Shoreline Management regulations. The Shorelines Master Program Element policies are not regulations in themselves and, therefore, do not impose requirements beyond those set forth in the regulations.

13.01.060 Liberal Construction

As provided for in RCW 90.58.900, the SMA is exempted from the rule of strict construction. The City shall therefore interpret the SMP not only on the basis of actual words and phrases used in it but by also taking purposes, goals, and policies into account.

13.01.070 Effective Date

The SMP is hereby adopted on the **XX date of XX, 2012**. This SMP and all amendments thereto shall become effective immediately upon final approval and adoption by Ecology.

13.03 Definitions

"Accessory" means any use or development incidental to and subordinate to a primary use of a shoreline use or development. For the purposes of this Title 13, the terms accessory and appurtenant are synonymous. See also Appurtenance, Residential.

"Act" means the Washington State Shoreline Management Act (SMA), chapter 90.58 RCW.

"Activity" means a specified pursuit in which a person partakes in the shoreline jurisdiction. Types of activities include development, modification, restoration, recreation, and other human activities.

"Activity center" means an underlying Bothell zoning district allowing a mix of intense urban uses such as the "Residential –Activity Center" zone.

"Active fault" means a fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last 10,000 years, but faults may also be considered active in some cases if movement has occurred in the last 500,000 years.

"Adjacent" means, for purposes of applying BMC 13.13, immediately adjoining (in contact with the boundary of the influence area) or within a distance that is less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:

- A. on a site immediately adjoining a critical area;
- B. a distance equal to or less than the required critical area buffer width and building setback;
- C. a distance equal to or less than 300 feet upland from a stream, wetland, or water body;¹
- D. bordering or within the floodway, floodplain, or channel migration zone; or
- E. a distance equal to or less than 200 feet from a critical aquifer recharge area.

"Adjacent Lands" means lands adjacent to the shorelines of the state (outside of shoreline jurisdiction).

"Advance mitigation" means mitigation of an anticipated adverse critical area impact or hazard completed according to an approved critical areas report and prior to site development.

"Administrator" or "Shoreline Administrator" means the City Community Development Director or his/her designee, charged with the responsibility of administering the Bothell SMP.

"Agricultural activities" means 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.

"Agricultural products" includes, but is not limited to, horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty years of planting; and livestock including both the animals themselves and animal products including, but not limited to, meat, upland finfish, poultry and poultry products, and dairy products.

"Agricultural equipment" and "agricultural facilities" includes, but is not limited to:

- A. the following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion,

withdrawal, conveyance, and use equipment and facilities including, but not limited to, pumps, pipes, tapes, canals, ditches, and drains;

- B. corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;
- C. farm residences and associated equipment, lands, and facilities; and
- D. roadside stands and on-farm markets for marketing fruit or vegetables.

"Agricultural land" means those specific land areas on which agricultural activities are conducted as of the date of adoption of this SMP as evidenced by aerial photography or other documentation. After the effective date of this SMP land converted to agricultural use is subject to compliance with the requirements of this SMP.

"Alteration" means any human-induced action that adversely impacts the existing conditions of the land. Alteration includes but is not limited to:

- A. grading, filling, dredging, draining, channelizing, cutting, topping;
- B. clearing, relocating or removing vegetation;
- C. paving, construction, modifying for surface water management purposes;
- D. human activity that adversely impacts the existing topography, vegetation, hydrology, or wildlife habitat.

"Amendment" means a revision, update, addition, deletion, and/or reenactment to the Bothell SMP.

"Anadromous fish" means species, such as salmon, which are born in fresh water, spend a large part of their lives in the sea, and return to freshwater rivers and streams to procreate.

"Appurtenance, residential" means an improvement necessarily connected to the use and enjoyment of a single-family residence when located landward of the OHWM, the perimeter of a wetland and outside their corresponding required buffers. Appurtenances may include, but are not limited to, a garage and/or shop; driveway; utilities; water craft storage (upland); swimming pools; hot tubs; shoreline stabilization considered exempt from the Shoreline Substantial Development permit per BMC 13.17.040; retaining walls; fences; yards; saunas; cabanas; antennas; decks; walkways; and installation of a septic tank and drainfield and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the OHWM. The terms "appurtenant" and "accessory" are synonymous.

"Aquaculture" means the culture or farming of fish, shellfish, or other aquatic plants and animals.

"Aquifer" means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

"Aquifer, confined" means an aquifer bounded above and below by beds of distinctly lower permeability than that of the aquifer itself and that contains groundwater under sufficient pressure for the water to rise above the top of the aquifer.

"Aquifer recharge areas" means areas that, due to the presence of certain soils, geology, and surface water, act to recharge groundwater by percolation.

"Aquifer, sole source" means an area designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply 50 percent or more of the drinking water for an area without a sufficient replacement available.

"Aquifer susceptibility" means the ease with which contaminants can move from the land surface to the aquifer based solely on the types of surface and subsurface materials in the area. Susceptibility usually defines the rate at which a contaminant will reach an aquifer unimpeded by chemical interactions with the vadose zone media.

"Aquifer, unconfined" means an aquifer not bounded above by a bed of distinctly lower permeability than that of the aquifer itself and containing groundwater under pressure approximately equal to that of the atmosphere. This term is synonymous with the term "water table aquifer."

"Area of shallow flooding" means an area designated AO or AH Zone on the flood insurance map(s). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

"Average grade level" means 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. In the case of structures to be built over water, average grade level shall be the elevation of the OHWM. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure;

"Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year. It is also referred to as the "100-year" flood. The base flood is determined for existing conditions unless a basin plan with projected flows under future development conditions has been completed and adopted by the City of Bothell. Designations on FIRM maps always include the letters "A" or "V."

"Base flood elevation" means the water surface elevation of the base flood. It shall be referenced to the National Geodetic Vertical Datum of 1929.

"Basement" means that portion of a story partly underground and having at least one-half of its height or more than five feet below the adjoining finish grade.

"Best Management Practices (BMPs)" means conservation practices or systems of practices and management measures that:

- A. control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;
- B. minimize adverse impacts to surface water and groundwater flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands;
- C. protect trees and vegetation designated to be retained during and following site construction and use native plant species appropriate to the site for re-vegetation of disturbed areas; and

- D. provide standards for proper use of chemical herbicides within critical areas.

The City shall monitor the application of best management practices to ensure that the standards and policies of this chapter are adhered to.

"Biodiversity" means the variety of animal and plant life and its ecological processes and interconnections—represented by the richness of ecological systems and the life that depends on them, including human life and economies.

"Boat lift" means lifts for motorized boats, kayaks, canoes and jet skis. Includes floating lifts that are designed to not contact the substrate; and ground-based lifts that are designed to be in contact with or supported by the substrate.

"Breakaway wall" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

"Breakwater" means an offshore structure whose 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. Breakwaters are generally built parallel to shore, and may or may not be connected to land, and may be floating or stationary.

"Buffer" or "buffer zone" means an area that is contiguous to and protects a critical area or shoreline waterbody which is required for the continued maintenance, functioning, and/or structural stability of a critical area or shoreline waterbody.

"Channel migration zone (CMZ)" means 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. Evidence of active movement over the 100-year time frame can be inferred from aerial photos or from specific channel and valley bottom characteristics. The time span typically represents the time it takes to grow mature trees that can provide functional large woody debris to streams. A CMZ is not typically present if the valley width is generally less than two bankfull widths, if the stream or river is confined by terraces, no current or historical aerial photographic evidence exists of significant channel movement, and there is no field evidence of secondary channels with recent scour from stream flow or progressive bank erosion at meander bends. Areas separated from the active channel by legally existing artificial channel constraints that limit bank erosion and channel avulsion without hydraulic connections shall not be considered within the CMZ.

"City" means the incorporated City of Bothell, Washington.

"Clearing" means the destruction or removal of vegetation, ground cover, shrubs and trees including, but not limited to, root material removal that affects the erosive potential of the soils on the site. This includes such activities as clear-cutting or selective harvest of trees, chipping of stumps and hauling off of shrubs, slash piles, etc.

"Commercial" means those activities engaged in commerce and trade and involving the exchange of money, including but not limited to, retail, services, wholesale, or business trade activities. Examples include, but are not limited to, hotels, motels, or other commercial

accommodations, grocery stores, restaurants, concessions, shops, commercial recreation facilities such as marinas, boat repair, boat, canoe, or kayak rentals, and offices.

"Community access" means the ability of all property owners or members of a residential development to reach and use the waters of the State, 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 community corridor to the shore), and/or visual access facilitated by scenic roads and overlooks, viewing platforms, and other community sites or facilities. Community access is not intended for the general public.

"Conditional use" means a use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program.

"Compensation project" means actions necessary to replace project-induced critical area, critical area buffer, shoreline, and shoreline buffer losses, including land acquisition, planning, construction plans, monitoring, and contingency actions.

"Compensatory mitigation", for purposes of BMC 13.13, means replacing project-induced losses or adverse impacts to a critical area or shoreline, and includes, but is not limited to, the following:

- A. "Restoration" means actions performed to reestablish functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.
- B. "Creation" means actions performed to intentionally establish a wetland at a site where it did not formerly exist.
- C. "Enhancement" means actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.
- D. "Preservation" means actions taken to ensure the permanent protection of existing, high-quality wetlands.

"Compensatory storage" means new, excavated storage volume equivalent to any flood storage capacity which has been or would be eliminated by filling or grading within the flood fringe.

"Equivalent" shall mean that the storage removed shall be replaced by equal volume between corresponding one-foot contour intervals that are hydraulically connected to the floodway through their entire depth.

"Conservation easement" means a legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. 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, therefore, providing permanent or long-term protection.

"Critical aquifer recharge area" means areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

"Critical area tract" means land held in private ownership and retained in an open condition in perpetuity for the protection of critical areas. Lands within this type of dedication may include but are not limited to portions and combinations of forest habitats, grasslands, shrub steppe, on-site watersheds, 100-year floodplains, shorelines, riparian areas, and wetlands.

"Critical areas" as defined under chapter 36.70A RCW includes the following areas and ecosystems:

- A. wetlands;
- B. areas with a critical recharging effect on aquifers used for potable waters;
- C. fish and wildlife habitat conservation areas;
- D. frequently flooded areas; and
- E. geologically hazardous areas.

"Critical facility" means a facility for which even a slight chance of flooding, inundation, or adverse impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations that produce, use, or store hazardous materials or hazardous waste.

"Critical species" means all animal and plant species listed by the state or federal government as threatened or endangered.

"Cumulative impact" or "cumulative effect" means the adverse impact on the environment which results from the incremental adverse impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

"Degraded buffer" means an area between the Ordinary High Water Mark and the standard buffer that has reduced ecological functions or impaired operation of ecosystem-wide processes relative to natural or historic conditions as a result of alterations to the physical, chemical, and/or biological characteristics of a site. Dominance of invasive plants or noxious weeds, monocultures of a single plant species, absence of vegetative structural diversity (lack of trees, shrubs and groundcovers), presence of significant impervious surfaces (e.g. majority of shoreline buffer), alteration of natural hydrologic pathways between upland areas and the shoreline waterbody, presence of hard structural shoreline stabilization, or presence of contaminated soils, among others, may be some indicators of degraded conditions.

"Development" means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to the act at any stage of water level. Development includes the storage or use of equipment or materials inconsistent with the existing use. Development also includes approvals issued by the City that binds land to specific patterns of use, including but not limited to, subdivisions, short subdivisions, zone changes, conditional use permits, and binding site plans. Development does not include the following activities:

- A. interior building improvements;
- B. exterior structure maintenance activities, including painting and roofing;
- C. routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning, and weeding; and
- D. maintenance of the following existing facilities that does not expand the affected area:
 - septic tanks (routine cleaning); wells; individual utility service connections; and individual cemetery plots in established and approved cemeteries.

"Dock" means a landing and moorage facility for watercraft that abuts the shoreline. On the Sammamish River, a dock is the term which collectively applies to a ramp extending from the shoreline to a float. (See Figure 13.03-1 for illustration.) This definition does not include recreational decks, storage facilities, or other appurtenances which may be associated with the dock. See also Community Dock and Public Dock.

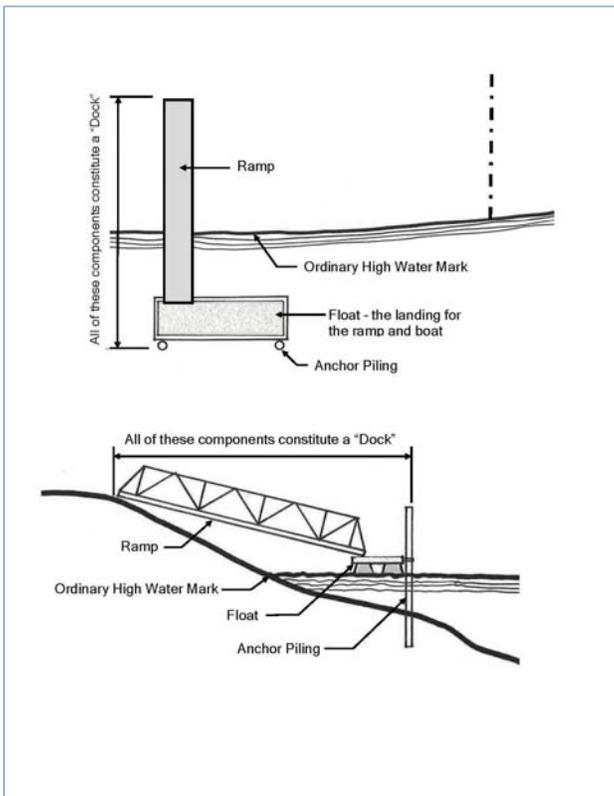


Figure 13.03-1. Dock Definition Illustration

"Dock, Community" means a private water-dependent facility designed for moorage of pleasure craft as its primary use that serves a specified residential development of more than four single-family residences or multi-family units. Other water-enjoyment uses, such as fishing or viewing, may occur on community docks.

"Dock, Public" means a public water-dependent facility designed for temporary moorage of pleasure craft as its primary use. Public docks are typically associated with public parks, but may be found on other properties that provide public access. Other water-enjoyment uses, such as fishing or viewing, may occur on public docks.

"Dredging" means the removal of earth, sand, gravel, silt, or debris from the bottom of a stream, river, lake, bay, or other waterbody and associated wetlands. Dredging can also mean the removal of sediment and other materials interfering with navigation.

"Ecological functions" or "shoreline functions" means 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.

"Ecology" (when capitalized) means the Washington State Department of Ecology.

"Ecosystem-wide processes" means 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.

"Elevated building" means a building that has no basement and its lowest elevated floor is raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

"Emergent wetland" means a wetland with at least 30 percent of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata.

"Enhancement" means the alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects.

"Erosion" means the group of natural processes including weathering, dissolution, abrasion, corrosion, and transporting by which earthy or rocky material is removed from any part of the earth's surface.

"Exempt" developments are those set forth in WAC 173-27-040 and RCW 90.58.030 (3)(e), 90.58.140(9), 90.58.147, 90.58.355, and 90.58.515 which are not required to obtain a substantial development permit but which must otherwise comply with applicable provisions of the Act and the SMP. See BMC 13.17.040 for a complete list of exempt activities.

"Erosion hazard areas" means those areas identified by the U.S. Department of Agriculture National Resources Conservation Service as having a "moderate to severe," "severe" or "very severe" rill and inter-rill erosion hazard and/or those areas containing soils which, according to the USDA Soil Conservation Service Soil Classification System, may experience severe to very severe erosion hazard.

"Exotic" means any species of plants or animals which are foreign to the planning area.

"Extirpate" means to destroy completely, or wipe out.

"Fair market value" of a development is the open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials;

"Feasible" means, for the purpose of this chapter, that 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 provides a reasonable likelihood of achieving its intended purpose; and
- C. The action does not physically preclude achieving the project's primary intended legal use.

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.

"Fill" means the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

"Fish and wildlife habitat conservation areas" means areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created as designated by WAC 365-190-080(5). These areas include:

- A. areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;
- B. habitats of local importance, including but not limited to areas designated as priority habitat by the Washington State Department of Fish and Wildlife;
- C. naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate adverse impacts to ponds;
- D. waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington;
- E. lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

- F. state natural area preserves and natural resource conservation areas; and
- G. land essential for preserving connections between habitat blocks and open spaces.

"Flood" or "flooding" means 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 insurance map" means the official map on which the Federal Insurance Administration has delineated the areas of special flood hazards and include the risk premium zones applicable to the community. Also known as "flood insurance rate map" or "FIRM."

"Flood insurance study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the flood boundary-floodway map, and the water surface elevation of the base flood.

"Flood protection elevation" means an elevation that is one foot above the elevation of the "100-year" flood.

"Flood resistant material" means materials designed to be resistant to the adverse impacts associated with flooding and defined and described in detail in the Federal Emergency Management Agency's Technical Bulletin #2-93, 1993 and FEMA publication FEMA-348, Protecting Building Utilities from Flood Damage.

"Floodplain" is synonymous with one-hundred-year floodplain and means that land area susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulation maps or a reasonable method which meets the objectives of the Act.

"Floodway" means the area established in Federal Emergency Management Agency flood insurance rate maps or floodway maps.

"Flood control" means any undertaking for the conveyance, control, and dispersal of floodwaters caused by abnormally high direct precipitation or stream overflow.

"Forest practices" means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, including but not limited to: road and trail construction; harvesting, final and intermediate; precommercial thinning; reforestation; fertilization; prevention and suppression of diseases and insects; salvage of trees; and brush control. Forest practice shall not include preparatory work such as tree marking, surveying and road flagging, and removal or harvesting of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms, and other products which cannot normally be expected to result in damage to forest soils, timber, or public resources.

"Forested wetland" means a wetland with at least 30 percent of the surface area covered by woody vegetation greater than 20 feet in height that is at least partially rooted within the wetland.

"Formation" means an assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

"Formation, confining" means the relatively impermeable formation immediately overlying a confined aquifer.

"Frequently flooded areas" or "flood hazard areas" are lands in the floodplain subject to a one percent or greater chance of flooding in any given year. These areas could include, but are not limited to, streams, lakes, wetlands and their associated floodplains, flood fringes or the Federal Emergency Management Agency floodway. A flood hazard area consists of the following components which shall be determined through a required special study or other available floodplain data.

- A. "Floodplain" means the total area subject to inundation by the base flood.
- B. "Flood fringe" means that portion of the floodplain outside of the FEMA floodway which is covered by floodwaters during the base flood; it is generally associated with standing water rather than rapidly flowing water.
- C. "Federal Emergency Management Agency (FEMA) floodway" means the channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow without increasing the base flood elevation more than one foot.

"Functions and values," for purposes of BMC 13.13, means the beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement; fish and wildlife habitat; food chain support; flood storage, conveyance and attenuation; groundwater recharge and discharge; erosion control; wave attenuation; protection from hazards; historical, archaeological, and aesthetic value protection; educational opportunities; and recreation. These beneficial roles are not listed in order of priority. Critical area functions can be used to help set targets (species composition, structure, etc.) for managed areas, including mitigation sites.

"Geotechnical report" or "geotechnical analysis" means 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 adverse 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" means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

"Geologically hazardous areas" means areas that may not be suited to development consistent with public health, safety, or environmental standards, because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-080(4). Types of geologically hazardous areas include erosion, landslide, and seismic hazards.

"Groin" means a barrier type of structure extending from the stream bank into a waterbody for the purpose of the protection of a shoreline and adjacent uplands by influencing the movement of water or deposition of materials.

"Groundwater" means water in a saturated zone or stratum beneath the surface of land or a surface water body.

"Groundwater management area" means a specific geographic area or subarea designated pursuant to Chapter 173-100 WAC for which a groundwater management program is required.

"Groundwater management program" means a comprehensive program designed to protect groundwater quality, to ensure groundwater quantity, and to provide for efficient management of water resources while recognizing existing groundwater rights and meeting future needs consistent with local and state objectives, policies, and authorities within a designated groundwater management area or subarea and developed pursuant to Chapter 173-100 WAC.

"Groundwater, perched" means groundwater in a saturated zone is separated from the underlying main body of groundwater by an unsaturated rock zone.

"Guidelines" means those standards adopted by the department to implement the policy of chapter 90.58 RCW for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards shall also provide criteria for local governments and the department in developing and amending master programs.

"Habitat" means the place or type of site where a plant or animal naturally or normally lives and grows.

"Habitat conservation areas" means areas designated as fish and wildlife habitat conservation areas.

"Habitats of local importance" areas include 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 might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alterations such as cliffs, talus, and wetlands. (WAC 365-190-030)

"Hard structural shoreline stabilization" means shore erosion control practices using hardened structures that armor and stabilize the shoreline from further erosion. Hard structural shoreline stabilization typically uses concrete, boulders, dimensional lumber or other materials to construct linear, vertical or near-vertical faces that are located at or waterward of ordinary high water, as well those structures located on average within five (5) feet landward of OHWM. These may include bulkheads, rip-rap, retaining walls and similar structures.

"Hazard areas" means areas designated as frequently flooded areas or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geological condition.

"Height" is measured from average grade level to the highest point of a structure: Provided, that television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where such appurtenances obstruct the view of the shoreline of a substantial number of residences on areas adjoining such shorelines: Provided further, that temporary construction equipment is excluded in this calculation.

"Hazardous substances" means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or 173-303-100.

"Health and social services" means establishments providing health care and social assistance for individuals including but not limited to hospitals, medical, dental, psychological, psychiatric, osteopathic, naturopathic, chiropractic, physical therapy or other clinics, and pharmacies.

"High intensity land use" means land uses which are associated with high levels of human disturbance or substantial adverse habitat impacts including, but not limited to, medium- and high-density residential (more than one home per five acres), multifamily residential, some agricultural practices, and commercial and industrial land uses.

"High quality wetlands" means those wetlands that meet the following criteria:

- A. no, or isolated, human alteration of the wetland topography;
- B. no human-caused alteration of the hydrology or the wetland appears to have recovered from the alteration;
- C. low cover and frequency of exotic plant species;
- D. relatively little human-related disturbance of the native vegetation, or recovery from past disturbance;
- E. if the wetland system is degraded, it still contains a viable and high quality example of a native wetland community; and
- F. no known major water quality problems.

"Historic condition" means condition of the land, including flora, fauna, soil, topography, and hydrology that existed before the area and vicinity were developed or altered by human activity.

"Hydraulic Project Approval (HPA)" means the permit issued by the Washington State Department of Fish and Wildlife pursuant to the State Hydraulic Code Chapter 77.55 RCW.

"Hydric soil" means soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper soil horizon(s), thereby influencing the growth of plants.

"Hydrologic soil groups" means soils grouped according to their runoff-producing characteristics under similar storm and cover conditions. Properties that influence runoff potential are depth to seasonally high water table, intake rate and permeability after prolonged wetting, and depth to a low permeable layer. Hydrologic soil groups are normally used in equations that estimate runoff from rainfall, but can be used to estimate a rate of water transmission in soil. There are four hydrologic soil groups:

- A. low runoff potential and a high rate of infiltration potential;
- B. moderate infiltration potential and a moderate rate of runoff potential;
- C. slow infiltration potential and a moderate to high rate of runoff potential; and
- D. high runoff potential and very slow infiltration and water transmission rates.

"Hydrophytic vegetation" means macrophytic plant life 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 following the methods described in the Washington State Wetland Identification and Delineation Manual.

"Hyporheic zone" means the saturated zone located beneath and adjacent to streams that contains some portion of surface waters, serves as a filter for nutrients, and maintains water quality.

"Impact" means the effects or consequences of actions, inclusive of adverse and beneficial effects or consequences to critical areas and their associated buffers.

"Impact, adverse" means the effects or consequences of actions, activities, construction and programs that injure, endanger, degrade or result in the loss of functions and values of a critical area or areas and their associated buffers.

"Impervious surface" means a hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development, and/or a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of storm water. Open, uncovered retention/detention facilities, turf, landscaping and natural vegetation shall not be considered as impervious surfaces.

"In-kind compensation" means to replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement "in category."

"Infiltration" means the downward entry of water into the immediate surface of soil.

"Injection Well(s)"

- A. "Class I" means a well used to inject industrial, commercial, or municipal waste fluids beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water.
- B. "Class II" means a well used to inject fluids:
 1. Brought to the surface in connection with conventional oil or natural gas exploration or production and may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as dangerous wastes at the time of injection;
 2. For enhanced recovery of oil or natural gas; or
 3. For storage of hydrocarbons that are liquid at standard temperature and pressure.
- C. "Class III" means a well used for extraction of minerals, including but not limited to the injection of fluids for:
 1. In-situ production of uranium or other metals that have not been conventionally mined;

2. Mining of sulfur by Frasch process; or
 3. Solution mining of salts or potash.
- D. "Class IV" means a well used to inject dangerous or radioactive waste fluids.
- E. "Class V" means all injection wells not included in Classes I, II, III, or IV.

"Industry" means facilities for processing, manufacturing, and storage of finished or semi-finished goods, power generating facilities, major repair, storage and repair of large vehicles or heavy equipment, related storage of fuels, warehousing construction contractors' offices and material/equipment storage yards, wholesale trade or storage, together with necessary accessory uses such as parking, loading, and waste storage and treatment.

"In-kind compensation" means to replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement "in category."

"In-stream structures" are placed by humans within a stream or river waterward of the OHWM that either cause or have the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

"Inter-rill" means areas subject to sheet wash.

"Invasive Species" means a species that is non-native to the Puget Sound ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health."

"Isolated wetlands" means those wetlands that are outside of and not contiguous to any 100-year floodplain of a lake, river, or stream and have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

"Landslide hazard areas" means areas that are potentially subject to risk of mass movement due to a combination of geologic landslide resulting from a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope gradient, slope aspect, geologic structure, groundwater, or other factors.

"Low intensity land use" means land uses which are associated with low levels of human disturbance or low habitat impacts, including, but not limited to, passive recreation, open space, or forest management land uses.

"Lowest floor" means the lowest floor of the lowest enclosed area, including the basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, which is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable requirements of this chapter.

"Marina" means a private or public facility providing the purchase and or lease of a slip for storing, berthing and securing motorized boats or watercraft, including both long-term and transient moorage. Marinas may include accessory facilities for providing incidental services to

users of the marina, such as waste collection, boat sales or rental activities, and retail establishments providing repair or service of boats.

"May" means the action is acceptable, provided it conforms to the provisions of Ecology Guidelines in WAC 173-26.

"Mitigation" or "Mitigation Sequencing" means the process necessary to avoid, minimize or reduce, or compensate for the adverse environmental impact(s) of a proposal (see WAC 197-11-768 and WAC 173-26-201(2.e)). Mitigation or mitigation sequencing means the following sequence of steps listed in order of priority, with A. of this subsection being top priority:

- A. avoiding the adverse impact altogether by not taking a certain action or parts of an action;
- B. minimizing adverse 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 adverse impact by repairing, rehabilitating, or restoring the affected environment;
- D. reducing or eliminating the adverse impact over time by preservation and maintenance operations;
- E. compensating for the adverse impact by replacing, enhancing, or providing substitute resources or environments; and
- F. monitoring the adverse impact and the compensation projects and taking appropriate corrective measures.

"Manufactured home," as defined under WAC 296-150M-0020, means a single-family dwelling unit built according to the United States Department of Housing and Urban Development (HUD) Manufactured Home Construction and Safety Standards Act, which is a national, preemptive building code.

"Mixed Use, Water Dependent and Non-water-oriented" means a use that contains a mix of water-oriented and non-water oriented uses or development. This definition is only applicable within Shoreline Jurisdiction.

"Mixed Use Commercial and Residential" means a development that combines uses vertically or horizontally on the same site to create a compact development meeting multiple needs of residents and businesses.

"Mobile/manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more mobile and/or manufactured home lots for rent or sale.

"Moderate intensity land use" means land uses which are associated with moderate levels of human disturbance or substantial adverse habitat impacts including, but not limited to, low-density residential (no more than one home per five acres), active recreation, and moderate agricultural land uses.

"Monitoring" means evaluating the adverse impacts of development proposals on the biological, hydrological, and geological elements of such systems, and assessing the performance of

required mitigation measures throughout the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features, including gathering baseline data.

"Moorage facility" means a marina, dock, mooring buoy, or any other similar fixed moorage site.

"Must" means a mandate; the action is required.

"Native vegetation" means plant species that are indigenous to the area in question.

"Native growth protection area (NGPA)" means an area where native vegetation is preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants and animal habitat;

"Natural or existing topography" means the topography of the lot, parcel, or tract of real property immediately prior to any site preparation or grading, including excavation or filling;

"Natural waters" means waters, excluding water conveyance systems that are artificially constructed and actively maintained for irrigation.³

"No Net Loss of Ecological Function" means a public policy goal and requirement to maintain the aggregate total of the City's shoreline ecological functions at its current level. For purposes of reviewing and approving this SMP, "current" is equivalent to the date of the Final Shoreline Analysis Report (February 2011). 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 processes relative to the legal condition just prior to the proposed development and/or use.

"Nonconformity" means a use of land or a structure which was lawful when established and which does not now conform to the use regulations of the zone in which it is located. A use shall be considered established if it conformed to applicable zoning regulations at any time, or when it has commenced under permit, a permit for the use has been granted and has not expired, or a structure to be occupied by the use is substantially underway as defined in the International Building Code.

"Non-indigenous." See "Exotic."

"Non-water-oriented uses" means those uses that are not water-dependent, water-related, or water-enjoyment. A use which does not need a shoreline location to successfully operate is considered non-water oriented; for example a bowling alley is a recreation use but is not related to enjoyment of the water and does not require a location along a shoreline to function.

"Normal repair" means activities that restore the character, size or scope of a project only to the previously authorized condition within a reasonable period after decay or partial destruction, excepting that repair involving total replacement which is not common practice or causes substantial adverse effects to the shoreline resource or environment shall not be construed as normal repair (WAC 173-27-040(2b) See also "Normal Maintenance".

"Noxious weed" means any non-native plant that, once established, is highly destructive, competitive and difficult to control, such as Himalayan blackberry, English ivy, Eurasian watermilfoil, or Scotch broom, and listed on the King or Snohomish County noxious weed lists.

"Off-site compensation" means to replace critical areas, critical area functions, or shoreline ecological functions away from the site on which a critical area or shoreline has been adversely impacted.

"On-site compensation" means to replace critical areas, critical area functions, or shoreline ecological functions at or adjacent to the site on which a critical area or shoreline has been adversely impacted.

"Out-of-kind compensation" means to replace critical areas, critical area functions, or shoreline ecological functions with substitute critical areas, critical area functions, or shoreline ecological functions whose characteristics do not closely approximate those destroyed or degraded. It does not refer to replacement "out-of-category."

"Ordinary high water mark" (often abbreviated OHWM) means that mark on all lakes, streams, and tidal waters that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland in respect to vegetation as that condition exists on June 1, 1971 or as it may naturally change thereafter; or as it may change thereafter in accordance with permits issued by the City or the 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 fresh water shall be the line of mean high water.

"Performance standard" means regulations, which include bulk and dimensional standards that are applied to the design and function of a development or use.

"Perched groundwater." See "Groundwater, perched."

"Permeability" means the capacity of an aquifer or confining bed to transmit water. It is a property of the aquifer or confining bed and is independent of the force causing movement.

"Permit" means any substantial development, variance, conditional use permit, or revision authorized under chapter 90.58 RCW.

"Pier" means an over-water, fixed, pile-supported structure that does not float on the water's surface and provides a location for boat moorage.

"Planning Area" means the totality of the Bothell city limits and its municipal urban growth area and potential annexation areas within the City's shoreline jurisdiction. When listed similar to "city limits and planning area" the phrase planning area refers to the unincorporated portions of the shoreline jurisdiction.

"Platform, fishing or viewing" means a raised level surface constructed along the shoreline and overwater allowing the public to view the shoreline and waterbody, and where specified, to fish.

"Pollutant" means any substance that has been or may be determined to cause or tend to cause injurious, corrupt, impure, or unclean conditions when discharged to surface water, air, ground, sanitary sewer system, or storm drainage system.

"Pollution" means such contamination, or other alteration of the physical, chemical, or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

"Porous soil types" means soils, as identified by the National Resources Conservation Service, U.S. Department of Agriculture, that contain voids, pores, interstices, or other openings which allow the passing of water.

"Potable water" means water that is safe and palatable for human use.

"Practical alternative" means an alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and has less adverse impacts to critical areas.

"Preferred uses" means uses which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline, single-family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, docks, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. (See RCW 90.58.020).

"Primary association area" means the area used on a regular basis by, is in close association with, or is necessary for the proper functioning of the habitat of a critical species. "Regular basis" means that the habitat area is normally or usually known to contain a critical species or, based on known habitat requirements of the species, the area is likely to contain the critical species. Regular basis is species and population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

"Priority habitat" means a habitat type or elements with unique or significant value to one or more species. An area classified and mapped as priority habitat by the state Department of Fish and Wildlife must have one or more of the following attributes:

- A. comparatively high fish or wildlife density;
- B. comparatively high fish or wildlife species diversity;
- C. fish spawning habitat;
- D. important wildlife habitat;
- E. important fish or wildlife seasonal range;
- F. important fish or wildlife movement corridor;
- G. rearing and foraging habitat;
- H. refugia habitat;

- I. limited availability;
- J. high vulnerability to habitat alteration; or
- K. unique or dependent species.

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 wetlands). 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 talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife.

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

- A. Criterion 1. State-listed or state Candidate species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State and Candidate 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.
- B. Criterion 2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. Examples include heron colonies, seabird concentrations, and marine mammal congregations.
- C. 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.
- D. Criterion 4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

"Project area" means all areas within 50 feet of the area proposed to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures. When the action binds the land, such as a subdivision, short subdivision, binding site plan, planned unit development, or rezone, the project area shall include the entire parcel, at a minimum.

"Public access" means a technique or mode of physical approach to and along the shoreline made available to the general public. This may also include visual approach.

"Public interest" means 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 a use or development.

