City of Mukilteo

Shoreline Master Program

~~December~~ 2011~~XX 2019~~Adopted December 2011; Updated June 2019

Photo by J. Bruce Arink

~~*City of Mukilteo, Washington*~~

~~2011 SHORELINE MASTER PROGRAM~~

ACKNOWLEDGEMENTS:

A special thanks goes out to all those who helped and participated in the 201~~1~~9 periodic update of the City's Shoreline Master Program.

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In addition, the following individuals participated in the 2011 comprehensive update of the City's Shoreline Master Program.

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City Council:	Richard Emery, Council President
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~~City of Mukilteo, Washington~~

~~2011 SHORELINE MASTER PROGRAM~~

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Chapter 1: Introduction

Mukilteo's Shoreline in a Regional Context

The City of Mukilteo is located in Snohomish County 25 miles north of Seattle with shorelines on the east~~ern~~ side of Possession Sound, ~~or~~ which represents Mukilteo's western shoreline (see~~.~~ Figure 1: ~~Regional Context~~City of Mukilteo Vicinity Map). The north~~ern~~ shoreline ~~and~~ is the most heavily developed and is on the western ~~-~~most portion of Port Gardner Bay adjacent to the City of Everett's western ~~-~~most shoreline.

Shoreline Management Act and 2003 WAC 173-26 Guidelines

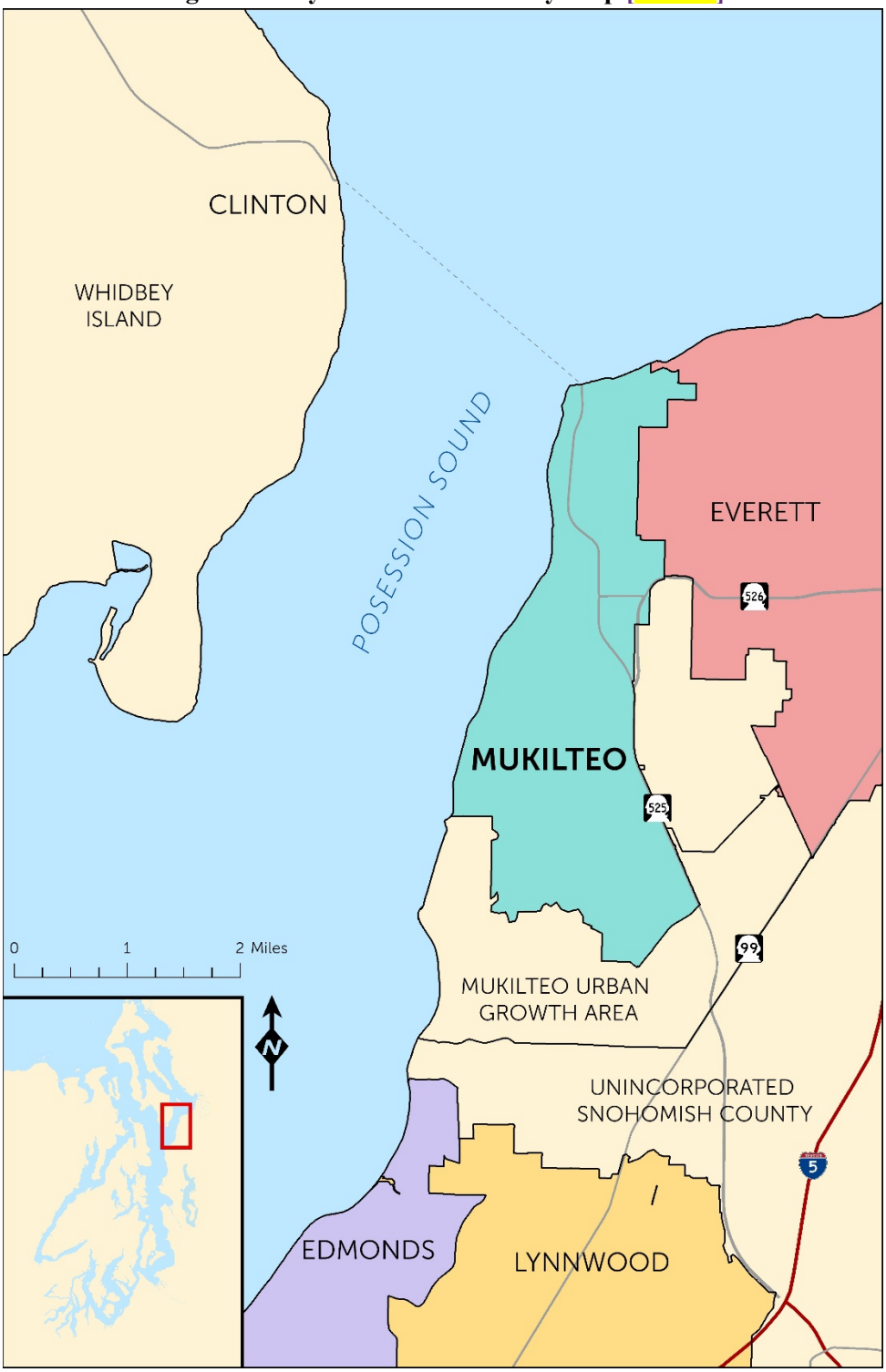
The Washington State Shoreline Management Act (SMA, or the Act) of ~~1972~~ 1971 (RCW 90.58), as implemented through WAC 173-26, requires all counties and municipalities located along the shorelines of Washington or with waters of statewide significance to develop *Shoreline Master Programs* (*SMP*s). In 1995, the state legislature required the Department of Ecology (~~DOE~~Ecology) to review and revise its ~~*Shoreline* *Master Program* *Guidelines*~~ (WAC 173-26) ~~in order~~ to ensure consistency with the Washington Growth Management Act (GMA). The legislation also required certain counties and their municipalities to update their SMPs as set forth in SSB 6012, with additional updates to be conducted every eight~~seven~~ years thereafter.

WAC 173-26 requires *SMP*s to include:

- Master Program Policies to translate broad, state-wide goals into local directives;
- Master Program Regulations, including Environment Designations as well as General and Specific Use Regulations; and
- Administrative Provisions regarding administration of a permit system for proposed "substantial development" within the regulated shoreline area.

Local governments may either integrate their SMP policies and regulations into their local *Comprehensive Plan* policies and implementing regulations, or they may prepare a stand-alone *Shoreline Master Program*. The City of Mukilteo has chosen to ~~integrate the policies into the *Comprehensive Pla*~~implement ~~*n*~~a stand-alone policies document and integrate regulations into the Mukilteo Municipal Code (MMC) as Title 17B. ~~This document includes the Comprehensive Plan policies and the regulations section of the MMC is as separate document for ease of use.~~

Figure 1: City of Mukilteo Vicinity Map ~~[revised]~~



The ten governing principles of the ~~*Shoreline*~~ *Master Program Guidelines* (WAC 173-26) ~~have been~~were used to develop the Mukilteo SMP ~~through a comprehensive update effort that resulted in adoption in 2011. These principals~~ principles are summarized below.~~:~~

1. The WAC guidelines are subordinate to the Shoreline Management Act.
2. The SMP guidelines are intended to reflect the policy goals of the Act.
3. All relevant goals must be addressed in the planning policies of the *SMPs*.
4. The planning policies of the SMPs may be achieved by a number of means, only one of which is the regulation of development.
5. The goals of the Act, implemented by the planning policies of the Comprehensive Plan and SMP, may not be achievable by development regulation alone. (Regulatory actions should not infringe upon private property rights~~;~~, thus, other local or regional efforts and funding will be needed to achieve a more comprehensive approach.)
6. The territorial jurisdictions of the SMP's planning function and regulatory function (applies only to the 200-foot jurisdiction) are legally distinct. The planning function may look beyond the territorial limits of shorelines of the state.
7. The planning policies and regulatory provisions of SMPs, Ce~~o~~mprehensive P~~p~~lan, and development regulations shall be integrated and coordinated in accordance with GMA and other laws where possible.
8. The Act makes protection of the shoreline environment an essential statewide goal. Local SMPs must: address shoreline ecological functions; include policies, regulations, and mitigation standards/restoration to achieve "no net loss;" include regulations that ensure that exempt development, in the aggregate, will not result in a net loss; include goals and policies providing for the restoration of impaired ecological functions; and~~,~~ evaluate and consider cumulative impacts of future development.
9. Local governments have reasonable discretion to balance the various policies and to modify SMPs to reflect changing circumstances consistent with the policy and use preference of RCW 90.58.020, these Guidelines (WAC 173-26), and other programs.
10. Local governments, in adopting and amending SMPs shall:
    a. Use a systematic interdisciplinary approach.~~;~~
    b. Consult with federal, state, regional, or local agencies with respect to any environmental impact.~~;~~
    c. Consider all plans, studies, surveys, inventories, and systems of classification by governments, individuals, or organizations dealing with shorelines of the state.~~;~~
    d. Conduct further research, inventories, and interviews as necessary.~~;~~
    e. ~~Utilize~~ Use all available hydrology, geography, topography, ecological?~~DOE~~~~Ecology~~, economics, and other pertinent data~~; and~~.
    f. Employ data and computer techniques to store, index, analyze, and manage the information gathered.

Purpose of the City of Mukilteo~~'s~~ SMP

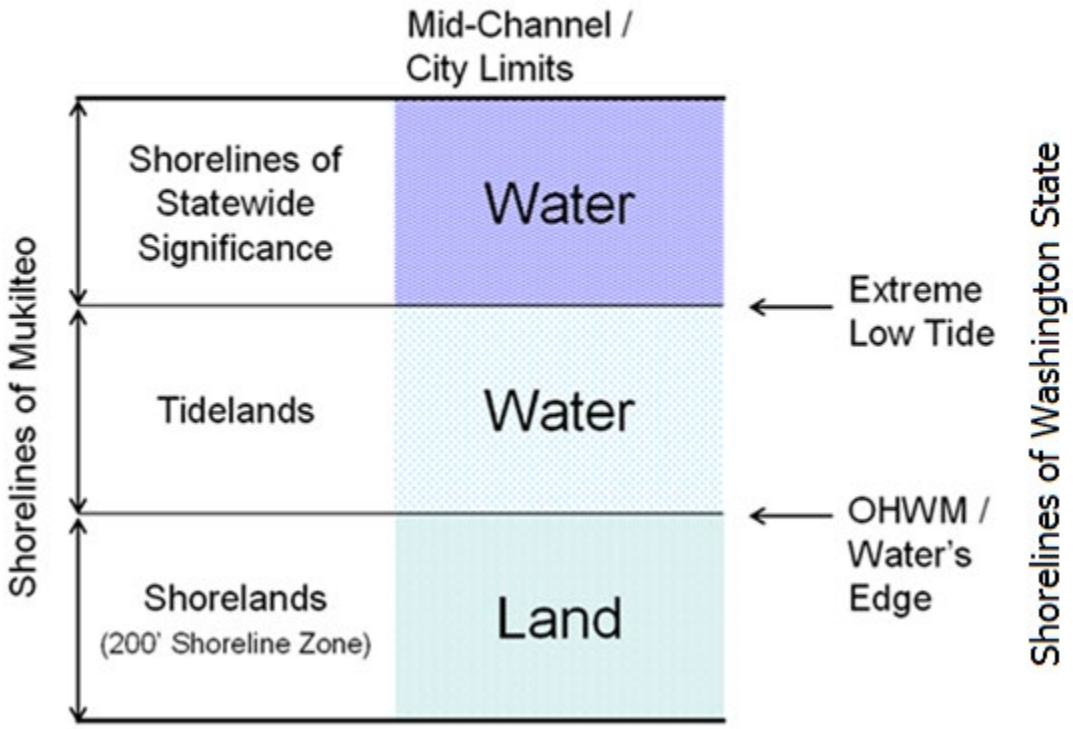
The Mukilteo shoreline planning area has been subject to a series of activities over time, including shipping, railroad, timber harvest, filling, and dredging. These major activities impacted the shoreline early ~~on~~ in Mukilteo's history. Within the City of Mukilteo, the population ~~is projected to increase to~~target is ~~22,000~~21,812 persons by 20~~32~~5, reaching total population capacity based on Snohomish County Tomorrow reconciled population growth targets (Snohomish County 2018). With just over ~~2,000~~ 1,200 additional people and similar growth in employment, the city is nearing build-out. Collectively, these factors are not likely to alter the basin conditions that contribute to the ecological functions within the area except development adjacent to the Paine Field A~~a~~irport. The advent of the ~~Growth Management Act (~~GMA~~)~~, the Mukilteo Comprehensive Plan, the Harbour Pointe Master Plan, and the critical area codes has protected much of the remaining undeveloped areas surrounding the drainages by placing them in parks and open space, which offers a significant opportunity to cumulatively enhance the streams and shoreline functions. In combination with these actions, the City of Mukilteo will assist in protecting its shoreline further through ongoing implementation of this ~~updated *2019*~~*11* *Shoreline Master Program* (*SMP*~~)~~, ~~comprehensively updated in 2011 and re-updated in 2019,~~ and will integrate the program as required by the ~~Growth Management Act (~~GMA~~)~~ into the Mukilteo *Comprehensive Plan* (*Comp. Plan*) and regulations in the ~~Mukilteo Municipal Code (~~MMC~~)~~.

An explanation of Mukilteo's 201~~1~~9 periodic update process is contained in Chapter 9~~, along with a summary of the previous 2011 comprehensive update effort~~.

Jurisdictional Limits

Under the SMA, "shorelands" or "shoreland areas" refer to those lands extending landward for two hundred (200) feet in all directions as measured on a horizontal plane from the ordinary high water mark (OHWM); floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams (greater than 20 cubic feet per second [cfs]), lakes, and tidal waters. According to the SMA, the shorelines within the City of Mukilteo that lie "seaward from the line of extreme low tide" are shorelines of statewide significance. ~~All are subject to Title 17B MMC and the same to be designated as to location by the department of ecology.~~ Examples of shoreline definitions are shown in Diagram A and t~~T~~he shoreline boundary is shown on Figure 2, a 200-foot shoreline zone where this *SMP* ~~plan~~ and ~~shoreline codes~~Title 17B MMC shoreline codes are in effect.

Diagram A: Example of Shoreline Definitions



The City of Mukilteo's shoreline jurisdiction is located in Sections 4, 9, 16, 17, 20, ~~21, 22,~~ and 33~~, and 34~~, Townships 28 and 29 North, Range 4 East, Willamette Meridian, known of as the Mukilteo Quadrangle (Snohomish County 2017). Lake Serene, located outside the current city limits~~,~~ but within the Municipal Urban Growth Area (MUGA), is 43 acres in size and ~~has been~~is covered under this *SMP*~~, as well as Snohomish County's Draft SMP~~. If the MUGA shoreline in Sections 29 and 32 and Lake Serene are annexed into the City, the regulations in ~~the Mukilteo Municipal Code~~MMC 17B will apply.

Under the SMA, local municipalities have the option to extend shoreline jurisdiction to include lands within the 100-year floodplain and/or lands necessary for buffers for critical areas (RCW 90.58.030(2)~~(f)~~). The City of Mukilteo is not extending shoreline jurisdiction under either of these ~~options~~areas. All critical areas and associated regulated buffers ~~located~~ within the shoreline jurisdiction are regulated solely by the City's ~~Shoreline Master Program~~SMP. All critical areas and associated regulated buffers ~~located~~ outside the shoreline jurisdiction shall be regulated by the City's critical area regulations set forth in MMC Chapter 17.52 Critical Areas Regulations. Figures 3-8 show the City of Mukilteo's shoreline jurisdiction overlay areas.

Figure 2: Shoreline Jurisdiction Overlay ~~[revised]~~

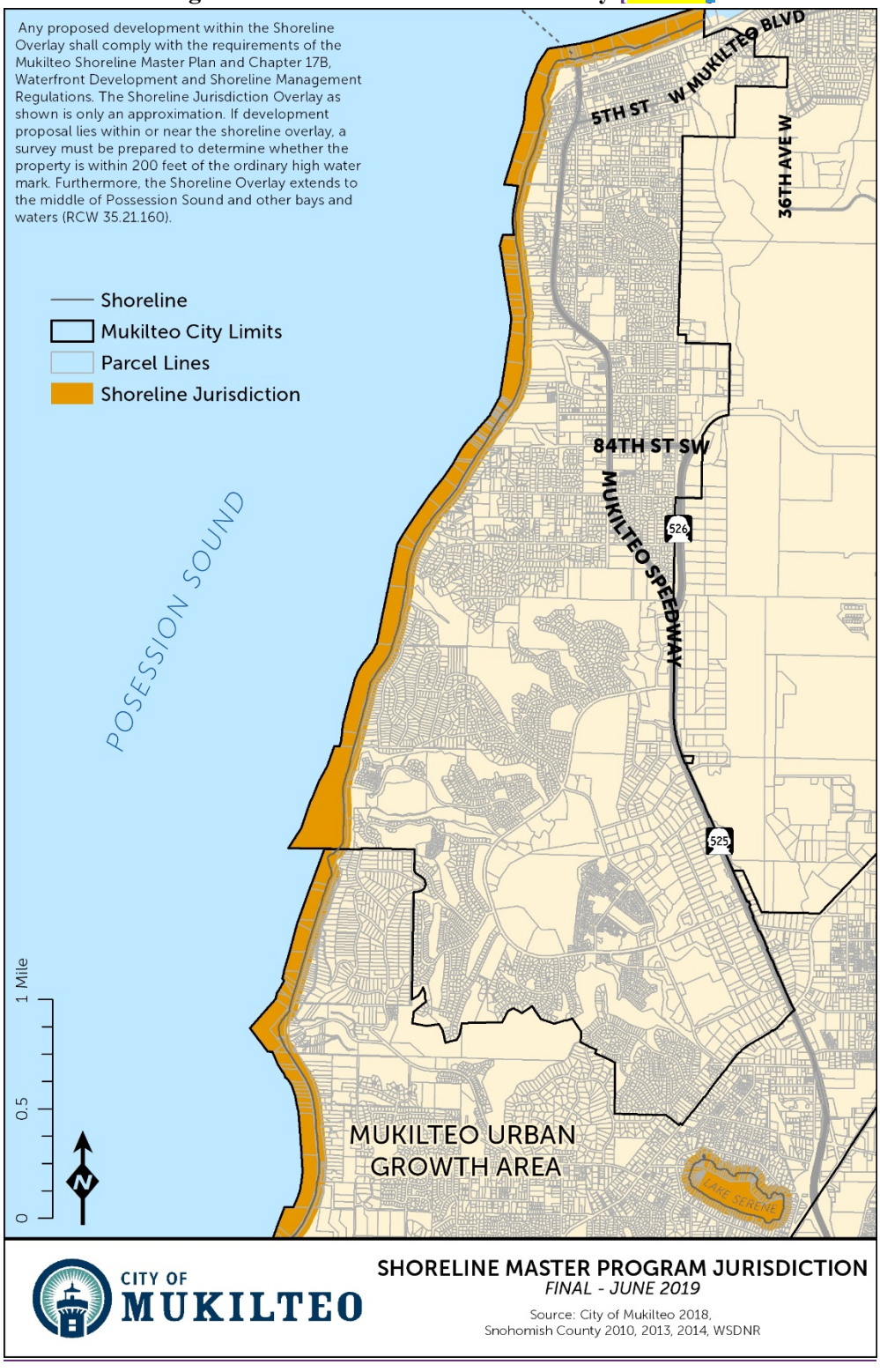


Figure ~~33~~: Shoreline Jurisdiction Overlay, Tile 1, Northern City Limits ~~to Olympic View Ravine [revised]~~

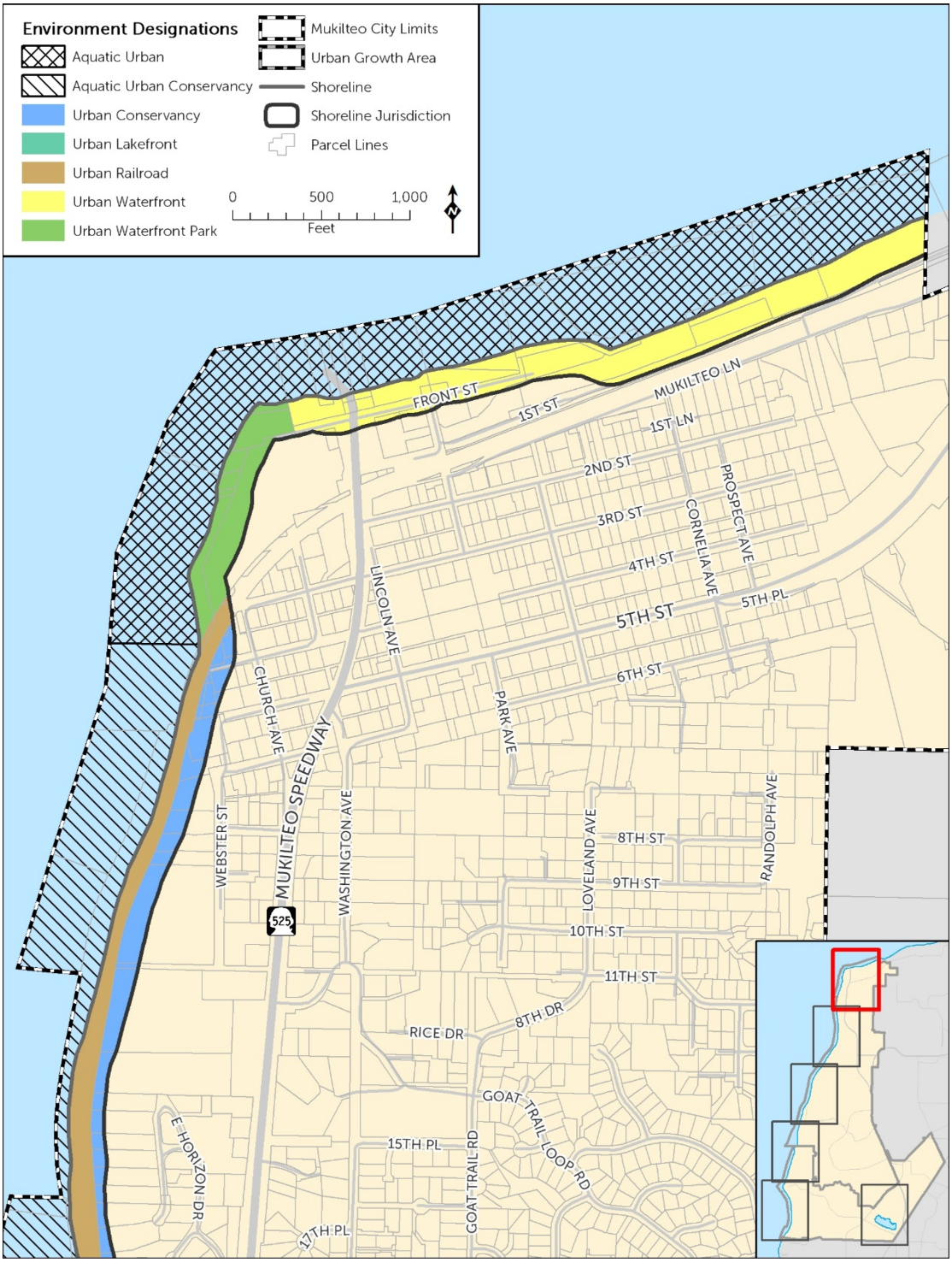


Figure 44: Shoreline Jurisdiction Overlay, ~~Olympic View Ravine to Big Gulch~~Tile 2 [revised]

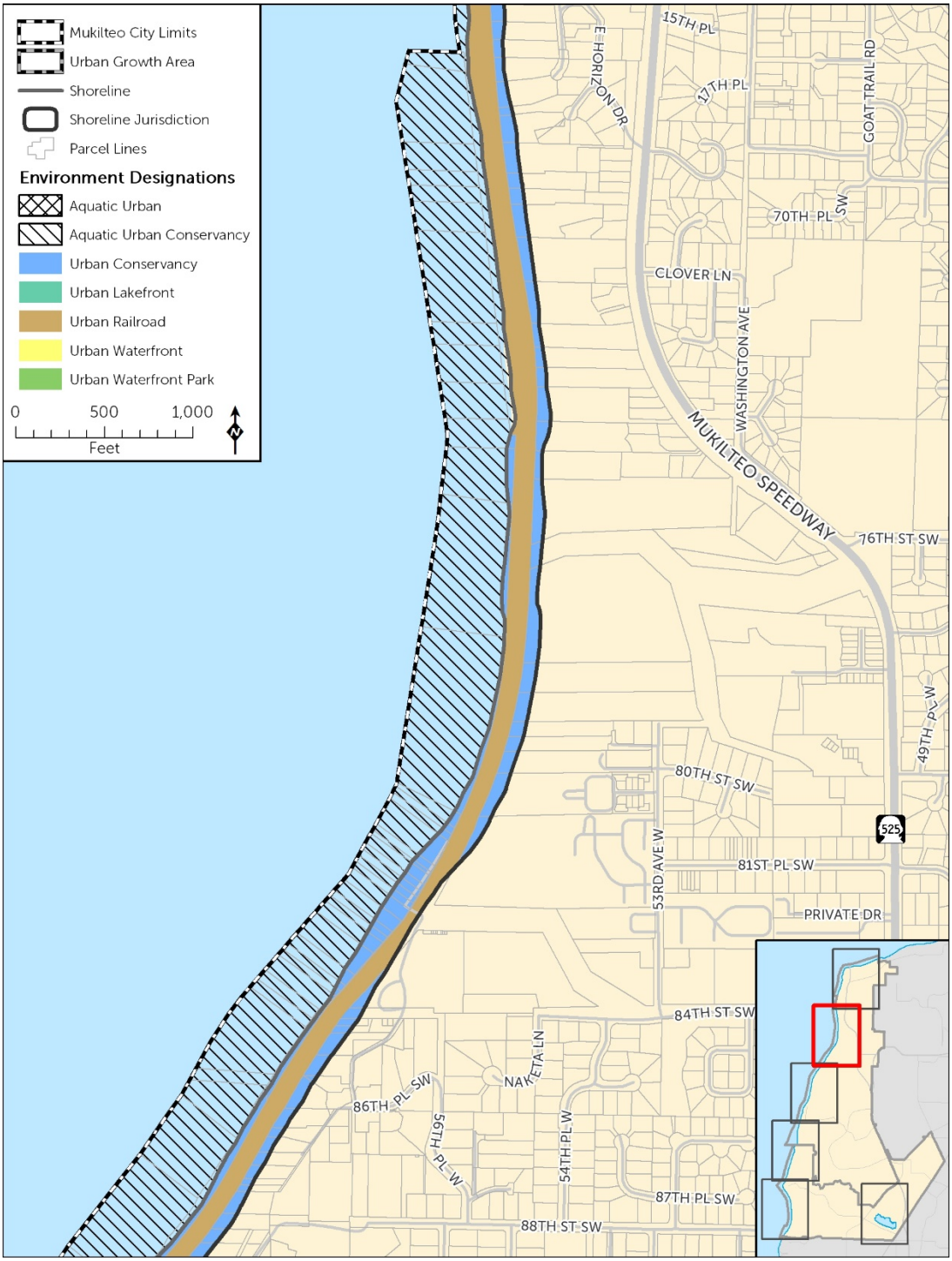


Figure ~~55~~: Shoreline Jurisdiction Overlay, ~~Big Gulch to Southern City Limits~~Tile 3 [revised]

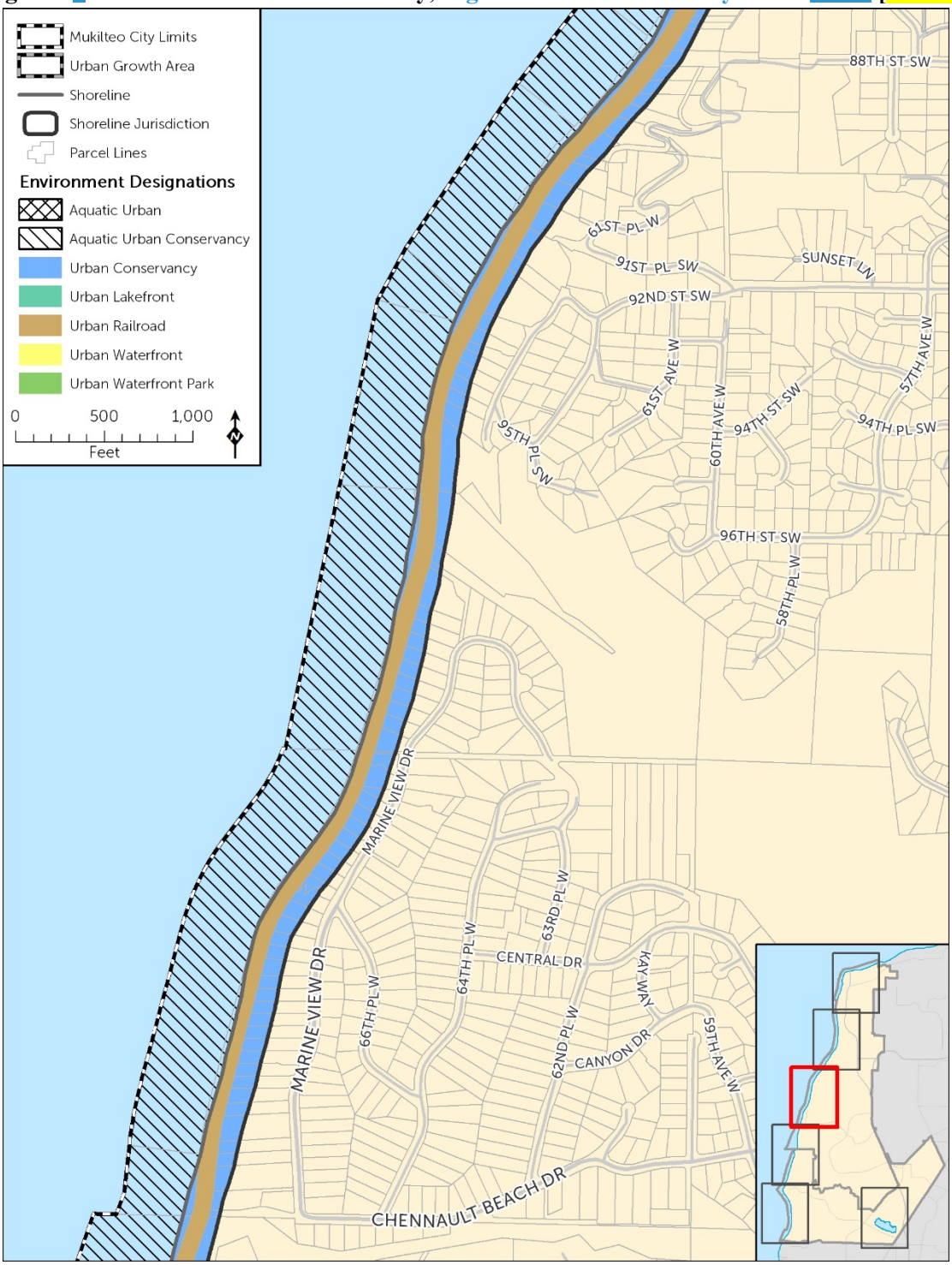


Figure ~~6~~6: Shoreline Jurisdiction Overlay, Tile 4, Southern City Limits to MUGA ~~Limits~~ [revised]

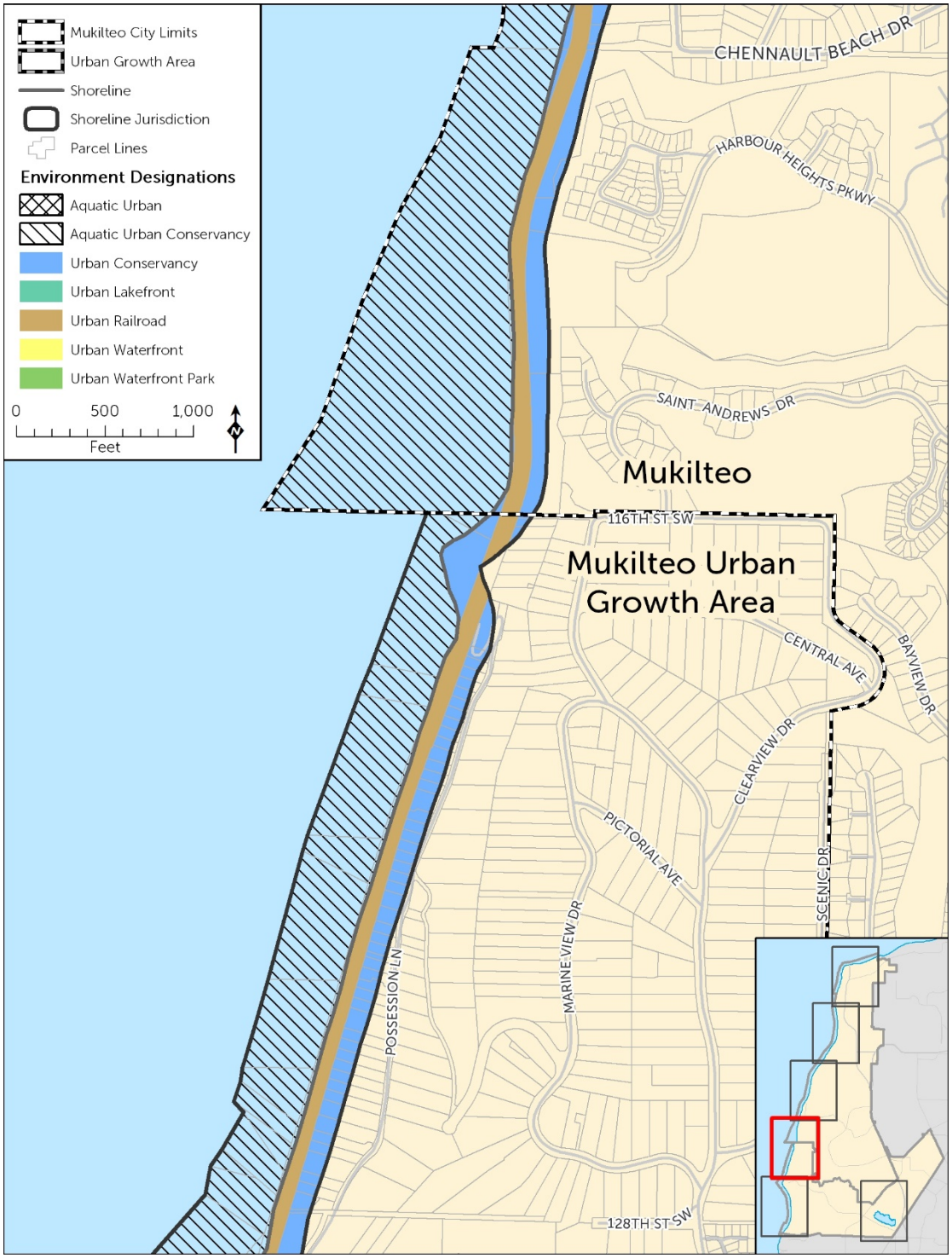


Figure 7: Shoreline Jurisdiction Overlay, Tile 5, Southern City Limits [revised]

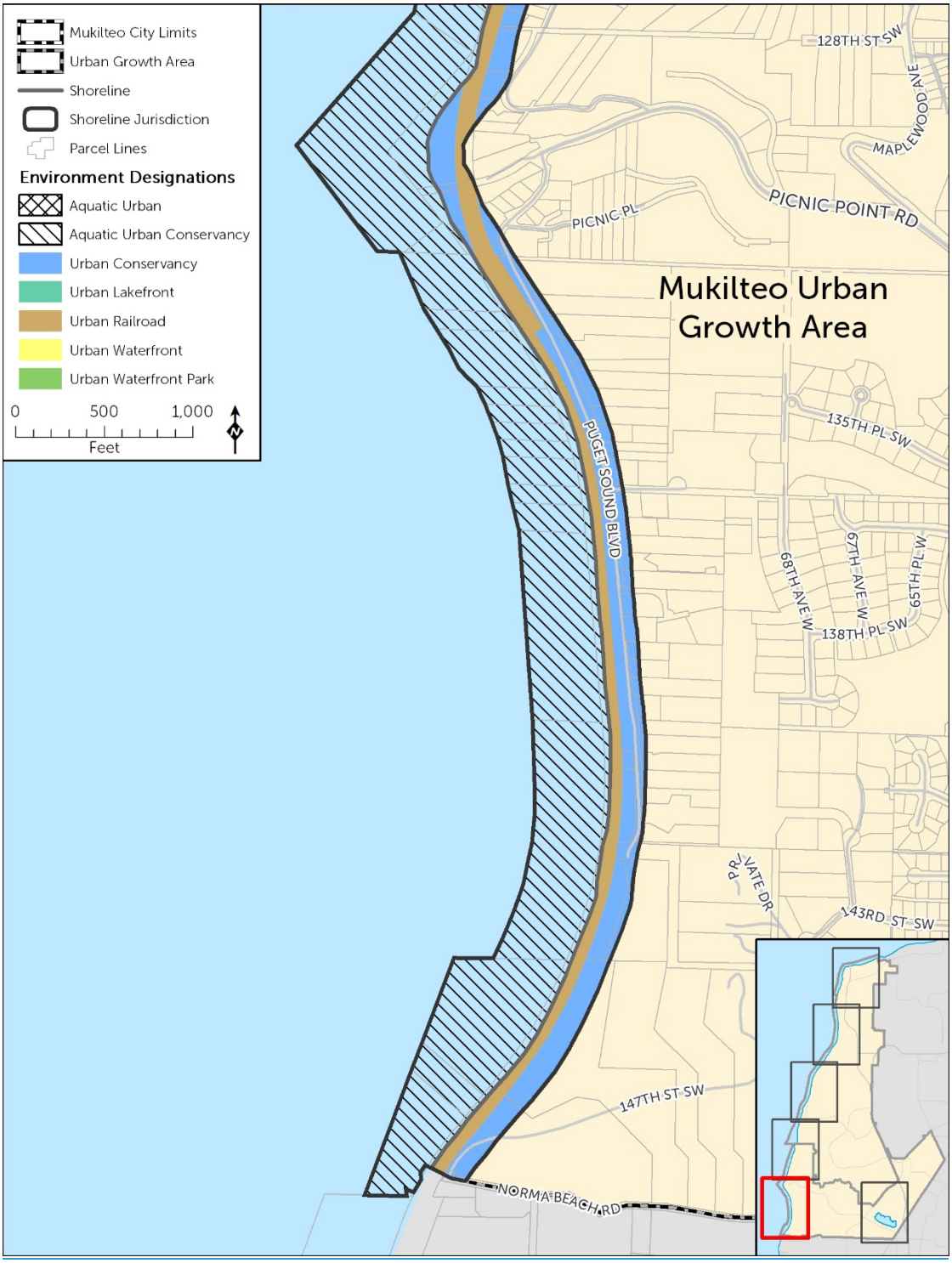
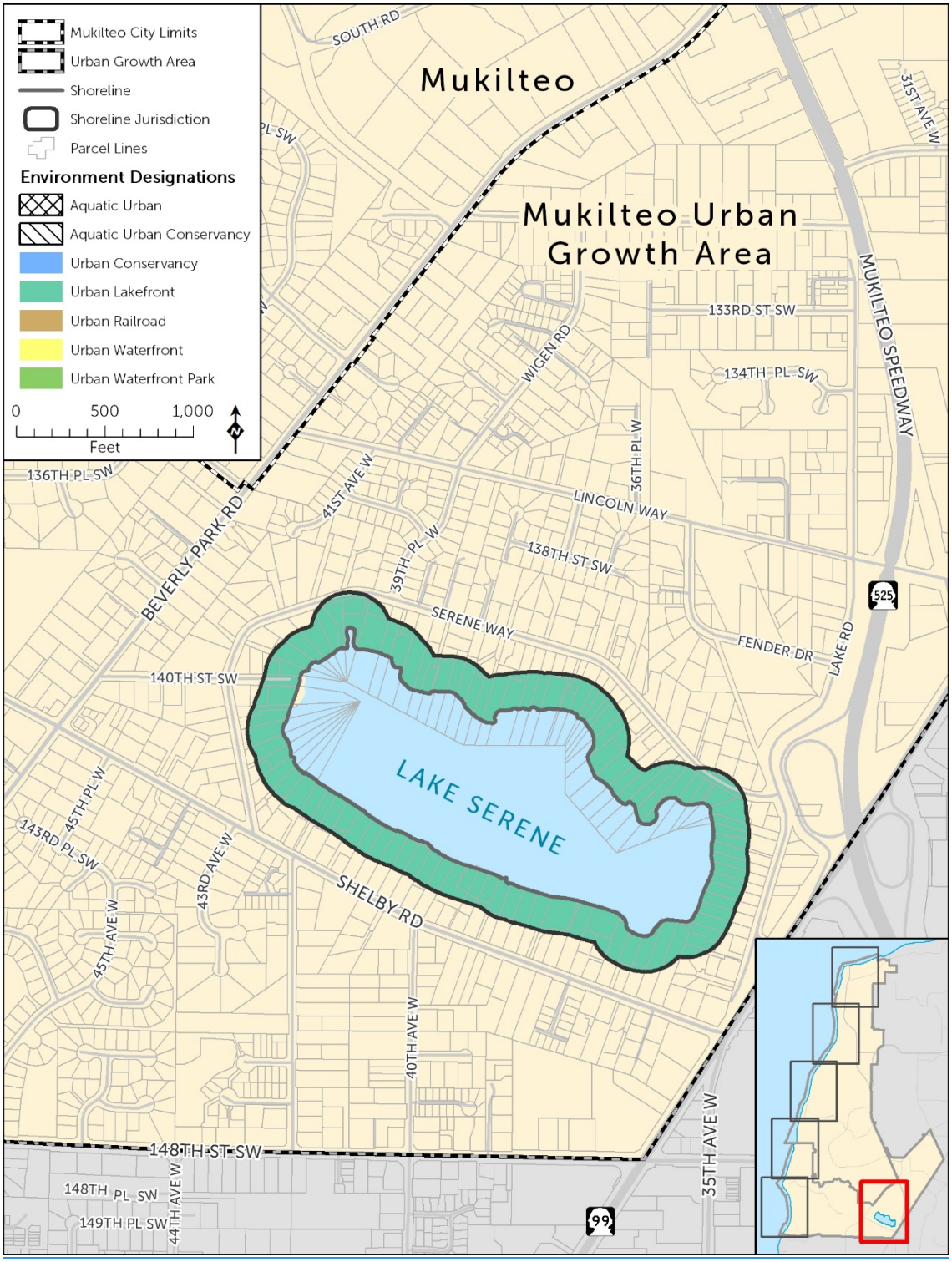


Figure 8: Shoreline Jurisdiction Overlay, Tile 6, MUGA and Lake Serene [revised]



Relationship to Other Plans

~~The 2003 DOE *Shoreline Guidelines* are intended to resolve some of the conflicts between planning under the Growth Management Act (GMA) and planning for shorelines. Previously, *SMPs* and *Comprehensive Plans* were typically written and adopted as separate documents with potentially separate or overlapping goals and policies. Integration of all planning policies and regulations became required by the State Legislature under the 1997 Regulatory Reform Act. The 2003 DOE Shoreline Guidelines support this integrated approach.~~

Consistent with the GMA, the City of Mukilteo guides development through planning documents, which include policies, and through codified regulations contained in the MMC. The City's Comprehensive Plan 2035 is the City's primary planning document, and includes numerous elements that are relevant to management of resources, land use, economic activities, and public access along the City's shorelines. Under the Comprehensive Plan, the Land Use Element includes an overarching policy (LU9) for the management of critical areas and shoreline areas. The Comprehensive Plan was adopted in 2015 and last amended in 2018. The Comprehensive Plan includes ~~several~~the following related Functional Plans, which are adopted as part of the Comprehensive Plan~~), including the following~~:

~~Parks, Open Space, and Recreation~~~~Comprehensive Surface Water Management~~ Plan
~~Transportation~~ Lighthouse Park Master Plan
~~Bicycle, Pedestrian and Trails~~92nd ~~Street Park Master~~ Plan
~~Shoreline Master Program~~Downtown Business District Subarea Plan
~~Habitat Management Plan~~
~~Capital Facilities Plan~~
~~Critical Area Mitigation Program (CAMP)~~
~~Downtown Waterfront Master Plan~~
~~Japanese Gulch Master Plan~~
~~By The Way (BTW) Plan~~
~~Parks, Recreation, Open Space, and Arts (PROSA) Plan~~

2017 Parks – Recreation – Open Space – Arts (PROSA) Plan: The PROSA Plan was written to be eligible for funding from the Washington State Recreation and Conservation Office (RCO), including funding for continued development of the waterfront. The primary goals and objectives laid out in this plan strive to meet applicable policies detailed in the 2015 Comprehensive Plan, where the overarching narrative is designed to increase Mukilteo's livability. The PROSA Plan prioritizes waterfront redevelopment over the next six years (Figure 15).

2017 By The Way (BTW) Plan: The Bike – Transit – Walk Plan was created as a vision for Mukilteo's future complete and efficient network of safe, healthy, convenient, and enjoyable transportation options that provide equitable connectivity to pedestrians, transit users, cyclists, and motorists to and from the neighborhoods where they live, work, and play. Included in this plan are the City's goals and policies for transportation networks that will provide safe connections for all ages, populations, and abilities.

2016 Downtown Waterfront Master Plan: The Downtown Waterfront Master Plan describes a revitalized waterfront that includes: an urban street front with local businesses, looped pedestrian promenade, bike lanes, and playful waterfront uses. This allows community members to experience the waterfront from an urban environment to a natural shoreline while focusing on connecting people

both physically and thematically to the intrinsic natural, cultural, and urban qualities that compose the past, present, and future of the Mukilteo waterfront.

2016 Japanese Gulch Park Master Plan: The adopted park master plan provides guidance to keep Japanese Gulch special while preserving and protecting the environment. This also includes plans for the 76th Street Trailhead to transition the former Highland Memorial Park into a park area to provide transition from the urban life to the Japanese Gulch Conservation Area.

Comprehensive Surface Water Management Plan: The Comprehensive Surface Water Management Plan was developed based on the City's commitment for stormwater utilities preserving the City's freshwaters and Puget Sound to meet the criteria for all beneficial uses of these valuable resources. This commitment is portrayed in programs that reduce flooding by attempting to mimic natural flow patterns, reduce pollutant loads to stormwater, and provide technical assistance to residents and developers in best management practices for stormwater.

Lighthouse Park Master Plan: The Lighthouse Park Master Plan was developed based on a vision of improved pedestrian connections between the park and the business districts to the southeast and east**.** The vision highlighted the lighthouse complex and integrated it with the rest of the park, providing a venue for city sponsored events and festivals while improving access to and from the facilities along the waterfront.

92nd Street Park Master Plan: The 92nd Street Park Master Plan was developed to present planning and design considerations for the future development of the 92nd Street Park. This report also documents the planning process and identifies construction costs for funding purposes. This report is a synthesis of information assembled over six months pertaining to the site's existing conditions, environmental features, public opinion and community history. The development goal for the park is to provide a variety of recreational activities for all age groups, individuals, families and social groups while respecting and enhancing the park's natural qualities.

Downtown Business District Subarea Plan: The Downtown Business District Subarea Plan established the overall vision for the Downtown Business District and strategies for implementing that vision. The proposed goals and policies were added to the City's Comprehensive Plan as part of the 2009 update process. The proposed implementation strategies were adopted by ordinance into the zoning code as development regulation code amendments or by resolution as development standards.

Habitat Management Plan: The Habitat Management Plan was developed to guide the management of publicly held lands. The stewardship of this important asset is required to support the community's quality of life. These lands not only protect important resources and critical areas and provide habitat for land-based and aquatic species, but also provide areas for residents to recreate and enjoy visual amenities. These areas are the last areas where fish, wildlife, and birds can live and reproduce. Without these areas, residents would be separated from the natural environment. In addition, these areas are vital to urban areas remaining sustainable over a longer period of time.

Capital Facilities Plan: The Mukilteo Comprehensive Plan contains the City's vision for the future of Mukilteo. Included in this plan are the City's goals and policies for the natural environment, built

environment, economy, public participation, arts and cultural awareness, healthy and safe community, and innovation.

Critical Area Mitigation Program (CAMP): The Critical Areas Mitigation Program (CAMP) offers more flexibility for property owners to explore off-site mitigation options for mitigating unavoidable impacts to wetlands in order to develop in-fill properties. The City's wetland mitigation program has identified specific locations where mitigation is allowed. This off-site mitigation program takes a watershed approach and focuses on locations where there is known potential for wetland function improvement.

Relevant policies and development guidelines from the 2015 Comprehensive Plan, 2017 By The Way Plan, 2018 Parks – Recreation – Open Space – Arts Plan, 2016 Downtown Waterfront Master Plan, and 2016 Japanese Gulch Park Master Plan have been incorporated into this SMP.

Land ~~Use~~ use r~~R~~egulations adopted in support of planning documents and associated policies include:

Zoning Code – MMC 17B ~~Waterfront Development and~~ Shoreline Management Regulations
- *Development Standards (e.g., Best Management Practices) and Enforcement*

In addition to the Comprehensive Plan and other adopted p~~P~~lans, including this SMP and regulations in MMC 17B, several other documents as listed below were developed in support of the SMP during the 2011 update:

- Shoreline Inventory and Characterization
- Restoration Plan
- Cumulative Impact Analysis
- Historical Use of the Shoreline

~~The 1991 GMA required counties and municipalities to undertake a 10-year update of *Comprehensive Plans* by December 1, 2004. As a part of this process, the City of Mukilteo added a "Critical Areas and Shoreline Element" to the 2004 *Mukilteo Comprehensive Plan*.~~ Today, th~~is~~ ~~Shoreline Master Plan~~SMP is a stand-alone document that~~This element~~ contains detailed policies related to the management of Mukilteo's shorelines. This SMP and associated policies, along with land use regulations codified in MMC 17B, serve to implement the overall policy intent of the City's Comprehensive Plan 2035.~~These same policies can be found in Chapter 3 of this document. This *Draft SMP* represents the City's approach to integrate the *SMP* into both the *Mukilteo Comprehensive Plan* and the *Mukilteo Municipal Code 17B,* while also having separate documents or functional plans for ease of use.~~

Updates to Mukilteo's ~~2011~~9 SMP ~~Update~~

The original City of Mukilteo SMP was adopted in 1974. Due to two small and two large annexations, the City of Mukilteo was~~is now~~ regulated by two separate shoreline programs before the 2011 SMP update. T~~In t~~he 2011 SMP update was a comprehensive effort that included technical analysis and inventory of shoreline conditions, restoration planning, and assessment of cumulative impacts completed to provide consistency with updated 2003 Washington State SMA guidelines.

Through the 2011 update process, Mukilteo coordinated with Ecology, shoreline property owners, and other stakeholders, as well as the public at large over multiple years.~~for ease of use.~~

This 2019 SMP periodic u~~U~~pdate is a focused review of the City's shoreline areas and the SMP ~~is~~ intended to:

- Respond to recent shoreline concerns and knowledge.~~;~~
- Ensure ongoing consistency with the City's Comprehensive Plan and other adopted plans and policies~~; and~~.
- ~~Ensure that habitat issues are addressed by identifying and utilizing the most current Best Available Science (BAS) for shorelines and critical areas;~~
- ~~Identify needed shoreline acquisition, enhancement, and restoration opportunities;~~
- ~~Integrate the SMP with Mukilteo's Comprehensive Plan and regulations for ease of use;~~
- ~~Address the most current regulatory solutions; and~~
- Demonstrate consistency with ~~the 2003 DOE Shoreline Guidelines and Department of Ecology (DOE)~~Ecology's SMA Guidelines, as required through the 2019 Periodic Review.

