CITY COUNCIL STUDY SESSION AGENDA

April 22, 2013

7:00 p.m.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. DISCUSSION ITEMS — Page #

   a. Presentation and Discussion Regarding an Alternative Proposal to the Department of Ecology Regarding Burien's Shoreline Master Program. — 3.

5. ADJOURNMENT

COUNCILMEMBERS

Brian Bennett, Mayor **Lucy Krakowiak, Deputy Mayor** **Jack Block, Jr.**
Rose Clark **Bob Edgar** **Joan McGilton** **Gerald F. Robison**

City Hall, 400 SW 152nd Street, 1st Floor

City Hall, 400 SW 152nd Street, 1st Floor, 98166

Excerpts from the 4/15/13 City Manager's Report
Regarding Abandoned Property

Abatement of Code Violations at an Abandoned Property in November, 2010

The following is submitted at the request of Councilmember(s) at the March 4 Council meeting in response to the public comment from Dick West about the City's abatement of code violations at an abandoned residential property in North Burien.

Mr. West stated at the Council meeting that he had hired a bankruptcy attorney to investigate the City's handling of abandoned foreclosed homes and believed he had discovered mismanagement and misuse of City funds in providing Chase Bank free cleanup of the home at 11416 26th Ave S.

Actual events are as follows: In June, 2010, shortly after annexing the above property in North Burien, the City began receiving complaints from law enforcement officers and residents (including Mr. West) about excessive dumping of trash, construction debris, mattresses, and stolen vehicles on the property and adjacent street and reports of unknown individuals entering the abandoned house during the day and night. The City was informed by King County that dumping in the street in front of the property had been a habitual problem prior to annexation and the County had frequently been called on to remove the debris.

After researching property records, the City found that Chase Bank had scheduled a foreclosure sale for the property but had not yet acquired ownership and that the property owner had filed for Chapter 13 bankruptcy protection. The City attempted to obtain code compliance from both Chase and the property owner but was unsuccessful in doing so.

Due to the urgency of the health and safety violations and complaints that had been received from the police, neighboring residents and Mr. West, the City negotiated a right of entry agreement with the property owner's bankruptcy attorney, in order for the City to enter the property to remove the garbage and secure the premises from unauthorized entry. On November 10, 2010, the property was cleaned and secured by the City's Public Works crew (less than $2,500 in in-kind labor cost). Waste Management provided dumpsters and vouchers to cover disposal costs and the City crew used materials on hand for securing the premises, so the City did not incur any additional out of pocket costs.

The City was not legally able to file a lien against the property for the abatement costs due to the "automatic stay" provision in Section 362 of the United States Bankruptcy Code, which prohibits such liens for charges incurred from the time the debtor has filed the bankruptcy petition until the bankruptcy has been discharged. As stated in the document provided by Mr. West, the property would not be surrendered and the automatic stay would not be lifted until the debt reorganization plan was confirmed. This document did not state, as indicated by Mr. West, that the property was surrendered to Chase Bank on March 25, 2010. To the contrary, according to King County property records, a Trustee's Deed upon Sale transferring ownership from the bankrupt property owner to Federal National Mortgage Association did not occur until December 9, 2011. This was over a year after the City cleaned and secured the property. If Mr. West or his bankruptcy attorney has accurate

contrary information regarding bankruptcy law or how and when the transfer of this property occurred, City staff would be very interested in reviewing it.

It should also be noted that in April, 2012, the City Council adopted a new code enforcement ordinance, Chapter 1.15 BMC. In this new ordinance, the City expanded the definition of "persons responsible for violation" to include mortgagees (such as Chase Bank) of property that is subject to a foreclosure action or that has been abandoned for at least 90 days. This now gives the City an additional tool to deal with mortgage companies such as Chase Bank; however, it still does not avoid the problem of dealing with properties involved in a bankruptcy proceeding. Accordingly, in order for the City to clean and secure the above property in response to the urgent complaints of Mr. West and others, the City would still have had no choice but to absorb the cost of doing so.

It should further be noted that the City's code enforcement staff was successful in obtaining code compliance for several properties in North Burien shortly after annexation without the City incurring any abatement costs other than staff time. These properties were being used as hangouts for various illegal activities, had been of significant concern to law enforcement officers for a long time, and had not been brought into compliance by King County code enforcement.

Cost of Abandoned Residential Properties

At the March 18 Council meeting, Councilmembers asked staff for information in response to the public comment from Dick West about the cost to the City of eight abandoned residential properties and 50-100 other such properties throughout Burien.

Mr. West showed the Council photos of eight apparently vacant houses. He said, "According to the FDIC each one of these houses cost the City $34,000 in lost revenue and surrounding home values go down by $220,000." He further said that these losses occur every year. Apparently extrapolating these amounts, Mr. West then said, "These eight houses on the screen have cost the City $589,000 in lost revenue in the last three years. The residents of Burien have lost $208,125,000 in net worth last year above and beyond our surrounding municipalities, because the City refuses to take action against these types of houses."

Staff has reviewed the FDIC website and found the following statements, which were based on 2005 Chicago studies:

"Homes in foreclosure that become vacant provide sites for crime or other neighborhood problems. One foreclosure can impose up to $34,000 in direct costs on local government agencies, including inspections, court actions, police and fire department efforts, potential demolition, unpaid water and sewage, and trash removal. … One foreclosure can result in as much as an additional $220,000 in reduced property value and home equity for nearby homes."

Thus, as actually stated on the FDIC website, the $34,000 figure does not represent annual lost revenue to City government nor does the $220,000 figure represent annual property value reduction in Burien. Although City staff does not disagree that abandoned foreclosed

homes are a significant problem, Mr. West's calculated total costs attributable to this problem are difficult to substantiate.

Staff has also reviewed the eight houses referenced by Mr. West. All eight are apparently up to date on King County property tax payments. One of the eight (#6) is an active code enforcement case. Three of the eight (#1, 3, 7) are closed code enforcement cases that have been brought into compliance. Four of the eight (#2, 4, 5, 8) have never been reported to City code enforcement.

Thus, the record contradicts Mr. West's statement that the City refuses to take action against these types of houses.

Although City staff does not have a precise or approximate count of the number of vacant homes in foreclosure in Burien, needless to say there are more than anyone would like to see. If Mr. West's estimate of 50-100 such homes and his estimate of 40 hours of staff time to abate each one are fair approximations, then the City Council would need to significantly increase the City's code enforcement budget in order to proactively address this situation. As part of the budget process, City staff is very willing to review this situation more carefully and propose possible courses of action and budget options for dealing with it.

CITY OF BURIEN
AGENDA BILL

Agenda Subject: Presentation and Discussion Regarding An Alternative Proposal to the Department of Ecology Regarding Burien's Shoreline Master Program		**Meeting Date:** April 22, 2013
Department: Community Development **Contact:** David Johanson, Senior Planner **Telephone:** (206) 248-5522	**Attachments:** 1. Shoreline Master Program, Public Hearing Draft	**Fund Source:** N/A **Activity Cost:** N/A **Amount Budgeted:** N/A **Unencumbered Budget Authority:** N/A
Adopted Initiative: Yes X No	**Initiative Description:** Shoreline Master Program	

PURPOSE/REQUIRED ACTION:
The purpose of this agenda item is for Council to receive a presentation from both Staff and the Shoreline Working group regarding an alternative proposal to the Dept. of Ecology regarding updates to Burien's Shoreline Master Program. Action on proposed Ordinance 581, adopting a Shoreline Master Program, is scheduled for late May 2013.

BACKGROUND (*Include prior Council action & discussion*):
On Sept. 27, 2010, the City Council passed Resolution No. 317 approving Burien's Shoreline Master Program (SMP). The Dept. of Ecology held a public hearing on the SMP on Dec. 8, 2010. Ecology approved the SMP with both required and suggested changes on April 22, 2011 (letter mailed to the City on April 27, 2011). Among other changes, Ecology is requiring a 50' marine riparian buffer plus 15' building setback from the buffer. The City's approved SMP called for a 20' marine riparian buffer with no additional setback.

May 23, 2011 the Council authorized the Mayor to submit an alternative proposal to Ecology, accepting all but four of the required changes from Ecology. Those four items are as follows;

1. In the Shoreline Residential environment, increasing the marine riparian buffer from 20' to 50' and increasing the building setback from the buffer from 0' to 15'.
2. Requiring a destroyed home to be located and designed to prevent the need for shoreline stabilization and structural flood hazard reduction measures.
3. Removal of the restriction on watercraft access from public access areas along Lake Burien.
4. Requiring a shoreline variance for geologically hazardous area buffer reductions to between 0 and 25 feet, and wetland buffer reduction to 25 feet.