"Qualified professional" means a person with experience and training in the pertinent discipline, and who is a qualified expert with expertise appropriate for the relevant critical area or shoreline

subject. A qualified professional must have obtained a B.S., B.A. or equivalent degree or certification in biology, engineering, environmental studies, fisheries, geomorphology, landscape architecture, forestry or related field, and two years of related work experience.

- A. A qualified professional for wildlife, habitats or wetlands must have a degree in biology, zoology, ecology, fisheries, or related field, and professional experience.
- B. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.
- C. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.
- D. A qualified professional for vegetation management must be a registered landscape architect, certified arborist, biologist, or professional forester with a corresponding degree or certification.

"Recharge" means the process involved in the absorption and addition of water to groundwater.

"Reclaimed water" means municipal wastewater effluent that has been adequately and reliability treated so that it is suitable for beneficial use. Following treatment it is no longer considered wastewater (treatment levels and water quality requirements are given in the water reclamation and reuse standards adopted by the state Departments of Ecology and Health).

"Recreation vehicle" means a vehicle that is:

- A. built on a single chassis;
- B. four hundred square feet or less when measured at the largest horizontal projection;
- C. designed to be self-propelled or permanently towable by a light duty truck; and
- D. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Recreation" means an experience or activity in which an individual engages for personal enjoyment and satisfaction. Shore-based outdoor recreation includes but is not limited to fishing; various forms of boating, swimming, hiking, bicycling, horseback riding, picnicking, watching or recording activities such as photography, painting, bird watching or viewing of water or shorelines, nature study and related activities.

"Recreational uses" refers to uses which offer activities, pastimes, and experiences that allow for the refreshment of mind and body. Examples include, but are not limited to, parks, viewpoints, trails, public access facilities, public parks, and other low-intensity use outdoor recreation areas. Recreational uses that do not require a shoreline location, nor are related to the water, nor provide significant public access, are considered non-water-oriented. For example, a recreation use solely offering indoor activities would be considered non-water-oriented.

"Residential" means buildings, structures or portions thereof that are designed and used as a place for human habitation. Included are single, duplex or multi-family dwellings, apartment/condominium buildings, manufactured homes, modular homes, and other structures that serve to house people. This definition includes accessory uses common to normal

residential use, including but not limited to, residential appurtenances, accessory dwelling units, home occupations, and family or adult day care homes.

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

"Restoration", for purposes of critical areas management under BMC 13.13, Critical Areas in Shoreline Jurisdiction, also means measures taken to restore an altered or damaged natural feature including:

- A. Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and
- B. Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

"Revegetation" means the planting of vegetation to cover any land areas that have been disturbed during construction. This vegetation shall be maintained to insure its survival and shall be consistent with planting requirements of the Bothell Municipal Code.

"Rills" means steep-sided channels resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery. Rill erosion tends to occur on slopes, particularly steep slopes with poor vegetative cover.

"Riparian habitat" means areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

"Riprap" means a layer, facing, or protective mound of stone placed on shoulders, slopes, or other such places to protect them from erosion, scour, or sloughing of a structure or embankment; also, the stone so used.

"Runoff" means water that is not absorbed into the soil, but rather flows along the ground surface following the topography. Sometimes called "surface water." See also definition of "Stormwater runoff" for definition of sub-category of runoff.

"Salmonid(s)" means a member of the fish family Salmonidae. In the vicinity of Bothell's planning area, these include Chinook, coho, chum, sockeye, and pink salmon; cutthroat, brook, brown, rainbow, steelhead and cutthroat salmon; cutthroat, brook and brown trout; and Brook and Dolly Varden char, kokanee, and whitefish.

"Scrub-shrub wetland" means a wetland with at least 30 percent of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

"Section 404 permit" means a permit issued by the U.S. Army Corps of Engineers for the placement of dredge or fill material or clearing in waters of the United States, including wetlands, in accordance with 33 USC Section 1344. Section 404 permits may also be for endangered species consultation. They require a consultation under Section 7 of the Federal Endangered Species Act.

"Sediment" means the fine-grained material deposited by water or wind.

"Seeps" means a spot where water oozes from the earth, often forming the source of a small stream.

"Seismic hazard areas" means areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

"SEPA" means State Environmental Policy Act.

"SEPA Checklist" refers to the form required of some projects under SEPA to identify the probable significant adverse impacts on the quality of the environment. The checklist helps to reduce or avoid adverse impacts from a proposal, and help the responsible governmental agency decide whether a full environmental impact statement (EIS) is required (WAC 197-11-960).

"Serviceable" means presently usable.

"Shall" means a mandate; the action must be done.

"Shoreline Administrator" means the Director of Community Development or his/her designee.

"Shoreline areas" and "shoreline jurisdiction" means all "shoreslines of the state" and "shorelands" as defined in RCW 90.58.030.

"Shoreline Master Program (SMP)" means 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 SMP approved under chapter 90.58 RCW shall be considered an element of the City's comprehensive plan. All other portions of the SMP adopted under chapter 90.58 RCW, including use regulations, shall be considered a part of the City's development regulations.

"Shoreline modifications" means those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a levee, breakwater, dock, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

"Shoreline stabilization" means structural or non-structural modifications to the existing shoreline intended to reduce or prevent erosion of uplands. They are generally located parallel to the shoreline at or near the OHWM.

"Should" means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the SMA and this chapter, against taking the action.

"Sign" means any device, structure, fixture, or placard that uses colors, words, letters, numbers, symbols, logos or trademarks for the purpose of providing information or directions, or identifying or advertising any place, establishment, product, good, or service and includes all supports, braces, guy wires and anchors associated with such signs.

"Significant adverse environmental impacts" means, a reasonable likelihood of more than a moderate adverse impact on environmental quality. This term will vary from one site to another because of the environmental conditions at and surrounding the subject property, the specific features of the subject property, and the judgment of the Shoreline Administrator.

"Significant portion of its range" means that portion of a species range likely to be essential to the long-term survival of the population in Washington.

"Significant vegetation removal" means the removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes adverse ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

"Soil survey" means the most recent soil survey for the local area or county by the National Resources Conservation Service, U.S. Department of Agriculture.

"Sole source aquifer." See "Aquifer, sole source."

"Soft structural shoreline stabilization" means shore erosion control and restoration practices that contribute to restoration, protection or enhancement of shoreline ecological functions. Soft shoreline stabilization typically includes a mix of gravels, cobbles, boulders, logs and/or native vegetation placed to provide shore stability typically in a non-linear, non-vertical arrangement.

"Special flood hazard areas" means the land in the floodplain within an area subject to a one percent or greater chance of flooding in any given year. Designations of special flood hazard areas on flood insurance map(s) always include the letters A or V.

"Special protection areas" means aquifer recharge areas defined by WAC 173-200-090 that require special consideration or increased protection because of unique characteristics, including, but not limited to:

- A. groundwaters that support an ecological system requiring more stringent criteria than drinking water standards;
- B. groundwater recharge areas and wellhead protection areas that are vulnerable to pollution because of hydrogeologic characteristics; and
- C. sole source aquifer status.

"Species" means any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

"Species, endangered" means any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

"Species of local importance" means those species of local concern due to their population status or their sensitivity to habitat manipulation, or that are game species.

"Species, priority" means any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence as genetically viable population levels as classified by the Washington State Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

"Species, threatened" means any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

"State Environmental Policy Act (SEPA)" means a state law at RCW 43.21C which requires state agencies, local governments and other lead agencies to consider environmental impacts when making most types of permit decisions, especially for development proposals of a significant scale.

"Stormwater runoff" means the water that runs off surfaces such as rooftops, paved streets, highways, and parking lots. It can also come from hard grassy surfaces like lawns, play fields, and from graveled roads and parking lots.

"Stream" or "watercourse" means any portion of a channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state, including areas in which fish may spawn, reside, or pass, and tributary waters with defined bed or banks, which influence the quality of fish habitat downstream. This includes watercourses which flow on an intermittent basis or which fluctuate in level during the year and applies to the entire bed of such watercourse whether or not the water is at peak level. This definition does not include irrigation ditches, canals, stormwater run-off devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans.

"Structure" means 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;

"Sub-drainage basin" or "subbasin" means the drainage area of the highest order stream containing the subject property impact area. Stream order is the term used to define the position of a stream in the hierarchy of tributaries in the watershed. The smallest streams are the highest order (first order) tributaries. These are the upper watershed streams and have no tributaries of their own. When two first order streams meet, they form a second order stream, and when two second order streams meet they become a third order stream, and so on.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

"Substantially degrade" means to cause significant adverse ecological impact.

"Substantial development" means any development that:

- A. pursuant to WAC 173-27-040(2)(a), the total cost or fair market value exceeds the five thousand dollars as adjusted for inflation by the office of financial management, based upon changes in the consumer price index during that time period. "Consumer price index" means, for any calendar year, that year's annual average consumer price index, Seattle, Washington area, for urban wage earners and clerical workers, all items, compiled by the Bureau of Labor and Statistics, United States Department of Labor. The total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state as. The total cost or fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials ; or
- B. materially interferes with the normal public use of the water or shorelines of the state.

A list of developments not considered substantial development is provided in BMC 13.17.040.

"Substantial improvement" means any repair, reconstruction or improvement of a structure, the total cost or fair market value of which exceeds 50 percent of the market value of the structure either:

- A. before the improvement or repair is started; or
- B. if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

- A. any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
- B. any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places, or the Bothell Register of Historic Landmarks.

The term "substantial improvement" does not mean the same as the term "substantial development" as utilized in BMC Title 13, Shoreline Management.

"Transmit" means to send from one person or place to another by mail or hand delivery. The date of transmittal for mailed items is the date that the document is certified for mailing or, for hand-delivered items, is the date of receipt at the destination;

"Transportation" means roads and railways, related bridges and culverts, fills, embankments, causeways, parking areas, and trails.

"Unavoidable" means adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

"Upland" means the area above and landward of the ordinary high water mark.

"Use" or "Use Activity" means the purpose for which the land, or building thereon, is designed, arranged or intended, or for which it is occupied or maintained and shall include any manner of performance or operation of such activity with respect to the provision of this title. The definition of "use" also includes the definition of "development."

"Utility" means a primary or accessory service or facility that produces, transmits, stores, processes, or disposes of electrical power, gas, water, sewage, communications, oil, and the like.

"Variance" is a means to grant relief from the specific bulk, dimensional or performance standards set forth in the SMP and not a means to vary a use of a shoreline;

"Vegetation stabilization" means planting of vegetation upon shoreline banks, slopes, or berms to retain soil and retard erosion from surface run-off; planting of aquatic vegetation offshore to reduce wave action and retain bottom materials; and utilizing temporary structures or netting to enable plants to establish in unstable areas.

"Vessel" includes ships, boats, barges, or any other floating craft which are designed and used for navigation and do not interfere with the normal public use of the water.

"Vulnerability" means the combined effect of susceptibility to contamination and the presence of potential contaminants.

"Water-dependent use" means a use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations. Examples include swimming beaches, boat launches, docks, and marinas.

"Water-enjoyment use" means a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment. Examples include parks and trails, restaurants, museums, aquariums, scientific/ecological reserves, resorts/hotels (as part of mixed use development or with significant public access or restoration components), and mixed-use commercial/office.

"Water-oriented use" means a use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

"Water quality" means the physical characteristics of water within shoreline jurisdiction, including water quantity, 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 SMP and affecting water quantity, such as impermeable surfaces and storm water 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 90.03.250 through 90.03.340.

"Water-related use" means 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:

- A. The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or
- B. The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Examples of water-related uses may include dry boat storage with onsite launching mechanisms, boat repair and maintenance, gravel storage when transported by boats or barges, warehousing of goods transported by water, hydroelectric generating plants, and agriculturally related water transportation systems.

"Water resource inventory area (WRIA)" means one of 62 watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

"Water table" means that surface in an unconfined aquifer at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the aquifer just far enough to hold standing water.

"Water table aquifer." See "Aquifer, unconfined."

"Water typing system" means waters classified according to WAC 222-16-030 as follows:

- A. "Type S water" means all waters, within their bankfull width, as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW including periodically inundated areas of their associated wetlands.
- B. "Type F water" means segments of natural waters other than Type S waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which in any case contain fish habitat or are described by one of the following four categories:
 1. Waters, which are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type F water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;
 2. Waters, which are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type F water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality. The department may allow additional harvest beyond the requirements of Type F water designation provided the department determines after a landowner-requested on-site assessment by the Department of Fish and Wildlife, Department of Ecology, the affected tribes and interested parties that:

- a. The management practices proposed by the landowner will adequately protect water quality for the fish hatchery; and
- b. Such additional harvest meets the requirements of the water type designation that would apply in the absence of the hatchery;
3. Waters, which are within a federal, state, local, or private campground having more than 10 camping units; provided, that the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit, trail or other park improvement;
4. Riverine ponds, wall-based channels, and other channel features that are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:
 - a. The site must be connected to a fish habitat stream and accessible during some period of the year; and
 - b. The off-channel water must be accessible to fish.
- C. "Type Np water" 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. If the uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see board manual, section 23), then Type Np waters begin at a point along the channel where the contributing basin area is at least 52 acres;
- D. "Type Ns water" 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, non-fish 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 Type S, F, or Np waters.
- E. For purposes of this section:
 1. "Residential unit" means a home, apartment, residential condominium unit or mobile home, serving as the principal place of residence.
 2. "Camping unit" means an area intended and used for:
 - a. Overnight camping or picnicking by the public containing at least a fireplace, picnic table and access to water and sanitary facilities; or
 - b. A permanent home or condominium unit or mobile home not qualifying as a "residential unit" because of part-time occupancy.
 3. "Public accommodation facility" means a business establishment open to and licensed to serve the public, such as a restaurant, tavern, motel or hotel.
 4. "Natural waters" only excludes water conveyance systems which are artificially constructed and actively maintained for irrigation.

5. "Seasonal low flow" and "seasonal low water" mean the conditions of the seven-day, two-year low water situation, as measured or estimated by accepted hydrologic techniques recognized by the department.
6. "Channel width and gradient" means a measurement over a representative section of at least 500 linear feet with at least 10 evenly spaced measurement points along the normal stream channel but excluding unusually wide areas of negligible gradient such as marshy or swampy areas, beaver ponds and impoundments. Channel gradient may be determined utilizing stream profiles plotted from United States Geological Survey topographic maps.
7. "Intermittent streams" means those segments of streams that normally go dry.
8. "Fish habitat" means 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.

"Watercourse." See "Stream."

"Watershed restoration plan" means a plan, developed or sponsored by the Department of Fish and Wildlife, the Department of Ecology, the Department of Natural Resources, the Department of Transportation, a federally recognized Indian tribe acting within and pursuant to its authority, a city, a county, or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a stream, stream segment, drainage area, or watershed for which agency and public review has been conducted pursuant to chapter 43.21C RCW, SEPA In the City of Bothell, the Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan (2005, or as amended) and the City of Bothell's Shoreline Restoration Plan (2011, or as amended) are important watershed restoration plans that are consistent with this definition.

"Weir" means a structure generally built perpendicular to the shoreline for the purpose of diverting water or trapping sediment or other moving objects transported by water.

"Well" means a bored, drilled, or driven shaft, or a dug hole whose depth is greater than the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

"Wellhead protection area (WHPA)" means the portion of a zone of contribution for a well, well field, or spring, as defined using criteria established by the Washington State Department of Ecology.

"Wetland classes," "classes of wetlands," or "wetland types" means the descriptive classes of the wetlands taxonomic classification system of the Washington State Wetland Rating System for Western Washington (revised), Department of Ecology publication #04-06-025.

"Wetland edge" means the boundary of a wetland as delineated based on the definitions contained in this chapter.

"Wetland mosaic" means an area with a concentration of multiple small wetlands, in which each patch of wetland is less than one acre; on average, patches are less than 100 feet from each other; and areas delineated as vegetated wetland are more than 50% of the total area of the entire mosaic, including uplands and open water.

"Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands if permitted by the City (RCW 36.70A.030(21)).

"Zone of contribution" means the area surrounding a well or spring that encompasses all areas or features that supply groundwater recharge to the well or spring.

13.05 Shoreline Jurisdiction

A. As defined by the SMA of 1971, shorelines include certain waters of the state plus their associated "shorelands." The City of Bothell's shoreline jurisdiction includes the following (see Figure 13.05-1):

1. shoreline waterbody,
2. ordinary high water mark plus upland 200 feet,
3. floodways,
4. floodplain areas including the 100-year floodplain, and
5. associated wetlands.

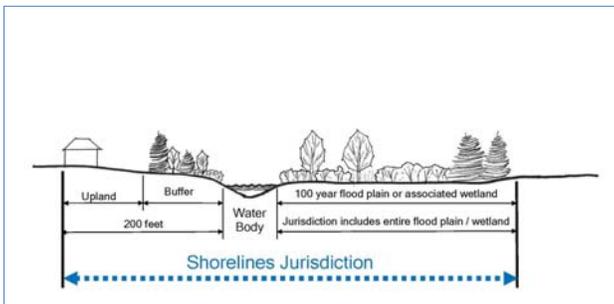


Figure 13.05-1. Shoreline Jurisdiction Illustration

B. The City's regulated shorelines include:

1. the Sammamish River throughout the city limits; and
 2. North Creek throughout the city limits.
- C. The City has pre-designated the following shorelines in the planning area outside the city limits, which are effective upon annexation:
1. North Creek south of 196th Street SE to the northern city limits; and
 2. Swamp Creek just west of Locust Way along Cypress Way throughout the planning area located west of the current City limits.
- D. Shoreline jurisdiction is not by itself considered a critical area under the Act except to the extent that specific areas located within shoreline jurisdiction qualify for critical area designation based on the definition of critical areas in BMC Chapter 14.04. Critical areas within shoreline jurisdiction include flood hazard areas; wetlands; fish and wildlife conservation areas including tributary streams such as Horse Creek, Coal Creek and others; geologic hazard areas; and potential aquifer recharge areas.

13.07 Shoreline Environment Designations

The following environment designations have been developed based on current and planned land use and current shoreline ecological conditions. Shoreline development shall be consistent with underlying zoning as modified by the shoreline environment designation overlays.

The following shoreline environment purposes, designation criteria and management policies are intended to provide direction to the City when assigning shoreline environment designations, interpreting the regulations and provide direction when evaluating Shoreline Conditional Use and Variance applications.

13.07.010 Natural

- A. Purpose: The purpose of the "Natural" environment is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low-intensity uses be allowed in order to maintain the ecological functions and ecosystem-wide processes.
- B. Designation Criteria: Natural environment designation should be assigned to shoreline areas if any of the following characteristics apply:
1. The shoreline area is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity;
 2. The shoreline area is considered to represent ecosystems that are of particular scientific and educational interest, such as high-quality wetlands; or
 3. The shoreline is unable to support new development or uses without significant adverse impacts to ecological functions or risk to human safety.

C. Management Policies:

1. Any use or development activity that would degrade the ecological functions or adversely alter the natural character of the shoreline area should be severely limited or prohibited.
2. Development activity in the Natural environment should only be permitted when no suitable alternative site is available on the subject property outside of shoreline jurisdiction.
3. The following new uses should not be allowed in the Natural environment:
 - a. commercial uses;
 - b. industrial uses;
 - c. non-water-oriented recreation; and
 - d. roads, utility corridors, and parking areas that can be located outside of Natural-designated shorelines.
4. Single-family residential development may be allowed as a conditional use within the Natural environment if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of the environment.
5. Commercial forestry is prohibited.
6. Development, when feasible, should be designed and located to preclude the need for shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications.
 - a. development activity or land surface modification that would reduce the capability of vegetation to perform normal ecological functions should be prohibited.
 - b. subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions should not be allowed. Each new parcel must be able to support its intended development without significant adverse ecological impacts to the shoreline ecological functions.
7. Controlled and restricted access may be permitted for scientific, historical, cultural, educational and low-intensity water-oriented recreational purposes, provided there are no significant adverse ecological impacts.

13.07.020 Urban Conservancy

- A. Purpose: The purpose of the "Urban Conservancy" environment is to protect and restore ecological functions of open space, parks, floodplains and floodways and lands containing critical areas, where they exist in urban and developed settings, while allowing a variety of compatible uses.
- B. Designation Criteria: This designation is appropriate for lands:
1. containing or suitable for parks and recreation facilities or other water-enjoyment uses;
 2. designated for low density single-family uses;

3. suitable for water-related uses;
4. designated open space, floodplain or other sensitive areas that should not be more intensively developed;
5. having potential for ecological restoration;
6. retaining important ecological functions, even though partially developed; or
7. having potential for development that is compatible with ecological restoration.

C. Management Policies:

1. Allowed uses should be those that preserve the natural character of the area and/or promote restoration within critical areas and public open spaces either directly or over the long term.
2. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
3. Restoration of shoreline ecological functions should be a priority.
4. Development, when feasible, should be designed to ensure that any necessary shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications do not result in a net loss of shoreline ecological function or further degrade other shoreline values.
5. Public access and public recreation objectives should be implemented whenever feasible and significant adverse ecological impacts can be mitigated.
6. Water-oriented uses should be given priority over non-water-oriented uses. For shoreline areas adjacent to navigable waters, water-dependent uses should be given highest priority.
7. New non-water-oriented commercial and industrial uses, other than limited commercial activities, such as small concession stands conducted accessory to a public park, should be prohibited. In addition, water oriented accessory activities such as canoe or kayak rentals are allowed.

13.07.030 Shoreline Residential

- A. Purpose: The purpose of the "Shoreline Residential" environment is to accommodate current and planned residential development and appurtenant structures, as well as appropriate public access and recreational uses, in areas suited for urban densities.
- B. Designation Criteria: Properties should be designated as Shoreline Residential if they are predominantly single-family or multifamily residential development or are planned and platted for residential development. This designation is appropriate for residential uses on lands with underlying zoning classifications for detached and attached residential, excepting residential lands established as community activity centers within the Zoning Code.
- C. Management Policies:
1. Standards for density or minimum frontage width, setbacks, lot coverage limitations, lot dimensions, buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be set to assure no net loss of shoreline ecological

functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations and should mitigate adverse impacts to maintain shoreline ecological functions.

2. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
3. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Within attached residential developments, continuous public access along the shoreline should be provided, preserved or enhanced.
4. Multifamily and multi-lot residential and water-oriented recreational developments should provide joint use community recreational facilities.
5. Water-dependent recreational uses should be permitted.
6. Limited water-oriented commercial uses which depend on or benefit from a shoreline location should also be permitted provided the underlying zoning classifications permit such uses.

13.07.040 Marina

- A. Purpose: The purpose of the "Marina" environment is to provide an appropriate degree of special consideration for this ongoing water-dependent and water-related business that provides services related to boat moorage, boat repair, and upland boat storage. This use is currently unique in Bothell's shorelines.
- B. Designation Criteria: Assign a Marina environment designation to the Blue Heron Landing property and boat basin and other properties which may become marinas in the future.
- C. Management Policies:
1. Provisions for the operation and management of the Marina environment should be directed towards maintaining and enhancing water-dependent and water-related services, while ensuring that existing and future activity does not degrade ecological functions.
 2. Dimensional standards for new or modified over-water structures should allow for safe and efficient use of the marina, while contributing to the maintenance or improvement of current ecological conditions.
 3. Standards should be developed that require appropriate use of materials or techniques to enhance water quality protection and meet current health, safety, and welfare requirements.
 4. Aesthetic objectives should be implemented by means such as sign control regulations, screening and architectural standards, and maintenance of natural vegetative buffers where they exist.

13.07.050 High Intensity

- A. Purpose: The purpose of the "High Intensity" environment is to provide for intensive land uses, such as residential - activity centers, commercial, office, retail, transportation, warehouse, manufacturing, and mixed-used developments, together with appropriate accessory uses such as parking lots, utilities, and storage areas, in shoreline areas that have been previously degraded.
- B. Designation Criteria: Assign a High Intensity environment designation to shoreline areas within city limits and urban growth areas if they currently support high-intensity uses related to commerce, industry, transportation or navigation, or are suitable and planned for high-intensity water-oriented uses. A High Intensity - Park sub-classification has been created and is applied to the portion of the Park at Bothell Landing east of the extension of 98th Avenue NE. The High Intensity -Park designation more accurately reflects the nature, purpose and existing use of this urban park that contains buildings, an amphitheater, tot lots, canoe/kayak launch and parking as well as trails, plazas, and other recreation facilities along the Sammamish River.
- C. Management Policies:
1. Manage development so that it enhances and maintains the shorelines for a variety of urban uses, with priority given first to water-dependent uses, and second to water-related and water-enjoyment uses.
 2. Non water-oriented uses as they exist on or before **effective date of this Master Program** may be allowed as part of an existing development, or a mixed use development, or where they do not conflict with or limit opportunities for water-oriented uses, or on sites where there is no direct access to the shoreline, or when associated with public access or ecological restoration.
 3. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced.
 4. Aesthetic objectives should be implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers where they exist.
 5. Full utilization of existing High Intensity lands should be achieved before further expansion of the High Intensity designation is allowed.
 6. The uses and activities of parks within lands designated as High Intensity -Park shall be consistent with any City-adopted Park Master Plan and this SMP.
 7. No net loss of shoreline ecological functions as a result of new development should be assured by application of SMP policies and regulations.
 8. Where applicable, new development shall include environmental cleanup and restoration of the shoreline to comply in accordance with any relevant state and federal law.

13.07.060 Aquatic

- A. Purpose: The purpose of the "Aquatic" environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.
- B. Designation Criteria: Assign an Aquatic environment designation to lands waterward of the ordinary high water mark exclusive of the waterward lands associated with the Marina environment.
- C. Management Policies:
1. Provisions for the management of the Aquatic environment should be directed towards maintaining and restoring shoreline ecological functions.
 2. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
 3. The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.
 4. In order to reduce the adverse impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities such as bridges and docks should be encouraged.
 5. Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed except where necessary to achieve the objectives of the Act, and then only when their adverse impacts are mitigated according to mitigation sequencing as necessary to ensure no net loss of ecological functions.
 6. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to minimize adverse visual impacts, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
 7. New overwater structures such as docks, bridges, viewing platforms, and others proposed for ecological restoration, water-dependent uses, and/or public access are permitted, provided they will not preclude attainment of ecological restoration.
 8. Public recreational uses of the water should be protected against competing uses that would interfere with these activities.
 9. Underwater pipelines and cables should be permitted when they demonstrate there is no feasible alternative location based on an analysis of technology and system efficiency, and that the adverse environmental impacts are not significant or can be shown to be less than the impact of upland alternatives.

13.07.070 Use Environment Interpretation

- A. The City has designated use environments in its city limits and pre-designated use environments in its annexation areas consistent with the maps in 13.07.070A, listed as follows.

1. Figure 13.07.070-1: Shoreline Environment Designations Reach 1
2. Figure 13.07.070-2: Shoreline Environment Designations Reach 2
3. Figure 13.07.070-3: Shoreline Environment Designations Reach 3
4. Figure 13.07.070-4: Shoreline Environment Designations Reach 4
5. Figure 13.07.070-5: Shoreline Environment Designations Reach 5
6. Figure 13.07.070-6: Shoreline Environment Designations Reaches 6 and 15
7. Figure 13.07.070-7: Shoreline Environment Designations Reaches 9 and 10
8. Figure 13.07.070-8: Shoreline Environment Designations Reaches 11-14
9. Figure 13.07.070-9: Shoreline Environment Designations Reaches 7a and 8
10. Figure 13.07.070-10: Shoreline Environment Designations Reach 7b

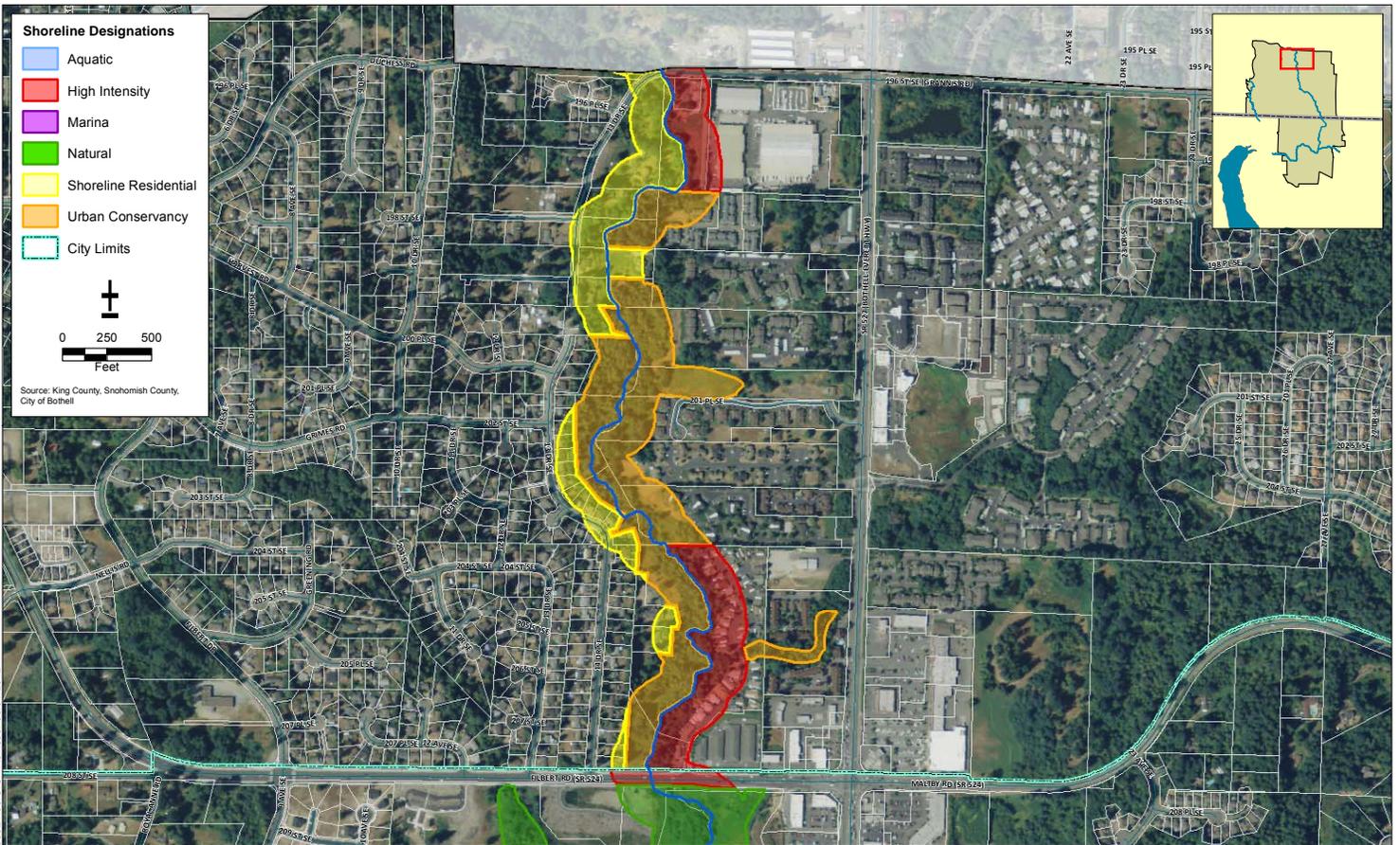
B. Any areas within shoreline jurisdiction that are not mapped and/or designated due to minor mapping inaccuracies in the lateral extent of shoreline jurisdiction from the shoreline waterbody related to site-specific surveys of OHWM are automatically assigned the category of the contiguous waterward shoreline environment designation provided the error does not extend onto a new parcel.

C. All other areas that were not mapped in shoreline jurisdiction, but which do meet criteria in Section 13.05, Shoreline Jurisdiction, shall be assigned an Urban Conservancy designation until the shoreline can be redesignated through a SMP Amendment.

D. Property shown in shoreline jurisdiction that does not meet the applicability criteria in Section 13.05, Shoreline Jurisdiction, shall not be subject to the requirements of this SMP. The actual location of the OHWM must be determined at the time a development is proposed.

E. In the event of an environment designation mapping error, the Shoreline Administrator shall use the environment designation criteria contained in SMP Sections 13.07.010 through 13.07.060 to establish the appropriate shoreline environment designation. Appeals of such interpretations may be filed pursuant to SMP Chapter 13.17, Administration, Permits, and Enforcement.