Update Process

The City of Mukilteo has prepared this ~~*Draft*~~ Shoreline Master Program update for public review and comment. Public and agency comments on this ~~*Draft*~~ SMP update are meant to assist the City of Mukilteo staff in finalizing this SMP update.

Best Available Science (BAS) has been used to characterize the shoreline and develop this SMP for the City of Mukilteo. BAS is based on research and studies conducted by qualified individuals using documented methods that lead to verifiable results and conclusions. In the absence of such, BAS can rely on existing studies, existing literature, and best professional judgment.

The work leading up to the release of this draft document has ~~been a multi-year effort and has~~ primarily entailed the collection of existing, as well as new inventories, data, and mapping, some done for the City of Mukilteo and those being done by other agencies and tribal governments. Additional data ~~was~~ were collected where existing data ~~was~~ were incomplete, thought to have changed, or where data did not previously exist. ~~In addition, d~~

From~~uring~~ 2004~~ ~~2007, the City worked cooperatively with Water Resource Inventory Area (WRIA) 7 and 8 as well as Snohomish County through the Marine Resources Advisory Committee (MRC) to develop a detailed shoreline inventory and an enhanced forage fish and substrate inventory. City staff and specialists ~~have~~ compiled, analyzed, and prioritized possible actions and recommended regulatory changes to develop this SMP for the City of Mukilteo. The Puget Sound Action Plan and Agenda were used to compare priority actions and were found to be consistent. In addition, early projects in the shoreline will be monitored, and changes to improve shoreline functions will be made over time as required by adaptive management.

T~~During this staff-intensive portion of the process, t~~he Mukilteo Planning Commission has served and will continue to serve as the central opportunity for public input for review and updates to the SMP~~. Periodic discussions have also been held with~~, along with project updates to the Mukilteo City Council ~~to provide information on progress, preliminary findings, and tentative direction~~. Listed

below are the publicly noticed sessions that will be held with the Planning Commission and City Council ~~to date~~as part of this 2019 SMP periodic update:

- ~~June 21, 2001 – Mukilteo Planning Commission Work Session~~
- ~~April 18, 2002 – Mukilteo Planning Commission Meeting~~
- ~~July 1 and 15, 2002 – Mukilteo City Council Meetings~~
- ~~May 16, 2005 – Mukilteo City Council Meeting to direct staff to develop a Draft SMP~~
- ~~Winter 2007 – Mukilteo City Council Meeting presenting the Preliminary Draft SMP for public review and directing the Planning Commission to hold Public Hearings~~
- ~~2009 – Planning Commission and City Council Meetings~~
- ~~April 2010 – Mukilteo Planning Commission Work Session~~
- ~~June 14, 2010 – Mukilteo City Council, Planning Commission, and Parks and Arts Commission Joint Work Session~~
- ~~November 18, 2010 – Planning Commission Public Hearing~~
- ~~January 20, 2011 – Planning Commission Public Hearing (continued)~~
- August 2018 – October 2018 – Drafting 2019 SMP p~~P~~eriodic r~~R~~eview checklist and updates by City staff
- November 15, 2018 – Planning Commission r~~R~~eview
- January 17, 2018 – Planning Commission Review
- February 21, 2019 – Planning Commission public hearing
- April 2019 – ~~DOE~~Ecology review and comment
- March 2019 – City Council review
- May 2019 – Concurrent City Council and ~~DOE~~Ecology public review / hearing~~Adoption~~
- June 2019 – City Council adoption and ~~DOE~~Ecology approval

~~Along the way, there have also been more informal avenues for public input, including the Snohomish County MRC "Beach Expo" day each year during 2001 through 2010.~~ The process and related documents can be obtained by accessing the City of Mukilteo website: ~~www.ci.mukilteo.wa.us~~https://mukilteowa.gov/departments/planning-development/planning-long-range/smp/.~~www.ci.mukilteo.wa.gov.~~

Finalization of the 201~~1~~9 Periodic SMP Update

~~This document represents City staff and consultants efforts' to prepare an update to the *Shoreline Master Program (SMP)* for the City of Mukilteo. As a draft document, it does not currently represent the Mayor's or City Council's views or approval. This document will be evaluated, commented upon, and changed as needed through Mukilteo's usual public process, which begin~~san with public hearings by the Mukilteo Planning Commission and is now being followed with public hearings by the City Council. The *Draft*Concurrent with City consideration and adoption of the proposed periodic update to the ~~*Shoreline Master Program*~~*SMP*, updates will be ~~was~~will then be reviewed and ~~amended~~ approved by ~~the State of Washington Department of~~ Ecology ~~(DOE)~~. ~~It was~~ is ~~o~~Only upon ~~DOE's~~ Ecology's approval ~~that~~that the updates are ~~are~~ consistent with all changes to SMA guidelines (since adoption of the SMP in 2011) ~~that~~ is the updated SMP ~~can be is now~~ considered a final document. The requirement for ~~DOE's~~ Ecology's review and approval differs from how other functional plans obtain final approval by City Council through the *Comprehensive Plan* update process.

Document Organization

This 20191 Mukilteo *Shoreline Master Program* (SMP) contains ten chapters and additional supporting documents. The various chapters provide an overview of Mukilteo's shoreline environment, definitions of the city's City's Environment Designations, and numerous goals and policies. Additionally, by State state mandate, the Mukilteo's SMP includes a regulatory component. The regulatory component addresses issues of concern regarding specific land uses or activities within the shoreline, and issues related to shoreline modification in order to protect and enhance the unique ecological functions of the shoreline resource. The components that make up the 2011-9 Mukilteo SMP include:

- *Shoreline Master Program (SMP or Shoreline Plan)* (this document)
- The Mukilteo *Comprehensive Plan – Critical Areas & Shoreline Element* (contained in this document)
- *Mukilteo Municipal Code Title 17B Waterfront Development and Shoreline Management Regulations*.

Other supporting documents include:

- Inventory and Characterization
- Restoration Plan
- Cumulative Impacts Analysis
- Historical Uses of the Shoreline

Other documents include:

- User Guide
- No Net Loss Report
- Takings Memo

The sections contained in this document include:

- Chapter 1: Introduction
- Chapter 2: Shoreline Environment Designations
- Chapter 3: Goals & Policies – Shoreline Elements
- Chapter 4: Administration and Permit Procedures
- Chapter 5: Inventory – Characteristics
- Chapter 6: Shoreline Protection, Enhancement, and Restoration
- Chapter 7: Cumulative Impacts Analysis Summary
- Chapter 8: Public Access
- Chapter 9: Public Input Process
- Chapter 10: Capital Improvements
- Appendix A: Definitions
- Appendix B: Acronyms and Abbreviations
- Appendix C: References

The Inventory and Characterization is a separate supporting document, which contains the technical biological analysis of the following three shoreline environments that are regulated under the SMP:

- Shorelines (marine/aquatic)

- Streams
- Freshwater lakes (Lake Serene)

If the reader is interested in developing along the shoreline, please refer to ~~the Mukilteo Municipal Code~~MMC Title 17B ~~Waterfront Development and~~ Shoreline Management Regulations.

Chapter 2: Shoreline Environment Designations

The City of Mukilteo's shoreline is divided into "Environment Designations," as required by the Shoreline Management Act. The City has seven ~~(7)~~ designations, each of which reflects distinctly different shoreline areas. These include:

- Urban Waterfront
- Urban Waterfront Park
- Urban Conservancy
- Urban Railroad
- Aquatic Urban
- Aquatic Urban Conservancy
- Urban Lakefront

These Environment Designations were developed based on a review of existing development patterns, biological and physical characteristics of the shoreline, and goals and aspirations of the community as expressed through the City's *Comprehensive Plan* and Washington State's ~~*Shoreline*~~ *Master Program* *Guidelines* (WAC 173-26-211).

These Environment Designations include either the upland property 200 feet inland from the ~~Ordinary High Water Mark (~~OHWM~~)~~ or the aquatic/marine tidelands and water areas lying waterward of the ~~Ordinary High Water Mark (~~OHWM~~)~~ out to the edge of the City of Mukilteo's legal jurisdiction at the middle of Possession Sound or Port Gardner Bay. The Urban Lakefront E~~e~~nvironment D~~d~~esignation encompasses both upland and freshwater areas of Lake Serene. Designation policies, included below, provide direction for the development and interpretation of regulations.

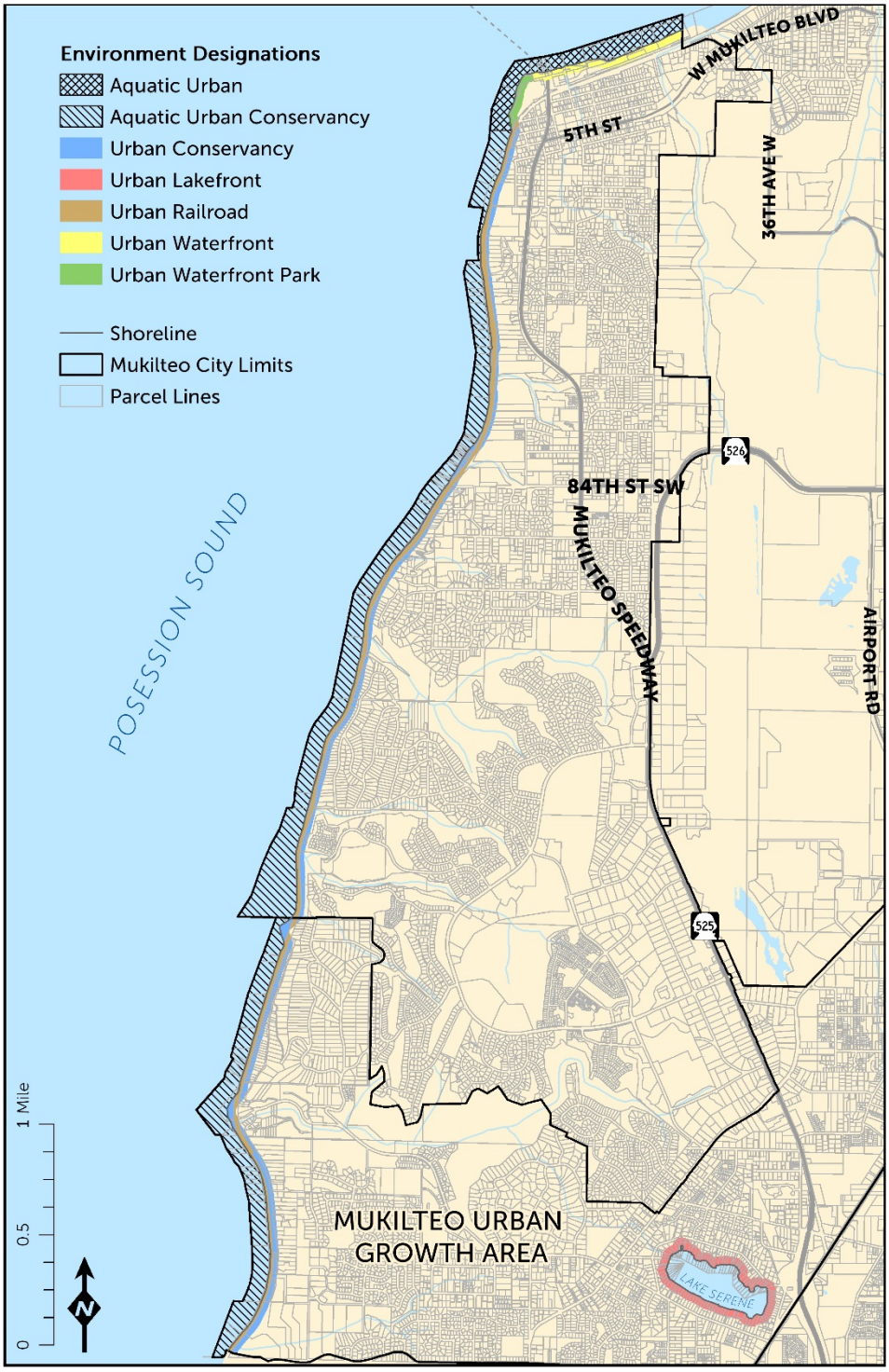
Each Environment Designation includes a Purpose Statement, Classification Criteria, and area~~is~~ designated. The corresponding adopted development regulations and definitions are contained in MMC 17B ~~Waterfront Development and~~ Shoreline Management Regulations. ~~The Environment Designations are designed to work together with the City of Mukilteo Comprehensive Plan Shoreline policies and these are complemented by the Zoning Districts.~~

~~Any area within the 200-foot shoreline jurisdiction that is not mapped and/or designated is automatically assigned an Urban Conservancy designation.~~

~~Mapping~~

An official City of Mukilteo Shoreline Map is on file at the City of Mukilteo Planning Department and is shown on Figure 9.

Figure ~~7~~9: City of Mukilteo Shoreline Environment Designations [revised]



Urban Waterfront Shoreline Environment

Purpose

The purpose of the Urban Waterfront Shoreline Environment Designation is to provide for the development and redevelopment of high-intensity, water-oriented commercial and recreational activities, transportation, and essential public facilities, while protecting existing ecological functions and improving ecological functions in areas that have been previously degraded.

Classification Criteria

The Urban Waterfront Shoreline Environment consists of the lands upland of the ~~Ordinary High Water Mark~~OHWM that are currently occupied by, or planned for occupancy by water-dependent/water related/water enjoyment uses, including water-dependent/water-related transportation, mixed-use commercial and parks, and recreational uses.

Area Designated

The Urban Waterfront Shoreline Environment ~~designation~~ Designation includes properties within the Waterfront Mixed Use (WMU) and Downtown Business zone. Urban Waterfront includes the area along the ~~south~~ north side of the BNSF Railroad tracks including Front Street starting at the Losvar Condominiums and eastward through and to the east~~ern~~ portion of the former Tank Farm.

Urban Waterfront Park Shoreline Environment

Purpose

The purpose of the Urban Waterfront Park Shoreline Environment Designation is to provide for redevelopment of an urban waterfront park including the western portion of Front Street, including the establishment of the park as a key component of community waterfront access.

Classification Criteria

The Urban Waterfront Park Shoreline Environment Designation consists of the lands upland of ~~Ordinary High Water mark~~the OHWM that are currently occupied by, or planned for occupancy by water-dependent/water related uses, including parks, open space, and recreational uses.

Area Designated

The Urban Waterfront Park Shoreline Environment Designation includes property within the Open Space (OS) Zone that comprises Mukilteo Lighthouse Park (the lighthouse and former State Park) and the western portion of Front Street. ~~The Urban Waterfront Park Environment Designation encompasses Mukilteo Lighthouse Park (the lighthouse and former State Park).~~

Urban Conservancy Shoreline Environment

Purpose

The purpose of the Urban Conservancy Shoreline Environment Designation is to protect and improve, wherever possible, the ecological functions of the shoreline in an urban setting, while allowing for the necessary retention and modification of the existing BNSF Railroad lines in order to optimize the freight, passenger, and commuter rail service corridor; stream, stormwater, culverts, and sewer outfalls; existing residences; and a variety of water-oriented public access and recreational activities together with their related structures.

Classification Criteria

Urban Conservancy a~~A~~reas ~~which~~ include one or more of the following characteristics:

- A length of shoreline that is already, or has the potential to achieve, proper ecological functioning along the backshore.
- The upland ecosystem has been altered by the construction and on~~-~~going use of railroad tracks.

Area Designated

The Urban Conservancy Environment Designation includes properties within the following zoning districts:

- Residential Zones: RD-7.5, RD-8.4, RD-12.5, RD 12.5(S), MRD, and MR-PRD.
- Heavy Industrial Zone: HI (Mukilteo Water District Wastewater Treatment Plant)
- Open Space Zone: OS.

Urban Railroad Shoreline Environment

Purpose

The purpose of the Urban Railroad Shoreline Environment ~~designation~~ Designation is to identify the 100-foot right-of-way for the ~~Burlington Northern Santa Fe~~BNSF R~~r~~ailroad along Mukilteo's shoreline. (The railroad also owns associated tidelands along the western shoreline that is covered under the Aquatic Urban Conservancy Shoreline E~~e~~nvironment D~~d~~esignation). This designation ~~will~~ provide~~s~~ for high-intensity transportation uses, under e~~E~~ssential p~~P~~ublic facilities regulations, while w~~h~~ere possible restoring the ecological functions~~,~~ and allowing for safe public access to the water via underpasses, bridges, or pedestrian overpasses/bridges.

Classification Criteria

The railroad use was introduced in the 1890~~'~~s, filling and following the shoreline of Puget Sound from Everett to Seattle. The designated right-of-way was provided by federal law and privileges. There are very few cases (e.g., Naketa Beach) where rights were acquired from private landowners and in exchange, they provide access over the railroad right-of-way in perpetuity.

The railroad provides regional freight connections, and hosts Sound Transit commuter rail~~,~~ and Amtrak trains. The railroad improvements disturb the shoreline environment, cutting off freshwater and saltwater estuaries along the Puget Sound tributaries. The majority of the western shoreline is armored by the railroad, except at the mid-portion Lighthouse Park, Naketa Beach, ~~Ship Wreck~~Shipwreck Point or Hulk Creek, Picnic Point Park, and Meadowdale Park or Lund's Gulch. The railroad generally consists of 100 feet of right-of way, with large cut granite blocks (often referred to as Chinese walls, as the "Chinese laborers~~,~~" cut and fitted these large stacked blocks into nearly vertical walls forming the bed for the tracks) or large rip~~-~~rap to allow for two parallel tracks. Only a single track exists from 9th Street south to the 76th Street ravine north of Big Gulch. ~~Where only a single track existed just south of Lighthouse Park to Naketa Beach, BNSF during 2010 rebuilt revetment and installed a second track as part of the improvements required for Sound Transit Commuter Rail.~~ In one case, the tracks cut ~~-~~off a portion of the shoreline just north of Picnic Point Park and south of Shipwreck Point – Hulk Creek. Typically, not all of the 100~~-~~foot right-of-way is currently ~~being~~ used.

Area Designated

The ~~proposed~~ Urban Railroad Shoreline Environment D~~d~~esignation includes the area between the base of the hillside out 100 feet as shown on the Snohomish County Assessor data and maps, from the northern property of Meadowdale Park to the southern end of Mukilteo Lighthouse Park. The remainder of BNSF right-of-way is not included within the shoreline jurisdiction of the City of Mukilteo along the northern waterfront. As the railroad leaves Mukilteo's boundaries on the east, it again enters the shoreline jurisdiction of the City of Everett.

Aquatic Urban Shoreline Environment

Purpose

The purpose of the Aquatic Urban Shoreline Environment Designation is to allow for the removal, maintenance, or construction of high-intensity, water-oriented uses that require piers/docks for operations or for access to the water including essential public transportation facilities, industrial uses, recreational, and commercial/mixed-use development. Existing over-water structures within this zone, which is located along the north end of the city limits, include the Mukilteo Ferry Terminal facilities (existing and proposed), National Oceanic and Atmospheric Administration (NOAA) Fisheries P~~p~~ier, Silver Cloud Pier, Port of Everett (POE) Fishing & Day Moorage pier and floats, and the public boat launch at Lighthouse Park.

Classification Criteria

The Aquatic Urban Shoreline Environment Designation consists of the marine waters waterward of the ~~Ordinary High Water mark~~OHWM that are currently occupied by, or planned for development or redevelopment by water-dependent/water-related/water enjoyment uses, including water-dependent/water-related transportation, mixed-use commercial, existing commercial and multi-family development, and parks and recreational uses.

Area Designated

The ~~proposed~~ Aquatic Urban Shoreline Environment ~~designation~~ Designation includes all of the water waterward of the ~~Ordinary High Water Mark~~OHWM out to the middle of Possession Sound or Port Gardner Bay**,** including the shoreline, nearshore, and marine environments, starting along the shoreline from the eastern boundary of the City to the south boundary of Lighthouse Park.

Aquatic Urban Conservancy Shoreline Environment

Purpose

The purpose of the Aquatic Urban Conservancy Shoreline Environment ~~designation~~ Designation is to protect, restore, and improve, wherever possible, the ecological functions of the aquatic environment while allowing for the existing facilities such as stormwater culverts, sewer outfalls, and existing bulkheads protecting private property or BNSF Railroad tracks. This zone includes the marine waters the length of the shoreline south of Lighthouse Park to the south where the Lund's Gulch/Meadowdale Beach Park Tidelands occur south of Norma Beach.

Classification Criteria

The Aquatic Urban Conservancy Shoreline Environment ~~designation~~ Designation consists of the marine waters waterward of the ~~Ordinary High Water Mark~~OHWM that are currently occupied by, or planned for development or redevelopment by single-family development, utility outfalls, BNSF Railroad tracks, and parks and recreational uses.

Area Designated

The ~~proposed~~ Aquatic Urban Conservancy Shoreline Environment ~~designation~~ Designation includes all of the water waterward of the ~~Ordinary High Water Mark~~OHWM out to the middle of Possession Sound including the shoreline, nearshore, and marine environments, starting along the shoreline south of Lighthouse Park to the south where the Meadowdale Beach Park Tidelands occur south of Norma Beach, which primarily consists of low-density single-family residential development and parkland upland of the marine waters.

Urban Lakefront Shoreline Environment

Purpose

The purpose of the Urban Lakefront Shoreline Environment ~~designation~~ Designation is to protect, restore, and improve, wherever possible, the ecological functions of the freshwater environment of Lake Serene, while allowing existing single-family development and park and lake recreational uses to continue to occur, along with associated docks.

Classification Criteria

The Urban Lakefront Shoreline Environment ~~designation~~ Designation consists of both the upland single-family development and re-development, park development, and associated in-water docks ~~occurring~~ on Lake Serene.

Area Designated

The Urban Lakefront Shoreline Environment Designation includes all of the freshwater of the lake encompassing Lake Serene, as well as the ~~Lake Serene~~ uplands within 200 feet of the ~~Ordinary High Water Mark (~~OHWM~~), and all of the freshwater of the lake encompassing Lake Serene~~.

Chapter 3: Goals and Policies – Shoreline Elements

BACKGROUND

This chapter addresses the Shoreline Management Act ("SMA") requirement for goals and policies. Washington Administrative Code (WAC) 173-26-191 (1) (b) requires that the local shoreline master program address eight shoreline "elements" including:

> "(b) **Master program elements.** RCW 90.58.100(2) states that the master programs shall, when appropriate, include the following elements:
>
> "(a) An economic development element for the location and design of industries, projects of statewide significance, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of shorelines of the state;
> (b) A public access element making provision for public access to publicly owned areas;
> (c) A recreational element for the preservation and enlargement of recreational opportunities, including but not limited to parks, tidelands, beaches, and recreational areas;
> (d) A 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;
> (e) A use element which considers the proposed general distribution and general location and extent of the use on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;
> (f) A conservation element for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection;
> (g) An historic, cultural, scientific, and educational element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values;
> (h) An element that gives consideration to the statewide interest in the prevention and minimization of flood damages;

In addition, the Shoreline Master Program may include any other element deemed appropriate or necessary to effectuate the policy of the State Shoreline Management Act. (WAC 173-26.191(1)(b)(i).

ORGANIZATION

This Chapter is organized as follows:

- Shoreline Goals **(Table 1)** are presented first. Goals are broad expressions of the City of Mukilteo's interests related to shorelines.

- Shoreline policies **(Table 2)** follow the goals. Policies guide the preparation of specific shoreline regulations and are intended to be used to evaluate proposed uses and development activity in areas subject to shoreline management jurisdiction.

- The goals and policies section is organized as a matrix to identify which "element" is addressed by a specific goal or policy. This is intentional, as certain goals or policies pertain to more than one element. The matrix format addresses this.

- The State SMA requires that there be an "Historic, cultural, scientific, and educational" element. Given how broad this category is, the matrix breaks these into two categories - "Historic and cultural" and "Scientific and education".

CONSISTENCY WITH OTHER PLANS

It is the intent of this chapter to not only meet the requirements of the Shoreline Management Act, but to also reflect the vision and desires of the community expressed through public involvement as well as in other adopted City Plan documents. The SMP goals and policies are therefore intended to work in harmony with other adopted City plans and policies including the City of Mukilteo 2015-2035 Comprehensive Plan and the Downtown Waterfront Master Plan.

These other adopted Plans place a high emphasis on waterfront redevelopment and protection of the environment, particularly critical areas. The Mukilteo 2015-2035 Comprehensive Plan, for instance, calls for waterfront development being developed in a manner that maximizes public access to the water (Comprehensive Plan Policy LU5) and for the City to manage and regulate critical areas and the shoreline to allow appropriate and reasonable uses while protecting them from adverse effects (Comprehensive Plan Policy LU9).

Specifically, City of Mukilteo Comprehensive Plan Policy LU5 and Comprehensive Plan Policy LU9 state,

> "LU5: Mukilteo's waterfront shall be developed in a manner that maximizes the public's access to the water.
>
> > LU5a. A Waterfront Master Plan shall be developed that reflects the direction of the Shoreline Master Program, accommodates the preferred alternative for the relocated Washington State Ferry facility, and addresses the operations and maintenance of city facilities envisioned for the waterfront. Subsequent land use decisions for the waterfront shall conform to the recommendations in the adopted Waterfront Master Plan.
> >
> > LU5b. Public and semi-public spaces that attract people of all generations and allow for public access to the waterfront, should be developed.
> > LU5c. Redevelopment of Mukilteo's waterfront should include exceptional pedestrian and recreation facilities that include a waterfront promenade and

a chain of waterfront parks, and a visitor dock, all with pedestrian-oriented amenities."

"LU9: The City shall manage and regulate development in critical areas and the shoreline to allow reasonable and appropriate uses in those areas while protecting them against adverse effects and shall regularly evaluate these regulations and programs to ensure they continue to use the best available science to protect environmentally sensitive areas from negative impacts associated with development."

The following Shoreline Master Program goals and policies support the City of Mukilteo 2015-2035 Comprehensive Plan for public access to the waterfront and for the protection of critical areas within areas subject to shoreline management requirements. Among other objectives, the following Shoreline Master Program goals and policies seek to provide for public access to public waters and shores, implement a concept of preferred shoreline uses and protect the environment.

In addition, the shoreline master program continue to address other issues affecting the environment and shoreline not directly addressed in critical area regulations including, as an example, climate change/sea level rise.

Table1: Shoreline Master Plan Goals

Shoreline Master Plan Goals	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Shoreline Master Plan Goals									
GD 1: Encourage City entryways, commercial development, and redevelopment near the urban waterfront to reflect the City's waterfront in a manner that will enhance the public enjoyment and access to the waterfront.	✓				✓				
GD 2: Ensure compatibility of adjacent land uses through the use of buffer, landscaping, and quality building design to mitigate impacts and enhance the City's unique identity and distinctive entryways.					✓		✓		
GD 3: Promote economic development and redevelopment to provide for a tax base that is balanced so the tax burden is shared among residential, commercial, and industrial properties.	✓				✓				

Shoreline Master Plan Goals	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
GD 4: Provide cost-effective and efficient public infrastructure and services that are sensitive to the environment; and that balance the use of a variety of modes of transportation.		✓		✓					
GD 5: Protect and enhance the City's critical areas and shoreline management zones to support fish and wildlife resources, maintain water quality and protect visual and aesthetic qualities.		✓		✓	✓	✓			
GD 6: Provide a system of parks, recreational, and cultural facilities that incorporates both public entities (City, County, State, Port of Everett, and schools), and private assets in order to expand opportunities within the City, views of the water and mountain scenery and public access along the shoreline.		✓	✓			✓	✓		
GD7: Be responsive to the beneficial and adverse impacts new technology may have on shoreline issues.	✓			✓	✓	✓	✓	✓	✓

Shoreline Master Plan Policies

The following **(Table 2)** are shoreline master program policies that support the shoreline master program goals. The Policies are organized into two main sections:

1) General Shoreline Policies; and,
2) Shoreline Environment Designation Policies.

The General Shoreline Policies address various general topics of importance when considering development of the shorelines and are intended to specifically support the goal statements of this Chapter. This includes policies related to Environmental Conservation, Public Access and Recreation, Use and Circulation, Shoreline Modification, Critical Areas and Habitat Management.

The Shoreline Environment Designation Policies are specific to each of the seven (7) shoreline environment designations adopted as part of this shoreline master program.

More detailed descriptions of these shoreline environment designations are included in this policy section. These seven (7) shoreline environments are:

1. Aquatic Urban
2. Aquatic Urban Conservancy
3. Urban Conservancy
4. Urban Lakefront
5. Urban Railroad
6. Urban Waterfront
7. Urban Waterfront Park

The establishment of these shoreline environment designations is consistent with WAC173-26-211 (2) which states, in part,

> "(2) **Basic requirements for environment designation classification and provisions.** (a) Master programs shall contain a system to classify shoreline areas into specific environment designations. This classification system shall be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through comprehensive plans as well as the criteria in this section. …"

Table 2: Shoreline Master Plan Policies

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
General Shoreline Policies									
SH 1: Work with the Port of Everett, the City of Everett, Snohomish County, BNSF, and other entities, and private landowners to; a) develop direct linkages to the waterfront; and, b) provide recreational opportunities, and restore ecological functions through use of innovative approaches.	✓	✓	✓		✓	✓			
SH 2: Sites or structures having historic, cultural, scientific, or educational value shall be inventoried and preserved by integrating them into re-development concepts.							✓	✓	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH 3: In providing for development of the shorelines, the City shall take into consideration impacts of climate change.								✓	✓
SH 4: City participation in County, regional and State natural hazard mitigation planning shall consider issues specific to the Mukilteo shorelines to ensure that needs unique to the Mukilteo shorelines have been considered.								✓	✓
Environmental Conservation Policies Preservation of the shoreline's ecological functions is required by the Shoreline Management Act (SMA). However, there are times when impacts that would harm the fragile shorelines of the state cannot be avoided. In these instances, these harmful impacts must be mitigated in order to assure that there is no net loss of ecological function necessary to sustain shoreline natural resources. The following policies assure, at a minimum, no net loss of the ecological functions that are necessary to sustain shoreline natural resources.									
SH 5: Ensure that the shoreline is developed to protect and restore the quality of the natural environment , ensure no net loss of ecological functions, reflect natural constraints, and protect and restore degraded ecological functions and ecosystem-wide processes consistent with Best Available Science (BAS), giving special emphasis to aquatic resources.					□	□		□	□
SH 6: Restore and enhance, to the greatest extent feasible, ecologically and aesthetically degraded critical areas, nearshore areas, and stream corridors in order to function as continuous watershed networks.		✓			✓	✓		✓	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH 7: • Use adaptive management methods to promote the stewardship of nearshore habitat, water quality, fish and wildlife access, and sediment transport processes; and, • stabilize flows of upland streams that feed the nearshore environment.					✓	✓		✓	
SH 8: Require the planting and establishment of shoreline riparian vegetation where feasible, to increase ecological functions.					✓	✓		✓	
SH 9: Ensure that new development does not reduce water quality.					✓	✓		✓	
Public Access and Recreation Policies Preservation and maintaining equitable public use and access of the shoreline for recreational opportunities for all members of the public, including but not limited to parks, tidelands, beaches and recreational areas is a fundamental goal of the Shoreline Management Act. This section provides public access and recreation policies for areas subject to shoreline management jurisdiction.									
SH10: Provide a system of public (City, County, State, Port of Everett, and schools) and private parks and recreational facilities to expand opportunities for public access along the shoreline.		✓		✓	✓				
SH11: Shoreline development should provide physical and visual waterfront access where possible. If public access is not feasible for reasons of public safety or site security, require mitigation that will add to the public's enjoyment of the shoreline.		✓			✓				
SH12: The City should maintain and enhance opportunities for the public to walk and visit tidelands where terrain and shore conditions permit access and where impacts to ecological functions can be avoided.		✓				✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH13: Encourage cooperation and joint use between public and private agencies and landowners to increase and diversify shoreline recreation opportunities.	✓	✓	✓		✓				
Use and Circulation Policies The City uses land use and circulation policies to consider the general distribution and location of uses on the shoreline and adjacent uplands. The policies in this section should be used when considering land use changes or development proposals that include housing, business, industry, or transportation.									
SH14: Generally limit new development within shoreline jurisdiction to water-dependent, water-related or water-enjoyment uses, public access, ecological restoration activities, or to essential regional public facilities that cannot feasibly be located elsewhere. Shops and services supporting the needs of commuters and visitors are also appropriate.	✓			✓	✓				
SH15: With the exception of pedestrian, bicycle, and emergency vehicle access, locate ferry vehicle staging, shared parking spaces, vehicle circulation and parking systems which are not related to shoreline-dependent uses or serving the multimodal station as far from the shoreline as possible.		✓		✓					
SH16: In the Urban Waterfront environment: • Public transportation systems shall be integrated through the Multimodal/Intermodal station. • Mixed-use development, recreational uses, and the Multimodal/Intermodal station should be used to promote re-development of the waterfront area.	✓	✓	✓	✓	✓				
SH 17: Shoreline development, including essential public facilities, shall mitigate impacts to ecological	✓			✓	✓	✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
functions and the temporary loss of habitat.									
Shoreline Modification Policies Shoreline modifications alter the physical configuration of the shoreline area, usually through the construction of a physical element. Shoreline modification activities are generally construction actions undertaken in preparation for, or in support of, a shoreline use. This section provides policies for shoreline modification actions within Mukilteo. These actions include: Upland Clearing, Grading, and Fill, Dredging and Dredge Disposal, In-Water Fill, Shoreline Stabilization, Beach Enhancement, and Piers and Docks.									
SH18: Allow structural shoreline modifications only: • where they are needed to protect existing primary structures, • for allowed water-oriented and water dependent uses, • for track upgrades of freight, passenger and commuter rail, or essential regional public facilities that cannot be located elsewhere, • where necessary to restore ecological functions. • where the need for shoreline stabilization is documented through a geotechnical engineering report.	✓			✓	✓				✓
SH 19: to modify or replace existing stabilization structures in or along the shoreline, except for modifications necessary to upgrade rail lines of freight, passenger or commuter rail service, the property owner must demonstrate necessity due to eminent danger. Where possible the structures shall be redeveloped to restore ecological functions.	✓			✓	✓				✓
SH 20: Shoreline modifications that would cause significant adverse ecological impacts are not allowed.					✓	✓			✓
Critical Area Policies This section contains critical area policies that apply to all uses, developments, and activities within the Mukilteo shoreline jurisdiction regardless of the Mukilteo SMP environment designation. Critical areas									

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
for the purposes of the Mukilteo SMP include the following areas and ecosystems: Wetlands, Geologically Hazardous Areas, Critical Saltwater Habitats, and Flood Hazard Areas.									
SH 21: Encourage the retention/replanting of native vegetation and use of drought tolerant plant species, as well as the use of native plants to protect slide prone slopes.					✓	✓		✓	
SH 22: Regulate critical areas within shoreline jurisdiction consistent with Best Available Science, including geologically hazardous areas, wetlands, critical saltwater habitats, and flood hazard areas...					✓			✓	✓
SH 23: Protect threatened or endangered species as mandated by the Federal and State regulations.						✓		✓	
SH 24: critical area regulations shall be limited to that portion of the property containing the resources or functions regulated by the critical area ordinance, including associated buffers.					✓	✓		✓	
SH 25: Provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound.						✓		✓	
Habitat Management Policies This section contains habitat management policies that apply to all uses, developments, and activities within the Mukilteo shoreline jurisdiction regardless of the Mukilteo SMP environment designation. The intent is to protect habitat that may be located in the shoreline environment.									
SH 26: Consider the environmental impacts of policy, regulatory, and service decisions in providing a high quality of life through programs, capital projects and day to day management. Emphasize conservation and sustainability in decisions.					✓	✓			
SH 27: Native vegetation on undeveloped land should not be removed unless:					✓	✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
• a city development application has been submitted and approved; • the removal is permitted by Mukilteo Municipal Code; • the removal is required for the protection of the public health, safety and welfare.									
SH 28: Avoid clearing native vegetation that maintains slope stability and reduces erosion, uses riparian habitat to shade shorelines, buffers wetlands and stream corridors, and protects aquatic habitat.					✓	✓			
SH 29: Preserve areas with natural or scenic values to achieve open space amenities and to maintain natural habitat corridors.						✓			
SH 30: Protect and enhance surface water quality by treating the water flow to remove pollutants before being released into streams, rivers, lakes and natural wetlands.						✓			
SH 31: Protect and enhance natural streams, lakes and shoreline habitat by protecting water quality, fish and wildlife habitats, and features that include natural hydraulic and ecological functions, recreational resources and aesthetics.			✓			✓		✓	
SH 32: Avoid and minimize adverse impacts to critical habitats and restore and enhance degraded or lower quality critical habitats during the land use development process or provide required mitigation.					✓	✓			
SH 33: Cooperate with other local and county governments, state, and federal agencies and nonprofit organizations to protect and enhance the environment and promote sustainability.					✓	✓			
SH 34: Promote and lead educational programs to raise public awareness of environmental issues, encourage respect for the environment, and show how individual actions and the cumulative effects of								✓	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
a community's actions can have significant effects on the environment.									
SH 35: Support public education of citizens, community groups, and nonprofit organizations to protect and improve surface and ground water resources. Increase public awareness of potential impacts on water bodies and water quality by encouraging proper use of fertilizers and chemicals on landscaping and gardens, and encouraging proper disposal of materials by residents and businesses.						✓		✓	
SH 36: Evaluate and monitor shoreline conditions to determine the effectiveness of management actions.					✓	✓		✓	
Urban Waterfront/Urban Waterfront Park Shoreline Environments Two (2) separate urban waterfront environment designations have been developed to coincide with the unique nature of Mukilteo's shoreline: This includes: 1. The "Urban Waterfront" shoreline environment encompasses the waterfront mixed-use area including the area of the new ferry terminal (planned for opening in 2020). The Urban Waterfront designation is to provide for development and redevelopment of higher-intensity, water-oriented (water enjoyment or water-related) commercial and recreational activities, transportation, and essential public facilities. 2. The "Urban Waterfront Park" shoreline environment designation encompasses the area generally at Lighthouse Park, a major park and recreation facility along the shorelines. Polices for these shoreline environment designations are as follows.									
Priority of Land and Water Uses									
UW1: Priority shall be given to water-dependent uses, including ferry terminals and boat launches, in the Urban Waterfront Environment. Water-related and water-enjoyment uses shall be given second priority.		✓		✓	✓				
UW2: Non-water-oriented uses shall not be allowed except as: • part of mixed-use developments; • in existing developed areas supporting									

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
water-dependent uses; or • in limited situations where there is no direct access to the shoreline.		✓			✓				
UW3: Non-water-dependent uses that are auxiliary to, and necessary for, multimodal/intermodal public transportation shall be allowed, provided no other feasible alternative exists.				✓	✓				
UW4: The creation of a pedestrian-friendly streetscape shall include on-street parking to provide a buffer for pedestrian uses on the sidewalks. Thus, on-street parking is considered acceptable in the 200 foot area of the shoreline jurisdiction, even though it is not a water-dependent/water-related use.	✓	✓		✓	✓				
Design Standards									
UW5: Implement aesthetic objectives of the waterfront area through the Waterfront Mixed Use (WMU) zoning code regulations.	✓			✓	✓	✓	✓		
Nearshore Enhancement and Restoration									
UW6: Where feasible, require beach softening and the enhancement of natural vegetative buffers compatible with pedestrian views and access along the shoreline, while retaining public safety and infrastructure protection.		✓			✓	✓			
UW7: Enhancement and restoration efforts directed toward improving ecological functions along the nearshore using Best Available Science are required of all new development or redevelopment activities once avoidance and minimization is exhausted.					✓	✓		✓	
UW8: All development, activities and uses on navigable waters or their beds shall: • minimize interference with surface navigation; • consider impacts to public views; and		✓		✓	✓	✓		✓	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
~~a~~ for the safe, unobstructed passage of fish and wildlife.									
UW9: Shoreline uses and modifications shall be designed and managed to prevent water quality degradation and the alteration of natural hydrographic conditions.					✓	✓		✓	
UW10: Uses that cause significant negative ecological impacts to critical saltwater and freshwater streams should not be allowed. Mitigation sequencing should be implemented for any allowed use to address potential negative ecological impacts.					✓	✓		✓	
Public Access									
UW11: New and redevelopment projects in the WMU zoning district are required to provide public access, except where the City determines that public access is not feasible due to public safety, site-security concerns, or where the property is not physically located to provide public access. In these cases, other forms of public access, such as on-site view enhancement or off site mitigation, will be required.	✓	✓	✓	✓	✓				
Docks and Piers									
UW12: New over-water structures should be allowed only for water-dependent uses, transportation facilities of state-wide significance, public access, scientific purposes, or ecological restoration. The size of new over-water structures should be the minimum necessary to support the structure's intended use, with joint use and shared pedestrian access encouraged.		✓		✓	✓	✓		✓	
Floodplain and Minimizing Floodplain Damage									

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
UW13: All structures, including Essential Public Facilities (EPFs), on the northwest waterfront shall be designed with a first floor level at least 19 feet above sea level to accommodate a sea level raise of up to eight (8) feet over a 50-year period. Use the current 14-15 foot elevation level or Best Available Science (BAS) to determine design criteria.					✓				✓
Shoreline Uses									
UW14: Consider amending the existing building height calculation methodology for the waterfront area only to account for anticipated sea level rise in the future.	✓				✓				✓
UW15: Reduce the likelihood of flood damage through various design techniques which allow for natural geohydrologic processes during flood events.					✓				✓
Urban Conservancy Shoreline Environment Designation The "Urban Conservancy" shoreline environment designation encompasses Mukilteo's shorelines south of Lighthouse Park. Mukilteo's Municipal Urban Growth Area's (MUGA's) shoreline area has also been designated Urban Conservancy. The Urban Conservancy designation is intended to protect and improve, wherever possible, the ecological functions of the shoreline and nearshore in an urban setting. This designation allows for the retention and modification of existing railroad tracks necessary to optimize freight, passenger, and commuter rail service and the benefits of the Mukilteo commuter rail station, the provision of utilities, existing residences and a variety of water-oriented public access and recreational activities together with their related structures.									
Urban Conservancy Shoreline Environment and Uses									
C1: Shoreline uses should: • be limited to new or redeveloped water-dependent recreational and educational facilities, transportation facilities, and utilities;				✓	✓	✓			✓

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
• minimal improvements to, but no expansion of, existing residential development within the SMP jurisdiction or west of the railroad tracks at Naketa Beach. • new residential development only on existing platted lots. • not allow new shoreline uses, including new residential development, which cause significant adverse ecological impacts to critical habitats.									
C2: Non-conforming uses shall not be allowed to expand and sewage systems should be upgraded to provide secondary level treatment, or the use should be discontinued.					✓	✓			
C3: Existing bulkheads can be replaced, but shall be the minimum size necessary to protect the primary structure from danger and should be placed no further seaward than the toe of the existing bulkhead.					✓	✓		✓	✓
C4: Essential regional public facilities that cannot feasibly be located elsewhere shall mitigate shoreline impacts by restoring natural shoreline habitat where feasible.				✓	✓	✓		✓	
Nearshore Enhancement or Restoration									
C5: During development and redevelopment activities, efforts shall be made to restore ecological functions using Best Available Science. Where possible, stream connections that provide sediment or natural beach nourishment should be maintained, and the marine riparian habitat corridor should be reestablished.						✓		✓	
Public Access									

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
C6: All residential uses shall preserve visual access to, and normal public use seaward of, the Ordinary High Water Mark (OHWM).		✓			✓	✓			
C7: For non-residential uses, shoreline restoration and public access shall be required of new development and for redevelopment on previously developed shorelines.		✓			✓	✓			
C8: Public access and public recreation uses should be limited to passive recreation such as trails and play equipment or in water activities such as boating and diving.		✓	✓			✓			
Habitat Stewardship									
C9: Public land stewardship should promote the protection and restoration of habitat and ecological functions.		✓				✓			
Aquatic Urban and Aquatic Urban Conservancy Shoreline Environments There are two (2) separate aquatic urban shoreline environment designations to address two distinct areas. These include: 1. The "Aquatic Urban" shoreline environment designation extends from the City's most eastern boundary with the City of Everett to the southern end of Lighthouse Park. 2. The "Aquatic Urban Conservancy" shoreline environment designation runs from the southern boundary of Lighthouse Park to the city's southern city limits and includes the annexation area. The purpose of these two aquatic shoreline environments is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark									
Aquatic Urban and Aquatic Urban Conservancy Shoreline Environment and Uses									
AQ 1: Ensure that public and private use of the aquatic environment and its natural resources occurs with minimal adverse impacts to the quality of the aquatic areas waterward of the shoreline with focus on maintaining and restoring the nearshore and aquatic environments.		✓			✓	✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
AQ 2: Preserve to the greatest extent feasible the scenic aesthetic quality of the open aquatic environment and vistas.		✓				✓			
AQ 3: New over-water structures should: • be prohibited in the Aquatic Urban Conservancy environment. • have the minimum size necessary to provide for research, public access or essential public facilities in the Aquatic Urban environment.		✓			✓	✓		✓	
AQ 4: All development, activities and uses on navigable waters or their beds should: • be located and designed to minimize interference with surface navigation • consider impacts to public views • allow for the safe, unobstructed passage of fish and wildlife. • Use low impact development techniques where feasible to minimize impacts on the aquatic environment.		✓		✓	✓	✓			
AQ 5: Uses that cause significant ecological impacts to critical marine waters should be discouraged, and, where allowed, should be consistent with the use objectives of the SMA and this SMP and should be mitigated to the greatest extent feasible.	✓					✓			
AQ 6: Development of underwater pipelines and cables on first and second-class tidelands should prohibit substantial or irrevocable damage to the environment.	✓					✓			
AQ 7: Water quality of the marine environments should be protected by eliminating septic, carbon and heavy metal releases into the aquatic environment.						✓			
AQ 8: Restore or improve riparian vegetation upland in the freshwater shoreline and marine nearshore to enhance ecological value and functions.						✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
"Aquatic Urban" Shoreline Environment and Use The following policies are specific to the "Aquatic Urban" Shoreline Environment Designation.									
AQ 9: Minimize adverse impacts of pier pilings, overwater structures, and ferry and boat moorage and launch on the marine environment's ecological functions.						✓			
AQ 10: Filling, dredging and additional revetment into the marine environment shall be allowed only for existing structure repair or new or improved essential public facilities and access.	✓	✓							
AQ 11: The City should evaluate, along with the City of Everett, Port of Everett and tribes of the Point Elliott Treaty, whether a marine stewardship or protection area should be proposed for a portion of the Mukilteo northern shoreline. The evaluation should be closely coordinated with the Tulalip Tribe and the Snohomish County Marine Resources Committee.						✓	✓	✓	
AQ 12: Evaluate the feasibility of integrating a dive park in Mukilteo's northern shoreline and secondarily the south end of Lighthouse Park so that neither would disturb aquatic resources and would limit impacts to the nearshore, forage fish spawning sites, and eelgrass resources.		✓						✓	
"Aquatic Urban Conservancy" Shoreline Environment and Use The following Policy is specific to the "Aquatic Urban Conservancy" Shoreline Environment Designation.									
AQ 13: Abandoned and neglected structures or structures with overwater residential uses that are a hazard to public health, safety, and welfare should be removed or restored to a usable condition.					✓	✓			
Urban Railroad Shoreline Environment The "Urban Railroad" Shoreline Environment includes all Burlington Northern Santa Fe (BNSF) railroad									

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
right-of-way or easements within two hundred feet upland and waterward of the OHWM of Puget Sound. BNSF tidelands below the OHWM of Puget Sound fall within the aquatic environments.									
Urban Railroad Shoreline Environment and Use									
URR1: The principal permitted use within the railroad right-of-way shall be for north and south tracks, switching and safety structures. Any additional tracks shall obtain an Essential Public Facilities Permit and shall provide mitigation for environmental impacts and improve pedestrian access to the water where public lands are available or use easements can be obtained.	✓	✓		✓					
URR2: Structures, seawalls, revetment and culverting associated with the railroad shall have appropriate permits and shall be regulated under MMC Chapter 17B and other applicable regulations. Any construction, including fencing exceeding six feet in height shall have administrative approval or shall be included in an Essential Public Facilities permit.					✓	✓			
URR3: Parking, construction access maintenance structures, and lay-down areas shall not be permitted unless there is no feasible location outside the shoreline jurisdiction.					✓	✓			
Urban Lakefront Shoreline Environment The "Urban Lakefront" Shoreline Environment includes all lands two hundred feet upland and waterward of the OHWM around the entire perimeter of Lake Serene. Lake Serene is located within the City's Municipal Urban Growth Area (MUGA). The shoreline environment designation and policies are intended to be applied at such time Lake Serene is annexed into the City of Mukilteo.									
Urban Lakefront Shoreline Environment and Use									
LkS 1: Use environmentally sensitive aquatic weed and algal control methods when native plant communities and associated habitats are threatened or where water dependent uses are restricted by the	✓					✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
presence of weeds or algal blooms.									
LkS 2: The control of aquatic weeds by de-rooting, rotovating or other method which disturbs the bottom sediment or benthos shall be considered development that requires issuance of a substantial development permit. Hand pulling or mechanical harvesting, with disposal of the collected weeds in an appropriate, identified upland site, is normal maintenance and repair should not require the issuance of a shoreline substantial development permit.				✓					
LkS 3: All docks shall be constructed and maintained using Best Available Science practices and shall be kept in safe and sound condition. Abandoned or unsafe docks shall be removed or repaired promptly by the property owner(s). Where any such structure constitutes a hazard to the public, the City may, following notice to the owner, abate the structure and impose a lien.		✓			✓				
LkS 4: Materials and coatings of all dock members shall not use toxic substances, including creosote, and degradable materials, which includes some plastic and foam products.		✓			✓	✓			
LkS 5: New or expanded docks should be allowed only if the docks are to be multi-use docks in order to limit the proliferation and reduce the amount of over-water coverage.									
LkS 6: The design of pilings and floats should take into consideration the affect climate change and other factors will have on future water levels. In addition: • Dock pilings shall be installed to extend at least one foot above extreme high water level. Floats shall have stops that keep the floats off the bottom during low water levels.					✓				

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
LkS 7: The length of new or expanded docks shall be limited and designed to ensure and maximize: • Navigability • Safe use of the open water • The public's enjoyment		✓		✓	✓				
LkS 8: Dock design shall limit the impact to the nearshore using a minimum width access from the shore out 10 feet over the water and using light penetrating materials		✓			✓				
LkS 9: All new dock construction and major maintenance of existing docks shall require re-vegetation with native plants of the first 10-25 feet of upland along the shoreline to assist with improving water quality.		✓			✓	✓			
LkS 10: Overhead wiring or plumbing shall not be permitted on docks and lighting shall be limited to the upland with cut-off fixtures to limit light spillage onto the lake's water surface.					✓	✓			
LkS 11: Water quality monitoring and public education programs on lakeside living for property owners should be created through the city's stormwater utility. The programs should promote low impact development, re-establishment of natural vegetation and other more sustainable techniques.						✓		✓	
LkS 12: Acquisition of headwater property and retention of the headwaters to Lake Serene shall be promoted as a preventative measure to assist in maintaining a high water quality of the lake.					✓	✓			
LkS 13: Increased densities adjacent to Lake Serene, even with sanitary sewers, shall be allowed only if the: • amount of existing impermeable surface coverage is not increased; • existing building height limits are maintained or	✓				✓	✓			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
decreased; and Quality of stormwater currently released into Lake Serene, both individually and collectively, is significantly improved.									