November 28, 2011 Council appointed a shoreline working group to study the four outstanding issues and prepare a recommendation for consideration by the City Council. On September 17, 2012 the working group presented an early draft of their recommendation to the City Council. The proposed resultions to the four issues were generally well received by both the City Council and the Department of Ecology.

Staff is recommending that the City Council receive a presentation which will provide an overview of the recommendations resolving the remaining four disputed topics. This is in preparation for the Public Hearing which is scheduled for May 6, 2013. Attachment 1 consists of the body of the proposed Shoreline Master Plan and includes only the new supplemental appendices provided by the working group. All other appendices are available upon request.

NEXT STEPS
May 6, 2013 - Conduct a Public Hearing
May 20, 2013 – Take action on Ordinance No. 581, adopting an updated Shoreline Master Program for Ecology's approval.

Administrative Recommendation: N/A	
Committee Recommendation: N/A	
Advisory Board Recommendation: N/A	
Suggested Motion: N/A	
Submitted by: David Johanson **Administration** _____	Mike Martin **City Manager** _____
Today's Date: April 16, 2013	**File Code:** R:\PL\DAVID\Shorelines\City Council\042213cd-1 Shoreline Master Program.docx

Burien Shoreline Master Program
PUBLIC HEARING DRAFT
April 12, 2013

Title 20

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Errata Sheet, posted August 23, 2010

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a. Data Analysis Report, Lake Burien, Washington (Herrera Environmental Consultants, March 2010)
b. Review of Burien's Draft SMP (Cooke Scientific, March 2010)
c. Memorandum Describing Existing Conditions of Burien Marine Shoreline (Burien Marine Homeowners Association, July 2010)
d. Memorandum, The Use of Science to Develop Marine Buffer Recommendations in Burien (Carl Hadley, June 2010)
e. Recommendations on Making Small Shoreline Buffers Work with Buffer Science, (Futurewise, November 2009)

Appendix X: User Guide

Chapter I. User's Guide

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20.10.001 Overview of State Shoreline Management Act

The State of Washington's Shoreline Management Act (RCW 90.58) was passed by the Legislature in 1971 and adopted by the public in a 1972 referendum. The following is an excerpt from the Shoreline Management Act stating Washington State's policy regarding shorelines.

~~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 great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition it finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state. The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. There is, therefor, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.~~

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

~~Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.~~*(Complete text of RCW 90.58.020)*

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The legislature declares that the interest of all of the people shall be paramount in the management of shorelines of statewide significance. The department, in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

(1) Recognize and protect the statewide interest over local interest;

(2) Preserve the natural character of the shoreline;

(3) Result in long term over short term benefit;

(4) Protect the resources and ecology of the shoreline;

(5) Increase public access to publicly owned areas of the shorelines;

(6) Increase recreational opportunities for the public in the shoreline;

(7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single-family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. Alterations of the natural condition of the shorelines and shorelands of the state shall be recognized by the department. Shorelines and shorelands of the state shall be appropriately classified and these classifications shall be revised when circumstances warrant regardless of whether the change in circumstances occurs through man-made causes or natural causes. Any areas resulting from alterations of the natural condition of the shorelines and shorelands of the state no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of chapter 90.58 RCW.

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

In 1995, the Legislature amended the Growth Management Act (GMA) and the Shoreline Management Act (SMA) to partially integrate the two statutes. The amendments incorporated the goals and policies of the SMA as the 14th goal of the GMA, specifically designating the goals and policies of a local shoreline master program as a segment of the jurisdiction's comprehensive plan. All other portions of the SMP shall be considered a part of the jurisdiction's development regulations (RCW 36.70A.480). The diagram below indicates the relationship.

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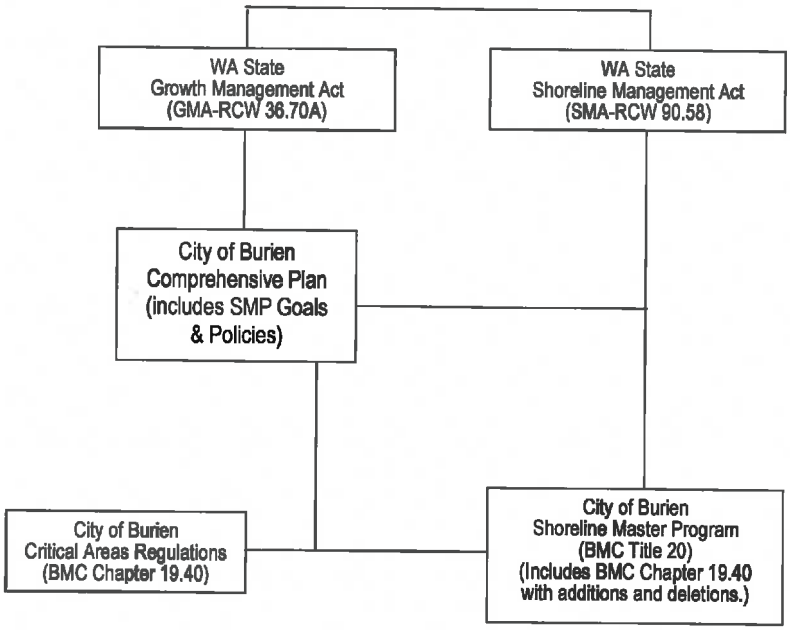
Figure 1: Relationship of Shoreline Master Program to GMA



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The SMA is administered through a cooperative program between local governments and the Department of Ecology (Ecology), whereby local communities prepare a Shoreline Master Program (SMP) that is adopted under guidelines established by Ecology. The SMP serves to regulate development along shorelines of the state and establish a comprehensive vision of how the shoreline areas will be used and developed over time.

The SMP is a comprehensive use plan for local shoreline areas that includes desired goals and policies consistent with SMA policy (RCW 90.58.020); maps, diagrams and charts or other descriptive material and text; use and development regulations; and administrative procedures for the shoreline permitting process. The Ecology SMP guidelines (WAC 173-26) establish general goals and policies, and standards and criteria for regulations. The SMP is based on state guidelines, but tailored to the specific conditions and needs of individual communities. The SMP is also meant to be a comprehensive vision of how the shoreline area will be used and developed over time.

Under the SMA, ~~the~~ shoreline jurisdiction generally includes ~~all~~ water areas of the state, the lands underlying them, and areas that are 200 feet landward of the ordinary high water mark (OHWM) of said waters that have been designated as "shorelines of statewide significance" or "shorelines of the state." These designations were established in 1971, and are described in RCW 90.58.030 (Definitions and Concepts). Generally, "shorelines of statewide significance" include marine waters below extreme low water, rivers west of the Cascade Range that have a mean annual flow of 1,000 cubic feet per second (cfs) or greater, rivers east of the Cascade Range that have a mean annual flow of 200 cfs or greater, and freshwater lakes with a surface area of 1,000 acres or more. "Shorelines of the state" are generally described as all marine shorelines and shorelines of all other streams or rivers having a mean annual flow of 20 cfs or greater and lakes with a surface area greater than 20 acres.

20.10.005 City of Burien Shoreline Jurisdiction

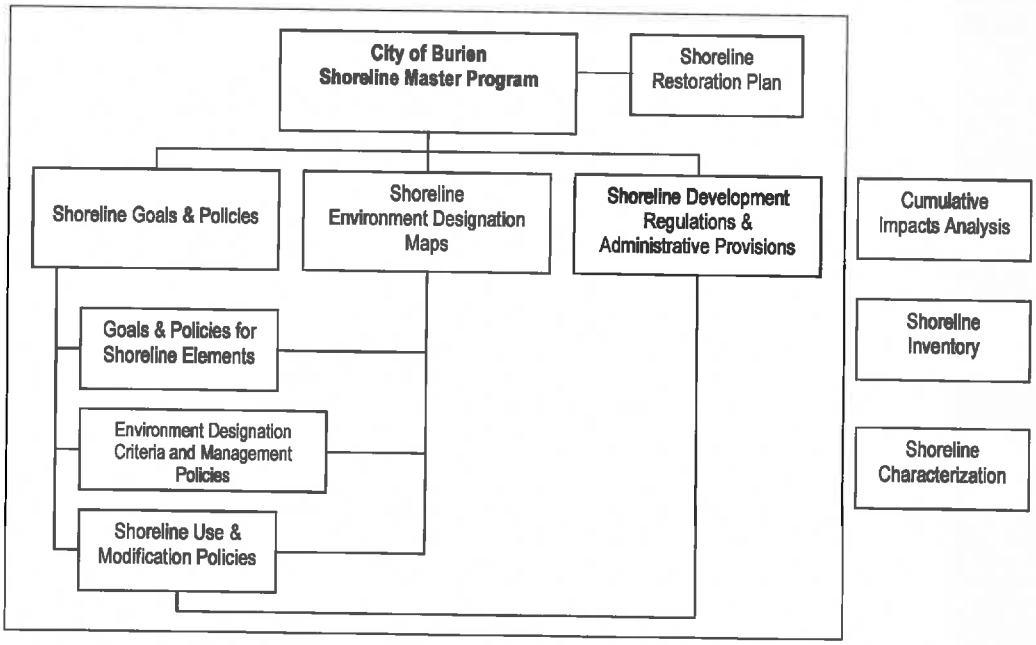
Although there are a number of waterbodies, including streams, lakes and marine shorelines, within the City of Burien, only two are regulated under the SMA. The shoreline jurisdiction within the city limits of the City of Burien includes approximately five miles of marine shoreline along Puget Sound and Lake Burien. There are no "shorelines of the state" associated with rivers or streams in the city. The portions of Puget Sound within the city limits are defined as "shorelines of statewide significance" waterward of the line of extreme low tide (RCW 90.58.030(2)(e)(iii)-Shorelines of Statewide Significance). The marine shoreline has been given a special status because they are considered a major resource from which all people in the state derive benefit.