This page intentionally blank

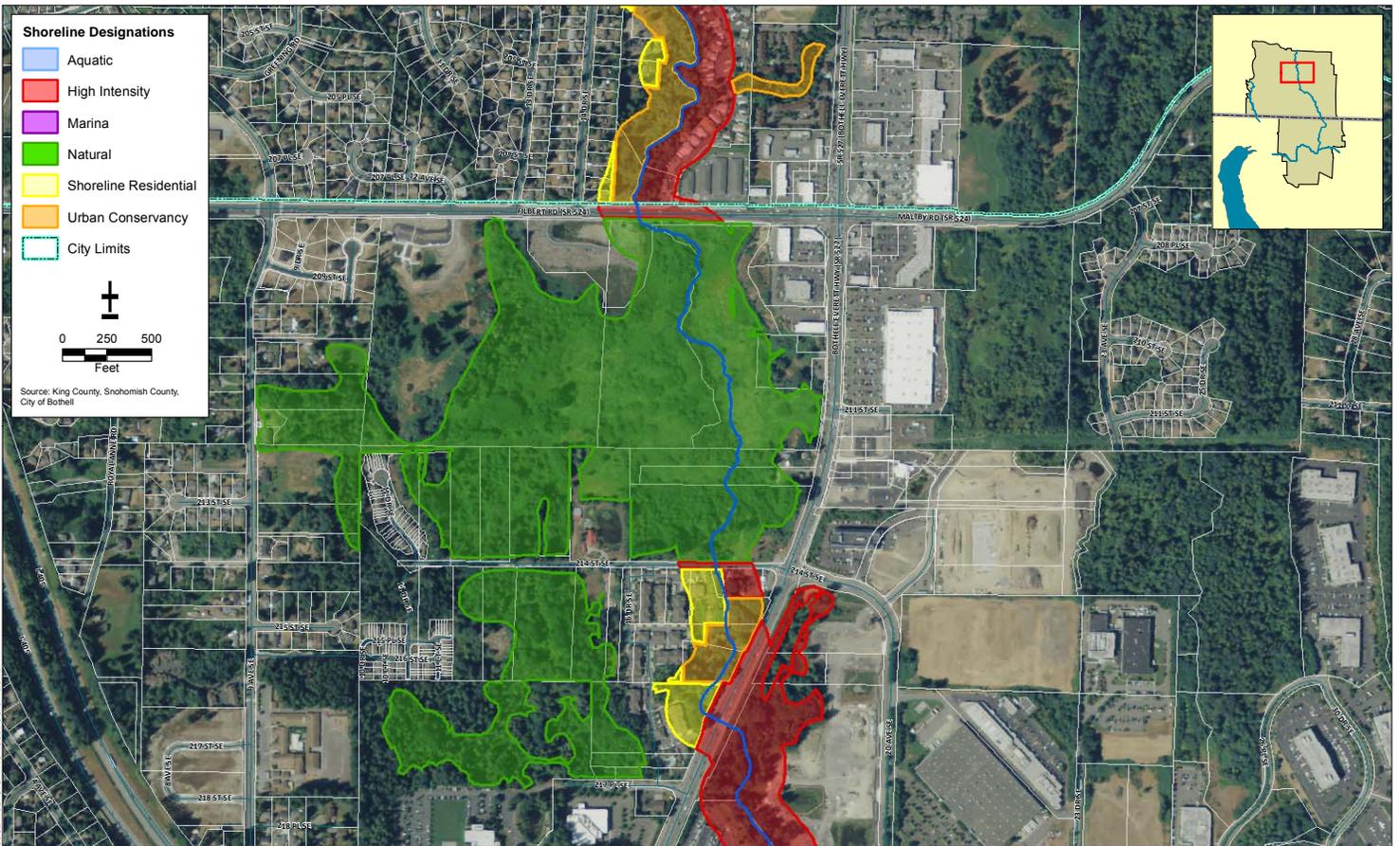


00924.09\GIS - Revised: 06/01/2012

ICF
INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reach 1
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-1

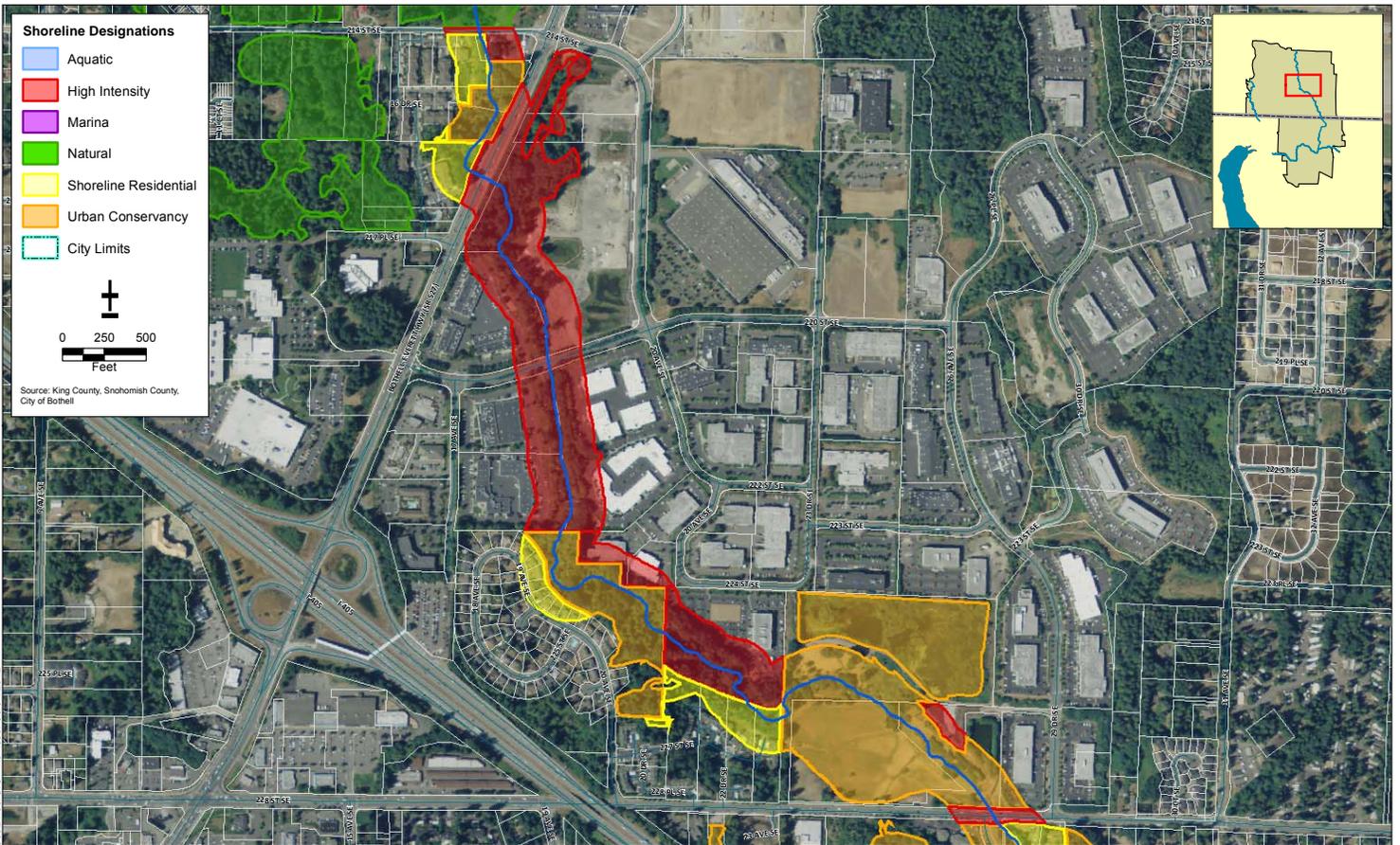


00924.09\GIS - Revised: 06/01/2012

ICF
INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reach 2
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-2

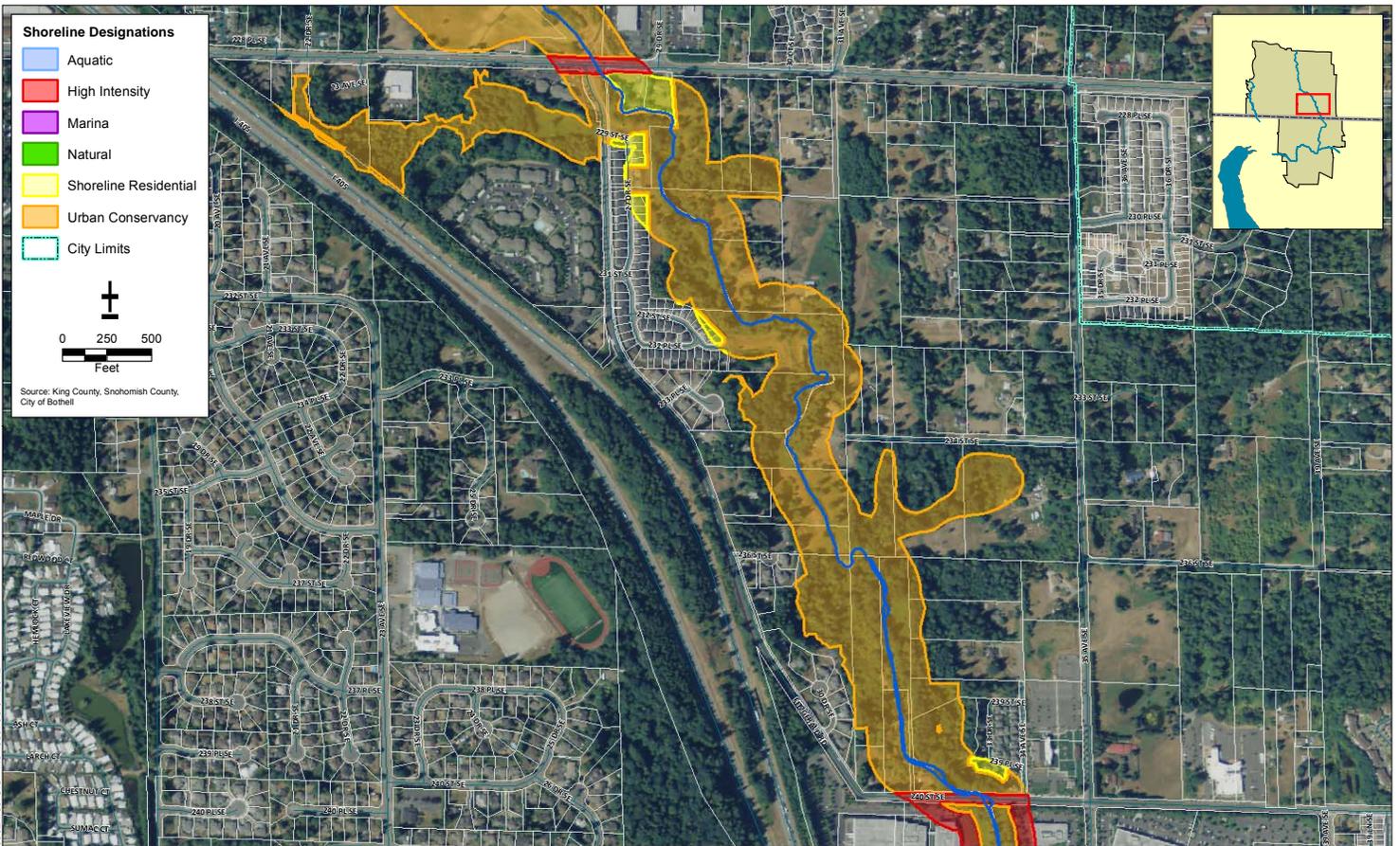


00624.09.GIS - Revised: 06/01/2012

ICF
INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reach 3
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-3

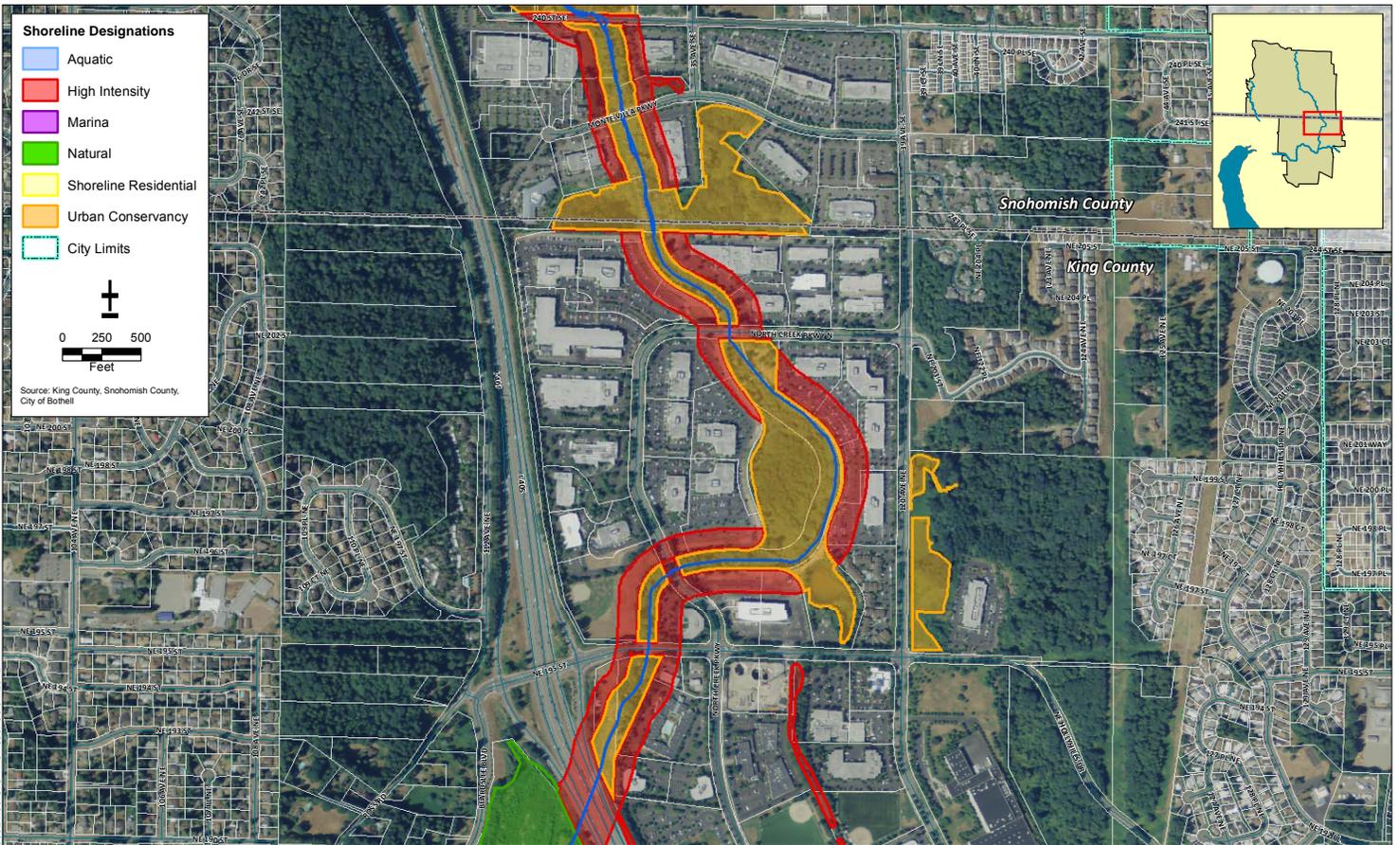


00624.09.GIS - Revised: 06/01/2012

ICF
INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reach 4
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-4



00924.09.GIS - Revised: 06/01/2012

ICF INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reach 5
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-5

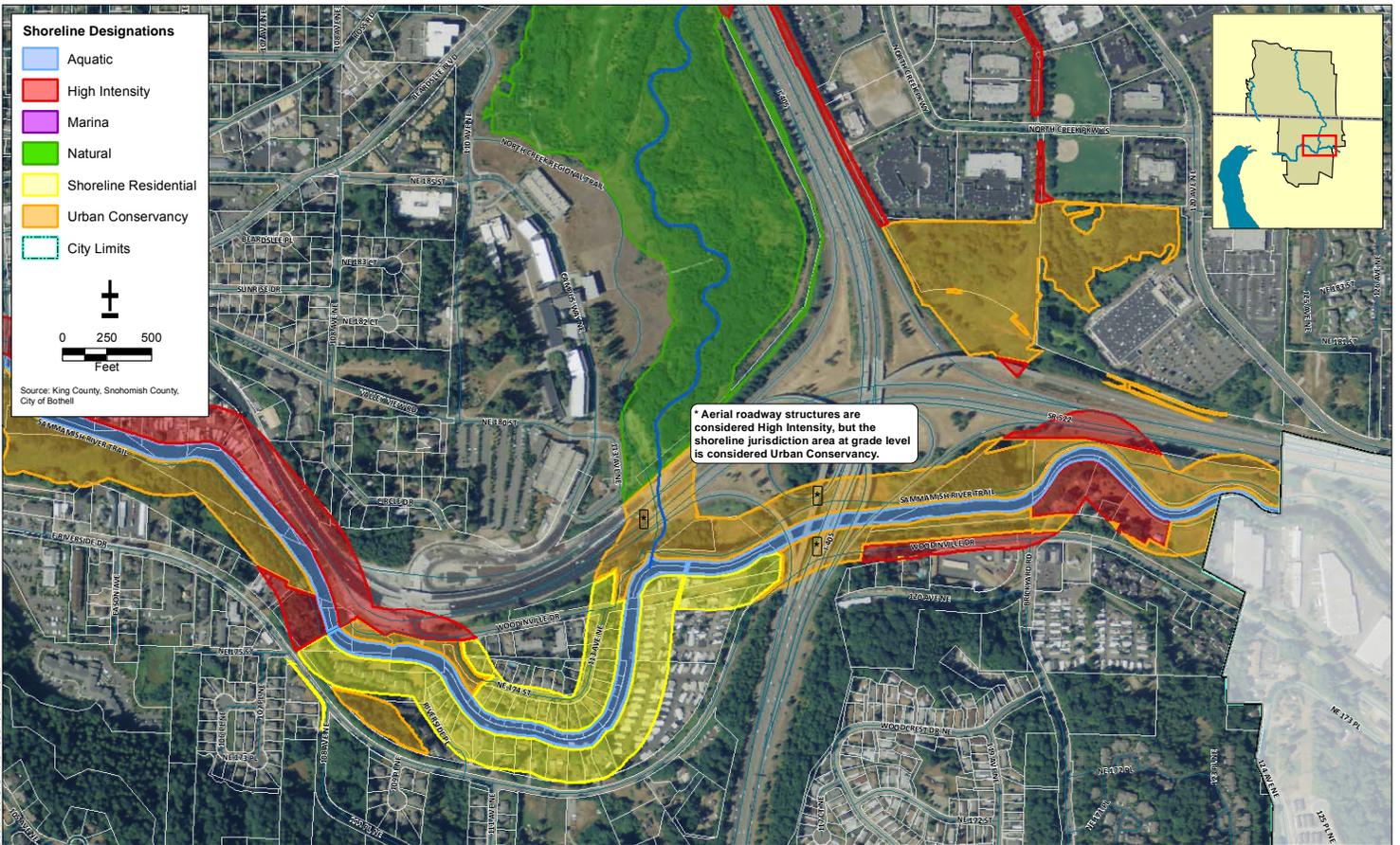


00924.09.GIS - Revised: 06/01/2012

ICF INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reaches 6 & 15
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-6

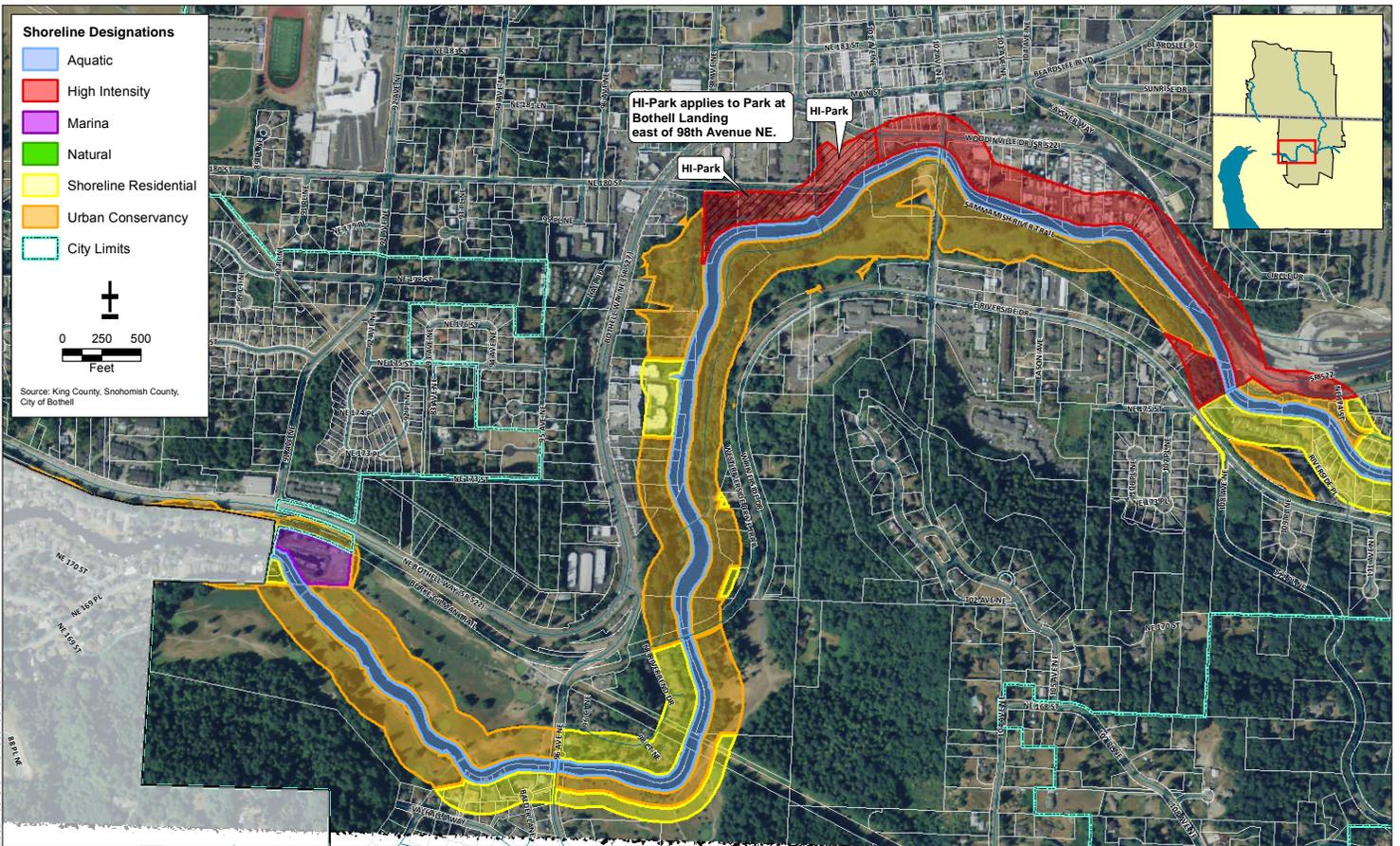


00924.09\GIS - Revised: 06/01/2012

ICF INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reaches 9 & 10
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-7

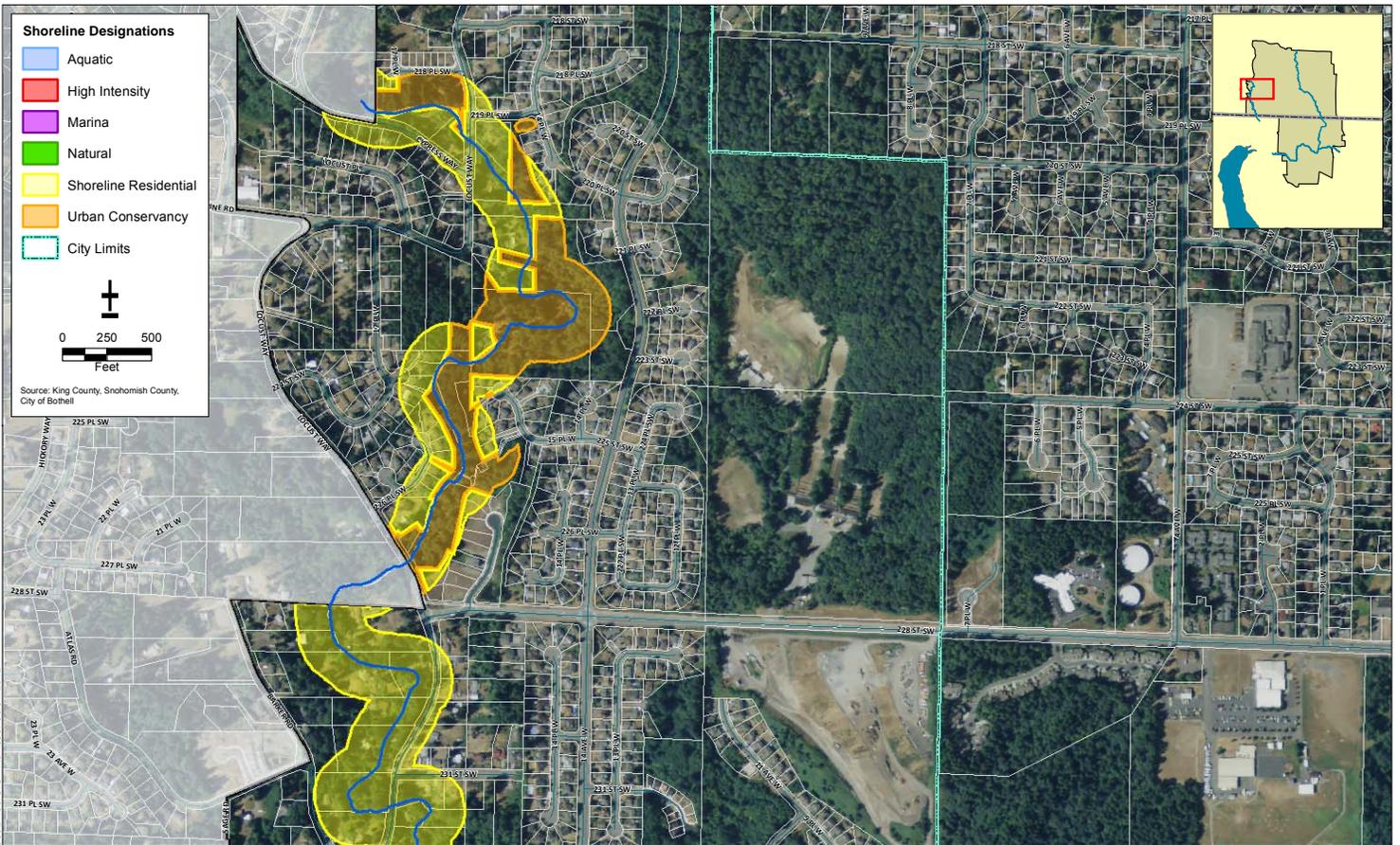


00924.09\GIS - Revised: 06/01/2012

ICF INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reaches 11-14
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-8

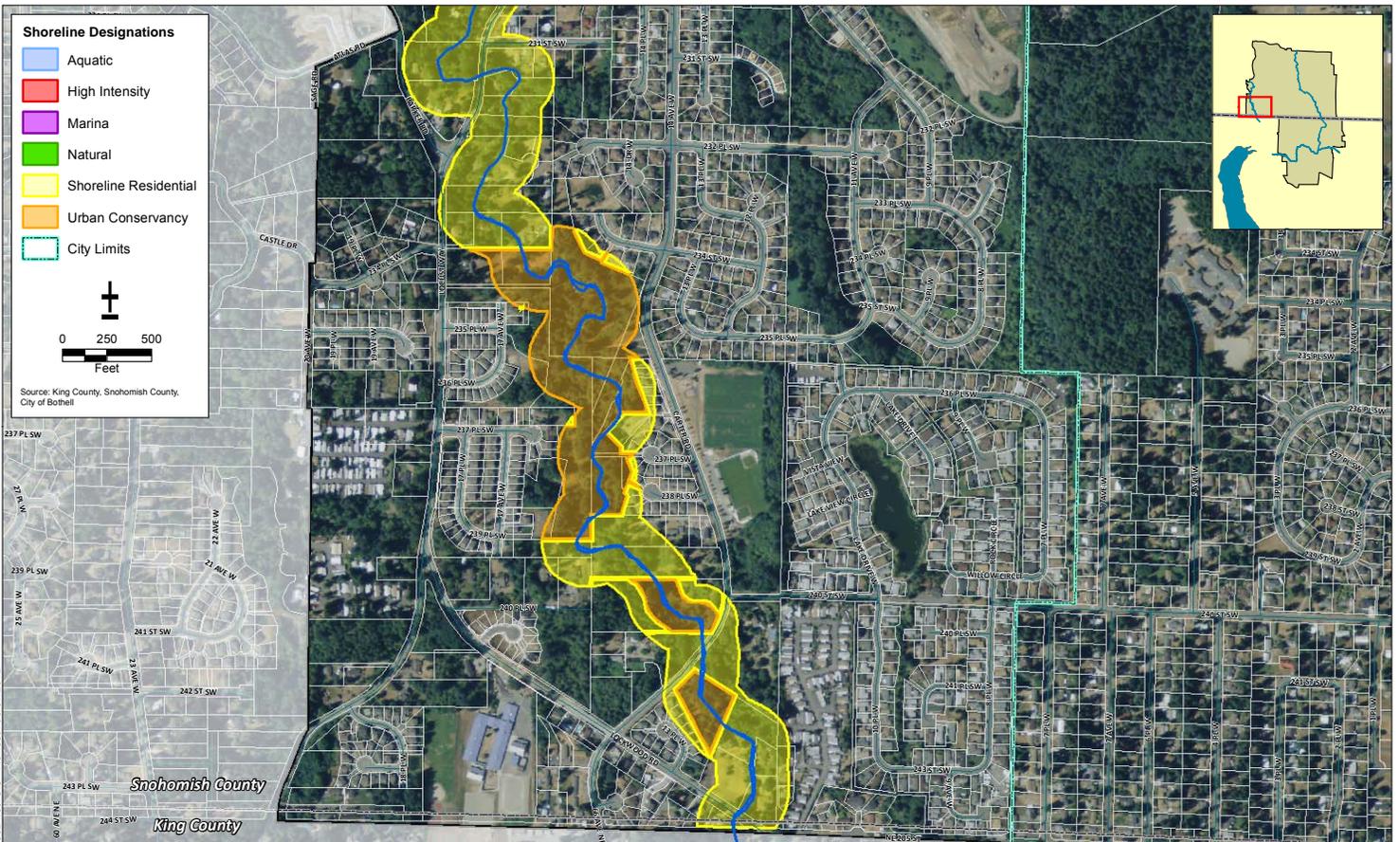


00924_09.GIS - Revised: 06/01/2012

ICF
INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reaches 7a & 8
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-9



00924_09.GIS - Revised: 06/01/2012

ICF
INTERNATIONAL

Road rights of way where roadways are or will be developed at grade are considered High Intensity whether specifically mapped or not. See map specific notes for aerial roadways such as I-405 at SR 522.

Shoreline Environment Designations: Reach 7b
City of Bothell Shoreline Master Program, May 15, 2012
Figure 13.07.070-10

13.07.080 Use Matrix

A. Table 13.07.080-1 indicates which shoreline activities, uses, developments and modifications may be allowed or are prohibited in shoreline jurisdiction within each shoreline environment designation. Activities, uses, developments, and modifications are classified as follows:

1. "Permitted Uses" require a Shoreline Substantial Development Permit or a Shoreline Exemption, and are shown as a "P" on the use matrix.
2. "Conditional Uses" require a Shoreline Conditional Use Permit per SMP Chapter 13.17, Administration, Permits, and Enforcement and are shown as a "C" on the use matrix.
3. "Prohibited" activities, uses, developments, and modifications are not allowed and are shown as an "X" on the use matrix.
4. "Not Applicable" uses or activities are shown as "NA" on the use matrix.

Chapters 13.09, General Regulations and Performance Standards, and 13.11, Use-Specific and Modification Regulations and Performance Standards shall be consulted for additional limitations.

- B. Accessory or appurtenant uses shall be subject to the same shoreline permit process as their primary use.
- C. Where there is a conflict between the chart and the written provisions in this SMP, the written provisions shall control.
- D. Authorized uses and modifications are only allowed in shoreline jurisdiction where the underlying zoning allows for it and are subject to the policies and regulations of this SMP.
- E. A use is considered unclassified when it is not listed in Table 13.07.080-1; in Sections 13.09, General Regulations and Performance Standards; or Chapter 13.11 BMC, Use-Specific and Modification Regulations and Performance Standards. Any proposed unclassified use shall be classified by the Shoreline Administrator as permitted, conditional, or prohibited, based on the listed use to which the proposed use is most similar. If the Shoreline Administrator determines that the proposed use is not similar to any use in this SMP, the proposed use shall be considered prohibited. The criteria for authorization of an unclassified use as a permitted or a conditional use are as follows:
1. The Shoreline Administrator finds that the unclassified use is in keeping with the purpose and intent of the use environment, underlying zoning, and the *Imagine Bothell* Comprehensive Plan; and
 2. The Shoreline Administrator finds that the use is similar in nature to, and no more intense than, a specifically listed permitted, or conditional use permit.
- F. If any part of a proposed activity, use, modification or development is not eligible for exemption per Section 13.17, then a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit is required for the entire proposed development project. See BMC 11.04.002.

- G. When a specific use or modification extends into the Aquatic environment and an abutting upland environment without clear separation (e.g., private moorage facility, shoreline stabilization), the most restrictive permit process applies to that use or modification.