~~Chapter 3: Goals and Policies – Shoreline Elements~~

~~BACKGROUND~~

~~This chapter addresses the Shoreline Management Act ("SMA") requirement for goals and policies. Washington Administrative Code (WAC) 173-26-192 (1) (b) requires that the local shoreline master program address eight shoreline "elements" including:~~

> ~~"(b) **Master program elements.** RCW 90.58.100(2) states that the master programs shall, when appropriate, include the following elements:~~
>
> ~~"(a) An economic development element for the location and design of industries, projects of statewide significance, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of shorelines of the state;~~
> ~~(b) A public access element making provision for public access to publicly owned areas;~~
> ~~(c) A recreational element for the preservation and enlargement of recreational opportunities, including but not limited to parks, tidelands, beaches, and recreational areas;~~
> ~~(d) A 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;~~
> ~~(e) A use element which considers the proposed general distribution and general location and extent of the use on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;~~
> ~~(f) A conservation element for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection;~~
> ~~(g) An historic, cultural, scientific, and educational element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values;~~

(h) An element that gives consideration to the statewide interest in the prevention and minimization of flood damages;

In addition, the Shoreline Master Program may include any other element deemed appropriate or necessary to effectuate the policy of the State Shoreline Management Act. (WAC 173-26.191(1)(b)(i).

ORGANIZATION

This Chapter is organized as follows:

- Shoreline Goals are presented first. Goals are broad expressions of the City of Mukilteo's interests related to shorelines.
- Shoreline policies follow the goals. Policies guide the preparation of specific shoreline regulations and are intended to be used to evaluate proposed uses and development activity in areas subject to shoreline management jurisdiction.
- The goals and policies section is organized as a matrix to identify which "element" is addressed by a specific goal or policy. This is intentional, as certain goals or policies pertain to more than one element. The matrix format addresses this.
- The State SMA requires that there be an "Historic, cultural, scientific, and educational" element. Given how broad this category is, the matrix breaks these into two categories – "Historic and cultural" and "Scientific and education".

CONSISTENCY WITH OTHER PLANS

It is the intent of this chapter to not only meet the requirements of the Shoreline Management Act, but to also reflect the vision and desires of the community expressed through public involvement as well as in other adopted City Plan documents. The SMP goals and policies are therefore intended to work in harmony with other adopted City plans and policies including the City of Mukilteo 2015-2035 Comprehensive Plan and the Downtown Waterfront Master Plan.

These other adopted Plans place a high emphasis on waterfront redevelopment and protection of the environment, particularly critical areas. The Mukilteo 2015-2035 Comprehensive Plan, for instance, calls for waterfront development being developed in a manner that maximizes public access to the water (Comprehensive Plan Policy LU5) and for the City to manage and regulate critical areas and the shoreline to allow appropriate and reasonable uses while protecting them from adverse effects (Comprehensive Plan Policy LU9).

Specifically, City of Mukilteo Comprehensive Plan Policy LU5 and Comprehensive Plan Policy LU9 state,

"LU5: Mukilteo's waterfront shall be developed in a manner that maximizes the public's access to the water.

LU5a. A Waterfront Master Plan shall be developed that reflects the direction of the Shoreline Master Program, accommodates the preferred alternative for the relocated Washington State Ferry facility, and addresses the operations and maintenance of city facilities envisioned for the waterfront. Subsequent land use decisions for the waterfront shall conform to the recommendations in the adopted Waterfront Master Plan.

LU5b. Public and semi-public spaces that attract people of all generations and allow for public access to the waterfront, should be developed.
LU5c. Redevelopment of Mukilteo's waterfront should include exceptional pedestrian and recreation facilities that include a waterfront promenade and a chain of waterfront parks, and a visitor dock, all with pedestrian-oriented amenities."

"LU9: The City shall manage and regulate development in critical areas and the shoreline to allow reasonable and appropriate uses in those areas while protecting them against adverse effects and shall regularly evaluate these regulations and programs to ensure they continue to use the best available science to protect environmentally sensitive areas from negative impacts associated with development."

The following Shoreline Master Program goals and policies support the City of Mukilteo 2015-2035 Comprehensive Plan for public access to the waterfront and for the protection of critical areas within areas subject to shoreline management requirements. Among other objectives, the following Shoreline Master Program goals and policies seek to provide for public access to public waters and shores, implement a concept of preferred shoreline uses and protect the environment.

In addition, the shoreline master program continue to address other issues affecting the environment and shoreline not directly addressed in critical area regulations including, as an example, climate change/sea level rise.

Table 1: Shoreline Master Plan Goals and Policies

Shoreline Master Plan Goals	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Shoreline Master Plan Goals									
GD 1: Encourage City entryways, commercial development, and redevelopment near the urban waterfront to reflect the City's waterfront in a manner that will enhance the public enjoyment and access to the waterfront.	⊟				⊟				
GD 2: Ensure compatibility of adjacent land uses through the use of buffer, landscaping, and quality building design to mitigate impacts and enhance the City's unique identity and distinctive entryways.					⊟		⊟		
GD 3: Promote economic development and redevelopment to provide for a tax base that is balanced so the tax burden is shared among residential, commercial, and industrial properties.	⊟				⊟				
GD 4: Provide cost-effective and efficient public infrastructure and services that are sensitive to the environment; and that balance the use of a variety of modes of transportation.		⊟		⊟					
GD 5: Protect and enhance the City's critical areas and shoreline management zones to support fish and wildlife resources, maintain water quality and protect visual and aesthetic qualities.		⊟		⊟	⊟	⊟			
GD 6: Provide a system of parks, recreational, and cultural facilities that incorporates both public entities (City, County, State, Port of Everett, and schools), and private assets in order to expand opportunities within the City, views of the water and mountain scenery and public access along the shoreline.		⊟	⊟			⊟	⊟		

Shoreline Master Plan Goals	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
GD7: Be responsive to the beneficial and adverse impacts new technology may have on shoreline issues.	✓			✓	✓	✓	✓	✓	✓

This chapter of the Mukilteo Shoreline Master Program contains seven (7) shoreline elements as listed in RCW 90.58.100(2). These are economic development, public access, circulation, shoreline land use, conservation, historical/cultural values, and flood hazard reduction. For each element there are goals and policies that apply to all shoreline uses and modifications in the City of Mukilteo.

Goals are broad expressions of the City of Mukilteo's broad interests related to shorelines whereas policies are legally enforceable. These are the bridges between goals and regulations, translating the general intent into more specific regulations. The Shoreline regulations which are applied jointly with the below listed goals and policies are contained in a separate document, Mukilteo Municipal Code Title 17B - Waterfront Development and Shoreline Management Regulations.

Table 1: Shoreline Master Plan Goals and Policies

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Lane Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Shoreline Master Plan Goals								
GD 1: Preserve the existing, owner-occupied, residential quality of life of each neighborhood and throughout the residential portion of the City by keeping high volumes of traffic out of residential neighborhoods.			✓	✓				
GD 2: Encourage City entryways, commercial development, and redevelopment near the urban waterfront to reflect the waterfront atmosphere of the City.	✓			✓				
GD 3: Ensure compatibility of adjacent land uses through the use of buffer, landscaping, and quality building design to maintain				✓		✓		

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
property values, safe living environments, and the City's unique identity and distinctive entryways.								
GD 4: Promote economic development and redevelopment to provide for a tax base that is balanced so the tax burden is shared among residential, commercial, and industrial properties.	✓			✓				
GD 5: Provide public infrastructure and services that are cost-effective, efficient, and sensitive to the environment; and that balance the use of private vehicles, cars/vanpools, public transit and non-motorized modes of transportation – including a comprehensive system of bicycle and pedestrian routes – for the movement of people and goods.		✓	✓					
GD 6: Protect and enhance the City's critical areas, habitats, and shoreline management zones to support fish and wildlife resources and provide physical and visual access opportunities.		✓	✓	✓	✓			
GD 7: Provide a system of parks, recreational, and cultural facilities that incorporates both public entities (City, County, State, Port of Everett, and schools), private assets to expand opportunities within the City, views of the water and mountain scenery and public access along the shoreline.		✓			✓	✓		
General Shoreline Policies								
SH 1: Work with the Port of Everett, the City of Everett, Snohomish County, BNSF, and other entities, or private landowners to develop direct linkages to the waterfront, to provide a diversity of recreational opportunities, and to restore ecological function or natural	✓	✓		✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
ecosystems by using Best Available Science (BAS), innovative and Best Management Practices (BMP) approaches.								
SH 2: Sites or structures having historic, cultural, scientific, or educational value shall be inventoried and preserved by integrating them into re-development concepts.						✓	✓	
SH 3: Proposed development shall be regulated and conditioned as necessary to protect the public's health, safety, and welfare, as well as the land and its vegetation and wildlife, and to protect property rights while implementing the policies of the Shoreline Management Act.				✓				✓
Environmental Conservation Policies Preservation of the shoreline's ecological functions is required by the Shoreline Management Act (SMA). However, there are times when impacts that would harm the fragile shorelines of the state cannot be avoided. In these instances, these harmful impacts must be mitigated in order to assure that there is no net loss of ecological function necessary to sustain shoreline natural resources. The following policies assure, at a minimum, no net loss of the ecological functions that are necessary to sustain shoreline natural resources.								
SH 4: Protect the City's critical areas, habitats, management zones and aquatic resources to ensure no net loss.				✓	✓		✓	✓
SH 5: Through the use of shoreline master program policies and regulations, zoning, environmental review and the critical area ordinances, ensure that the shoreline is developed in such a manner as to protect and restore the quality of the natural environment to ensure no net loss of ecological functions, to reflect natural constraints, to protect and restore degraded ecological functions and ecosystem-wide processes, giving special emphasis to aquatic resources.				✓	✓		✓	✓

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH 6: Restore and enhance to the greatest extent feasible critical areas, nearshore areas, and stream corridors which are ecologically and aesthetically degraded so that they function as continuous watershed networks, while giving special emphasis to restoring ecological functions to aquatic resources.				✓	✓		✓	
SH 7: Monitor shoreline conditions to determine the effectiveness of management actions. Use adaptive management methods to: • Promote the stewardship of nearshore habitat for eelgrass and kelp, forage fish spawning, salmonid smolts and juveniles, and shore or water-dependent birds. • Promote the stewardship of water quality and stabilize flows of upland streams that feed the nearshore environment. • Promote access for fish and other wildlife at the mouth of the three major watersheds – Japanese Gulch, Big Gulch, and Picnic Point Creek and for sea-run cutthroat at Smuggler's and Norma Creeks. • Protect and restore sediment transport processes toward a more natural condition.				✓	✓		✓	
SH 8: The planting and establishment of shoreline riparian vegetation shall be required where feasible to increase ecological functions.				✓	✓		✓	
SH 9: Ensure that new development does not reduce water quality.				✓	✓		✓	

Public Access and Recreation Policies

Preservation and maintaining public use of the shoreline for recreational opportunities, including but not limited to parks, tidelands, beaches and recreational areas is one of the fundamental goals of the Shoreline Management Act. This section provides policies for public access and recreation in the shoreline management zone of Mukilteo.

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH10: Provide a system of parks and recreational facilities that incorporates both public (City, County, State, Port of Everett, and schools) and private assets to expand opportunities within the City and public access along the shoreline.		✓	✓	✓				
SH11: Shoreline development should provide waterfront access as part of the development, expansion, or redevelopment. If public access is not feasible for reasons of public safety or site security, require mitigation that will add to the public's enjoyment of the shoreline.		✓		✓				
SH12: Wherever possible, provide opportunities for the public to walk and visit the tidelands where terrain and shore conditions permit access and where impacts to ecological functions can be avoided.		✓			✓			
SH13: Where possible, maintain or increase visual access to views of the water where topography, private ownership, or the BNSF railroad tracks prevent direct access.		✓	✓					
SH14: The City should acquire, or otherwise make available to the public, shoreline properties and tidelands that would provide for public access.		✓		✓	✓			
SH15: Encourage cooperation and joint use between public and private agencies and landowners to increase and diversify recreation opportunities at the shoreline.	✓	✓		✓				
Use and Circulation Policies The City uses land use and circulation policies to consider how the general distribution and location of uses on the shoreline and adjacent uplands should be distributed. The policies in this section should be used when considering any land use changes or development proposals that include housing, business, industry, or transportation.								

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH16: Limit new development within the shoreline jurisdiction (SMP shoreline jurisdiction is 200 feet landward from the Ordinary High Water Mark (OHWM)) to water-dependent, water-related or water-enjoyment uses, public access, activities being done solely to restore ecological functions, or to essential regional public facilities that cannot feasibly be located elsewhere.	✓		✓	✓				
SH17: With the exception of pedestrian, bicycle, and emergency vehicle access, ferry vehicle staging, shared parking spaces, vehicle circulation and parking systems which are not related shoreline-dependent uses shall be located as far from the shoreline as possible and should utilize off-site parking options such as park-and-ride facilities.		✓	✓					
SH18: Public transportation systems shall be integrated through the Multimodal/Intermodal station in the Urban Waterfront Environment. Mixed-use development, recreational uses and the Multimodal/Intermodal station should be used to promote re-development of the waterfront area in accordance with the City's "Zoning and Design Standards for the Waterfront Mixed-Use District".	✓	✓	✓	✓				
SH19: Link public transportation systems to the waterfront, recreation uses, and Multimodal/Intermodal station in a manner that is compatible with shorelines management objectives and results in the least disruption to the shoreline environment.	✓	✓	✓					
SH20: Development and redevelopment including essential public facilities, shall mitigate impacts to ecological functions and the temporary loss of habitat, as well as	✓		✓	✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
provide restoration to ecological functions.								
SH21: Except for water-oriented development, track upgrades for freight, passenger and commuter rail, or other essential public facilities, shoreline development shall be prohibited in the urban conservancy environment.			✓		✓			
Shoreline Modification Policies Shoreline modifications are those actions that modify the physical configuration of qualities of the shoreline area, usually through the construction of a physical element. Shoreline modification activities are generally construction actions undertaken in preparation for, or in support of, a shoreline use. This section provides policies for shoreline modification actions within Mukilteo. These actions include: Upland Clearing, Grading, and Fill, Dredging and Dredge Disposal, In-Water Fill, Shoreline Stabilization, Beach Enhancement, and Piers and Docks.								
SH22: Allow structural shoreline modifications only where they are needed to protect existing primary structures, for allowed water-oriented and water dependent uses, track upgrades for freight, passenger and commuter rail, or essential regional public facilities that cannot be located elsewhere, or where necessary to restore ecological functions. The need for shoreline stabilization shall be documented through a geotechnical engineering report.	✓		✓	✓				✓
SH23: To modify or replace existing stabilization structures in or along the shoreline, except for modifications necessary to upgrade rail lines for freight, passenger or commuter rail service, the property owner must demonstrate necessity due to eminent danger and where possible the structures shall be redeveloped to restore ecological functions.	✓		✓	✓				✓
SH24: Shoreline modifications that would cause significant negative ecological impacts are not allowed. When assessing the potential				✓	✓			✓

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
ecological impacts, special attention should be given to sediment transport and maintenance of natural beach conditions.								
Critical Area Policies This section contains critical area policies that apply to all uses, developments, and activities that may occur within the Mukilteo shoreline jurisdiction regardless of what Mukilteo Shoreline Master Program environment designation they may occur in. Critical areas for the purposes of the Mukilteo Shoreline Master Program include the following areas and ecosystems: Wetlands, Geologically Hazardous Areas, Critical Saltwater Habitats, and Flood Hazard Areas.								
CA1: Regulate steep slopes limiting and conditioning development, based upon technical engineering studies, for steep slopes (as defined by the Mukilteo Municipal Code), for unstable soil, and liquefaction areas designated as having potential soil stability problems for building.				✓	✓		✓	✓
CA2: Encourage retention/replanting of native vegetation and use of drought tolerant plant species, as well as encourage the use of native plants to protect slide prone slopes.				✓	✓		✓	
CA3: Regulate areas designated as 100-year floodplains on the most current Federal Flood Insurance Maps to ensure their proper use and to satisfy requirements for the flood insurance eligibility.				✓			✓	✓
CA4: Protect threatened or endangered species as mandated by the Federal and State regulations.					✓		✓	
CA5: Protect wetlands such as bogs, marshes, swamps, creeks, ravines, and other natural surface water runoff and detention areas to mitigate and to maintain their functional values.				✓	✓		✓	

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
CA6: Protect areas with a critical recharge effect on aquifers or groundwater that assists with maintaining stream flow year-round or are used for potable water.				✓	✓		✓	✓
CA7: Retain and enhance the existing water quality of the Sound and the various creeks and drainage areas within the City by adopting appropriate regulations.				✓	✓		✓	
CA8: Review and revise the Critical Area Ordinances, as needed for clarity, to improve administration, and to ensure consideration of property rights and use of best available science (BAS).				✓	✓		✓	
CA9: Critical area regulations shall be limited to that portion of the property containing the resources or functions regulated by the critical area ordinance.				✓	✓		✓	
CA10: Provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound.					✓		✓	
Urban Waterfront Use Policies **Priority of Land and Water Uses Policies**								
UW1: Priority shall be given to water-dependent uses, including ferry terminals and boat launches, in the Urban Waterfront Environment. Water-related and water-enjoyment uses shall be given second priority.		✓	✓	✓				
UW2: Non-water-oriented uses shall not be allowed except as part of mixed-use developments or in existing developed areas supporting water-dependent uses, provided that non-water-oriented uses may also be allowed in limited situations where there is no		✓		✓				

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
direct access to the shoreline.								
UW3: Non-water-dependent uses that are auxiliary to, and necessary for, Multimodal/Intermodal public transportation systems that include water-dependent public transportation shall be allowed, provided no other feasible alternative exists.			✓	✓				
UW4: The creation of a pedestrian-friendly streetscape shall include on-street parking to provide a buffer for pedestrian uses on the sidewalks. Thus, on-street parking is considered acceptable in the 200-foot area of the shoreline jurisdiction, even though it is not a water-dependent/water-related use.	✓	✓	✓	✓				
Design Standards Policies								
UW5: Aesthetic objectives of the waterfront area shall be actively implemented through the WMU zoning code regulations. These regulations include requirements pertaining to sign control, appropriate development siting, parking lot location and screening, and architectural standards.	✓		✓	✓	✓	✓		
Nearshore Enhancement and Restoration Policies								
UW6: Beach softening (modification of riprap) and the enhancement of natural vegetative buffers that is compatible with pedestrian views and access along the shoreline and while retaining public safety and infrastructure protection is required.		✓		✓	✓			
UW7: Enhancement and restoration efforts directed toward improving ecological functions along the nearshore using Best Available Science are required of all new development or redevelopment activities. All				✓	✓		✓	

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
overwater structures will conform to Best Management Practices (BMPs) to ensure salmonids can use the nearshore corridor along this shoreline and to avoid or minimize impacts to forage fish spawning beaches and eelgrass beds are not impacted.								
UW8: All land uses and any development or structures in navigable waters or their tidelands shall be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife particularly those species dependent on migration along the nearshore by using BMPs to avoid and minimize impacts.		✓	✓	✓	✓		✓	
UW9: Shoreline uses and modifications shall be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.				✓	✓		✓	
UW10: Uses that cause significant negative ecological impacts to critical saltwater and freshwater streams should not be allowed. Where those uses are necessary to achieve the objectives of RCW 90.58.020, their impacts shall be mitigated according to the sequence defined in WAC 173-26-020, Habitat Stewardship.				✓	✓		✓	
UW11: Public lands stewardship should promote habitat protection and ecological functions.		✓		✓	✓		✓	
Public Access Policies								
UW12: Since Mukilteo Landing is the area of Mukilteo's shoreline where the most human activity will occur, visual and physical public access to the water and shoreline are high	✓	✓	✓	✓				

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
priorities. All new and redevelopment projects as specified in the 1995 Multimodal/Intermodal Plan and the WMU zoning district are required to provide such public access, except where the City determines that the public access is not feasible due to public safety or site security concerns. In that case, off-site public access mitigation will be required.								
Docks and Pier Policies								
UW13: New over-water structures should be allowed only for water-dependent uses, transportation facilities of state-wide significance, public access, scientific purposes, or ecological restoration. The size of any new over-water structure should be limited to the minimum necessary to support the structure's intended use and should have shared pedestrian access. In order to reduce the impacts of shoreline development and increase the effective use of water resources, multiple and/or joint use of over-water facilities is encouraged.		✓	✓	✓	✓		✓	
Flood Plain and Minimizing Flood Plain Damage Policies								
UW14: Recognize the north waterfront area west of the old Tank Farm pier (approximately at Loveland Avenue if it was extended north) as being in the FMA floodplain zone								✓
UW15: Recognize all structures, especially Essential Public Facilities (EPFs), on the northwest waterfront shall be designed with a first floor level at least 19 feet above sea level to accommodate a sea level raise of up to eight (8) feet over a 50-year period and the current 14-15 foot elevation level is required or by using Best Available Science (BAS) to				✓				✓

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
determine design criteria.								
Urban Waterfront and Urban Waterfront Park Use Policies								
UW16: Consider amending the existing building height calculation methodology for the waterfront area only to account for anticipated sea level rise in the future.	✓			✓				✓
UW17: Reduce the likelihood of flood damage through various design techniques which allow for natural geohydrologic processes during flood events.				✓				✓
Urban Conservancy Use Policies								
Urban Conservation Land and Water Uses Policies								
C1: Shoreline uses should be limited to new or redeveloped water-dependent recreational and educational facilities, transportation facilities, utilities and minimal improvements to, but no expansion of, existing residential development within the 200-foot SMP jurisdiction or west of the railroad tracks at Naketa Beach. New residential development within the 200 foot SMP jurisdiction will only be allowed on existing platted lots. New shoreline uses, including new residential development, which cause significant negative ecological impacts to critical saltwater and freshwater habitats, should not be allowed.			✓	✓	✓			✓
C2: Non-conforming uses shall not be allowed to expand and sewage systems should be upgraded to provide secondary level treatment, or the use should be discontinued.				✓	✓			
C3: Existing bulkheads can be replaced, but they shall be the minimum size necessary to protect the primary structure from eminent				✓	✓		✓	✓

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
danger and should be placed no further seaward than the toe of the existing bulkhead.								
C4: Essential regional public facilities that cannot feasibly be located elsewhere may be allowed, but they shall mitigate shoreline impacts by restoring natural shoreline habitat where feasible.			✓	✓	✓		✓	
Uses Detrimental to the Environment Policies								
C5: Uses and activities that cause significant ecological impacts or limit ecological functions of the shoreline shall not be allowed.				✓	✓		✓	
Nearshore Enhancement or Restoration Policies								
C6: During development and redevelopment activities, efforts shall be made to restore ecological functions using Best Available Science. Upland stream connections that provide sediment or natural beach nourishment shall be maintained where possible, and the marine riparian habitat corridor shall be reestablished wherever possible.					✓		✓	
Public Access Policies								
C7: All residential uses shall preserve visual access to, and normal public use seaward of the OHWM of the shoreline		✓		✓	✓			
C8: For non-residential uses, shoreline restoration and public access shall be required of all new development and for redevelopment on previously developed shorelines; i.e., the railroad line (when permissible), sewer plant and utilities.		✓		✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Habitat Stewardship Policies								
C9: Public land stewardship should promote the protection and restoration of habitat protection and ecological functions.		✓			✓			
Public/Recreational Uses Policies								
C10: Public access and public recreation uses shall be limited to passive recreation.		✓			✓			
Aquatic Environment & Use Policies								
AQ 1: Ensure that utilization of the aquatic environment and its natural resources occurs with minimal adverse impacts to natural systems, water quality, quality of the aquatic, marine, nearshore and shoreline environments and the public's use of the aquatic waters and shoreline.		✓		✓	✓			
AQ 2: Preserve to the greatest extent feasible the scenic aesthetic quality of the open aquatic environment and vistas.		✓			✓			
AQ 3: New over-water structures should: • Be prohibited in the Aquatic Urban Conservancy environment. • Have the minimum size necessary to provide for research, public access or essential public facilities in the urban aquatic environment.		✓		✓	✓		✓	
AQ 4: The Aquatic Urban and Aquatic Urban Conservancy environments should be focused on maintaining and restoring aquatic marine and nearshore and shoreline associated wetland habitats.					✓			✓
AQ 5: All development, activities and uses on navigable waters or their beds should:		✓	✓	✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
• Be located and designed to minimize interference with surface navigation • Consider impacts to public views • Allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration • Use low impact development techniques where feasible to minimize impacts on the aquatic environment.								
AQ 6: Uses that cause significant ecological impacts to critical marine waters should be discouraged. Where those uses are necessary to achieve the objectives of RCW 90.58.020, impacts shall be mitigated through avoidance and with a mitigation sequencing development review process.	✓				✓			
AQ 7: Development of underwater pipelines and cables on first and second class tidelands should include adequate provisions to ensure against substantial or irrevocable damage to the environment.	✓				✓			
AQ 9: The water quality of the marine environments should be protected by eliminating septic, carbon and heavy metal releases into the aquatic environment.					✓			
AQ 10: Restore or improve riparian vegetation upland in the freshwater shoreline and marine nearshore to enhance ecological value and functions.					✓			
Aquatic Urban Environment and Use Policies								
AQ 11: Minimize impacts of pier pilings, overwater structures, and ferry and boat					✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
moorage and launch operations and promote development that protects ecological functions of the marine environment.								
AQ 12: Filling, dredging and additional revetment into the marine environment shall be allowed only for existing structure repair or new essential public facilities and for new or improved public access.	✓	✓						
AQ 13: The City should evaluate along with the City of Everett, Port of Everett and tribes of the Point Elliott Treaty whether a marine stewardship or protection area should be proposed for a portion of the Mukilteo northern shoreline. The evaluation should be closely coordinated with the Tulalip Tribe and the Snohomish County Marine Resources Committee.					✓	✓	✓	
AQ 14: Evaluate the feasibility of integrating a dive park in Mukilteo's northern shoreline and secondarily the south end of Lighthouse Park so that neither would disturb aquatic resources and would limit impacts to the nearshore, forage fish spawning sites, and eelgrass resources.		✓					✓	
Aquatic Urban Conservancy Environment Use and Policies								
AQ 8: Abandoned and neglected structures or structures with overwater residential uses that are a hazard to public health, safety, and welfare should be removed or restored to a usable condition consistent with the provision of this program.				✓	✓			
Urban Railroad Environment and Use Policies								
URR1: The principal permitted use within the railroad right-of-way shall be for north and	✓	✓	✓					

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
south tracks, switching and safety structures. Any additional tracks shall obtain an Essential Public Facilities Permit and shall provide mitigation for environmental impacts and improve pedestrian access to the water where public lands are available or use easements can be obtained.								
URR2: Structures, seawalls, revetment and culverting associated with the railroad shall have appropriate permits and shall be regulated under MMC 17B. Any construction, including fencing exceeding six feet in height shall have administrative approval or shall be included in an Essential Public Facilities permit.				✓	✓			
URR3: Parking, construction access and maintenance structures and lay-down areas shall not be permitted unless there is no feasible location outside the shoreline jurisdiction.				✓	✓			
Urban Lakefront Environment and Use Policies								
LkS 1: Aquatic weed and algal control shall occur when native plant communities and associated habitats are threatened or where water dependent uses are restricted by the presence of weeds or algal blooms. Vegetation management shall emphasize the most environmentally sensitive methods.	✓				✓			
LkS 2: Control of aquatic weeds by hand pulling or mechanical harvesting with disposal of the collected weeds in an appropriate, identified upland site is normal maintenance and repair thus does not require the issuance of a shoreline substantial development permit.				✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
LkS 3: The control of aquatic weeds by de-rooting, rotovating or other method which disturbs the bottom sediment or benthos shall be considered development that requires issuance of a substantial development permit.				✓				
LkS 4: All docks shall be constructed and maintained to meet International Building Code requirements and shall use Best Available Science practices and shall be kept in safe and sound condition. Abandoned or unsafe docks shall be removed or repaired promptly by the property owner(s). Where any such structure constitutes a hazard to the public, the City may, following notice to the owner, abate the structure and impose a lien equaling the cost of the actual abatement and staff time processing the notice and lien if the owner fails to do so within ninety (90) days of the notice.		✓		✓				
LkS 5: Materials and coatings of all dock members shall conform to applicable state, city and International Building Code material standards. The use of toxic substances, including creosote, and degradable materials, which includes some plastic and foam products, are prohibited.		✓		✓	✓			
LkS 6: The construction of new or expanded docks should be allowed only if the docks are to be multi-use docks in order to limit the proliferation and reduce the amount of over-water coverage over time.		✓		✓	✓			
LkS 7: Dock pilings shall be installed to extend at least one foot above extreme high water level. Floats shall have stops that keep the floats off the bottom during low water levels. The design of pilings and floats should				✓				

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
take into consideration the affect climate change and other factors will have on future water levels.								
LkS 8: The length of new or expanded docks on Lake Serene shall be limited and designed to ensure and maximize: • Navigability • Safe use of the open water • The public's enjoyment.		✓	✓	✓				
LkS 9: Dock design shall limit the impact to the nearshore using a minimum width access from the shore out 10 feet over the water and using light penetrating materials.		✓		✓				
LkS 10: All new dock construction and major maintenance of existing docks shall require re-vegetation with native plants of the first 10-25 feet of upland along the shoreline to assist with improving water quality.		✓		✓	✓			
LkS 11: Overhead wiring or plumbing shall not be permitted on docks and lighting shall be limited to the upland with cut-off fixtures to limit light spillage onto the lake's water surface.				✓	✓			
LkS 12: Water quality monitoring and public education programs on lakeside living for property owners should be created through the city's stormwater utility. The programs should promote low impact development, re-establishment of natural vegetation and other more sustainable techniques.					✓		✓	
LkS 13: Acquisition of headwater property and retention of the headwaters to Lake Serene shall be promoted as a preventative measure to assist in maintaining a high water quality of				✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
the lake.								
LkS 14: Increased densities adjacent to Lake Serene, even with sanitary sewers, shall be allowed only if the: • Amount of existing impermeable surface coverage is not increased; • Existing building height limits are maintained or decreased; and • Quality of stormwater currently released into Lake Serene, both individually and collectively, is significantly improved.	✓			✓	✓			
Habitat Management Policies								
HA1: Consider the environmental impacts of policy, regulatory and service decisions in the context of the City's commitment to providing a high quality of life in a sustainable environment through programs, capital projects and day to day management that emphasizes conservation and sustainability.				✓	✓			
HA2: Native vegetation on undeveloped land should not be removed unless: • a city development application has been submitted and approved; or • the removal is permitted by Mukilteo Municipal Code; or 1. is required for the protection of the public health, safety and welfare.				✓	✓			
HA3: Avoid clearing of native vegetation that maintains slope stability and reduces erosion, use riparian habitat to shade shorelines, buffer wetlands and stream				✓	✓			

Shoreline Master Plan **Goals and Policies**	Economic Development	Public Access	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
corridors, and protect aquatic habitat, such as eelgrass.								
HA4: Preserve areas with natural or scenic values to achieve open space amenities and to maintain natural habitat corridors.					✓			
HA8: Protect and enhance surface water quality by treating the water flow to remove nutrients (especially phosphorous), heavy metals and other pollutants before being released into streams, rivers, lakes and natural wetlands.					✓			
HA9: Protect and enhance natural streams, lakes and shoreline habitat, protecting water quality, fish and wildlife habitats, and features that include natural hydraulic and ecological functions, recreational resources and aesthetics.					✓		✓	
HA11: Avoid impacts to critical habitats and restore and enhance degraded or lower quality critical habitats during the land use development process or provide required mitigation.				✓	✓			
HA12: Cooperate with other local and county governments, state, and federal agencies and nonprofit organizations to protect and enhance the environment and forward the concepts of sustainability.				✓	✓			
HA13: Promote and lead educational programs to raise public awareness of environmental issues, encourage respect for the environment and show how individual actions and the cumulative effects of a community's actions can have significant effects on the environment.							✓	

~~Shoreline Master Plan~~ **~~Goals and Policies~~**	~~Economic Development~~	~~Public Access~~	~~Circulation~~	~~Land Use~~	~~Conservation~~	~~Historic & Cultural~~	~~Scientific & Educational~~	~~Flood Damage~~
~~**HA14:** Support public education of citizens, community groups, and nonprofit organizations to protect and improve surface and ground water resources by increasing the public's awareness of potential impacts on water bodies and water quality, encouraging proper use of fertilizers and chemicals on landscaping and gardens, and encouraging proper disposal of materials by residents and businesses.~~					~~✓~~		~~✓~~	

Shoreline Master Plan Policies

The following **(Table 2)** are shoreline master program policies that support the shoreline master program goals. The Policies are organized into two main sections:

1) General Shoreline Policies; and,
2) Shoreline Environment Designation Policies.

The General Shoreline Policies address various general topics of importance when considering development of the shorelines and are intended to specifically support the goal statements of this Chapter. This includes policies related to Environmental Conservation, Public Access and Recreation, Use and Circulation, Shoreline Modification, Critical Areas and Habitat Management.

The Shoreline Environment Designation Policies are specific to each of the seven (7) shoreline environment designations adopted as part of this shoreline master program.

More detailed descriptions of these shoreline environment designations are included in this policy section. These seven (7) shoreline environments are:

- Aquatic Urban
- Aquatic Urban Conservancy
- Urban Conservancy
- Urban Lakefront
- Urban Railroad
- Urban Waterfront
- Urban Waterfront Park

The establishment of these shoreline environment designations is consistent with WAC173-26-211 (2) which states, in part.

> "(2) **Basic requirements for environment designation classification and provisions.** (a) Master programs shall contain a system to classify shoreline areas into specific environment designations. This classification system shall be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through comprehensive plans as well as the criteria in this section. …"

Table 2: Shoreline Master Plan Policies

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
General Shoreline Policies									
SH 1: Work with the Port of Everett, the City of Everett, Snohomish County, BNSF, and other entities, and private landowners to: - develop direct linkages to the waterfront; and, - provide recreational opportunities, and restore ecological functions through use of innovative approaches.	⊟	⊟	⊟		⊟	⊟			
SH 2: Sites or structures having historic, cultural, scientific, or educational value shall be inventoried and preserved by integrating them into re-development concepts.							⊟	⊟	
SH 3: In providing for development of the shorelines, the City shall take into consideration impacts of climate change.								⊟	⊟
SH 4: City participation in County, regional and State natural hazard mitigation planning shall consider issues specific to the Mukilteo shorelines to ensure that needs unique to the Mukilteo shorelines have been considered.								⊟	⊟
Environmental Conservation Policies Preservation of the shoreline's ecological functions is required by the Shoreline Management Act (SMA). However, there are times when impacts that would harm the fragile shorelines of the state cannot be avoided. In these instances, these harmful impacts must be mitigated in order to assure that there is no net loss of ecological function necessary to sustain shoreline natural resources. The following policies assure,									

Shoreline Master Program Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
at a minimum, no net loss of the ecological functions that are necessary to sustain shoreline natural resources.									
SH 5: Ensure that the shoreline is developed to protect and restore the quality of the natural environment , ensure no net loss of ecological functions, reflect natural constraints, and protect and restore degraded ecological functions and ecosystem-wide processes consistent with Best Available Science (BAS), giving special emphasis to aquatic resources.					☐	☐		☐	☐
SH 6: Restore and enhance, to the greatest extent feasible, ecologically and aesthetically degraded critical areas, nearshore areas, and stream corridors in order to function as continuous watershed networks.		☐			☐	☐		☐	
SH 7: - Use adaptive management methods topromote the stewardship of nearshore habitat, water quality, fish and wildlife access, and sediment transport processes; and, - stabilize flows of upland streams that feed the nearshore environment.					☐	☐		☐	
SH 8: Require the planting and establishment of shoreline riparian vegetation where feasible, to increase ecological functions.					☐	☐		☐	
SH 9: Ensure that new development does not reduce water quality.					☐	☐		☐	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Public Access and Recreation Policies Preservation and maintaining equitable public use and access of the shoreline for recreational opportunities for all members of the public, including but not limited to parks, tidelands, beaches and recreational areas is a fundamental goal of the Shoreline Management Act. This section provides public access and recreation policies for areas subject to shoreline management jurisdiction .									
SH10: Provide a system of public (City, County, State, Port of Everett, and schools) and private parks and recreational facilities to expand opportunities for public access along the shoreline.		⊟		⊟	⊟				
SH11: Shoreline development should provide physical and visual waterfront access where possible. If public access is not feasible for reasons of public safety or site security, require mitigation that will add to the public's enjoyment of the shoreline.		⊟			⊟				
SH12: The City should maintain and enhance opportunities for the public to walk and visit tidelands where terrain and shore conditions permit access and where impacts to ecological functions can be avoided.		⊟				⊟			
SH13: Encourage cooperation and joint use between public and private agencies and landowners to increase and diversify shoreline recreation opportunities.	⊟	⊟	⊟		⊟				
Use and Circulation Policies The City uses land use and circulation policies to consider the general distribution and location of uses on the shoreline and adjacent uplands. The policies in this section should be used when considering land use changes or development proposals that include housing, business, industry, or transportation.									

Shoreline Master Program Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH14: Generally limit new development within shoreline jurisdiction to water-dependent, water-related or water-enjoyment uses, public access, ecological restoration activities, or to essential regional public facilities that cannot feasibly be located elsewhere. Shops and services supporting the needs of commuters and visitors are also appropriate.	⊟			⊟	⊟				
SH15: With the exception of pedestrian, bicycle, and emergency vehicle access, locate ferry vehicle staging, shared parking spaces, vehicle circulation and parking systems which are not related to shoreline-dependent uses or serving the multimodal station as far from the shoreline as possible.		⊟		⊟					
SH16: In the Urban Waterfront environment: – Public transportation systems shall be integrated through the Multimodal/Intermodal station. – Mixed-use development, recreational uses, and the Multimodal/Intermodal station should be used to promote re-development of the waterfront area.	⊟	⊟	⊟	⊟	⊟				
SH 17: Shoreline development, including essential public facilities, shall mitigate impacts to ecological functions and the temporary loss of	⊟			⊟	⊟	⊟			

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
habitat.									
Shoreline Modification Policies Shoreline modifications alter the physical configuration of the shoreline area, usually through the construction of a physical element. Shoreline modification activities are generally construction actions undertaken in preparation for, or in support of, a shoreline use. This section provides policies for shoreline modification actions within Mukilteo. These actions include: Upland Clearing, Grading, and Fill, Dredging and Dredge Disposal, In-Water Fill, Shoreline Stabilization, Beach Enhancement, and Piers and Docks.									
SH18: Allow structural shoreline modifications only: – where they are needed to protect existing primary structures, – for allowed water-oriented and water dependent uses, – for track upgrades of freight, passenger and commuter rail, or essential regional public facilities that cannot be located elsewhere, – where necessary to restore ecological functions. – where the need for shoreline stabilization is documented through a geotechnical engineering report.	⊟			⊟	⊟				⊟
SH 19: to modify or replace existing stabilization structures in or along the shoreline, except for modifications necessary to upgrade rail lines of freight, passenger or commuter rail service, the property owner must demonstrate necessity due to eminent danger. Where possible the structures shall be redeveloped to restore	⊟			⊟	⊟				⊟

Shoreline Master Program Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
ecological functions.									
SH 20: Shoreline modifications that would cause significant adverse ecological impacts are not allowed.					⊟	⊟			⊟
Critical Area Policies This section contains critical area policies that apply to all uses, developments, and activities within the Mukilteo shoreline jurisdiction regardless of the Mukilteo Shoreline Master Program environment designation. Critical areas for the purposes of the Mukilteo Shoreline Master Program include the following areas and ecosystems: Wetlands, Geologically Hazardous Areas, Critical Saltwater Habitats, and Flood Hazard Areas.									
SH 21: Encourage the retention/replanting of native vegetation and use of drought tolerant plant species, as well as the use of native plants to protect slide prone slopes.					⊟	⊟		⊟	
SH 22: Regulate critical areas within shoreline jurisdiction consistent with Best Available Science, including geologically hazardous areas, wetlands, critical saltwater habitats, and flood hazard areas...					⊟			⊟	⊟
SH 23: Protect threatened or endangered species as mandated by the Federal and State regulations.						⊟		⊟	
SH 24: critical area regulations shall be limited to that portion of the property containing the resources or functions regulated by the critical area ordinance, including associated buffers.					⊟	⊟		⊟	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH 25 : Provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound.						✓		✓	
Habitat Management Policies This section contains habitat management policies that apply to all uses, developments, and activities within the Mukilteo shoreline jurisdiction regardless of the Mukilteo Shoreline Master Program environment designation. The intent is to protect habitat that may be located in the shoreline environment.									
SH 26: Consider the environmental impacts of policy, regulatory, and service decisions in providing a high quality of life through programs, capital projects and day to day management. Emphasize conservation and sustainability in decisions.					✓	✓			
SH 27: Native vegetation on undeveloped land should not be removed unless: • a city development application has been submitted and approved; • the removal is permitted by Mukilteo Municipal Code; the removal is required for the protection of the public health, safety and welfare.					✓	✓			
SH 28: Avoid clearing native vegetation that maintains slope stability and reduces erosion, uses riparian habitat to shade shorelines, buffers wetlands and stream corridors, and protects aquatic habitat.					✓	✓			

Shoreline Master Program Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
SH 29: Preserve areas with natural or scenic values to achieve open space amenities and to maintain natural habitat corridors.						✓			
SH 30: Protect and enhance surface water quality by treating the water flow to remove pollutants before being released into streams, rivers, lakes and natural wetlands.						✓			
SH 31: Protect and enhance natural streams, lakes and shoreline habitat by protecting water quality, fish and wildlife habitats, and features that include natural hydraulic and ecological functions, recreational resources and aesthetics.			✓			✓		✓	
SH 32: Avoid and minimize adverse impacts to critical habitats and restore and enhance degraded or lower quality critical habitats during the land use development process or provide required mitigation.					✓	✓			
SH 33: Cooperate with other local and county governments, state, and federal agencies and nonprofit organizations to protect and enhance the environment and promote sustainability.					✓	✓			
SH 34: Promote and lead educational programs to raise public awareness of environmental issues, encourage respect for the environment, and show how individual actions and the cumulative effects of a community's actions can have significant effects on								✓	

Shoreline Master Program Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
the environment.									
SH 35: Support public education of citizens, community groups, and nonprofit organizations to protect and improve surface and ground water resources. Increase public awareness of potential impacts on water bodies and water quality by encouraging proper use of fertilizers and chemicals on landscaping and gardens, and encouraging proper disposal of materials by residents and businesses.						✓		✓	
SH 36: Evaluate and monitor shoreline conditions to determine the effectiveness of management actions.					✓	✓		✓	

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Urban Waterfront/Urban Waterfront Park Shoreline Environments Two (2) separate urban waterfront environment designations have been developed to coincide with the unique nature of Mukilteo's shoreline: This includes: - The "Urban Waterfront" shoreline environment encompasses the waterfront mixed-use area including the area of the new ferry terminal (planned for opening in 2020). The Urban Waterfront designation is to provide for development and redevelopment of higher intensity, water-oriented (water enjoyment or water-related) commercial and recreational activities, transportation, and essential public facilities. - The "Urban Waterfront Park" shoreline environment designation encompasses the area generally at Lighthouse Park, a major park and recreation facility along the shorelines. Polices for these shoreline environment designations are as follows.									
Priority of Land and Water Uses									
UW1: Priority shall be given to water-dependent uses, including ferry terminals and boat launches, in the Urban Waterfront Environment. Water-related and water-enjoyment uses shall be given second priority.	-	⊟	-	⊟	⊟	-	-	-	-
UW2: Non-water-oriented uses shall not be allowed except as: - p of mixed-use developments; - i existing developed areas supporting water-dependent uses,; or provided that non-water-oriented uses may also be allowed i - in limited situations where there is no direct access to the shoreline.	-	⊟	-	-	⊟	-	-	-	-

UW3: Non-water-dependent uses that are auxiliary to, and necessary for, multimodal/intermodal public transportation systems that include water-dependent public transportation shall be allowed, provided no other feasible alternative exists.	-	-	-	日	日	-	-	-	-
Shoreline Master Program Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
UW4: The creation of a pedestrian-friendly streetscape shall include on-street parking to provide a buffer for pedestrian uses on the sidewalks. Thus, on-street parking is considered acceptable in the 200-foot area of the shoreline jurisdiction, even though it is not a water-dependent/water-related use.	日	日	-	日	日	-	-	-	-
Design Standards									
UW5: Implement Aaesthetic objectives of the waterfront area shall be actively implemented through the Waterfront Mixed Use (WMU) zoning code regulations. These regulations include requirements pertaining to sign control, appropriate development siting, parking lot location and screening, and architectural standards.	日	-	-	日	日	日	日	-	-
Nearshore Enhancement and Restoration									
UW6: Where feasible, require Bbeach softening (modification of riprap) and the enhancement of natural vegetative buffers that is compatible with pedestrian views and access along the shoreline, and while retaining public safety and infrastructure protection is required.	-	日	-	-	日	日	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
UW7: Enhancement and restoration efforts directed toward improving ecological functions along the nearshore using Best Available Science are required of all new development or redevelopment activities once avoidance and minimization is exhausted. All overwater structures will conform to Best Management Practices (BMPs) to ensure salmonids can use the nearshore corridor along this shoreline and to avoid or minimize impacts to forage fish spawning beaches and eelgrass beds are not impacted.	-	-	-	-	✓	✓	-	✓	-
UW8: All development, activities and land uses and any development or structures in on navigable waters or their beds shall: tidelands shall be located and designed to m - minimize interference with surface navigation;, t - consider impacts to public views; and, and to - a for the safe, unobstructed passage of fish and wildlife. particularly those species dependent on migration along the nearshore by using BMPs to avoid and minimize impacts.	-	✓	- - - -	✓	✓	✓	-	✓	-
UW9: Shoreline uses and modifications shall be designed and managed to prevent degradation of water quality degradation and the alteration of natural hydrographic conditions.	-	-	-	-	✓	✓	-	✓	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lande Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
UW10: Uses that cause significant negative ecological impacts to critical saltwater and freshwater streams should not be allowed. Mitigation sequencing should be implemented for any allowed use to address potential negative ecological impacts. Where those uses are necessary to achieve the objectives of RCW 90.58.020, their impacts shall be mitigated according to the sequence defined in WAC 173-26-020, Habitat Stewardship.	-	-	-	-	✓	✓	-	✓	-
UW11: Public lands stewardship should promote habitat protection and ecological functions.	-	✓	-	-	✓	✓	-	✓	-
Public Access									
UW112: Since Mukilteo Landing is the area of Mukilteo's shoreline where the most human activity will occur, visual and physical public access to the water and shoreline are high prioritiesNew and redevelopment projects in . the WMU zoning district are required to provide such public access, except where the City determines that the public access is not feasible due to public safety, site security concerns, or where the property is not physically located to provide public access. In these cases, other forms of public access, such as on-site view enhancement or off-site mitigation, will be required.	✓	✓	✓-	✓	✓	-	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Docks and Piers									
UW123: New over-water structures should be allowed only for water-dependent uses, transportation facilities of state-wide significance, public access, scientific purposes, or ecological restoration. The size of any new over-water structures should be limited to the minimum necessary to support the structure's intended use, with joint use and should have shared pedestrian access encouraged. In order to reduce the impacts of shoreline development and increase the effective use of water resources, multiple and/or joint use of over-water facilities is encouraged.	-	✓	-	✓	✓	✓	-	✓	-
Floodplain and Minimizing Floodplain Damage									
UW14: Recognize the north waterfront area west of the old Tank Farm pier (approximately at Loveland Avenue if it was extended north) as being in the FMA floodplain zone.	-	-	-	-	-	-	-	-	✓
UW135: Recognize aAll structures, especially including Essential Public Facilities (EPFs), on the northwest waterfront shall be designed with a first floor level at least 19 feet above sea level to accommodate a sea level raise of up to eight (8) feet over a 50-year period . Use and the current 14-15 foot elevation level is required or by using Best Available Science (BAS) to determine design criteria.	-	-	- - -	-	✓	-	-	-	✓

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Shoreline Uses									
UW146: Consider amending the existing building height calculation methodology for the waterfront area only to account for anticipated sea level rise in the future.	✓	-	-	-	✓	-	-	-	✓
Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
UW157: Reduce the likelihood of flood damage through various design techniques which allow for natural geohydrologic processes during flood events.	-	-	-	-	✓	-	-	-	✓

Urban Conservancy Shoreline Environment Designation

The "Urban Conservancy" shoreline environment designation encompasses Mukilteo's shorelines south of Lighthouse Park. Mukilteo's Municipal Urban Growth Area's (MUGA's) shoreline area has also been designated Urban Conservancy.

The Urban Conservancy designation is intended to protect and improve, wherever possible, the ecological functions of the shoreline and nearshore in an urban setting. This designation allows for the retention and modification of existing railroad tracks necessary to optimize freight, passenger, and commuter rail service and the benefits of the Mukilteo commuter rail station, the provision of utilities, existing residences and a variety of water-oriented public access and recreational activities together with their related structures.