Under the SMA, the shoreline area to be regulated under the City's SMP must include marine waters and shorelands, defined as the upland area within 200 feet of the OHWM, as well as any associated wetlands (RCW 90.58.030-Definitions and Concepts). All proposed uses and development occurring within shoreline jurisdiction must conform to Chapter 90.58 RCW, the Shoreline Management Act, and this Shoreline Master Program.

20.10.010 Components of Burien Shoreline Master Program

The City of Burien Shoreline Master Program was originally adopted at the time of the City's incorporation in 1993. Under new shoreline master program guidelines adopted by Ecology in 2004, cities within King County are required to update their local shoreline master programs.

Figure 2: Structure of City of Burien Shoreline Master Program



20.10.015 Amendments and State Role

The City of Burien Shoreline Master Program may be amended when new information is obtained, local circumstances change, or shoreline management approaches are improved. The city will follow procedures identified in BMC 19.65.080 (Type 4 Decisions) for Type 4 Legislative Decision which allow for public notice and hearing, review and recommendation by the Shoreline Administrator and the City Planning Commission with formal approval given by the City Council. After local adoption, all amendments to the City of Burien Shoreline Master Program must be approved by the Washington State Department of Ecology before they can be locally in effect.

Appeals of approved amendments to the Burien Shoreline Master Program are under the jurisdiction of the Central Puget Sound Growth Management Hearings Board. Appeals involving a shoreline permit are under the jurisdiction of the State of Washington Shorelines Hearings Board.

Chapter II. General Goals and Policies

20.20.001 Purpose

The Shoreline Master Program goals and policies of this chapter reflect the aspirations and concerns that Burien citizens and stakeholders expressed about the City's shorelines during community and Shoreline Advisory Committee meetings. These goal and policy statements, along with the shoreline land use map, are the foundation for specific guidelines concerning how to regulate and manage activities occurring within the City's shoreline jurisdiction.

The goals and policies of this element apply to all water bodies and shorelands that meet the definitions set forth in RCW 90.58.030 (Definitions and Concepts) unless otherwise specifically stated in the goal or policy. Burien's shorelines includes those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters. Water bodies in Burien that meet the applicable definitions include Puget Sound waterward to mid channel and Lake Burien.

20.20.005 General Goals and Policies

Goal ALL

Develop, implement, and maintain a Shoreline Master Program that results in no net loss of shoreline ecological functions and processes, balances public and private interests in the shoreline, and considers other relevant programs.

Pol. ALL 1 The Shoreline Master Program shall result in no net loss of shoreline ecological functions and processes.

Pol. ALL 2 Regulation and management of Burien's shorelines should be guided by ongoing and comprehensive science.

Pol. ALL 3 The City should be proactive in managing activities within the shoreline jurisdiction.

Pol. ALL 4 Implement an adaptive management approach to respond to changes and to ensure continued effectiveness.

Pol. ALL 5 The Shoreline Master Program should balance private use and enjoyment of tidelands and adjacent lands with the greater public benefit that shorelines provide, while recognizing the rights of individuals to use and develop private property in a manner consistent with City and other applicable regulations.

Pol. ALL 6 When Shoreline Master Program regulations are developed and applied, they should consider site-specific characteristics.

Pol. ALL 7 Regulation and management of the City's shorelines should be coordinated with relevant local, state, federal, and other programs. Such programs include, but are not limited to, those administered by: City of Seattle, City of Normandy Park, City of SeaTac, King County, Washington Department of Ecology, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Puget Sound Partnership, United States Army Corps of Engineers, Muckleshoot Tribe, Puyallup Tribe, and Water Resource Inventory Area 9.

Pol. ALL 8 Consider an incentive base system to encourage redevelopment projects to comply with accepted shoreline best management practices and standards.

20.20.010 Economic Development Element

Goal ED

Insure healthy, orderly economic growth by allowing those economic activities which will be an asset to the local economy and which result in the least possible adverse effect on the quality of the shoreline and surrounding environment.

Pol. ED 1 Protect the beauty and function of the natural environment to maintain a community where workers want to live and work.

Pol. ED 2 Promote actions ensuring a clean and attractive community.

20.20.015 Shoreline Public Access Element

Goal PA

Increase and enhance public access to shoreline areas, consistent with the natural shoreline character, private property rights, and public safety.

Pol. PA 1 Developments, uses, and activities on or near the shoreline should not impair or detract from public access to the water.

Pol. PA 2 Publicly owned shorelines should be limited to water dependent or public recreational uses, otherwise such shorelines should remain protected open space.

Pol. PA 3 Public access to the City's shorelines should be designed to provide for public safety and to minimize potential impacts to private property and individual privacy rights.

Pol. PA 4 Public access should be provided as close as possible to the water's edge with no net loss of shoreline ecological function and without adversely impacting private property rights and personal privacy rights. Public access should be designed for handicapped and physically impaired persons.

Pol. PA 5 The City should seek opportunities to develop new public access areas in locations dispersed throughout the shoreline.

Pol. PA 6 The vacation or sale of street ends, other public right of ways and tax title properties that abut shoreline areas shall be prohibited except as provided for in RCW 35.79.035 (Streets-Vacation). The City should protect these areas for public access and public viewpoints.

Pol. PA 7 Waterfront street ends should be recognized as:

a. An important community resource that provides visual and physical access to the Puget Sound;
b. Special use parks which serve the community, yet fit and support the character of the surrounding neighborhoods;
c. A destination resource, where limited facilities and enhancements are provided.

Pol. PA 8 The City should manage and develop waterfront street ends by:

a. Supporting their use by residents city-wide, yet ensuring that the street ends and their supporting facilities are developed at a level or capacity which are appropriate to the neighborhood character, promotes safety, protects private property rights and individual privacy, and is consistent with City risk management practices;
b. Ensuring that public parking is available and limited to a level appropriate to the capacity of the public access site, and is harmonious with the surrounding neighborhood;
c. Ensuring that the waterfront street ends are preserved and maintained with limited enhancements, such as places to sit or rest which fit in with the natural environment of the area;
d. Installing signs that indicate the public's right of access, the rules of use, and penalties for misuse;
e. Installing limited trail improvements and enhancements to allow access to the water;
f. Protecting adjacent private property including but not limited to protecting individual privacy rights and ensuring public safety; and
g. Developing a street ends plan that promotes waterfront access and public safety.

Pol. PA 9 Waterfront street ends or other shoreline access should be planned in conjunction with the affected neighborhoods. However, the broader community should be notified during the public notification process.

Pol. PA 10 The City should disseminate information that identifies all locations for public access to the shorelines.

Pol. PA 11 The public's visual access to the City's shorelines from streets, paths, trails and designated viewing areas should be conserved and enhanced.

Pol. PA 12 Public views from the shoreline upland areas should be enhanced and conserved, while recognizing that enhancement of views should not be necessarily construed to mean removal of vegetation.

Pol. PA 13 Promote a coordinated system of connected pathways, sidewalks, passageways between buildings, beach walks, and shoreline access points that increase the amount and diversity of opportunities for walking and chances for personal discoveries.

20.20.020 Recreation Element

Goal REC

Develop a well-maintained, interconnected system of multi-functional parks, recreation facilities, and open spaces that: is attractive, safe, and accessible for all geographic regions and population segments within the City; supports the community's well-established neighborhoods and small town atmosphere; protects private property rights and results in no net loss of shoreline ecological functions and processes.