Table 13.07.080-1. Use Matrix

| Use/Modification | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity | High Intensity - Park | Aquatic |
|---|---------|-------------------|-----------------------|----------------|-------------------|-----------------------|----------------|
| Resource Uses Specific standards: BMC 13.11.010, 020, and 080 | | | | | | | |
| Agriculture | X | P/C ¹³ | P | X | P/C ¹³ | X | X |
| Aquaculture, Non-Commercial | X | C | P | X | P | C | P |
| Non-Commercial Forest Practices | C | C | P | NA | P | P | NA |
| Mining | X | X | X | X | X | X | X |
| Boating Facilities and Overwater Structures Specific standards: BMC 13.11.030, 110, and 120. | | | | | | | |
| Sammamish River | | | | | | | |
| Boat Launch (motorized boats) | X | C | P ¹¹ | P | P | P ⁵ | P |
| Boat Launch (non-motorized boats - canoe / kayak) | X | P | P ¹¹ | P | P | P ⁵ | P |
| Marina | X | C ⁵ | X | P | P | P ⁵ | P |
| Community Dock | X | X | P | X | P | X | P |
| Public Dock | X | P ⁵ | X | P ⁵ | P ⁵ | P ⁵ | P ⁵ |
| Fishing or Viewing Platform | X | P ⁵ | X | X | P ⁵ | P ⁵ | P |
| North Creek or Swamp Creek | | | | | | | |
| Boat Launch (motorized) | X | X | X | NA | X | NA | X |
| Boat Launch (non-motorized - canoe / kayak) | X | P | P ¹¹ | NA | P | NA | P |
| Marina | X | X | X | NA | X | NA | X |
| Community or Public Dock | X | X | X | NA | X | NA | X |
| Fishing or Viewing Platform | X | X | X | X | X | X | X |
| Private Residential Docks | | | | | | | |
| Sammamish River | X | NA | P | NA | P | X | P |
| North and Swamp Creeks | X | X | X | X | X | X | X |

| Use/Modification | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity | High Intensity - Park | Aquatic |
|---|---------|-------------------|-----------------------|--------|----------------|-----------------------|---------|
| Commercial Development Specific standards: BMC 13.11.050. | | | | | | | |
| Water-oriented | | | | | | | |
| Water-oriented, general | X | P ⁵ | P | P | P | P ⁵ | C |
| Restaurant | X | P ⁵ | X | P | P | P ⁵ | X |
| Office | X | C ⁵ | X | P | P | P ^{5,18} | X |
| Retail Establishment | X | C ⁵ | C | C | P | P ⁵ | X |
| Retail sale of new or used boats (sales or rental) | X | X | X | P | P | P ⁵ | X |
| Concession Stand | X | P ⁵ | X | P | P | P ⁵ | X |
| Entertainment or cultural facility | X | X | C | P | P | P ¹⁸ | C |
| Lodging | X | X | C | C | P | X | X |
| Repair and service of boat and boat motors | X | X | X | P | P | X | X |
| Non-water-oriented ¹² | | | | | | | |
| Non-water-oriented, general | X | C ⁵ | C | C | P | C ⁵ | X |
| Dry land boat storage | X | X | C | C | P | X | X |
| Retail Establishment | X | C ⁵ | C | C | P | C ⁵ | X |
| Automotive Service | X | X | X | C | C | X | X |
| Mixed Use Water Dependent and Non-Water-Oriented | X | C | C | P | P | P ⁵ | P |
| Mixed Use Commercial and Residential | X | X | C | P | P | X | C |
| Personal Service ⁷ Specific standards: BMC 13.11.050. | | | | | | | |
| Business and personal services, general | X | P ⁵ | P | P | P | X | C |
| Any professional, executive or administrative office use | X | P ⁵ | P | P | P | P ^{5,18} | X |
| Personal care services (e.g., barbershops, hair salons, tanning booths) | X | C ⁵ | P | X | P | X | X |

| Use/Modification | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity | High Intensity - Park | Aquatic |
|---|--|-------------------|-----------------------|--------|-----------------|-----------------------|---------|
| Churches, temples, mosques and other religious facilities | X | C | P | X | P | X | X |
| Conference centers | X | C ⁵ | P | C | P ²⁰ | P ^{5,18} | X |
| Dry cleaning establishments | X | X | X | X | P ¹⁹ | X | X |
| Kennels, catteries and animal obedience schools | X | X | X | X | X | X | X |
| Government service, general | X | C | P | P | P | P ^{5,18} | C |
| City, county, special district, state, and federal offices | X | C | P | X | P | P ^{5,18} | NA |
| Fire stations | X | C | P | P | P | X | P |
| Maintenance shops and vehicle and equipment parking and storage areas for government services | X | C | P | X | P | C | X |
| Police stations | X | C | P | P | P | X | P |
| Post Offices | X | C | P | X | P | X | NA |
| Education, Health, and Day Care Services ⁷ | Specific standards: BMC 13.11.050. | | | | | | |
| Education services | X | C | C | P | P | P ^{5,18} | C |
| Health and social services | X | C | C | C | P | X | X |
| Adult and child day care centers | X | C | P | X | P | P ^{5,18} | X |
| Essential public facilities | Specific standards: BMC 13.11.050, 160, and 170. | | | | | | |
| Airports/heliports ⁷ | X | X | X | X | C ¹⁹ | X | X |
| Community colleges, colleges and universities ⁷ | X | C | C | X | C ¹⁹ | P ^{5,18} | C |
| Correctional facilities ⁷ | X | X | X | X | C ¹⁹ | X | X |
| Electrical transmission lines of higher voltage than 115 kV, in new corridors | X | C | P | P | P | C | P |
| In-patient facilities including but not limited to substance abuse facilities and mental health facilities ⁷ | X | X | P | P | P | X | P |

| Use/Modification | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity | High Intensity - Park | Aquatic |
|---|--|-------------------|-----------------------|--------|------------------|-----------------------|---------|
| Military installations ⁷ | X | X | P | P | P | X | P |
| Public agency animal control facilities ⁷ | X | X | X | X | C | X | X |
| Secure community transition facilities (SCTFs) ⁷ | X | C | C | C | C | X | X |
| Solid waste landfills | X | X | X | X | X | X | X |
| Solid waste transfer stations ⁷ | X | X | X | X | C | X | X |
| Transit bus, train, or other high capacity vehicle bases | X | X | C | X | P | X | X |
| Waste water treatment facilities | X | X | X | X | C | X | X |
| Work release facilities ⁷ | X | C | C | C | P | X | X |
| Industry | Specific standards: BMC 13.11.090. | | | | | | |
| Water-oriented | | | | | | | |
| Manufacturing, distribution, storage, and warehousing | X | X | X | P | P ⁸ | X | C |
| Non-water-oriented | | | | | | | |
| Manufacturing, distribution, storage, and warehousing | X | X | C | C | P/C ⁸ | X | X |
| Recreational Development | Specific standards: BMC 13.11.120. | | | | | | |
| Water-oriented | | | | | | | |
| Public parks / recreation and accessory uses | P ¹⁷ | P | P | P | P | P | P |
| Private parks / recreation and accessory uses | C ¹⁷ | P | P | P | P | NA | P |
| Fishing or Viewing Platform | See Boating Facilities and Overwater Structures Above. | | | | | | |
| Non-water-oriented | | | | | | | |
| Public parks / recreation and accessory uses | X | P/C ¹⁰ | P | X | P | P/C ¹⁰ | X |
| Private parks / recreation and accessory uses | X | C | C | X | C | NA | X |

| Use/Modification | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity | High Intensity - Park | Aquatic |
|--|------------------|-------------------|-----------------------|------------------|------------------|-----------------------|------------------|
| Residential Specific standards: BMC 13.11.130. | | | | | | | |
| Residential Development | C | P | P | X | P | X | X |
| Dredging Activities Specific standards: BMC 13.11.060. | | | | | | | |
| Dredging | NA | NA | NA | P | N/A | NA | P |
| Dredge Material Disposal | X | C ¹ | C ¹ | C ¹ | C ¹ | C ¹ | C ¹ |
| Fill Specific standards: BMC 13.11.070. | | | | | | | |
| Waterward of OHWM and in floodways | X ¹ | C ¹ | C ¹ | C ¹ | C ¹ | C ¹ | C ¹ |
| Between upland edge of floodway and upland edge of floodplain | X ¹ | C ¹ | P | P | P | P | NA |
| Other upland fill | C ¹ | C ¹ | P | P | P | P | NA |
| In-water Modifications Specific standards: BMC 13.11.040 and 100. | | | | | | | |
| Breakwaters, Groins and Weirs | C/X ¹ | P/C ¹ | P/C ¹ | P/C ¹ | P/C ¹ | P/C ¹ | P/C ¹ |
| In-Stream Structures | NA | NA | NA | NA | NA | NA | C ¹ |
| Shoreline Enhancement Projects Specific standards: BMC 13.11.140. | | | | | | | |
| Shoreline Habitat and Natural Systems Enhancement Projects | P | P | P | P | P | P | P |
| Flood Control and Shoreline Stabilization Specific standards: BMC 13.09.060 and 13.11.150. | | | | | | | |
| Flood Control | | | | | | | |
| Modification of existing levees and flood control facilities | C ¹⁴ | C ¹⁴ | P | P | P | P | NA |
| New levees and flood control facilities | C ¹⁴ | C ¹⁴ | C ¹⁴ | C ¹⁴ | C | C | NA |
| Shoreline Stabilization | | | | | | | |
| New | | | | | | | |
| Hard | X | C | C | C | C | C | C |
| Soft | C ¹⁴ | C | P | P | P | P | P |
| Replacement: hard replaced with hard ^{1a} | C ¹⁵ | C | P | P | P | P | P |
| Replacement: hard replaced with soft | P | P | P | P | P | P | P |
| Transportation Specific standards: BMC 13.11.160. | | | | | | | |
| Bridges, motor vehicles | C | C | P | C | P/C | C | C |

| Use/Modification | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity | High Intensity - Park | Aquatic |
|---|------------------|-------------------|-----------------------|--------|-----------------|-----------------------|---------|
| Bridges, bikes and pedestrian | C | P | P | P | P | P | P |
| Railroads | C | C | C | C | C ¹⁹ | C | NA |
| Roads | C | C | P | P | P | C | NA |
| Trails | P ¹⁶ | P | P | P | P | P | P |
| Parking, accessory Takes permit type of primary use | | | | | | | |
| Parking as a primary use | X | C | C | P | P | X | X |
| Existing bridges, trails, roads, and parking facilities: maintenance or improvement | P | P | P | P | P | P | P |
| Utilities Specific Standards: BMC 13.11.170. | | | | | | | |
| Utilities, primary and accessory | P/C ⁹ | P | P | P | P | P | P |

Table Notes:

P = Permitted Uses with Shoreline Substantial Development Permit or Shoreline Exemption;

C = Conditional Uses; X = Prohibited Uses; NA = Not Applicable

- In the Natural Environment, a Conditional Use Permit is required and may only be approved if such structures are installed to protect or restore ecological functions. For other Shoreline Environments, structures or modifications installed to protect or restore ecological functions may be permitted with issuance of a Shoreline Substantial Development Permit or Exemption. Otherwise a Conditional Use Permit is required.
- Provided the boat facility is for the exclusive use of kayaks, canoes, or other non-motorized boats.
- Permitted when the parking is accessory to a public park, public recreation use or provides parking for public access to the shoreline.
- Modification of existing levees and other flood control improvements may be processed as a Shoreline Substantial Development Permit.
- Only allowed when accessory to a public park, public recreation facility, or private recreation facility open to the public.
- Only when accessory or associated use within a public park.
- Government and service uses shall be subject to the Commercial use specific standards in BMC 13.11.050.
- Water-oriented and non-water-oriented manufacturing, distribution, storage, and warehousing uses are allowed on North Creek subject to performance standards of this SMP, including, but not limited to BMC 13.11.090. Water-dependent industrial development shall be a permitted use and non-water dependent industrial uses shall be a conditional use within High Intensity and Aquatic shoreline environments associated with the Sammamish River.
- Permitted if accessory; conditional if primary use.
- Permitted if the recreation facilities have water enjoyment elements. Conditional if the recreational facilities have no water enjoyment elements.
- Permitted only when a joint facility shared by 5 or more residential dwelling units
- Non-water oriented uses are those uses which do not need a shoreline location to successfully operate and which are not water-dependent, water-related, or water-enjoyment uses.
- Permitted if an existing agricultural use; Conditional if a proposed new agricultural use.
- Only allowed when protecting existing development in existence on or before **effective date of SMP**
- Only allowed when associated with a public right-of-way or bridge.
- Trail extensions and surfaces shall be consistent with park master plans. Where feasible, pervious materials are preferred.

- 17. In the Natural environment, only passive, low-intensity recreation is allowed when demonstrated to have no significant adverse ecological impact.
- 18. Allowed within existing structure as of the effective date of this SMP **[effective date of SMP]**.
- 19. Only when consistent with BMC 13.11.150 Shoreline Stabilization

13.07.090 Development Standards

- A. To preserve the existing and planned character of the shoreline consistent with the purposes of the shoreline environment designations, development standards are provided in Table 13.07.090-1. In addition, shoreline developments shall comply with all other dimensional requirements of the Bothell Municipal Code.
- B. When a development or use is proposed that does not comply with the dimensional performance standards of this SMP, such development or use can only be authorized by approval of a Shoreline Variance. If a proposal meets requirements allowing administrative reductions or modifications, it is considered compliant with the SMP and does not require a Variance.

Table 13.07.090-1. Development Standards

| Standard in feet | Natural | Urban Conservancy | Shoreline Residential | Marina | High Intensity/ High Intensity Park | Aquatic |
|--|---------|-------------------|-----------------------|--------|-------------------------------------|---------|
| Lot Width, minimum-Residential | 150 | 80 | 70 | NA | 25 | NA |
| Side yard setbacks | 30 | 20 | 5 | 5 | - ^B | NA |
| Building Height: maximum ^A | 35 | 35 | 35 | 35 | 35-100 ^A | 35 |
| Shoreline Buffer – North Creek ^{C, D, E} | 150 | 100 | 100 | NA | 100 | NA |
| Shoreline Buffer – Swamp Creek ^{D, E} | NA | 150 | 150 | NA | 150 | NA |
| Shoreline Buffer – Sammamish River ^{D, E} | NA | 100 | 100 | 15 | 100 | NA |

NA = Not Applicable

Table Notes:

- A. Height allowances:
 - 1. The following structures may be erected above the height limits, provided such structures are consistent with underlying zoning requirements, and provided such structures shall not extend 10 feet above the maximum height limit of this SMP:
 - a. Roof structures housing or screening ventilating fans, HVAC (heating and cooling equipment), or similar equipment required for building operation and maintenance.
 - b. Fire or parapet walls, flagpoles, chimneys, smokestacks, communication transmission and receiving structures, utility line towers and poles, water towers/storage tanks, and similar structures;
 - c. On properties with any of the following architectural elements including, but not limited to, peaked roofs and steeples; provided, that the increase in height shall not increase usable floor area;

- d. Structures containing certain manufacturing processes within the Canyon Park regional activity center or the North Creek regional activity center in accordance with the zoning code;
- e. Structures supporting alternative energy generation equipment such as wind machines, solar arrays, and other equipment devoted to energy generation.
- 2. If a property has an underlying zoning classification that allows buildings taller than 35 feet, a building or structure may be constructed on that property to the height limit of the underlying zone, subject to the applicant demonstrating to the satisfaction of the shoreline administrator the following:
 - a. That the intended uses for the portion of the building over 35 feet would particularly serve the public interest, for one non-exclusive example, by preserving more land as natural open space and wildlife habitat than might otherwise have resulted had the same total square footage been developed in a larger 35-foot-tall building or multiple 35-foot-tall buildings with a consequently larger cumulative footprint within the shoreline jurisdiction; and
 - b. That portions of the building over 35 feet would obstruct no more than 30 percent of cumulative shoreline views from residential properties and public parks within a 1,000-foot radius of the subject property; such quantification shall be based on a view analysis utilizing photographs, videos, and/or photo- or computer-based simulations.
- B. The setback shall be the distance required for landscaping per the Bothell Municipal Code.
- C. The main stem of North Creek located between 240th Street SE and 228th Street SE shall have a stream buffer width of 150 feet for all environment designations.
- D. When environment designations are parallel, the buffer assigned to the waterward environment extends only to the upland edge of that environment. The buffer for the landward environment as measured from the OHWM would apply to uses and modifications in that upland environment.
- E. See BMC 13.13.060 for regulations governing management of shoreline buffers and provisions for special buffer dimensions.

13.09 General Regulations and Performance Standards

13.09.010 Archaeological and Historic Resources

- A. The City shall require that permits issued in areas documented to contain archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.
- B. Developers and property owners shall immediately stop work and notify the responsible local government, the Washington State Department of Archaeology and Historic Preservation, and affected Indian tribes if archaeological resources are uncovered during excavation.
- C. Where a professional archaeologist or historian, recognized by the State of Washington, has identified an area or site as having significant value, or where an area or site is listed in national, state, county or Bothell historical registers, the City may require an evaluation of the resource, and appropriate conditions, which may include preservation and/or retrieval of data, proposal modifications to reduce adverse impacts, or other mitigation authorized through the State Environmental Policy Act, or other local, state, or federal laws.
- D. 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 resources) and development or uses that may adversely impact such sites shall comply with chapter 25-48 WAC (Archaeological excavation and removal permit), as well as the provisions of this Master Program.
- E. The presence and location of identified historic or archaeological resources shall be considered in park, open space, public access, and site planning, with access to such areas designed and managed so as to give maximum protection to the resource and surrounding environment.

13.09.020 Environmental Protection

- A. All project proposals, including those for which a Shoreline Substantial Development Permit is not required, shall comply with Chapter 43.21C RCW, the Washington State Environmental Policy Act.
- B. Applicants shall apply the following sequence of steps in order of priority to avoid or minimize significant adverse impacts, with 1) being top priority:
1. avoiding the adverse impact altogether by not taking a certain action or parts of an action;
 2. minimizing adverse impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
 3. rectifying the adverse impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project;
 4. reducing or eliminating the adverse impact over time by preservation and maintenance operations;
 5. compensating for the adverse impact by replacing, enhancing, or providing substitute resources or environments; and
 6. monitoring the adverse impact and the compensation projects and taking appropriate corrective measures.
- C. Projects that cause significant adverse ecological impacts, as defined in BMC 13.03. Definitions, are not allowed unless necessary to achieve other objectives of the SMA, such as accommodation of water-oriented and other preferred uses, and only when the impacts are mitigated according to Subsection B, above, to avoid reduction or damage to ecosystem-wide processes and ecological functions.
- D. If specific standards, such as buffers, vegetation requirements, or dock dimensions, are provided in this Chapter, then the City shall not require additional mitigation sequencing analysis under these provisions.
- E. The City shall require mitigation measures and/or permit conditions based on the provisions of this SMP in order to mitigate adverse impacts. In order to determine acceptable mitigation or permit conditions, the Shoreline Administrator may require the applicant to provide the necessary environmental information and analysis, including a description of existing conditions/ecological functions and anticipated shoreline impacts, along with a mitigation plan outlining how proposed mitigation measures would result in no net loss of shoreline ecological functions.
- F. When compensatory measures are appropriate pursuant to the mitigation priority sequence above in Subsection B, preferential consideration shall be given to measures that replace the adversely impacted functions directly and in the immediate vicinity of the adverse impact. However, alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans, including the Shoreline Restoration Plan, applicable to the area of adverse impact may be authorized. Authorization of compensatory

- mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions.
- G. In addition to any requirements for specific critical areas found below, mitigation plans for any adverse impacts to ecological functions resulting from use, activity or development in shoreline jurisdiction, both inside and outside of critical areas, shall address the following:
1. inventory existing shoreline environment including the physical, chemical and biological elements and provide an assessment of their condition;
 2. a discussion of the project's compliance with mitigation sequencing requirements and remaining unavoidable adverse impacts on the ecological functions;
 3. a discussion of any federal, state, or local special management recommendations which have been developed for critical areas or other species or habitats located on the site;
 4. a discussion of measures to preserve existing habitats and opportunities to restore habitats that were degraded prior to the proposed land use activity;
 5. a discussion of proposed measures which mitigate the adverse impacts of the project to ensure no net loss of shoreline ecological functions;
 6. scaled drawings of existing and proposed conditions, materials specifications, and a five-year maintenance and monitoring plan, including performance standards;
 7. a discussion of proposed management practices which will protect fish and wildlife habitat both during construction, and after the project site has been fully developed;
 8. contingency plan if the mitigation fails to meet established success criteria; and
 9. any additional information necessary to determine the adverse impacts of a proposal and mitigation of the impacts.

13.09.030 Shoreline Vegetation Conservation

- A. Vegetation conservation standards shall not apply retroactively to existing uses and developments. Vegetation associated with existing structures, uses and developments may be maintained within shoreline jurisdiction as stipulated in the approval documents for the development.
- B. Regulations specifying establishment and management of shoreline buffers are located in BMC 13.13.010 and BMC 13.13.060. Vegetation within shoreline buffers, other stream buffers, and wetlands and wetland buffers shall be managed consistent with BMC 13.13. Critical Areas in Shoreline Jurisdiction.
- C. Vegetation outside of shoreline buffers, other stream buffers, and wetlands and wetland buffers and within shoreline jurisdiction shall be managed according to this Section, BMC 13.09.020, Environmental Protection, and any other regulations specific to vegetation management contained in other chapters of this SMP.
- D. Vegetation clearing outside of wetlands and buffers shall be limited to the minimum necessary to accommodate approved shoreline development that is consistent with all other provisions of this SMP. Mitigation sequencing shall be applied so that the design and location of the structure or development minimizes native vegetation removal. Development

or uses that require vegetation clearing shall be designed to avoid the following in the order indicated below, with 1 being the most desirable vegetation to retain:

1. native significant trees.
2. non-native significant trees.
3. native non-significant trees.
4. other native vegetation.
5. other non-native vegetation.

E. Significant trees located in shoreline jurisdiction outside of wetlands and wetland, stream or shoreline buffers shall be retained using the preferences specified in Subsection D above as a guide and consistent with the percent by number provided in Table 13.09.030-1; significant trees shall mean existing trees over eight inches in caliper as measured four feet above grade.

Table 13.09.030-1. Significant Tree Retention Requirements outside of Wetlands and Wetland, Stream or Shoreline Buffers (percent by number)

| Shoreline Waterbody | Natural | Urban Conservancy | Shoreline Residential | High Intensity/ High Intensity-Park or Marina |
|---------------------|---------|-------------------|-----------------------|---|
| Sammamish River | NA | 65 | 10 | 10 |
| North Creek | 90 | 65 | 35 | 35 |
| Swamp Creek | NA | 65 | 35 | 35 |

F. The City may approve modifications or require minor site plan alterations to achieve maximum tree retention. A tree retention plan may provide for the retention of fewer significant trees than required in subsection E. of this section only if the trees to be removed are replaced at a ratio of three to one. The size of said replacement trees shall be in accordance with the requirements of this chapter.

G. All proposed developments shall include a tree retention plan for the entire subject property within shoreline jurisdiction except identified areas in which existing vegetation would not be disturbed in any manner. If any significant trees within such undisturbed area(s) outside of critical areas and their buffers are to be counted toward the percent significant tree retention required by subsection E. of this section, the location of such trees shall be indicated on a plan, but other tree retention plan requirements shall not apply to the undisturbed area or areas. The tree retention plan shall include the following:

1. location, size, species and driplines of all existing healthy trees over eight inches in caliper measured four feet above grade;
2. proposed and existing contours;
3. trees and other vegetation to be retained; and

4. a description of protection techniques to be utilized during construction, including but not limited to five-foot-high chainlink or plastic-net fencing around tree driplines, tunneling instead of trenching, stump grinding instead of stump pulling, and routing of traffic to prevent excessive soil compaction.

H. A disturbance-free area beyond the tree dripline shall be indicated. A tree designated for retention shall not have the soil grade altered within its dripline or within 15 feet of its trunk, whichever is greater, unless an alternative tree retention method is submitted by a tree specialist acceptable to the City, and said alternative method is approved by the City.

I. The Shoreline Administrator shall require a maintenance bond or other surety be submitted to the City of Bothell to ensure retention of existing trees and plant material during construction. In the event any trees designated by the City to be retained are removed, the City shall have the option of enforcing any bond posted. Each tree identified for retention shall be bonded pursuant to Table 13.09.030-2:

Table 13.09.030-2. Tree Diameter and Bonding Required

| Tree Diameter | Amount |
|-----------------------|---------|
| 8 –16 inches | \$1,000 |
| 16 –20 inches | \$1,500 |
| 20 –30 inches | \$2,000 |
| Larger than 30 inches | \$3,500 |

J. In the event that existing significant trees or vegetation which are designated to be retained die or are damaged or removed as a result of development activity, prior to issuance of occupancy permits, or release of any tree retention bonds required pursuant to subsection I. of this section, a restoration plan shall be prepared and submitted to the Shoreline Administrator for approval. The plan shall provide for replacement of plants in the following manner:

1. Each such significant tree shall be replaced by a mixture of three native deciduous and/or native coniferous trees. For each additional two inches of caliper over eight inches on the dead, damaged or removed tree, one new tree shall be planted. Particular species shall be approved by the City, with all native trees removed required to be replaced with native trees. Replacement trees shall conform to required plant sizes in accordance with the requirements of this Section, and may be placed in other locations on the property than where the replaced trees were located. Where conditions allow, native replacement trees should be placed in on-site wetlands or wetland, stream or shoreline buffers if doing so would improve function of the critical area or its buffers.
2. Shrubs and ground cover shall be replaced in all disturbed areas by a mixture of indigenous shrubs, groundcovers and other plant material to provide 85 percent surface coverage within two years from planting.
3. The restoration shall be in addition to the revocation of the tree bond.

- K. Where vegetation removal conducted consistent with this section results in adverse impacts to shoreline ecological function, new developments or site alterations shall be required to develop and implement a supplemental mitigation plan. Adverse impacts are assumed to result from removal of native shrubs and groundcovers not otherwise regulated under the significant tree provisions, or when allowed removal of the significant trees disrupts an existing vegetation corridor connecting the property to other critical areas or buffers. Mitigation plans shall be prepared by a qualified professional and shall contain information required in BMC 13.09.020(G). Mitigation measures shall be maintained over the life of the use and/or development.
- L. Where native shoreline vegetation must be removed to accommodate a temporary staging area necessary to implement an allowed use, the area must be immediately stabilized and restored with native vegetation once construction is complete.
- M. Selective pruning of trees for safety or view protection is allowed. Where trees pose a significant safety hazard as indicated in a written report by a certified arborist or other qualified professional, they may be removed or converted to wildlife snags if the hazard cannot be eliminated by pruning, crown thinning or other technique that maintains some habitat function.
- N. Trees that are part of a grouping or that otherwise provide mutual support during strong winds shall be preserved to prevent blow down of on and off-site trees with particular emphasis on trees that support adjacent wildlife habitat areas.
- O. Vegetation removal conducted without City authorization requires the submittal and approval of a restoration plan prepared by a qualified professional as defined in BMC 13.03. The mitigation plan must utilize only native vegetation, and should be designed to compensate for temporal loss of function and address the specific functions adversely impacted by the unauthorized vegetation removal.
- P. With the exception of hand removal or spot-spraying of invasive or noxious weeds on shorelands, the determination of whether non-native vegetation removal may be allowed in shoreline jurisdiction must be evaluated in conformance with this Section, Environmental Protection (BMC 13.09.020), and Critical Areas in Shoreline Jurisdiction (BMC 13.13). Such removal of noxious weeds and/or invasive species shall be incorporated in mitigation plans, as necessary, to prevent erosion and facilitate establishment of a stable community of native plants.
- Q. Aquatic weed control shall only be permitted where the presence of aquatic weeds will adversely affect native plant communities, fish and wildlife habitats, or an existing water-dependent recreational use. Aquatic weed control efforts shall comply with all applicable laws and standards. Removal using mechanical methods is preferred over chemical methods.

13.09.040 Water Quality, Stormwater, and Nonpoint Pollution

- A. All shoreline development, both during and after construction, shall avoid or minimize significant adverse ecological impacts, including any increase in surface runoff, through control, treatment, and release of surface water runoff so that water quality and quantity are not adversely affected. Control measures include, but are not limited to, low impact

- development techniques, levees, catch basins or settling ponds, oil interceptor drains, grassy swales, planted buffers, and fugitive dust controls
- B. New development shall provide stormwater management facilities designed, constructed, and maintained in accordance with the City of Bothell Surface Water Design Manual in effect at the time, including the use of best management practices. Additionally, new development shall implement low impact development techniques where feasible and necessary to fully implement the core elements of the Surface Water Design Manual.
- C. Best management practices for control of erosion and sedimentation shall be implemented for all development in shoreline jurisdiction through a City-approved temporary erosion and sediment control (TESC) plan, in accordance with the City of Bothell Surface Water Design Manual standards in effect at the time.
- D. For development activities with the potential for adverse impacts on water quality or quantity in a fish and wildlife habitat conservation area, a critical area report as prescribed by BMC 13.13.010(O) and BMC 13.13.060(C) shall be prepared. Such reports should discuss the project's potential to exacerbate water quality parameters which are impaired as determined by a 303d listing or as established by a Total Maximum Daily Load (TMDL) Study for that pollutant, and prescribe any necessary mitigation and monitoring.
- E. All materials that may come in contact with water 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. Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave or boat wake splash, rain, or runoff. Wood treated with creosote, copper chromium arsenic, or pentachlorophenol is prohibited in shoreline waterbodies.
- F. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
1. not allow the release of a hazardous substance to the ground, groundwaters, or surface waters; and
 2. have a primary containment area enclosing or underlying the tank or part thereof.
- G. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
1. prevent releases due to corrosion or structural failure for the operational life of the tank;
 2. be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
 3. use material in the construction or lining of the tank that is compatible with the substance to be stored.
- H. For residential uses, application of household pesticides, herbicides, and fertilizers shall not exceed times, rates, and locations specified on the packaging.

- I. Water reuse projects and locations proposed for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the State Departments of Ecology and Health.
1. Use of reclaimed water for surface percolation must meet the groundwater recharge criteria given in RCW 90.46.080(1) and 90.46.010(10). The State Department of Ecology may establish additional discharge limits in accordance with RCW 90.46.080(2).
 2. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.
- J. All activities, uses, and construction activities shall be in accordance with applicable state and federal regulations.
- K. Site design review criteria include:
1. The applicant shall either demonstrate that the proposed activity will infiltrate and recharge the groundwater table using measures approved in the City of Bothell Surface Water Design Manual or that it is not feasible to incorporate infiltration measures.
 2. The proposed activity must comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, and the King and Snohomish County health districts.

13.09.050 Public Access

- A. Except as provided in BMC13.09.050(B) below, shoreline substantial developments and shoreline conditional uses shall provide for safe and convenient public access to and along the shoreline where any of the following conditions are present:
1. the development is proposed by a public entity or on public lands;
 2. the nature of the proposed use, activity or development will likely result in an increased demand for public access to the shoreline;
 3. the proposed use, activity or development is not a water-oriented or other preferred shoreline use, activity or development under the Act, such as a non-water-oriented commercial or industrial use; or
 4. the proposed use, activity or development will interfere with the public use, activity and enjoyment of shoreline areas or waterbodies subject to the public trust doctrine.
- B. An applicant shall not be required to provide public access where the City determines that one or more of the following conditions apply:
1. proposed use, activity or development only involves the construction of four or fewer single-family or multifamily dwellings;
 2. the proposed use, activity or development only involves agricultural activities.
 3. the nature of the use, activity or development or the characteristics of the site make public access requirements inappropriate due to health, safety or environmental hazards. The proponent shall carry the burden to demonstrate by substantial evidence the existence of unavoidable or unmitigatable threats or hazards to public health, safety

- or the environment that would be created or exacerbated by public access upon the site;
4. the proposed use, activity or development has security requirements that are not feasible to address through the application of alternative design features or other measures;
 5. the economic cost of providing for public access upon the site is unreasonably disproportionate to the total long-term economic value of the proposed use, activity or development. For the purposes of this section "unreasonable and disproportionate" means that the economic cost of public access would add more than 20% to the total project cost.³
 6. significant and unmitigatable harm to the shoreline environment would be likely to result from an increase, expansion or extension of public access upon the site;
 7. the City's adopted parks and recreation plans including the Parks and Recreation Open Space Action Plan (PROSAP) does not indicate a need for a trail or access at the property, and reasonable safe and convenient public access to the shoreline exists within one-quarter mile (1,320 feet) of the site, provided that this exception shall not apply if the total frontage of the site along the shoreline is one thousand three hundred and twenty (1,320) feet or greater in dimension; or
 8. public access has reasonable potential to threaten or harm the natural functions and native characteristics of the shoreline; or
 9. The site is within or part of an overall development, a binding site plan or a planned unit development which has previously provided public access through other application processes; or
 10. Public access is deemed detrimental to threatened and/or endangered, species under the Endangered Species Act. The Shoreline Administrator shall consult with governmental agencies or authorities with jurisdiction when making this determination.
- C. Except for detached single family residential and detached residential subdivisions, shoreline development proposals that have the potential to impact public views of the shoreline from public land or substantial numbers of residences, shall demonstrate protection of shoreline views through implementation of the following standards:
1. The implementation of view corridor(s) a minimum of one fourth of the property width. These view corridors shall be maintained free of structures, parking and driveways for the entire depth of the property from the street to the shoreline. The view corridors may be divided into two corridors to facilitate development of the property. Property width shall mean the dimension across a point midway between the front and rear property lines as measures parallel or as near thereto as practical to the course of that portion of the ordinary high water mark nearest the property. See Figure 13.09.050-1 for an illustration of view corridors.
 2. Special setbacks established from adjacent structures.

³ The 20% figure is based on WSDOT's practices in determining whether sidewalks will be provided with state roads. (pers. com. Paula Reeves, WSDOT, email to WAAAPA list serve, April 24, 2009).

3. Upper story setbacks 8 foot minimum at second floors.

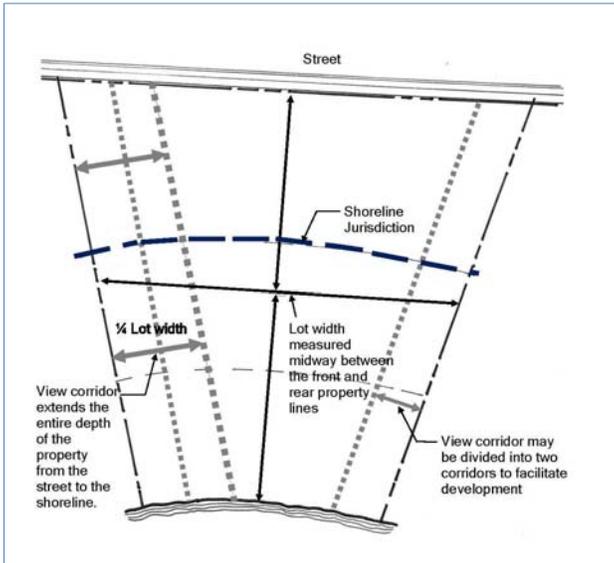


Figure 13.09.050-1. Illustration of View Corridors

- D. Proponents shall include within their shoreline applications an evaluation of a proposed use, activity or development's likely adverse impact upon current public access and future demands for access upon the site. Such evaluation shall consider potential alternatives and mitigation measures to further the policies of this SMP and the provisions of this section.
- E. The City shall not vacate such public rights of ways or easements as a means of retaining public access. Public access provided by public street ends, public utilities and rights-of-way shall not be diminished by a proposed use, activity or development.
- F. Where public access routes terminate, connections shall be made with the nearest public street unless determined by the Shoreline Administrator to be infeasible.
- G. The following standards shall apply to all public access:

1. Types of Access. Applicants required to provide, or who voluntarily provide, shoreline public access shall provide for both physical and visual access, unless due to dangerous of unsafe site conditions only visual access is feasible. Examples are listed in 2 and 3 below.
2. Visual Access. Visual public access may consist of view corridors, viewpoints, or other means of visual approach to public waters.
3. Physical Access. Physical public access may consist of a dedication of land or easement and a physical improvement in the form of a walkway, trail, bikeway, park, boat or canoe and kayak launching ramp, dock area, view platform, or other area serving as a means of physical approach to public waters. Perpendicular trails with limited shoreline access points are an acceptable form of public access provided the PROSAP does not identify a particular alignment or connection for the subject property.
4. Illustration of Visual and Physical Access. Figure 13.09.050-2 illustrates example visual and physical access, including required view corridors.