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Urban Conservancy Shoreline Environment and Uses									
C1: Shoreline uses should: - be limited to new or redeveloped water-dependent recreational and educational facilities, transportation facilities, and utilities; - minimal improvements to, but no expansion of, existing residential development within the 200-foot SMP jurisdiction or west of the railroad tracks at Naketa Beach. - new residential development only on existing platted lots. - not allow new shoreline uses, including new residential development, which cause significant adversenegative ecological impacts to critical saltwater and freshwater habitats.	-	-	-	✓	✓	✓	-	-	✓
Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
C2: Non-conforming uses shall not be allowed to expand and sewage systems should be upgraded to provide secondary level treatment, or the use should be discontinued.	-	-	-	-	✓	✓	-	-	-
C3: Existing bulkheads can be replaced, but they shall be the minimum size necessary to protect the primary structure from eminent danger and should be placed no further seaward than the toe of the existing bulkhead.	-	-	-	-	✓	✓	-	✓	✓

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
C4: Essential regional public facilities that cannot feasibly be located elsewhere may be allowed, but they shall mitigate shoreline impacts by restoring natural shoreline habitat where feasible.	-	-	-	✓	✓	✓	-	✓	-
Uses Detrimental to the Environment.									
C5: Uses and activities that cause significant ecological impacts or limit ecological functions of the shoreline shall not be allowed.	-	-	-	-	✓	✓	-	✓	-
Nearshore Enhancement or Restoration									
C56: During development and redevelopment activities, efforts shall be made to restore ecological functions using Best Available Science. Where possible, Upland stream connections that provide sediment or natural beach nourishment should hall be maintained where possible, and the marine riparian habitat corridor should all be reestablished wherever possible.	-	-	-	-	-	✓	-	✓	-
Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Public Access									
C67: All residential uses shall preserve visual access to, and normal public use seaward of, the Ordinary High Water Mark (OHWM) of the shoreline.	-	✓	-	-	✓	✓	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
C78: For non-residential uses, shoreline restoration and public access shall be required of all new development and for redevelopment on previously developed shorelines.; i.e., the railroad line (when permissible), sewer plant and utilities.	-	✓	-	-	✓	✓	-	-	-
C8: Public access and public recreation uses should be limited to passive recreation such as trails and play equipment or in water activities such as boating and diving.		✓	✓			✓			
Habitat Stewardship									
C89: Public land stewardship should promote the protection and restoration of habitat protection and ecological functions.	-	✓	-	-	-	✓	-	-	-
C10: Public access and public recreation uses shall be limited to passive recreation	-			-	-		-	-	-
Aquatic Urban and Aquatic Urban Conservancy Shoreline Environments There are two (2) separate aquatic urban shoreline environment designations to address two distinct areas. These include: 1. The "Aquatic Urban" shoreline environment designation extends from the City's most eastern boundary with the City of Everett to the southern end of Lighthouse Park. 2. The "Aquatic Urban Conservancy" shoreline environment designation runs from the southern boundary of Lighthouse Park to the city's southern city limits and includes the annexation area. The purpose of these two aquatic shoreline environments is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high water mark									
Aquatic Urban and Aquatic Urban Conservancy Shoreline Environment and Uses									
Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
AQ 1: Ensure that public and private useutilization of the aquatic environment and its natural resources occurs with minimal adverse impacts to the quality of the aquatic areas waterward of the shoreline with focus on maintaining and restoring the nearshore and aquatic environments. natural systems, water quality, quality of the aquatic, marine, nearshore and shoreline environments and the public's use of the aquatic waters and shoreline.	-	✓	-	-	✓	✓	-	-	-
AQ 2: Preserve to the greatest extent feasible the scenic aesthetic quality of the open aquatic environment and vistas.	-	✓	-	-	-	✓	-	-	-
AQ 3: New over-water structures should: — be prohibited in the Aquatic Urban Conservancy environment. — have the minimum size necessary to provide for research, public access or essential public facilities in the Aquatic Urban urban aquatic environment.	-	✓	- - -	-	✓	✓	-	✓	-
AQ 4: The Aquatic Urban and Aquatic Urban Conservancy environments should be focused on maintaining and restoring aquatic marine and nearshore and shoreline-associated wetland habitats.	-	-	-	-	-	✓	-	-	✓
AQ 45: All development, activities and uses on navigable waters or their beds should: — be located and designed to minimize interference with surface navigation — consider impacts to public views	-	✓	- - -	✓	✓	✓	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration			-						
Aquatic Urban and Aquatic Urban Conservancy Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Use low impact development techniques where feasible to minimize impacts on the aquatic environment.			-						
AQ 56: Uses that cause significant ecological impacts to critical marine waters should be discouraged., and, where allowed, should be consistent with the use objectives of the SMA and this SMP and should be mitigated to the greatest extent feasible. Where those uses are necessary to achieve the objectives of RCW 90.58.020, impacts shall be mitigated through avoidance and with a mitigation sequencing development review process.	✓	-	-	-	-	✓	-	-	-
AQ 67: Development of underwater pipelines and cables on first and second-class tidelands should include adequate provisions to prohibit substantial or irrevocable damage to the environment.	✓	-	-	-	-	✓	-	-	-
AQ 789: Water quality of the marine environments should be protected by eliminating septic, carbon and heavy metal releases into the aquatic environment.	-	-	-	-	-	✓	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
AQ 810: Restore or improve riparian vegetation upland in the freshwater shoreline and marine nearshore to enhance ecological value and functions.	-	-	-	-	-	✓	-	-	-
"Aquatic Urban" Shoreline Environment and Use The following policies are specific to the "Aquatic Urban" Shoreline Environment Designation.									
AQ 911: Minimize adverse impacts of pier pilings, overwater structures, and ferry and boat moorage and launch on the marine environment's operations and promote development that protects ecological functions of the marine environment.	-	-	-	-	-	✓	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
AQ 1012: Filling, dredging and additional revetment into the marine environment shall be allowed only for existing structure repair or new or improved essential public facilities and access. for new or improved public access.	✓	✓	-	-	-	-	-	-	-
AQ 113: The City should evaluate, along with the City of Everett, Port of Everett and tribes of the Point Elliott Treaty, whether a marine stewardship or protection area should be proposed for a portion of the Mukilteo northern shoreline. The evaluation should be closely coordinated with the Tulalip Tribe and the Snohomish County Marine Resources Committee.	-	-	-	-	-	✓	✓	✓	-
AQ 124: Evaluate the feasibility of integrating a dive park in Mukilteo's northern shoreline and secondarily the south end of Lighthouse Park so that neither would disturb aquatic resources and would limit impacts to the nearshore, forage fish spawning sites, and eelgrass resources.	-	✓	-	-	-	-	-	✓	-
"Aquatic Urban Conservancy" Shoreline Environment and Use The following Policy is specific to the "Aquatic Urban Conservancy" Shoreline Environment Designation.									
AQ 138: Abandoned and neglected structures or structures with overwater residential uses that are a hazard to public health, safety, and welfare should be removed or restored to a usable condition. consistent with the provision of this program.	-	-	-	-	✓	✓	-	-	-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Urban Railroad Shoreline Environment The "Urban Railroad" Shoreline Environment includes all Burlington Northern Santa Fe (BNSF) railroad right-of-way or easements within two hundred feet upland and waterward of the OHWM of Puget Sound. BNSF tidelands below the OHWM of Puget Sound fall within the aquatic environments.									
Urban Railroad Shoreline Environment and Use									
URR1: The principal permitted use within the railroad right-of-way shall be for north and south tracks, switching and safety structures. Any additional tracks shall obtain an Essential Public Facilities Permit and shall provide mitigation for environmental impacts and improve pedestrian access to the water where public lands are available or use easements can be obtained.	✓	✓	-	✓	-	-	-	-	-
URR2: Structures, seawalls, revetment and culverting associated with the railroad shall have appropriate permits and shall be regulated under MMC Chapter 17B and other applicable regulations. Any construction, including fencing exceeding six feet in height shall have administrative approval or shall be included in an Essential Public Facilities permit.	-	-	-	-	✓	✓			-
URR3: Parking, construction access maintenance structures, and lay-down areas shall not be permitted unless there is no feasible location outside the shoreline jurisdiction.	-		-	-	✓	✓	-		-

Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
Urban Lakefront Shoreline Environment The "Urban Lakefront" Shoreline Environment includes all lands two hundred feet upland and waterward of the OHWM around the entire perimeter of Lake Serene. Lake Serene is located within the City's Municipal Urban Growth Area (MUGA). The shoreline environment designation and policies are intended to be applied at such time Lake Serene is annexed into the city of Mukilteo.									
Urban Lakefront Shoreline Environment and Use									
LkS 1: Use environmentally sensitive aquatic weed and algal control methods when native plant communities and associated habitats are threatened or where water dependent uses are restricted by the presence of weeds or algal blooms.	✓		-	-	-	✓	-	-	-
	-	-	-	✓	✓				-
LkS 2: The control of aquatic weeds by de-rooting, rotovating or other method which disturbs the bottom sediment or benthos shall be considered development that requires issuance of a substantial development permit. Hand pulling or mechanical harvesting, with disposal of the collected weeds in an appropriate, identified upland site, is normal maintenance and repair should not require the issuance of a shoreline substantial development permit.	-		-	✓	-		-		-

Urban Lakefront Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Lands Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
LkS 3: All docks shall be constructed and maintained using Best Available Science practices and shall be kept in safe and sound condition. Abandoned or unsafe docks shall be removed or repaired promptly by the property owner(s). Where any such structure constitutes a hazard to the public, the City may, following notice to the owner, abate the structure and impose a lien.		✓			✓				
LkS 4: Materials and coatings of all dock members shall not use toxic substances, including creosote, and degradable materials, which includes some plastic and foam products.		✓			✓	✓			
LkS 5: New or expanded docks should be allowed only if the docks are to be multi-use docks in order to limit the proliferation and reduce the amount of over-water coverage.									
LkS 6: The design of pilings and floats should take into consideration the affect climate change and other factors will have on future water levels. In addition: - Dock pilings shall be installed to extend at least one foot above extreme high water level. - Floats shall have stops that keep the floats off the bottom during low water levels.					✓				

Urban Lakefront Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
LkS 7: The length of new or expanded docks shall be limited and designed to ensure and maximize: - Navigability - Safe use of the open water - The public's enjoyment		✓		✓	✓				
LkS 8: Dock design shall limit the impact to the nearshore using a minimum width access from the shore out 10 feet over the water and using light penetrating materials.		✓			✓				
LkS 9: All new dock construction and major maintenance of existing docks shall require re-vegetation with native plants of the first 10-25 feet of upland along the shoreline to assist with improving water quality.		✓			✓	✓			
LkS 10: Overhead wiring or plumbing shall not be permitted on docks and lighting shall be limited to the upland with cut-off fixtures to limit light spillage onto the lake's water surface.					✓	✓			
LkS 11: Water quality monitoring and public education programs on lakeside living for property owners should be created through the city's stormwater utility. The programs should promote low impact development, re-establishment of natural vegetation and other more sustainable techniques.						✓		✓	

Urban Lakefront Shoreline Master Plan Policies	Economic Development	Public Access	Recreation	Circulation	Land Use	Conservation	Historic & Cultural	Scientific & Educational	Flood Damage
LkS 12: Acquisition of headwater property and retention of the headwaters to Lake Serene shall be promoted as a preventative measure to assist in maintaining a high water quality of the lake.					✓	✓			
LkS 13: Increased densities adjacent to Lake Serene, even with sanitary sewers, shall be allowed only if the: – amount of existing impermeable surface coverage is not increased; – existing building height limits are maintained or decreased; and – Quality of stormwater currently released into Lake Serene, both individually and collectively, is significantly improved.	✓				✓	✓			

Chapter 4: Administration and Permit Procedures

Program Administration

Washington's Shoreline Management Act establishes a local/state partnership in administering permits. The City of Mukilteo has the primary responsibility for initiating the planning required by the act and administering the regulatory program. ~~The Washington State Department of~~ Ecology's ~~(DOE)~~ role is to act primarily in a supportive and review capacity with an emphasis on providing assistance to local government and on insuring compliance with the policies and provisions of the Shoreline Management Act.

All development within the shorelines of the state must be consistent with the policies of the SMA and the requirements of the local SMP. A project that is consistent with zoning, etc., but inconsistent with SMP requirements cannot be approved.

Development that meets specific thresholds is considered substantial development and requires a Substantial Development Permit (SDP). An SDP is required for all development with a total cost or fair market value exceeding ~~$5,000~~~~that~~the amount ~~stated~~specified in RCW 90.58.030(3)(e), or development which materially interferes with normal public use of the water or shorelines of the state (regardless of cost), except for development that is categorically exempt by the Shoreline Management Act RCW 90.58.030(3)(e) & WAC 173-27-040(2) from permit requirements.

Within the City of Mukilteo, project review for new development or re-development within the 200-foot shoreline jurisdiction requires an SDP. SDPs fall into two categories: administrative approval or those requiring a public hearing by the Hearing Examiner. All proposed uses and development occurring within the shoreline jurisdiction must conform to Chapter 90.58 RCW, the Shoreline Management Act, and this SMP whether or not a permit is required.

The City of Mukilteo may condition the approval of permits if needed to ensure consistency of the project with the act and the local master program. SDPs are reviewed and processed by the City of Mukilteo and subsequently sent to ~~DOE~~Ecology for filing.

Certain kinds of development are exempt from SDP requirements. *(Note: Activities exempt from the requirement to obtain a SDP must comply with the policies of the SMA and substantive requirements of the local master program.)*.

Exemptions are 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. Exemptions include development such as normal maintenance or repair of existing structures, construction of most single-family residences, and some watershed restoration projects. All exempted uses and developments must be consistent with the policies and provisions of the SMP and the SMA. The city may attach conditions of approval to exempt development or uses as necessary to assure consistency of the project with the SMP and the SMA. Further, a proposed development may be found exempt from requirements for an SDP but may still require a variance or conditional use permit.

Under certain circumstances, local governments can allow deviations from SMP requirements through variance or C~~c~~onditional U~~u~~se P~~p~~ermits (CUPs).

A ~~Conditional Use Permit (~~CUP~~)~~ can be issued for ~~is~~ any development or use that is listed as a conditional use in the SMP or is an unlisted use, must obtain a conditional use permit even though the development is otherwise listed as exempt. The conditional use provision allows for the consideration of uses that would otherwise not be permitted outright. The Permitted Use Matrix

found in MMC Title 17B indicates which uses are conditional. In authorizing a conditional use, special conditions may be attached to the permit by the City of Mukilteo or ~~DOE~~Ecology to prevent undesirable effects of the proposed use and/or to assure consistency of the project with the SMP and the SMA.

A variance is issued when a development or use is proposed that does not comply with the bulk, dimensional, and performance standards of the SMP, such development or use can only be authorized by approval of a shoreline variance. An objective of a variance is to grant relief from specific bulk, dimensional, or performance standards when there are extraordinary circumstances relating to the physical character or configuration of property such that the strict implementation of the SMP will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

Exceptions are set forth in WAC 173-27-044 and WAC 173-27-045. Requirements to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other review do not apply to the following: remedial actions, boatyard improvements, Washington State Department of Transportation (WSDOT) facility maintenance and safety improvements, projects consistent with an environmental excellence program agreement, and projects authorized through the Energy Facility Site Evaluation Council process.

Role of the Department of Ecology

~~DOE~~Ecology has two duties relative to permits:

1. As the repository of shoreline permits for the whole state, ~~DOE~~Ecology files permits received from local government; and
2. Conducts substantive review on conditional use permits and variances to check for compliance with the policies and procedural requirements of the local SMP and the Shoreline Management Act.

Permit Process

All shoreline permits are processed by the City of Mukilteo according to the procedures; development regulations; and definitions contained in MMC Title 17B ~~Waterfront Development and~~ Shoreline Management Regulations. Following the decision on all permit applications, applications are sent to the Department of Ecology. ~~DOE~~Ecology must approve, approve with conditions or deny each conditional use permit and variance. ~~DOE~~Ecology does not have direct approval authority over the more common SDPs - if they are found inconsistent with the local SMP and the SMA, ~~DOE~~Ecology may file an appeal with the Shorelines Hearings Board.

Application: The permit application must include a detailed site plan, a vicinity map, text describing the location of the proposed use(s), proposed and existing structures, utilities, fill, information on the natural shoreline environment, local shoreline designation information, and location of the OHWM. A State Environmental Policy Act (SEPA) checklist is also often required. Mukilteo Municipal Code Title 17B lists the requirements for a complete application.

City review and decision: Technical review of the proposal and compliance may require one or more cycles of revision(s) until the proposed development meets the SMP, MMC 17B and development standards; SEPA review is also undertaken during this time frame. A staff report containing recommendations for the decision maker(s) is developed and as necessary a Public Hearing is scheduled with the Hearing Examiner. After the public comment period, the City makes a

decision on the permit application. All SEPA requirements must be met prior to the decision. Upon a final City decision, all approved permits and denied permit applications are filed with ~~DOE~~Ecology.

~~DOE~~Ecology review: ~~DOE~~Ecology has authority to approve or deny CUPs and Variances. If ~~DOE~~Ecology disagrees with a local government decision on an SDP, the agency must appeal to the Shorelines Hearings Board. Citizens may also appeal local or state permits decisions.

Appeals: Local SMPs may contain provisions for a local appeals process. At the state level, requests for review are heard by the Shorelines Hearings Board, a quasi-judicial body created to hear permit appeals by aggrieved parties. Permits may be upheld, reversed or remanded to the local government with instructions to issue a new permit consistent with the SHB Order.

Filings of permits: Local governments submit permits to ~~DOE~~Ecology after a final local decision, including any local appeal period. A local decision is not considered final until all local appeals have been resolved or exhausted.

Construction: Construction is not authorized until 21 days after the "date of filing" or until all review proceedings (upon appeal) are terminated [RCW 90.58.140(5)].~~]~~ A pre-construction meeting is typically scheduled between the City staff, applicant, and lead contractor to go over conditions of the permit(s) once ~~DOE~~Ecology approves the project.

Making Future Updates to the 2019~~91~~ Mukilteo SMP

Per RCW 90.58.080 and WAC 173-26-090, the City is required to review and update ~~their~~ its Shoreline Master Program at least once every eight~~seven~~ years after approval of their GMA-compliant Master Program. The purpose of the review is:

(a) To en~~as~~sure that the master program complies with applicable law and guidelines in effect at the time of the review; and

(b) To en~~as~~sure consistency of the master program with the City's and development regulations adopted under ~~chapter~~ Chapter 36.70A RCW, if applicable, and other local requirements.

Adoption of an amendment to the City's existing Shoreline Master Program (SMP) or adoption of an entirely new Master Program shall follow~~ing~~ the most current requirements of RCW 90.58.

Chapter 5: Inventory – Characteristics

This chapter contains a summary of technical data on Mukilteo's shoreline and forms the basis for the ~~*Shoreline Master Program* (~~SMP~~)~~ actions described in the separate supporting document. The technical work is summarized from the following documents:

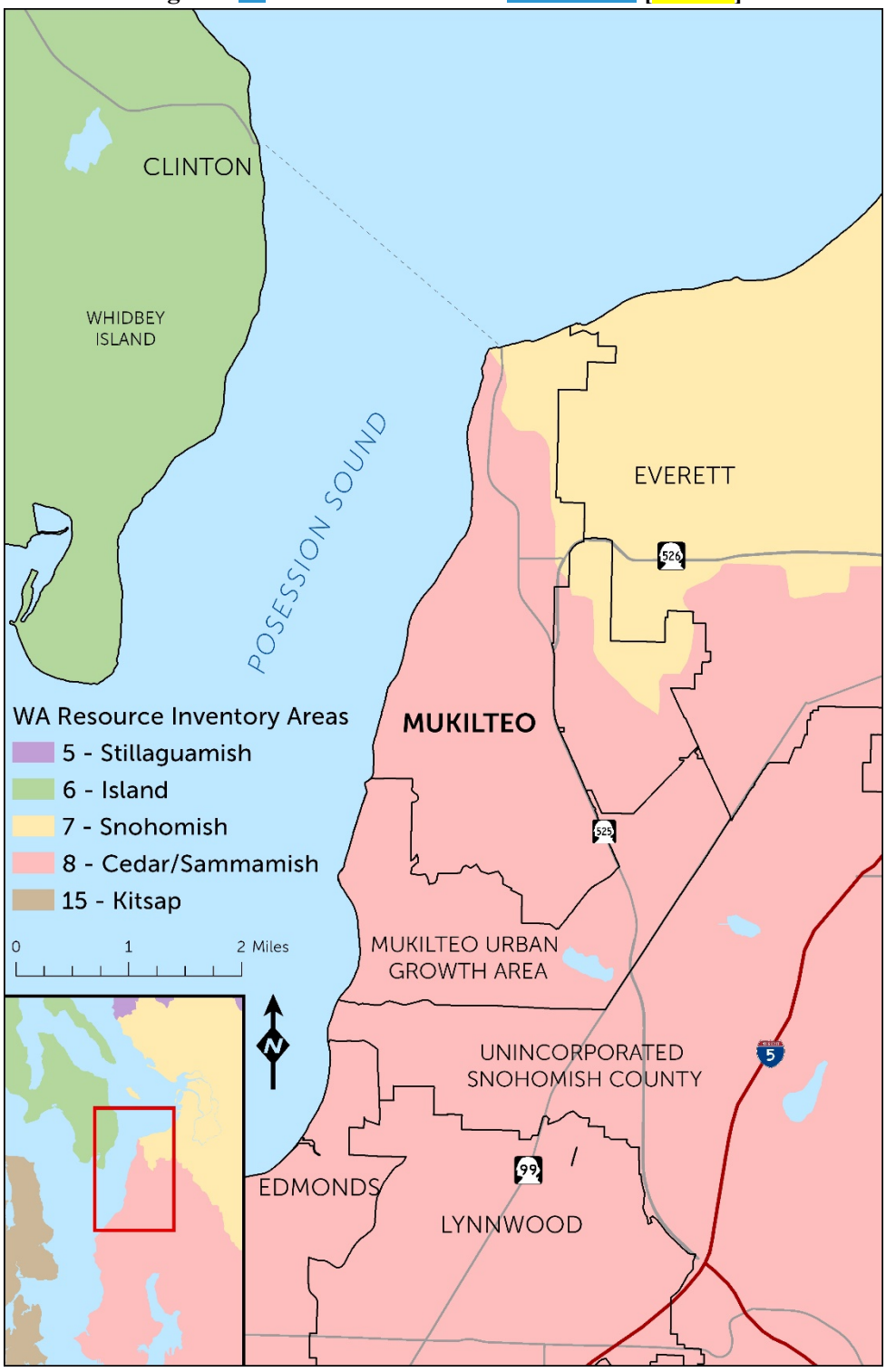
- Mukilteo *Shoreline Technical Analysis*, Anchor Environmental, October 2003
- Snohomish County Marine Resources Advisory Committee ~~(~~MRC~~)~~ – *Draft Candidate Sites for Protection and Restoration*, April 2004
- *WRIA (Water Resources Inventory Area) 7 and 8 Action Plan* – Chapter 6, Nearshore, 2005
- *Action Agenda, Puget Sound Partnership, 2008*
- Mukilteo *Draft Shoreline Master Program Inventory and Characterization*, April 2010

The Regional Study Area

The shorelines of Mukilteo are contained within the WRIA 7 and 8 nearshores. The City's watersheds flowing north (the northern shoreline) are located within WRIA 7, and the watersheds flowing west (the western shoreline) are located in WRIA 8. Mukilteo is the northernmost boundary of WRIA 8 and contains a significant portion of the nearshore within this WRIA. Figure ~~8-~~10 shows the relationship of Mukilteo to the remainder of WRIA 7 and~~&~~ 8.

Multiple regional efforts are currently underway to evaluate and improve the region's shoreline environment. ~~Much of the focus of WRIA 7 & 8 efforts is on streams, rivers (Snohomish River), and Lake Washington.~~ The WRIA 7 nearshore environment is identified as a high priority for juvenile salmon and forage fish rearing habitat. The shoreline between Everett and Mukilteo is impounded by a 4.5-mile stretch of railroad ~~which~~that has disrupted natural beach and habitat ~~-~~forming processes since the early 1800s. Snohomish County developed the Nearshore Beach Restoration Project to support the Snohomish River Basin Salmon Conservation Plan (Snohomish County 2018). ~~King County has undertaken the majority of work related to the marine environment as part of the Puget Sound Technical Group and the scientific or environmental work associated with siting the Brightwater Sewer Treatment Plant.~~ In addition, ~~Governor Gregoire and~~ the Puget Sound Partnership, the U.S. Army Corps of Engineers (the Corps), and the Washington Department of Fish and Wildlife (WDFW) are leading the Puget Sound Nearshore Ecosystem Restoration Program (PSNERP) to identify criteria to select and fund large-scale projects within Puget Sound. The umbrella effort for Snohomish County's n~~N~~earshore has been undertaken by the Northwest Straits Commission - Snohomish County ~~Marine Resources Advisory Committee (~~MRC~~)~~. The MRC efforts parallel many of Mukilteo's efforts and have been ~~very~~ valuable in determining habitat values in a boarder comparative context in WRIA 7 ~~&~~ and 8. The multiple efforts to improve the shorelines in Puget Sound will also assist in both regulatory actions and enhancement/restoration projects.

Figure ~~8~~10: WRIA ~~7 & 8 MAPS~~Boundaries [revised]



Shoreline Geology and Topography

The geology of Mukilteo comprises quaternary glacier and interglacial deposits consisting primarily of Vashon till over sand and gravel deposits (TetraTech/KCM 2001). The primary surface soil type in Mukilteo is in the Alderwood-Everett series, which is derived from glacial till. This soil is classified as generating moderately high runoff because the clay/hardpan layers restrict percolation and restrict surface drainage to Puget Sound, which results in a high landslide hazard. The majority of the western shoreline is in a high landslide hazard area, which is caused by a combination of high runoff, steep slopes, and non-permeable geology.

Elevations in the City of Mukilteo range from mean sea level to approximately 500 feet. The Harbour Pointe and Paine Field areas to the east of the marine shoreline are situated on a broad, upland plateau. Many hills terminate in bluffs and steep slopes overlooking Puget Sound. The northern shoreline area (e.g., former U.S. Air Force [USAF] Tank Farm facility) was built on fill material overlying original shoreline beach deposits.

Mukilteo's hilly topography slopes both west and north towards Puget Sound and is bisected with many creeks and streams that have cut deep ravines and gullies through the underlying glacial deposits, which has created wooded open spaces that protect the numerous watersheds. These watersheds include Japanese Gulch, Brewery Creek and State Park Tidegate, Goat Trail Creek, Mukilteo Olympic View Creek, Naketa Beach Creek, Smuggler's Gulch Creek, Big Gulch Creek, Chennault drainage, Upper and Lower Chennault Creeks, Hulk Creek, Picnic Point Creek, Norma Creek, and Lund's Creek. In addition to these creeks and streams, Lake Serene is perched upland from the Sound in the southern portion of the City.

Biological Resources and Physical Characteristics

This section provides contextual information on shoreline physical and biological resources ~~as it describes conditions~~ across the City's marine shorelines and conditions distinct along three ~~distinct~~ shoreline areas, which have been termed the Urban Waterfront, Urban Waterfront Park, and Urban Conservancy Environment Designations. The Urban Waterfront Park Environment Designation runs the length of Mukilteo Lighthouse Park, and the Urban Waterfront Environment Designation runs north from the north end of Mukilteo Lighthouse Park around Possession Point to the eastern city limits. The Urban Conservancy Environment Designation runs south from the southernmost boundary and tidelands of Mukilteo Lighthouse Park to the southern city limits. The resources are also characterized into the MUGA area to Lund's Gulch and Meadowdale Park. Chapter 2 describes these marine shoreline areas and their E~~e~~nvironment D~~d~~esignations in more detail, and Chapter 3 provides broad policies and specific policies that apply to each E~~e~~nvironment D~~d~~esignation.

A basic concept in the preparation of an SMP is the use of scientific and technical information for development of a "shoreline characterization" (i.e., shoreline inventory) and subsequent analysis. A more detailed *Shoreline Inventory and Characterization* for the City of Mukilteo can be found as a supporting document to this SMP. The inventory also includes a general assessment of land uses, landslide hazard areas, soils, wetlands and streams, parks and open space, wildlife, aquatic resources, and sediment drift cell information.

For the purposes of this analysis, the nearshore is defined as the interface between marine and upland ecosystems. The seaward boundary of the nearshore is the outer limit of the photic zone, beyond which radiation from the sun is insufficient to support aquatic plant growth ~~(approximately 20 ft. MLLW, or the depth beyond which there is insufficient photosynthetically active radiation~~

~~[PAR] for active photosynthesis)~~. The landward boundary of the nearshore is up to the top of the slope. This is typically beyond the 200-foot shoreline jurisdiction along the western shoreline of the City.

The nearshore and shoreline environments provide four primary functions for a variety of aquatic organisms, including salmonids ~~(Williams and Thom 2001, Simenstad et al. 1999, Aitkin 1998)~~. These functions are ~~:~~

(1) m~~M~~igratory corridors, ~~(~~

(2) n~~N~~ursery habitats, ~~(~~

(3) p~~P~~roduction, and ~~(~~

(4) f~~F~~eeding. See the *Shoreline Inventory and Characterization* for additional detail.

~~Urban Waterfront and Urban Waterfront Park Environment Designation~~

Biological Resources

Aquatic Habitats

Eelgrass and macroalgae are sparse within the Aquatic Urban Environment Designation. Eelgrass *(Zostera marina*) meadows begin on the eastern portion of the Tank Farm site and continue east into Everett. In addition, two small patches of eelgrass were identified in the intertidal zone on both sides of the NOAA Fisheries Pier (Norris 2000). In the area where Washington State Ferries (WSF) is relocating its ferry terminal, brown algae (*Laminaria saccharina*) and green algae have been identified in addition to four very small and isolated patches of eelgrass. Macroalgae (green algae [*Ulva lactuca*]) has been documented near the NOAA Fisheries Pier (Anchor Environmental 2003, unpublished), and additional macroalgae (mostly *Ulva* and *Enteromorpha*) has been identified on the nearshore mudflat between the outlet of Japanese Gulch Creek and the Port of Everett Rail/Barge Facility.

Algal species, such as sea lettuce and rockweed, in addition to other green, brown, and red algae have formed an algal community along the Aquatic Urban Conservancy Environment Designation. Extending farther seaward is a kelp community consisting of species such as bull kelp. Eelgrass is abundant along the Aquatic Urban Conservancy Designation (Pentec 1996, Sound Transit 1999, Tsyland 2002). Except for at Naketa Beach, few human-induced activities are likely to occur that would adversely affect eelgrass in this area due to the steep bluff on the western shoreline and the presence of the BNSF Railroad along the shoreline, which restricts access to and development along the shoreline.

~~-~~Epibenthic/Benthic Infauna

No quantitative information exists on benthic (sediment) communities along the Mukilteo shoreline. Based on physical conditions along the beach from the eastern end of the former USAF Pier extending into and past Mukilteo City limits into Everett, the Aquatic Urban beach area is likely to support a more diverse and abundant benthic community than the western portion that is encompassed by Lighthouse Park.

In some places along the Aquatic Urban Conservancy Environment Designation, the steepness of the shoreline has resulted in compacted substrate, which may preclude certain types of benthic organisms from colonizing. However, farther offshore, between about 0 and -10 feet Mean Lower Low Water (MLLW), substrates appear to be unconsolidated gravel and sand, which likely support a

variety of benthic organisms. In addition, the presence of eelgrass along the majority of the Aquatic Urban Conservancy Environment Designation would likely support epibenthic production.

Fin Fish (other than Forage Fish)

A variety of fin fish likely occur and/or utilize the nearshore environment. See Table 10 of the *Mukilteo Inventory and Characterization* for a list of species likely to occur in the marine water along the Aquatic Urban and Aquatic Urban Conservancy Environment Designations.

Forage Fish

Sand lance spawning is documented from east of the existing WSF Terminal at the Silver Cloud Pier. Sand lance spawning is also documented east of the Tank Farm, at the Port of Everett Rail/Barge Facility site. There are no documented surf smelt or herring spawning or holding areas within the Aquatic Urban Designation. Sand lance and surf smelt spawning has been documented at Picnic Point. No herring spawning has been documented along the Aquatic Urban Conservancy Environment Designation (WDFW 2003).

Marine Mammals

Harbor seals have been observed hauled out on the beach by the WSF Terminal and condominiums west of the WSF Terminal. The closest Steller sea lion breeding area is on Race Rock, approximately 70 miles southwest of Vancouver Island, BC. A California sea lion haul out is located on log booms at the Port of Everett. Small numbers of California sea lions are observed on navigation buoys in the region (WDFW 2000). It is possible that Steller sea lions occasionally haul out along the Mukilteo shoreline planning area, but there is no documentation to quantify this possibility. No data are available on marine mammal occurrences or use of marine waters along the Aquatic Urban Conservancy Environment Designation.

Marine Riparian Zones

Due to culverting under the Tank Farm site, the only naturally occurring stream riparian vegetation in the Urban Waterfront is between 5th Street and Mukilteo Lane (outside of the 200-foot shoreline zone), and a length of about 1,000 feet east of the former USAF Tank Farm Pier. Marine riparian vegetation zones occur along Mukilteo Lighthouse Park in the Urban Waterfront Park environment. Riparian vegetation occurs seaward of the BNSF Railroad tracks in the Urban Conservancy environment at Picnic Point and Lund's Gulch, at a small area at Big Gulch where stream gravel has accreted, and at Shipwreck Point, where vessels left behind from a shipwrecking business located there in the 1930s–1960s act as barriers to sediment movement.

Development upland and within the watersheds suggests possible nutrient loading and contamination; however, water quality data are limited for most streams that discharge along the Mukilteo shoreline. The lack of marine riparian zones precludes opportunities for this habitat feature to provide pollution abatement functions often found along natural marine shorelines.

Salmonids

The shorelines in the Aquatic Urban and Aquatic Urban Conservancy Environment Designations have characteristics to support Chinook, chum, sockeye, coho, and pink salmon as well as steelhead, cutthroat, and bull trout migration. Coho and chum have been observed in the lower reach of Japanese Gulch Creek. Fish passage improvements were completed in the winter of 2010, and stream realignment was completed in October 2012 that supported cutthroat and coho salmonid migration and adult coho and chum spawning. Three streams that drain into the Aquatic Urban Conservancy Environment Designation have coho salmon and cutthroat trout. Coho and chum have

been observed in the lower reach of Big Gulch Creek and Lund's Gulch Creek. Cutthroat trout and Chinook salmon have also been observed in Big Gulch Creek.

Shellfish

Table 11 of the *Mukilteo Inventory and Characterization* lists shellfish and the habitat and shoreline zones they typically inhabit. The WDFW Priority Habitats and Species (PHS) maps (WDFW 2003) and recent MRC research and Port of Everett Rail/Barge Facility studies indicate that intertidal clams occur within the Tank Farm extending east into Everett. Although the PHS maps do not indicate the presence of intertidal clams in the remaining portion of the Urban Waterfront and Aquatic Urban Conservancy Environment Designations, the lower intertidal beach substrate is sand and gravel that tend to support bivalve populations. Dungeness crabs occur along the entire Urban Waterfront Designation shoreline, but fewer along the rocky substrates of Lighthouse Park.

The lowering of the beach profile along the Aquatic Urban Conservancy Environment Designation due to the installation of riprap and bulkheads has resulted in the removal of sand and gravel. Currently, only glacial till remains. Glacial till in the upper intertidal area may be too consolidated to allow bivalve colonization. A subtidal geoduck bed occurs offshore in the southern portion of the Aquatic Urban Conservancy Environment Designation, and Dungeness crab occurs along the entire shoreline. Pandalid shrimp are also documented offshore within this designation (WDFW 2003).

Wildlife Habitat (Terrestrial)

In 2012, faculty, staff, and students from Edmonds Community College began conducting annual wildlife monitoring in both Japanese Gulch and Big Gulch. Several wildlife species have been identified and confirmed as occurring in Japanese Gulch in the Urban Waterfront environment and Big Gulch in the Urban Conservancy environment, which provide habitat and functions (e.g., feeding, rearing, nesting, refuge) for a range of wildlife species.

Table 3: Wildlife Habitat Observed

Shoreline Environment Designation	Wildlife Habitat Area	Wildlife Species Overserved
Urban Waterfront	Japanese Gulch Creek	Over the years, deer, coyote, raptors, various small mammals, and numerous passerine birds have been observed. Wildlife monitoring in 2017 by Edmonds Community College students documented the presence of Cooper's hawk, Douglas squirrel, Townsend's chipmunk, and black bear (EdCC 2017).
Urban Waterfront Park	No wildlife habitat areas	
Urban Conservancy	Big Gulch Creek	Deer, coyote, raptors, various small mammals, and birds have been observed during Edmonds Community College student wildlife monitoring. During the 2017 student wildlife monitoring, northern flying squirrel, hairy woodpecker, and

Shoreline Environment Designation	Wildlife Habitat Area	Wildlife Species Overserved
		spotted towhee were observed and documented.

Wetlands

The open channel portions of the two creeks within the Urban Waterfront Environment Designation, Japanese Gulch Creek and Brewery Creek, are classified as riparian wetlands, but neither are contained within the shoreline jurisdiction as they are both culverts. There is an intertidal mudflat/marsh or intertidal lagoon north of Picnic Point Creek and Park. Specific wetland mapping between the railroad tracks and uplands will occur on a project basis.

Physical Characteristics

Aquifer

The northwestern portion of the Tank Farm overlies the Intercity Plateau aquifer in the Urban Waterfront. This area was identified as a significant recharge area for the aquifer; however, it is likely that shallow groundwater passes through the site beneath existing pavement and discharges to the shoreline (Herrera 2003).

Banks and Bluffs

Within the City of Mukilteo, the majority of the shoreline occurs immediately adjacent to steep bluffs. Stressors on banks and bluffs include development activities, passive human intrusion, and changes in hydrology.

Beaches and Backshore

~~Beach areas occur between east of the Tank Farm property in Everett and where Japanese Gulch Creek drains to the shoreline, between the former U.S. Air Force Pier and the existing Washington State Ferry Terminal, and at Mukilteo Lighthouse Park.~~ Shoreline armoring has affected recruitment of new beach materials along the Mukilteo shoreline. Exceptions occur where drainages carry limited material to the nearshore and result~~ed~~ing in the formation of small deltas, especially in the Urban Conservancy and Aquatic Urban Conservancy environments. ~~The only backshore areas with marine riparian vegetation zones occur along Mukilteo Lighthouse Park, and a length of about 1,000 feet east of the former U.S. Air Force Tank Farm pier. Shoreline armoring has affected recruitment of new beach materials in this area. Exceptions occur where drainages carry limited material to the nearshore resulting in the formation of small deltas and at two new beach enhancement sites: 1) Port of Everett Rail/Barge Facility in Everett and 2) Mukilteo Lighthouse Park.~~

Table 4: Beaches and Backshore

Shoreline Environment Designation	Beaches and B~~b~~ackshore	Notes
Urban Waterfront	Edgewater Beach Mukilteo Community Beach Park	Beach areas occur just east of Edgewater Beach to the Japanese Gulch Creek shoreline outlet and between the former ~~U.S. Air Force~~USAF Pier and the existing Washington State Ferry (WSF) Terminal. Backshore areas with marine riparian vegetation occur about 1,000 feet east of the former ~~U.S. Air Force~~USAF Tank Farm Pier.
Urban Waterfront Park	Mukilteo Lighthouse Park	
Urban Conservancy	Four areas of accreted beach	A few small beach deltas have formed along the shoreline where drainages to the shoreline are culverted under the BNSF Railroad line.
Aquatic Urban Conservancy	Shipwreck Point Picnic Point Ravine Lund's Gulch Big Gulch	

~~Aquifer~~

~~The northwestern portion of the Tank Farm overlies the Intercity Plateau aquifer in the Urban Waterfront. This area was identified as a significant recharge area for the aquifer; however, it is likely that shallow groundwater passes through the site beneath existing pavement and discharges to the shoreline (Herrera 2003).~~

Flooded Areas

According to mapping developed by the Federal Emergency Management Agency (FEMA) in 1999, little of the City of Mukilteo falls in the 100-year floodplain. The boundary of the 100-year floodplain is confined to areas within and around ~~Mukilteo Lighthouse Park and~~ the Urban Waterfront, Urban Waterfront Park, and Urban Conservancy areas of ~~downtown~~ the Mukilteo shoreline.

In 2010, FEMA began a study of 74 miles of coastline in Snohomish County, including Mukilteo, and provided preliminary Digital Flood Insurance Rate Maps (DFIRM) and studies to Snohomish County, which can be viewed at Snohomish County Planning and Development Services. The Urban Waterfront and Urban Waterfront Park areas of the shoreline are mapped as high risk flood hazard areas. The Urban Conservancy areas of the shoreline are also mapped as high risk flood hazard areas, with the area south of Big Gulch Creek having an additional hazard associated with storm waves.

Sediment

In general, substrates along the Mukilteo shoreline can be characterized as cobble/gravel in a sand matrix. Within the Urban Waterfront and Urban Waterfront Park Environment Designations, substrates also include bulkheads, riprap, wood debris, and shell hash. The slope of the shoreline along the Urban Waterfront Environment Designation is generally steep and drops off quickly, which makes it less available to juvenile salmonids than the more gently sloped beaches of the Urban Waterfront Park Designation. To the south, the intertidal slope along the Urban Conservancy Environment Designation is also relatively steep; however, the lower intertidal/shallow subtidal slope of the shoreline is gentler than along the Urban Waterfront Designation.

Bluffs along the shoreline were the likely primary source of sediments to the shoreline prior to the construction of the BNSF Railroad line in the late 1880s/early 1900s. To protect the rail line, a fitted stone seawall was constructed in the foreshore area. This seawall and the subsequent culverting of drainages into Possession Sound have resulted in effectively eliminating bluffs as a primary source of sediment supply across Mukilteo shorelines and extending to the northeast and south. The result is low sediment transport volumes and fewer net-shore drift indicators. These conditions have resulted in "sediment-starved" beaches across much of Mukilteo, and especially within the Urban Conservancy Environment Designation to the south of Mukilteo Lighthouse Park (Ecology 1992).

Streams are the remaining source of sediment supply to the shoreline. At the north end of the City within the Urban Waterfront and Urban Waterfront Park Environment Designations, Japanese Gulch Creek is the primary source of sediment.

There is no appreciable net shore drift in the Urban Waterfront or Urban Waterfront Park Environment Designation, and there is an indication of accreted beach from the Mukilteo Lighthouse to the former USAF Pier. The shoreline west of Mukilteo Lighthouse Park also shows a small area of accreted beach. Net shore drift along the Urban Conservancy shoreline is generally north and northeastward around Elliot Point. Net shore drift along the Urban Conservancy's western shoreline is driven by southerly and southwesterly waves (Ecology 1992).

Streams/Creeks

Across the City's marine shorelines, 12 streams/creeks drain through the shoreline environment. All of these streams are culverted under the BNSF Railroad tracks and generally flow through steeply sloped ravines to the landward side of the tracks. Many of the streams have been inventoried with

eroding beds and banks resulting from improper surface water drainage. Tables 11 and 12 of the *Mukilteo Inventory and Characterization* identify existing conditions of streams/creeks draining to the marine shorelines.

Table 5: Streams/Creeks

Shoreline Environment Designation	**Streams/Creeks**	**Notes**
Urban Waterfront	Japanese Gulch Creek Brewery Creek	Japanese Gulch Creek is a good candidate for stream restoration and day-lighting. Fish passage improvements were completed in the winter of 2010, and stream realignment was completed in October 2012. Completion of the Japanese Gulch Creek restoration supported cutthroat and coho salmonid migration and adult coho and chum spawning.
Urban Waterfront Park	No streams	
Urban Conservancy	10 mapped streams/creeks, including Big Gulch Creek, Smugglers Gulch Creek, and Goat Trail Creek	Open channel portions of the creeks and drainages within the Urban Conservancy Environment Designation have been classified and mapped as part of critical area ordinances. Along with observations of coho, chum, and cutthroat, non-natal Chinook were observed in Big Gulch Creek in a 2013 electrofishing survey (Beamer et al. 2013).

~~Streams/Creeks~~

~~Across the City's marine shorelines, there are 12 streams/creeks that drain through the shoreline environment. All of these streams are culverted under the BNSF Railroad tracks and generally flow through steeply sloped ravines to the landward side of the tracks. Many of the streams have been inventoried with eroding beds and banks resulting from improper surface water drainage. Tables 11 and 12 There are two streams/creeks, Japanese Gulch Creek and Brewery Creek, which occur within the Urban Waterfront Designations. Both are culverted under the BNSF Railroad tracks and are generally steeply sloped, with erosion resulting due to improper surface water drainage. Table 12 of the *Mukilteo Inventory and Characterization* identifyies the existing conditions of streams/creeks draining to Japanese Gulch and Brewery Creeksthe marine shorelines. Japanese Gulch Creek is a good candidate for stream restoration and day lighting. Fish passage improvements were completed in the winter of 2010 and stream realignment was completed in October 2012. Completion of the Japanese Gulch Creek restoration resulted in cutthroat and coho salmonid migration and adult coho and chum spawning.~~

~~**Shoreline Environment Designation**~~	~~**Streams/Creeks**~~	~~**Notes**~~
~~Urban Waterfront~~	~~Japanese Gulch~~	~~Japanese Gulch Creek is a good candidate for~~

	Creek Brewery Creek	stream restoration and day-lighting. Fish passage improvements were completed in the winter of 2010, and stream realignment was completed in October 2012. Completion of the Japanese Gulch Creek restoration resulted insupported cutthroat and coho salmonid migration and adult coho and chum spawning.
Urban Waterfront Park	No streams	
Urban Conservancy	10 mapped streams/creeks, including Big Gulch Creek, Smugglers Gulch Creek, and Goat Trail Creek	Open channel portions of the creeks and drainages within the Urban Conservancy Environment Designation have been classified and mapped as part of critical area ordinances. Along with observations of coho, chum, and cutthroat, non-natal CChinook were observed in Big Gulch Creek in a 2013 electrofishing survey (Beamer et al. 2013).

There are 10 streams/creeks that occur within or drain into the Urban Conservancy Designation. All are culverted under the BNSF Railroad tracks and most are steeply sloped, with erosion resulting from improper surface water drainage. Table 11 of the *Mukilteo Inventory and Characterization* identifies the existing conditions of the streams that occur within the Urban Conservancy Designation. Open channel portions of the creeks and drainages within the Urban Conservancy Designation have been classified and mapped as part of critical area ordinances. Along with observations of coho, chum, and cutthroat, non-natal Chinook were observed in Big Gulch Creek in a 2013 electrofishing survey (Beamer et al. 2013).

Marine Riparian Zones

Due to culverting under the Tank Farm site, the only naturally occurring stream riparian vegetation in the Urban Waterfront is between 5th Street and Mukilteo Lane (outside of the 200-foot shoreline zone), and a length of about 1,000 feet east of the former U.S. Air ForceUSAF Tank Farm Ppier. Marine riparian vegetation zones occur along Mukilteo Lighthouse Park in the Urban Waterfront Park environment. Riparian vegetation occurs seaward of the BNSF Railroad tracks in the Urban Conservancy environment at Picnic Point and Lund's Gulch, at a small area at Big Gulch, where stream gravel has accreted, and at Shipwreck Point, where vessels left behind from a shipwrecking business located there in the 1930s – 1960s act as barriers to sediment movement.

Development upland and within the watersheds suggests possible nutrient loading and contamination; however, water quality data isare limited for most streams that discharge along the Mukilteo shoreline. The lack of marine riparian zones precludes opportunities for this habitat feature to provide pollution abatement functions often found along natural marine shorelines.

Wetlands

The open channel portions of the two creeks located within the Urban Waterfront Environment Designation, Japanese Gulch Creek and Brewery Creek, are classifiedy as riparian wetlands, but neither are contained within the shoreline jurisdiction as they are both culverts. There is an intertidal

mudflat/marsh or intertidal lagoon north of Picnic Point Creek and Park. Specific wetland mapping between the railroad tracks and uplands will occur on a project basis.The Japanese Gulch corridor is heavily vegetated with various plant species, and narrow riparian vegetation occurs along the creek itself. A Category 2 wetland/detention with dual functions was identified in Japanese Gulch Creek east of the stream and south of Mukilteo Lane outside the shoreline jurisdiction. No wetlands associated with Brewery Creek have been identified.

Wildlife Habitat (Terrestrial)

Several wildlife species have been identified as occurring in Japanese Gulch, which provides habitat and functions (e.g., feeding, rearing, nesting, refuge) for a range of wildlife speciesIn 2012, faculty, staff, and students from Edmonds Community College began conducting yearlyannual wildlife monitoring in both Japanese Gulch and Big Gulch. Several wildlife species have been identified and confirmed as occurring in Japanese Gulch in the Urban Waterfront environment and Big Gulch in the Urban Conservancy environment, which provide habitat and functions (e.g., feeding, rearing, nesting, refuge) for a range of wildlife species. including deer, coyote, raptors, various small mammals, and numerous passerine birds (City of Mukilteo 1995). In addition, a bald eagle, Canada geese, seabirds (unidentified), and great blue heron have been observed in the area (T. McKenzie and WDFW).

Shoreline Environment Designation	**Wildlife Habitat Area**	**Wildlife Species Overserved**
Urban Waterfront	Japanese Gulch Creek	Over the years, deer, coyote, raptors, various small mammals, and numerous passerine birds have been observed. Wildlife monitoring in 2017 by Edmonds Community College students resulted in documented the presence of cCooper's hawk, Douglas squirrel, Townsend's chipmunk, and black bear (EdCC 2017).
Urban Waterfront Park	No wildlife habitat areas	
Urban Conservancy	Big Gulch Creek	Deer, coyote, raptors, various small mammals, and birds have been observed during Edmonds Community College student wildlife monitoring. During the 2017 student wildlife monitoring, northern flying squirrel, hairy woodpecker, and spotted towhee were observed and documented.

~~Urban Conservancy Environment Designation~~

~~Sediment~~

~~In general, substrates along the Mukilteo shoreline can be characterized as cobble/gravel in a sand matrix. Riprap and hardpan occur along the majority of the Urban Conservancy Designation. Although the intertidal slope along the Urban Conservancy Designation is relatively steep, the lower intertidal/shallow subtidal slope of the shoreline is gentler than along the Urban Waterfront Designation.~~

~~Bluffs along the shoreline were the likely primary source of sediments to the shoreline prior to the construction of the BNSF Railroad line in the late 1880s/early 1900s. To protect the rail line, a fitted stone seawall was constructed in the foreshore area. This seawall and the subsequent culverting of drainages into Possession Sound have resulted in effectively eliminating the primary source of sediment supply to the City of Mukilteo shoreline. Streams are the remaining source of sediment supply to the shoreline, although a very small contribution of sediment supply occurs from periodic landslides. The result is low sediment transport volumes and fewer net shore drift indicators. These conditions have resulted in "sediment-starved" beaches along the Urban Conservancy Designation (DOE 1992).~~

~~Net shore drift along the Urban Conservancy shoreline is generally north and northeastward around Elliot Point. Net shore drift along the Urban Conservancy's western shoreline is driven by southerly and southwesterly waves (DOE 1992).~~

~~Beaches and Backshore~~

~~Although drainages to the shoreline are culverted under the BNSF Railroad line, limiting the amount of sediment supply to the shoreline, it is evident that a few small beach deltas have formed along the shoreline. The formation of small delta beaches is discussed above. There are also four areas of accreted beach within the Urban Conservancy Designation, which are in locations where drainages likely supply sediment to the shoreline. There are no overwater structures occurring in the Urban Conservancy Designation that could affect beaches by modifying the flow, sediment supply to beaches, or sediment characteristics.~~

~~Banks and Bluffs~~

~~Within the City of Mukilteo, the majority of the shoreline occurs immediately adjacent to steep bluffs. Stressors on banks and bluffs include development activities, passive human intrusion, and changes in hydrology.~~

~~Aquifer~~

~~Based on existing information, there are no known or identified aquifers that occur within the Urban Conservancy Designation.~~

~~Flooded Areas~~

~~According to mapping developed by the Federal Emergency Management Agency (FEMA) in 1999, little of the City of Mukilteo falls within the 100-year floodplain. The Flood Insurance Rate Maps (FIRM) indicate that the marine waters in the nearshore areas of the Urban Conservancy Designation are designated as areas that fall within the 100-year flood boundary.~~

~~Streams~~

There are 10 streams/creeks that occur within or drain into the Urban Conservancy Designation. All are culverted under the BNSF Railroad tracks and most are steeply sloped, with erosion resulting from improper surface water drainage. Table 11 of the Mukilteo Inventory and Characterization identifies the existing conditions of the streams that occur within the Urban Conservancy Designation. Open channel portions of the creeks and drainages within the Urban Conservancy Designation have been classified and mapped as part of critical area ordinances.

Wetlands

There is an intertidal mudflat/marsh or intertidal lagoon north of Picnic Point Creek and Park. Specific wetland mapping between the railroad tracks and uplands will be one on a project basis.

Wildlife Habitat (Terrestrial)

Very little data is available on wildlife habitat, species, or functions within the Urban Conservancy Designation. It is possible, but unconfirmed, that similar wildlife species known to occur in Japanese Gulch also could occur in the other forested gulches or ravines within the City. Bald eagle nests have been identified within the Urban Conservancy Designation north of 84th Street and near Harbour Heights Parkway.