Pol. REC 1 Recreation facilities in the shoreline area should be restricted to those dependent upon a shoreline location, or those benefiting from a shoreline or in-water location that are in the public interest.

Pol. REC 2 Recreational developments should be located, designed and operated to be compatible with, and minimize adverse impacts on, environmental quality and valuable natural features as well as on adjacent surrounding land and water uses. Favorable consideration should be given to proposals which complement their environment and surrounding land and water uses, and result in no net loss of ecological functions.

Pol. REC 3 Public information and education programs should be developed and implemented to help ensure that the public is aware of park regulations and private property rights, and to prevent the abuse of the shoreline and its natural ecological system.

Pol. REC 4 The City shall plan to provide, in coordination with other agencies, a range of park facilities that serve a variety of recreational and open space purposes. Such planning should use the following designations and guidelines to provide such diversity:

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1. Mini or Pocket Park

Use Description: Passive recreation or specialized facilities that *may* serve a concentrated or limited population such as children or senior citizens.

Service area: Approximately 1/3 of a mile radius.

Size: No minimum to approximately one acre.

Desirable Characteristics: These parks should be in close proximity to dwellings and or other centers of activity. Mini parks should be designed for intensive use and should be accessible and visible from surrounding area.

Examples: In Burien these types of parks are primarily private parks consisting of beach access for adjacent subdivisions, view appreciation areas (bench or platform), picnic tables and trees in a small area, children's play area, game tables, or planted areas.

Other Considerations: Since maintenance costs of these smaller parks are high relative to their service areas, few jurisdictions are able to meet the desired quantity. This type of park is most suitable to provide unique local needs, such as shore access, or as a consideration in the design of new development. The City should seek a variety of means for financing and maintaining mini-parks, including considering opportunities for community stewardship and grant or private funding.

2. Regional Parks

Use Description: Areas of natural or ornamental quality for outdoor recreation such as picnicking, boating, beach activities, swimming, and trails. Such parks may contain special amenities, facilities or features that attract people from throughout the surrounding region. Such facilities require extensive on-site parking and good access by automobile.

Service area: Approximately 1/2 to 1 hour driving time.

Size: Approximately 90 acres.

Desirable Characteristics: Contiguous to or encompassing significant natural resources.

Examples: Seahurst Park.

3. Special Use Park

Use Description: Specialized or single-purpose recreational activities such as walking and bicycle trails, street ends, or areas that preserve buildings, sites or features of historical significance.

Service area: Variable.

Size: Depends on nature of facility.

Desirable Characteristics: Compatibility with adjacent facilities and uses.

Examples: Examples within Burien shoreline consist primarily of designated view points and historical markers, and waterfront street ends (including those at SW 170th Pl., SW 163rd Pl., and at the intersection of Maplewild Ave. SW and SW 172nd St.).

4. Conservancy Park

Use Description: Conservancy parks are formally designated public resource areas. In such parks the primary management objectives are protection and management of historical, cultural and natural resources, including fish and wildlife habitat areas and may include appropriate passive recreational activities.

Service area: None.

Size: As appropriate for the resource.

Desirable Characteristics: As appropriate for the resource.

Examples: Currently Salmon Creek Ravine is most appropriately classified in this category although its feasibility for including other types of park activities consistent with its character should be evaluated. This category would also apply to any significant formally designated land, protected wetlands or steep slope areas by private or public means.

Pol. REC 5 Access for motorized vessels should be discouraged at Seahurst Park. Access for non-motorized craft should be considered if access for such craft can be provided in an environmentally-sensitive manner.

Pol. REC 6 Where appropriate, recreational developments should make adequate provisions for:

a. Vehicular and pedestrian access, both on-site and off-site;
b. Proper water supply and sewage waste disposal methods;
c. Security and fire protection;

d. The prevention of overflow and trespass onto adjacent properties, including but not limited to landscaping, fencing and posting of property; and
e. Buffering of such development from adjacent private property or natural area.

Pol. REC 7 Trails and pathways on steep shoreline bluffs should be located, designed and maintained to protect bank stability without the need for shoreline armoring.

Pol. REC 8 Mooring buoys, in general, are beneficial in enabling increased recreational opportunities. However, the City should ensure that their possible negative effects on physical and visual environments are avoided.

Pol. REC 9 Artificial marine life habitats should be encouraged in order to provide increased aquatic life for recreation. Such habitats should be constructed in areas of low habitat diversity and in consultation with the Washington Department of Fish and Wildlife.

Pol. REC 10 The linkage of shoreline parks, recreation areas and public access points with linear systems, such as hiking paths, bicycle paths, easements and /or scenic drives, should be encouraged.

Pol. REC 11 Development of recreational facility along City shorelines should implement Low Impact Development techniques whenever feasible.

20.20.025 Circulation Element

Goal CI

Provide safe, reasonable, and adequate circulation systems in the shoreline area that will have the least possible adverse effect on unique or fragile shoreline features and existing ecological systems, while contributing to the functional and visual enhancement of the shoreline.

Pol. CI 1 Minimize impacts to the topography and other natural characteristics of the shoreline by appropriately locating transportation routes. New roadways for vehicle circulation should be located outside of or minimized within the shoreline area.

Pol. CI 2 Cross Puget Sound bridges should be prohibited within the Burien shoreline jurisdiction.

Pol. CI 3 Provide and/or enhance physical and visual public access along shoreline public roads and trails when appropriate given topography, views, natural features, and surrounding land uses.

Pol. CI 4	Public transit systems should provide service to designated public parks within the City.
Pol. CI 5	Wherever practicable, safe pedestrian and bicycle movement on and off roadways in the shoreline area should be encouraged as a means of personal transportation and recreation.
Pol. CI 6	Parking in shoreline areas should directly serve a permitted shoreline use. Parking developed for public access points should be limited to the number of spaces consistent with the capacity of those public access points and is harmonious with the surrounding neighborhood.
Pol. CI 7	Parking facilities should be located and designed to minimize adverse impacts, including those related to: stormwater runoff; water quality; visual qualities; public access; and vegetation and habitat maintenance.
Pol. CI 8	Parking should be planned to achieve optimum use. Where possible, parking should serve more than one use.
Pol. CI 9	Utilities are necessary to serve shoreline uses and shall be properly installed so as to protect the shoreline and water from contamination and degradation.
Pol. CI 10	Utility facilities and right-of-ways should be located outside of the shoreline area to the maximum extent possible. When utility lines require a shoreline location, they should be placed underground.
Pol. CI 11	Utility facilities should be designed and located in a manner which preserves the natural landscape and shoreline ecology and minimizes conflicts with present and planned land uses.
Pol. CI 12	Parking for non water dependent uses should be located as far away as feasible from shorelines.

20.20.030 Land Use Element

Goal USE

Provide functional and attractive shoreline uses that are appropriate in scale, configuration, and location, and are sensitive to and do not degrade habitat and ecological systems and other shoreline resources.

Pol. USE 1 The Shoreline Master Program shall govern the development of all designated shorelines of the City. Lands adjacent to these areas shall be managed in a manner consistent with the Shoreline Master Program.

Pol. USE 2 The City will strive to ensure that basic community values are reflected in the City's land use and decision making processes, while recognizing the rights of individuals to use and develop private property in a manner consistent with City regulations.

Pol. USE 3 Ensure the appropriate location, design, and operation of all activities, development, and redevelopment in the shoreline.

Pol. USE 4 Incentives should be available to encourage the removal and/or reduction of non-conformances.

Pol. USE 5 If feasible, septic systems should be connected to the sanitary sewer system where connections are available.

Pol. USE 6 Any existing single-family lot that was legally subdivided or legally created prior to enactment of subdivision statutes prior to incorporation or annexation shall be considered a legally conforming lot for building purposes, providing the size of the lot was not reduced by more than 50 percent through acquisition for public purposes, and on such lots new homes may be built and existing houses may be expanded and remodeled, provided that applicable setbacks, lot coverage, critical area restrictions, design review requirements (if any), height limits and other applicable regulations in the zoning code are met.

Pol. USE 7 When determining buildable lot size for residential development, the area of a lot covered by water (including but not limited to lakes or the Puget Sound) shall not be included in the calculation.

Pol. USE 8 The planned densities for single-family development should encourage a lower development potential in areas with development constraints.

Pol. USE 9 The Low Density Residential Neighborhood designation will provide for low-density residential development. Development within this designation includes existing neighborhoods that are zoned for four units net per acre or less.