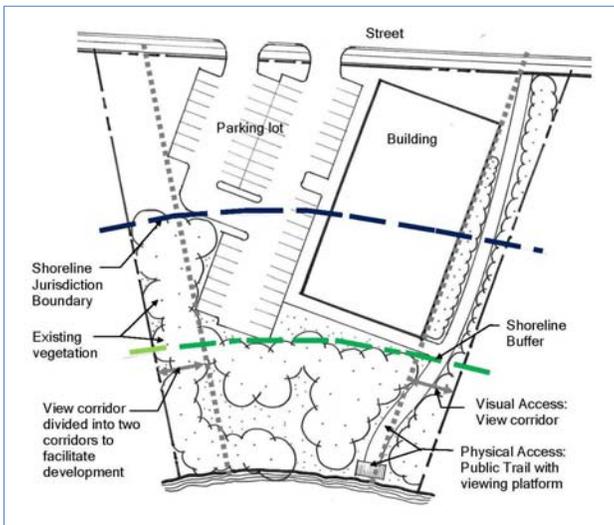


Figure 13.09.050-2. Public Access Illustration, Visual and Physical

H. Off-site Public Access. Off-site public access may:

1. be permitted by the City where it results in an equal or greater public benefit than on-site public access, or when on-site limitations of security, environment, or feasibility are present.
 2. be visual or physical in nature.
 3. include, but is not limited to, enhancing a nearby public property (e.g. existing public recreation site; existing public access; road, street or alley abutting a body of water; or similar) in accordance with City standards;
 4. Involve providing, improving or enhancing public access on another property under the control of the proponent or a governmental body or agency; or
 5. include another equivalent measure as approved by the Shoreline Administrator.
- I. Shared community access may be allowed if there is no existing or planned public access along the shoreline as determined by a review of the Parks, Recreation and Open Space Action Program. Where provided, community access is subject to all applicable development standards of this section.
- J. Public access facilities shall accommodate persons with disabilities unless determined infeasible by the Shoreline Administrator.
- K. Public access facilities required for an approved or permitted use, activity or development shall be completed prior to occupancy and use of the site or operation of the activity.
- L. Where public access is to be provided by dedication of public access easements along the OHWM, the minimum width of such easements shall be as follows:
1. Regional Trails: 16 feet total width with 12 feet of paved travel way and two 2-foot-wide gravel shoulders and clear zones. The standards may be adjusted by the Shoreline Administrator to avoid adverse critical area impacts.
 2. City Trails: 12 feet total width accommodating 10 feet of travel way and a total of 2 feet of gravel shoulders and clear zones, or as otherwise approved by the Shoreline Administrator to match existing connecting City trails.
 3. The public easements required pursuant to this section, for the purpose of providing access across or through the site to the OHWM, shall be improved and maintained by the property owner to provide for reasonable and safe public access to the OHWM.
- M. Public access easements, trails, walkways, corridors, and other public access facilities may encroach upon any buffers or setbacks stipulated within Chapter 13.13, Critical Areas in Shoreline Jurisdiction, or under other provisions of this SMP, provided that no net loss of ecological function is achieved.
- N. Signage to be approved by the Administrator shall be conspicuously installed along public access easements, trails, walkways, corridors, and other facilities to indicate the public's right of use and the hours of operation. The proponent shall bear the responsibility for establishing and maintaining such signs.

- O. The Administrator may require the proponent to post signage restricting or controlling the public's access to specific shoreline areas. The proponent shall bear the responsibility for establishing and maintaining such signage.
- P. Public access does not include the right to enter upon or cross private property, except on dedicated public rights-of-way or easements or where development is specifically designed to accommodate public access. Public access facilities shall be compatible with adjacent private properties through the use of techniques to define the separation between public and private space, including but not limited to, setbacks, screening materials, landscaping, and natural elements such as logs, vegetation, and elevation separations. The City may condition shoreline applications to reinforce the distinction between public and private space.
- Q. Within the Shoreline Residential and High Intensity environment designations, but excluding territory in the Bothell Downtown Subarea Plan, the number of dwelling units within an attached residential development or the number of lots within a detached residential development may be increased within shoreline jurisdiction pursuant to Table 13.09.050-1 in exchange for providing a **new** publicly accessible trail placed on the subject property that parallels the shoreline waterbody, consistent with all of the following:
1. A general public access easement shall be recorded and located in the same location as the physical trail. The easement shall be a minimum of 25 feet wide and shall be permanently dedicated for public use and public access.
 2. The public access easement shall be physically connected to a public right-of-way by a minimum 15-foot-wide public access easement;
 3. The trail widths shall be constructed pursuant to 13.09.050.L above;
 4. Trails shall be consistent with BMC 13.09.050.J through P; and,
 5. Density bonuses are not applicable in the Downtown Subarea Plan.

Density bonus options are illustrated for example on Figure 13.09.050-3.

Table 13.09.050-1. Incentives for parallel trails along shoreline water bodies

| Type of Public Access | SR and HI Residential Incentives |
|--|---|
| Parallel Trail comprising 50% to 75 percent of the shoreline length | <ul style="list-style-type: none"> □ 10 percent increase in the number of dwelling units or lots: □ Reduction of lot circle requirements up to 15 percent □ Reduction of lot area by 20 percent □ Should the applicant select to locate any additional lots authorized by this provision outside shoreline jurisdiction, the Community Development Director may reduce the lot areas and lot circle dimensions of lots located outside shoreline jurisdiction to accommodate the additional lots, consistent with the applicable provisions of the Bothell Municipal Code |
| Parallel Trail comprising 76 to 100% of the shoreline length and the trail allows for future connections to adjoining properties | <ul style="list-style-type: none"> □ 20 percent increase in the number of dwelling units or lots: □ Reduction of lot circle requirements up to 30 percent □ Reduction of lot area by 50 percent □ Should the applicant select to locate any additional lots authorized by this provision outside shoreline jurisdiction, the Community Development Director may reduce the lot areas and lot circle dimensions of lots located outside shoreline jurisdiction to the minimum necessary to accommodate the additional lots consistent with the applicable provisions of the Bothell Municipal Code |

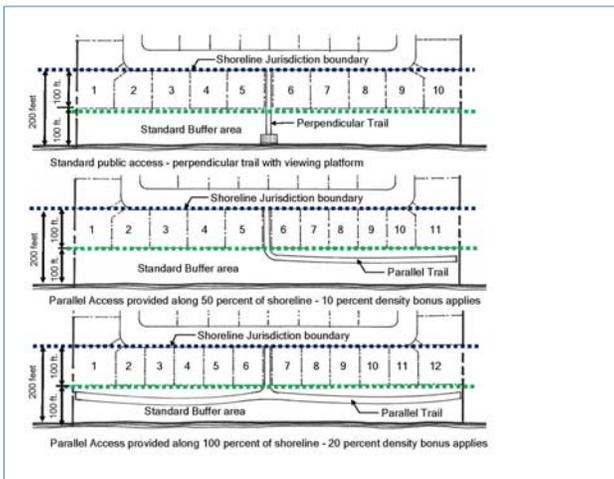


Figure 13.09.050-3. Density Bonus Study

13.09.060 Flood Hazard Reduction

- A. Development in floodplains shall avoid significantly or cumulatively increasing flood hazards. Development shall be consistent with this SMP, as well as guidelines of the Natural Resource Conservation Service, the U.S. Army Corps of Engineers, the Federal Emergency Management Agency and King and Snohomish Counties' flood hazard management plans.
- B. The channel migration zone (CMZ) is considered to be that area of a stream channel which may erode as a result of normal and naturally occurring processes⁴ or areas mapped by the Department of Ecology [pending] prepared consistent with WAC 173-26-221(3)(b). Applicants for shoreline development or modification may submit a site-specific channel migration zone special study if they believe these conditions do not exist on the subject

⁴ Four potential areas of channel migration have been identified on North Creek in the City's Shoreline Analysis Report: 1) in North Creek - Centennial Park (Reach 2) ,2) the open space/wetland area just north of 228th in North Creek - Canyon Park assessment unit (lower Reach 3), 3) south of 228th Street SE and north of 240th Street SE along the North Creek - Fitzgerald assessment unit (Reach 4), and 4) west of Interstate-405 and north of the North Creek confluence with the Sammamish River within the North Creek - Campus assessment unit (Reach 6).

property or Ecology's mapping is in error. The CMZ special study must be prepared consistent with WAC 173-26-221(3)(b), and may include, but is not limited to, historic aerial photographs, topographic mapping, flooding records, and field verification.

C. The following uses and activities may be authorized within the CMZ or floodway:

1. New development or redevelopment landward of existing legal structures, such as levees, that prevent active channel movement and flooding.
2. Development of new or expansion or redevelopment of existing bridges, utility lines, public stormwater facilities and outfalls, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate costs. The evaluation of cost differences between options within the CMZ or floodway and outside of the CMZ or floodway shall include the cost of design, permitting, construction and long-term maintenance or repair. For the purposes of this section "unreasonable and disproportionate" means that locations outside of the floodway or CMZ would add more than 20% to the total project cost.⁵ Where such structures are allowed, mitigation shall address adversely impacted functions and processes in the affected shoreline.
3. New or redeveloped measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measures do not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measures include appropriate mitigation of adverse impacts to ecological functions associated with the river or stream.
4. Actions that protect or restore the ecosystem-wide processes or ecological functions or development with a primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.
5. Modifications or additions to an existing nonagricultural legal use, provided that channel migration is not further limited and that the modified or expanded development includes appropriate protection of ecological functions.
6. Repair and maintenance of existing legally established use and developments, provided that channel migration is not further limited, flood hazards to other uses are not increased, and significant adverse ecological impacts are avoided.
7. Existing and ongoing agricultural activities provided that no new restrictions to channel movement are proposed.

D. Existing structural flood hazard reduction measures, such as levees, may be repaired and maintained as necessary to protect legal uses on the landward side of such structures. Increases in height of an existing levee, with any associated increase in width, that may be needed to prevent a reduction in the level of protection of existing legal structures and uses shall be considered an element of repair and maintenance provided the expansion is landward of the ordinary high water mark.

⁵ The 20% figure is based on WSDOT's practices in determining whether sidewalks will be provided with state roads. (pers. com. Paula Reeves, WSDOT, email to WAAAPA list serve, April 24, 2009).

E. New development or new uses in shoreline jurisdiction, including the subdivision of land, shall not be permitted within the CMZ or floodway.

F. New public and private structural flood hazard reduction measures

1. shall be approved when a scientific and engineering analysis demonstrates the following:
 - a. that they are necessary to protect existing development,
 - b. that nonstructural measures are not feasible, and
 - c. that adverse impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss.
2. shall be consistent with the King and Snohomish County's respective comprehensive flood hazard management plans.
3. shall be placed landward of associated wetlands and designated shoreline buffers, except for actions that increase ecological functions, such as wetland restoration, or when no other alternative location to reduce flood hazard to existing development is feasible as determined by the Shoreline Administrator.

G. New public structural flood hazard reduction measures, such as levees, shall dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and un-mitigable significant adverse ecological impacts, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development. For the purposes of this section "unreasonable and disproportionate" means that the cost of the public access improvements would add more than 20% to the total project cost.⁶

H. In those instances where management of vegetation as required by this SMP conflicts with vegetation provisions included in state, federal or other flood hazard agency documents governing City-authorized, legal flood hazard reduction measures, the vegetation requirements of this SMP will not apply. However, the applicant shall submit documentation of these conflicting provisions with any shoreline permit applications, and shall comply with all other provisions of this section and this SMP that are not strictly prohibited by the approving flood hazard agency.

I. The removal of gravel or other riverbed material for flood management purposes shall be consistent with BMC 13.11.060, Dredging and Dredge Material Disposal, and may be allowed only after a biological and geo-morphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of ecological functions, and is part of a comprehensive flood management solution.

J. Transportation facilities shall be located outside the floodway excepting necessary crossings or bridges which shall be placed as perpendicular to the waterbody as is physically feasible. New transportation facilities shall be designed so that no significant loss of floodway capacity or greater than a 0.5-foot increase in the 100-year flood level will result

⁶ The 20% figure is based on WSDOT's practices in determining whether sidewalks will be provided with state roads. (pers. com. Paula Reeves, WSDOT, email to WAAAPA list serve, April 24, 2009).

consistent with FEMA Standards. The applicant shall provide all necessary studies, reports and engineering analysis which shall be subject to review and modification by the City of Bothell. If proposed transportation facilities effectively provide flood control, they shall comply with policies and regulations of this section.

13.11 Use-Specific and Modification Regulations and Performance Standards

13.11.010 Agriculture

- A. The provisions of this SMP do not limit or require modification of existing agricultural activities on agricultural lands as of the date of adoption of this SMP.
- B. A Substantial Development Permit shall be required for all agricultural development not specifically exempted by the provisions of RCW 90.58.030(3)(e)(iv).
- C. SMP provisions shall apply in the following cases:
1. new agricultural activities on land not meeting the definition of agricultural land;
 2. expansion of agricultural activities on non-agricultural lands;
 3. conversion of agricultural lands to other uses;
 4. other development on agricultural land that does not meet the definition of agricultural activities; and
 5. agricultural development and uses not specifically exempted by the Act.
- D. New non-agricultural activities proposed on agricultural lands shall be consistent with the environment designation and use table as well as other applicable shoreline use standards, for example Commercial or Industrial.
- E. Agricultural uses and development in support of agricultural uses shall be located and designed to assure no net loss of ecological functions and no significant adverse impact on other shoreline resources and values.
- F. Agricultural chemicals, fertilizers, pesticides, and manure shall be applied in a manner that prevents their direct runoff into water bodies, wetlands or aquifer recharge areas, and shall be restricted in accordance with State Department of Fish and Wildlife Management recommendations and the regulations of the State Department of Agriculture and the U.S. Environmental Protection Agency. Application shall be consistent with the instructions on the container label and U.S. Environmental Protection Agency requirements.
- G. New or redeveloped agricultural activities shall provide a buffer of permanent native vegetation between all cropland or pasture areas and adjacent waters or wetlands pursuant to the critical areas provisions of BMC 13.13.

13.11.020 Aquaculture

- A. Non-commercial aquaculture undertaken for conservation or habitat restoration purposes is a preferred use within Bothell's shorelines. Allowed fisheries enhancement uses shall include hatcheries, rearing ponds, spawning channels, water diversion structures, and

- groundwater wells, provided that their construction does not result in a net loss of ecological function.
- B. Proponents of an aquaculture use or activity shall supply, at a minimum, the following information in their application for shoreline permit(s):
1. species to be reared;
 2. aquaculture method(s);
 3. anticipated use of any feeds, pesticides, herbicides, antibiotics, vaccines, growth stimulants, anti-fouling agents or other chemicals, and their predicted adverse impacts;
 4. harvest and processing method and timing;
 5. method of waste management and disposal;
 6. best available background information and probable adverse impacts on water quality, biota, and any existing shoreline or water uses.
 7. method(s) of predator control;
 8. a description of the proposed use of lights and noise-generating equipment, and an assessment of adverse impacts upon surrounding uses; and
 9. other pertinent information as required by the City.
- C. Aquacultural activities shall meet all applicable federal, state and county standards and regulations.
- D. No garbage, wastes or debris shall be allowed to accumulate upon the site of any aquaculture use or activity, nor discharged to any waterbody regulated by this SMP.
- E. No pesticides, herbicides, antibiotics, vaccines, growth stimulants, anti-fouling agents or other chemicals shall be used until approved by all appropriate state and federal agencies. Those agencies shall include, but shall not be limited to, the Washington State Departments of Fish and Wildlife, Agriculture, and Ecology, and the U.S. Food and Drug Administration. Evidence of such approval shall be submitted to the City.
- F. Aquaculture structures and equipment that come in contact with the water shall contain no substances that are toxic to aquatic life, and aquaculture activities that would degrade water quality shall be prohibited.
- G. Aquaculture activities shall be subject to conditioning and requirements for mitigation to ensure that it does not result in a net loss of ecological function.

13.11.030 Boating Facilities

Boating facilities are improvements or modifications that accommodate motorized and non-motorized boats and include improvements for storing, launching, mooring, and servicing boats. Boating facilities include marinas, community docks serving more than four residential units, other public docks, and community or public boat launches. Boating facility regulations do not apply to private residential docks serving four or fewer residential units, which are addressed separately in BMC 13.11.110, Private Residential Docks. All boating facilities shall comply with the standards below.

A. General

1. Over-water residential uses, including houseboats, live-aboards, or other vessels, serving as a dwelling unit, are prohibited in marinas and along private or community docks.
2. Extended mooring for greater than 30 days is prohibited on waters of the state, except at permitted moorage facilities and as otherwise allowed by applicable state regulations (see Chapter 332-30 WAC, Title 79 RCW). Adverse impacts to navigation and public access shall be prohibited. A lease or permission from the Washington Department of Natural Resources, Aquatic Resources Division may need to be obtained for extended mooring outside of permitted moorage facilities (Chapter 43.12, 43.30 and Title 79 of the Revised Code of Washington).
3. Shoreline improvements and modifications necessary to accommodate boating facilities shall comply with all applicable no net loss provisions of this SMP.
4. Boating facilities shall comply with the use / activity provisions of BMC 13.07.080.
5. Boating facilities shall be located and designed with the minimum necessary shoreline stabilization to adequately protect facilities (see BMC 13.11.150).
6. Removal of sediment that is deposited beneath and interferes with the normal use of moorage facilities shall be governed by BMC 13.11.060 of this Master Program.

B. Location Standards

1. New boating facilities shall not be permitted:
 - a. in channel migration zones;
 - b. where a flood hazard will be created; or
 - c. where adverse impacts to shoreline ecological functions and processes cannot be mitigated.
2. Motorized boating facilities proposed after [effective date of SMP] are prohibited in North and Swamp Creeks. Non-motorized boat launches for canoes, kayaks, and other non-motorized boats may be developed in North and Swamp Creeks subject to these standards.
3. Motorized and non-motorized boating facilities are allowed on the Sammamish River. Boating facilities are defined as the following:
 - a. community docks shared by five or more dwelling units;
 - b. marinas, limited to the Sammamish River;
 - c. community, public or commercial motorized boat launches, limited to the Sammamish River; and
 - d. non-motorized boat launches.

Over-water piers, constructed as boat moorage, are prohibited on all waterbodies. See definition of pier.

4. Boating facilities shall be located at least 50 feet from the mouth of any named or numbered tributary entering the Sammamish River or North and Swamp Creeks.
5. Boating facilities constructed or expanded after [effective date of SMP] within wetlands or wetland buffers are prohibited.
6. Boating facilities constructed or expanded after [effective date of SMP] shall be located only where adequate utility services and vehicular or pedestrian access are or can be made available.

C. Design Standards

1. General Overwater Standards:
 - a. No skirting is allowed on any overwater structure.
 - b. Overwater structures shall not include walled structures. Covered structures with roofs are allowed provided the roof is maintained at least 8 feet above the water level and the roof contains translucent materials covering at least 50% of the gross roof square footage.
 - c. Any paint, stain or preservative applied to components of the overwater structure must be leach-resistant, completely dried or cured prior to installation. Materials shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds.
 - d. Lighting associated with overwater boating facilities shall be beamed, hooded, or directed to avoid causing glare on adjacent properties or waters. Illumination levels shall be the minimum necessary for safety and shall be consistent with the City of Bothell exterior lighting regulations contained in BMC 12.14.240.
 - e. Overwater boating facilities shall be marked with reflectors or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night. Exterior finish shall be generally non-reflective.
 - f. Boating facilities shall not create navigation hazards consistent with U.S. Army Corps of Engineers and U.S. Coast Guard Standards for navigable waterbodies.
 - g. Float Standards: In addition to specific float standards for community and public docks in C(2) and for marinas in C(3) below, the following general standards apply to all floats that are components of either of those facilities:
 - i. Floats shall be decked with grating on all deck surfaces not underlain by float tubs, with a maximum area of float tub of 70 percent of the total float area. The number and area of float tubs shall be minimized to the amount necessary based on design and engineering considerations. Grating shall allow for a minimum of 40 percent light transmission. The City shall also approve other configurations that provide equal or greater effective light transmission.
 - ii. All float tubs shall be fully encapsulated.
 - iii. Floats shall at all times float on the water and not rest on the substrate.
2. Community and public docks:

- a. Allowed elements of a community or public dock consist of a ramp extending from the shoreline to a float or float system, generally oriented parallel to the shoreline to minimize interference with navigation and public use of the river. Long-term moorage per BMC 13.11.030(A)(2) is permitted at community docks; only day moorage is permitted at public docks.
 - b. Floats shall be no wider than 6 feet, and shall be oriented parallel to the shoreline.
 - c. Floats shall project into the Sammamish River no more than 10 feet from the ordinary high water mark measured from the landward edge of the float. The Shoreline Administrator may allow floats to be positioned up to an additional 10 feet waterward from the ordinary high water mark to reach a depth of 3 feet to accommodate boat moorage.
 - d. The maximum length of a community dock shall be determined by the number of residential units served based upon 20 feet of float per unit. In no case shall floats exceed 160 feet in length. The maximum length of a public dock is 30 feet.
 - e. Docks shall be accessed by one fully-grated ramp no wider than 4 feet and a ramp shall be the minimum length necessary to provide safe access to the float. The length of the ramp and the distance between the float and the OHWM are determined by the height of the bank above the OHWM and the distance waterward of the OHWM needed to place the float at a depth that does not result in grounding on the substrate.
3. Marinas:
- a. The primary walkway portions of the marina shall consist of floats no wider than 6 feet, and shall be oriented parallel to the shoreline. Perpendicular extensions off the walkway shall be no wider than 4 feet, unless the extension serves two boats, in which case the perpendicular extension may be up to 6 feet wide.
 - b. Docks shall be accessed by fully grated ramps no wider than 5 feet and ramps shall be the minimum length necessary to provide safe access to the float. Depending on shoreline configuration, a marina may have one access ramp for every 150 feet of dock.
 - c. The length of the ramp and the distance between the float and the OHWM are determined by the height of the bank above the OHWM and the distance waterward of the OHWM needed to place the float and a boat at a depth that does not result in grounding of the float or boat on the substrate or disturbance of the substrate by boat propeller action.
4. Piling:
- a. Each float is allowed a maximum of two anchor piles. For community or public docks exceeding 50 feet in length, up to two anchor piles per 50 feet of float length may be used. In all cases, the number of anchor piles shall be the minimum number necessary based upon site-specific engineering and design considerations.
 - b. Anchor piles shall be a maximum of 12 inches in diameter or dimension.
 - c. Anchor piles shall not project above the OHWM by more than 8 feet.

- d. Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ammoniacal copper zinc arsenate (ACZA) pilings are proposed, the applicant will meet all of the Best Management Practices, including a post-treatment procedure, as outlined in the latest edition of the Western Wood Preservers Institute Best Management Practices for the Use of Treated Wood in Aquatic and Sensitive Areas.
5. Community, public, and commercial boat launches:
- a. Boat launches shall comply with the critical area regulations of BMC 13.13.
 - b. Boat launches shall be constructed on existing grade and shall limit fill or dredging to the minimum necessary to accommodate the launch. Excavation or fill of less than 10 cubic yards of materials to accommodate launch placement may be allowed if the grading would enable use of a launch ramp design that is more preferred as outlined in Subsection (7)(g) below than the method that would be used without the grading.
 - c. Boat launches shall not protrude more than 20 feet waterward of the ordinary high water mark or 5 feet beneath the water surface as measured at the ordinary high water mark.
 - d. Boat launches shall not obstruct existing or proposed public access to and along the shoreline.
 - e. Boat launches shall retain native vegetation on either side of the launch and any access ramp to associated docks. The Shoreline Administrator shall have the authority to identify modifications in the site plan to achieve vegetation preservation.
 - f. Boat launches must be as narrow as feasible to launch the intended watercraft, and extend into the waterbody no more than necessary.
 - g. Preferred launch ramp designs, in order of priority, are:
 - i. Gravel and cobble materials, or other natural surfacing.
 - ii. Open grid designs with minimum coverage of substrate.
 - iii. Pre-cast concrete planks with segmented pads and flexible connections that leave space for natural substrate and can adapt to changes in substrate profile. In all cases, such segmented pads shall be used waterward of the ordinary high water mark.
 - iv. Concrete is preferred over asphalt.
- D. Site Design and Operation
- 1. Boating facilities shall be designed so that lawfully existing or planned public shoreline access is not blocked, obstructed or made dangerous.
 - 2. Marinas shall provide physical and/or visual public access, commensurate with the need for security and the scale of the proposal.
 - 3. Best management practices shall be utilized to prevent pollutants associated with upland boat-related service activities, such as boat maintenance and repair, from reaching the Sammamish River. Boat maintenance and repair activities conducted while the boat is moored in the water are prohibited.

4. Except for marinas with a valid Boat Yard General NPDES Permit issued by the Washington State Department of Ecology, the following standards apply to vessel maintenance areas:
 - a. Maintenance areas shall be sited as far from the water as is practicable, and shall be designed so that all maintenance activities that are potential sources of water or air pollution can be accomplished over dry land, under roof, and in a contained operation; and
 - b. All drains from maintenance areas must lead to a sump, holding tank, or pump out facility from which the wastes can later be extracted for treatment and/or disposal by approved methods. Drainage of maintenance areas directly into surface or groundwater shall not be allowed.
 5. On-site boat fueling facilities are prohibited.
 6. Accessory uses at marinas or public boat launches shall be limited to water-oriented uses or accessory uses that support the marina operation. Accessory uses include, but are not limited to, parking, boat storage, non-hazardous waste storage and treatment, stormwater management facilities, and utilities where these are necessary to support the water-oriented use.
 7. Long-term boat storage located landward of the OHHM is allowed and regulated as a water-oriented commercial use if the development is equipped with a boat launch (either launch ramp, crane, hoist or similar device). Upland boat storage without an on-site facility for launching boats is regulated as a non-water-oriented commercial use under BMC 13.11.050, Commercial Development.
 8. During development or expansion of marinas and public boat launches, the City may condition boating facility developments to provide landscaping, screening, signage specifications, and other features to assure compatibility with adjacent shoreline development, where such measures do not interfere with the marina and public boat launch use or operation.
- E. Waste Disposal
1. Discharge of solid waste or sewage into a waterbody is prohibited. Garbage or litter receptacles shall be provided and maintained by the operator at several locations convenient to users. Marinas installed or re-developed after [effective date of the SMP] shall provide adequate restroom and sewage disposal facilities (pump out, holding, and/or treatment facilities) in compliance with applicable health regulations. No fuel storage facility or sanitary pump-out station holding tank shall be located over water.
 2. Disposal or discarding of fish-cleaning wastes, scrap fish, viscera, or unused bait into water or in other than designated garbage receptacles is prohibited.
 3. Marina operators shall post all regulations pertaining to handling, disposal and reporting of waste, sewage, fuel, oil or toxic materials where all users may easily read them.
 4. Fail-safe facilities and procedures for receiving, storing, dispensing, and disposing of oil or hazardous products, as well as a spill response plan for oil and other products, shall be required of new marinas and existing marinas proposed for expansion or substantial alteration. Compliance with Federal or State law may fulfill this requirement. Handling of

fuels, chemicals or other toxic materials must be in compliance with all applicable Federal and State water quality laws as well as health, safety and engineering requirements. Rules for spill prevention and response, including reporting requirements, shall be posted on site.

F. Submittal Requirements

1. Applicants for new or expanded boating facilities shall provide habitat surveys, critical area studies, and mitigation plans as required by BMC 13.09.020, Environmental Protection, and Chapter 13.13, Critical Areas Regulations in Shoreline Jurisdiction, as applicable.
2. The mitigation plan shall discuss how the proposed project avoids and minimizes adverse impacts consistent with the facility's sizing needs, which are to be based on the results of any habitat survey/critical area study.
3. A slope bathymetry map may be required when deemed beneficial by the Shoreline Administrator for the review of the project proposal.

13.11.040 Breakwaters, Groins, and Weirs

- A. New, expanded or replacement structures shall only be permitted if the applicant demonstrates that the proposed breakwater, groin or weir will not result in a net loss of shoreline ecological functions, and the structure is necessary to water-dependent uses, public access, shoreline stabilization, or other specific public purpose.
- B. Breakwaters, groins, and weirs shall require a Conditional Use Permit, except when such structures are installed to protect or restore ecological functions, such as placement of woody debris in streams with the dual purpose of habitat and directing flows to prevent the need for shoreline stabilization or installation of groins that may eliminate or minimize the need for hard shoreline stabilization.
- C. Breakwaters, groins and weirs shall be located, designed, constructed and operated consistent with mitigation sequencing principles, including avoiding critical areas, limiting structure size to the minimum necessary, restoring temporarily disturbed areas after construction is complete, and mitigating any long-term adverse impacts.

13.11.050 Commercial Development

- A. Commercial development is activity related to the sale of goods and services, including but not limited to, retail, services, wholesale, or business trade activities. Types of commercial development include, but are not limited to, hotels, motels, or other commercial accommodations, grocery stores, restaurants, concessions, shops, commercial recreation facilities such as marinas, boat repair, boat, canoe, or kayak rentals, and offices. See also BMC 13.11.030 Boating Facilities for in-water commercial activities.
- B. Review Criteria: The City shall utilize the following information in its review of all commercial development applications:
 1. whether there is a water dependent, water-related, or water-oriented aspect of the proposed commercial use or activity;
 2. whether the proposed commercial use is consistent with the use matrix of 13.07.080;

3. the application's ability to enhance compatibility with the shoreline environment and adjacent uses enhance compatibility with the shoreline environment and adjacent uses;
 4. whether adequate provisions are made for public and private visual and physical shoreline access;
 5. whether the application makes adequate provisions to prevent or mitigate adverse environmental impacts; and
 6. whether the application makes adequate provisions to provide for shoreline ecological or critical area mitigation, where appropriate.
- C. Water-dependent commercial development shall be given priority over non-water-dependent commercial uses within shoreline environments associated with the Sammamish River. Secondly, water-related and water-oriented uses shall be given priority over non-water-oriented commercial uses.
- D. Non-water-oriented commercial uses shall be allowed if the use can demonstrate at least one of the following:
1. The commercial use is part of a mixed-use project that includes water-dependent uses.
 2. Navigability is severely limited at the proposed site, and the commercial use provides a public benefit with respect to the objectives of the Act, such as providing public access consistent with BMC 13.09.050 and ecological restoration that is not otherwise required for mitigation purposes.
 3. The commercial use is physically separated from the shoreline by another property or public right-of-way.
- E. Non-water-oriented uses, including but not limited to residential uses, may be located with water-oriented commercial uses provided:
1. The mixed-use project includes one or more water-dependent uses.
 2. Water-dependent commercial uses as well as other water-oriented commercial uses have preferential locations along the shoreline.
 3. The underlying zoning district permits residential uses together with commercial uses.
 4. Public access is provided for significant number of persons in accordance with BMC 13.09.050, and/or ecological restoration is provided as a public benefit.
 5. Residential uses meet requirements of BMC 13.11.130.
- F. All commercial loading and service areas shall be located upland or away from the shoreline. Provisions shall be made to screen such areas with walls, fences and landscaping and to minimize aesthetic impacts.
- G. Eating and drinking facilities and lodging facilities shall be oriented to provide views to the waterfront.
- H. Non-water-oriented commercial uses shall not be allowed over water in any shoreline environment unless they are accessory to and support water-dependent uses.

13.11.060 Dredging and Dredge Material Disposal

A. General

1. New development shall be designed and located to avoid or, if infeasible, to minimize the need for new and maintenance dredging.
2. Dredging shall be allowed only for one or more of the following purposes:
 - a. For shoreline restoration projects benefiting water quality and/or fish and wildlife habitat.
 - b. For flood hazard reduction, when performed as part of an approved flood hazard reduction plan, such as King County's Flood Hazard Management Plan or Snohomish County's Surface Water Management Plan.
 - c. To maintain existing legal moorage facilities.
 - d. To maintain existing navigation or navigation access.
 - e. In conjunction with a bridge or navigational structure for which there is a public need and where other feasible sites or routes do not exist.
3. Developments which propose dredging for the primary purpose of obtaining fill material are prohibited, except when the material is necessary for the restoration of ecological functions and is placed waterward of the OHWM. Such an application shall be associated with a Model Toxics Control Act (MTCA) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) habitat restoration project or, if approved through a Shoreline Conditional Use Permit, another significant habitat enhancement project.
4. Dredging to maintain an existing legal navigation route shall be restricted to restoring the previously authorized location, depth, and width of the navigation channel.
5. Dredging and dredge material disposal shall be permitted only where it is demonstrated that the proposed dredging or deposition shall not:
 - a. result in significant or ongoing damage to water quality, fish, and shoreline wildlife habitat;
 - b. alter natural drainage and water circulation patterns, currents, river flows, and channel migration processes or significantly reduce flood water capacities; or
 - c. cause other significant adverse ecological impacts.
6. Proposals for dredging and dredge material disposal shall, when impacts cannot be avoided, minimize and mitigate adverse impacts (such as turbidity; release of nutrients, heavy metals, sulfides, organic material or toxic substances; dissolved oxygen depletion; disruption of food chains; loss of benthic productivity; and disturbance of fish runs and important localized biological communities) to assure no net loss of shoreline ecological functions. Mitigation plans shall be prepared by a qualified professional.
7. Dredging and dredge material disposal shall be carefully scheduled to protect biological productivity (e.g. fish runs, spawning, benthic productivity).

8. When dredging is permitted, the dredging shall be the minimum necessary to accomplish its intended purpose.
9. Dredging shall utilize techniques that cause minimum dispersal and broadcast of bottom material.
10. Vegetation disturbed by dredging activities shall be restored to its original condition, equal alternative, or an improved condition. All replacement vegetation shall be native species.
11. Dredging and dredge material disposal shall be prohibited on or in archaeological sites that are listed on the Washington State Register of Historic Places until such time that they have been released by the State Archaeologist.