Urban Railroad Environment Designation

Sediment

In general, substrates along the Mukilteo shoreline can be characterized as cobble/gravel in a sand matrix. Riprap and hardpan occur along the majority of the Urban Railroad Designation. The intertidal slope along the Urban Railroad Designation is relatively steep.

Bluffs along the shoreline were the likely primary source of sediments to the shoreline prior to the construction of the BNSF Railroad line in the late 1880s. To protect the rail line, a fitted stone seawall was constructed in the foreshore area. This seawall and the subsequent culverting of drainages into Possession Sound have resulted in effectively eliminating the primary source of sediment supply to the City of Mukilteo shoreline. Streams are the remaining source of sediment supply to the shoreline, although a very small contribution of sediment supply occurs from periodic landslides. The result is low sediment transport volumes and fewer net shore drift indicators. These conditions have resulted in "sediment-starved" beaches along the Urban Railroad Designation (DOE 1992).

Net shore drift along the Urban Railroad shoreline is generally north and northeastward around Elliot Point. Net shore drift along the Urban Railroad's western shoreline is driven by southerly and southwesterly waves (DOE 1992).

Banks and Bluffs

Within the City of Mukilteo, the majority of the shoreline occurs immediately adjacent to steep bluffs. Stressors on banks and bluffs include development activities, passive human intrusion, and changes in hydrology.

Streams

There are 10 streams/creeks that occur within or drain into the Urban Railroad Designation. All are culverted under the BNSF Railroad tracks and most are steeply sloped, with erosion resulting from improper surface water drainage. Table 11 of the Mukilteo Inventory and Characterization identifies

the existing conditions of the streams that occur within the Urban Railroad Designation. Open channel portions of the creeks and drainages within the Urban Railroad Designation have been classified and mapped as part of critical area ordinances.

Aquatic Urban Environment Designation

Aquatic Habitats

Eelgrass Meadows and Macroalgae. Eelgrass and macroalgae are sparse within the Aquatic Urban Environment Designation. Eelgrass *(Zostera marina)* meadows begin on the eastern portion of the Tank Farm site and continue east into Everett. In addition, two small patches of eelgrass were identified in the intertidal zone on both sides of the NOAA Fisheries Ppier (Norris 2000). In the area where Washington State Ferries (WSF) is considering relocating its ferry terminal, brown algae (*Laminaria saccharina*) and green algae have been identified in addition to four very small and isolated patches of eelgrass. Macroalgae (green algae [*Ulva lactuca*]) has been documented near the NOAA Fisheries Ppier (Anchor Environmental 2003, unpublished), and additional macroalgae (mostly *Ulva* and *Enteromorpha*) has been identified on the nearshore mudflat between the outlet of Japanese Gulch Creek and the proposed Port of Everett Rail/Barge Facility.

Marine Riparian Zones. There is very little riparian vegetation established along the Aquatic Urban Designation. Due to culverting under the Tank Farm site, the only naturally occurring stream riparian vegetation is between 5th Street and Mukilteo Lane (outside of the 200-foot shoreline zone). In addition, the lack of marine riparian zones precludes opportunities for vegetation to provide a pollution abatement function often found along natural marine shorelines. Re-development of the Tank Farm site can improve both the stream and nearshore riparian environments.Algal species, such as sea lettuce and rockweed, in addition to other green, brown, and red algae have formed an algal community along the Aquatic Urban Conservancy Environment Designation. Extending fuarther seaward is a kelp community consisting of species such as bull kelp. Eelgrass is abundant along the Aquatic Urban Conservancy Designation (Pentec 1996, Sound Transit 1999, Tsyland 2002). Except for at Naketa Beach, few human-induced activities are likely to occur that would adversely affect eelgrass in this area due to the steep bluff on the western shoreline and the presence of the BNSF Railroad along the shoreline, which restricts access to and development along the shoreline.

Salmonids

The shorelines in the Aquatic Urban and Aquatic Urban Conservancy Environment Designations haves characteristics to support Chinook, chum, sockeye, coho, cutthroat, and pink salmon as well as steelhead, cutthroat, and bull trout migration. Coho and chum have been observed in the lower reach of Japanese Gulch Creek. Fish passage improvements were completed in the winter of 2010, and stream realignment was completed in October 2012 whichthat resultedsupported in cutthroat and coho salmonid migration and adult coho and chum spawning. Three streams that drain into the Aquatic Urban Conservancy Environment Designation have Ccoho salmon and cutthroat trout. Coho and chum have been observed in the lower reach of Big Gulch Creek and Lund's Gulch Creek. Cutthroat trout and Chinook salmon have also been observed in Big Gulch Creek.

Cutthroat trout are also likely to occur in the creeks where Coho have been observed.

Forage Fish

Sand lance spawning is documented from east of the existing WSF Ferry Terminal at the Silver Cloud Pier. Sand lance spawning is also documented east of the Tank Farm, at the Port of Everett Rail/Barge Facility site. There are no documented surf smelt or herring spawning or holding areas within the Aquatic Urban Designation. Sand lance and surf smelt spawning havehas been documented at Picnic Point. No herring spawning has been documented along the Aquatic Urban Conservancy Environment Designation (WDFW 2003).

Other Fin Fish

A variety of other fin fish are likely to occur and/or utilize the nearshore environment. Representative species of fish that were observed at the WSF Terminal and at Mukilteo Lighthouse Park are identified in Table 10 of the *Mukilteo Inventory and Characterization*.See Table 10 of the *Mukilteo Inventory and Characterization* for a list of species that are likely to occur in the marine water along the Aquatic Urban and Aquatic Urban Conservancy Environment Designations.

Shellfish

A wide variety of substrates provide habitat for different types of shellfish. Table 11 of the *Mukilteo Inventory and Characterization* lists shellfish and the habitat and shoreline zones they typically inhabit. The WDFW Priority Habitats and Species (PHS) maps (WDFW 2003) and recent MRC research and Port of Everett Rail/Barge Facility studies indicate that intertidal clams occur within the Tank Farm extending east into Everett. Although the PHS maps do not indicate the presence of intertidal clams in the remaining portion of the Urban Waterfront and Aquatic Urban Conservancy Environment Designations, the lower intertidal beach substrate is sand and gravel that tend to support bivalve populations. Dungeness crabs occur along the entire Urban Waterfront Designation shoreline, but fewer along the rocky substrates of Lighthouse Park.

The lowering of the beach profile along the Aquatic Urban Conservancy Environment Designation due to the installation of riprap and bulkheads has resulted in the removal of sand and gravel. Currently, only glacial till remains. Glacial till in the upper intertidal area may be too consolidated to allow bivalve colonization. A subtidal geoduck bed occurs offshore in the southern portion of the Aquatic Urban Conservancy Environment Designation, and Dungeness crab occurs along the entire shoreline. Pandalid shrimp are also documented to occur offshore within this designation (WDFW 2003).

Epibenthic/Benthic Infauna

No quantitative information exists on benthic communities along the Mukilteo sShoreline. Based on physical conditions along the beach from the eastern end of the former USAF Pier extending into and past Mukilteo City limits into Everett, the Aquatic Urban is beach area is likely to support a more diverse and abundant benthic community than the western portion of the Urban Waterfront Designationthat is encompassed by Lighthouse Park.

In some places along the Aquatic Urban Conservancy Environment Designation, the steepness of the shoreline has resulted in compacted substrates being compacted, which may preclude certain types of benthic organisms from colonizing the substrates. However, fuarther offshore, between about 0 and -10 feet. Mean Lower Low Water (MLLW), substrates appear to be unconsolidated gravel and sand, which are likely to support a variety of benthic organisms. In addition, the presence of eelgrass

along the majority of the Aquatic Urban Conservancy Environment Designation would likely support epibenthic production.

Marine Mammals

Harbor seals have been observed being hauled out on the beach by the WSF Terminal and condominiums west of the WSF Terminal. The closest Steller sea lion breeding area is on Race Rock, approximately 70 miles southwest of Vancouver Island, BC. A California sea lion haul out is located on log booms at the Port of Everett. Small numbers of California sea lions are observed on navigation buoys in the region (WDFW 2000). It is possible that Steller sea lions occasionally haul out along the Mukilteo shoreline planning area, but there is no documentation to quantify this possibility. No data isare available on marine mammal occurrences or use of marine waters along the Aquatic Urban Conservancy Environment Designation.

Aquatic Urban Conservancy Environment Designation

Aquatic and Riparian Habitats

Beaches and backshore areas occur at Shipwreck Point, Picnic Point Ravine, and Lund's Gulch. In addition, a small delta is forming at Big Gulch. No other marine riparian vegetation zones exist along the Aquatic Urban Conservancy Designation; therefore, the creation of additional riparian areas would be very beneficial.

Eelgrass Meadows

Three general aquatic plant communities occur in the Aquatic Urban Conservancy Designation. Algal species, such as sea lettuce and rockweed, in addition to other green, brown, and red algae have formed an algal community. Overlapping with this algal community and extending further seaward is a kelp community consisting of species such as bull kelp. There is a brown algae (Laminaria saccharina) bed located immediately offshore of Elliot Point (McKenzie, personal observation 2001). Eelgrass is abundant along the Aquatic Urban Conservancy Designation (Pentec 1996, Sound Transit 1999, Tsyland 2002). Except for at Naketa Beach, few human induced activities are likely to occur that would adversely affect eelgrass in this area due to the steep bluff on the western shoreline and the presence of the BNSF Railroad along the shoreline, which restricts access to and development along the shoreline.

Marine Riparian Zones

Riparian vegetation occurs seaward of the BNSF Railroad tracks at Picnic Point and Lund's Gulch, at a small area at Big Gulch, where stream gravel has accreted, and at Shipwreck Point, where vessels left behind from a shipwrecking business located there in the 1930s-1960s act as barriers to sediment movement. This results in a delta with a foreshore beach and a backshore supporting shrubs and trees. Development upland and within the watersheds suggests possible nutrient loading and contamination; however, water quality data is limited for all streams that discharge along the Urban Conservancy Designation. The lack of marine riparian zones precludes opportunities for this habitat feature to provide pollution abatement functions.

Salmonids

Three streams that drain into the Aquatic Urban Conservancy Designation have Coho and cut-throat trout. Coho and chum have been observed in the lower reach of Big Gulch Creek and Lund's Gulch Creek. Cutthroat trout are also likely to occur in this creek. Other streams that either support or could support cutthroat trout are Smuggler's Gulch, Upper and Lower Chennault Creeks, Picnic Point Creek, and Lund's Gulch Creek. None of the streams or creeks has the characteristics to support

~~Chinook, sockeye, or pink salmon, steelhead, or bull trout because the drainages are too small and they lack suitable habitat; however, these species use the nearshore.~~

~~Forage Fish~~

~~Sand lance and surf smelt spawning have been documented at Picnic Point. No herring spawning has been documented along the Aquatic Urban Conservancy Designation (WDFW 2003).~~

~~Other Fin Fish~~

~~A variety of other fin fish are likely to occur and/or utilize the nearshore environment. See Table 10 of the Mukilteo Inventory and Characterization for a list of species that are likely to occur in the marine water along the Urban Conservancy Designation.~~

~~Shellfish~~

~~The WDFW PHS maps (WDFW 2003) do not indicate the presence of intertidal clams along the Aquatic Urban Conservancy Designation; however, the lower intertidal beach substrate is sand and gravel that would tend to support bivalve populations. The lowering of the beach profile along the Aquatic Urban Conservancy Designation due to installation of riprap and bulkheads has resulted in the removal of sand and gravel. Currently, only glacial till remains. Glacial till in the upper intertidal area may be too consolidated to allow bivalve colonization. A subtidal geoduck bed occurs offshore in the southern portion of the Aquatic Urban Conservancy Designation. Dungeness crab occurs along the entire Aquatic Urban Conservancy shoreline. Pandalid shrimp are also documented to occur offshore within this designation (WDFW 2003).~~

~~Epibenthic/Benthic Infauna~~

~~No quantitative information exists on benthic communities in the Aquatic Urban Conservancy Designation. The beach profile along this shoreline has become steeper over time with the construction of the BNSF Railroad line seawall. In some places, this has resulted in substrates being compacted, which may preclude certain types of benthic organisms from colonizing the substrates. However, further offshore, between about 0 and -10 ft. MLLW, substrates appear to be unconsolidated gravel and sand, which are likely to support a variety of benthic organisms. In addition, the presence of eelgrass along the majority of the Aquatic Urban Conservancy Designation would likely support epibenthic production.~~

~~Marine Mammals~~

~~No data is available on marine mammal occurrences or use of marine waters along the Aquatic Urban Conservancy Designation.~~

Conditions within the Urban Railroad Environment Designation

Sediment

To protect the rail line, a fitted stone seawall was constructed in the foreshore area. This seawall and the subsequent culverting of drainages into Possession Sound have ~~resulted in~~ effectively eliminat~~ing~~ed the primary source of sediment supply to the ~~City of~~ Mukilteo shoreline. The result is low sediment transport volumes and fewer net-shore drift indicators. These conditions have resulted in "sediment-starved" beaches along the Urban Railroad Designation (~~DOE~~Ecology 1992).

Net shore drift along the Urban Railroad shoreline is generally north and northeastward around Elliot Point. Net shore drift along the Urban Railroad's western shoreline is driven by southerly and southwesterly waves (~~DOE~~Ecology 1992).

Banks and Bluffs

Within the City of Mukilteo, the majority of the shoreline occurs immediately adjacent to steep bluffs. Stressors on banks and bluffs include development activities, passive human intrusion, and changes in hydrology.

Streams

All 10 streams that occur in the Urban Railroad Environment Designation are culverted under the BNSF Railroad tracks, and most are steeply sloped, with erosion resulting from improper surface water drainage. Table 11 of the *Mukilteo Inventory and Characterization* identifies the existing conditions of the streams ~~that occur~~ within the Urban Railroad Environment Designation. Open channel portions of the creeks and drainages within the Urban Railroad Environment Designation have been classified and mapped as part of critical area ordinances.

Conditions within the Urban Lakefront Environment Designation

Key management issues for Lake Serene ~~discussed~~ described in this section include:

- Preservation and improvement of water quality in the context of degradation increased contaminant inputs from surface water runoff.
- Preservation and enhancement of native aquatic vegetation.
- Preservation and enhancement of native woody vegetation in the nearshore environment.
- Alteration of key habitat characteristics caused by shoreline modifications (docks, piers and bulkheads).

Preservation and improvement of water quality is a~~the~~ key management issue for Lake Serene. Additional development pressures throughout the Lake Serene watershed has increased contaminant input and modified natural water quality processes. Increased impervious surface in upland areas as well as alteration and loss of wetland habitat around the lake have eliminated areas for nutrient storage and cycling, biotic uptake and altered the basin's natural water and sediment transport regimes. Under natural conditions, Lake Serene would have had very minimal sediment input, but road construction, residential development and changes in peak flow have increased sediment delivery to the lake, which is potentially a reason for the higher levels of phosphorus measured since 2006 (Snohomish County, 2008).

Preservation of a native community of aquatic vegetation throughout the lake bottom substrate is a key issue for Lake Serene. Aquatic vegetation stabilizes sediments during mixing periods and other disturbances, reducing the amount of phosphorus and other limiting nutrients released into the epilimnion. Actions taken in 2005 to control Eurasian water milfoil have proven highly successful, as scuba surveys in subsequent years have shown a water milfoil-free environment. Preservation of the native aquatic vegetation and further actions to prevent and control invasive species should be priorities for Lake Serene.

Preservation of existing woody vegetation along the lakeshore is a key issue for Lake Serene. Shoreline vegetation provides habitat for numerous wildlife species, and additionally provides shelter to the lake from excessive wind mixing and reduces the potential for releasing phosphorus trapped in the lake substrate and hypolimnion into the epilimnion during seasonal lake mixing periods. Although mixing events between the bottom and top waters are common in Lake Serene, the phosphorus releasing impacts of these events are largely controlled by the dense aquatic vegetation present throughout much of the lake bottom substrate. Implementation and enforcement of the City's Critical Areas Ordinance (CAO) regulations pertaining to buffer standards for all land use development activities are critical to ensuring good water quality in Lake Serene. In addition, the City should consider other means, including incentives programs, to preserve and enhance native woody vegetation in the shoreline environment.

Shoreline modifications are another significant concern along the Lake Serene shoreline. The proliferation of residential docks, piers, and bulkheads along the lakeshore has reduced the quality of the nearshore habitat. Much of the dense woody vegetation that originally lined the Lake Serene shoreline has been replaced by structurally simple docks and bulkheads causing a decrease in woody debris, overhanging vegetation, and detrital inputs. Docks and piers create artificial shading that reduces the amount of light available to phytoplankton and aquatic macrophytes, which can decrease primary productivity and ultimately reduce fish and invertebrate diversity (Kahler~~,~~ 2001).

Bulkhead construction has also eliminated shoreline vegetation. Bulkheads can change the slope, configuration, and/or substrate composition of the shoreline by cutting off upland sediment supply and increasing erosion on neighboring properties without bulkheads. In very low energy environments like Lake Serene, these effects tend to be localized, but they can still have adverse implications for aquatic habitat (Kahler~~,~~ 2000).

Historically, docks and piers were constructed of chemically ~~wood~~ treated wood, which is a source of polycyclic aromatic hydrocarbons (PAHs) and heavy metals. These preservatives can leach into the water column and become toxic to aquatic organisms. The majority of docks are likely to be built with chemically-treated wood on Lake Serene and it is expected that most new docks will be constructed using alternative, less harmful materials such as metal.

~~**Introduction**~~

~~This restoration plan provides additional information regarding shoreline restoration opportunities in the City's shoreline jurisdiction, including Lake Serene in the City's potential annexation area. This discussion supplements and updates the information provided in the City's Preliminary Draft Shoreline Master Program (2007). The Lake Serene area is located in unincorporated Snohomish County and within the City's Municipal Urban Growth Area (MUGA) referred to as the South Mukilteo Annexation Area. A citizen's group gathered over 2,000 signatures from the South Mukilteo PAA property owners in favor of annexation into the City. In addition, citizens south of 148th Street have requested to be annexed by the City of Mukilteo. The cities of Mukilteo and Lynnwood are working on where to split the Meadowdale Gap Area (City of Mukilteo, 2010).~~

No Net Loss and Restoration

The Washington State Shoreline Management Act (RCW 90.58) policy of achieving both shoreline utilization and protection is reflected in the provision that "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 DOE~~Ecology and environment of the shoreline area and any interference with the public's use of the water." In RCW 90.58.020, the legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources, and that there is a great concern throughout the state relating to their utilization, protection, restoration, and preservation.

To this end, RCW 90.58.100 requires that shoreline master programs include:

- A conservation element for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection, and
- An historic, cultural, scientific, and educational element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values.

The guidelines for implementing the SMA suggest that "no net loss" of ecological function can be achieved primarily through regulatory mechanisms, including mitigation requirements with restoration incentives, and voluntary actions also playing an important role in achieving no net loss of ecological functions. ~~DOE~~Ecology's Shoreline Master Program Guidelines (Chapter 173-26 WAC) define restoration as "the reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including, but not limited to, re-vegetation, 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 (WAC 173-26-020[~~27~~33]).

Restoration projects that shift the location of the shoreline can inadvertently create hardships for property owners, particularly in urban areas. Hardship may occur when a shoreline restoration project shifts ~~Shoreline Management Act~~SMA regulations into areas that had not previously been regulated under the A~~a~~ct, or shifts the location of required shoreline buffers. The intent is to provide relief to property owners in such cases, while protecting the viability of shoreline restoration projects.

This chapter serves as the basis for SMP actions from which enhancement and restoration projects can be selected, but should not be interpreted to discourage or disallow other opportunities that could be undertaken in the future. The first section provides general recommendations regarding nearshore

enhancement/restoration, while the second section provides options for potential site-specific enhancement projects, as Mukilteo's shoreline was heavily impacted by the railroad, commercial and industrial development before the SMA was adopted in 1974. In most cases, enhancement project actions will need to be undertaken by the state or multiple agencies as opportunities arise with redevelopment or as related to the Essential Public Facilities (EPFs). These projects are consistent with the policies, environmental designations, and regulations contained in this SMP.

Potential Shoreline Enhancement and Restoration Projects by Drainage Basin

More specific opportunities exist for improving both public access to the City's shoreline and ecological functions within the City's shoreline planning area. Two regional efforts provide the framework for developing this section of the City of Mukilteo ~~Shoreline Master Program~~SMP.

The first of these efforts is the Snohomish County Marine Resources Advisory Committee's work on identifying and prioritizing potential nearshore enhancement/restoration sites in Snohomish County through the *Snohomish County Marine Resources Advisory Committee Strategic Plan 2011-2016* (Snohomish County MRC ~~– Edwards 2004~~2011). Secondly, ~~during 2004, the~~ WRIA 8 Salmon Recovery Council ~~worked on identifying~~identifies actions and projects for the watershed, which can be found in the 2005 and 2017 update of the *WRIA 8 Chinook Salmon Conservation Plan* ~~*Watershed Recovery Plan*~~. These efforts ~~have~~ complement~~ed~~ the City's efforts undertaken in conjunction with this SMP, and thus are incorporated into this chapter to create the City of Mukilteo *Restoration Plan*.

Following are project descriptions for protection, enhancement, and restoration of shorelines within Mukilteo and its MUGA (see Figures 12 and 13) ~~area~~. In combination, these projects present opportunities for restoration and enhancement for shorelines. Use of this information does not preclude or limit the identification of additional projects that may result from project experience or new scientific data gained.

General Goals in the Marine Resources Strategic Plan

The following general recommendations are based on the *Snohomish County Marine Resources Advisory Committee Strategic Plan 2011-2016*. This document provides the general direction for restoration projects.

1. Establish protection and restoration priorities to guide projects and improve biodiversity in Snohomish County nearshore areas.
2. Protect and monitor key marine indicator species and habitat, and promote sustainable harvest practices.
3. Monitor invasive species and support research and removal efforts.
4. Identify water quality indicators, critical areas of impaired water quality, and improvement priorities.
5. Continue the Mussel Watch Program.

General Recommendations in the WRIA 8 ~~Watershed~~ Chinook Salmon ~~Recovery~~ Conservation Plan

The following general recommendations are based on the *2005 Water Resources Inventory Area (WRIA) 8 Chinook Salmon~~Watershed~~ Conservation Plan*, Volume II – Chapter 13 and the *2017 WRIA 8 Chinook Salmon Conservation Plan*. ~~This~~ These documents provide~~s~~ the general direction for restoration projects.

1. BNSF Railroad has armoring along all of Mukilteo's bluffs so it is important to~~.~~ p~~P~~rotect the remaining feeder bluffs that supply sediment and support littoral habitat creation. ~~BNSF Railroad has armoring along all of Mukilteo's bluffs. Sand and gravel material should be added to the nearshore.~~
2. Reduce bank hardening, especially in areas where the armoring falls within the tidal zone and/or separates a sediment source from the nearshore environment. Such actions would help restore natural shoreline accretion and depletion processes and support littoral habitat creation.
3. Protect remaining Marine Riparian Vegetation (MRV) to maintain overhanging cover and terrestrial inputs (e.g., leaf litter, invertebrates) for marine species and their prey through critical area and clearing ordinances.
4. Plant vegetation along the shoreline near the Mean Higher High Water (MHHW) line to provide overhanging cover and terrestrial inputs (e.g., leaf litter, invertebrates) for marine species and their prey.
5. Reduce number and coverage of overwater structures (e.g., docks, piers) in order to reduce segmentation of the shoreline and effects on both habitat-forming processes and marine species behavior.
6. Protect or re-connect small stream mouths to create pocket estuaries (Figure 11).
7. Re-connect backshore areas (e.g., marshes, wetlands) to contribute to shoreline habitat diversity and terrestrial inputs.
8. Protect sediment and water quality, especially near commercial and industrial areas, from fuel spills, discharge of pollutants, removal of septic systems, limit~~ing~~ fill and dredging, etc.

Figure ~~9~~11: Mukilteo Stream and Creek Location Map

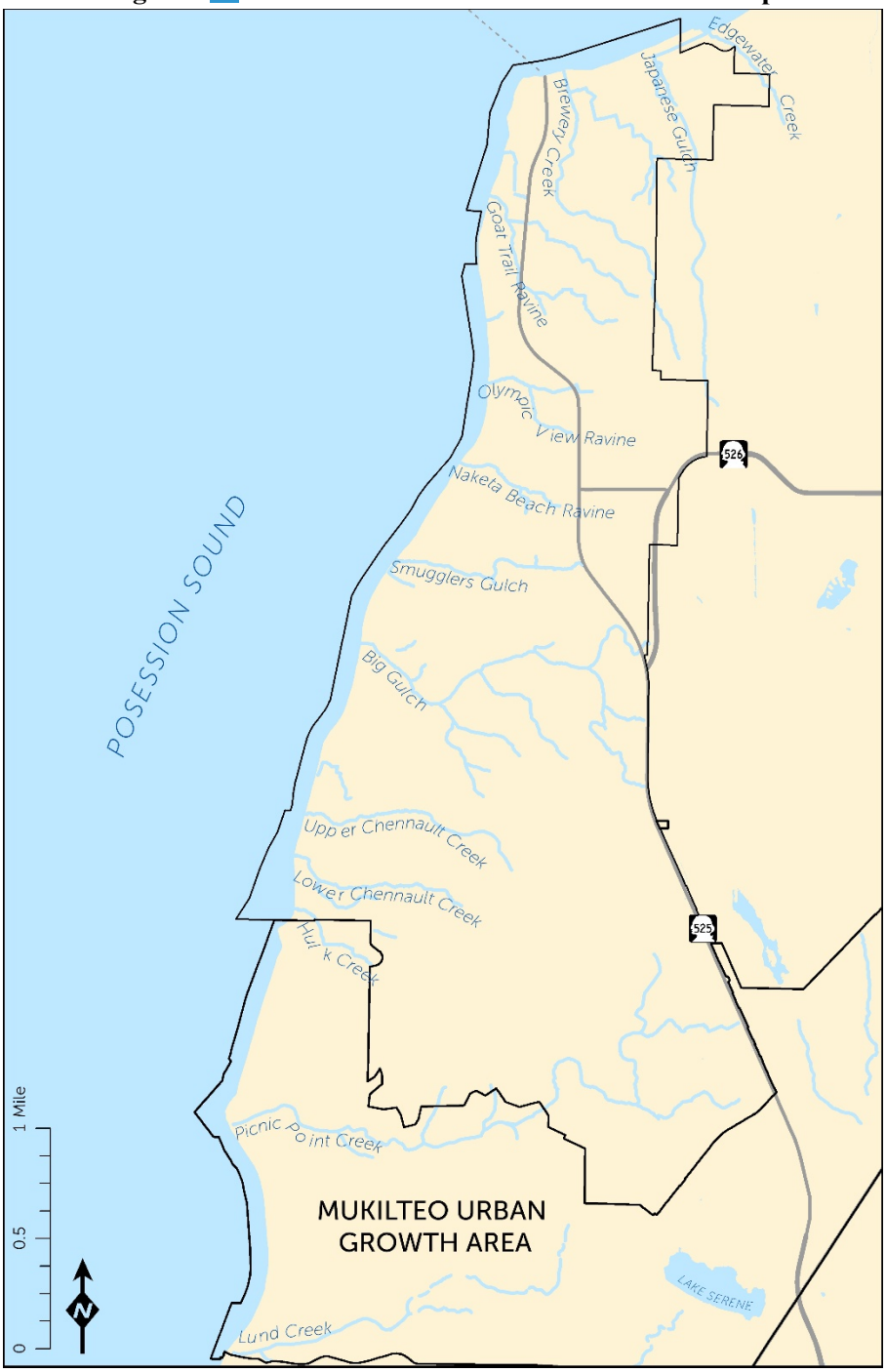


Figure ~~10~~12: Summary of Urban Waterfront Enhancement Projects [revised]

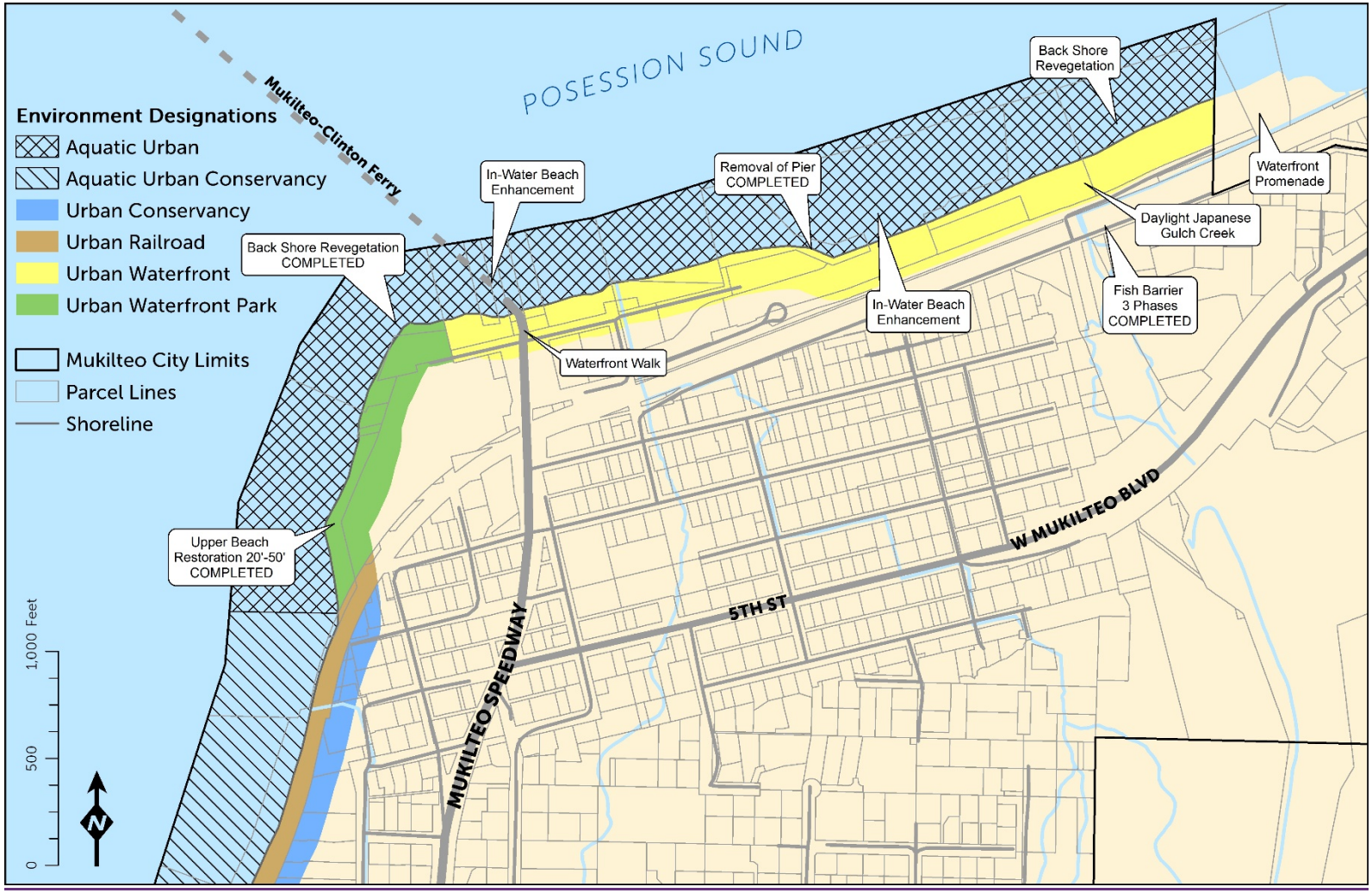


Figure ~~11~~13: Summary of Urban Conservancy Enhancement Projects [revised]

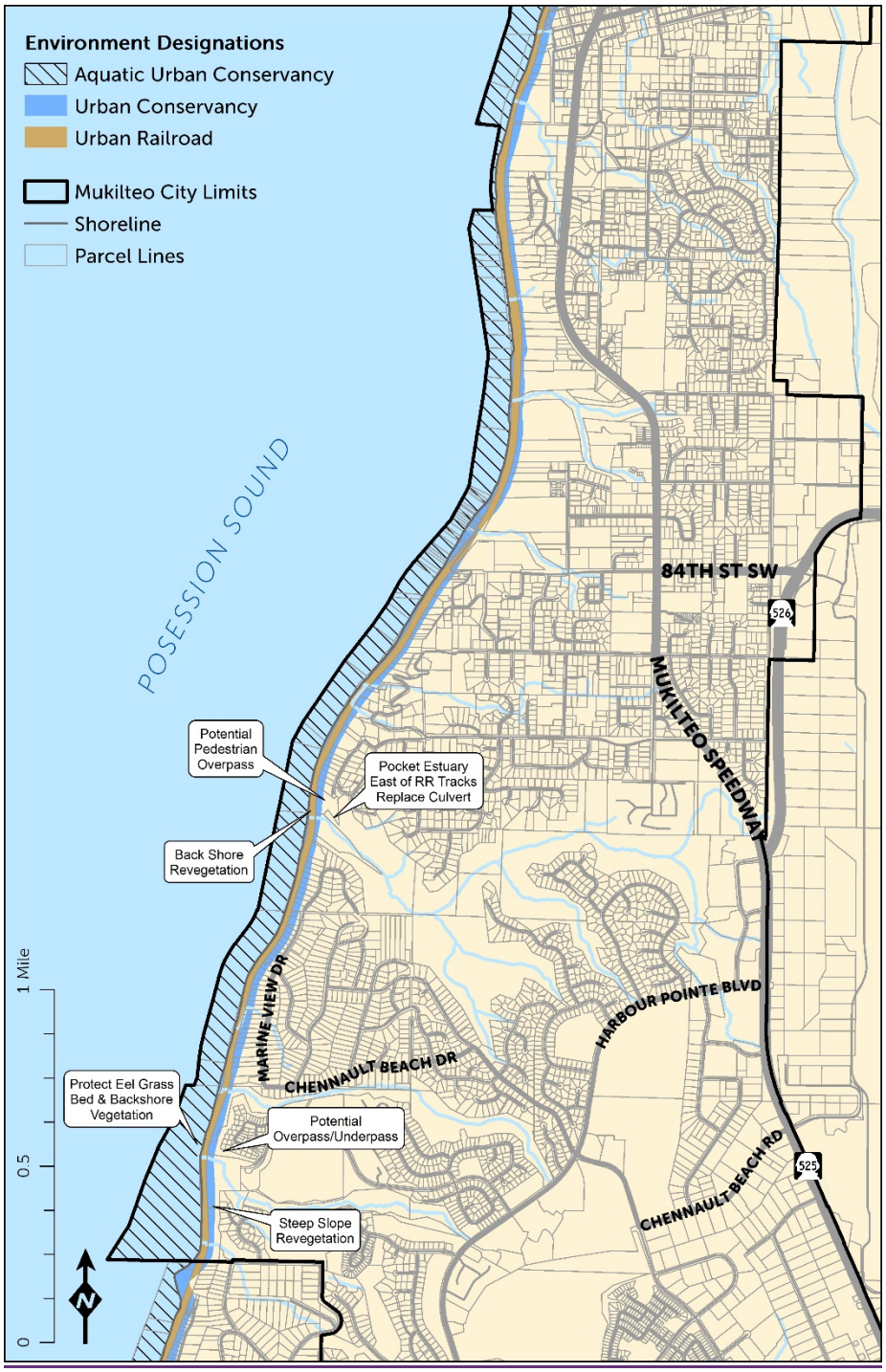
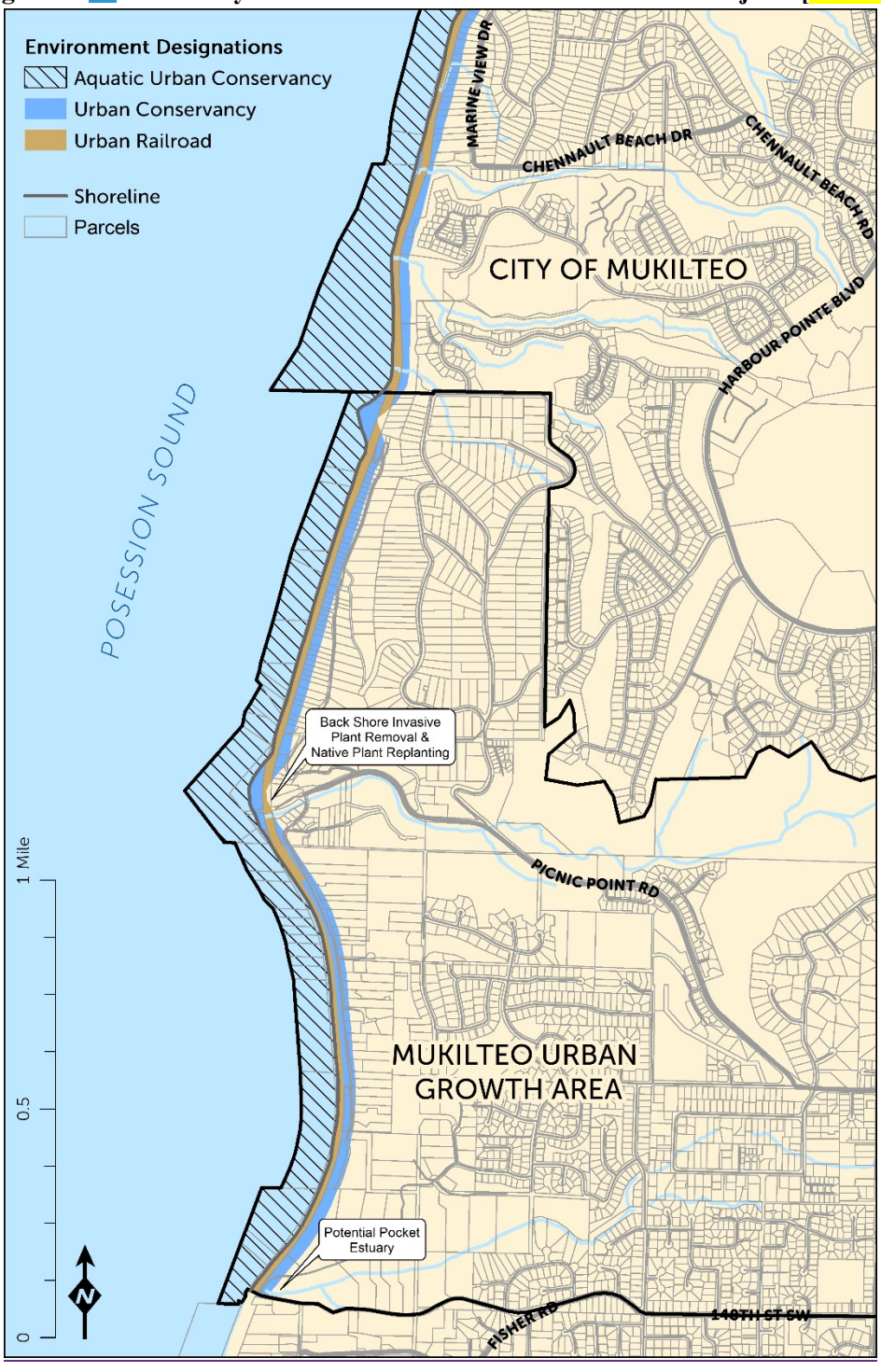


Figure ~~12~~14: Summary of Urban Growth Area Enhancement Projects [revised]



Urban Waters 1 & 2 (WRIA 7 & 8)
Japanese Gulch Creek & Tidelands

Site Type:	Enhancement and Restoration
Shoreline Environmental Designation:	Urban Waterfront
Watershed:	WRIA 7 (Snohomish)
Drainage Basin Size:	615 acres in Mukilteo 1,000 acres City of Everett
Shoreline Length:	2,922 linear~~l~~ feet
Shore Units/Sub-Reach:	4700-4702
Presence of Fish:	Coho and chum fish bearing with blockages

2005

2018

 2004	 2009

Site Description

~~This site is a sand and gravel accretion beach that is protected from wave action by the old U.S. Air Force pier.~~ Prior to industrial~~, and~~ military, and railroad development along the north Mukilteo shoreline~~at this~~ site, the beach was one of the most productive clam beds in the region, and people continue to harvest shellfish in this area despite potential contamination from stormwater. ~~The shoreline has riprap along the entire length of the old Tank Farm.~~ ~~Documented presence of~~ Dungeness crab ~~is identified~~presence is documented along the entire length of the Mukilteo shoreline. Eelgrass is present on the easternmost portion of the Tank Farm along the sub-tidal shelf and in patches in the lower intertidal portion.

Japanese Gulch Creek, which is a Type 3 stream, flows out onto the beach through a culvert under the Tank Farm and the BNSF Railroad. Coho and chum salmon and cutthroat trout have been ~~known to~~documented entering the stream during fall runs. Above the railroad tracks, the creek flows through a vertical pipe at 5th Street, which prevents upstream fish migration.

The Japanese Gulch watershed has good forest cover north and south of 5th Street; however, the east side is predominantly alder after clearing and re-grading in the 1970s. ~~The sub-tidal area along the western edge of the U.S. Air Force pier is heavily used by gravid female Dungeness crab. Eelgrass is present on the easternmost portion of the Tank Farm along the sub-tidal shelf and in patches in the lower intertidal portion.~~

Several large-scale re-development projects are planned to replace the Mukilteo Tank Farm. These include a Mukilteo multi-modal transportation center that includes the relocated ~~Ferry~~ WSF Terminal and the new Sound Transit Commuter Rail facility. ~~A rail-barge transfer facility was added on the east side of the Tank Farm in the City of Everett.~~ Other mixed-use development and park uses with waterfront access are also planned and ~~-~~adopted in the 2016 *Japanese Gulch Master Plan* and 2016 *Downtown Waterfront Master Plan*.

Planned ~~Potential~~ Projects

In 2016, the City of Mukilteo adopted the *Japanese Gulch Master Plan* and *Downtown Waterfront Master Plan*, which include the following plans to ~~I~~improve the nearshore environment ~~along the Tank Farm by~~:

~~1. Removing creosote piles and riprap that has fallen onto the nearshore.~~
~~2.~~1. Provid~~e~~ing natural beach restoration and enhancement ~~east of the Tank Farm pier~~ to restore the shallower beach profile. ~~(Mount Baker Terminal construction included beach enhancement in 2008).~~
~~3. Restoring the nearshore at the existing terminal after the ferry is relocated.~~
2. Daylight Japanese Gulch Creek where it flows under the Tank Farm and create Japanese Gulch Creek Park to support riparian enhancement.~~, if feasible, and allowing a reduction in the riparian buffer as an incentive to daylighting.~~
~~4.~~3. Restore Japanese Gulch Creek tidal estuary habitat along the shoreline.
~~5.~~4. Improve water quality and public health signage for recreational shellfish harvesting.
~~6.~~5. Protect and enhance riparian buffers and upland forest cover within the Japanese Gulch Creek drainage basin.
~~7. Remove blockages to fish at 5th Street/Mukilteo Boulevard (three phases funded).~~
~~8. Consider pocket estuary or wetland enhancement, or reduce conflict with detention.~~
6. Establish more consistent stream flows and improve in-water habitat.
7. Create a promenade and small park~~s~~ along the downtown waterfront.

Brewery Creek & Tidelands

Site Type:	Enhancement
Shoreline Environmental Designation:	Urban Waterfront
Watershed:	WRIA 7 (Snohomish)
Drainage Basin Size:	292 acres
Shoreline Length:	740 linear~~l~~ feet
Shore Units/Sub-Reach:	4703
Presence of Fish:	Non-fish bearing

Site Description

Brewery Creek is a small Type 4 and 5 stream that drains the older northern and western portion of Mukilteo. Presently, there are no fish present south of Mukilteo Lane, where the stream is culverted ~~and has steep gradients~~. ~~Brewery Creek is culverted intermittently in the older portion of north Mukilteo.~~ Located in a natural ravine with a stream drop of 1 foot in elevation for every 10 feet and with a drop of 90 feet from the upper bank to stream in some places, adjacent development has been setback from the top of the slope. In most cases, riparian vegetation has remained relatively undisturbed.

~~-~~Unfortunately, ~~however,~~ existing legal platted lots (old "paper plats" from the late 1800s or early 1900s, with no regard for natural features) lie within the stream corridor. ~~There may be lots that should not be developed even under reasonable use provisions because significant impact to the stream would be likely.~~ In the lower area between the BNSF Railroad tracks and Puget Sound, Brewery Creek is culverted under the Tank Farm along Park Avenue. Sand lance spawning under an overwater walkway is documented just west of the stream where bulkheads were moved back to allow for a more natural beach profile when the Silver Cloud Inn was developed.

Potential Projects

In 2016, the City of Mukilteo adopted the *Downtown Waterfront Master Plan*, which includes plans to potentially restore Brewery C~~c~~reek to improve the nearshore environment by ~~Enlarge the culvert to 48 inches with a tide gate to handle a 100 year storm event.~~potentially daylighting ~~Brewery~~the c~~-C~~reek and creating Brewery Creek Park to support riparian and estuarine restoration.

~~Work with Washington State Ferries to relocate the ferry terminal/dock to reduce propeller wash in this area of the shoreline.~~
~~Work with the Port of Everett to improve and enlarge the fishing pier for improved public access.~~

~~Improve the beach profile for sand lance spawning.~~

~~Explore designating a dive park and/or marine management area off of Park Avenue Community Beach east of the new Multimodal facility.~~

Mukilteo Lighthouse Park & Tidelands

Site Type:	Enhancement & Restoration (completed)
Shoreline Environmental Designation:	Urban Waterfront Park
Watershed:	WRIA 8
Drainage Basin Size:	70 acres
Shoreline Length:	2,913 linear~~l~~ feet
Shore Units/Sub-Reach:	2475-2476/8.0
Presence of Fish:	Non-fish bearing

Site Description

Mukilteo Lighthouse Park was transferred from the Washington State Parks Department to the City of Mukilteo in 2002. This park features more than 1,000 feet of sand and gravel beach. Marine riparian vegetation was limited to small patches of Nootka rose, dune ryegrass, and gumweed. Former park facilities along the shoreline included a fair-weather public boat launch, scenic view parking spaces, restrooms, picnic tables, fire pits, and a paved walking path.

The *Lighthouse Park Master Plan*, which includes beach restoration as a major element, was adopted in February 2004. Phases 1, ~~and~~ 2, and 3 of the Master Plan improvements have been ~~implemented~~completed, including construction of public picnic shelters and play equipment, installation of native vegetation and driftwood along the upper beach, and installation of several interpretive signs and kiosks. A large, continuous and dense patch of eelgrass is situated off the southern beach; several other patches of eelgrass are found to the west on the western sub-tidal shelf.

Potential Project

~~The City will be applying for state matching funds to implement Phases 3 and 4 of the Master Plan to complete improvements in the central portion and eastern edge of the park, including removing the asphalt parking area and installing a great lawn and a pedestrian access off of SR525.~~ In 2016, the City of Mukilteo adopted the *Downtown Waterfront Master Plan*, which includes plans to potentially relocate the existing boat launch to allow the creation of open space in the center of the park.

Big Gulch Creek Outfall

Site Type:	Enhancement & Restoration
Shoreline Environmental Designation:	Urban Conservancy
Watershed:	WRIA 8
Drainage Basin Size:	1,600 acres
Shoreline Length:	1,341 linear~~l~~ feet
Shore Units/Sub-Reach:	2481/8.05
Presence of Fish:	Coho and Chum salmon bearing

Site Description

Big Gulch Creek is a Type 3 stream that drains the largest drainage area within the City of Mukilteo and its urban growth area. This drainage is a complex system with many headwater wetlands in the upper reaches and slope wetlands connecting directly to the creek within the ravine; these wetlands provide the creek with flows throughout the year. The portion of the drainage within the ravine has relatively mature upland forest cover.

The lower reaches of the stream are used by Coho and chum salmon, and sea-run cutthroat. The stream flows under the BNSF railroad tracks to the beach through a 60-inch corrugated metal culvert. The Mukilteo Water and Wastewater District owns and operates a sewage treatment plant located on the south bank of the lowest reach of Big Gulch Creek. The City of Mukilteo owns most of the undeveloped open space within the drainage except for private property north of the creek at the base of the ravine. The headwaters of Big Gulch Creek drain the west end of Paine Field Airport.

Chemical spills in the vicinity of Paine Field in 1993, 1996, and 2000 resulted in downstream fish kills, including nine to ten Coho salmon in 2000. Puget Sound anglers and local residents have demonstrated a stewardship commitment for Big Gulch Creek by conducting stream surveys, planting Coho salmon, and counting returning salmon.

Eelgrass extends northward from the stream outfall. Eelgrass beds are also present south of the accreted beach area and creek outfall. The beds are typically two strips of eelgrass along the sub-tidal portion of Marine View Drive. The tidelands are held in private ownership or by BNSF Railroad, except for one Snohomish County parcel from south of Naketa Beach and south to Possession View Tidelands.

Big Gulch stream was repaired from Harbour Pointe Boulevard to approximately 52nd Avenue West. Work included adding large woody debris, stream bed gravel, creations of resting pools, and rechannelization in some places. The work was completed cooperatively with the City of Mukilteo, the Mukilteo Water and Sewer District, and ~~the Department of Fish and Wildlife~~WDFW. A high-flow stormwater by-pass has also been installed in the lower reach of the g~~G~~ulch to take the high-flow storm events out of the stream and maintain stream flows for fish passage.

Potential Projects

1. Acquire private property north of stream outlet and explore concept of a pocket estuary or freshwater wetland east of the railroad tracks.
2. Improve in-water habitat and control stream flows.
3. Eliminate fish blockages or mitigate with fish passage projects.
4. ~~Acquire private property north of stream outlet and explore concept of a pocket estuary or freshwater wetland east of the railroad tracks.~~
5. Improve the connectivity of Big Gulch Creek with the nearshore by replacing the existing railroad culvert with a large open bottom culvert or trestle.
6. Beach enhancement and additional marine riparian planting may be required when surface water or sewer outfall improvements are made, if warranted from the project's impacts.
7. Provide access over the BNSF Railroad when possible with a pedestrian overpass connection and provide beach enhancement and additional riparian vegetation planting if able to obtain BNSF approval to allow public access to their tidelands.

Upper and Lower Chennault Beach Creeks, and Possession View Park and Tidelands

Site Type:	Enhancement & Restoration
Shoreline Environmental Designation:	Urban Conservancy
Watershed:	WRIA 8
Drainage Basin Size:	777 acres
Shoreline Length:	948 linear~~l~~ feet
Shore Units/Sub-Reach:	2484/8.05
Presence of Fish:	Non fish bearing

Site Description

The Upper Creek flows through a 24-inch (2-foot) concrete culvert perched ~~one~~ 1 foot high. The Lower Creek flows through two 42-inch concrete culverts that are not perched. These streams are in good condition, within ravines approximately 50 feet deep, but have high flow incisions and side slope failures along these creeks. The City owns 7.4 acres of upland parkland and 52 acres of tidelands between Upper and Lower Chennault Beach Creeks. The eelgrass bed(s) on the subtidal shelf along with four bands of eelgrass on the intertidal area comprise one of the larger beds along the western shoreline. Lower Chennault Creek has a small amount of accretion in the intertidal shoreline, but there is no riparian vegetation associated with this since there is no upper shore area.