Comment [d1]: Change made pursuant to recent comp plan amendments.

Allowed Uses and Description: The Low Density Residential Neighborhood designation allows single family residential uses and their accessory uses at a density of 4 units per net acre or less, due to the constraints posed by critical areas. This policy may be implemented by more than one zoning category, based on the ability of the land and public facilities to support development. Development standards, for such items as impervious surfaces, streetscapes, sidewalks and stormwater drainage, may vary within each zoning category based on the existing character of the area.

Comment [d2]: Change made pursuant to recent comp plan amendments.

Designation Criteria: Properties designated Low Density Residential Neighborhood should reflect the following criteria:

1. The area is already generally characterized by single-family residential development at four units per acre or less; and
2. Relative to other residential areas within the City, the area is characterized by lower intensity development as shown on Map LU-2.
3. The land is designated as a potential landslide hazard area, steep slope area, or wetland on the City of Burien's Critical Areas Map,
4. The existing and planned public facilities for the area cannot adequately support a higher density.
5. The area is subject to existing impacts from high levels of airport-related noise.

Pol. USE 10 Clustering of housing units may be allowed on lots designated for residential development that contain steep slopes and are located adjacent to an urban environment.

Pol. USE 11 As slope increases, development intensity, site coverage, and vegetation removal should decrease and thereby minimize the potential for drainage problems, soil erosion, siltation and landslides. Slopes of 40 percent or greater should be retained in a natural state, free of structures and other land surface modifications.

1. Single-family homes and detached single-family garages on existing legally established lots are exempted from this restriction, provided that:

    a. The application of this restriction would deny any appropriate use of this property;
    b. There is no other appropriate economic use with less impact;
    c. The proposed development does not pose a threat to public health, safety or welfare on or off the development site;
    d. Any alterations permitted to the critical area shall be the minimum necessary to allow for economic use of the property;
    e. An analysis of soils, footings and foundations, and drainage be prepared by qualified professionals, certifying that the proposed activity is safe and will not adversely affect the steep slope hazard area or buffer; and

f. There are adequate plans, as determined by the City, for stormwater and vegetation management.
g. It is the applicant's responsibility to show that these provisions are met through an appropriate mechanism such as, or similar to, the SEPA process.

2. Short plats or other divisions of an existing legal lot shall only be approved if all resulting lots are buildable under this restriction.

3. It is the applicant's responsibility to show that these provisions are met through an appropriate mechanism such as, or similar to, the SEPA process.

Pol. USE 12 The City should prohibit development on areas prone to erosion and landslide hazards. Further, the City should restrict development on potentially unstable land to ensure public safety and conformity with existing natural constraints, unless the risks and adverse impacts associated with such development can be appropriately mitigated.

Pol. USE 13 Land uses on steep slopes should be designed to prevent property damage and environmental degradation, and to enhance open space and wildlife habitat.

Pol. USE 14 Where there is a high probability of erosion, grading should be kept to a minimum and disturbed vegetation should be restored as soon as feasible. In all cases, the City shall require appropriate site design and construction measures to control erosion and sedimentation.

Pol. USE 15 The City should have development standards that promote the siting of new structures such that they will not require shoreline stabilization and protective measures in the future.

Pol. USE 16 Shoreline stabilization and protective measures should be limited in number and extent. The use of "soft" stabilization and protective measures, such as vegetation, is preferred over the use of "hard" measures, such as concrete bulkheads.

Pol. USE 17 Encourage joint-use activities in proposed shoreline developments.

Pol. USE 18 Wakes generated by vessels operating in the shoreline area should be minimized in order to reduce adverse impacts on the shoreline environment.

Pol. USE 19 Limit use of pesticides and herbicides within shoreline jurisdiction.

Pol. USE 20 Development should be designed to minimize impacts to both views of the shoreline and views from the water. Building orientation, height and the creation of view corridors shall be considered in site and structure design.

20.20.035 Conservation Element

Goal CON

Preserve and enhance shoreline natural resources in order to: protect public health, safety, and welfare; maintain the integrity of the natural environment; and preserve the quality of life in Burien.

Pol. CON 1 Protect critical areas and shoreline ecological processes and functions through regulatory and non-regulatory means. Protection may include acquisition of key properties, regulation of development, and incentives to encourage ecologically sound design.

Pol. CON 2 The City shall ensure that uses and development in shoreline areas is compatible with the shoreline environments designated in this Shoreline Master Program. Adherence to these designations will ensure that sensitive habitat, ecological systems, and other shoreline resources are protected.

Pol. CON 3 The City of Burien's Critical Areas Map shall be used as a reference for identifying the City's critical areas. Other unmapped critical areas do exist throughout the City. Any site containing critical areas within shoreline jurisdiction are subject to the special development regulations and conditions found in this shoreline master program

Pol. CON 4 Development should be directed toward areas where their adverse impacts on critical areas can be minimized.

Pol. CON 5 New development or redevelopment should avoid or mitigate additional loss of shoreline ecological functions. Developments should be encouraged to improve ecological functions and restore riparian buffers.

Pol. CON 6 The City shall maintain a system of development regulations and a permitting system to prevent the destruction of critical areas. Development regulations should at a minimum address wetland protection, aquifer recharge areas important for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas

Pol. CON 7 The City shall require permit review approval before any activity or construction is allowed to occur in, adjacent to, or impact a critical area.

Pol. CON 8 The City shall develop land use regulations to buffer critical areas from the impacts of adjacent land uses.

Pol. CON 9	The City requires the use of Best Available Science for protecting critical areas within the community pursuant to the Growth Management Act RCW 36.70A.172(1) (Critical Areas).
Pol. CON 10	The City should provide education and technical assistance on low-impact development techniques.
Pol. CON 11	Provide public outreach and education about shoreline ecological functions and processes, and engage the public in stewardship and enhancement activities.
Pol. CON 12	Encourage minimizing the amount of impervious surfaces in new development through the use of appropriate low-impact development techniques and removing paved areas or using retrofit options in existing developments, where applicable, to minimize runoff.
Pol. CON 13	The City shall consider the impacts of new development on water quality as part of its environmental review process and require where appropriate any mitigation measures.
Pol. CON 14	Educate the public on water quality issues and impacts of stormwater flow.
Pol. CON 15	Educate individuals and households about different ways to reduce pollution.
Pol. CON 16	If no feasible alternative exists, a limited amount of development may occur on wetlands and floodplains. In these instances, a broad range of site planning techniques should be explored to minimize impacts on these critical areas.
Pol. CON 17	All wetland functions should be considered in evaluating wetland mitigation proposals, including fish and wildlife habitat, flood storage, water quality, recreation, educational opportunities, and aesthetics.
Pol. CON 18	The City will protect wetlands by maximizing infiltration opportunities and promoting the conservation of forest cover and native vegetation.
Pol. CON 19	Mitigation for any adverse impacts on wetlands shall be provided in the same basin within which the impacts occur.
Pol. CON 20	The City shall consider the impacts of new development on the quality of land, wildlife and vegetative resources as a part of its environmental review process and require any appropriate mitigating measures. Such mitigation may involve the retention of significant habitats.
Pol. CON 21	The City shall encourage an increase in tree canopies through the addition and the preservation of existing vegetation and use of landscaping as an integral part of development plans.

Pol. CON 22 The City should require development proposals to include non structural measures to stabilize soils, hillsides, bluffs and ravine sidewalls and to promote wildlife habitat by removing invasive vegetation and retaining or restoring native vegetation.

Pol. CON 23 The City should consider developing policies that balance the removal of vegetation to preserve and enhance views with the need to retain vegetation to promote slope stability and open space.

Pol. CON 24 Enhance riparian vegetation to improve shoreline ecological functions and processes where possible.

Pol. CON 25 The City should maintain and enhance existing species and habitat diversity including fish and wildlife habitat that supports the greatest diversity of native species.

Pol. CON 26 All development activities shall be located, designed, constructed and managed to avoid disturbance of adverse impacts to fish and wildlife resources, including spawning, nesting, rearing and habitat areas and migratory routes.

Pol. CON 27 Fish and wildlife habitat should be protected, conserved and enhanced, including:

a. Habitats for species which have been identified as endangered, threatened, or sensitive by the state or federal government;
b. Priority species and habitats listed in the Adopted King County Comprehensive Plan, October 2008, as amended;
c. Shellfish areas;
d. Kelp and eel-grass beds;
e. Herring and smelt spawning areas; and
f. Wildlife habitat networks designated by the City.

Pol. CON 28 Fish and wildlife should be maintained through conservation and enhancement of terrestrial, air and aquatic habitats.