B. Dredge Material Disposal

1. Upland dredge material disposal within shoreline jurisdiction is permitted under the following conditions:
 - a. shoreline ecological functions and processes will be preserved, restored or enhanced, including protection of surface and groundwater; and
 - b. erosion, sedimentation, floodwaters or runoff will not increase adverse impacts to shoreline ecological functions and processes or property; and
 - c. the site will ultimately be suitable for a use allowed by this SMP.
2. Dredge material disposal shall not occur on shorelands or in wetlands within a stream's channel migration zone, except as authorized by Conditional Use Permit as part of a shoreline restoration project.
3. Dredge material disposal within areas assigned an Aquatic environment designation may be approved only when authorized by applicable agencies, which may include the U.S. Army Corps of Engineers pursuant to Section 10 (Rivers and Harbors Act) and Section 404 (Clean Water Act) permits, and Washington State Department of Fish and Wildlife Hydraulic Project Approval (HPA); and when one of the following conditions apply:
 - a. land disposal is infeasible, less consistent with this SMP, or prohibited by law; or
 - b. disposal as part of a program to restore or enhance shoreline ecological functions and processes is not feasible.
4. Dredge materials approved for disposal within Bothell's shoreline areas assigned an Aquatic environment designation shall comply with the following conditions:
 - a. aquatic habitat will be protected, restored, or enhanced;
 - b. adverse effects on water quality or biologic resources from contaminated materials will be mitigated;
 - c. shifting and dispersal of dredge material will be minimal; and
 - d. water quality will not be adversely affected.
5. When required by the City's Shoreline Administrator, revegetation of land disposal sites shall occur as soon as feasible in order to retard wind and water erosion and to restore the wildlife habitat value of the site. Native species shall be used in the revegetation.

6. Dredge material disposal operating periods and hours shall be limited to those stipulated by the Washington state Department of Fish and Wildlife and hours to 7:00 AM to 5:00 PM Monday Through Friday, except in time of emergency as authorized by the Shoreline Administrator. Provisions for buffers at land disposal or transfer sites in order to protect public safety and other lawful interests and to avoid adverse impacts shall be required.

C. Submittal Requirements: The following information shall be required for all dredging applications:

1. A description of the purpose of the proposed dredging and analysis of compliance with the policies and regulations of this SMP.
2. A detailed description of the existing physical character, shoreline geomorphology, and biological resources provided by the area proposed to be dredged, including:
 - a. a site plan map outlining the perimeter of the proposed dredge area. The map must also include the existing bathymetry (water depths that indicate the topography of areas below the OHWM) and have data points at a minimum of 2-foot depth increments.
 - b. a critical areas special study.
 - c. a mitigation plan if necessary to address any identified adverse impacts to ecological functions or processes.
 - d. information on stability of bedlands adjacent to proposed dredging and spoils disposal areas.
3. If additional data on the physical, chemical or biological characteristics of the dredge materials to be removed is required by any state or federal agency, such data shall be provided to the City.
4. A description of the method of materials removal, including facilities for settlement and movement.
5. Dredging procedure, including the length of time it will take to complete dredging, method of dredging, and amount of materials removed.
6. Frequency and quantity of project maintenance dredging.
7. Detailed plans for dredge spoil disposal, including specific land disposal sites and relevant information on the disposal site, including, but not limited to:
 - a. dredge material disposal area;
 - b. physical characteristics including location, topography, existing drainage patterns, surface and ground water;
 - c. size and capacity of disposal site;
 - d. means of transportation to the disposal site;
 - e. proposed dewatering and stabilization of dredged material;
 - f. methods of controlling erosion and sedimentation; and
 - g. future use of the site and conformance with land use policies and regulations.

8. Total estimated initial dredge volume.
9. Plan for disposal of maintenance spoils for at least a 20-year period, if applicable.
10. Hydraulic modeling studies sufficient to identify existing geohydraulic patterns and probable effects of dredging.

13.11.070 Fill

- A. Fill waterward of the OHWM, except fill to support ecological restoration, requires a Conditional Use Permit and may be permitted only when:
 1. in conjunction with water-dependent or public access uses allowed by this SMP;
 2. in conjunction with a levee, bridge, navigational structure, or transportation facility of statewide significance for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist;
 3. in conjunction with implementation of an interagency environmental clean-up plan to clean up and dispose of contaminated sediments; or
 4. in conjunction with any other environmental restoration or enhancement project.
- B. Waterward of the OHWM, pile or concrete 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 pile or concrete pier supports are proven not feasible.
- C. Fill upland and waterward of the ordinary high water mark shall be permitted only where it is demonstrated that the proposed action will not:
 1. result in significant ecological damage to water quality, fish, and/or wildlife habitat; or
 2. adversely alter natural drainage and circulation patterns, currents, river flows or significantly reduce flood water capacities.
 3. alter channel migration, geomorphic, or hydrologic processes.
 4. significantly reduce public access to the shoreline or significantly interfere with shoreline recreational uses.
- D. Fills are allowed in floodplains outside of the floodway only where they would not alter the hydrologic characteristics, flood storage capacity, or inhibit channel migration that would, in turn, increase flood hazard or other damage to life or property and are consistent with FEMA standards and BMC 13.13.040, Frequently Flooded Areas.
- E. Fills are prohibited in the floodway, except when approved by Conditional Use Permit and where required in conjunction with uses allowed by this SMP.
- F. Fill shall be of the minimum amount and extent necessary to accomplish the purpose of the fill.
- G. Fill shall be "clean" and free of contaminants pursuant to WAC 173-204 and 173-340 or fill shall be obtained from a Washington State Department of Ecology approved site.

13.11.080 Forest Practices

Forest practice applications shall meet all local, state, and federal regulations regarding forest practices and land clearing and ensure no-net-loss of ecological function.

13.11.090 Industry

- A. Review Criteria: The City shall utilize the following information in its review of all industrial development applications:
 1. whether the proposal includes water-dependent, water-related, or water-oriented aspects or components of the use or activity;
 2. whether the proposed industrial use is consistent with the use matrix of 13.07.080;
 3. whether the proposed industrial use makes adequate provisions for public and private visual and physical shoreline access; and
 4. whether the application makes adequate provisions to prevent or mitigate adverse environmental impacts; and
 5. whether the application makes adequate provisions to provide for shoreline ecological or critical area mitigation, where appropriate.
- B. Water-oriented and non-water-oriented industrial uses are permitted on North Creek subject to the standards of this SMP. Water-dependent industrial development shall be a permitted use and non-water-dependent industrial uses shall be a conditional use within High Intensity and Aquatic shoreline environments associated with the Sammamish River; however, where a new non-water-dependent industrial use meets the criteria in Subsection C below, it shall be considered permitted. Applications for new industrial development on the Sammamish River shall demonstrate that the proposed use would not impede navigability of the river.
- C. Applications for new non-water-oriented industrial uses shall demonstrate at least one of the following:
 1. The industrial use is part of a mixed-use project that includes water-dependent uses.
 2. Navigability is severely limited at the proposed site; and the use provides a public benefit with respect to the objectives of the Act such as providing public access and ecological restoration that would not be achieved except for the presence of the industrial use.
 3. The industrial use is physically separated from the shoreline by another property or public right-of-way.
- D. All loading and service areas shall be located upland of the activity. Loading and service areas shall be screened from adjacent uses to protect the aesthetics of the shoreline.
- E. Industrial development and redevelopment shall be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.

13.11.100 In-Stream Structures

In-stream structures are those structures placed by humans within a stream or river waterward of the OHWM that either cause or have the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for

hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose. Docks, floats and marinas are not regulated as "in-stream structures" under this section of the SMP.

A. General

1. The location, planning and design of in-stream structures shall be compatible with the following:
 - a. the full range of public interests, including demand for public access to shoreline waters, desire for protection from floods, and need for preservation of historical and cultural resources; and
 - b. protection and preservation of ecosystem-wide processes and ecological functions, including, but not limited to, fish and wildlife, with special emphasis on protecting and restoring priority habitats and species, and water resources and hydro geological processes.
2. Structures shall be designed, located, and constructed consistent with mitigation sequencing principles in BMC 13.09.020(B) and in such a manner as to avoid topographical alteration of more than 4 feet and as otherwise limited by floodplain regulations found in BMC 13.13.040. Structures shall be designed and located to minimize removal of riparian vegetation and, if applicable, to return flow to the stream in as short a distance as possible.
3. Subject to the approval of the appropriate state authority, in-stream structures shall provide for adequate upstream and downstream migration of anadromous fish. The City shall not approve an in-stream structure project that adversely effects anadromous fish or state-listed priority species or adversely modifies habitat for fish or state-listed priority species.
4. Utilities and transmission lines shall be located so as to minimize obstruction or degradation of views, and comply with applicable provisions of BMC 13.11.170, Utilities.
5. Mitigation shall be required of the proponent for the loss of ecological functions and processes pursuant to BMC 13.09.020, and consistent with provisions found in applicable sections of BMC 13.13. No net loss in function, value, or acreage shall occur from such development.
6. In-stream structures may be required to provide public access, provided public access improvements do not create significant ecological impacts or other adverse environmental impacts to and along the affected shoreline nor create a safety hazard to the public. Public access provisions shall include, but not be limited to, any combination of trails, vistas, parking, and any necessary sanitation facilities. Required public access sites shall be dedicated for public use through fee acquisition or recorded easement or any action that permanently dedicates the sites as public access.

B. Submittal Requirements: In addition to the standard requirements listed in 13.17.030, Review and Processing Requirements, all permit applications for in-stream structures shall contain, at a minimum, the following additional information:

1. a site suitability analysis, which provides sufficient justification for the proposed site. The analysis must fully address alternative sites for the proposed development;

2. proposed location and design of primary and accessory structures, transmission equipment, utility corridors, and access/service roads;
3. provision for public access to and along the affected shoreline and proposed recreational features at the site, where applicable;
4. a plan that describes the extent and location of vegetation that is proposed to be removed to accommodate the proposed facility, and any site revegetation plan required by this SMP;
5. a hydraulic analysis prepared by a licensed professional engineer that sufficiently describes the project's effects on stream way hydraulics, including potential increases in base flood elevation, changes in stream velocity, and the potential for redirection of the normal flow of the affected stream.
6. a hydrologic analysis that analyzes the project's effects on ecological processes, including delivery and rate of water and sediment, geomorphology, and recruitment of large woody debris.;
7. biological resource inventory and analysis that sufficiently describe the project's effects on fish and wildlife resources, prepared by a qualified professional as defined in BMC 13.03;
8. provision for erosion control, protection of water quality, and protection of fish and wildlife resources during construction; and
9. long-term management plans that describe, in sufficient detail, provisions for protection of in-stream resources during construction and operation. The plan shall include means for monitoring its success.

13.11.110 Private Residential Docks

Regulations in this section apply only to private residential docks serving four or fewer residential units. Other types of docks or boating-related modifications and uses are addressed separately in BMC 13.11.030, Boating Facilities.

A. General

1. New docks shall be allowed only for water-dependent uses or public access. For the purposes of this provision a dock associated with a single-family residence is a water-dependent use provided that it is designed and intended as a facility for access to watercraft and otherwise complies with the provisions of this section.
2. Private residential docks are prohibited on Swamp and North Creeks. Private residential docks are allowed on the Sammamish River, and shall consist of a ramp extending from the shoreline to a float, oriented parallel to the shoreline to minimize interference with navigation and public use of the river. Piers, intended as boat moorage facilities, are prohibited on all waterbodies. See definition of pier.
3. A new, private residential dock may be permitted for each single-family residential lot and multi-family residential parcel exclusively owned for residential use and developed with such use prior to [the effective date of this SMP], provided that no more than one dock for each single-family residence or multi-family parcel is permitted.

4. In the following circumstances, a joint use dock shall be required:
 - a. on lots subdivided after [the effective date of this SMP] that create one or more additional lots with waterfront access rights.
 - b. new residential development of two or more multi-family or single-family dwelling units after [the effective date of this SMP] with waterfront access rights.
5. When a joint-use dock serves more than four residential units, it is regulated under BMC 13.11.030, Boating Facilities, as a community dock.
6. No skirting is allowed on any structure.
7. Private residential docks shall not include covered or walled structures.
8. Lighting associated with overwater structures shall be beamed, hooded, or directed to avoid causing glare on adjacent properties and into the water. Illumination levels shall be the minimum necessary for safety.
9. Private residential docks shall be marked with reflectors or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night. Exterior finish shall be generally non-reflective.
10. Proposals for the replacement of entire ramps, floats, or piles shall comply with all applicable regulations in this section.
11. Additions to private residential docks may be permitted when a single-use dock is converted to a joint-use dock or when the applicant demonstrates a need for increased moorage area; however, under no circumstances shall the proposed additions cause any of the standards of this section to be exceeded.
12. Removal of sediment that is deposited beneath and interferes with the normal use of private residential docks shall be governed by BMC 13.11.060 of this Master Program.
13. Repairs to existing legally established private residential docks where the nature of the repair is not described in the regulations of this section shall be considered minor and are permitted, consistent with all other applicable codes and regulations.
14. All private residential docks shall be constructed and maintained in a safe and sound condition. Abandoned or unsafe structures shall be removed or repaired promptly by the owner.
15. Private boat launches serving four or fewer residential units are prohibited on all waterbodies. Boat launches serving more than four residential units providing for public access are regulated under BMC 13.11.030, Boating Facilities.
16. Existing habitat features (for example, large woody debris and substrate material) shall not be removed from the riparian or aquatic environment except to maintain navigation ways and legally established moorage areas, consistent with BMC 13.11.060 and BMC 13.13, and when removal is the minimum necessary and adverse impacts are mitigated pursuant to BMC 13.09.020.
17. Temporary moorages shall be permitted for vessels used in the construction of shoreline facilities. The design and construction of temporary moorages shall be such that upon

termination of the project, the aquatic habitat in the affected area shall be returned to its pre-construction condition.

B. Design and Construction Standards.

1. All private residential dock dimensions shall be minimized to the maximum extent feasible, and otherwise comply with the design requirements found in Table 13.11.110-1 below. An illustration of a float is found in Figure 13.11.110-1 below. Proposed new, enlarged or replacement docks or floats that do not comply with the dimensional standards contained in this section may only be approved if they obtain a Shoreline Variance.

Table 13.11.110-1. Private residential dock dimension and design standards.

| New Residential Dock | Dimensional and Design Standards |
|---|--|
| Maximum Area: surface coverage of over-water structures, NOT including the ramp | <ul style="list-style-type: none"> <input type="checkbox"/> 120 sq. ft. for single residential unit <input type="checkbox"/> 240 sq. ft. for joint-use facility used by 2 residential units <input type="checkbox"/> 360 sq. ft. for joint-use facility used by 3 residential units <input type="checkbox"/> 480 sq. ft. for joint-use facility used by 4 residential units |
| Maximum Width | <ul style="list-style-type: none"> <input type="checkbox"/> 4 ft. for ramp <input type="checkbox"/> 6 ft. for floats |
| Maximum Length | <ul style="list-style-type: none"> <input type="checkbox"/> Each float unit may be up to 20 feet per residential unit, and shall be laid end-to-end. The maximum length is thus 20 feet, 40 feet, 60 feet, and 80 feet for facilities serving 1, 2, 3 and 4 residential units, respectively. <input type="checkbox"/> Ramps shall be the minimum length necessary to provide safe access to the float. The length of the ramp and the distance between the float and the CHWM are determined by the height of the bank above the OHWM and the distance waterward of the OHWM needed to place the float and a boat at a depth that does not result in grounding of the float or boat on the substrate or disturbance of the substrate by boat propeller action. |

| New Residential Dock | Dimensional and Design Standards |
|--------------------------------|---|
| Decking and Material Standards | <ul style="list-style-type: none"> □ Floats shall be decked with grating on all deck surfaces not underlain by float tubs, with a maximum area of float tub of 70 percent of the total float area. The number and area of float tubs shall be minimized to the amount necessary based on design and engineering considerations. Grating shall allow for a minimum of 40 percent light transmission. The City shall also approve other configurations that provide equal or greater effective light transmission. □ Ramps shall be fully grated. □ Any paint, stain or preservative applied to components of the overwater structure must be leach-resistant, completely dried or cured prior to installation. Materials shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds as outlined in the latest edition of the Western Wood Preservers Institute Best Management Practices for the Use of Treated Wood in Aquatic and Sensitive Areas. □ All float tubs shall be fully encapsulated. |
| Location | <ul style="list-style-type: none"> □ Floats shall be located no less than 5 feet and no more than 10 feet from the ordinary high water mark measured from the landward edge of the float. To avoid interfering with river navigation and public use of the water, private moorage facilities may extend no farther waterward than one-third the width of the river in the location of the proposed structure. <ul style="list-style-type: none"> ○ The Shoreline Administrator may allow floats to be positioned up to an additional 10 feet waterward from the ordinary high water mark as needed to reach a sufficient boat moorage depth (greater than 3 feet). □ Floats shall be located at least 50 feet from the mouth of any named or numbered tributary entering the Sammamish River. □ Private moorage facilities shall be located at least ten feet from the extended side property lines, except for joint-use structures, which may abut property lines provided that adjacent property owners have mutually agreed to the structure location. |
| Anchor Piles | <ul style="list-style-type: none"> □ No more than two anchor piles shall be allowed per private moorage facility (shared facilities may have two piles per 20 feet of float length, but the number of piling for such facilities shall be the minimum number given site-specific engineering and design considerations). □ Anchor piles shall be the minimum size feasible given site-specific engineering and design considerations, but in no cases shall anchor piles be greater than 12 inches in diameter. □ Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ACZA piling are proposed, the applicant will meet all of the Best Management Practices, including a post-treatment procedure, as outlined in the amended Best Management Practices of the Western Wood Preservers. |

| New Residential Dock | Dimensional and Design Standards |
|---|--|
| Mitigation for new or additions to existing docks, floats or overwater structures | <ul style="list-style-type: none"> □ Any existing in-water and overwater structures shall be removed if they are associated with either a private residential dock that other than the subject dock, or other recreational use. □ Native riparian vegetation shall be planted along at least 80 percent of the water frontage by length along the water's edge. The vegetated area shall average ten (10) feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement. Total square feet of landscaped area shall be equal to a continuous 10-foot wide area. Joint-use docks required under the provisions of this SMP shall have the required vegetated area along all properties sharing the dock. Other joint-use docks shall be required to provide the same mitigation as required for one property, which can be split evenly between the subject properties. □ Mitigation plantings shall consist of a mixture of native trees, shrubs and groundcover and be designed to improve habitat functions. At least three (3) trees per 100 linear feet of shoreline or three (3) trees per property, whichever greater, and 60% shrubs must be included in the plan. Plant density and spacing shall be appropriate for the site and commensurate with spacing recommended for each individual species proposed. An alternative planting plan or mitigation measure in lieu of meeting these requirements shall be allowed if approved by other state and federal agencies. In addition, the City shall accept existing native trees, shrubs and groundcover as meeting the requirements of this section, including vegetation previously installed as part of a prior development activity, provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation. |
| Boatlifts | <ul style="list-style-type: none"> □ One free-standing or floating boatlift is allowed per detached dwelling unit OR □ 2 jet ski lifts or 1 fully grated platform lift is allowed per detached dwelling unit □ Boatlift-mounted canopies are prohibited. □ Boatlifts shall be located on the waterward side of the dock □ A maximum of 2 cubic yards of fill are permitted to anchor a boatlift, subject to the following requirements: <ul style="list-style-type: none"> □ May only be used if the substrate prevents the use of anchoring devices that can be embedded into the substrate □ Must be clean □ Must consist of rock or pre-cast concrete blocks □ Must only be used to anchor the boatlift □ Minimum amount of fill is utilized to anchor the boatlift |
| Mooring Buoys | <ul style="list-style-type: none"> □ No more than one (1) mooring buoy is permitted per detached dwelling unit, in lieu of a dock. □ Mooring buoys may not interfere with navigation. |

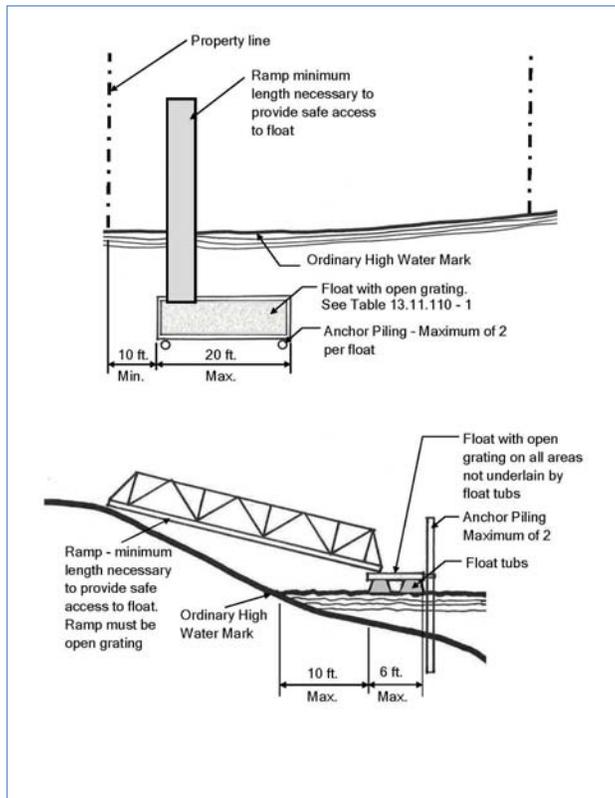


Figure 13.11.110-1. Float Illustration

13.11.120 Recreational Development

- A. Recreational uses and facilities located within shoreline jurisdiction shall include features that relate to access, enjoyment and use of the water and shorelines of the state.
- B. Sites with fragile and unique shoreline conditions such as high rank order wetlands and wildlife habitats shall be used only for non-intensive recreation activities, such as trails, viewpoints, interpretive signage and similar passive and low-impact facilities.
- C. Accessory uses and support facilities such as maintenance facilities, utilities, and other non-water oriented uses shall be consolidated and located in upland areas outside shoreline, wetland and riparian buffers unless such facilities, utilities, and uses are allowed in shoreline buffers based on the regulations of this SMP.
- D. Structures associated with recreational development shall not exceed 35 feet in height. Exceptions for mechanical equipment and alternative architectural design may be allowed by the Shoreline Administrator in accordance with BMC 13.07.090, Table 13.07.090-1, footnote A.1.
- E. Recreational development shall minimize effective impervious surfaces in shoreline jurisdiction and incorporate low impact development techniques consistent with the Bothell Surface Water Design Manual. The following standards shall apply:
1. Natural Environment: 10% maximum effective impervious surface;
 2. Urban Conservancy: 10% maximum effective impervious surface –sites greater than 25 acres; 20% maximum effective impervious surface –sites less than 25 acres;
 3. Shoreline Residential: 50% maximum effective impervious surface; and
 4. Marina and High Intensity: Consistent with underlying zoning requirements.
- F. Golf courses, playfields and other turf grass areas that require the use of fertilizers, pesticides, or other chemicals, shall demonstrate best management practices and methods to prevent these chemical applications and resultant leachate from entering adjacent waterbodies.
- G. Recreational facilities shall provide vegetated physical separations from adjacent non-recreational properties at least 20 feet wide consisting of landscaped strips, fences, signs, and other impediments to minimize potential impacts to private property.
- H. Fishing or viewing platforms are only permitted on the Sammamish River and shall comply with the following minimum design standards (see Figure 13.11.120-1 for illustration):
1. The size of the structure should be the minimum necessary to safely accommodate the intended uses and number of users, and shall be no larger than 20 feet in width along the shoreline and 8 foot deep overwater.
 2. The structure should not interfere with navigation nor block, obstruct or make dangerous any existing or planned public shoreline access.
 3. The structure may be either a dock (ramp to float) design, or may be elevated on fixed piles. Either design must incorporate the maximum amount of functional grating that is feasible into the deck of the float or platform. If the structure utilizes piles, they must be the fewest number and smallest diameter feasible as determined by engineering

requirements. If the structure utilizes a float, the landward edge of the float may be no farther than 10 feet waterward of the OHWM.

4. The structure shall comply with the same materials requirements for piles, decking or floats as found in BMC 13.11.030, Boating Facilities.
5. Application materials for new or expanded over-water recreation structures shall provide habitat surveys, critical area studies, and mitigation plans as required by BMC 13.09.020, Environmental Protection and Chapter 13.13, Critical Areas Regulations in Shoreline Jurisdiction, as applicable. The mitigation plan shall discuss how the proposed project avoids and minimizes adverse impacts consistent with the facility's sizing needs. A slope bathymetry map may be required when deemed beneficial by the Shoreline Administrator for the review of the project proposal.
- I. Fishing or viewing platforms shall not provide boat moorage. See BMC 13.11.030, Boating Facilities, or BMC 13.11.110, Private Residential Docks.
- J. Recreational development shall meet Environmental Protection standards of BMC 13.09.020.

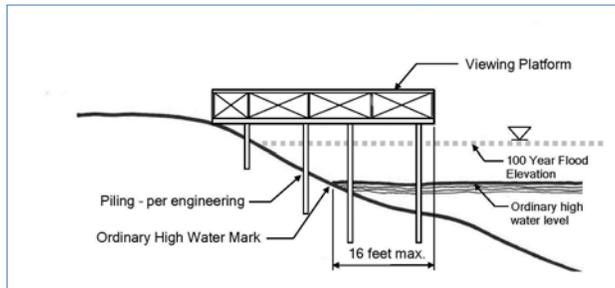


Figure 13.11.120-1. Illustration of Fishing or Viewing Platform

13.11.130 Residential Development

- A. Review Criteria: The City shall utilize the following information in its review of all shoreline jurisdiction residential development applications:
1. whether the proposed residential use is consistent with the use matrix of 13.07.080;
 2. whether adequate provisions are made for public and private visual and physical shoreline access;
 3. whether the application makes adequate provisions to prevent or mitigate adverse environmental impacts; and

4. whether the application makes adequate provisions to provide for shoreline ecological or critical area mitigation, where appropriate.
- B. Applications for new shoreline residences shall ensure that shoreline stabilization and flood control structures are not necessary to protect proposed residences.
- C. New floating residences and over-water residential structures shall be prohibited in shoreline jurisdiction.
- D. Accessory uses and structures shall be located landward of the principal residence, unless the structure is or supports a water-dependent use.
- E. Detached residential development may be clustered where appropriate to minimize physical and visual impacts on shorelines as outlined below:
1. Within detached zoning classifications, the minimum lot area per single-family dwelling unit may be reduced by as much as 40%. For example, properties with a zoning classification of R 9,600 may have a minimum lot area of 5,760 square feet.
 2. Within detached zoning classifications, minimum lot circle diameter may be reduced by as much as 50%. For example, properties with a zoning classification of R 9,600 may have a minimum lot circle diameter of 40 feet.
 3. The number of lots for any subdivision proposed under these modification provisions shall not exceed the number of lots which could be obtained under City-wide regulations regarding lot area and dimension, street configuration, surface water facilities, critical areas regulations, and all other requirements applied to properties located outside the shoreline jurisdiction area.
 4. Land area equal to or greater than the combined reduction in lot area allowed above shall be set aside into a separate tract(s) dedicated to the city, held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association or other legal entity (such as a land trust, which ensures the ownership, maintenance, and protection of the tract).
 5. See BMC 13.09.050.A for potential density incentives for the provision of new parallel public access trails.

13.11.140 Shoreline Habitat and Natural Systems Enhancement Projects

- A. Shoreline restoration and ecological enhancement projects shall be permitted in all shoreline environments, provided the project's purpose is the restoration of the natural character and ecological functions of the shoreline, and shall be consistent with any applicable requirements of BMC 13.13, Critical Areas in Shoreline Jurisdiction.
- B. "Major" restoration projects as used in this section incorporate all work elements waterward of the ordinary high water mark and any activity in wetlands, and may include upland elements as well. "Minor" restoration projects consist only of upland activities above the ordinary high water mark and outside of wetlands, and are conducted without the use of heavy machinery. Typically, minor shoreline restoration projects may include removal of invasive vegetation, installation of native vegetation, or placement of habitat logs or structures.

- C. "Major" restoration and enhancement projects shall be carried out in accordance with an approved shoreline restoration plan prepared by a qualified professional (see BMC 13.03 for complete definition) with experience and education or training in the pertinent discipline and containing the following plan details:
1. inventory of existing shoreline environment, including the physical, chemical and biological elements and an assessment of their condition;
 2. a discussion of any federal, state, or local special management recommendations for species or habitats located on the site that will be incorporated into the plan;
 3. a discussion of proposed measures to minimize any temporary adverse impacts of the project to ensure no net loss of shoreline ecological functions;
 4. scaled drawings of existing and proposed conditions, materials specifications, construction sequence, and a five-year maintenance and monitoring plan, including relevant performance standards applicable to all restoration plan components, such as vegetation, large woody debris, or substrate;
 5. contingency plan if the restoration plan fails to meet performance standards included in the project restoration plan; and
 6. any additional information necessary to determine the impacts of a proposal and mitigation of any adverse impacts.
- D. "Minor" restoration and enhancement projects shall be carried out in accordance with an approved shoreline restoration plan prepared using applicable guidance promulgated by City, County, or State agencies or other environmentally founded organizations such as the Washington Native Plant Society. Such plans shall include:
1. a description of the existing and proposed condition, focusing on the element to be restored or enhanced;
 2. a discussion of proposed measures to minimize any temporary adverse impacts of the project to ensure no net loss of shoreline ecological functions;
 3. scaled drawings of existing and proposed conditions, materials specifications, construction sequence, and a three-year maintenance and monitoring plan; and
 4. any additional information necessary to determine the impacts of a proposal and mitigation of any adverse impacts.
- E. All shoreline restoration and enhancement projects shall protect the long-term integrity of adjacent natural resources, including aquatic habitats and water quality, and shall make appropriate provisions to reduce or mitigate temporary impacts, such as implementing erosion control, conducting work during those times authorized by the State Department of Fish and Wildlife, and other measures as stipulated by the Shoreline Administrator.
- F. Major shoreline restoration and enhancement projects are allowed if the project applicant demonstrates that no significant long-term change to sediment transport will result and that the enhancement project will not adversely affect ecological function, ecosystem-wide processes, properties, or habitat.

- G. Major and minor restoration activities that damage fish and wildlife resources, degrade recreation and aesthetic resources, result in a net loss of ecological functions, or result in high flood stages and velocities are prohibited.
- H. Major restoration and enhancement projects shall be designed using the best available scientific and technical information, and implemented using best management practices. Applicants should consult manuals produced by the Washington Department of Fish and Wildlife, including but not limited to the Stream Habitat Restoration Guidelines Final Draft (2004, as amended) and Integrated Streambank Protection Guidelines (2002, as amended).
- I. Shoreline restoration and enhancement shall not permanently interfere with the normal public use of the navigable waters of the state without appropriate mitigation.

13.11.150 Shoreline Stabilization

Shoreline stabilization includes actions taken to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, wind, or wave action. These actions include structural and nonstructural methods. Nonstructural methods include shoreline buffers or setbacks, relocation of the structure to be protected, groundwater management, and planning and regulatory measures to avoid the need for structural stabilization. Structural methods include hard and soft structural stabilization. "Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete or stacked boulder bulkheads, while "soft" structural measures utilize more natural arrangements of hard and soft materials, including boulders, cobble, gravels, large woody debris and vegetation. Soft shoreline stabilization is preferred because it protects development while minimizing impacts to ecological functions. Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions.

A. General

1. The feasibility of non-structural or soft structural shoreline stabilization using natural materials, such as logs, root wads, plant materials, soil stabilization and other soft methods, shall be evaluated when new, enlarged or replacement hard structural shoreline stabilization measures are being considered. The appropriate documentation per BMC 13.11.150.H below shall be submitted to demonstrate that non-structural and soft structural alternatives have been thoroughly evaluated, and only the softest technique that will accomplish the necessary stabilization shall be approved.
2. A qualified professional (see BMC 13.03 for complete definition) with experience and education or training in the pertinent discipline, such as a fisheries biologist, hydrogeologist, geotechnical engineer, or landscape architect, shall prepare shoreline stabilization plans. The required geotechnical report must be prepared by a professional engineer or geologist who has professional expertise about the regional and local shoreline geology and processes.
3. When any structural shoreline stabilization measures are demonstrated to be necessary, the size of stabilization measures shall be limited to the minimum necessary.
4. Shoreline stabilization shall be designed so that no net loss of ecological functions occurs.