Potential Project

1. The City envisions an opportunity to provide access to the beach using a pedestrian overpass/underpass near Lower Chennault Beach. An upland beach area would need to be created through beach enhancement. Marine riparian vegetation could then be planted. An underpass might allow for a pocket estuary to be created on the east side of the railroad tracks. Access to the beach would be limited to low tides. Pedestrians would need to be channeled to a designated trail system to protect streamside vegetation and a riparian buffer on the north side of the stream.

Norma Creek

Site Type:	Enhancement and Restoration
Shoreline Environmental Designation:	Urban Conservancy
Watershed:	WRIA 8
Drainage Basin Size:	939 acres
Shoreline Length:	7,300 linear~~l~~ feet
Presence of Fish:	Coastal cutthroat trout, Coho salmon

Site Description

Norma Creek is the outlet stream of Lake Serene. The stream starts at the lake's northwestern shore, north of the public boat launch, and conveys flows via a short channel before entering a long culvert that passes under Serene Road and Beverly Park Road. The culvert outlet is at the 138th Street SW and 48th Place W intersection, where a large wetland contributes flow to the stream. At 59th Avenue W., Norma Creek receives additional flow from a tributary stream. Norma Creek extends approximately one mile from 59th Avenue W to Puget Sound through a steep, deeply incised ravine. Several left-bank tributary streams to Norma Creek are mapped within the lower basin, passing through smaller ravines to the south of the main stem ravine. At Norma Beach, the stream cuts through steep coastal bluffs and flows through a culvert under the railroad tracks to enter Puget Sound.

The upper reaches of the Norma Creek basin consist of suburban residential neighborhoods and commercial development along the east and west side of the Highway 99 corridor. The lower reaches of the stream are mostly undeveloped.

Maintaining or reducing phosphorus inputs in Lake Serene from current levels will further support the water quality and integrity of Norma Creek. Approximately one mile downstream of Lake Serene, Norma Creek supports spawning habitat for coastal cutthroat trout and reported populations of Coho salmon. The upper portions of the stream are likely too steep to support salmonids.

The quality of salmon habitat in Norma Creek is limited by excessive peak flows that scour the streambed and deposit excess sediments in the lower reaches. Development of the basin has contributed to poor water quality in Norma Creek, particularly high levels of fecal coliform.

Potential Projects

Restoration opportunities for Norma Creek include:

1. Daylight Norma Creek at the Lake Serene outflow to improve water quality and habitat.
2. Retain existing native vegetation where it is present along the shoreline.

3. Protect and restore wetlands adjacent to Lake Serene that serve to improve water quality in Norma Creek.
4. Revegetate eroded stream banks to reduce sources of sediment.
5. Upgrade the stormwater system in areas where runoff is contributing to erosion in Norma Creek. Several stormwater system upgrades, stream restoration, and fish blockage removal projects have been identified at locations outside of the shoreline area (Snohomish County Drainage Needs Report December 2002).

~~Opportunities and Constraints~~

~~Uses and habitats within the Urban Waterfront and Urban Waterfront Park Environment Designation, as well as the Urban Conservancy, Aquatic Urban, Aquatic Urban Conservancy, Urban Railroad, and Urban Lakefront Environment Designations can be found in the *Mukilteo Inventory and Characterization*. In addition, these tables identify potential opportunities and constraints for improving shoreline functions and public access.~~

~~Introduction~~

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 (RCW 90.58). ~~This policy~~It ~~is~~ designed to ensure "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."

RCW 90.58.020 also states, that "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." Comprehensive Planning, under the Growth Management Act, and zoning are the most widely used tools ~~that are~~ companioned with the Shoreline Master Program. The Comprehensive Plan provides a guide to control and assure the designation of uses appropriate for waterfront lands. The preservation of land for water-dependent uses must be viewed on a statewide basis and not limited to local communities. Any program to preserve areas for water-dependent uses needs to be based on a scientifically sound inventory of sites.

According to the ~~*shoreline*~~ *Master Program Gguidelines*, WAC 173-26-186(8)(d), the City SMP is required to evaluate and consider cumulative impacts of reasonably foreseeable future development on the shorelines of the state as follows:

"To ensure no net loss of ecological functions and protection of other shoreline functions and/or uses, master programs shall contain policies, programs, and regulations that address adverse cumulative impacts and fairly allocate the burden of addressing cumulative impacts among development opportunities. Evaluation of such cumulative impacts should consider: (i) current circumstances affecting the shorelines and relevant natural processes; (ii) reasonably foreseeable future development and use of the shoreline; and (iii) beneficial effects of any established regulatory programs under other local, state, and federal laws."

In addition, the guidelines require evaluation of the effects caused by:

- Unregulated activities
- Developments that are exempt from a shoreline substantial development permitting
- Residential bulkheads, residential piers, and runoff from newly developed properties. The guidelines also require that particular attention be paid to platting or subdividing property and installation of infrastructure that could establish a pattern for future shoreline development.
- Mukilteo's ~~Shoreline Master Program~~ SMP incorporates what is a reasonable future, economics, characteristics of development impacts and the timing associated with the City's future shoreline. The pattern of redevelopment within the urban waterfront is the most significant change and the

SMP is meant to guide that change. Other issues related to the railroad, sewer treatment plants and outfalls, other utilities and existing legally platted lots, or re-development of single-family homes have also been considered.

~~Summary of~~ Cumulative Impacts Assessment

This section provides an assessment of the expected future negative impacts of development as well as expected positive impacts from restoration projects and the likelihood of successfully achieving "no-net-loss" as discussed in Chapter 6. Shorelines of the state within the City of Mukilteo and its annexation area are largely developed in residential, commercial, and water-dependent uses. Outside of the marine Aquatic Urban Environment shoreline designation, there are few opportunities for new development within the shoreline jurisdiction~~, with the exception of Segment A~~. Within this northern shoreline, initial ~~planning~~ efforts for ~~Mukilteo Landing~~shoreline redevelopment are underway. Table 6~~2~~ identifies the changes that are expected to occur on the northern shoreline of Aquatic Urban Environment. With a reduction in the number of piles and overwater coverage, as well as the opportunity for beach enhancement and stream day-lighting, the condition of the northern shoreline of Mukilteo will be improved. With the water-dependent and water-oriented elements of development in mind, the SMP was developed to allow for these elements while ensuring that shoreline functions and resources are considered and that shoreline mitigation for all required impacts occurs.

Table 6~~2~~: Summary of Cumulative Impacts for Mukilteo's Urban Waterfront and Urban Waterfront Park Environment Designations

	Existing Condition	Future Condition	Total (+/-)	% Change	Net Benefit (+) or (-)
No. of ~~Pilings~~Piles	4,662	~~1,098~~~500	~~-3,564~~4,000	~~-76%~~90%	+
Pier Overwater Coverage (square feet)	247,710	~~218,260~~117,710	~~-29,450~~130,000	~~-11.8~~53%	+
Ripr~~-R~~ap /Seaw~~-W~~all Shoreline (linear~~l~~ feet)	22,225	19,975	-2,250	-10%	+
Beach Enhancement (linear~~l~~ feet)	4,075	6,325	+2,250	+55%	+
Shoreline Eelgrass (square feet) *	–	–	–	–	–
Forage Fish Spawning Sites	4	5	+1	25%	+

**Note: Accurate data ~~is~~ are not available on eelgrass beds.*

The results of this analysis clearly shows that there will be a net benefit to the shoreline in Mukilteo as re-development within the Urban Waterfront and Urban Waterfront Park Environment Designations takes place.

~~The net benefit in Urban Conservancy and Aquatic Urban Conservancy Environment along the western shoreline if BNSF adds a third track is less clear and depends on mitigation, due to further impacts to the nearshore that is currently impacted and often only a narrow shelf.~~

Within the marine ~~shoreline segments B, C, and D, as well as within the~~ and Lake Serene shoreline areas, changes in development will primarily be the result of redevelopment activities. Due to the existing SMP environmental constraints of large lots and the few undeveloped lots in residential areas of the marine shoreline, it is anticipated that residential density will not increase significantly above current levels. On the limited number of vacant residential lots within the marine ~~Segment B, C, and D S~~shorelines, development of residential structures may trigger the shoreline variance process due to the presence of critical areas (primarily steep slope areas) within the undeveloped lots.

The ~~proposed~~ 2011 SMP provide~~d~~s a new system of shoreline E~~e~~nvironment D~~d~~esignations that establishe~~d~~s more uniform management of the City's shoreline. The shoreline E~~e~~nvironment D~~d~~esignations remain the same in this updated SMP. The system of shoreline E~~e~~nvironment D~~d~~esignations and use regulations in the ~~proposed~~ updated SMP are~~is~~ consistent with the established land use pattern, as well as the land use vision planned for in the City's comprehensive plan, zoning, and other long-range planning documents. Based on this consistency, it is unlikely that substantial changes in the type of shoreline land uses will occur in the future.

The ~~updated~~ development standards and regulation of shoreline modifications provide~~s~~ more protection for shoreline processes, as they are ~~. The updated standards and regulations are more restrictive~~more restrictive of activities that would result in adverse impacts to the shoreline environment. In addition, the *Shoreline Restoration Plan* developed as part of the SMP ~~Update~~ provides the City and other agencies with opportunities to improve or restore ecological functions that have been impaired as a result of past development activities. Furthermore, the ~~proposed~~ updated SMP is meant to ~~compliment~~ complement several City, state, and federal efforts to protect shoreline functions and values.

Based on assessment of these factors, the cumulative actions taken over time in accordance with the ~~proposed~~ updated SMP are not likely to result in a net loss of shoreline ecological functions from existing baseline conditions. This conclusion is based on an assessment of the three factors identified in the ~~DOE~~Ecology guidelines for evaluating cumulative impacts:

- Current circumstances affecting the shorelines and relevant natural processes
- Reasonably foreseeable future development and use of the shoreline
- Beneficial effects of any established regulatory programs under other local, state, and federal laws

As a point of emphasis, it is expected that the ecological functions in ~~Segment A "~~the Urban Waterfront~~"~~ and ~~"~~Aquatic Urban~~"~~ E~~e~~nvironment Shoreline Designations will improve due to restoration efforts proposed for over 4,000 linear~~l~~ feet along the shoreline with re-development and shoreline restoration and enhancement. In concert with implementation of these restoration actions and additional restoration actions throughout the city, the regulatory provisions of the SMP ~~would~~ should ~~serve to~~ improve the overall condition of shoreline resources in the city.

~~Summary of~~ Findings

The ~~proposed~~ updated ~~*Shoreline Master Prog*~~SMP~~*ram*~~ contains many positive regulations ~~tory changes~~ that address cumulative impacts. In summary, the SMP prohibits:

- Bulkheads, except replacements, that are subject to wave run-up

- Landfill, except for public access/recreation, restoration, or mitigation purposes
- Piers outside of the Urban Waterfront environment
- Removal of vegetation on steep/unstable slopes within the shoreline

The ~~*Shoreline Master Program*~~SMP requires:

- Public access; unless not practicable due to security issues and safety
- Protection of nearshore habitats
- Cumulative impact assessments and a requirement that new projects result in no net loss
- Backshore vegetation enhancement where possible

Because of Mukilteo's urban waterfront, past development had degraded the shoreline~~, then~~ so re-development occurring in this shoreline designation area does not constitute a net loss of ecological functions. The minor site-specific impacts can be avoided or reasonably mitigated in association with the process of project environmental review and beach enhancement, the day-lighting of Japanese Gulch Creek and re-vegetation of the backshore will improve the ecological functions along the shoreline.

Causes of Shoreline Impacts

Over time the most likely impacts to the Mukilteo shoreline could come from various forms of shoreline development including shoreline armoring, overwater structures and piling~~s~~, ramps, stormwater and wastewater inputs, disruption of the tidal zone, and loss of riparian vegetation. How these forms of development can impact the shoreline environment is described below. The subsequent sections review the likely impacts on 6 elements of the environment~~al~~ consistent with adopted SEPA policy and procedures.

- **Shoreline armoring**. Shoreline armoring can alter beach sediment size/type, decrease sediment abundance, increase wave energy, and reduce water quality from flow alteration and accumulation of drift material, including macro algae blooms. Shoreline armoring can alter plant and animal assemblages, including loss of eelgrass and copepods, increase beach scouring and lowering of beach line, create loss of shallow nearshore habitat and connectivity, and alter shoreline hydrodynamics and drift.

- **Over-water structures and piling~~s~~.** Over-water structures can cause altered beach sediment size/type, decreased sediment abundance, light limitation/alteration, declines in water quality from flow alteration, and accumulation of drift material. Over-water structures can alter plant and animal assemblages and alter access to shallow nearshore corridors.

- **Boat Ramps.** The presence of boat ramp, stairways and other similar structures can alter beach sediment size/type as well as sediment distribution patterns. Ramps can also alter plant and animal assemblages and alter shoreline hydrodynamics and drift.

- **Stormwater-wastewater inputs.** Uncontrolled stormwater-wastewater inputs can cause low dissolved oxygen, contaminant loading, nutrient and toxics loadings, physical scouring from increased runoff, increased shoreline erosion from poor stormwater conveyance/maintenance, and alteration of beach hydrodynamics. Uncontrolled stormwater-wastewater inputs can alter plant and animal assemblages, including increased macro algae blooms (e.g., leaf lettuce), damage habitat due to eelgrass declines from smothering, anoxia, shading, forcing habitat shifts due to blooms, and accumulation of nutrients.

- **Disruption of tidal zone.** Land filling and dredging below the MHHW line may result in altered beach sediment size/type, decreased sediment abundance, and increased wave energy. Land filling and dredging can alter plant/animal assemblages, and result in loss of shallow nearshore corridor, loss of riparian habitat, beach scouring and/or lowering, and loss of connectivity.
- **Loss of riparian vegetation.** Effects of riparian vegetation loss can include increased temperature and reduced organic input (food web). Loss of riparian vegetation can reduce shade, increase erosion, and reduce the availability and function of large woody debris, including organic material availability. These stressors to the shoreline environment may be the result of individual actions or as part of system developments, such as residential development and development of streets and utilities.

On a shoreline planning level scale, and taking into account the drainages into the Mukilteo shoreline, activities in the City's shoreline jurisdiction contribute to past, present, and future opportunities and constraints for maintenance, restoration, and protection of ecological conditions and fish and wildlife habitat. The Mukilteo shoreline ~~planning area~~ has been subject to a series of activities and actions over time including shipping, railroad, timber harvest, munitions depot, fisheries harvest, and filling and dredging. In the City of Mukilteo, population is projected to increase to 21,812 persons by 2035~~22,000 persons by 2025~~, and additional land may be annexed down to 148th Street, as well as part of the Meadowdale Gap Area that includes Norma Beach. Collectively, these activities are likely to alter basin conditions that impact ecological functions. However, the City has taken proactive measures to protect much of the remaining undeveloped critical areas and has identified them as open space, offering significant opportunity to cumulatively enhance and restore shoreline functions. Finally, there are several developments proposed in the Urban Environment Shoreline Designation (within City limits and Everett City limits), which could provide an opportunity for shoreline development and some shoreline/nearshore restoration.

One of the greatest recent impacts to the nearshore ~~that~~ was the ~~exists today is the~~ number of creosote piles that ~~are~~ were present along the developed shoreline from Lighthouse Park to the old Tank Farm Pier. With the removal of the old Tank Farm Pier in 2016, ~~There are 4,087~~3,900 creosote ~~pilings~~ piles out of a total of 4,154 ~~pilings~~ piles (excluding the Rail-Barge facility) ~~or 98%~~ were removed. Their removal ~~will be~~is a significant remediation for the nearshore environment. ~~The following table provides a sense of magnitude of the issue.~~ As redevelopment ~~occurs~~continues, these piles will either be replaced with steel or concrete piles or removed. However, there are existing development projects that are on piles and these have not been included in the overall count as many of them are under structures and there is no access to provide the count of piles holding up enclosed structures. In addition, the Port of Everett Rail-Barge Transfer Facility ~~also~~ added~~s~~ 550 steel and concrete ~~pilings~~ piles along the nearshore. ~~Again, the summary chart is to provide a sense of magnitude and what could occur over a long period of time as the waterfront is transformed or redeveloped and whether there will be a positive net benefit with this redevelopment.~~

~~Information on the quality, quantity and location of this limited resource needs to be specific enough to identify conflicting uses so that rational policy choices can be made.~~

~~Local master programs are required to evaluate and consider cumulative impacts associated with future development on shoreline ecological functions and other shoreline functions.~~

Cumulative impacts to the shoreline environment may result from a wide range of possible actions. Consistent with the guidelines, an appropriate evaluation of cumulative impacts on ecological functions

will consider reasonably foreseeable future development and use of the shoreline that is regulated by the ~~Sshoreline Mmaster Pprogram~~SMP, as well as actions that are caused by unregulated activities and development exempt from permitting.

To ensure "no net loss of ecological functions" and protection of other shoreline functions and/or uses, master programs must contain policies, programs, and regulations that address adverse cumulative impacts and fairly allocate the burden of addressing cumulative impacts among development opportunities. Evaluation of such cumulative impacts should consider:

- C~~c~~urrent circumstances affecting the shorelines and relevant natural processes;
- R~~r~~easonably foreseeable future development and use of the shoreline;
- B~~b~~eneficial effects of any established regulatory programs under other local, state, and federal laws;
- U~~u~~nregulated activities,
- D~~d~~evelopment exempt from permitting, and
- E~~e~~ffects such as the incremental impact of bulkheads, piers, or runoff from newly developed properties.

However, there are practical limits when evaluating impacts that are prospective and sometimes indirect. To accommodate for these the City has relied on the use of evaluation, measurement, estimation, or quantification of impacts consistent with the guidance of RCW 90.58.100(1) and WAC 173-26-201(2)(a).

The above guidelines provide a way for the master program policies and regulations to be developed to assure that the known commonly occurring and foreseeable cumulative impacts do not cause a net loss of ecological functions of Mukilteo's shoreline. If enhancement is incorporated with the planned redevelopment, the net affect will likely be positive for Mukilteo's urban waterfront shoreline, since the shoreline has been so heavily impacted in the past.

Effects of the Proposed Actions

The effects of a proposed action on the marine ecosystem, and human community include the present and future effects added to the effects that have taken place in the past. Such cumulative effects must also be added to effects (past, present, and future) caused by all other actions that affect the same resource.

Cumulative effects on a given resource, in this case the shoreline ecosystem, and human community are rarely aligned with political or administrative boundaries. Resources typically are demarcated according to agency responsibilities, i.e., state, county, and city boundaries. Because natural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem.

For the purposes of Mukilteo's shoreline planning process, cumulative impact and effects are as defined in the National Environmental Policy Act (NEPA) (40 CFR § 1508.7).

> *Sec. 1508.7 - Cumulative impact.*
> *Effects and impacts as used are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.*

In the granting of all permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if variances were granted to other developments in the area where similar circumstances exist the total of the variances shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

Overwater structures: discharges of dredged or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem (Guidelines: EPA CFR 40 Part 230, December 24, 1980).

Stormwater management is fundamental to water quality. The addition of impervious surfaces increases flow quantities and decreases the travel time of water through the environment, increasing pollution concentrations and erosion. Natural processes often determine if habitat is available and other aquatic components relate to the quality of habitat available. Vegetation and water quality play a direct role in maintaining habitat.

The introduction to Section 230.10(a) recognizes that the level of analysis required may vary with the nature and complexity of each individual case. Similarly, Section 230.6 ("Adaptability") ~~makes~~ has clear ~~that the~~ Guidelines:

> *It is unlikely that the Guidelines will apply in their entirety to any one activity, no matter how complex. It is anticipated that substantial numbers of permit applications will be for minor, routine activities that have little, if any, potential for significant degradation of the aquatic environment.*

It is important to recognize, however, that in some circumstances even small or temporary fills result in substantial impacts, and that in such cases a more detailed evaluation is necessary. These minor impacts would not result in a net loss of ecological functions but in combination could result in a net loss.

Shoreline ecosystems have been found to be ~~so~~ resilient and adaptive to change. By their very fluid nature, shorelines change over time. But, if the components of the environment (environmental values) are sustained, then the values will be sustained. These components are the ecological functions that work individually and together to create a functioning shoreline environment. Thereby using the "ecological functions necessary to sustain shoreline resources" as the measure assures that the relevant components of any particular shoreline are identified and can be protected through implementation of the SMP~~*Shoreline Master Program*~~.

WAC 173-26-201(2)(c) implements the Act's policy on protection of shoreline natural resources through protection and restoration of ecological functions necessary to sustain these natural resources. The concept of ecological functions recognizes that any ecological system is composed of a wide variety of interacting physical, chemical and biological components., ~~that~~ These components are interdependent in varying degrees and scales, and that produce the landscape and habitats as they exist at any time. Ecological functions are the work performed or role played individually or collectively within ecosystems by these components.

WAC 173-26-201(2)(c) requires the shoreline master program contain policies and regulations that assure, at minimum, "no net loss of ecological functions" necessary to sustain the shoreline's natural resources, as discussed in Chapter 6. To achieve this standard while accommodating appropriate and necessary shoreline uses and development, the master program establishes and applies the following:

1. Environment designations with appropriate use and development standards;

2. Provisions to address the impacts of specific common shoreline uses, development activities and modification actions;
3. Provisions for the protection of critical areas within the shoreline; and
4. Provisions for mitigation measures and methods to address anticipated impacts.

It is the aggregate effect of all four components that provides for necessary and appropriate development while assuring no net loss of shoreline ecological functions.

The ~~e~~Environment D~~d~~esignation system's division of the jurisdiction into areas for particular types and intensities of development is the basic layer of the system. The current character of an area in comparison to the future character, established in a proposed E~~e~~nvironment D~~d~~esignation for that area, generally determine the range and degree of potential impacts to shoreline ecological functions resulting from development in that setting. The E~~e~~nvironment D~~d~~esignation system also is intended to assure that, at least at the broadest level, like areas will be treated alike, a basic fairness issue.

The City of Mukilteo is nearly built out. Along ~~and along~~ the shoreline there will be a limited number of urban land uses and few undeveloped areas will remain ~~on the shoreline~~.

The urban conservancy shoreline is planned for residential development, typically landward from top-of-slope, while the urban waterfront is planned to undergo intense development pressure from essential public facilities such as the multi-modal station, recreation, waterfront access, and mixed-use re-development.

Proposed/Completed Nearshore Projects

- New ~~Washington State Ferry~~WSF Terminal
- State Route 525 (~~Proposed pedestrian bridge at Sounder Station (outside the shoreline area)~~SR 525) gateway, pedestrian bridge, and underpass
- Waterfront promenade
- Creation of waterfront parks including Speedway Park, Brewery Creek Park, Central Waterfront Park, Japanese Gulch Park, and City Dive Park
- Port of Everett rail/barge transfer facility (Completed)
- NOAA facility expansion and re-development
- Re-development of Mukilteo Lighthouse Park (Completed)
- ~~Removal of Tank Farm Pier (Completed)~~
- ~~Replacement of BNSF double tracks in some locations~~
- ~~Possible triple tracking by BNSF~~

Cumulative Effects of these Projects

- Beach enhancement and backshore re-vegetation
- Day-lighting of Japanese Gulch Creek
- Short-term construction activities:
  - ~~Removal and installation of piles will create a disturbance via in-water noise and vibration~~
  - ~~In-water work will be limited to periods of time when sensitive species are least present~~
  - Installation of piling and anchoring systems for new piers will cause turbidity
    - Dispersed through wave action

- Effects of traffic, noise, and dust to community
- High probability of encountering archaeological resources
- Increased noise and air pollution

- Long-term effect of projects:
  - Increased human activity along waterfront will affect salmonid, bald eagle, and marbled murrelet use of nearshore habitat
  - Removal of Tank Farm Pier creosote pilings and addition of non-toxic in-water structures for rail/barge transfer facility and new ferry terminal facility will have a positive impact on water quality
  - New stormwater treatment facilities will improve water quality of Possession Sound
  - No expected effects to topography, geology, soils, or hydrology
  - Cumulative effects on wildlife include fragmentation of habitat
  - Creation of an active, people-oriented waterfront including traffic improvements, parking structure, waterfront promenade, residential and commercial development, improvements to area open space and recreational facilities.
  - Improved access between residential, commercial, and recreational areas
  - Increased economic activity and employment
  - Re-location of tribal and non-tribal fishing and harvesting to be nearer to Elliott Point

Water-Dependent Development

The Coastal Zone Management Act (CZMA) requires participating states to give priority consideration to water-dependent uses when planning major facilities in the coastal zone. It encourages states to develop policies to balance the competing demands on finite coastal resources, such as sites suitable for water-dependent uses, and to implement these policies by:

1. Preserving existing water-dependent uses (i.e.g., Washington State FerriesWSF)
2. Reserving appropriate vacant lands for water-dependent uses
3. Designating lands for re-development with water-dependent uses

The Shoreline Management Act (Act) establishes the concept of preferred uses of shoreline areas. According to RCW 90.58.020, "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 shorelines." If alteration of the natural condition of the shorelines is allowed, priority is given to the following uses (not listed in any intended order of preference):

1. Single-family residences
2. Ports
3. Shoreline recreational uses
4. Industrial and commercial developments that are particularly dependent upon their location on, or use of, the shorelines
5. Other developments which will provide an opportunity for substantial numbers of people to enjoy the shorelines

While the Act does not categorically prohibit all non-water-dependent uses, water-dependent uses are nevertheless preferred. The concept of use preferences is particularly applicable to shorelines under intense development pressure for essential public facilities and port- and harbor-related industrial activity where shorelines are limited and extremely valuable.

Scope of Assessment

The evaluation of cumulative impacts requires that discussions of cumulative impacts reflect the severity of the impacts and their likelihood of occurrence.

The following three elements are necessary for an adequate cumulative analysis:

1. Either a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the City (i.e., the list approach); or a summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions (i.e., the plan approach).
2. The assessment of cumulative impacts must examine reasonable options for mitigating or avoiding any significant cumulative effects of the master program.
3. Review of a non-project proposal should include a consideration of other existing regulations and plans, and any under development.

The master program policies and regulations should use the permitting or conditional use permitting processes to ensure that all impacts are addressed and that there is "no net loss of ecological function of the shoreline after mitigation" (WAC 173-26-201).

Setting ~~and Assumptions~~

One of the principal goals of the Master Program and the City's Comprehensive Plan is to allow for re-development of mixed-use structures that ~~compliment~~complement the multimodal station and ~~is complementary to~~ Mukilteo's 100-year-old historic lighthouse. Elements of this redevelopment are:

- Ferries
- Sounder Train~~and pedestrian bridge~~
- Port of Everett rail/barge transfer facility
- NOAA facility expansion
- Tulalip Tribe property development

Regulation

In addition to governing Federal and State laws, i.e., Endangered Species Act, Clean Water Act, Model Toxics Control Act, etc. the City has adopted specific environmental policies and regulations that apply to all uses, developments and activities that may occur within the shoreline jurisdiction regardless of the Master Program E~~e~~nvironment D~~d~~esignation. They are to be implemented in conjunction with the specific use policies and regulations found in this Shoreline Master Program.

The Shoreline Management Act (SMA) mandates the preservation of the ecological functions of the shoreline by preventing impacts that would harm the fragile shorelines of the state. When impacts cannot be avoided, impacts must be mitigated to assure "no-net-loss of ecological function" necessary to sustain shoreline resources (WAC 173-26-201(2)).

The environmental protection policies and regulations address general environmental impacts and critical areas. General environmental impacts include effects upon the elements of the environment listed in the State Environmental Policy Act (SEPA) (WAC 197-11-600 and WAC 197-11-444).

The City's SEPA laws and the ~~proposed~~ SMP include the following requirements:

- The General Policies include analysis of impacts, including cumulative impacts, mitigation, bonding, and monitoring as well as stipulating regulations protecting "critical areas" including wetlands, geologic sensitive areas, frequently flooded areas, and fish and wildlife habitat conservation areas. Critical areas are also protected under the City's Critical Areas regulations.
- The Master Program is to be implemented in concert with the City's Critical Areas Ordinance and uses mitigation sequencing to protect the environment: Avoid, Minimize, Rectify, Reduce, Compensate (WAC 173-26-201(2)(e)). The adverse impacts of shoreline developments and activities on the natural environment shall be minimized during all phases of development (design, construction, operation, and management).
- Development and use within, and management of, the shoreline areas shall result in "no net loss of ecological functions." Mitigation compensates for adverse impacts caused by a particular development or activity. Enhancement is to achieve overall improvement in shoreline ecological processes and functions over time.
- Shoreline developments or activities that serve to enhance ecological functions and/or values and those that protect and/or contribute to the long-term restoration of properly functioning conditions (PFCs) for proposed, threatened and endangered (PTE) species are consistent with the fundamental goals of this SMP~~*Shoreline Master Program* and~~ shall be encouraged.

In addition, the following environmental regulations have been adopted in the ~~draft~~ SMP:

1. Shoreline development and activity shall be located, designed, constructed, and managed in a manner that avoids, minimizes, rectifies, reduces, and compensates adverse impacts to the environment. The preferred mitigation sequence (avoid, minimize, rectify, reduce, compensate) shall follow that listed in WAC 173-26-~~020~~201(2)(e)).
2. In approving shoreline developments, the City shall ensure that shoreline development, use, and/or activities will result in "no net loss of ecological functions" necessary to sustain shoreline resources, including loss that may result from the cumulative impacts of similar developments over time. To this end, the City may require modifications to the site plan, and adjust and/or prescribe project dimensions, and intensity of use as deemed appropriate. If impacts cannot be avoided through design modifications, the City shall require mitigation commensurate with the project's adverse impacts and at a rate prescribed in the regulations.
3. Identified significant short-term, long-term, or cumulative adverse environmental impacts lacking appropriate mitigation shall be sufficient reason for permit denial.
4. On-site compensatory mitigation shall be the preferred mitigation option, except where off-site mitigation can be demonstrated to be more beneficial to fish and wildlife resources.
5. If off-site mitigation, including beach enhancement, is implemented, the applicant must demonstrate, to the satisfaction of the ~~Shoreline Administrator/~~Community Development ~~Planning~~ Director that the mitigation site will be protected in perpetuity. This may be accomplished through various means, including but not limited to, dedication of a permanent easement to the City or approved non-profit agency.
6. Where mitigation for loss of or impact to wetlands or fish and wildlife resources is required, an enhancement plan shall be required. Enhancement plans shall be prepared by a professional wildlife biologist or fisheries biologist as determined appropriate by the Planning Director. The enhancement plan shall contain at a minimum:
    a. A discussion of measures to preserve existing habitats and opportunities to restore habitats that were degraded prior to the proposed land use activity.

b. A discussion of proposed measures which mitigate the impacts of the project and established success criteria.

c. An evaluation of the anticipated effectiveness of the proposed mitigation measures.

d. A discussion of proposed management practices which will protect fish and wildlife habitat after the project site has been fully developed, including proposed monitoring and maintenance programs.

e. As a condition of approval, the City should require periodic monitoring for up to five years from the date of completed development to ensure the success of required mitigation. The monitoring period will be extended if the success criteria set forth in the approved mitigation plan fail to be accomplished.

Development Potential

Re-use and re-development of existing historic structures is encouraged, and the ~~proposed~~ SMP may result in some limited expansion of existing structures and the limited ability to construct new water-oriented and overwater structures or piers. Non-water-dependent uses will be allowed upland of the OHWM and overwater in association with a mixed-use development.

Upland Geology and Soils

Within the Urban Conservancy environment, development of single-family residential structures and associated utilities, landscaping, access, and other typical improvements will result in temporary impacts to soils, with accompanying risk of erosion.

Commercial and other non-residential development anticipated within the Historic Urban environment will likely result in greater proportional impervious surface site coverage and intensity of site development than is generally associated with residential development, with accompanying greater potential for erosion.

Most of Mukilteo's shoreline (90%+) has the railroad tracks and steep and unstable slopes that meet the designation criteria for Geologically Sensitive Areas under the 2018~~06~~ Mukilteo ~~Critical Areas Ordinance (~~CAO~~)~~ (MMC 17B.52A). The CAO establishes requirements for geotechnical evaluation of proposals that may impact or be impacted by geologically sensitive areas. Minimum setback requirements and other standards that minimize and mitigate geological impacts apply. Any activities that increase the threat of landslide or erosion of geologically sensitive areas are prohibited by the CAO. Mukilteo's ~~clearing and grading~~grading and excavation ordinance (MMC 15.16) includes requirements for use of appropriate construction best management practices (BMPs) ~~BMPs~~ to limit direct and indirect impacts of erosion and associated downstream water quality impacts.

Within the Urban Conservancy environment, the Shoreline Master Program and Critical Areas Ordinance requires a varied setback from the shoreline for residential uses in the Urban Conservancy environment, based upon the top of slope, with the effect of further limiting encroachment within geologically sensitive areas. This setback can be reduced under certain conditions, but it is assumed that all new residential development in this environment will occur at a setback that minimizes impacts to, or from, geologically sensitive areas. Steep slopes of 40% or greater are not suitable for placing structures or locating intense activities or uses due to the inherent threat to public health and safety.

No specific setbacks are proposed in the SMP~~*Shoreline Master Program*~~ for mixed-use or essential public facilities within the Urban Waterfront environment. Development is required to conform to the City's flood hazard mitigation ordinance and special constructions standards are required. Alteration of

shoreline-associated bluffs are not allowed by the policies of the SMPShoreline Master Program, except when it is conclusively demonstrated that such work is necessary to prevent imminent damage to existing development. It is likely that some construction of new or replacement slope stabilization measures or rip-rap will be required to protect some of the existing structures in the Urban Waterfront environment. With the higher residential density potential assumed under existing shoreline regulations, increased impervious surface and potential for erosion would likely occur as opposed to the regulations of the proposed SMPShoreline Master Program. Impacts to or from geologically sensitive areas are assumed to be minimal under either the existing or proposed regulatory systems.

A certain level of erosion is natural to the Puget Sound area. Erosion is the primary source of sand and gravel found on beaches including accretion beaches (gravel bars). Under the existing Shoreline Master Program, extensive "hardening" of feeder bluff areas by BNSF would eventually starve beaches down drift of the bluff, resulting in lowered beach profiles and the potential for increased erosion. Changes in the beach substrate would likely result in habitat impacts.

Under the proposed *SMP*, theThe following new regulations are proposedwere adopted into the SMP in 2011:

- New development or the creation of new lots should not cause any foreseeable risk from geologic conditions to people or improvements during the life of the development.
- Development will only be permitted in locations where no slope protection (i.e., bulkheads, rip-rap, retaining walls, etc.) is necessary, or where non-structural protection (i.e., soft shore vegetated buffers) is sufficient for the life of the project.
- Proposals will be designed and constructed in a manner that does not increase or result in slope instability or sloughing.
- When no alternatives, including relocation or reconstruction of existing structures, are found to be feasible and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 shoreline modification requirements, and then only if no net loss of ecological functions will result.

In geologically sensitive areas, such as marine bluffs, development is prohibited in the sensitive area and buffer. Limited development for public access may be allowed, for which the City may require geotechnical review and impose conditions to ensure that proposals do not increase the risk of hazard. By being limited to public access stairs, proliferation will be minimized. Special studies may be required by the City's Critical Areas regulations. Conditions could include limited access width, depth onto beach, associated armoring and number of access points.

Clearing is limited to the minimum necessary. Removal of invasive species is allowed as part of an enhancement or restoration project. Development must be consistent with the City's clearing, grading and erosion control standards. Application submittals for grading permits must address re-vegetation, and methods of nearshore and riparian corridor protection. Very limited tree and shrub removal along shoreline is allowed with new development.

Transportation/Circulation

With the potential construction of 20 (under the proposed Master Program) or 30 (under existing regulations) new homes and four new non-residential structures within Mukilteo's shoreline jurisdiction, increased traffic will result. The City's existing Transportation Plan *By The Way (Bike – Transit – Walk)*

Plan establishes level-of-service standards for the existing transportation network. The City's ~~Transportation~~ *By the Way Plan* has evaluated the impacts of growth through the year 2047~~20~~ based ~~up~~on development opportunities presented in the Comprehensive Plan and the SMP.

Air Quality

In response to the nation's growth and increased air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, the Environmental Protection Agency, under the authority of the federal government, passed the Clean Air Act. The purpose of the Clean Air Act is to protect and enhance the quality of the nation's air resources and to promote the public health, welfare, and productive capacity of its population. Under the Clean Air Act, the Mukilteo waterfront area, as well as the urbanized areas of Snohomish, King, and Pierce Counties, is within a Carbon Monoxide and an Ozone maintenance area.

The nearshore of Mukilteo is heavily impacted by transportation and freight mobility. Carbon monoxide (CO) emissions are generated by vehicles, the Mukilteo-Clinton ferry, the Sound Transit Commuter Rail Facility, the Burlington Northern Santa Fe freight shipping lines, and the Everett Rail-Barge Transfer Facility. Each of these sites emits CO emissions from the combustion of diesel and fossil fuels. As of current, CO emissions emitted from the waterfront include:

- Vehicles idling at the ferry terminal
- Diesel-powered ferries that idle during loading and unloading
- The Sound Transit commuter trains are powered by cleaner diesel engines, but are a source of CO emissions when the train idles for several minutes between scheduled service runs
- The Everett Rail-Barge Transfer Facility includes a diesel-powered train, diesel-powered tug boats, and an electric, rail-mounted gantry crane. While the train does emit CO, steps were taken to mitigate for these impacts by the installation of an electric-powered crane that would not be a source of CO emissions.

According to a 2006 ~~Department of~~ Ecology air quality map, these combined vehicle emissions meet ~~DOE~~Ecology's standards for both CO emissions and the Environmental Protection Agency (EPA) 1-Hour Ozone Maintenance area air quality conditions. However, ~~DOE~~Ecology revoked the 1-Hour Ozone Maintenance Area criteriona~~s~~ as of June 15, 2005, and replaced it with a new 8-Hour Ozone Maintenance Area. ~~It has not been determined whether that t~~The Mukilteo waterfront does not meet~~s~~ the EPA ~~new~~ 8-Hour Ozone Maintenance criteriona~~s~~. As projects come on-line, additional studies will be required to determine if the proposed improvements to the City of Mukilteo waterfront meet the 8-Hour Ozone Maintenance Area criteriona~~s~~. ~~In addition, discussions at the state and local level are being held regarding adopting a new law concerning idling vehicles. If this potential legislation is adopted, new air quality standards may be implemented or requirements for use of smaller, auxiliary engines may be required for Mukilteo Ferry Terminal and Commuter Rail operations.~~

Upland Biological Resources

The *Mukilteo Inventory and Characterization* describes shoreline habitat in detail. Important upland biological resources include bald eagle and great blue heron nest sites and breeding territories. Japanese Gulch Creek, Big Gulch Creek, Lower Chennault Creek, and Norma Creek riparian areas provide habitat for various upland species including deer, coyote, raptors, and other small mammal and bird species.

Marine Biological Resources

Important marine resources within Mukilteo's shoreline jurisdiction include eelgrass beds, forage fish spawning areas, shellfish beds, and backshore wetlands.

Critical salt-water habitats provide important rearing and nursery areas for valuable recreational and commercial species. They provide habitat for many marine plants, fish and animals. These habitats should be protected because of their importance to the marine ecosystem of both the City and the State of Washington. Developments within or adjacent to the shoreline jurisdiction where critical salt water habitats exist, should not directly or indirectly change the composition of the beach and bottom substrate. Habitat enhancement and restoration projects may change beach or bottom substrata only when appropriate to restore or enhance these habitats.

All projects must be designed to minimize impacts on critical saltwater habitats and the shoreline environment. Impacts to critical saltwater habitat functions must be mitigated to result in equal or better ecological function. This may be accomplished by providing off-site mitigation or by financially participating in or supporting beach enhancement.

Visual Resources

The aesthetic qualities of Mukilteo's shoreline are essential to the character of our existing community and make a significant contribution to the appeal that draws new development to the waterfront area. Though aesthetic functions are difficult to measure quantitatively, most observers would agree that features such as native vegetation, views of the water to the north and west, the Cascade Mountains to the east, and of the Olympic Mountains to the west along with the historic nature of the shoreline development are of critical aesthetic importance and merit determined measures to ensure these view corridors. The ~~proposed~~ SMP ~~*Shoreline Master Program*~~ recognizes the visual importance of the shoreline, and includes several provisions to protect visual resources, including height restrictions, limitations on clearing of native vegetation on steep slopes, and prohibition of aquaculture. Some impairment of existing views is inevitable as shoreline parcels become developed with new homes or other structures. Cumulatively, however, under the ~~proposed~~ SMP ~~*Shoreline Master Program*~~ the additional impacts to visual resources are not likely to be significant if the structure alignment guidelines are followed.

Historic and Cultural Resources

The waterfront area that the City now occupies was frequented by Native Americans, and intact archaeological resources represent a record of their occupation and use of the Mukilteo shoreline. While many of the shell middens and burial sites that once occurred in the area have been disturbed or buried, either by development or through natural processes such as beach erosion, it is probable that intact resources still remain.

The ~~proposed~~ ~~updated~~ ~~*Shoreline Master Program*~~ SMP promotes a balance between the desire to protect historic character and allow for re~~-~~development and the careful stewardship of sensitive shoreline resources. While allowing some new development and re~~-~~development, the ~~proposed~~ policies of the ~~*Shoreline Master Program*~~ SMP are intended to ensure that such development minimizes impacts to sensitive shoreline areas, and does not result in a net loss of shoreline function. Areas with potential historic or cultural resources were identified through the following resources:

- National Historic Preservation Act: Area of Potential Effects (APE) for proposed projects in Mukilteo. Horizontal APE is approximately~~.~~ 0.75 mile~~s~~ long and 0.25 mile in length. Vertical

APE is 10-30 ft. for excavation of stormwater vaults, and max. 100-150 ft. for drilled support columns.

  - High probability areas: base of bluff line at the southern boundary of the APE, crest of sand berm that follows lines of Front Street, and near the mouths of Japanese Gulch Creek and Brewery Creek.

- Survey of historic buildings and structures per Historic Property Inventory Forms: none are eligible for listing in National Register of Historic Places (except for the Lighthouse, which is already listed).

Hazardous Materials

Hazardous materials include chemicals or substances such as petroleum products, pesticides, solvents, wood preservative, cleaners, and other potentially toxic or volatile materials. Threats to ground or surface waters from these types of materials are generally greater around intensely urban or industrial land uses. The Tank Farm site was an ~~DOE~~Ecology cleanup site (or brownfield) for five years, and the cleanup was declared final on ~~5-22-2006.~~December 31, 2006.

Commercial use, storage, and disposal of most hazardous materials is tightly regulated by the Washington State Department of Ecology.

Water Quality

Marine water quality can be impacted by urban runoff carrying pesticides, hydrocarbons, fertilizer, sediment, or other non-point sources of contaminants generated by commercial and residential development and land uses. Such impacts will likely incrementally increase with anticipated development under the proposed ~~*Shoreline Master Program*~~SMP. The limited density and requirements for shoreline re-vegetation under the proposed ~~*Shoreline Master Program*~~SMP may help mitigate some of these impacts. Similar impacts can be expected with the higher densities and more intensive land uses permitted under existing shoreline regulations.

Drainage

All shoreline development, use and activities shall utilize ~~best management practices (~~BMPs~~)~~ to minimize any increase in surface runoff and to control, treat and release surface water runoff to protect the quality and quantity of surface and groundwater. Such measures may include but are not limited to catch basins or settling ponds, installation and required maintenance of oil/water separators, vegetated bioswales, interceptor drains and landscaped buffers. All development must be in accordance with the adopted surface water manual. Re-development in accordance with the adopted surface water management manual may result in improvements to the stormwater infrastructure.

Energy and Other Utilities

Development under the existing shoreline regulations would result in a greater cumulative consumption of energy resources such as electrical power or petroleum products than would development under the proposed~~ Shoreline Master Program~~ SMP. In either scenario, the potential energy needs are within existing capacity, and no significant cumulative impacts to energy resources are anticipated. Other utilities, such as telephone service, cable television, sewer, and water are already established with ample capacity for the anticipated development within shoreline jurisdiction. Additional demands placed on these resources under either re-development scenario are insignificant relative to growth in the surrounding non-shoreline community.

Housing

No net loss of existing housing is likely with either development scenario.

Public Services

Public services may include fire and police protection, human services, schools, libraries, or hospital services. Similar residential densities allowable under the existing and proposed shoreline regulations would place similar demands on these services. ~~Re-development of the waterfront was planned under both *Shoreline Master Programs*. The growth allowed with the Washington State Ferries compact alternative is greater than the upland alternative that consumes the majority of the site. The majority of the mixed-use development occurs outside the shoreline zone south of Front Street. The Urban Waterfront represents most of the cumulative impacts to the shoreline, except for expansion of railroad activities.~~

Recreation

Under Mukilteo's proposed ~~*Shoreline Master Program*~~ SMP, a greater emphasis is placed on providing public shoreline access than under the existing shoreline regulations, and is required of certain development activities, especially with commercial development in the Urban Waterfront environments. Providing public access along the waterfront will likely result in a higher demand on existing and new recreational facilities such as the promenade, parks, and beach access. The cumulative benefit of waterfront re-development is accrued by providing added recreational opportunities.

Noise

Noise emanating from a shoreline use or activity, along with noise generated by the railroad operations and train horn noise, have a significant impact on waterfront activities and park uses, as well as residential uses upland in the Old Town area. Noise related to transportation uses are exempt and substantial study was done in the EIS for the Port of Everett Rail-Barge Facilities and ~~will also be addressed~~ in the ~~Washington State Ferries~~WSF EIS for relocation of the ferry terminal.

Chapter 8: Public Access

Shoreline public access is the physical ability of the general public to reach and touch the water's edge or the ability to have a view of the water and the shoreline from upland locations. There are a variety of types of public access, include docks and piers, boat launches, pathways and trails, promenades, street ends, picnic areas, beach walks, viewpoints and others.

An important goal of the ~~Shoreline Management Act~~SMA to is protect and enhance public access to the state's shorelines. Specifically, the SMA states:

> ***RCW 90.58.020:*** "The public's opportunity to enjoy the physical and aesthetic quality of the 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~~.~~…
>
> "Alterations of the natural conditions of the shorelines of the state, in those limited instances when authorized, shall be given priority for … development that will provide an opportunity for substantial numbers of people to enjoy the shorelines of the state."

Public access and use of the shoreline is supported, in part, by the Public Trust Doctrine. The essence of the doctrine is that the waters of the state are a public resource owned by and available to all citizens equally for the purposes of navigation, conducting commerce, fishing, recreation and similar uses and that this trust is not invalidated by private ownership of the underlying land. The doctrine limits public and private use of tidelands and other shorelines to protect the public's right to use the waters of the state. The Public Trust Doctrine does not allow the public to trespass over privately owned uplands to access the tidelands. It does however; protect public use of navigable water bodies.

Requiring public access on privately owned property as a condition of development has been the subject of considerable legal review. Our state Constitution and the U.S. Constitution provide both the authority for conducting the activities necessary to carry out the ~~Shoreline Management Act~~SMA and significant limitation on that authority. While the SMA stresses the need for public access, our state and the U.S. Constitution provide for the protection of certain private property rights. Where public access is required as a permit condition, the courts have stated that there must be a rational and roughly proportionate connection between the project's impact on public access and the public access requirement.

Relevant Planning Documents

This public access chapter is preceded by several planning efforts to maintain and enhance public access to the shoreline of Mukilteo. The public access policies and strategies included in this ~~Master Plan~~SMP build on those established in past planning documents.

Mukilteo Comprehensive Plan 2035
Comprehensive Surface Water Management Plan
Lighthouse Park Master Plan
92nd Street Park Master Plan
Downtown Business District Subarea Plan
Habitat Management Plan
Capital Facilities Plan
Critical Area Mitigation Program (CAMP)
Downtown Waterfront Master Plan
Japanese Gulch Master Plan

Relevant policies and development guidelines from the 2010 2015 Comprehensive Plan, and the 2007 Parks, Open Space, and Recreation2017 By The Way Plan, 2018 Parks – Recreation – Open Space – Arts Plan, 2016 Downtown Waterfront Master Plan, and 2016 Japanese Gulch Park Master Plan have been incorporated into this Master PlanSMP.

20150 Comprehensive Plan: The Mukilteo Comprehensive Plan contains the City's vision for the future of Mukilteo. Included in this document plan are the City's goals and policies for land use, parks and recreation, shorelines, economic development, transportation, capital facilities, and potential annexations.the natural environment, built environment, economy, public participation, arts and cultural awareness, healthy and safe community, and innovation.

2017807 Parks, Open Space, and RecreationParks – Recreation – Open Space – Arts (PROSA) Plan: The PROSA Plan was written in order to be eligible for funding from the Washington State Recreation and Conservation Office (RCO), including funding for continued development of the wWaterfront. The primary goals and objectives laid out in this plan strive to meet applicable policies detailed in the 2015 Comprehensive Plan, where the overarching narrative is designed to increase Mukilteo's livability. The PROSA pPlan prioritizes waterfront redevelopment over the next six years (Figure 15).To comply with the Washington State Growth Management Act (GMA), a Parks, Open Space, and Recreation Plan (Park Plan) has been prepared that reflects the goals and policies adopted in the Mukilteo Comprehensive Plan. The Park Plan is a useful tool to articulate the open space and recreational policies presented in the Comprehensive Plan and to help set priorities. Finally, this functional plan provides a foundation from which to establish the capital budget and allocate funds to complete the proposed projects.

2009 Bicycle, Pedestrian and Trails2017 By The Way (BTW) Plan: The Trails Bike – Transit – Walk Plan was created as a vision for Mukilteo's future complete and efficient network of safe, healthy, convenient, and enjoyable transportation options that provide equitable connectivity to pedestrians, transit users, cyclists, and motorists to and from the neighborhoods where they live, work, and play.bicycle and pedestrian trails system. Included in this document plan are the City's goals and policies for trails, a trail inventory, and a capital facilities plan prioritizing bicycle and pedestrian pathway needs.transportation networks that will provide safe connections for all ages, populations, and abilities.

2016 Downtown Waterfront Master Plan: The Downtown Waterfront Master Plan describes a revitalized waterfront whichthat includes: an urban street front with local businesses, looped pedestrian promenade, bike lanes, and playful waterfront uses. This allows community members to experience the waterfront from an urban environment to a natural shoreline while focusing on connecting people both physically and thematically to the intrinsic natural, cultural, and urban qualities that compose the past, present, and future of the Mukilteo waterfront.

2016 Japanese Gulch Park Master Plan: The adopted park master plan provides a guiding directionguidance to keep Japanese Gulch special while preserving and protecting the environment. This also includes plans for the 76th Street Trailhead to transition the former Highland Memorial Park into a park area to provide transition from the urban life to the Japanese Gulch Conservation Area.

Public Access Vision Statement

"Moving Mukilteo Forward" provided the motto in the recently adopted Comprehensive Plan. Notably, ~~this~~the Comprehensive Plan introduced a story of Mukilteo that differed from previous plans. While previous plans focused on the future development of Mukilteo, Moving Mukilteo Forward engaged decision-~~-~~makers in the story of Mukilteo. This story introduced the vision and goals of enhancing the livability of the community.