Pol. CON 29 The City should ensure that habitat networks throughout the City are designated and mapped. The network should be of sufficient width to protect habitat and dispersal zones for small mammals, amphibians, reptiles, and birds. These networks should be protected through incentives, regulation and other appropriate mechanisms. Site planning should be coordinated during development review to ensure that connections are made or maintained amongst segments of the network.

Pol. CON 30 Native plant communities and wildlife habitats shall be integrated with other land uses where possible. Development shall protect wildlife habitat

through site design and landscaping. Landscaping, screening, or vegetated buffers required during development review shall retain, salvage and/or reestablish native vegetation whenever feasible. Development within or adjacent to wildlife habitat networks shall incorporate design techniques that protect and enhance wildlife habitat values.

Pol. CON 31 The City shall promote voluntary wildlife enhancement projects which buffer and expand existing wildlife habitat, through educational and incentive programs for individuals and businesses.

Pol. CON 32 The City shall seek to retain as open space, those areas that provide essential habitat for any rare, threatened or endangered plant or wildlife species.

Pol. CON 33 The City should maintain, protect and enhance greenbelts riparian corridors and wildlife habitat corridors so that the extent and intensity of the built environment is balanced by these natural features.

Pol. CON 34 The City shall work with property owners to encourage non-purchase options such as conservation easements, current use easements, and development covenants to preserve open space and greenbelts within the city's neighborhoods. The City should also accept donations of properties where public access is anticipated or planned.

20.20.040 Historic, Cultural, Scientific, and Educational Element

Goal HCSE

Identify, protect, preserve, and restore buildings, sites, and areas in the shoreline having historic, cultural, scientific, or educational value for educational purposes, scientific endeavors, and enjoyment by the general public.

Pol. HCSE 1 The City should protect buildings, sites, and areas in the shoreline having historic, cultural, scientific, or educational value through designation, acquisition by purchase or gift, and incentives for preservation.

Pol. HCSE 2 Ensure that properties having historic, cultural, scientific, or educational value are protected from undue adverse impacts associated with public or private uses and activities.

Pol. HCSE 3 The City should consider developing and implementing measures which preserve trees of historical significance.

Pol. HCSE 4 Encourage educational projects and programs, including signage, that foster a greater appreciation of the importance of buildings, sites, and areas in the shoreline having historic, cultural, scientific, or educational value, as well as of shoreline management and environmental conservation.

20.20.045 Flood Prevention and Minimization Element

Goal FLD

Prevent and minimize flood damage to public and private property by locating development away from flood-prone areas and by protecting and restoring shoreline ecological functions and processes.

Pol. FLD 1 Discourage new development in shoreline areas that would be harmed by flood conditions, or which would create or intensify flood hazard impacts on other properties.

Pol. FLD 2 The capacity of natural drainage courses shall not be diminished by development or other activities.

Pol. FLD 3 New structural flood hazard reduction measures shall only be allowed where demonstrated to be necessary, and when non-structural methods are infeasible and mitigation is accomplished. New structural flood reduction measures shall be located landward of associated wetlands and buffer areas, except where no alternative exists as documented in a geotechnical analysis.

Pol. FLD 4 Monitor sea level rise and accordingly adjust development standards and building setbacks to minimize flooding potential.

20.20.050 Restoration Element

Goal REST

Restore areas which are ecologically degraded to the greatest extent feasible while maintaining appropriate use of the shoreline.

Pol. REST 1 Promote restoration actions that are doable, practical, and effective.

Pol. REST 2 The City shall be a good steward of public lands and should integrate restoration and/or enhancement of fish and wildlife habitats into capital improvement projects whenever feasible.

Pol. REST 3 Establish incentives that provide opportunities for new development or redevelopment activities in the shoreline to restore impaired ecological functions and processes. Incentives might include, but are not limited to: flexible development standards (e.g. setbacks, height limits, lot coverage), reduced or waiver of permits fees, and tax relief.

Pol. REST 4 The City shall promote voluntary shoreline enhancement projects through educational and incentive programs for individuals and organizations.

Pol. REST 5	The City should implement the restoration plan associated with this Shoreline Master Program.
Pol. REST 6	Improve natural stream and shoreline conditions to an environmental quality level that supports the return and continuation of salmon runs and eliminates fish blockages.
Pol. REST 7	Stream banks and stream channels should be maintained or restored to their natural condition wherever such conditions or opportunities exist.
Pol. REST 8	Increase availability of large woody debris and opportunities for recruitment in the nearshore zone.
Pol. REST 9	Restore degraded shoreline areas with native species.
Pol. REST 10	The City should investigate partnerships with local environmental groups, city, state or county agencies, or tribes to implement projects and conduct follow-up monitoring and reporting.

Chapter III. Shoreline Environment Designations

20.25.001 Shorelines of Statewide Significance

The State of Washington Shoreline Management Act (SMA) designates certain shoreline areas as shorelines of statewide significance. These shorelines are considered important major resources from which all people in the state derive benefit. The SMA states that local shoreline master programs must give preference to uses which favor public and long-term interests of the people of the state. In the City of Burien, only the marine shorelines below the extreme low tide are designated shorelines of statewide significance. Lake Burien is a "shoreline of the state" and is not a "shoreline of statewide significance." The following policies apply to Burien's marine shorelines:

- Recognize and protect the statewide interest over local interest.
- Preserve the natural character of the shoreline.
- Result in long-term over short-term benefit.
- Protect the resources and ecology of the shoreline.
- Increase public access to publicly owned areas of the shoreline.
- Increase recreational opportunities for the public on the shoreline.

20.25.005 Shoreline Environment Designation Map

The shoreline designation map, Figure 3, establishes the general locations of each of the shoreline designations within the City of Burien. This map generally illustrates the extent of shoreline jurisdiction, but is only a depiction that will need to be reviewed and determined on a case by case basis based on the relevant definitions in the SMA. In the event that there are any undesignated shorelines of the state, they will be automatically designated Urban Conservancy under this SMP. If any part of a proposed development or activity is located within shoreline designation, the entire proposal must be reviewed for consistency with the City of Burien's Shoreline Master Program.

20.25.010 Aquatic

1. Purpose

The purpose of the "Aquatic" shoreline environment designation is to protect, restore, and manage the unique characteristics and resources of shoreline areas waterward of the ordinary high water mark, including both Lake Burien and Puget Sound. This is accomplished by managing water dependent uses and modifications to:

- Preserve/restore ecological functions of the nearshore area;
- Preserve critical saltwater and freshwater habitat;
- Provide public access and recreation opportunities;
- Assure compatibility between shoreland and aquatic uses.

2. Criteria for Designation

An "Aquatic" shoreline environment designation is assigned to lands waterward of the ordinary high water mark for both saltwater and freshwater bodies of water, including any submerged or inter-tidal areas. For the City of Burien, this designation applies to Lake Burien and all marine (Puget Sound) areas waterward of the ordinary high water mark out to the center of the channel within the City limits. The Aquatic shoreline environment designation includes the water surface together with the underlying lands and the water column.

3. Management Policies

a. Shoreline uses and modifications should be compatible with the adjoining shoreline environment and designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

b. New overwater structures should be allowed only for water-dependent uses, public access, or ecological restoration if it can be clearly shown that the cumulative environmental impacts of such structures will not cause significant adverse impacts to protected species.

c. The size of new overwater structures should be limited to the minimum necessary to support the structure's intended use and should support multiple uses.

d. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation and moorage.

e. All developments and uses should consider impacts to public views and access and allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

f. Restoration opportunities associated with project impacts should be encouraged in the aquatic environment.

g. Uses that adversely impact the ecological functions of critical saltwater and freshwater habitats should not be allowed except where necessary to achieve the objectives of RCW 90.58.020 (Shoreline Management Act), and then only when their impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) (Environmental Impact Mitigation) necessary to achieve no net loss of ecological functions.

h. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

20.25.015 Urban Conservancy

1. Purpose

The purpose of the "Urban Conservancy" shoreline environment designation is to protect and restore ecological functions of open space, floodplains, and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses. This designation focuses on providing public access for the enjoyment of marine and lake shorelines by allowing the development of public recreational facilities.

2. Criteria for Designation

An "Urban Conservancy" environment designation is assigned to areas within shoreline jurisdiction that are suitable for public access, water-enjoyment recreational uses and active recreation developments. These are areas that are developed at a low density including residences and outdoor recreation. The Urban Conservancy environment is bounded on the north by the northern end of Seahurst Park and on the south by the southern end of Eagle Landing Park.