5. Publicly financed or subsidized shoreline erosion control measures shall not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. Where feasible, ecological restoration and public access improvements shall be incorporated into the project.
- B. New or Enlarged Shoreline Stabilization Structures**
1. New development shall be located and designed to avoid the need for new or enlarged shoreline stabilization.
 2. New development on erosion or landslide geologically hazardous areas, as defined and regulated in BMC 13.13.050, shall be designed to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis.
 3. New shoreline stabilization which causes significant adverse impacts to adjacent or down-current properties and shoreline areas shall not be allowed.
 4. Lots shall not be created by the subdivision process if such lots require shoreline stabilization in order to accommodate development.
 5. New or enlarged structural stabilization measures shall be allowed in the following circumstances:
 - a. to protect an existing primary structure, including residences, when conclusive evidence, documented by a geotechnical report prepared by a qualified professional engineer or geologist, is provided that the structure is in danger from shoreline erosion caused by currents, boat wakes, or waves. Normal sloughing or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis should evaluate on-site drainage issues and address drainage problems before considering shoreline stabilization.
 - b. in support of new non-water-dependent development, including single-family residences, when all of the conditions below apply:
 - i. The erosion is not being caused by upland conditions inside or outside of shoreline jurisdiction, such as drainage or the loss of vegetation;
 - ii. Nonstructural measures, such as placing the development farther from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address adverse erosion impact; and
 - iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report prepared by a qualified professional engineer or geologist. The damage must be caused by conditions beyond the control of the applicant, such as natural processes, including currents or waves.
 - c. in support of water-dependent development when all of the conditions below apply:
 - i. The erosion is not being caused by upland conditions on the subject property, such as drainage, the presence of inadequate on-site surface water control, or the loss of vegetation. Upland conditions on the subject property that result in

- erosion should be addressed before approving new or enlarged shoreline stabilization.
- ii. The erosion is being caused by upland conditions outside of shoreline jurisdiction or on adjacent properties outside of the applicant's control, such as drainage, the presence of inadequate upstream surface water control, or the loss of vegetation;
 - iii. Nonstructural measures, such as planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or adverse impacts; and
 - iv. The need to protect primary structures, including residences, from damage due to erosion is demonstrated through a geotechnical report prepared by a qualified professional engineer or geologist who has professional expertise about the regional and local shoreline geology and processes.
- d. to protect projects for the restoration of ecological functions or for hazardous substance remediation projects pursuant to Chapter 70.105D RCW when nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or adverse impacts.
- C. Replacement of Existing Shoreline Stabilization Structures**
1. For purposes of this section, "replacement" means the construction of new shoreline stabilization to perform the shoreline stabilization function of an existing structure which can no longer adequately serve its purpose due to age, deterioration, or increased flood flow rates and volumes. Replacements that include additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.
 2. An existing structural stabilization structure may be replaced subject to the following provisions:
 - a. There is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.
 - b. Replacement hard structural shoreline stabilization measures protecting existing residences shall not encroach waterward of the OHWM or waterward of the existing shoreline stabilization measure unless the residence was occupied prior to January 1, 1992, and there is overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. All other replacement hard structural shoreline stabilization measures shall be located at or landward of the existing shoreline stabilization structure.
 - c. Shoreline stabilization measures may allow some fill waterward of the OHWM to provide enhancement of shoreline ecological functions through improvements in substrate condition or gradient.
 3. When replacement is allowed pursuant to the provisions of Subsection (C)(2) above, an existing structural stabilization structure shall be replaced with the softest stabilization measure that will provide the necessary level of stabilization consistent with the findings of the required submittal documents outlined in Subsection H below.

D. Repair of Existing Shoreline Stabilization Structures

1. For purposes of this section, "repair" means modifications or improvements to an existing shoreline stabilization structure that are designed to ensure the continued function of the structure by preventing failure of any part.
2. "Repair" shall not include:
 - a. Additions to or increases in size of existing shoreline stabilization structures. Such additions or increases shall be considered new or enlarged structures;
 - b. The placement of a new shoreline stabilization structure landward of a failing shoreline stabilization structure. Such placement shall be considered a new structure; and
 - c. Replacement of greater than 50 percent of the linear length of existing shoreline stabilization structure when an existing structure, including its footing or bottom course of rock, is removed prior to placement of new shoreline stabilization materials (repairs that involve only removal of material above the footing or bottom course of rock are not considered replacement). Such activity must be designed and reviewed as a replacement structure.

E. General Design and Construction Standards

1. Areas of temporary disturbance within the shoreline buffer shall be stabilized within seven days of project completion, and revegetated within 30 days using native plant species that will return the area to its pre-project condition or a condition with improved ecological functions such as increased native tree or shrub cover, or shade of waterbodies.
2. Soft shoreline stabilization structures shall be used to the maximum extent practicable for new, enlarged, and replacement of legally established shoreline stabilization structures, limiting hard shoreline stabilization structures to the portion or portions of those sites determined necessary to protect or support existing shoreline structures or trees, or where necessary to connect to existing hard structural shoreline stabilization structures on adjacent properties. Hard structural shoreline stabilization transition areas between the applicant's otherwise soft shoreline structure and the adjacent hardened shoreline, when needed on the subject property to prevent destabilization of adjacent hardened shorelines, shall be minimized and extend into the applicant's property from the property line no more than 10 feet and shall not extend onto the adjacent property.
3. For enlarged or replacement shoreline stabilization structures, the following location and design standards are preferred in descending order:
 - a. Conduct excavation and fill activities associated with the structural shoreline stabilization landward of the existing OHWM except as authorized above.
 - b. Where "a", above, is not practicable because of overriding safety or environmental concerns, conduct necessary excavation and fill activities waterward of the existing OHWM as needed to implement a soft structural shoreline stabilization technique or to mitigate the adverse impacts of adjacent hard structural shoreline stabilization.
4. All shoreline stabilization activities shall minimize and mitigate any adverse impacts to ecological functions resulting from short-term construction. Impact minimization

techniques may include compliance with appropriate timing restrictions, use of best management practices to prevent adverse water-quality impacts related to upland or in-water work, and stabilization of exposed soils following construction.

5. New and enlarged shoreline stabilization structures shall mitigate any adverse impacts to ecological functions by incorporating the following measures, at a minimum, if appropriate for local conditions:
 - a. Restoration of appropriate substrate conditions waterward of the OHWM, including substrate composition and gradient. The material should be sized and placed to remain stable during at least a two-year flood event.
 - b. Plant native riparian vegetation, as necessary, along at least 75 percent of the shoreline frontage affected by the new or enlarged stabilization. The vegetated portion of the shoreline buffer shall average 20 feet in depth from the OHWM, but may be a minimum of 10 feet wide to allow for variation in landscape bed shape and plant placement. Restoration of native vegetation shall consist of a mixture of trees, shrubs, and groundcover and be designed to improve habitat functions. At least 3 trees per 100 linear feet of shoreline must be included in the plan. Plant materials must be native to King or Snohomish County. An alternative planting plan or mitigation measure in lieu of meeting these requirements may be allowed if approved by other state and federal agencies.
6. The shoreline stabilization structure shall not interfere with normal surface and/or subsurface drainage into the waterbody.
7. The shoreline stabilization measure shall be designed so as not to constitute a hazard to navigation.
8. Stairs or other water-access measures may be incorporated into the shoreline stabilization structures (e.g., steps integrated into the bulkhead), but shall not extend waterward of the shoreline stabilization structure and the OHWM.
9. The shoreline stabilization structure shall be designed to ensure that it does not restrict appropriate public access to the shoreline. When a structural shoreline stabilization measure is required at a public access site, provisions for safe access to the water shall be incorporated into the shoreline stabilization structure design (e.g., steps integrated into the bulkhead). Access measures should not extend farther waterward than the face of the shoreline stabilization measure and the OHWM.
10. Shoreline stabilization structures shall not extend waterward of the OHWM, except for soft shoreline stabilization elements which enhance shoreline ecological functions or are allowed under (C)(2)(b) above.
11. When repair or replacement shoreline stabilization structures intended to improve ecological functions shift the OHWM landward of the pre-modification location, any buffers from the OHWM or lot area for the purposes of calculating lot coverage shall be measured from the pre-modification location. The pre-modification OHWM shall be noted in a record of survey approved by the City of Bothell and recorded at the King or Snohomish County Recorder's Office.

12. Repair or replacement shoreline stabilization measures which re-locate the OHWM landward of the pre-modification location, and result in an expansion of the shoreline jurisdiction on any property other than the subject property, shall not be approved until the applicant submits a copy of a statement signed by the legal owners of all affected properties, on a form approved by the City of Bothell and recorded at the King or Snohomish County Recorder's Office, consenting to the shoreline jurisdiction creation and/or increase on such property.

F. Design and Construction Standards for Soft Shoreline Stabilization Structures

1. The soft structural shoreline stabilization design shall provide sufficient protection of adjacent properties by tying in with the existing contours of the adjoining properties to prevent erosion at the property line. Projects that include necessary use of hard structural shoreline stabilization measures only near property lines in order to tie in with adjacent properties shall be permitted as soft shoreline stabilization measures. The length of hard structural shoreline stabilization transition area to adjacent properties should be minimized to the maximum extent practicable, and extend into the subject property from adjacent properties no more than 10 feet. The hard structural shoreline stabilization transition area shall not extend waterward of the OHWM, except as necessary to make the connection to the adjoining stabilization, and shall not extend onto the adjacent property.
2. The soft shoreline stabilization design shall size and arrange any gravels, cobbles, logs, and boulders so that the project remains stable during a two-year flood event and dissipates wave and current energy, without presenting extended linear faces to oncoming waves or currents.
3. The sizing and placement of all materials shall be selected to accomplish the following objectives:
 - a. protect the primary structures from erosion and other damage over the long term and accommodate the normal amount of alteration from currents and waves;
 - b. allow safe passage and migration of fish and wildlife; and
 - c. minimize or eliminate juvenile salmon predator habitat.

G. Design and Construction Standards for Hard Shoreline Stabilization Structures

1. All new, enlarged, or replacement hard shoreline stabilization structures should minimize any long-term adverse impacts to ecological functions by incorporating the following measures into the design:
 - a. limiting the size of hard shoreline stabilization structures to the minimum necessary to protect existing upland development, including length, height, depth, and mass; and
 - b. shifting the hard shoreline stabilization structures landward and/or sloping the hard shoreline stabilization structures landward to provide some dissipation of wave energy and increase the quality or quantity of habitat.
2. When hard structural shoreline stabilization is approved on a site where hard structural shoreline stabilization is not located on adjacent properties, the construction of hard

structural shoreline stabilization shall tie in with the existing contours of the adjoining properties, as feasible, such that the proposed stabilization would not cause erosion of the adjoining properties.

3. The following provisions apply when hard structural shoreline stabilization is approved on a site where hard structural shoreline stabilization is located on adjacent properties:
 - a. the proposed stabilization may tie in flush with existing stabilization measures on adjoining properties, provided that:
 - i. the new stabilization does not extend waterward of the OHWM, except as necessary to make the connection to the adjoining stabilization, and
 - ii. the new stabilization does not extend onto the adjacent property.
 - b. Where a portion of stabilization extends waterward of the OHWM per Subsection G(3)(a)(i) above, the remaining portion of the stabilization shall be placed landward of the existing OHWM such that no net intrusion into the waterbody occurs nor does net creation of uplands occur.
4. Backfill behind hard structural shoreline stabilization intended to protect single-family residences shall be limited to one cubic yard per running foot of stabilization. Any filling in excess of this amount shall be considered a regulated activity subject to the regulations in this SMP pertaining to fill activities and the requirement for obtaining a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit.

H. Submittal Requirements

1. For all new, enlarged, or replacement structural shoreline stabilization structures, (including soft shoreline stabilization structures), detailed construction plans, including, but not limited to, the following:
 - a. plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and ordinary high water lines; and
 - b. detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation.
2. For projects that include native vegetation, a detailed five-year vegetation maintenance and monitoring program to include the following:
 - a. goals and objectives of the shoreline stabilization plan;
 - b. success criteria by which the implemented plan will be assessed;
 - c. a five-year maintenance and monitoring plan, consisting of at least one site visit per year by a qualified professional, with annual progress reports submitted to the Shoreline Administrator and all other agencies with jurisdiction; and
 - d. a contingency plan in case the performance objectives of the plan are not met.
3. For new or enlarged hard or soft shoreline stabilization structures, a geotechnical report prepared by a qualified professional with an engineering license. The report shall include the following:

- a. An assessment of the necessity for structural shoreline stabilization by estimating time frames and rates of erosion and reporting on the urgency associated with the specific situation. New hard shoreline stabilization structures shall not be authorized, except when a report confirms that there is a significant possibility that an existing structure will be damaged within three years as a result of shoreline erosion in the absence of such hard shoreline stabilization structures, or where waiting until the need is immediate results in the loss of opportunity to use measures that would avoid adverse impacts on ecological functions. Where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years, the report may still be used to justify more immediate authorization to protect against erosion using soft structures.
- b. An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the ordinary high water mark.
- c. An assessment of alternative measures to shoreline stabilization, including:
 - i. Placing the development farther from the ordinary high water mark.
 - ii. Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion.
4. Where structural shoreline stabilization is determined to be necessary, the assessment must evaluate the feasibility of using soft shoreline stabilization structures in lieu of hard structural shoreline stabilization structures. Soft shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.
5. Design recommendations for minimum sizing of hard or soft structural shoreline stabilization materials, including gravel and cobble beach substrates necessary to dissipate wave energy, eliminate scour, and provide long-term shoreline stability.
6. For replacements of existing hard shoreline stabilization structures with a similar hard structure, the applicant shall submit a written narrative providing a demonstration of need. The narrative must be prepared by a qualified professional and shall consist of the following:
 - a. An assessment of the necessity for continued structural shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch or flow velocities, and location of the nearest primary structure.
 - b. An assessment of erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization.
 - c. An assessment of alternative measures to shoreline stabilization, including:
 - i. relocating the development farther from the OHWM;
 - ii. correcting any on-site groundwater or drainage issues that may be causing shoreline erosion; and
 - iii. an assessment of the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures.

7. Soft structural shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.
8. Design recommendations for minimizing adverse impacts of any necessary hard structural shoreline stabilization.
9. A demonstration of need may be waived when an existing hard shoreline stabilization structure is proposed to be repaired or replaced using soft shoreline stabilization structure that would result in significant restoration of shoreline ecological functions or processes.

13.11.160 Transportation

- A. Parking facilities are not a water-dependent use and shall only be permitted in the shoreline to support an authorized use where it can be demonstrated to the satisfaction of the Shoreline Administrator that there are no feasible alternative locations away from the shoreline.
- B. Parking facilities shall be located upland of the principal structure, building, or development they serve, and preferably outside of shoreline jurisdiction, except:
 1. where the proponent demonstrates that an alternate location would reduce adverse impacts to the shoreline and adjacent uses; and/or
 2. where another location is not feasible due to the presence of existing transportation facilities or traffic engineering standards and/or
 3. except when Americans with Disability Act (ADA) standards require otherwise.

In such cases, the applicant shall demonstrate measures to reduce adverse impacts of parking facilities in shoreline jurisdiction such as low impact development techniques, buffering, or other measures approved by the Shoreline Administrator.
- C. Parking facilities shall be landscaped in a manner to minimize adverse visual and aesthetic impacts upon adjacent shoreline and abutting properties. Parking shall not be allowed in the required waterfront buffer areas.
- D. If located in the side yard or waterward side of a structure, loading areas shall be screened from view of pedestrians on either side of the waterway. The visual screen shall be composed of a fence or wall with trees and shrubs consistent with City landscape standards.
- E. New transportation infrastructure such as streets, street expansions or railroads shall not be built within shoreline jurisdiction unless other locations are not feasible and/or costs would be disproportionate and unreasonable to the total long-term cost of the development. For the purposes of this Section, disproportionate and unreasonable means the alternative locations would add more than 20% to the total project cost.⁷
- F. When transportation infrastructure is unavoidable in the shoreline jurisdiction, proposed transportation facilities shall be planned, located, and designed to achieve the following:

⁷ The 20% figure is based on WSDOT's practices in determining whether sidewalks will be provided with state roads. (pers. com. Paula Reeves, WSDOT, email to WAAAPA list serve, April 24, 2009).

1. meet mitigation sequencing provisions of BMC 13.09.020;
 2. avoid adverse impacts on existing or planned water-oriented uses; and
 3. set back from the OHWM to allow for a usable shoreline area for vegetation conservation and planned shoreline uses unless infeasible.
- G. New motorized transportation facilities within shoreline jurisdiction shall be designed to minimize grading, vegetation clearing, and alterations of the natural topography. Permit applications shall contain best management practices for preventing erosion and degradation of surface water quality.
- H. When water crossing is determined to be a necessity, transportation facilities shall cross the shoreline jurisdiction by the shortest and most direct route feasible. This requirement shall only be waived when such a route would cause more disruption or damage to the environment than a less direct one.
- I. Bridge supports and abutments shall be designed consistent with flood hazard regulations in BMC 13.09.060, and shall avoid interrupting stream channel processes.
- J. Shoreline crossings and culverts shall be designed to minimize adverse impact to riparian and aquatic habitat and shall allow for fish passage.
- K. Trails shall be designed consistent with public access requirements in BMC 13.09.050, Public Access.

13.11.170 Utilities

- A. In addition to the other submittal requirements of this Title, applications for installation of utility facilities shall include the following:
1. reason why utility facility must be in a shoreline area, for example the utility serves development within shoreline jurisdiction or the utility is gravity dependent;
 2. alternative locations considered and reasons for their elimination;
 3. location of the same, similar or other utility facilities in the vicinity of the proposed project;
 4. proposed method(s) of construction, for example deep cut trench, directional boring, or coffer dams;
 5. plans for reclamation of areas to be disturbed during construction;
 6. landscape plans, consistent with the vegetation conservation and installation standards of BMC 13.09.030;
 7. methods to achieve no net loss of ecological function and minimize clearing of native vegetation; and
 8. consistency with the City of Bothell, or applicable District Comprehensive Water, Sewer or Surface Water comprehensive plans.
- B. Utility lines shall be consolidated within a single easement and utilize existing rights-of-way rather than developing new ones unless determined infeasible by the Shoreline Administrator.

- C. Any publicly-owned utility which must of necessity cross the shoreline shall be designed and operated to reserve the option of general public recreational usage of the right-of-way in the future. This option shall be exercised by the public only where:
1. the public will not be exposed to dangers from the utility equipment; and
 2. the utility itself will not be subjected to unusual risks of damage by the public.
- D. Utility facilities shall be designed and located in a manner that protects scenic views and minimizes adverse aesthetic impacts. They must be landscaped to enhance the appearance from surrounding areas in accordance with landscape standards applicable to the underlying zone.
- E. All underwater pipelines or those paralleling the waterway transporting liquids potentially injurious to aquatic life or water quality are prohibited, unless no other alternative exists to serve a public interest. In those limited instances where permitted, shut-off valves shall be provided at both sides of the waterbody except for public sanitary sewers of a gravity or siphon nature.
- F. New utilities which must be constructed across shoreline jurisdiction must submit a reclamation plan demonstrating restoration of the shoreline to at least its existing condition. Upon completion utility installation or maintenance, any disturbed areas shall be regraded to be compatible with the natural terrain of the area and revegetated with appropriate native plants to prevent erosion.
- G. In areas where utilities must cross shoreline jurisdiction, they shall do so by the most direct route feasible, unless such a route would negatively impact an environmentally critical area, obstruct public access to the shoreline, or interfere with the navigability of a waterbody regulated by this SMP.
- H. Utilities shall be bored beneath the water body such that the shoreline substrate is not disturbed.
- I. Minor trenching to allow the installation of necessary underground pipes or cables if no alternative, including boring, is feasible, and:
1. impacts to fish and wildlife habitat are avoided to the maximum extent possible;
 2. the utility installation shall not increase or decrease the natural rate, extent, or opportunity of channel migration; and
 3. appropriate best management practices are employed to prevent water quality impacts or other environmental degradation.
- J. Use of construction methods that avoid greater impact shall be used when feasible, which may include directional boring, use of sleeves or other construction methods that reduce or avoid temporary and long-term adverse ecological impacts.
- K. Utility installation and maintenance operations shall be conducted in a manner that does not negatively affect surface water quality or quantity.
1. Applications for new utility projects in shoreline jurisdiction shall include a list of best management practices to protect water quality.
 2. Surface Water Outfalls.

- a. Stormwater outfalls to shorelines or other waterbodies shall be constructed in a manner that duplicates the functions and appearance of a natural stream or creek discharging into the waterbody.
 - b. All outfalls shall be required to install native vegetation consistent with 13.13.060.-3(1) and shall consist of trees, shrubs and groundcovers consistent with the following planting standards:
 - i. Three (3) deciduous or coniferous trees
 - ii. Shrubs to equal a minimum 60% areal coverage within 3 years of installation covering all disturbed areas
 - iii. Groundcovers to equal a minimum areal coverage of 80% within 3 years of installation, covering all disturbed areas.
 - iv. Retained native trees and shrubs may be credited toward the planting standard.
 - c. Stormwater outfalls must be set back from the water's edge and discharged onto appropriate materials such as rocks, logs, and other natural materials to mimic the appearance of a natural-looking creek flowing into the waterbody. Such outfalls shall be fully consistent with the flow and discharge requirements of the Bothell Surface Water Manual of the Bothell Design and Construction Standards.
3. Stormwater outfalls shall be designed and installed so that during periods of heavy rainfall the velocity and quantity of runoff will not be detrimental to important aquatic life in the receiving waters, and so that it does not flood adjacent land. The Shoreline Administrator may condition the proposed outfall location and design to assure aesthetic compatibility and to reduce adverse environmental impacts.
 4. Storm drain lines for any substantial development shall be designed so that they can be economically connected to a common collector system when the level of development makes that feasible. A common collection system and outfall will be preferred to a large number of outfalls from individual parcels of land.
- L. Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, which are non-water-oriented shall not be allowed in shoreline jurisdiction unless it can be demonstrated that no other feasible option is available.
- M. New utility lines shall be located underground, except:
1. where the presence of sensitive areas, ground water, flood threat, bedrock or other obstructions make such placement unfeasible; or
 2. underground placement would create greater adverse environmental impacts than above-ground transmission; or
 3. underground placement is not feasible as that term is defined in this SMP.

13.13 Critical Areas in Shoreline Jurisdiction

13.13.010 General

A. Purpose and Goals

1. The purpose of this chapter is to designate and classify ecologically sensitive and hazardous areas present in shoreline jurisdiction known as critical areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.
2. This chapter is to implement the goals, policies, guidelines, and requirements of the City comprehensive plan and the SMA.
3. The City finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the City and its residents, and/or may 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, groundwater recharge and discharge, erosion control, wave attenuation, protection from hazards, historical, archaeological, and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.
4. Goals. By limiting development and alteration of critical areas, this chapter seeks to:
 - a. 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, volcanic eruptions, or flooding;
 - b. maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species;
 - c. direct activities not dependent on critical areas resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas; and
 - d. prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas.
5. The regulations of this chapter are intended to protect critical areas in accordance with the SMA and through the application of most current, available scientific and technical information, as determined according to WAC 173-26-201(2)(a), and in consultation with state and federal agencies and other qualified professionals.
6. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.

7. The City's enactment or enforcement of this chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.

B. Relationship to Other Regulations

1. These critical areas regulations shall apply within shoreline jurisdiction as an overlay and in addition to zoning and other regulations adopted by the City.
2. Any individual critical area adjoined by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When any provision of this chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this chapter, that which provides more protection to the critical areas shall apply.
3. These critical areas regulations shall apply concurrently with review conducted under this SMP and State Environmental Policy Act (SEPA), as locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination and any required shoreline permit.
4. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, Hydraulic Project Approval (HPA) permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 or 10 permits, National Pollutant Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter.
5. It is not intended that this chapter repeal, abrogate, or impair any existing regulations, easements, covenants, or deed restrictions. The SEPA regulations and procedures are not replaced or rescinded by this chapter. It is understood that the provisions of this chapter may not allow development to occur at what otherwise might be the property's full zoning potential.

C. Mitigation Sequencing

1. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize adverse impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:
 - a. avoiding the adverse impact altogether by not taking a certain action or parts of an action;
 - b. minimizing adverse impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
 - c. rectifying the adverse impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;
 - i. minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

- ii. reducing or eliminating the adverse impact or hazard over time by preservation and maintenance operations during the life of the action;
- iii. compensating for the adverse impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
- iv. monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures as appropriate.

2. If specific standards, such as buffers and vegetation requirements, are provided in this Chapter, then the City shall not require additional mitigation sequencing analysis under these provisions.

D. Mitigation Requirements

1. The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this chapter, if alteration to the critical area is unavoidable or necessary to achieve other objectives of the SMA, such as accommodation of water-oriented and other preferred uses, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the most current, available scientific and technical information in accordance with an approved critical areas report and SEPA documents, so as to result in no net loss of critical area and shoreline ecological functions and values.
2. Except as otherwise provided in this chapter, mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area or shoreline, and to prevent risk from a hazard posed by a critical area.
3. Mitigation shall not be implemented until after City approval of a critical areas report that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical areas report.

E. Fees

1. The City by resolution shall establish fees for filing of a critical area identification form, critical area review processing, and other services provided by the City as required by this chapter. These fees shall be based on the anticipated sum of direct costs incurred by the City for any individual development or action and may be established as a sliding scale that will recover all of the City costs including the enforcement of these code provisions. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.
2. Unless otherwise indicated in this chapter, the applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application.

- F. Administrative Rules. Applicable departments within the City are authorized to adopt such administrative rules and regulations as necessary and appropriate to implement this chapter and to prepare and require the use of such forms as necessary for its administration.
- G. Interpretation. In the interpretation and application of this chapter, the provisions of this chapter shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this chapter, and shall be deemed to neither limit nor repeal any other provisions under state statute.
- H. Jurisdiction –Critical Areas
1. Within shoreline jurisdiction, the City shall regulate all uses, activities, and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the most current, available scientific and technical information and the provisions herein.
 2. Critical areas regulated by this chapter include:
 - a. wetlands as designated in BMC 13.13.020, Wetlands;
 - b. critical aquifer recharge areas as designated in BMC 13.13.030, Critical Aquifer Recharge Areas;
 - c. frequently flooded areas as designated in BMC 13.13.040, Frequently Flooded Areas;
 - d. geologically hazardous areas as designated in BMC 13.13.050, Geologically Hazardous Areas; and
 - e. fish and wildlife habitat conservation areas as designated in BMC 13.13.060, Fish and Wildlife Habitat Conservation Areas.
 3. All areas within the City's shoreline jurisdiction meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.
 4. Areas Adjacent to Critical Areas Subject to Regulation. Areas adjacent to critical areas within shoreline jurisdiction shall be considered to be within the jurisdiction of these requirements and regulations to support the intent of this chapter and ensure protection of the functions and values of critical areas. "Adjacent" shall mean any activity located:
 - a. on a site immediately adjoining a critical area;
 - b. a distance equal to or less than the required critical area buffer width and building setback;
 - c. a distance equal to or less than one-half mile (2,640 feet) from a bald eagle nest;
 - d. a distance equal to or less than 300 feet upland from a stream, wetland, or water body;
 - e. within the floodway, floodplain, or channel migration zone; or
 - f. a distance equal to or less than 200 feet from a critical aquifer recharge area.
- I. Building Setbacks. Unless otherwise provided, buildings and other structures shall be set back a distance of 15 feet from the edges of all critical area buffers or from the edges of all

- critical areas, if no buffers are required. The following may be allowed in the building setback area:
1. landscaping;
 2. uncovered decks;
 3. building overhangs, if such overhangs do not extend more than 18 inches into the setback area; and
 4. impervious ground surfaces, such as driveways and patios; provided, that such improvements may be subject to water quality regulations as adopted in the Bothell Design and Construction Standards and Specifications and other adopted ordinances and plans.
- J. Protection of Critical Areas. Any action taken pursuant to this chapter shall result in equivalent or greater functions and values of the critical areas and shorelines associated with the proposed action, as determined by the most current, available scientific and technical information. All actions and developments shall be designed and constructed in accordance with mitigation sequencing [BMC 13.13.010(C)] to avoid, minimize, and restore all adverse impacts. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and 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.
- K. Activities Allowed without a Critical Areas Report
1. Critical Areas Report. Activities allowed under this chapter shall have been reviewed and permitted or approved by the City or other agency with jurisdiction, but do not require submittal of a separate critical areas identification form or critical areas report, unless such submittal was required previously for the underlying permit. The Shoreline Administrator may apply conditions to the underlying shoreline permit or approval to ensure that the allowed activity is consistent with the provisions of this chapter to protect critical areas.
 2. Required Use of Best Management Practices. All allowed activities shall be conducted using the best management practices, adopted pursuant to the City of Bothell Design and Construction Standards and Specifications, and any other adopted plans and regulations, that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense within a timeframe approved by the Shoreline Administrator, and in any case work shall begin no later than six months of the date of the incident.
 3. Allowed Activities. The following activities are allowed:
 - a. Permit Requests Subsequent to Previous Critical Area Review. Development permits and approvals that involve both discretionary land use approvals (such as

subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:

- b. The provisions of this chapter have been previously addressed as part of another approval;
 - i. there have been no material changes in the potential impact to the critical area or buffer since the prior review;
 - ii. there is no new information available that is applicable to any critical area review of the site or particular critical area;
 - iii. the permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit or approval; and
 - iv. compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;
- c. Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the adverse impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement; provided, that restoration of structures substantially damaged by fire, flood, or act of nature must be initiated within one year of the date of such damage, as evidenced by the submittal of a valid building permit, and diligently pursued to completion;
- d. Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a City authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased storm water; subject to the following:
 - i. critical area and/or buffer widths shall be increased, where possible, equal to the width of the right-of-way improvement, including disturbed areas; and
 - ii. retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance;
- e. Minor Utility Projects. Utility projects that have minor or short-duration impacts to critical areas, as determined by the Shoreline Administrator in accordance with the criteria below, and that do not significantly impact the function or values of a critical area(s); provided, that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased storm water. Such allowed minor utility projects shall meet the following criteria:
 - i. there is no practical alternative to the proposed activity with less adverse impact on critical areas;
 - ii. the activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and
 - iii. the activity involves disturbance of an area less than 75 square feet;

- f. Public and Private Nonmotorized Trails. Public and private nonmotorized trails, except when such trails are located within wetlands, or fish and wildlife habitat conservation areas, or their buffers. Nonmotorized trails shall be subject to the following:
 - i. the trail surface shall meet all other requirements including water quality standards set forth in the City of Bothell Design and Construction Standards and Specifications, and any other adopted plans and regulations;
 - ii. nonmotorized trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report;
 - iii. nonmotorized trails proposed to be located in wetland buffers shall follow the requirements of BMC 13.13.020(F)(7)(i)(ii)(A); and
 - iv. nonmotorized trails proposed to be located in fish and wildlife habitat conservation area buffers shall follow the requirements of BMC 13.13.060(E)(12)(d).
- g. Select Vegetation Removal Activities. The following vegetation removal activities; provided, that no vegetation shall be removed from a critical area or its buffer without approval from the Shoreline Administrator and that the removal activities are also consistent with BMC 13.09.030, Shoreline Vegetation Conservation:
 - i. The removal of the following vegetation with hand labor and light equipment only:
 - (A) invasive and noxious weeds listed on the King or Snohomish County Noxious Weed Lists;
 - (B) English ivy (*Hedera helix*);
 - (C) Himalayan blackberry (*Rubus discolor*, *R. procerus*);
 - (D) evergreen blackberry (*Rubus laciniatus*);
 - (E) reed canarygrass (*Phalaris arundinacea*); and
 - (F) purple loosestrife (*Lythrum salicaria*)
 - ii. Removed vegetation shall be replaced with native species as approved by the Shoreline Administrator.
 - iii. The removal of trees from critical areas and buffers that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property; provided, that:
 - (A) the applicant submits a report from a certified arborist, registered landscape architect, or professional forester that documents the hazard and provides a replanting schedule for the replacement trees;
 - (B) tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be removed or converted to wildlife snags;

(C) all vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for disease, re-vegetation by invasive species, or pest transmittal to other healthy vegetation;

(D) the landowner shall replace any trees that are removed with new trees at a ratio of three replacement trees for each tree removed (3:1) within one year in accordance with an approved restoration plan. Replacement trees may be planted at a different, nearby location if it can be determined that planting in the same location would create a new hazard or potentially damage the critical area. Replacement trees shall be species that are native and indigenous to the site and a minimum of one inch in diameter-at-breast height (dbh) for deciduous trees and a minimum of six feet in height for evergreen trees as measured from the top of the root ball;

(E) if a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods of removal that will minimize impacts; and

(F) hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the landowner prior to receiving written approval from the City; provided, that within 14 days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this chapter.

iv. Measures to control a fire or halt the spread of disease or damaging insects consistent with the state Forest Practices Act, Chapter 76.09 RCW, and local forest practices; provided, that the removed vegetation shall be replaced in-kind or with similar native species within one year in accordance with an approved restoration plan; and

v. Unless otherwise provided, or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited.

h. Chemical Applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, as approved by the City; provided, that their use shall be restricted in accordance with state Department of Fish and Wildlife Management recommendations and the regulations of the state Department of Agriculture and the U.S. Environmental Protection Agency;

i. Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be the minimum necessary and disturbed areas shall be immediately restored; and

j. Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers.

L. Critical Area Project Review Process. The City shall conduct a critical area project review process. As part of this review, the City shall:

1. verify the information submitted by the applicant;
2. evaluate the project area and vicinity for critical areas;
3. determine whether the proposed project is likely to impact the functions or values of critical areas; and
4. determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.
5. If the proposed project is within, adjacent to, or is likely to impact a critical area, implement the following steps:
 - a. require a critical areas report from the applicant that has been prepared by a qualified professional;
 - b. review and evaluate the critical areas report. The City shall utilize third party review whenever it is deemed necessary by the Shoreline Administrator;
 - c. determine whether the development proposal conforms to the purposes and performance standards of this chapter;
 - d. assess the potential adverse impacts to the critical area and determine if they can be avoided or minimized; and
 - e. determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this chapter.