Moving Mukilteo Forward identified specific policies for implementation that would be identified through the Bike - Transit - Walk (BTW) Plan. Some of these policies included adopting street standards to include pedestrian-oriented streetscape elements and bicycle facilities, as well as ensuring that street standards provide bike lanes and~~,~~ convenient bus stops, discourage high travel speeds, minimize significant environmental impacts, and maintain the character of existing residential neighborhoods. Not only does the Comprehensive Plan require standards that include bike, pedestrian, and bus facilities; the p~~Comprehensive P~~lan also identifies~~d~~ destinations or "~~'~~points of interest"~~'~~ that these facilities must provide connectivity between parks, retail centers, schools, and regional transportation nodes.

Mukilteo's vision for the future of parks and recreation combines ~~three~~ four priorities based on a the 2017 PROSA Plan:

- ***Healthy Community***: A community engaged in improving the mental and physical well-being of its people is a healthy community.
- ~~***Waterfront***: increased access to the waterfront through re-development~~
- ***Arts & Culture***: Arts and culture promote a vital, enduring connection to place marked by pride in civic history and optimism about the community's future.
- ~~***Trails and Open Space***: pedestrian trail construction to provide open space access and to connect with the network of bike and pedestrian paths through town~~
- ***Natural Environment***: In addition to parks and trail corridors, the natural environment includes undeveloped open space within and around Mukilteo, the shoreline, and the marine environment.
- ~~***Active Recreation and Cultural Facilities***: providing quality active recreation and cultural facilities and fields~~
- ***Prioritizing the Waterfront***: The projects will increase access to a revitalized waterfront through redevelopment.

~~Land acquisition plays an essential role in achieving the vision for each priority category, because there is a limited amount of large land parcels available to add to the City's parks and open space inventory. Even tidelands play an important function in providing additional waterfront access, despite access being available only a portion of each day.~~

Using the demographic and parks demand analysis, the City learned that although the demand is high for large community parks, the need is being met by Mukilteo's current park system. When residents were asked about their priorities for parks in the future, respondents chose the following priorities: waterfront promenade (52.2%), beach access (42.9%), hiking trails (38.7%), environmental beach enhancements

(34.4%), and an indoor swimming pool (23.1%). The waterfront promenade repeatedly came up as a high priority for the public throughout the parks demand analysis.

The ~~Parks, Open Space, and Recreational Opportunities~~Mukilteo 2040 Map (Figure 164) represents ~~potential opportunities in the above categories~~planned connectivity between origins and destinations within the c~~C~~ity. This map indicates where future opportunities exist to enhance the ~~park~~ transportation system to better identify projects for funding and implementation.~~through the development of existing facilities and potential future land acquisition~~.

Figure ~~13~~15: ~~Park Plan Priority Categories~~6-year Capital Improvement Pprojects and Llong-Rrange Pproject Ooptions from the 2017 PROSA Plan

6-Year Capital Improvement Program (2017-2022)

Project	Type*	Year	Estimated Cost	Funding Source**
Waterfront Redevelopment Phase I				
• Promenade Design		2018		
• Promenade Construction	D	2019-2020	$320,000	G, L
• Edgewater Beach Park	RN	2018-2020	$1,800,000	G, L
• Japanese Gulch Creek Park	D, RS	2018-2020	$2,500,000	G, L
• Beach Restoration	D, RS	2018-2020	$1,700,000	G, L
Waterfront Pedestrian Bridge (Path Under SR 525 Bridge, Part of Ped Bridge)	D	2018-2020	$4,700,000	G, L
Peace Park (Byers' Family Park) - Design/Build Phases I & II	A, D	2018-2020	$50,000	L, DN
Waterfront Redevelopment Phase II				
• Mukilteo Lane & Signage	RN	2018-2019	$260,000	G, L
Japanese Gulch Park - 76th Street Trailhead - Interim Dirt Jump Bike Course	D	2018-2020	Volunteers	DN
Waterfront Redevelopment Phase III				
• Speedway Pocket Park	D	2021-2022	$1,165,000	G, L
• Frontage Road Improvements (Front Street at Diamond Knot)	RN	2021-2022	$650,000	G, L
Hawthorne Hall Revitalization	RN	2021-2022	$1,000,000	G, L
92nd Street Park Playground Equipment Replacement	RN	2022	$120,000	L
Harbour Pointe Village Park Playground Equipment	RN	2022	$120,000	L

*A=Acquisition, D=Development, RN=Renovation, RS=Restoration
**L=Local Funds, G=Grant, DN=Donations

Long Range Project Options (2023-2037)

Project	Estimated Cost	Funding**
92nd Street Park Paved ADA Path	$20,000	G, L, U
Japanese Gulch Park - 76th Street Trailhead (Dirt Jump Bike Course, Natural Play Area, Parking)	$1,900,000	G, L
Japanese Gulch Park - Conservation Area (Trails, maintenance path, and boardwalks)	$1,400,000	G, L
Japanese Gulch Park - Lower Japanese Gulch	$872,000	G, L
Japanese Gulch Park - Tails and Trails Dog Park Rebuild and Drainage Improvements	$620,500	G, L

Project	Estimated Cost	Funding**
Lighthouse Park Phase III & IV	$3,200,000	G, L
Rosehill Community Center Playground Equipment	$120,000	L
Waterfront Redevelopment Phase IV		
• Central Waterfront Park	$5,000,000	G, L
Waterfront Redevelopment Phase V		
• Front Street Woonerf and Streetscape	$11,000,000	G, L, U
• Loveland Ave Path Stairs	$330,000	G, L

**L=Local Funds, G=Grant, U=Unknown

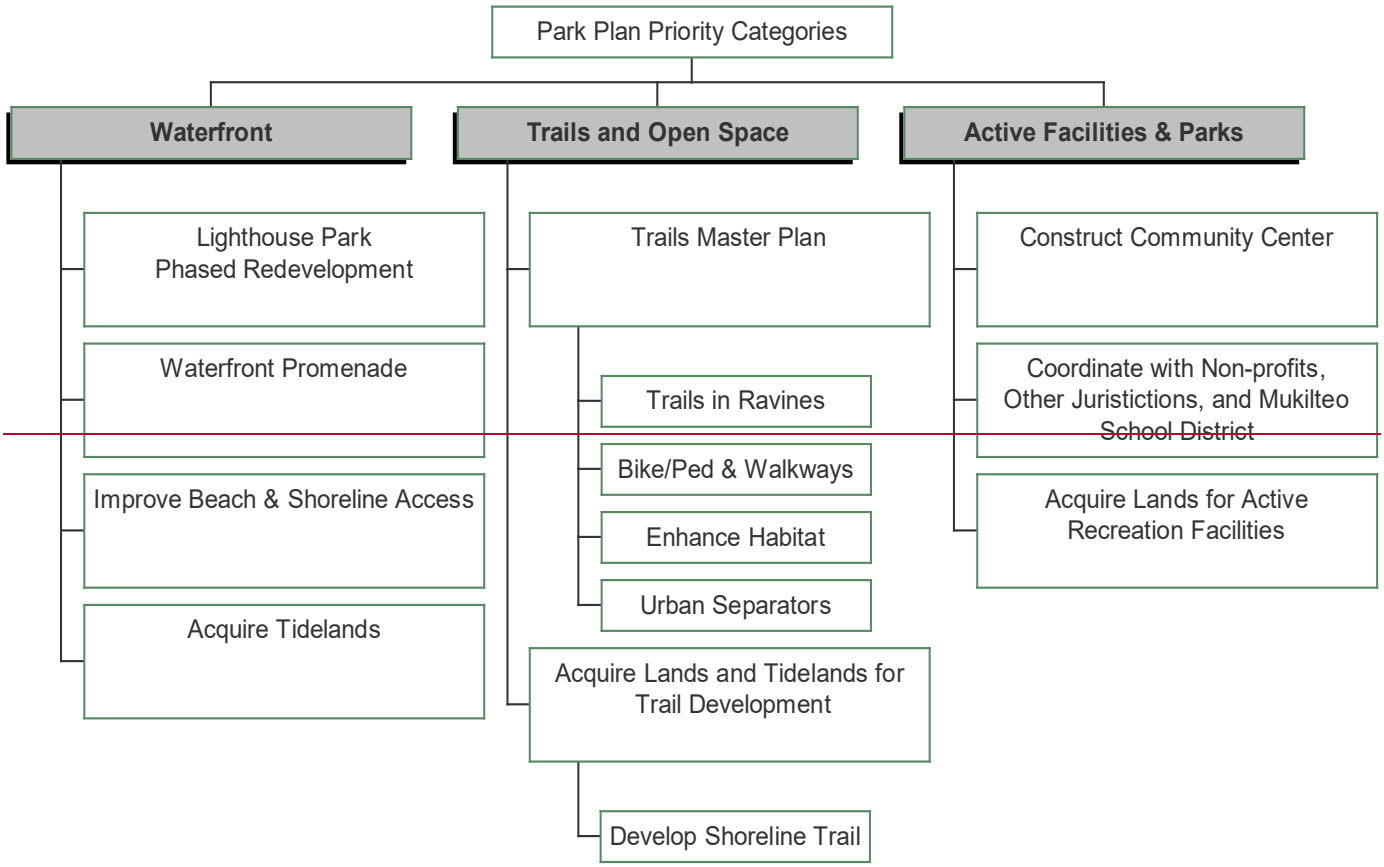
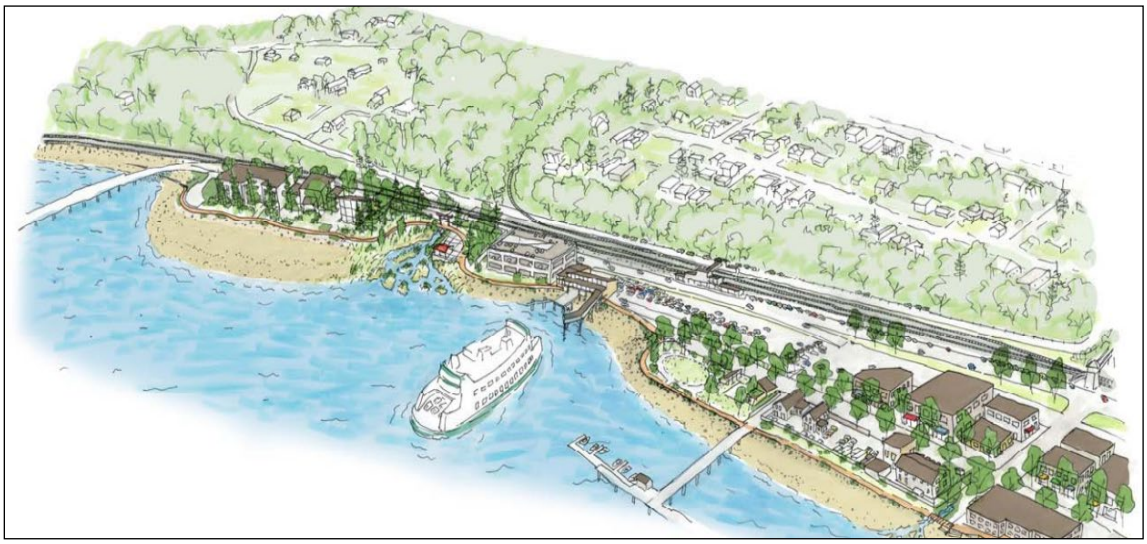

Park Plan Priority Categories
Waterfront
Trails and Open Space
Active Facilities & Parks
Lighthouse Park
Phased Redevelopment
Waterfront Promenade
Improve Beach & Shoreline Access
Acquire Tidelands
Trails Master Plan
Trails in Ravines
Bike/Ped & Walkways
Enhance Habitat
Urban Separators
Acquire Lands and Tidelands for
Trail Development
Develop Shoreline Trail
Construct Community Center
Coordinate with Non-profits,
Other Juristictions, and Mukilteo
School District
Acquire Lands for Active
Recreation Facilities

Figure ~~14~~16: ~~Parks, Open Space and Recreation Opportunities~~Future Connectivity of Mukilteo Map from the 2017 BTW Plan

Waterfront Access

Mukilteo has reached a major turning point in waterfront access with the addition of large, highly visible waterfront resources from federal, state, and county governments. The City of Mukilteo sits on the shores of Possession Sound and is home to the Mukilteo / Clinton Ferry terminal served by ~~State Route 525~~SR 525. This busy waterfront includes Lighthouse Park, Losvar Condominiums, the ferry terminal, restaurants, a hotel, ~~National Oceanic and Atmospheric Administration (~~NOAA~~)~~ facilities, the recently transferred Tank Farm site, Edgewater Beach, and the Port of Everett's Mount Baker Barge Rail Facility. The Downtown Waterfront Master Plan describes a revitalized waterfront ~~which~~that includes: an urban street front with local businesses, looped pedestrian promenade, bike lanes, and playful waterfront uses. ~~The City received the lighthouse from the federal government in 2001 and Lighthouse Park from Washington State Parks in 2003. The Mukilteo Lighthouse Park Master Plan adopted in February 2004 is an important component in the re-development of the waterfront area. The U.S. Air Force intends to turn over control of the Tank Farm to the Port of Everett. An updated Multi-modal Master Plan for re-development is under consideration; which will allow a consortium of agencies to direct improvements along the waterfront.~~ Figure ~~15~~ 17 illustrates conceptual enhancements proposed under this plan.

Figure ~~15~~17: Conceptual Waterfront Design~~,~~ from the ~~1995 Multi-modal Plan~~2016 Downtown Waterfront Master Plan



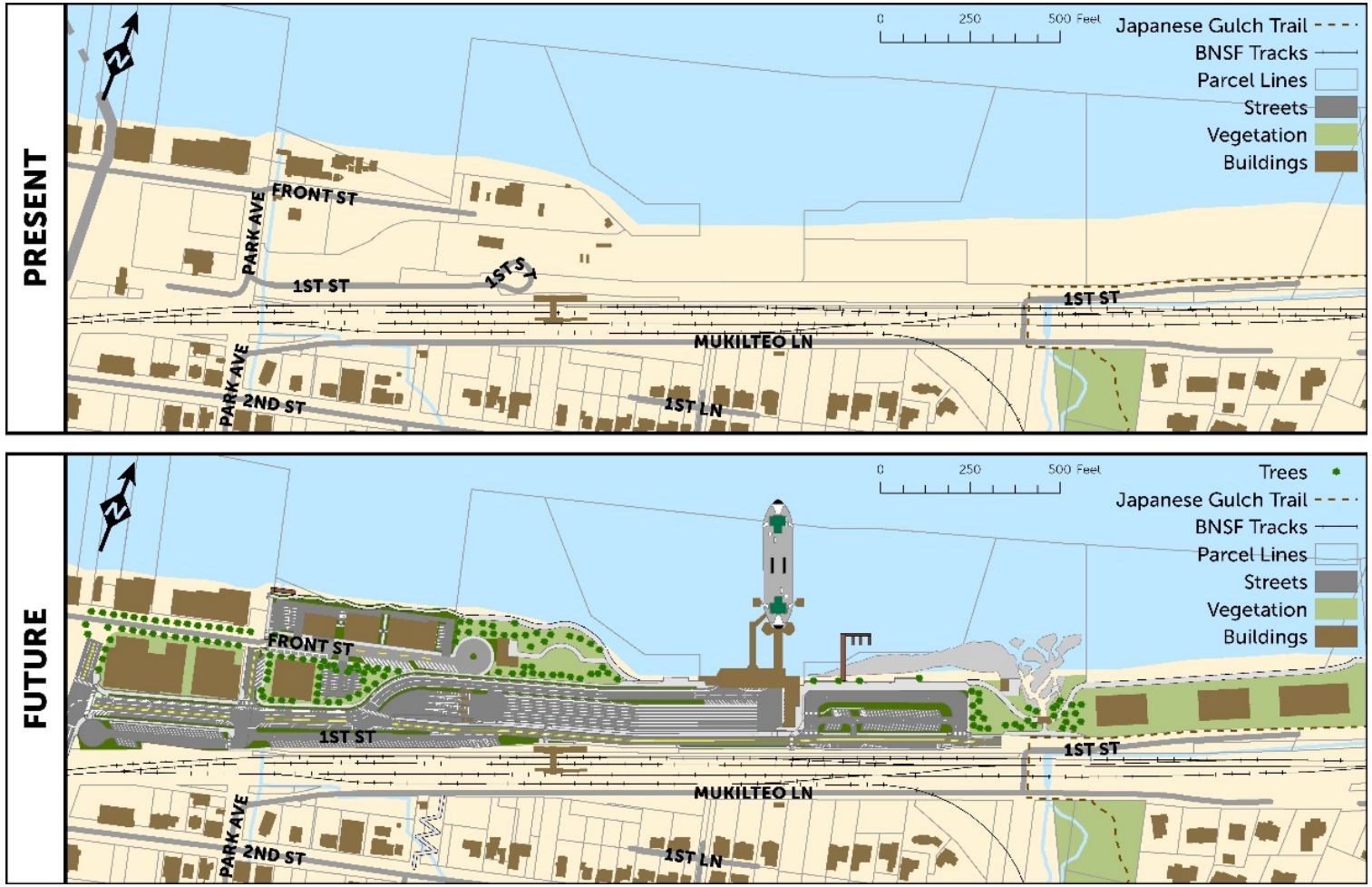
The Downtown Waterfront Master Plan addresses the following objectives:

- ~~-~~Pedestrian-~~-~~oriented urban street front with local businesses.
- ~~-~~Looped pedestrian promenade and bike lanes ~~(Figure 18)~~.
- ~~-~~Playful waterfront uses.
- ~~-~~Allows the public to experience the waterfront from an urban environment to a natural shoreline.
- ~~-~~Connects people to the natural, cultural, and urban qualities that compose the past, present, and future Mukilteo waterfront.

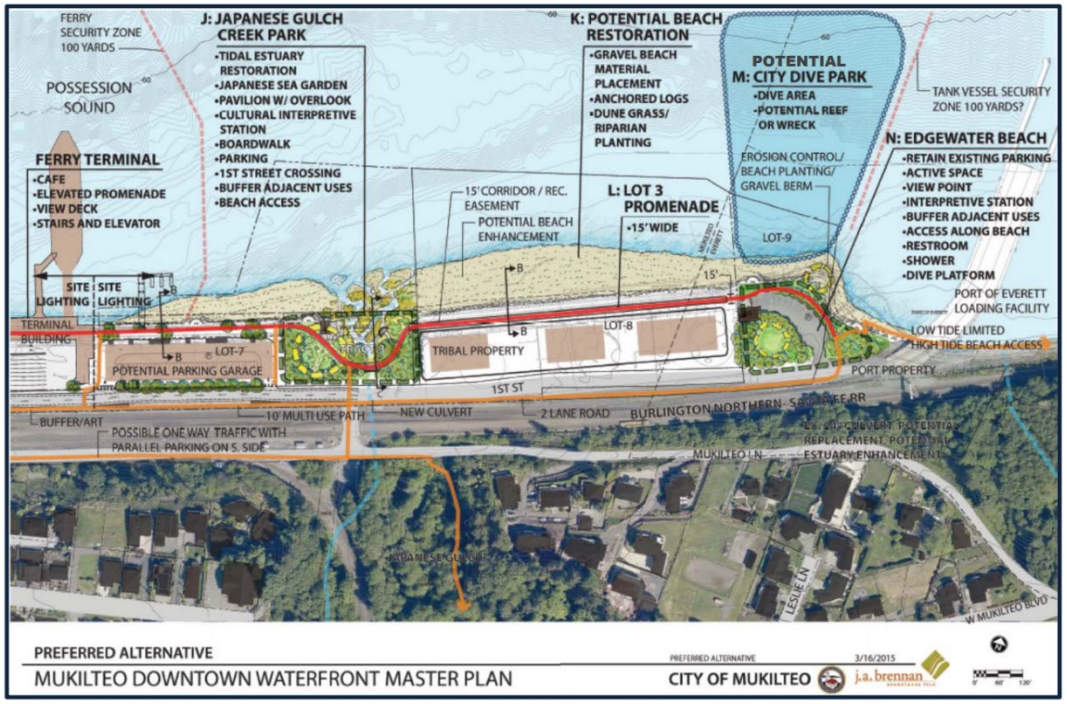
- ~~•~~ Cohesive new waterfront park system from Lighthouse Park to Edgewater Beach.
- ~~•~~ Chain of public parks to ~~help~~ soften the development impact of the multimodal station and commercial development. ~~Re-development will provide a pedestrian waterfront promenade along 3,000 lineal feet of the north shoreline adjacent to Port Gardner Bay wrapping around Lighthouse Park. The promenade will return public access to the waterfront, an asset cut off nearly sixty years ago. Following this Multi-modal Master Plan, Mukilteo's waterfront will become a prime Snohomish County attraction and provide recreational opportunities for residents and visitors, specifically a walking promenade along the shoreline, access to the waterfront and linkages to parks and open spaces.~~
- ~~Significant progress in redeveloping the waterfront has begun. In 1995, the Multi-modal Master Plan was adopted for the waterfront area. Figure 16 (below) illustrates the waterfront re-development area. The transfer of the Mukilteo Lighthouse and the former State Park to the City allowed joint operation of these important recreation and historical assets as a single complex – Lighthouse Park.~~
- Short-~~–~~term priorities include the creation of the SR 525 gateway, pedestrian bridge and underpass, site clean-up for park creation, and beach enhancement along the Tank Farm ~~property~~site. Long-~~–~~term priorities include creating the Speedway Park ~~creation~~, creating the interim promenade ~~creation~~, and daylighting Japanese Gulch Creek at the Tank Farm ~~property~~site. Figure 1~~6~~8 ~~(below)~~ illustrates the waterfront redevelopment area and Figure 19 shows a conceptual waterfront promenade.

~~,8~~

Figure ~~16~~18: ~~Overview of western Waterfront Redevelopment Area~~Waterfront Redevelopment Area – Existing and Proposed



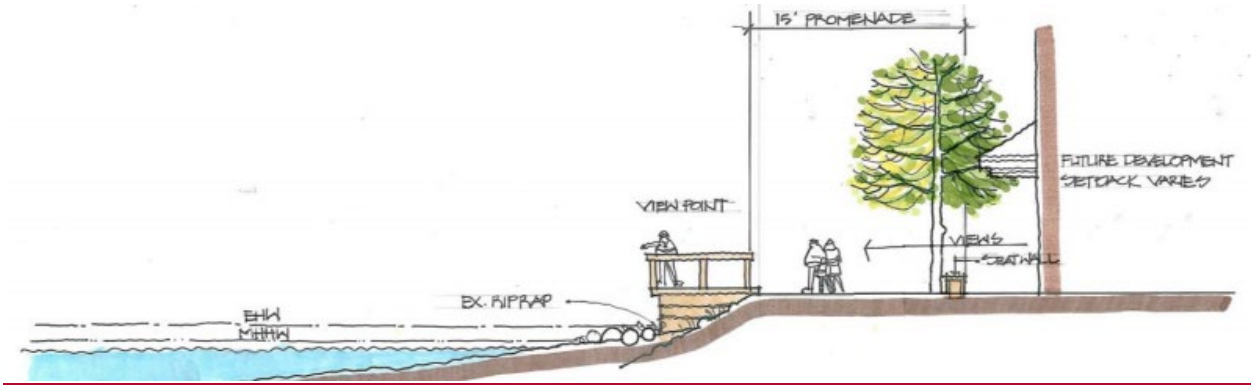
~~Figure 17: Overview of eastern Waterfront Redevelopment Area~~

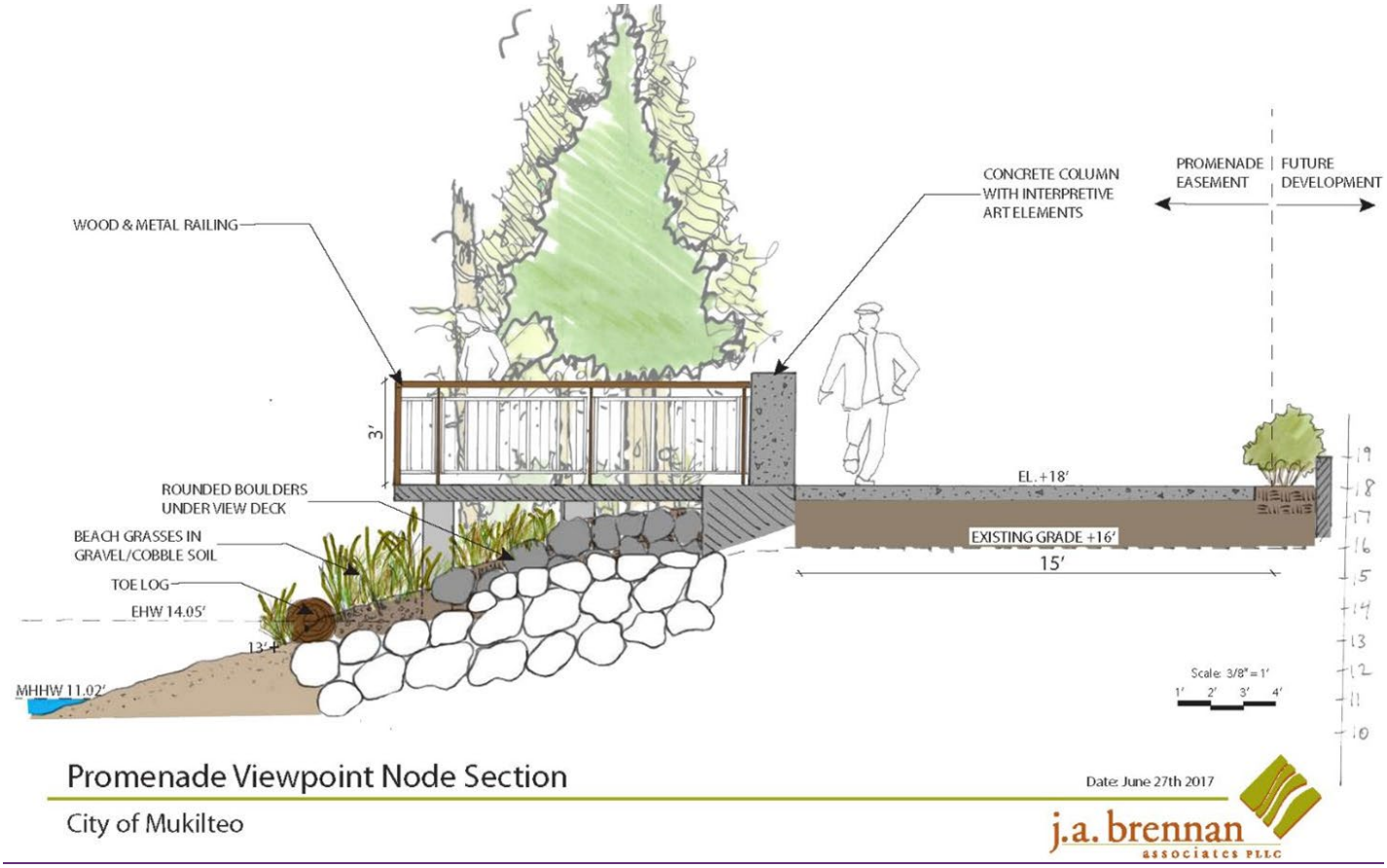


~~In February of 2004, City Council adopted the Lighthouse Park Master Plan after several years of work and public input. Figure 18 is a conceptual diagram adapted from the Lighthouse Park Master Plan that shows the planned improvements for Lighthouse Park.~~

~~Together, the Multi-modal Plan and Lighthouse Park Master Plan form the blueprint for providing public access to the waterfront and shoreline in the northern part of the city.~~

Figure ~~18~~19: Conceptual Waterfront Promenade from 2016 Downtown Waterfront Master Plan





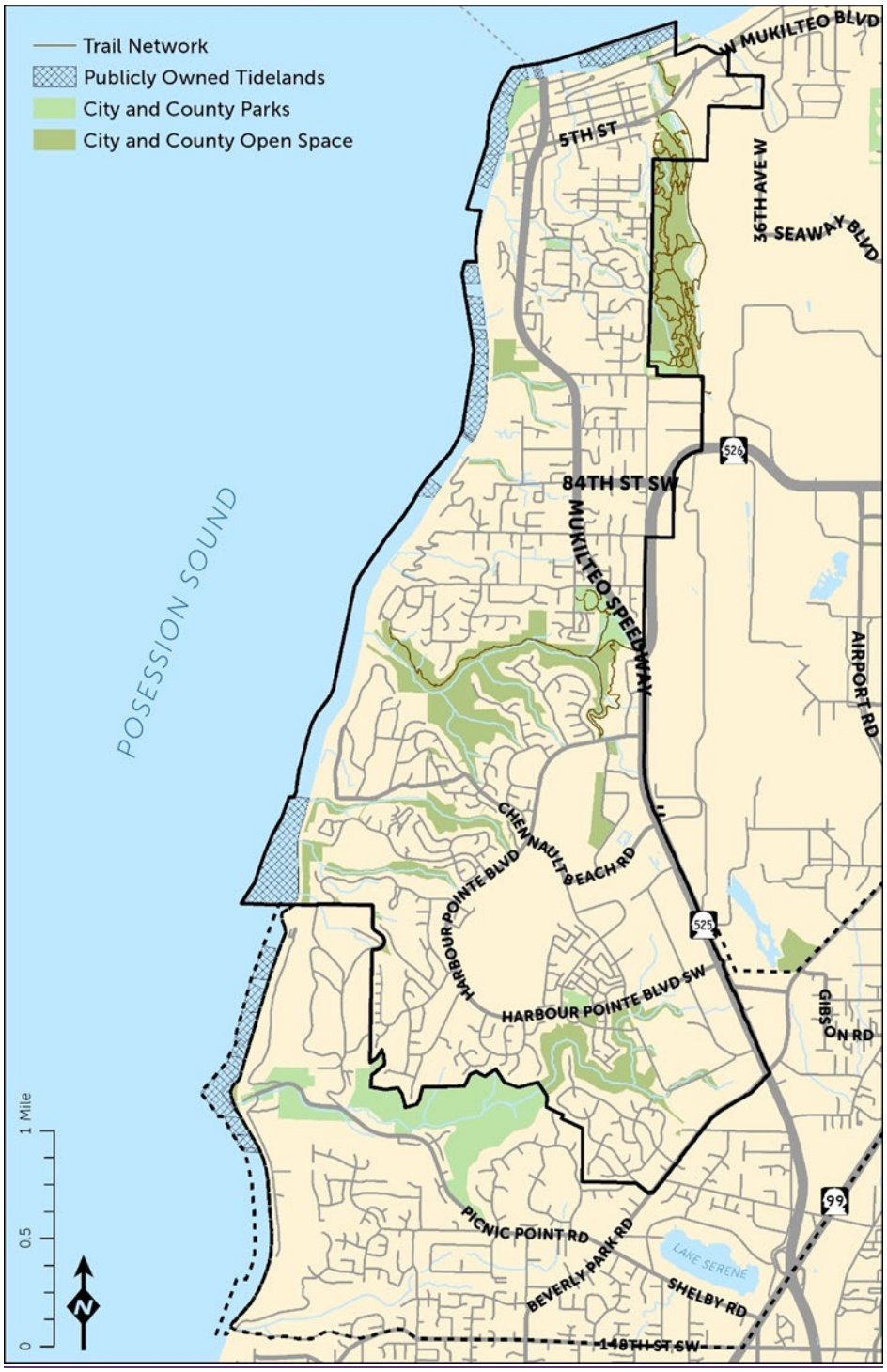
Trails and Open Spaces along the Shoreline

Within Mukilteo, several natural ravines link upland areas to ~~the~~ Puget Sound. Local residents refer to these ravines as "gulches." Due to the lack of development potential, Mukilteo's gulches are ideal locations for passive recreation, specifically as access corridors to the shoreline, and they provide another important component of open space (Figure 20).

The Big Gulch trail system is fully built, although public comments have shown a need for trail improvements to ~~help~~ keep paths from becoming too muddy to use in the winter ~~months~~. Scout troops ~~continue to be~~are a valuable volunteer resource for the City and have constructed multiple gateway entries in a cohesive timber frame style. Citizens have expressed concerns about the availability of trails. Others have expressed an interest in the City taking on an active stewardship role of the gulches, and maintaining or enhancing tree and other vegetative buffers. The City also has a responsibility for the stewardship of critical area habitats along stream corridors, surrounding wetlands, and along the shoreline.

The City is taking steps to meet these public demands. The City accepted large donations of open space from Snohomish County and gained ownership of Japanese Gulch in 2014. Following the direction expressed by citizens, the City has developed a ~~2009 Bicycle, Pedestrian, and Trails Plan~~2016 *Japanese Gulch Master Plan* and 2017 *Bike – Transit – Walk Plan* that explore~~s~~ the development of trails and trail connections throughout the community (Figure 2~~0~~1). Pedestrian trails can include several types ~~including~~such as expanded sidewalk systems, nature trials, bike trails, and water trails.

Figure 20: City of Mukilteo Overall Parks, Open Space, and Recreation Opportunities


Trail Network
Publicly Owned Tidelands
City and County Parks
City and County Open Space
POSESSION SOUND
W MUKILTEO BLVD
5TH ST
36TH AVE W
SEAWAY BLVD
526
84TH ST SW
MUKILTEO SPEEDWAY
AIRPORT RD
CHENNAULT BEACH RD
HARBOUR POINTE BLVD
525
HARBOUR POINTE BLVD SW
GIBSON RD
99
PICNIC POINT RD
BEVERLY PARK RD
LAKE SERENE
SHELBY RD
148TH ST SW
0
0.5
1 Mile
N

Trail Network
Public Tidelands
City and County Parks
City and County Open Space
W MUKILTEO BLVD
Lighthouse Park
5TH ST
36TH AVE W
SEAWAY BLVD
Japanese Gulch
526
84TH ST SW
MUKILTEO SPEEDWAY
POSESSION SOUND
Big Gulch
AIRPORT RD
CHENNAULT BEACH RD
HARBOUR POINTE BLVD
525
HARBOUR POINTE BLVD SW
GIBSON RD
Picnic Point Park
99
PICNIC POINT RD
BEVERLY PARK RD
LAKE SERENE
SHELBY RD
148TH ST SW
1 Mile
0.5
0
N

Figure 21: City of Mukilteo Existing and Proposed Trails

~~An opportunity for new trail construction in Big Gulch presented itself as partial mitigation for Mukilteo Water District's sewer line replacement project that runs through Big Gulch. Mitigation measures imposed on future developments within the city may increase the trail inventory. Additionally, the City is conceptualizing the development of a shoreline trail. If this idea is implemented it will also increase the total trail inventory.~~

Along with the creation of the waterfront promenade and implementation of the *BTW Plan*, the *Japanese Gulch Master Plan* incorporates public outreach, vision, preferred alternatives, critical areas, design, historic significance, public safety, maintenance and operation costs, park uses, and parking. The Japanese Gulch Master Plan recognizes that the connection to the Tank Farm, or future Japanese Gulch Creek Park (Figure 2~~1~~2), is a vital connection to the waterfront from Japanese Gulch.

~~Pedestrian trails can include several types including expanded sidewalk systems, nature trials, bike trails, and water trails. A unique trail system that parallels Mukilteo's coastline is the Washington State Water Trail, which extends along the Puget Sound. A Level of Service (LOS) has not yet been developed for this resource. Below are several examples of pedestrian trails in Mukilteo.~~

~~Figure 18: Examples of Trail Types Found in Mukilteo~~

~~Water Trail in front of Lighthouse Park~~

~~Portion of Mukilteo's Existing Sidewalk System~~

~~Bicycle Trail Next to Paine Field Blvd.~~

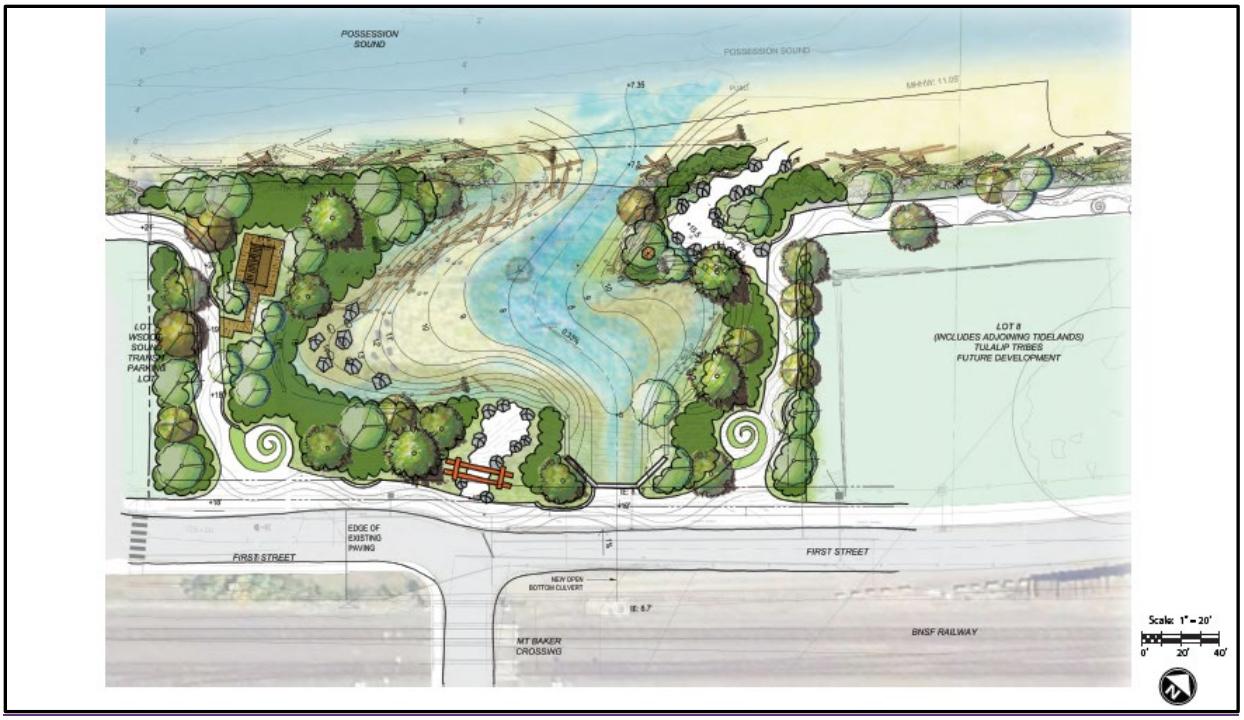
~~Bicycle Trail on the Mukilteo Speedway~~

~~Nature Trail Next to the Library~~

~~Figure 2019: City of Mukilteo Existing and Proposed Trails~~

~~The City hopes to add additional pedestrian trails. Specifically, the City intends to develop a waterfront promenade and construct soft trails through the gulches to the water. The promenade will be developed as part of the waterfront re-development as described previously. An illustration of the promenade, adapted from the Multi-modal Plan, that looks toward the west is presented below in Figure 20. A trail through Big Gulch as part of Mukilteo Water District's sewer line replacement project has provided the first opportunity for the City to develop a major pedestrian trail in Big Gulch. As a stated goal, the City would like to acquire more tidelands as opportunities arise. As a long-term vision, tideland acquisition could lead to developing a shoreline trail along the coastline. The City also plans to add additional bike paths to connect existing bike paths within the city and region.~~

Figure ~~21~~22~~10~~: Conceptual ~~Promenade~~ Japanese Gulch Creek Park Drawing ~~(west-facing view)~~ from the ~~Multi-modal~~Japanese Gulch Master Plan



Shoreline Priorities and Implementation

The fourthree priorities of this the PROSA Pplan for public access: waterfront, trails and open space, and active facilities and parkshealthy community, arts and culture, natural environment, and prioritizing the waterfront, have been determined to beare the highest parks and recreation needs for the City of Mukilteo, both currently and into the future. Tables 3 and 4 identifyies each of these priority areas and present specific projects associated with each priority areaone. In each priority area, land acquisition and re-development is are essential to achieve the City's long-term vision for parks, open space, and recreational facilities for the community. By accomplishing projects under each of these categories, the City of Mukilteo's park system will provide diverse recreational opportunities. Each priority has its own distinct list of projects that can stand alone. Thus, the projects can be undertaken at the same time and may compete for funding separately.

Priority 1: Waterfront Healthy Community

Re-development of the waterfront is a high priority for the City. Proposed waterfront projects addressed in this plan have local and regional importance. The first project priority is renovating Lighthouse Park. As we have seen, the Lighthouse is an important landmark in Mukilteo. Acquiring tidelands will put beaches back into public holdings and allow residents to walk the shoreline at low tide. Other priority projects are tied to large-scale regional projects, such as relocating the Ferry Terminal, improving shoreline access, and restoring marine habitats. Table 3 highlights specific projects and a timeline to accomplish them.

Table 3: Waterfront Redevelopment Timeline

A community engaged in improving the mental and physical well-being of its people is a healthy community. Characteristics of a healthy community include: pedestrian and bike--friendly connections,; clean water and air,; and recreation opportunities for all ages and abilities.

The *Japanese Gulch Master Plan* was completed in 2016 and plans for over 100 acres of forested upland, including creek daylighting, park trails for walkers and bikes, trailheads, a dog park, a preservation area, an arboretum, a playground, and a community garden. The public outreach process for Japanese Gulch overlapped with safe transportation discussions as part of the 2017 *By The Way (Biking – Transit - Walk) Pplan*. Integrating open space and public access into the City framework includes safe connections to and within swaths of open space land.

~~Table 4: Timeline for Trail Development~~

~~Trails, Open Space and Habitat Projects~~	~~Year~~																			
	~~2006~~	~~2007~~	~~2008~~	~~2009~~	~~2010~~	~~2011~~	~~2012~~	~~2013~~	~~2014~~	~~2015~~	~~2016~~	~~2017~~	~~2018~~	~~2019~~	~~2020~~	~~2021~~	~~2022~~	~~2023~~	~~2024~~	~~2025~~
~~Develop shoreline promenade~~																				
~~Develop a Trail Master Plan~~																				
~~Develop ravine trails (shoreline access & bike/pedestrian system)~~																				
~~Enhance shorelines, streams, & forest management areas~~																				
~~Create urban separators using vegetated buffers~~																				
~~Acquire tidelands, & shorelines (on-going)~~																				

~~The Lighthouse Park Master Plan Phase 1 outlines four attributes to improve public access:~~

~~Improve the southern portion of Lighthouse Park including the construction of a new internal access road.~~

~~Install picnic facilities, restrooms, play area, and sand volleyball courts.~~

~~Develop a new water view parking area and turnaround.~~

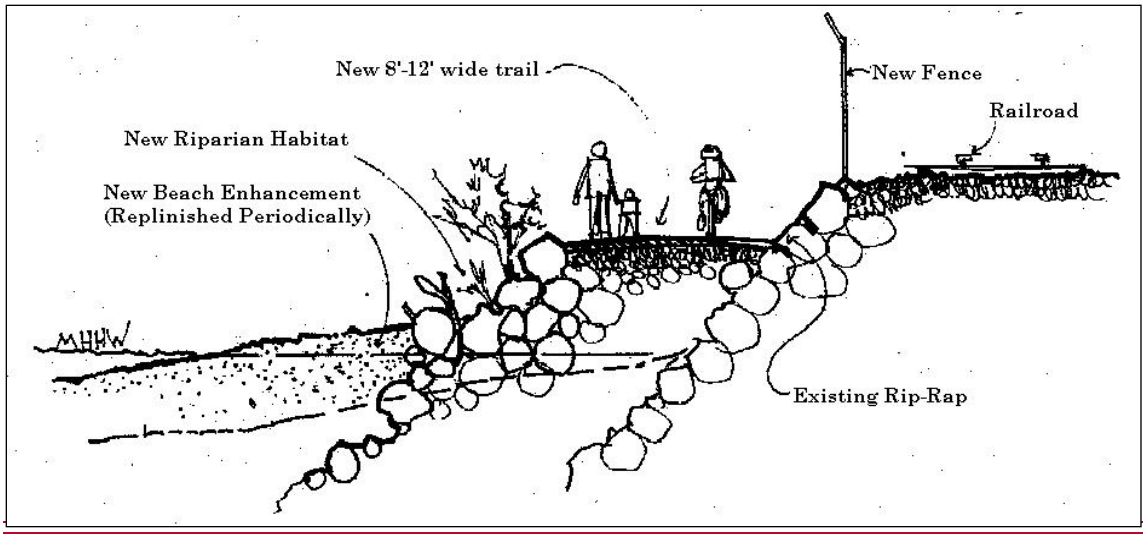
~~Beach restoration that includes 1,500l.f. re-planting the marine riparian area with native vegetation, placing drift logs along the shore, and creating channels.~~

~~Another waterfront initiative is to provide beach and tideland access along the western side of the City adjacent to Possession Sound. This ambitious effort will take years to fulfill. First, tidelands have to be purchased from private homeowners and BNSF to allow "legal access." A trail under or over the railroad tracks is necessary to provide safe, legal pedestrian access to the shoreline. Such a structure (i.e. over or underpass) is proposed at Possession View Park. Adequate structures exist at Picnic Point Park and Meadowdale Park. Over and underpass structures will help facilitate the long-range concept of "beach walks," first proposed in the 2003 City of Everett Shoreline Public Access Plan. Figure 21 exemplifies the types of over or underpass structures that could provide shoreline access where feasible and legal, such as at Possession View Park.~~

~~Figure 21: Examples of Pedestrian Access Structures to the Shoreline~~

~~Figure 22 (below) shows a cross-section of a proposed beach walk terrace between Mukilteo and Pigeon Creek in Everett (City of Everett, 2003 Shoreline Public Access Plan). This diagram represents a typical trail. A similar design could be employed for new shoreline trails in Mukilteo.~~

~~Figure 22: Cross-section of Proposed Beach Walk Terrace~~



Priority 2: ~~Trails~~Arts & Culture

Arts and culture promote a vital, enduring connection to place, marked by pride in civic history and optimism about the community's future. To support creative placemaking means sponsoring: a variety of public art installations impacting civic buildings, public spaces, and infrastructure; cultural festivals and events; diverse and inclusive cultural programs; and projects that celebrate the community's ever-changing diversity.

Based on resident preferences, the City plans to implement the following types of public art across the city:

1. ~~1.~~ Large-scale, iconic, memorable features (fountains, statues, sculptures, murals etc.).
2. ~~2.~~ Functional pedestrian and~~&~~ bicycle amenities (benches, bike racks).
3. ~~3.~~ Interactive artwork (functional musical sculptures, large chess sets, movable sculptures).
4. ~~4.~~ Community gateway and~~&~~ placemaking signage.

~~1.~~ ~~5.~~ Artwork integrated into public and community facilities (galleries and exhibits). ~~In conjunction with waterfront re-development, one of the most important elements of the re-development is building a pedestrian waterfront promenade. This is one of the major objectives yet to be achieved while re-developing the Federal Tank Farm. Washington State Ferries, Sound Transit, and the Port of Everett have laid the groundwork for this process with Sound Transit opening the Sounder Platform in June 2008. This walkway will link Edgewater Beach with Lighthouse Park. Both ends of the promenade will supply convenient parking and access. Washington State Ferries is encouraged provide elevators and second level walkways over the ferry loading area. This will make crossing the congested area easy and safe for pedestrians. A conceptual drawing of the promenade taken from the Multi-modal Plan is shown below in Figure 23.~~

~~2. Figure 23: Conceptual Drawing of the Waterfront Promenade Looking Northeast~~

3.
4.
5. A proposed schedule for accomplishing future trail projects has been included below in Table 4.
6.5.

Table 4: Timeline for Trail Development

The need to provide connections for pedestrian trails and bicycle paths may include land acquisition. This is important because developing trail and walkway connections requires an overall vision and strategy to accomplish it. Actions the City can take, to see this vision through include coordinating with street and infrastructure projects and conditioning development projects to provide connections. Because it is difficult to predict opportunities, potential land acquisitions cannot be shown on a map. When acquisition opportunities occur, their relative importance will be evaluated against the overall park system. Decisions will be based on the following criteria: expanding existing holdings or facilities, providing high quality facilities with adequate funding for operation and maintenance, and protecting critical areas and providing parks and open space in under-represented areas of the city.

Proposed trail development will provide public access through the city's steep gulches to the shoreline. However, trail construction within these ravines poses some challenges. The largest challenge is developing a public resource in a geologically sensitive area without creating environmental problems. Other associated challenges include performing maintenance and repairs to these areas, as needed since 2002, when the City became responsible for the gulches. As mentioned above, providing safe, legal access to the water is an overriding factor in creating trail connections. The first trail development opportunity has been Mukilteo Water District's sewer line replacement in Big Gulch, which began in 2009.

Because build-out in the City is assumed to occur by 2020, opportunities for land acquisition are becoming scarce. Tidelands and steep slopes might be the few opportunities available for acquisition for trail development and connections.

Priority 3: Active Facilities and ParksNatural Environment

In addition to parks and trail corridors, the natural environment includes undeveloped open space within and around Mukilteo, the shoreline, and the marine environment. To ensure a flourishing natural environment means: protecting environmental resources and habitats; fostering parks and preserving open

space; minimizing the use of toxic products; modeling environmentally -friendly practices; and reducing greenhouse gases.

Implementation of best practices for open space stewardship ~~best practices~~ contributes to the long-term success of public natural areas. The Park Stewardship Program is designed to connect individuals with nature through volunteering, safe and healthy parks, and education. The stewardship program is intended to be a resource, provide training opportunities, organize work parties, and assist in project implementation. The long-term success of Mukilteo's urban forests and open space areas will be based on the continued support of volunteers to monitor the sites, aid in habitat restoration, assist in trail maintenance, and help implement projects.

The City's parks and open spaces include broad swaths of natural areas within our easily accessible urban fabric of residential communities. These natural spaces are rife with educational opportunities through environmental programming. It is important to educate the public and park users about the importance of sustaining ~~the~~ natural ecosystems where plants, animals, and waterways interact and depend on each other for survival. Teaching the community about the environment, park rules, and how to be good stewards of the land helps keep park property safe and well maintained for everyone to enjoy.

Priority 4: Prioritizing the Waterfront

Within the next ~~6~~six years, this vision will be applied across Mukilteo and most directly to the downtown waterfront through a series of priority projects. The projects identified in ~~this plan~~the Downtown Waterfront Master Plan ~~PROSA Plan~~ will increase access to a revitalized waterfront through redevelopment. The projects will create a ~~looped~~ pedestrian promenade, an urban street front with local businesses, and playful waterfront uses that connect people to the natural, cultural, and urban qualities of Mukilteo. The waterfront prioritization reflects community demand and City-wide planning efforts over the past 10 years.

The waterfront promenade ~~repeatedly came up as~~is a high priority for the public. The City's Shoreline Development Regulations require that a 15-foot wide pedestrian promenade be constructed along the waterfront edge from Park Avenue east~~ward~~ to the Port of Everett Mount Baker Barge Rail Facility. The promenade will be ~~located~~ just upland of the existing rip-rap along the entire length of the waterfront. The Downtown Waterfront Master Plan provides design concepts for future development projects to ensure a cohesive look along the entire waterfront. Design elements include: interpretive cultural themes, compli~~c~~mentary materials, resting places, viewpoints, lighting, beach access, environmentally friendly landscaping, and public art.