3. Management Policies

a. Uses that preserve or restore the natural character of the shoreline area or promote preservation of open space and critical areas should be the primary allowed uses.

b. Public access and public recreation objectives should be implemented if feasible and wherever any significant ecological impacts can be mitigated.

c. Water-oriented uses should be given priority over non-water-oriented uses with water-dependent uses given the highest priority.

d. New development should be designed and located to preclude the need for shoreline armoring, vegetation removal, flood control, and other shoreline modifications.

e. Standards should be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications. These standards shall ensure that new development does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.

20.25.020 Shoreline Residential

1. Purpose

The purpose of the "Shoreline Residential" environment designation is to accommodate residential development and appurtenant structures as well provide appropriate public access.

2. Criteria for Designation

A Shoreline Residential environment designation is assigned to shoreline areas that are predominantly single-family or multifamily residential development or are planned and platted for residential development. These are areas that are developed at a moderate density or intensity including residences and outdoor recreation. Low intensity institutional uses may be allowed if their impacts on the shoreline environment are mitigated. The Shoreline Residential environment includes all shorelands from the northern city limits to the north end of Seahurst Park, from the southern end of Eagle Landing Park to the southern city limits, and all of Lake Burien.

3. Management Policies

a. Residential and accessory uses, recreation facilities and public access shall be the preferred uses.

b. Multifamily and multi-lot residential and recreational developments should provide public access and joint use for community recreational facilities.

c. Water-oriented recreational uses should be allowed.

d. Any new development or redevelopment should utilize low impact development techniques where feasible.

e. Standards for building setbacks, lot coverage limitations, riparian buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be set to assure no net loss of shoreline ecological functions.

f. Public access and public recreation objectives should be implemented if feasible and wherever any significant ecological impacts, can be mitigated.

20.25.025 Figure 3 Shoreline Environment Designation Map

Chapter IV. Shoreline Uses and Modifications Policies and Regulations

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General Provisions

20.30.001 Figure 4 Shoreline Permit Matrix

Type of Shoreline Permit Required for New Shoreline Uses and Modifications*			
	Shoreline Environment Designations (Please see Chapter 20.25 for shoreline designation descriptions and section 20.25.025 Figure 3 for a map showing the locations of each designation)		
	Shoreline Residential	**Aquatic**	**Urban Conservancy**
Aquaculture	X	CU[1]	X
Boat Mooring Buoy	N/A	P[3]	N/A
Boat Ramp	X	X	X
Boat House (covered moorage)	X	X	X
Shoreline Stabilization Structures			
• Breakwater & other in-water structures	N/A	X[6]	N/A
• Bulkheads	SDP[4]	CU	SDP[4]
• Upland Structures (retaining walls and bluff walls)**	SDP	N/A	SDP
Personal Wireless Service Facility	CU	N/A	X
Community Beach	CU	CU	X
Community residential facility	CU	X	X
Docks, Piers and Floats	CU	CU	CU
Docks, Piers and Floats-Residential	SDP[5]	SDP[5]	X
Dredging	N/A	X	N/A
Fill[2]	X	X	X
Floating home	N/A	X	N/A
Flood Hazard Reduction	SDP	CU	SDP
Forestry (clearing)	CU	N/A	CU
Grading	CU	N/A	CU
Government facility	CU	X	CU
Habitat Enhancement or Restoration	SDP	SDP	SDP
Industrial & Ports	X	X	X
Mining	X	X	X
Office	X	X	X
Public park and recreation facilities	SDP	SDP	SDP
Recreation	SDP	SDP	SDP
Residential - Single family**	SDP[8]	X	SDP[8]
Residential - Multi family	SDP	X	CU
Commercial Use and Development	X[7]	X	X[7]
Schools	CU	N/A	CU
Transportation Facilities & Parking	SDP	X	SDP
Utilities	SDP	CU	SDP

Comment [d1]: An original City suggested modification to DOE

SDP Shoreline substantial development permit (City Decision) – See Chapter 20.35 for specific procedures

CU Shoreline conditional use permit (Requires a Department of Ecology Decision if locally approved.) – See Chapter 20.35 for specific procedures. A SDP may also be required.

X Prohibited

N/A Not applicable

1 Prohibited in critical saltwater habitats and Lake Burien

2 Allowed if necessary to construct a permitted use

3 Private mooring buoys are exempt from the shoreline substantial development permit process but shall comply with BMC 20.30.090[Recreational Mooring Buoys] which prohibits mooring buoys on Lake Burien.

4 Construction of the normal protective bulkhead common to single-family residences must comply with BMC 20.30.070 [Bulkheads and other shoreline stabilization structures] but is not required to obtain a substantial development permit.

5 Construction of a dock, pier, or float that is below the substantial development threshold set forth in RCW 90.58.030[3e.iv] [Definitions and concepts, "susbstantial development"]shall be exempt from the Shoreline Substantial Development Permit process, but shall comply with all other applicable sections of this master program.

6. Allowed only for protection or restoration of ecological functions.

7. B&B's are allowed in Shoreline Residential environment (Section 20.30.095). Limited commercial recreation activities in Seahurst Park (Section 20.30.085)

8 A conditional use permit is required for construction within the shoreline~~riparian~~ buffer ~~or setback~~ that is not waterward of the existing home. A variance is required for any development waterward of the existing home with the buffer or setback. This does not apply to the common line setback option.

* Shoreline uses not listed in the matrix above are subject to a shoreline conditional use permit.

** Exempt from shoreline substantial development permit requirements if this is for construction of only one detached unit built by an owner, lessee, or contract purchaser who will be occupying the residence, in accordance with WAC 173-27-040(g)[single-family residential exemption], as amended.

20.30.005 Applicability

The following provisions shall apply to all uses and activities within the City of Burien's shoreline jurisdiction unless otherwise noted. These regulations are based on general goals and policies without regard to shoreline designation based upon elements of the shoreline detailed in Chapter II of this shoreline master program consistent with RCW 90.58.100(2)[SMP required contents] and implement the principles as established in WAC 173-26-186[Governing principles of the guidelines] and WAC 173-26-221[General Master Program Provisions].

- Land Use
- Archaeological and Historic Resources
- Critical Areas
- Flood Hazard Reduction
- Public Access
- Shoreline Vegetation Conservation
- Water Quality, Storm Water, and Nonpoint Pollution

20.30.007 Existing Development

1. **Existing Single-Family Homes, Appurtenances, and Other Existing Structures.** Single-family homes, appurtenances and other structures that were legally established by _____ (effective date of this SMP) are considered to be conforming to the SMP. All such structures may be reconstructed within the existing footprint subject only to those building standards that prevail throughout the City of Burien for the associated zoning designation. Any addition, expansion or reconstruction beyond the existing footprint of the single-family home, appurtenance or other structure must comply with the SMP. Any single family home to which a variance is issued shall be considered a conforming structure.
~~1.~~ The ability to reconstruct a structure within its existing footprint does not imply an ability to create, enlarge or expand structures for flood hazard reduction (see BMC 20.30.030), or Bulkheads and Other Structures for Shoreline Stabilization (See BMC 20.30.070).

   Replacement of any portion of any structure shall comply with the SMP requirements for materials that come in contact with the waters of Puget Sound and Lake Burien pursuant to 20.30.045 [2][Water Quality, Storm Water and Nonpoint Pollution].

   Comment [d2]: A City suggested modification tp DOE. Added for clarity.

~~2.~~ **Other Existing Uses ~~or Structures~~.** Uses ~~or structures~~ ~~other than single-family homes~~ that were legally established by _____(effective date of this SMP) are considered to be conforming to the SMP. Any enlargement or expansion of the use must comply with the SMP.

20.30.010 Impact Mitigation

1. Policy

a. Adverse i~~I~~mpacts to the ecological functions and values shall be mitigated to result in no net loss of shoreline ecological functions and process.

b. Mitigation for adverse impacts of new development projects should first consider enhancement of degraded conditions to offset the impacts of the new development near shoreline resources.

(For additional policy guidance please refer to Chapter II General Goals and Policies, pgs. 1-2, 12-15 and Chapter III Management Policies, pgs. 2-4.)

2. Regulations

a. All shoreline development and uses shall occur in a manner that results in no net loss of shoreline ecological functions, through the location and design of all allowed development and uses. In cases where impacts to shoreline ecological functions from allowed development and uses are unavoidable, those impacts shall be mitigated according to the provisions of this section.

b. To the extent Washington's State Environmental Policy Act of 1971 (SEPA), RCW chapter 43.21C[State environmental policy], is applicable, the analysis of environmental impacts from proposed shoreline uses or developments shall be conducted consistent with the rules implementing SEPA (BMC Chapter 14[Environmental Protection] and WAC 197-11[SEPA rules]).

c. ~~c.~~ Where required, mitigation measures shall be applied in the following sequence of steps listed in order of priority.