M. Critical Area Identification Form

1. Submittal. Prior to the City's consideration of any proposed activity allowed pursuant to BMC 13.13.010(K)(3), Allowed Activities, the applicant shall submit to the City a complete critical area identification form on forms provided by the City.
2. Site Inspection. Upon receipt of a project application and a critical area identification form, the Shoreline Administrator shall conduct a site inspection to review critical area conditions on site if deemed warranted. The Shoreline Administrator shall notify the property owner of the inspection prior to the site visit. Reasonable access to the site shall be provided by the property owner for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.
3. Critical Area Identification Form Review Process. The Shoreline Administrator shall review the critical area identification form, conduct a site inspection, and review other information available pertaining to the site and the proposal and make a determination as to whether any critical areas may be affected by the proposal and if a more detailed critical areas report shall be submitted. The Shoreline Administrator may use the following indicators to assist in determining the need for a critical areas report:
 - a. indication of a critical area on the City critical areas maps that may be impacted by the proposed activity;
 - b. information and scientific opinions from appropriate agencies, including but not limited to the Departments of Fish and Wildlife, Natural Resources, and Ecology;

- c. documentation, from a scientific or other reasonable source, of the possible presence of a critical area; or
 - d. a finding by a qualified professional or a reasonable belief by the Shoreline Administrator that a critical area may exist on or adjacent to the site of the proposed activity.
4. Decision on Identification Form
- a. No Critical Areas Present. If after a site visit the Shoreline Administrator's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the Shoreline Administrator shall rule that the critical area review is complete and note on the identification form the reasons that no further review is required. A summary of this information shall be included in any staff report or decision on the underlying permit.
 - b. Critical Areas Present, But No Impact –Waiver. If the Shoreline Administrator determines that there are critical areas within or adjacent to the project area, but that the most current, available scientific and technical information shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the Shoreline Administrator may waive the requirement for a critical areas report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:
 - i. there will be no alteration of the critical area or buffer;
 - ii. the development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter; and
 - iii. the proposal is consistent with other applicable regulations and standards.
 A summary of this analysis and the findings shall be included in any staff report or decision on the underlying permit.
 - c. Critical Areas May Be Affected by Proposal. If the Shoreline Administrator determines that a critical area or areas may be affected by the proposal, then the Shoreline Administrator shall notify the applicant that a critical areas report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report.
5. Shoreline Administrator's Determination Subject to Reconsideration. A determination regarding the apparent absence of one or more critical areas by the Shoreline Administrator is not an expert certification regarding the presence of critical areas and the determination is subject to possible reconsideration and reopening if new information is received.
- If the applicant wants greater assurance of the accuracy of the critical area review determination, the applicant may choose to hire a qualified professional to provide such assurances.
- N. Public Notice of Initial Determination. The City shall notify the public of proposals in accordance with BMC Title 11, in addition to any requirements of BMC 13.17.030, Review and Processing Requirements and the following:

- 1. If the Shoreline Administrator determines that no critical areas report is necessary, the City shall state the reasons for this determination in the notice of application issued by the City for the proposal.
 - 2. If the Shoreline Administrator determines that there are critical areas on the site that the proposed project is unlikely to impact and the project meets the requirements for and has been granted a waiver from the requirement to complete a critical areas report, a summary of the analysis and findings for this decision shall be stated in the notice of application for the proposal.
 - 3. If the Shoreline Administrator determines that critical areas may be affected by the proposal and a critical areas report is required, public notice of the application shall include a description of the critical area that might be affected and state that a critical areas report(s) is required.
- O. Critical Areas Report –Requirements
- 1. Preparation by Qualified Professional. If required by the Shoreline Administrator in accordance with BMC 13.13.010(L), the applicant shall submit a critical areas report prepared by a qualified professional as defined herein.
 - 2. Incorporation of the Most Current, Available Scientific and Technical Information. The critical areas report shall use scientifically valid methods and studies in the analysis of critical areas data and field reconnaissance and reference the source of science used. The critical areas report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this chapter.
 - 3. Minimum Report Contents. At a minimum, the report shall contain the following:
 - a. the name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
 - b. a copy of the site plan for the development proposal including:
 - i. a map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared; and
 - ii. a description of the proposed storm water management plan for the development and consideration of impacts to drainage alterations;
 - c. the dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;
 - d. identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;
 - e. a statement specifying the accuracy of the report, and all assumptions made and relied upon;
 - f. an assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development, including a functions and values analysis;
 - g. an analysis of site development alternatives including a no development alternative;

- h. a description of reasonable efforts made to apply mitigation sequencing pursuant to BMC 13.13.010(C), Mitigation sequencing, to avoid, minimize, and mitigate adverse impacts to critical areas;
 - i. plans for adequate mitigation, as needed, to offset any adverse impacts, in accordance with BMC 13.13.010(Q), Mitigation Plan Requirements, including, but not limited to:
 - i. the impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and
 - ii. the impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;
 - j. a discussion of the performance standards applicable to the critical area and proposed activity;
 - k. financial guarantees to ensure compliance; and
 - l. any additional information required for the critical area as specified in the corresponding section.
4. Unless otherwise provided, a critical areas report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Shoreline Administrator.
- P. Critical Areas Report –Modifications to Requirements
1. Limitations to Study Area. The Shoreline Administrator may limit the required geographic area of the critical areas report as appropriate if:
 - a. the applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area; or
 - b. the proposed activity will affect only a limited part of the subject site.
 2. Modifications to Required Contents. The applicant may consult with the Shoreline Administrator prior to or during preparation of the critical areas report to obtain City approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.
 3. Additional Information Requirements. The Shoreline Administrator may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:
 - a. historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
 - b. grading and drainage plans; and
 - c. information specific to the type, location, and nature of the critical area.

- Q. Mitigation Plan Requirements. When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical areas report. The mitigation plan shall include:
1. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:
 - a. a description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
 - b. a review of the most current, available scientific and technical information supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and
 - c. an analysis of the likelihood of success of the compensation project.
 2. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this chapter have been met.
 3. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:
 - a. the proposed construction sequence, timing, and duration;
 - b. grading and excavation details;
 - c. erosion and sediment control features;
 - d. a planting plan specifying plant species, quantities, locations, size, spacing, and density; and
 - e. measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.
 4. Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years one, three, five, and seven after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document 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 five years.

5. Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.
6. Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with BMC 13.13.010(V), Bonds to ensure mitigation, maintenance, and monitoring.

R. Unauthorized Critical Area Alterations

1. When a critical area or its buffer has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The City shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this chapter.
2. Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by the City. Such a plan shall be prepared by a qualified professional using the most current, available scientific and technical information and shall describe how the actions proposed meet the minimum requirements described in subsection C of this section. The Shoreline Administrator shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.
3. Minimum Performance Standards for Restoration.
 - a. For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:
 - i. the historic structural and functional values shall be restored, including water quality and habitat functions;
 - ii. the historic soil types and configuration shall be replicated;
 - iii. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration; and
 - iv. information demonstrating compliance with the requirements in BMC 13.13.010(Q), Mitigation Plan Requirements, shall be submitted to the Shoreline Administrator.
 - b. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

- i. the hazard shall be reduced to a level equal to, or less than, the pre-development hazard;
 - ii. any risk of personal injury resulting from the alteration shall be eliminated or minimized; and
 - iii. the hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.
 4. Site Investigations. The Shoreline Administrator is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The Shoreline Administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.
- #### S. Critical Area Markers and Signs
1. The boundary at the outer edge of critical area tracts and/or easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.
 2. The boundary at the outer edge of the critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site.
 3. These provisions may be modified by the Shoreline Administrator as necessary to ensure protection of sensitive features or wildlife needs.
- #### T. Notice on Title
1. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal is submitted shall file a notice with the county records and elections division according to the direction of the City. The notice shall state the presence of the critical area or buffer on the property, the application of this chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall "run with the land."
 2. This notice on title shall not be required for a development proposal by a public agency or public or private utility:
 - a. within a recorded easement or right-of-way;
 - b. where the agency or utility has been adjudicated the right to an easement or right-of-way; or
 - c. on the site of a permanent public facility.
 3. The applicant shall submit proof that the notice has been filed for public record before the City approves any site development or construction for the property or, in the case of subdivisions, short subdivisions, planned unit developments, and binding site plans, at or before recording.
- #### U. Critical Area Tracts

1. All critical areas and their buffers shall be placed in separate critical areas tracts, and shall be designated on all site plans, binding site plans, planned unit developments records of surveys, or subdivision approval, as follows:
 - a. all landslide hazard areas and buffers;
 - b. all wetlands and buffers;
 - c. all fish and wildlife habitat conservation areas and buffers when applicable and appropriate; and
 - d. all other lands to be protected from alterations as conditioned by project approval.
 2. Critical area tracts shall be recorded on all documents of title of record for all affected lots.
 3. Critical area tracts shall be designated on the face of the plat or recorded drawing in a format approved by the City attorney. The designation shall include the following restriction:
 - a. an assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
 - b. the right of the City to enforce the terms of the restriction.
 4. The City may require that any required critical area tract be dedicated to the City, held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association or other legal entity (such as a land trust, which ensures the ownership, maintenance, and protection of the tract).
- V. Bonds to Ensure Mitigation, Maintenance, and Monitoring
1. When mitigation required pursuant to a development proposal is not completed prior to the City final permit approval, such as final plat approval or final building inspection, the City shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the City. If the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the City to ensure mitigation is fully functional.
 2. The bond shall be in the amount of 125 percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.
 3. The bond shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the City attorney.
 4. Bonds or other security authorized by this section shall remain in effect until the City determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the City for a minimum of five years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.

5. Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.
 6. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
 7. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the City may demand payment of any financial guarantees or require other action authorized by the City code or any other law.
 8. Any funds recovered pursuant to this section shall be used to complete the required mitigation.
- W. Critical Area Inspections. Reasonable access to the site shall be provided to the City, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.
- X. Native Plants. Where native plants are required by regulations in BMC 13.13, applicants shall select plants from the list maintained by the City or consult guidance provided by King or Snohomish Counties or the Washington Native Plant Society.

13.13.020 Wetlands

- A. Designating Wetlands. Wetlands are those areas, designated in accordance with the approved federal wetland delineation manual and applicable regional supplements that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within the City meeting the wetland designation criteria in the federal wetland delineation manual, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.
- B. Wetland Ratings. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents (Washington State Wetland Rating Manual for Western Washington (revised), Department of Ecology Document No. 04-06-025) or as revised by Ecology. These documents contain the definitions and methods for determining if the criteria below are met.
1. Wetland Rating Categories
 - a. Category I. Category I wetlands are those wetlands that (i) represent a unique or rare wetland type; or (ii) are more sensitive to disturbance than most wetlands; or (iii) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (iv) provide a high level of functions. These include bogs, mature and old-growth forested wetlands, and wetlands that perform many functions very well (score 70 points or more (out of 100) on a completed rating form for the appropriate hydro-geomorphic class).

- b. Category II. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. There are no estuarine or inter-dunal wetlands in Bothell. Category II wetlands are those that score between 51 and 69 (out of 100) points. Wetlands scoring 51 to 69 points were judged to perform most functions relatively well, or performed one group of functions very well and the other two moderately well.
 - c. Category III. Category III wetlands are wetlands with a moderate level of functions (scores between 30 and 50 points out of 100). Wetlands scoring between 30 and 50 points generally have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.
 - d. Category IV. Category IV wetlands have the lowest levels of functions (scores less than 30 points out of 100) and are often heavily disturbed. These are wetlands that should be able to be replaced, and in some cases be able to be improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and also need to be protected.
2. Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the local government, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.
- C. Mapping. The approximate location and extent of wetlands are shown on the adopted critical area maps. The following critical area maps, including locally adopted maps, are hereby adopted. Additionally, soil maps produced by U.S. Department of Agriculture National Resources Conservation Service may be useful in helping to identify potential wetland areas. These maps are to be used as a guide for the City, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional wetland scientist applying the approved federal wetland delineation manual and applicable regional supplements.
- D. Activities Allowed in Wetlands. The activities listed below are allowed in wetlands in addition to those activities listed in, and consistent with, the provisions established in BMC 13.13.010(K), Activities Allowed without a Critical Areas Report, and do not require submission of a critical area report, except where such activities result in a loss to the functions and values of a wetland or wetland buffer. These activities include:
- 1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland.
 - 2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

- 3. Drilling for utilities under a wetland; provided, that the drilling does not interrupt the groundwater connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the groundwater connection to the wetland or percolation of surface water down through the soil column is disturbed.
 - 4. Enhancement of a wetland through the removal of nonnative invasive species. Weeding shall be restricted to hand removal and weed material shall be removed from the site. Bare areas that remain after weed removal shall be revegetated with native shrubs and trees at natural densities. Some hand seeding may also be done over the bare areas with native herbs.
- E. Additional Report Requirements. In addition to the general critical area report requirements of BMC 13.13.010(M), critical area reports for wetlands must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.
- 1. Preparation by a Qualified Professional. A critical area report for wetlands shall be prepared by a qualified professional who is a certified professional wetland scientist or a noncertified professional wetland scientist with a minimum of five years of experience in the field of wetland science and with experience preparing wetland reports.
 - 2. Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for wetlands:
 - a. the project area of the proposed activity;
 - b. all wetlands and recommended buffers within 300 feet of the project area; and
 - c. all shoreline areas, water features, floodplains, and other critical areas, and related buffers within 300 feet of the project area.
 - 3. Wetland Analysis. In addition to the minimum required contents of BMC 13.13.010(O), Critical area reports –Requirements, a critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:
 - a. A written assessment and accompanying maps of the wetlands and buffers within 300 feet of the project area, including the following information at a minimum:
 - i. wetland delineation and required buffers;
 - ii. existing wetland acreage;
 - iii. wetland category;
 - iv. vegetative, faunal, and hydrologic characteristics;
 - v. soil and substrate conditions;
 - vi. topographic elevations, at two-foot contours; and
 - vii. a discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year –drift lines, algal layers, moss lines, and sediment deposits).

- b. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.
 - c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.
 - d. Functional evaluation for the wetland and adjacent buffer using the Washington State Wetland Rating System for Western Washington (revised), Department of Ecology Publication No. 04-06-025 and including the reference of the method and all data sheets.
 - e. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:
 - i. existing and proposed wetland acreage;
 - ii. vegetative and faunal conditions;
 - iii. surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;
 - iv. relationship within watershed and to existing waterbodies;
 - v. soil and substrate conditions, topographic elevations;
 - vi. existing and proposed adjacent site conditions;
 - vii. required wetland buffers (including any buffer reduction and mitigation proposed to increase the plant densities, remove weedy vegetation, and replant the buffers);
 - viii. property ownership; and
 - ix. associated wetlands and related wetlands that may be greater than 300 feet from the subject project.
 - f. A scale map of the development proposal site and adjacent area. A discussion of ongoing management practices that will protect wetlands after the project site has been developed; including proposed monitoring and maintenance programs.
 - g. A bond estimate for the installation (including site preparation, plant materials and installation, fertilizers, mulch, stakes) and the proposed monitoring and maintenance work for the required number of years.
 - h. Title Notification. All activity in critical area protection areas shall be accompanied by a title.
4. Additional Information. When appropriate, the Shoreline Administrator may also require the critical area report to include an evaluation by the state Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

- a. If the development proposal site contains or is within a wetland area, the applicant shall submit an affidavit, which declares whether the applicant has knowledge of any illegal alteration to any or all wetlands on the proposed site and whether the applicant previously had been found in violation of this chapter. If the applicant has been found previously in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the jurisdiction.
- b. The Shoreline Administrator shall determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety, and welfare, consistent with the goals, purposes, objectives and requirements of this chapter.

F. General Requirements

1. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that short- and long-term impacts of the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas when mitigation is performed in accordance with the preferred sequencing shown in BMC 13.13.010(C).
2. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.
3. Category I Wetlands. Activities and uses shall be prohibited from Category I wetlands, except for low-impact public access and recreation facilities, such as raised boardwalks or platforms for hiking or bird/wildlife watching, that provide opportunities for significant numbers of people to enjoy the natural environment. Such facilities shall be designed to avoid or minimize significant vegetation removal. Projects shall be designed to result in no net loss of ecological functions, and all adverse impacts shall be mitigated.
4. Category II and III Wetlands. With respect to activities proposed in Category II and III wetlands, the following standards shall apply:
 - a. Water-dependent activities may be allowed where there are no practicable alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas.
 - b. Low-impact public access and recreation facilities, such as raised boardwalks, may be allowed if they provide opportunities for substantial numbers of the general public to enjoy the natural environment. Such facilities shall be designed to avoid or minimize significant vegetation removal. Projects shall be designed to result in no net loss of ecological functions, and all adverse impacts shall be mitigated. Public access and recreational facilities shall incorporate interpretive signs or other mechanism to educate the public about wetland functions.
 - c. Where activities are proposed that are neither water-dependent or related to public access and recreation, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
 - i. the basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less adverse impact on, a wetland on another site or sites in the general region; and

- ii. all alternative designs of the project as proposed, that would avoid or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible.
- 5. Category IV Wetlands. Activities and uses that result in unavoidable and necessary adverse impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the acreage and lost functions will be provided under the terms established under BMC 13.13.020(G)(6)).
- 6. All isolated Category III and IV wetlands less than 1,000 square feet are exempt from the buffer provisions contained in this Chapter and the normal mitigation sequencing process in BMC 13.13.010(C) if the following conditions exist:
 - a. are not associated with riparian areas or buffers;
 - b. not part of a wetland mosaic; and
 - c. do not contain habitat identified as essential for local populations of priority species identified by the Washington Department of Fish and Wildlife or species of local importance identified in BMC 13.13.060(A)(3).

They may be filled if adverse impacts are fully mitigated. In order to verify the preceding conditions, a wetlands critical area report is required.
- 7. Wetland Buffers
 - a. Standard Buffer Widths. Required standard wetland buffers, based on wetland category and habitat score, are as follows:

Table 13.13.020-1. Wetland Buffer Widths (in feet)

| Wetland Category | Standard (feet) | Buffer (in feet) if 21-25 habitat pts* | Buffer (in feet) if 26-29 habitat pts* | Buffer (in feet) if 30-36 habitat pts* |
|------------------|-----------------|--|--|--|
| I | 75 | 105 | 165 | 225 |
| II | 75 | 105 | 165 | 225 |
| III | 60 | 105 | 165 | Not applicable |
| IV | 40 | Not applicable | Not applicable | Not applicable |

*The habitat points are derived from one of three scoring elements (habitat, hydrology and water quality) included in the Washington State Wetland Rating System for Western Washington (revised), Department of Ecology Publication No. 04-06-025.

- b. Nonstandard Buffer Widths
 - i. Where a legally established roadway transects the buffer, the buffer edge shall extend to the edge of the roadway nearest the wetland.
 - ii. Where a legally established structure is located within the designated buffer, the buffer edge shall be the edge of the structure.

- iii. Where a legally established use or activity is located within the designated buffer, the buffer edge shall extend to the edge of the use or activity.
- c. Decreased Buffer Widths. In accordance with an approved critical areas report, buffer widths may be reduced as follows:
 - i. Buffer Enhancement. Buffer widths for wetlands may be reduced up to 25 percent of the required width, or to a minimum of 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV wetlands, whichever is greater, when buffer enhancement is performed that increases the existing functions and values beyond that which the wetland would achieve with a standard buffer width. Buffer quality will be evaluated by a qualified wetlands biologist and verified by the City's third-party biologist; or
 - ii. Impact Mitigation. The Shoreline Administrator may approve a reduction in the buffer width if one or more of the following mitigating conditions exist or are provided:
 - (A) Groundwater Recharge. Where site storm water from impervious surfaces is collected, treated, and infiltrated into the ground above the wetland and the infiltration system is recorded on the title to the property on which it is located; or
 - (B) Physical Barriers. Where dense vegetation, such as rose and/or hawthorn is planted, at the outer edge of the wetland buffer to minimize animal and/or human intrusion into the wetland.
 - d. Increased Wetland Buffer Widths. The Shoreline Administrator shall consider, and may require increased buffer widths, up to 25 feet, in accordance with the recommendations of an experienced, qualified professional wetland scientist, and the most current, available scientific and technical information on a case-by-case basis when a larger buffer is necessary to protect existing wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:
 - i. a larger buffer is needed to protect other critical areas;
 - ii. wetlands within 25 feet of the toe of slopes equal to or greater than 15 percent shall have the following buffers:
 - (A) Where the horizontal length of the slope including small benches and terraces is within the buffer for that wetland category, the buffer width shall be the greater of the required buffer for that wetland category or twenty-five feet beyond the toe of the slope.
 - (B) Where the horizontal length of the slope extends beyond the required buffer for that wetland category, the buffer shall extend to a point 25 feet beyond the required buffer for that wetland category.
 - iii. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the existing wetland functions and values, implementation of a buffer planting plan developed by a qualified wetland scientist in accordance with an approved critical areas report may substitute. Existing buffer vegetation is considered "inadequate" and

will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (i) nonnative or invasive plant species provide the dominant cover, (ii) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (iii) enhancement plantings in the buffer could significantly improve buffer functions.

- iv. Buffer widths may vary for any one wetland based on its existing characteristics. It is understood that gradual transition zones will be employed between one buffer width and another. The required buffer width may be increased if any of the following circumstances exist:
 - (A) species listed by the federal government or the state of Washington as endangered, threatened, sensitive or priority, or essential or outstanding actual habitat for those species, or plant associations of infrequent occurrence are present;
 - (B) unusual nesting or resting sites such as heron rookeries or raptor nesting or lookout trees are present;
 - (C) the wetland has been identified as providing particularly important water quality maintenance or flood control function, or is particularly sensitive to erosion and/or sedimentation.
- e. Wetland Buffer Width Averaging. The Shoreline Administrator may allow modification of the standard wetland buffer width in accordance with an approved critical areas report and the most current, available scientific and technical information on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified professional wetland scientist demonstrates that:
 - i. it will not reduce wetland functions or functional performance;
 - ii. the wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
 - iii. the total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
 - iv. the buffer at its narrowest point is never less than either 75 percent of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.
- f. Measurement of Wetland Buffers
 - i. All buffers shall be measured from the wetland boundary as surveyed in the field.
 - ii. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers.
- g. Buffer Consistency. All mitigation sites shall have buffers consistent with the buffer requirements of this chapter.

- h. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. Removal of invasive nonnative weeds is required for the duration of the mitigation bond.
 - i. Buffer Uses. The following uses may be permitted within a wetland buffer in accordance with the review procedures of this chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize adverse impacts to the buffer and adjacent wetland:
 - i. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.
 - ii. Passive Recreation. Passive recreation facilities designed and in accordance with an approved critical areas report, including:
 - (A) walkways and trails; provided, that those pathways that are generally parallel to the perimeter of the wetland shall, where practicable, be located in the outer one-third of the buffer area. Surface permeability of walkways and trails shall be considered where applicable. Raised boardwalks utilizing nontreated pilings area may be acceptable. Buffer widths shall be increased, where practicable, equal to the width of the trail corridor;
 - (B) wildlife viewing structures; and
 - (C) fishing access areas down to the water's edge shall be no wider than six feet.
 - iii. Other Water-Oriented Public Access and Recreation. Consistent with the use allowances for each environment designation, public access and public recreation facilities and their accessory uses and developments may be located in wetland buffers. All such uses and facilities in wetland buffers shall be located to avoid or minimize significant vegetation removal and shall minimize impervious areas. The project shall be designed to result in no net loss of ecological functions, and all adverse impacts shall be mitigated.
 - iv. Storm Water Management Facilities. Stormwater management facilities, except conveyance facilities and dispersion outfalls for which no alternative location is feasible, are prohibited within Category I and II wetland buffers. Stormwater management facilities may be located within the outer twenty-five percent (25%) of the buffer of Category III or IV wetlands, provided that:
 - (A) no other location is feasible; and
 - (B) the location of such facilities will not degrade the functions or values of the wetland.
8. Signs and Fencing of Wetlands
- a. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and is subject to inspection by the Shoreline Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained

throughout construction and shall not be removed until permanent signs, if required, are in place.

- b. Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the Shoreline Administrator may require the applicant to install permanent signs along the boundary of a wetland or buffer.
 - i. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post, or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the Shoreline Administrator:

Protected Wetland Area
Do Not Disturb
Contact the City of Bothell
Regarding Uses and Restriction
 - ii. The provisions of subsection (G)(2)(a) of this section may be modified as necessary to assure protection of sensitive features or wildlife.
- c. Fencing
 - i. The Shoreline Administrator shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Shoreline Administrator shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future adverse impacts to the wetland.
 - ii. The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on site.
 - iii. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes adverse impacts to the wetland and associated habitat.

G. Compensatory Mitigation Requirements. Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the state Department of Ecology *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1)*, Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised, as revised.

- 1. Mitigation shall be required in the following order of preference:
 - a. Avoiding the adverse impact altogether by not taking a certain action or parts of an action.
 - b. Minimizing adverse 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 adverse impact by repairing, rehabilitating, or restoring the affected environment.

- d. Reducing or eliminating the adverse impact over time by preservation and maintenance operations.
- e. Compensating for the adverse impact by replacing, enhancing, or providing substitute resources or environments.
- 2. Mitigation for Lost or Affected Functions. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost, except when:
 - a. The lost wetland provides minimal functions as determined by a site-specific function assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or
 - b. out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.
- 3. Preference of Mitigation Actions. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement. Mitigation actions that require compensation shall occur in the following order of preference:
 - a. Restoring wetlands on upland sites that were formerly wetlands. Wetland restoration refers to actions performed to re-establish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.
 - b. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. Wetlands creation refers to actions performed to intentionally establish a wetland at a site where it did not formerly exist. Creation should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.
 - c. Enhancing significantly degraded wetlands in combination with restoration or creation. Enhancement refers to actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality. Such enhancement should be part of a mitigation package that includes replacing the impacted area meeting appropriate ratio requirements.
- 4. Type and Location of Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, such as a mitigation bank located within Watershed Resource Inventory Area (WRIA) 8, implementation of a project found in the City's Shoreline Restoration Plan, or a City of Bothell-sponsored fee-in-lieu program, compensatory mitigation for ecological functions shall be either in-kind and on-site, or in-kind and within the same stream reach or subbasin. Mitigation actions shall be conducted within the same sub-drainage basin and on the site as the alteration except when all of the following apply:
 - a. There are no reasonable on-site or in-sub-drainage basin opportunities or on-site and in-sub-drainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the adverse impacts.

Consideration should include: anticipated wetland mitigation replacement ratios; buffer conditions and proposed widths; hydrogeomorphic classes of on-site wetlands when restored; proposed flood storage capacity; and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

- b. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
- c. Off-site locations shall be in the same sub-drainage basin unless:
 - i. established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or
 - ii. credits from a state-certified wetland mitigation bank located within the Sammamish River, North Creek, or Swamp Creek drainage basin are used as mitigation and the use of credits is consistent with the terms of the bank's certification;
 - iii. the mitigation occurs as part of a City of Bothell-sponsored fee-in-lieu program;
 - iv. wetponds established and maintained for control of surface water shall not constitute replacement or enhancement for wetland alterations.

5. Mitigation Timing. Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce adverse impacts to existing fisheries, wildlife, and flora.

The Shoreline Administrator may authorize a one-time temporary delay, up to 120 days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the mitigation plan. The justification must be verified and approved by the City and include a financial guarantee.

6. Mitigation Ratios

- a. Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Table 13.13.020-2. Wetland mitigation ratios.

| Category and Type of Wetland Impacts | Re-establishment or Creation | Rehabilitation Only ¹ | Re-establishment or Creation (R/C) and Rehabilitation (R/R) | Re-establishment or Creation (R/C) and Enhancement (E) ¹ | Enhancement Only ¹ |
|---|------------------------------|---|---|---|-------------------------------|
| All Category IV | 1.5:1 | 3:1 | 1:1 R/C and 1:1RH | 1:1 R/C and 2:1 E | 6:1 |
| All Category III | 2:1 | 4:1 | 1:1 R/C and 2:1 RH | 1:1 R/C and 4:1 E | 8:1 |
| Category II | 3:1 | 6:1 | 1:1 R/C and 4:1 RH | 1:1 R/C and 8:1 E | Not allowed |
| Category I Forested | 6:1 | 12:1 | 1:1 R/C and 10:1 RH | 1:1 R/C and 20:1 E | Not allowed |
| Category I - based on score for functions | 4:1 | 8:1 | 1:1 R/C and 6:1 RH | 1:1 R/C and 12:1 E | Not allowed |
| Category I Natural Heritage site | Not allowed | 6:1 Rehabilitation of a Natural Heritage site | Not allowed | Not allowed | Not allowed |
| Category I Bog | Not allowed | 6:1 Rehabilitation of a bog | Not allowed | Not allowed | Not allowed |

¹ These ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.

- b. Increased Replacement Ratio. The Shoreline Administrator may increase the ratios under the following circumstances:
 - i. uncertainty exists as to the probable success of the proposed restoration or creation;
 - ii. a significant period of time will elapse between adverse impact and replication of wetland functions;
 - iii. proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being adversely impacted; or
 - iv. the impact was an unauthorized impact.

H. Subdivisions. The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

1. Land that is located wholly within a Category I, II or III wetland or its buffer may not be subdivided.
2. Land that is located partially within a Category I, II or III wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:
 - a. located outside of the wetland and its buffer; and
 - b. meets the minimum lot size requirements of BMC Title 12.
3. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the City determines that no other feasible alternative exists and when consistent with this chapter.

13.13.030 Critical Aquifer Recharge Areas

A. Designation and Mapping

1. Potable water is an essential life sustaining element. Once groundwater is contaminated, it is difficult, costly, and sometimes impossible to clean up. Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to the public. It is the City of Bothell's intent, through this section of the critical areas regulations, to recognize the importance of aquifers and to acknowledge a responsibility common to all governmental agencies to ensure, as much as possible through each jurisdiction's powers to protect the health, safety and welfare of the public, the continued quantity and quality of groundwater supplies through the regulation of land uses which may contribute contamination that may degrade groundwater quality and/or quantity in recharge areas of vulnerability. The extent of regulation shall be based on the degree of vulnerability of an identified recharge area and the contaminant loading potential of the proposed land use.
2. Where it is determined through special studies or City of Bothell mapping projects that soil and geologic formation permeability exists such that the presence of a groundwater recharge area is likely, the Shoreline Administrator may require further investigation by the applicant of the existence of recharge areas when the proposed land use involved is considered to be of a type or intensity that has a high contamination potential. Such uses may include, but are not limited to, planned unit developments, waste disposal sites, or agriculture activities.

B. Additional Report Requirements. Any additional required special study shall address, but are not limited to, the following:

1. depth of groundwater;
2. aquifer properties such as hydraulic conductivity and gradients;
3. soil texture, permeability, and contaminant attenuation properties;
4. characteristics of the vadose zone (the unsaturated top layer of soil and geologic material) including permeability and attenuation properties; or
5. other relevant factors.

C. General Requirements. Based upon information provided in any required special report or study, the Shoreline Administrator shall determine conditions of development which will ensure, to the extent possible, no degradation of groundwater quantity or quality. Such

conditions shall be attached to the appropriate shoreline permit or approval when required as a result of the presence of any other critical area or to any other permit required by the project or approval of a rezone application or certification of zoning compliance for either tenancy or new construction.

13.13.040 Frequently Flooded Areas

A. Designation of Frequently Flooded Areas. Frequently flooded or special flood hazard areas are lands subject to a one percent or greater chance of flooding in any given year; otherwise known as the "100-year" flood or the "base" flood. These areas could include, but are not limited to, streams, lakes, wetlands and their associated floodplains, flood fringes or areas identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for King County, Washington and Incorporated Areas" dated March 30, 1998, and any revisions thereto, and "The Flood Insurance Study for Snohomish County, Washington, and Incorporated Areas," dated November 8, 1999, and any revisions thereto, with accompanying FIRMs are hereby adopted by reference and declared to be part of this chapter. The flood insurance studies and FIRMs are on file at the office of the City clerk.

B. Findings and Intent

1. Frequently flooded or flood hazard areas are subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage or which are inappropriately located in the floodplain also contribute to the flood loss.
2. It is the intent of the City of Bothell, by way of this article, to reduce, minimize and/or prevent the public and private losses noted above and to promote the public health, safety and general welfare, through the regulation of development within frequently flooded areas designed to:
 - a. restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
 - b. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 - c. control and minimize the alteration of natural floodplains, stream channels and natural protective barriers which help accommodate or channel floodwaters;
 - d. control filling, grading, dredging and other development which may increase flood damage; and
 - e. prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

C. Administration

1. Designation of the Local Flood Management Administrator. The public works director is the administrator. The public works director is appointed to administer and implement this section by reviewing permit applications in accordance with its provisions and providing final findings to the Shoreline Administrator who shall issue or deny the underlying shoreline permit based on said findings and consistency with all other provisions of the SMP.
 2. Duties and Responsibilities of the Local Flood Management Administrator. Duties of the local flood management administrator shall include, but not be limited to:
 - a. Permit Review.
 - i. Review all permit applications within areas of special flood hazard to determine that the requirements of this chapter and this section have been satisfied;
 - ii. Review all permit applications within areas of special flood hazard to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required;
 - iii. Review all permit applications within areas of special flood hazard to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of BMC 13.13.040(G)(4)(I) of this section are met.
 - b. Use of Other Base Flood Data.
 - i. When base flood elevation data has not been provided, the local flood management administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to fulfill his or her duties and responsibilities under this chapter.
 - ii. Review of Building Permits. Where base flood elevation data has not been provided or is not available either through the flood insurance study or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is the judgment of the City engineer and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.
- D. Relationship to Other Critical Areas Regulations. In addition to the provisions of this article, requirements for buffers, sensitive area tracts, development setback lines, permitted alterations, mitigation and monitoring for a development proposal site on or adjacent to a flood hazard area shall be as established elsewhere in this chapter for the streams, wetlands, wildlife habitat conservation areas or other critical areas which form the constituent elements of the floodplain.
- E. Information to be Obtained and Maintained
1. Where base flood data is provided through the flood insurance study or as required in BMC 13.13.040(C)(2)(b)(i), obtain and record the actual elevation (in relation to mean

City of Bothell

- sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
2. For all new or substantially improved floodproofed structures in a special flood hazard area:
 - a. Verify and record the actual elevation in relation to sea level to which the structure was floodproofed.
 - b. Maintain the floodproofing certifications required by this article. The applicant must provide certification by a professional civil engineer or land surveyor licensed in the State of Washington of the actual as-built elevation of the lowest floor, including basement (in relation to mean sea level), and, if applicable, the actual as-built elevation to which the structure is floodproofed. If the structure has a basement, this must be indicated.
 - c. Maintain for public inspection all records pertaining to the provisions of this article.
- F. Other Agencies. In all flood hazard areas, the City of Bothell shall honor all existing contractual obligations with any federal agency.
- G. Development Regulations
1. Any activities in a special flood hazard area as defined by this chapter shall require the appropriate shoreline permit and shall be subject to the requirements of this section .
 2. Alteration of Watercourses
 - a. Notify adjacent communities and the State Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
 3. Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided for elsewhere in this chapter.
 4. General Standards. In all areas of special flood hazards, the following standards are required:
 - a. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within zone AE on the community's FIRMs, unless it is demonstrated that the cumulative effect of the proposed development when combined with all other existing development, will not increase the water surface elevation of the base flood more than six inches at any point within the community.
 - b. Anchoring
 - i. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;