Table ~~3~~7: Tentative Downtown Waterfront Phasing Plan & Implementation Schedule~~It is expected that the Tank Farm will be transferred to the Port of Everett, which will open public access to approximately 3,000 lineal feet of waterfront after re-development occurs. The transfer of land continues to put a greater burden on city governments to provide services, to both residents and non-residents. Developed parks that remain open will experience a higher level of use and even greater maintenance and renovation requirements than other parks. The City of Mukilteo had the foresight to set aside revenues coming from the Hotel-Motel tax to provide for park maintenance; however, this revenue source will not be enough to maintain the whole system. General funds will continue to be needed to subsidize costs, as well as taxes collected by the Port of Everett. Just as there are pressures to maintain and staff Lighthouse Park adequately, there will be similar pressures placed on local park and recreation services to maintain and staff specific park and~~

recreation services, at the expense of other City services unless funding is approved by a voted levy-lid lift. Determining what the cost is to operate, staff and maintain parks and recreation facilities, as well as setting aside funding for renovation – let alone new development – will continue to be an ongoing challenge. In the near future, local governments have to face this issue. The City must estimate maintenance and operation costs before building new parks and recreation facilities and consider these costs and funding sources when determining the phasing of development in individual park master plans.

Table 3: Waterfront Redevelopment Timeline

Waterfront Development Projects	Year																			
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lighthouse Park Redevelopment																				
• Phase I (construct beach enhancements, promenade, restrooms, picnic & play area)																				
• Phase II (improve Front St. access)																				
• Phase III (connect upper & lower downtown)																				
• Phase IV (relocate boat ramp & parking lot)																				
Shoreline Access																				
• Improve beach/shoreline access to publicly owned tidelands																				
Beach / Shoreline Improvements																				
• Enhance Riparian and Marine Habitat (as opportunities occur)																				
• Acquire tidelands (on-going)																				

WSF Project Elements			2015	2016	2017	2018	2019	2020	2022+
Phase 1		WSF Pier Removal							
Phase 2 A		WSF Upland Construction							
Phase 2 B		WSF Open New Facility & Remove Old Terminal							
Downtown Waterfront Master Plan Project Elements			**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2022+**
Short-Term Priority	***Interim Improvements***								
	Priority	**Project**							
	1	Site Clean Up							
2	2	Interim Parking							
	Street Scape								
	Priority	**Project**							
1	1	SR 525 Gateway, Pedestrian Bridge, and Underpass							
3	2	2nd Street Stairs							
	3	Front Street East							
	3	Front Street West							
	Park Elements								
	Priority	**Project**							
4	1	Interim Promenade: Japanese Gulch to Edgewater Beach							
	1	Edgewater Beach							
	2	Park Avenue							
	3	Interim Promenade: Park Avenue to Ferry Terminal							
	3	Speedway Park							
	4	Final Promenade							
	4	Central Waterfront Park (Pending NOAA Use Decision)							
	Pending	Boat Dock / Joint Pier							
	Environmental								
	Priority	**Project**							
	1	JG Creek Daylighting							
3/4	*On Going*	Beach Enhancement							

Chapter 9: Public Input Process

The comprehensive SMP update that concluded with adoption of the 2011 SMP included an extensive process of seeking and considering input from ~~Since this proposed *Shoreline Master Program* represents a changes from the 1974 2011 *SMP,* and public use of the shorelines is a principal goal, it is imperative that~~ the public, stakeholders, and lake, shoreline, and bluff landowners. ~~The City found t~~This input and the opportunity for the ~~have an opportunity to~~ public to participate in the process ~~as~~were imperative to development of the SMP.

~~The following details the public participation process for this plan update.~~

~~Goals of the Public Participation Plan~~

RCW 90.58.130 and WAC 173-26-090 and -100 require that local governments inform the people of the state about the planning process and invite and encourage participation by all who have any interest or responsibility related to shorelines. The goal ~~of the~~of p~~P~~ublic p~~P~~articipation ~~Plan~~planning, both as implemented for the 2011 comprehensive SMP update and for 2019 periodic SMP update, is to ~~provide a guide to~~ proactively encourage public participation during the SMP update public process. The City of Mukilteo is committed to encouraging coordinated and effective public involvement.

The following details the public participation process for this ~~plan~~SMP update.

~~Overview of the City's Shorelines~~

~~The City of Mukilteo is located in Snohomish County, 25 miles north of Seattle and west of Everett with over 210,070110 residents occupying a land area of 60 square miles. Mukilteo forms the southern boundary of Port Gardner Bay and the western portion of the city and the annexation area along Possession Sound encompassing 25,874 lineal feet or 4.9 miles of Puget Sound's shoreline (including the annexation area).~~

~~The majority of the shoreline was altered with the construction of the railroad line along the Puget Sound from Everett to Seattle in the late 1800s. The northern, or older, portion of Mukilteo's waterfront, known as Mukilteo Landing, lies within the 100-year floodplain and was formed by sand deposits from the Japanese Gulch Creek and lateral drift that comes north from Edmonds around Elliot Point. The northern portion of Mukilteo was created by a sand spit that was filled back to the railroad early in the 20th century.~~

~~Those shorelines that have been used for industrial, commercial or state park purposes will continue to be used by new urban re-development and essential public transportation facilities. The western portion of the shoreline south of Lighthouse Park that contains only railroad tracks and steep slopes is more "natural," and will be retained that way.~~

~~The *SMP* update will also cover the city's annexation area south of Mukilteo. This area is approximately 2,600 acres and home to nearly 11,000 people.~~

~~Lake Serene is over 20 acres and is also included in the Shoreline Plan. The Puget Sound shoreline from Everett to Seattle, which includes Mukilteo's western shoreline, was impacted by the construction of the railroad in the late 1800's.~~

~~2011 *SMP* Update Public Participation Strategy~~

~~The City of Mukilteo developed a strategy to ensure there is effective public participation throughout the review process. The primary methods to be employed were:~~

- Development of a public outreach program to inform community members, tribes, and agencies.
- Updating the City website, City Council, and Planning Commission periodically and have them host open houses, work sessions, and public hearings.

By utilizingusing all of these methods, the City exceeded the mandates of Washington State to involve all interested parties in the update of the *SMP*.

The affected tTribes and Department of Fish and WildlifeWDFW, and other agencies such as Department of Natural Resources, Department of Ecology, King and Snohomish County WRIA and Marine Resources Committees, neighboring jurisdictions, residents and affected property owner/parties of interest, etc.and others were be asked to provide comments on the draft plan and code. The Planning Commission open houses, work sessions, and public hearings provided a forum to review the technical work, discuss issues, and suggest solutions. They received testimony at their public hearing(s) and makemade a recommendation to City Council on the draft documents. City staff reported on the public process and comments made and identified whether specific entities or interests had not responded with input, so that it was clear whether the City Council should move forward with adoption of the documents or whether additional time was needed to solicit input (for example, from the tTribes).

Public Outreach Program

Community members and stakeholders were involved, through the following required and supplemental outreach methods:

- SEPA process and notification of agencies, including tTribes, and parties of interests.
- **Website**: A Shoreline page was added to the City's website where community members were able tocould access draft documents and maps, view the schedule, check for meeting notices, obtain contact information, and submit comments.
- **Newsletter**: The City of Mukilteo publishes three newsletters per year to cover the most important activities and information that interest residents. The Planning Department is given 1-2 pages to provide articles about plan updates and where to obtain more information on the Ccity website.
- **Newspaper(s):** The City of Mukilteo is fortunate to have a local weekly newspaper that covers, Pplanning Ccommission, Ccity Ccouncil, and other Ccity activities.
- **Open house**: Hosting an open house at a convenient location allowed for the broad dissemination of information (i.e.e.g., maps, proposals, etc.) and opportunity for comment.
- **Public hearings**: The public hearings on the draft and final plan and code provided the community with thea forum to include their comments into the public record.
- **Public notices**: Notice of the open house and public hearings were placed on the City's website;, posted at City Hall, Rosehill and other posting sites, and the local library branches;, and published in the newspaper of record, *The Everett Herald*.
- **Mailing list**: The City maintained a list of interested parties that provided the City with another avenue to keep the public informed throughout the update process.
- **Comments**: Establishing multiple means for submitting comments allowed for interested people to choose their preferred way to provide input.

2019 SMP Periodic Review Update Public Participation Strategy

The City of Mukilteo is undertaking a periodic review of its Shoreline Master Program (SMP), as required by the Washington State Shoreline Management Act (SMA), RCW 90.58.080(4). The SMA requires each SMP be reviewed and revised, if needed, on an eight-year schedule established by the

Legislature. The review ensures the SMP stays current with changes in laws and rules, remains consistent with other Mukilteo plans and regulations, and is responsive to changed circumstances, new information and improved data.

A Public Participation Plan is required to describe how Mukilteo will encourage early and continuous public participation throughout the process of reviewing the SMP. This Public Participation Plan describes the steps that Mukilteo will take to provide opportunities for public engagement and public comment, as well as Mukilteo's contact information and web addresses.

This plan is in addition to any other minimum requirements for public participation required by Mukilteo's Code Section MMC 17B.72.050. This plan is a working document and will be adjusted as needed to provide for the greatest and broadest public participation.

Public Participation Goals

- Provide interested parties with timely information, an understanding of the process, and multiple opportunities to review and comment on proposed amendments to the SMP.
- Actively solicit information from citizens, property owners and stakeholders about their concerns, questions and priorities for the Periodic Review process.
- Encourage interested parties to informally review and comment on proposed changes to the SMP throughout the process and provide those comments to decision makers.
- Provide forums for formal public input at project milestones prior to decision-making by local officials.
- Consult and consider recommendations from neighboring jurisdictions, federal and state agencies, and Native American tribes.

2.0 Public Participation Opportunities

Mukilteo is committed to providing multiple opportunities for public participation throughout the process. Mukilteo ~~will~~ used a variety of communication tools to inform the public and encourage their participation, including the following:

2.1 Website

Mukilteo's website ~~will~~ included a Periodic Review webpage where interested parties can access status updates, draft documents, official notices, minutes and other project information. The webpage will be the primary repository of all information related to the Periodic Review process. The page will include who to contact for more information and an email link for questions and comments.

2.2 Survey

A community survey was conducted to solicit specific feedback from interested parties and results were posted on the Periodic Review webpage.

2.3 Community Meetings

Mukilteo ~~will~~ initiated the Periodic Review with a series of targeted community meetings and at least one open house. Public comments received during these events were ~~will be~~ posted on the Periodic Review webpage.

2.4 Notice mailing list

An email list of interested parties was ~~will be~~ created, advertised and maintained by the City of Mukilteo. The list will be used to notify interested parties regarding Periodic Review progress and participation opportunities. Interested parties will be added to the list by contacting the Planning Department.

2.5 Comment

Interested parties were ~~will be~~ encouraged to provide comments to Mukilteo by letter or email. All comments were ~~will be~~ forwarded to the Mukilteo Planning Commission and City Council. The Periodic Review webpage is ~~will be~~ the central repository for information under consideration. Documents are ~~will be~~ available for review at the Mukilteo Planning Department, and copies will be provided at the established copying cost.

2.6 Planning Commission

The Planning Commission is ~~will be~~ the primary forum for detailed review and recommendations to the City Council. Interested parties are encouraged to attend and provide comments during the Planning Commission deliberations and/or workshops and public hearings. Official notices were ~~will be~~ published as established in Mukilteo's policy.

2.7 News media

The local news media has been ~~will be~~ kept up-to-date on the Periodic Review process and receive copies of all official notices.

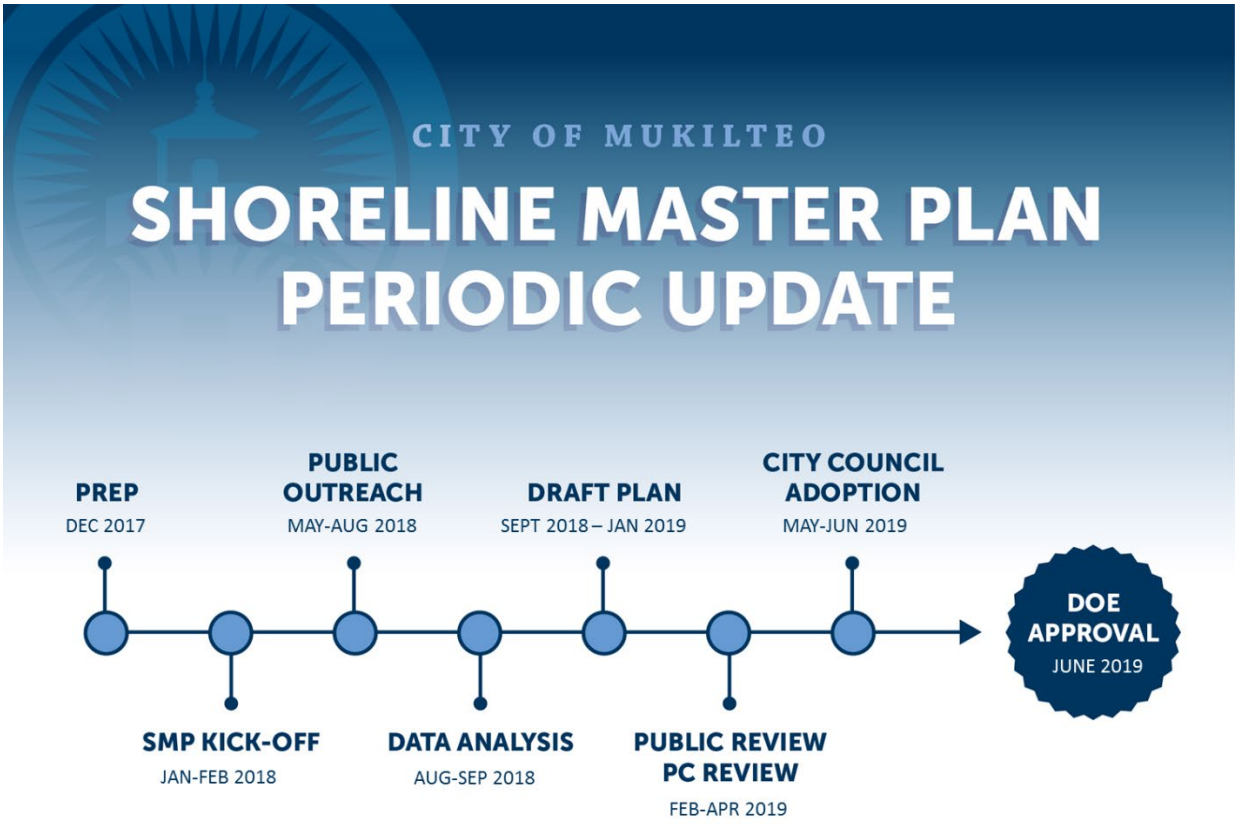
3.0 List of stakeholders

Mukilteo ~~will~~ engaged the following stakeholders:

- All people listed on the Shorelines, Downtown Waterfront, or Comprehensive Plan / Dive Community parties of record lists
- Downtown Businesses and Residents
- Snohomish County Ferry Advisory Committee
- Mukilteo Kiwanis~~/Rotary/Mukilteo Chamber of Commerce~~
- Mukilteo Historical Society / Seniors
- Mukilteo Youth Advisory Committee / Parks and Arts Commission
- Port of Everett / Water & Wastewater Districts / City of Everett / Snohomish County
- Tulalip Tribes / Beach Watchers

4.0 Public Participation Timeline

The following is a general timeline including anticipated public participation opportunities. Mukilteo will coordinate with the Department of Ecology throughout the process. A detailed timeline will be posted on the Periodic Review webpage.



5.0 Public Comment Periods and Hearings

The Draft Shoreline Master Program was~~ill be~~ circulated for public comment for at least 30 days prior to the Planning Commission holding at least one public hearing to solicit input on the Periodic Review. The Mukilteo City Council held ~~will hold~~ at least one public hearing before final adoption.

Mukilteo ~~will~~ coordinated with the Department of Ecology on public notification of comment periods and hearings to take advantage of Ecology's optional SMP amendment process that allows for a combined state-local comment period (WAC 173-26-104).

Public notice of all hearings will state who is holding the comment period and/or hearing, the date and time, and the location of any public hearing. Notices will be published per official policy and comply with all other legal requirements such as the Americans with Disabilities Act. A notice will be sent to the email list (2.4, above) and ~~the Department of~~ Ecology.

~~Roles and Responsibilities~~

~~The City of Mukilteo is responsible for all aspects of the SMP update. The City will be the primary regulator, with Washington State Department of Ecology (DOE) acting in a support and review capacity.~~

~~DOE is also required to approve some permits and must approve new or amended shoreline master programs.~~

~~The primary contact for Mukilteo's SMP update is:~~

~~Department of Planning & Community Development~~

~~City of Mukilteo~~

~~SMP Public Participation~~

~~11930 Cyrus Way~~

~~Mukilteo, WA 98275~~

~~(425) 263-8000~~

~~(Subject Line: Shoreline Question or Comments)~~

~~City website:~~

~~http://www.ci.mukilteo.wa.us/Page.asp?NavID=171https://mukilteowa.gov/departments/planning-development/planning-long-range/smp/~~

Public Agencies or Interest Groups/Residents/Tribes/Parties of Interest

The following list includes previously identified ~~Local governments must consult with~~ interested parties that were engaged throughout the process of develop~~ment~~ing the 2011 comprehensive SMP update. These interested parties and associated priorities were considered during the 2019 periodic update, and should be considered during all future updates to the City's SMP~~throughout the process of developing the *SMP*. Mukilteo will involve representatives from the following~~:

- Mukilteo City Council
- Mukilteo Planning Commission
- Residents of Mukilteo
- Lake Serene Associations
- Property/b~~B~~usiness owners in the shoreline environment
- Tulalip Tribe
- Squamish Tribe
- Swinomish Indian Tribal Community
- Lummi Nation
- Other Point Elliot Treaty Tribes
- Port of Everett
- ~~WA State Department of Transportation~~WSDOT
- Sound Transit
- Community Transit
- City of Edmonds
- City of Lynnwood
- City of Everett
- Snohomish County - WRIA 7
- Snohomish County Marine Resources Committee and the two members living ~~with~~ in the City of Mukilteo
- King and Snohomish Counties~~y~~ -WRIA 8
- ~~Department of Ecology (DOE~~Ecology~~)~~
- ~~Department of Fish and Wildlife (~~WDFW~~)~~
- Department of Natural Resources (DNR)
- Department of Commerce (Commerce)
- State Office of Archaeology and Historic Preservation (DAHP)
- NOAA Fisheries
- U.S. Fish and Wildlife Service
- U.S. Air Force
- ~~Burlington Northern Santa Fe (~~BNSF~~)~~
- Shore land/Mukilteo Landing parties of interests
- Pilchuck Audubon
- Master Builders
- Parties of record

~~These parties will be informed and invited to participate throughout the review process.~~

Other stakeholders not ~~included in the list~~listed above may also be notified during future~~the~~ public involvement process~~es~~. Others contacted may include homeowner associations, environmental groups, or others. ~~Notification to these stakeholders may be accomplished via email or other means as the shoreline management planning process proceeds.~~

Chapter 6 of this ~~*Shoreline Master Program (*~~SMP~~)~~ ~~covers~~ identifies the projects that are likely to be considered over the next ~~ten~~ 10 years, recognizing that not all of these projects or ideas can be carried out due to technical~~,~~ coordination and available funding limitations. What is more important is that potential projects are identified, and five projects will have been accomplished by the end of 2022 (see Table 8).~~2011.~~

Table ~~8~~4~~5~~: Restoration or Enhancement Projects Accomplished by 2022~~12 2011~~

Project Name & Location	Restoration Accomplishment	Cost of Restoration
1. ~~Lighthouse Park Phase 1~~Japanese Gulch Creek Park Site Clean-Up~~:~~ ~~Backshore Berm and Riparian Vegetation Re-planting~~	The City requested and was approved for a Targeted Brownfields Assessment of the Mukilteo Tank Farm by the ~~United States Environmental Protection Agency (~~EPA~~)~~. A site clean-up Remediation Plan has been prepared with recommendations on how to move forward.~~Removed park restroom and picnic tables, redesigning the backshore of the beach creating a 1,000 l.ft. berm, adding large woody debris (drift logs) and replanting with native riparian species.~~ ~~Water quality improvements were added using a stormwater swale cleaning water from park parking lot before released into Puget Sound. Used LID to reduce parking impact.~~ ~~Expanded pedestrian waterfront walkway.~~	~~$1,000,000.~~100,000 ~~ALEA~~ EPA Grant ~~$500K~~100,000 ~~City $500K~~
~~Phase 1 Area Before 2008 Redevelopment~~	~~Phase 1 After Increasing Backshore~~	

~~Backshore After Phase 1 is Completed~~	~~Backshore After Phase 1 is Completed~~	
2. ~~Lighthouse Park Phase 2~~Japanese Gulch Creek Park Beach Enhancement and Tidal ~~:~~Estuary Restoration ~~Riparian Vegetation Replanting & Impervious surface retrofit~~	Restoration would include creating the creek channel and estuary and riparian buffer plantings. ~~One thousand lineal feet (450 l.ft.) was replanted to assist with water quality and to provide additional riparian habitat upland of the Ordinary High Water Mark (OHWM).~~ ~~Improved water quality with use of pavers, rain gardens, and stormwater swales as a retrofit for cul-de-sac and parking before releasing into Puget Sound.~~ ~~Added 500 l.ft. of pedestrian waterfront trail to Elliot Point and added park benches and picnic tables.~~	$241,561~~$40,000.~~ ~~RCO Grant $20K~~ ~~City $20K~~ ~~$200,000.~~ ~~Heritage Grant $100K~~ ~~City SW $100K~~

~~Lighthouse Park Phase 2 Backshore Enhancement & Riparian Replanting~~

3. Japanese Gulch ~~Fish Passage Phase 1 & Design & Permitting of Phase 2~~Creek Park Daylighting	This project will include removing a portion of the existing rip-rap and stabilizing the upland bank to create an open creek channel from Possession Sound to the new First Street. ~~Baffles and rocks installed onto concrete sluice to concentrate water flow and allow fish to pass under Mukilteo Lane.~~	$~~61,000~~4,000,000 ~~Airport Mitigation $~~

~~Before:~~

~~After:~~

4. Brewery Creek Park Restoration and Potential Creek and Estuary Restoration~~Japanese Gulch Fish Passage Phase 2~~	This area is heavily used by the dive community to access deep water and is an informal d~~D~~ive p~~P~~ark. This City envisions enhancing this area with gateway concepts and pedestrian-~~-~~friendly amenities, as well as potentially daylighting Brewery Creek. ~~A three level fish ladder installed just south of Mukilteo Lane and ring weirs installed inside the culvert to allow fish to pass into and through a 170 foot culvert under BNSF – Boeing Spur.~~	~~$81,800~~$887,837 ~~Airport Mitigation $~~
~~Before:~~ 	~~After:~~ 	
5. ~~Japanese Gulch Fish Passage Phase 3 & Estuary and Stream habitat connection~~Edgewater Beach Restoration	Edgewater Beach P~~p~~ark was constructed by the Port of Everett for habitat mitigation and enhanced public access alongside its Mount Baker Terminal shipping facility.~~Realigned Japanese Gulch Creek to flow in original natural stream corridor and leaving concrete sluice for high water flow as a by-pass.~~ ~~Reconnected a freshwater estuary to Japanese Gulch Creek, by breaking a dike built to protect the railroad bed, by separating the tributary and groundwater flows from reaching the stream south of Mukilteo Lane.~~ While the majority of this park is already developed, the City envisions adding additional beach enhancements.	$460,267 ~~$170,000~~ ~~Airport Mitigation of $25,000~~ ~~Stormwater Funds of $145,000~~
Summary of Shoreline Projects		Total ~~$765,191~~$5,589,665 ~~Grants~~

		~~$100,000~~~~City: $520K~~ ~~City SW: $265K~~ ~~Grants: $620K~~ ~~Mitigation Funds: $150K~~

The Restoration Plan serves as a supporting document, and Appendix B of that ~~document~~ plan ~~provides~~ identifies the potential funding sources ~~that are~~ available to assist with funding and grants. Generally, the following funding sources are being used for restoration efforts:

1) State and f~~F~~ederal g~~G~~rants
2) ~~Stormwater capital funds~~Ecology and salmon restoration funds
3) City Real Estate Excise Tax
4) ~~Project Mitigation Funding~~Beach enhancement funds

Because capital plans evolve each year, it is not appropriate to include details in the *SMP*. The reader is referred to the City Budget that includes funded capital projects each year, and the most current City of Mukilteo Comprehensive Plan – Capital Facilities Element.

Appendix A: Definitions

To clarify the intent and meaning of certain words or terms contained in this *SMP*, the following list of definitions is provided. These definitions are used for general understanding only when reviewing the SMP. Adopted definitions are contained in Title 17B.08.020 of the Mukilteo Municipal Code. All other words used in this document carry their customary meaning. Words in the present tense include the plural, and vice versa.

"Archaeological/Historical" means uses, developments, and activities on sites of historical or archeological significance, or sites containing items of historical or archeological significance.

"Bike / Pedestrian Path/Trail" means multi-purpose trails that emphasize safe travel for pedestrians and bikes around the community with a joint focus on recreation and transportation that may include separate on-street travel lanes.

"Boat" means vessels less than twenty tons, used as a private pleasure craft.

~~**"Boathouse"** means a structure specifically designed or used for storage of boats.~~

"Boat launching facility" means a facility used for launching of boats by auto or hand including ramps and other devices, along with adequate parking and maneuvering space. For the purpose of the chapter, boating facilities exclude docks serving four or fewer single-family residences.

~~**"Breakwater"** means protective structure usually built off shore for the purpose of protecting the shoreline or harbor areas from wave action.~~

"Buffer" means an area, typically adjacent or otherwise associated with an environmentally sensitive feature, which is retained in its natural state. No clearing, grading, or filling is permitted within a buffer (unless specifically conditioned otherwise).

~~**"Buildable area"** is that portion of a lot within the setbacks established by the zoning district in which the lot lies. Open space tracts, native growth protection areas, drainage facilities, easements, or other similarly restricted land are not considered part of the buildable portion of a lot.~~

"Bulkhead" means a wall or embankment used for holding back earth and to protect structures or shoreline from wave action.

"Capital Facilities" means those services and/or structures provided by a state, county or city such as roads, sewers, police and fire protection, schools that provide the necessary foundation for the functions of a community of people and commerce.

"Community Park" means larger parks that focus on meeting the active and passive recreation needs of several neighborhoods or larger sections of the community, including group activities. They also preserve unique landscapes and open spaces within the community. Community centers may be included in this classification as they also provide broad recreation opportunities for the community. This classification may include school resources such as High School and Middle School athletic fields.

"Critical Areas" For the purpose of the critical area regulations contained in Chapters 17B.52 through 17B.52D, "critical areas" means those possessing existing slopes in excess of forty percent, or areas containing unstable soils or other geologic hazards, or natural drainage ways or ravines, areas of special flood hazard, areas of critical recharging effect on aquifers used for potable water, or areas that have been identified as providing significant wildlife habitat by the Washington Department of Fish and Wildlife, wetland areas, or those areas defined as shorelines of Mukilteo, the state, or of statewide significance.

"Cultural Resources" Includes sites, structures, objects, or remains, which convey historical, architectural or archaeological information of local, state, or national significance.

"Daylighting a stream" means to bring a previously culverted or piped stream or stormwater drain to the surface. Daylighting projects reestablish a stream in its old channel where feasible, or create a new channel if necessary. Daylighting projects shall include installation of habitat features such as large woody debris, creation/recreation of wetlands, streams, and ponds.

"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 this chapter at any state of water level. "Development" does not include dismantling or removing structures if there is no other associated development or re-development.

"Dock" means any facility for the moorage of boats, including but not limited to piers, wharves, and quays.

"Dredging" means removal of sand, gravel, or other earth from the bottom of a body of water for the purpose of deepening a navigational channel or obtaining bottom materials. Dredging does not include maintenance sediment removal at pipe inlets or outlets or removal of material from man-made ponds, including backwash solids drying areas, or stormwater ponds. Excavation for the purposes of constructing utilities and other permitted structures (e.g., pilings) shall not be considered dredging.

"Essential Public Facility" or "EPF" means a facility that is typically difficult to site, such as an airport, a state education facility, a state or regional transportation facility as defined in RCW 47.06.140, a state or local correctional facility, a solid waste handling facility, or an in-patient facility, including substance abuse facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.09.020. The term "Essential Public Facility" includes all facilities listed in RCW 36.70A.200, all facilities that appear on the list maintained by the State Office of Financial Management pursuant to RCW 36.70A.200(4), and all facilities listed as essential public facilities in the Mukilteo Comprehensive Plan.

"Essential Public Facility, Local" means an EPF that is owned, operated, or sponsored by the City of Mukilteo, a special purpose district, Snohomish County (for facilities that do not provide service to the county-wide population), or another unit of local government. An EPF is "sponsored" by a local government when it is to be owned or operated by a nongovernmental entity pursuant to a contract with the local government to provide the EPF.

"Essential Public Facility, Regional" means an EPF that is owned, operated, or sponsored by Snohomish County or a Regional Agency whose boundaries encompass the City and which serves the county-wide population or an area that is greater than the County. An EPF is "sponsored" by the County or a Regional Agency when it is to be owned or operated by a nongovernmental entity pursuant to a contract with the County or Regional Agency to provide the EPF.

"Essential Public Facility, State" means an EPF that is owned, operated, or sponsored by the State of Washington.

"Floodway" means the area, as identified in a master program, that either: (i) Has been established in federal emergency management agency flood insurance rate maps or floodway maps; or (ii) consists of those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under

normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition, topography, or other indicators of flooding that occurs with reasonable regularity, although not necessarily annually. Regardless of the method used to identify the floodway, the floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

~~the area that has been established in effective Ffederal Eemergency Mmanagement Aagency flood insurance rate maps or floodway maps. The floodway does not include lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state. those portions of the area of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition. The floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.~~

"GMA (Growth Management Act)" This Act (RCW chapter 36.70A) passed by the Washington State Legislature requires that certain cities and counties develop and coordinate policy and plans to: secure wise and proper use of land and resources, maintain environmental quality, ensure sustainable economic growth, provide adequate public facilities including sufficient open space and recreational opportunities, and to preserve cultural and historical resources in the face of increasing population and its concomitant pressures.

~~**"Groin"** means a barrier type structure extending from the back of shore into the water across the beach. The purpose of a groin is to interrupt sediment movement along the shore.~~

"Hearing board" means the Shoreline Hearings Board (not the Growth Management Hearing Board(s)).

~~**"In-water facilities"** means boat launching facilities, marinas, visitor docks, mooring buoys, residential docks, floats, seaplane access and moorage, docking facilities for cruise boats, and waterborne transportation facilities.~~

~~**"In-Water Fill"** means activities that involve the addition of soil, sand, rock, gravel, earth retaining structure, or other material to an area waterward of the ordinary high water mark or in shorelands in a manner that raises the elevation or creates dry land.~~

~~**"Level of Service (LOS)"** means a qualitative expression of minimum standards, typically expressed as acres/1,000 population, required to satisfy the parks, open space, and recreational needs of the community.~~

~~**"Jetty"** means an artificial barrier used to change the natural littoral drift to protect inlet entrances from clogging by excessive sediment.~~

~~**"Marina"** means a facility providing for the rental or public use of moorage for pleasure craft and which may include accessory facilities such as sales, rentals, and light servicing of these craft.~~

~~**"Mini-park"** means the smallest park classification used to address limited, passive, or isolated recreational needs or to act as green urban buffers.~~

"Moorage" means any device or structure used to secure a vessel for temporary anchorage, but which is not attached to the vessel (such as a pier or buoy).

"Mukilteo's MUGA or Municipal Urban Growth Area" is that portion of Snohomish County's Southwest Urban Growth Area that is being considered by the City of Mukilteo for future annexation and has been mutually agreed to by all surrounding cities through the Snohomish County Tomorrow process.

"Multi-modal" means two or more modes or methods of transport.

"Municipal Urban Growth Area" means the unincorporated portion of Mukilteo within the Southwest Snohomish County urban growth area.

~~**"Neighborhood Park"** means the basic unit of the park system that provides the active or passive recreational and activities at the neighborhood level for a variety of ages and user groups. This classification may include school resources such as playgrounds and localized centers such as the Boys and Girls Club.~~

~~**"Nonconforming use"** means an existing shoreline use that was lawfully established prior to the effective date of the act or the applicable master program, but which does not conform to present use regulations due to subsequent changes to the master program.~~

"Non-water oriented use" means upland uses that have little or no relationship to the shoreline. All uses which do not meet the definition of water-dependent, water-related or water-enjoyment are classified as non-water-oriented uses. Adding public access features to a non-water-oriented use does not automatically change the inherent use to a water-enjoyment use. Examples may include, but are not limited to, professional offices, automotive sales or repair shops, mini-storage facilities, convenience stores, and gas stations.

"Ordinary high water mark (OHWM) Shoreline" means a visible break where the presence of water has created an obvious mark or demarcation on the shoreline. For areas where a seawall or bulkhead creates an obvious break between the tidelands and shorelands, this shall be considered the OHWM. Where there is no obvious break or visible mark, the ordinary high water mark shall be the line of mean higher high water. See Diagram A.

Diagram A: Example of Shoreline Definitions

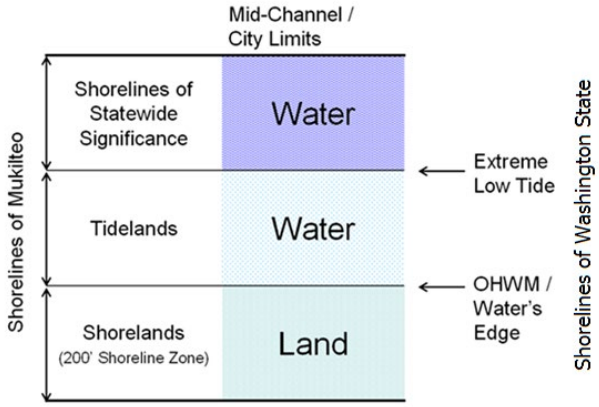


Diagram A: Example of Shoreline Definitions

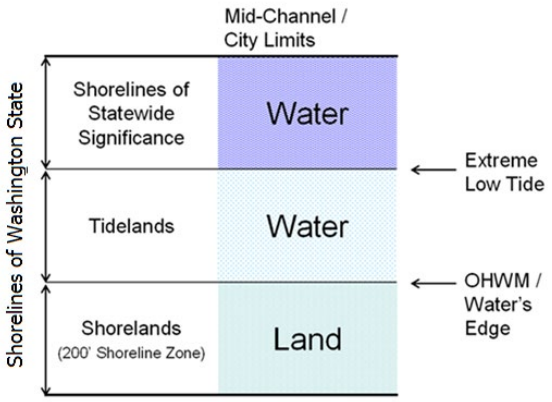
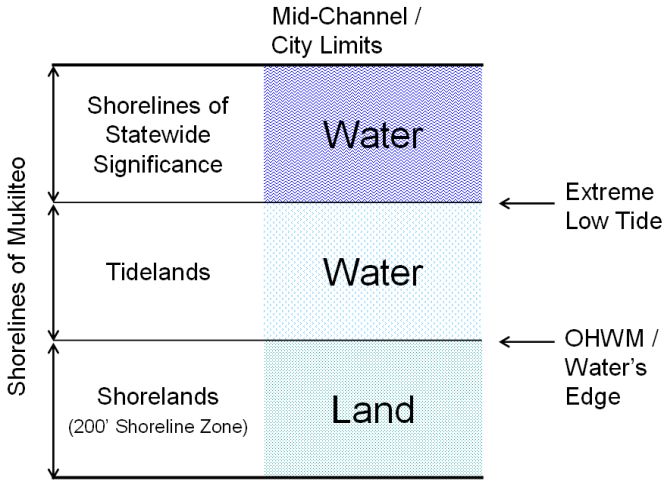


Diagram A: Example of Shoreline Definitions



"Open Space" means undeveloped areas set aside for the preservation of significant natural resources, remnant landscapes, and aesthetic buffering, this category may include critical areas, non-developable land, or tracts of land that set aside during development projects.

"Ordinary high water mark—streams (OHWM-Streams)" means the mark that will be found by examining the bed and banks of a stream and ascertaining where the presence and action of waters are so common and usual, and so long maintained in ordinary years, as to mark upon the soil a vegetative character distinct from that of the abutting upland. In any area where the ordinary high water mark cannot be found, the line of mean high water shall substitute. In any area where neither can be found, the top of the channel bank shall be substituted.

"Overwater structure" means a structure extending on or over the surface of the water which has one or more walls, with or without a roof.

"Pedestrian Trail" means a multi-purpose trail located within parks, greenways, open spaces, or natural resource areas with a focus on recreational value and enjoying the natural environment.

"Pier" means a general term including docks and similar structures consisting of a fixed or floating platform extending from the shore over the water secured or supported by pilings. Piers may also be used for fishing.

"Pile~~s~~," "p~~P~~iling~~s~~" and "p~~P~~ile driving" means a column of wood or steel or concrete that is driven into the ground to provide support for a structure, a number of piles, the process of installing piles into the ground, respectively.

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

1. Comparatively high fish or wildlife density;
2. Comparatively high fish or wildlife species diversity;
3. Fish spawning habitat;
4. Important wildlife habitat;
5. Important fish or wildlife seasonal range;
6. Important fish or wildlife movement corridor;
7. Rearing and foraging habitat;
8. Important marine mammal haul-out;
9. Refugia habitat;
10. Limited availability;
11. High vulnerability to habitat alteration;
12. Unique or dependent species; or
13. Shellfish bed.

A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as, old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or 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.

1. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the department of fish and wildlife (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.
2. 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, gravid (egg bearing) female Dungeness crab and marine mammal congregations.
3. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.
4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

"Public access" is a means of physical approach to and along the shoreline available to the general public. Public access may also include visual approach.

"Shorelands" or "shoreland areas" means those lands extending landward for two hundred (200) feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this plan and code; the same to be designated as to location by the department of ecology. See Diagram A under "ordinary high water mark."

"Shoreline" means the water and submerged lands of Port Gardner Bay, Possession Sound, and including all shorelines of the state and shorelines of statewide significance as defined in RCW 90.58.030. See Diagram A under "ordinary high water mark."

"Shoreline activity" means an activity associated with use of the shoreline or the use of energy toward a specific action or pursuit. Examples of shoreline activities include, but are not limited to, fishing, swimming, boating, dredging, fish spawning, wildlife nesting, or discharging of materials. Not all activities necessarily require a shoreline location.

"Shoreline Appeal – Date of Filing" the "date of filing" varies according to the type of permit being appealed:

1~~A~~. An appeal of the City's approval or denial of a substantial development permit or the City's denial of a variance or conditional use permit, the "date of filing" is the date that ~~DOE~~Ecology actually receives a completed filing from the City on its permit decision.

2~~B~~. An appeal of a conditional use permit or variance that has been approved by the City and approved or denied by ~~DOE~~Ecology, the "date of filing" is the date that ~~DOE~~Ecology transmits its final decision or order to the City, not the date the City actually receives the decision or order.

3~~C~~. Where a project involves both a substantial development permit and a conditional use permit or variance, the latest applicable date of filing may be used in filing the project appeal.

For shoreline appeal process and timelines, the requirements of RCW 90.58.180 shall be followed.

"Shoreline designations" means the seven (7) shoreline overlay zones in the city: Urban Waterfront~~–~~, Urban Waterfront Park, Urban Conservancy, Aquatic Urban, Aquatic Urban Conservancy, Urban Railroad, and Urban Lakefront.

"Shoreline modifications" means those actions that modify the physical configuration of qualities of the shoreline area, usually through the construction of a physical element. Shoreline modification activities are generally construction actions undertaken in preparation for, or in support of, a shoreline use.

"Shoreline stabilization" means actions taken to address erosion impacts to property and dwellings, businesses, or essential public facility structures caused by, or associated with, current, flood, tides, wind, or wave actions. These actions include structural methods (i.e., seawalls, bulkheads, retaining walls and bluff walls, concrete groins, gabions, rock revetments, etc.), nonstructural methods (i.e., beach nourishment and vegetation enhancement) and regulatory requirements (i.e., setbacks).

"Shoreline use" means the commitment of land or water surface to a given purpose or activity. Examples of shorelines uses include, but are not limited to, residential units, parks, marinas, open space, office buildings, ports, restaurants, wildlife preserves, utilities, essential public facilities or

even nonuse. Not all uses, however, are necessarily reasonable or appropriate for a shoreline location.

"Shorelines of Mukilteo" means the total of all the "shorelands" (extending landward two hundred (200) feet from the water's edge or OHWM) and the "shorelines of the state" (areas of Puget Sound lying seaward of the water's edge or ordinary high water mark) within the city limits, being those areas covered by the city's shoreline master program. See Diagram A under "ordinary high water mark." Shoreline designations include both the upland and the water or aquatic environment.

"Shorelines of state-wide significance" within the city's jurisdiction, means all of the water areas of Possession Sound and Port Gardner Bay lying seaward of the line of extreme low tide, out to the city limits or to mid-channel. See Diagram A under "ordinary high water mark."

"Shorelines of the state" means those areas of Puget Sound lying seaward of the water's edge or ordinary high water mark. See Diagram A under "ordinary high water mark."

"Steep slopes" or "Geologically Sensitive Slopes" means those areas within the city that are:

1. Affected by, contain, or exhibit unstable or potentially unstable soil types, steep slopes, erosion, earth movement, slides, surface water runoff, ground water, liquefaction, within the one-hundred-year flood plain, or within a tsunami hazard area.
2. Within the designated geologic sensitive area as shown on the city's "geologic sensitive areas" map (see Attachment A at the end of Chapter 17.52A).
3. 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).

"Tidelands" means those areas lying between the water's edge or ordinary high water mark (OHWM) and the line of extreme low water. See Diagram A under "ordinary high water mark."

"Utility uses" means all services and facilities that produce, convey, store, or process power, gas, sewage, stormwater, communications, oil, waste, water, and the like. Utilities also include pump/lift stations and associated emergency generators.

"Water courses/streams" means the areas to which surface and subsurface waters naturally flow and which form a continuous channel through which water descends to natural outlets.

"Water-dependent uses" means activities for which direct accessibility to deep water is required because of the nature of their product and/or process (i.e., shipbuilding, marine repair and construction, tug and barge operations, log rafting, commercial fishing, public and private marina, terminal facilities).

"Water enjoyment use" means a recreational use, or other use facilitating public access to the shoreline; or uses that cater to recreational, cultural, educational, tourism, food and drink services, hotel/motel, and water-related retail promoting the recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use.

"Water-related use" means the use that has something to do with the water and needs to be near the water but does not require direct access to the water to occur.

"Waterfront area" means all areas of tidelands and uplands lying above and within two hundred feet of the line of ordinary high tide. In the POS, DB and WMU zones the waterfront area is further defined as lying north of the Burlington Northern Santa Fe Railroad tracks and the line of extreme low tide, extending south to the southern boundary of Mukilteo State Park and extending east to the east boundary of the city.

"Water's edge" means the line of the ordinary high water mark (OHWM).

Appendix B: Acronyms and Abbreviations

Act	Shoreline Management Act
APE	Area of Potential Effects
BAS	Best Available Science
BMP	Best Management Practice
BNSF	Burlington Northern – Santa Fe
BTW	By The Way, or Bike-Transit-Walk
CAMP	Critical Area Mitigation Program
CAO	Critical Areas Ordinance
CFR	Code of Federal Regulations
cfs	cubic feet per second
CO	carbon monoxide
Commerce	Department of Commerce
Corps	U.S. Army Corps of Engineers
CUP	Conditional Use Permit
CZMA	Coastal Zone Management Act
DAHP	State Office of Archaeology and Historic Preservation
DFIRM	Digital Flood Insurance Rate Maps
DNR	Department of Natural Resources
Ecology	Department of Ecology
EdCC	Edmonds Community College
EPA	U.S. Environmental Protection Agency
EPF	Essential Public Facility
FEMA	Federal Emergency Management Agency
GMA	Growth Management Act
MHHW	Mean Higher High Water
MLLW	Mean Lower Low Water
MMC	Mukilteo Municipal Code
MRC	Marine Resources Advisory Committee
MRV	Marine Riparian Vegetation
MUGA	Municipal Urban Growth Area
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
OHWM	Ordinary High Water Mark
OS	Open Space

PAH	polycyclic aromatic hydrocarbon
PFC	properly functioning condition
PHS	Priority Habitats and Species
POE	Port of Everett
PROSA	Parks, Recreation, Open Space, and Arts
PSNERP	Puget Sound Nearshore Ecosystem Restoration Program
PTE	proposed, threatened, and endangered
RCO	Washington State Recreation and Conservation Office
RCW	Revised Code of Washington
SDP	Substantial Development Permit
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
SMP	Shoreline Management Program
SR	State Route
USAF	U.S. Air Force
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WMU	Waterfront Mixed Use
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WSF	Washington State Ferries

Appendix C: References

Beamer et al. 2013

City of Everett. 2003. City of Everett Shoreline Public Access Plan. Everett Planning and Community Development Department. Available: https://everettwa.gov/DocumentCenter/View/1495/Shoreline-Public-Access-Plan-PDF?bidId=.

City of Mukilteo. 2004. Mukilteo Lighthouse Park Master Plan. Adopted February 2004. Prepared by MacLeod Reckord Landscape Architects. Available: https://mukilteowa.gov/wp-content/uploads/Lighthouse-Park-Master-Plan.pdfCity of Mukilteo. 2016. City of Mukilteo Downtown Waterfront Master Plan: A Waterfront Vision. Adopted January 4, 2016. Available: https://mukilteowa.gov/wp-content/uploads/2016-Downtown-Waterfront-Master-Plan.pdf.

City of Mukilteo. 2008. 92nd Street Park Master Plan. ????. Amended 2008.

City of Mukilteo. 2009. 2009 Habitat Management Plan. Adopted December 7, 2009 by Resolution 2009-29. Available: https://mukilteowa.gov/wp-content/uploads/2009-Habitat-Management-Plan-adopted.pdf.

City of Mukilteo. 2009. Downtown Business District Subarea Plan. Adopted November 30, 2009 by Resolution 2009-25. Available: https://mukilteowa.gov/wp-content/uploads/DB-Subarea-Plan-adopted.pdf.

City of Mukilteo. 2010-2015 Capital Facilities Plan. Adopted December 17, 2009 by Resolution 2009-26.

City of Mukilteo. 2011. City of Mukilteo 2011 Shoreline Master Program. December 2011.

City of Mukilteo. 2011. City of Mukilteo Critical Area Mitigation Program (CAMP). Prepared by ESA. Available: https://mukilteowa.gov/wp-content/uploads/2015/08/01_CAMP-11-10-11_complete01.pdf. November 2011.

City of Mukilteo. 2011. City of Mukilteo Shoreline Master Program Inventory & Characterization. Draft – January 2011. Available: http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.187.2791.

City of Mukilteo. 2015. City of Mukilteo Comprehensive Plan 2035. Adopted October 5, 2015, amended June 4, 2018. Available: https://mukilteowa.gov/wp-content/uploads/Reduced_Comp-Plan-Final-20180610.pdf.

City of Mukilteo. 2015. Comprehensive Surface Water Management Plan Update: 2015 – 2021. Available: https://mukilteowa.gov/wp-content/uploads/2015/10/Final_CompSW_NoAppendicesWeb.pdf. August 2015.

City of Mukilteo. 2015. Harbour Pointe Master Plan. Appendix IV of the City of Mukilteo Comprehensive Plan 2035.

City of Mukilteo. 2016. City of Mukilteo Japanese Gulch Park Master Plan. Adopted on June 20, 206, Resolution No. 2016-2. Available: https://mukilteowa.gov/wp-content/uploads/Japanese-Gulch-Master-Plan-Final-Full-Document-Reduced-Size.pdfCity of Mukilteo. 2017. City of Mukilteo By The Way (BTW) Plan. Adopted by City Council on March 6, 2017, Resolution 2017-01. Available: https://mukilteowa.gov/wp-content/uploads/Final-BTW-Plan-w-Appendix-Reduced.pdf.

City of Mukilteo. 2017. City of Mukilteo 2017 Parks, Recreation, Open Space, and Arts (PROSA) Plan. Adopted by City Council on December 11, 2017, Resolution 2017-14. Available: https://mukilteowa.gov/wp-content/uploads/PROSA-Plan-Final-Reduced-1.pdf.

Ecology 1992

EdCC (Edmonds Community College). 2017. Repatriating Salmon to Point Elliott: Fish and Wildlife in Mukilteo. Prepared for City of Mukilteo by the Learn and Serve Environmental Anthropology Field (LEAF) School, Edmonds Community College.

EIS for the Port of Everett Rail-Barge Facilities

FEMA 1999

Herrera 2003

Kahler 2001

Norris 2000

Pentec 1996

Puget Sound Partnership. 2014. The 2014/2015 Action Agenda for Puget Sound. Available: http://www.psp.wa.gov/downloads/2014_action_agenda/Final%202014%20action%20agenda%20update/2014-2015_Action_Agenda_for_Puget_Sound.pdf. May 2014.

City of Mukilteo. Shoreline Restoration Plan.

City of Mukilteo. Shoreline Inventory and Characterization Report.

Snohomish Basin Salmon Recovery Forum. 2005. Snohomish River Basin Salmon Conservation Plan. Snohomish County Department of Public Works, Surface Water Management Division. Everett, WA. Available: http://www.govlink.org/watersheds/7/pdf/WRIA%207_Plan/Final_Compiled_Plan.pdf. June 2005.

Snohomish County 2008

Snohomish County Marine Resources Advisory Committee. 2011. Snohomish County Marine Resources Advisory Committee Strategic Plan 2011-2016. Available: https://www.snocomrc.org/media/1257/strategic-plan-10-19-11_approved-by-mrc.pdf. October 2011.

Snohomish County MRC 2004

Snohomish County. 2002. Drainage Needs Reports Protocols. Snohomish County Public Works Department, Surface Water Management Division. Available: https://snohomishcountywa.gov/DocumentCenter/View/14232/DNR_Protocols?bidId=. December 2002.

Snohomish County. 2017. Municipal Urban Growth Area (MUGA) Boundaries (Map). Appendix A – CPP Southwest Snohomish County. Effective Date: October 14, 2017. Available: https://snohomishcountywa.gov/DocumentCenter/View/8759/Map-3-Municipal-Urban-Growth-Areas?bidId=.

Snohomish County. 2018. Population Growth Trends. Snohomish County Tomorrow 2016 Growth Monitoring Report. Available: https://snohomishcountywa.gov/DocumentCenter/View/44883/2---2016-GMR---Population-Trends.

Snohomish County. 2018. Nearshore Restoration Project (website). Snohomish County Marine Resources Committee. Available: https://www.snocomrc.org/projects/nearshore-restoration-project/

Sound Transit 1999

TetraTech/KCM 2001

Tsyland 2002

WDFW 2000

WDFW 2003

Williams, G.D., and R.M. Thom. 2001. Marine and estuarine shoreline modification issues: Olympia, Wash., Washington Department of Fish and Wildlife, Washington Department of Ecology, and Washington Department of Transportation.

WRIA (Water Resources Inventory Area) 7 and 8 Action Plan

WRIA 8 Steering Committee. 2005. Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan. Available: http://www.govlink.org/watersheds/8/planning/chinook-plan/volumeI/01_Front_Materials.pdf. July 2005.

WSDOT (Washington State Department of Transportation), FTA (Federal Transit Administration), and WSF (Washington State Ferries). 2013. Mukilteo Multimodal

Project, Final Environmental Impact Statement. Available: https://www.wsdot.wa.gov/NR/rdonlyres/CF951E48-0FB2-4E74-AA33-AB0A5CE2026D/0/00Cover_FactSheet_TableOfContents.pdf. June 2013.