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

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

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

iv. ~~iv.~~ Reducing or eliminating the impact over time by preservation maintenance;

v. ~~v.~~ Compensating for the impact by replacing, enhancing, or providing substitute resources or environments;

vi. ~~vi.~~ Monitoring the impact and the compensation projects and taking the appropriate corrective measures.

d. ~~d.~~ In determining appropriate mitigation measures applicable to shoreline development, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

e. ~~e.~~ Required mitigation shall not be in excess of that necessary to assure that proposed uses or development will result in no net loss of shoreline ecological functions.

f. ~~f.~~ When requiring compensatory measures or appropriate corrective measures pursuant to the priority of mitigation sequencing above, preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact. However, alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact may be authorized. Compensatory mitigation of impacts from new development projects should first consider enhancement of degraded conditions to offset the impacts of the new development near shoreline resources. If this is not feasible the second priority should focus mitigation on areas that are in need of restoration. Authorization of compensatory mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions.

g. Mitigation for new development in the Shoreline Buffer is required if
   i. native vegetation is cleared and/or
   ii. new impervious surface is created and/or
   iii. new partially functioning area is created

A procedure for evaluating impacts and determining requirements for mitigation is described in BMC 20.30.055 [Shoreline Buffers]~~Appendix X~~.

Alternatively the applicant may choose to secure the services of a qualified professional to develop a report to demonstrate that the no-net-loss standard will be met. The Shoreline Administrator may choose to develop standards for guiding the development of this report.

Please also refer to sections BMC 20.30.050, Dimensional Standards for Shoreline Development and BMC 20.30.055, Shoreline Buffers for specific requirements.

Comment [d3]: Amend to reference to BMC section. Staff recommends the code related portions of appendix X be moved into the body of the document as code language. Please see section 20.30.055 for more comments.

20.30.015 Land Use

The following provisions apply to all development and uses regardless of whether a shoreline substantial development permit is required.

1. Policies

a. Preference for shoreline permitted uses shall first be given to *water dependent uses*, then to *water related* and *water enjoyment uses*.

b. The city should be proactive in enforcing shoreline regulations and provide sufficient resources to ensure enforcement occurs.

(For additional policy guidance please refer to Chapter II General Goals and Policies, pgs. 8-11 and Chapter III Management Policies, pgs. 2-4.)

2. Regulations

a. The application of master program policies and regulations to all uses and related modifications shall assure no net loss of ecological functions necessary to sustain shoreline natural resources.

b. *Water dependent uses* shall only be allowed overwater if the overwater location is necessary for the operation of the water dependent use. Uses which are not water dependent shall not be permitted overwater unless specifically stated otherwise in the regulations for the applicable shoreline environment.

20.30.020 Archaeological and Historic Resources

According to the state shoreline management guidelines, if archaeological or historic resources have been identified in shoreline jurisdiction, the local government is required to collect information about these resources and contact the state historic preservation office and local affected Indian Tribes. The county and the state maintain inventories of both archaeological and historic resources. These sites and artifacts are protected by several state provisions:

RCW Chapter 27.53— Archaeological Sites and Resources
This state law makes it illegal to knowingly disturb an archaeological site on public or private lands without a state-issued permit.

RCW Chapter 27.44— Indian Graves and Records
This state law makes it illegal to knowingly disturb Native American cairns, petroglyphs and graves on public or private lands without a state-issued permit. Selling any Native American Indian artifacts or remains removed from a cairn or grave is also illegal.

WAC 25-48—Archaeological Excavation and Removal Permit
This provision establishes procedures for application for and issuance of state permits for excavation and/or removal of archaeological sites and resources.

1. Policy

The City should ensure conservation of significant archeological and historic amenities in the shoreline areas and include on the inventory of registered sites maintained by the Washington State Office of Archaeology and Historic Preservation, and tribally identified sites.

(For additional policies refer to Chapter II General Goals and Policies, pg. 15.)

2. Regulations

a. Archaeological sites located in shoreline jurisdiction are subject to state and federal regulations as well as to the City of Burien Shoreline Master Program.

b. When an application for work in the shoreline area documented to contain archaeological resources is filed the application shall include an evaluation by a professional archaeologist coordinated with affected tribes.

c. All shoreline permits shall contain the requirement to stop work immediately and notify the City, affected tribes and the Washington State Office of Archaeology and Historic Preservation if an artifact is discovered. The property owner will be required to provide for a site inspection and evaluation by a professional archaeologist for review by the relevant tribes and agencies prior to proceeding with the development or activity.

d. Archaeological excavations may be permitted subject to the provisions of this shoreline program.

20.30.025 Critical Areas

Critical areas include the following areas and ecosystems: wetlands, critical aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas. Critical saltwater and critical freshwater habitats are also types of critical areas within shoreline jurisdiction.

1. Policies

a. In assessing the potential for net loss of ecological functions or processes, project specific and cumulative impacts should be considered.

b. Development standards for density, frontage improvements, setbacks, impervious surface, shoreline stabilization, vegetation conservation, buffers, critical areas, and water quality should protect existing shoreline ecological functions and processes. During permit review, the Shoreline Administrator should consider the expected impacts associated with proposed shoreline development when assessing compliance with this policy.

(For additional policy guidance please refer to Chapter II General Goals and Policies, pgs. 12-15 and Chapter III Management Policies, pgs. 2-4.)

2. Regulations

a. BMC 19.40—Critical areas (City of Burien Ordinance 394, adopted October 20, 2003) has been reviewed for consistency with Chapter 90.58 RCW and WAC 173-26 and shall apply to the shoreline jurisdiction with the following exceptions:

i. The exemptions and exceptions contained in BMC 19.40.070(1), (2) & (3) apply only to the critical areas provisions and are not exemptions from substantial development permits. The ~~reasonable use~~ exceptions contained in BMC 19.40.070 ~~(3) &~~ (4) do not apply and are not considered part of the SMP.

ii. BMC 19.40.290 (3.B.iii) does not apply and is not considered part of the SMP. For a landslide hazard area buffer of less than twenty-five (25) feet, in addition to the items required in BMC 19.40.120, a shoreline variance shall be required.

iii. BMC 19.40.310 (2.H.v) does not apply and is not considered part of the SMP. For a wetland buffer of less than twenty-five (25) feet, a shoreline variance shall be required.

iv. BMC 19.40.410(2.B) does not apply and is not considered part of the SMP. Filing is prohibited in the Aquatic environment per Section 20.30.001 Figure 4.

~~i.~~v. The following types of wetlands are not regulated by the SMP:

a. ~~(a).~~ Small wetlands less than 1,000 square feet and hydrologically isolated;

Comment [d4]: DOE originally was opposed to the change but now does not object to the original text as proposed here. The original language allowed utility projects a possible exception if the Critical Areas chapter prohibited a project. All shoreline rules and procedures will still apply.

Comment [d5]: SWG change removed see comment above.

Comment [d6]: SWG change removed see comments above.

Comment [d7]: DOE originally was opposed to the change but now does not object to the change as proposed here.

b. ~~(b).~~ Man-made ponds smaller than one acre and excavated from uplands without a surface water connection to streams, lakes, or other wetlands.

~~iii. Section 19.40.410(2.B) is not part of the shoreline master program. Filling is prohibited in the Aquatic environment per Section 20.30.001 Figure 4.~~

b. Wetland delineation. Wetlands are those areas in the City of Burien, designated in accordance with the Washington State Wetland Identification and Delineation Manual, as required by RCW 36.70A.175[Wetlands to be delineated in accordance with manual] (Ecology Publication #96-94).

c. Wetland rating system. Wetlands for the purposes of the SMP shall be categorized in accordance with the Washington State Wetland Rating System for Western Washington – Revised (Ecology Publication #04-06-025).

d. Wetland buffers. Wetland buffers for the purposes of this SMP shall be determined based upon Appendix 8-C of "Wetlands in Washington State Volume 2: Guidance for Protecting and Managing Wetlands FINAL April 2005 Ecology Publication #05-06-0088" based on information provided as part of a critical area study.

e. Development proposals shall adhere to the applicable submittal requirements (a critical area report specific to the critical area) as specified in the Critical Areas Ordinance regulations adopted as part of this SMP.

f. Development shall not intrude into, over, or within 10 feet from *critical saltwater habitats* (e.g., eelgrass) except when an alternative alignment or location is not *feasible* and the development would result in no net loss of *critical saltwater habitat*.

g. When this Master Program requires mitigation, the mitigation sequence described in section BMC 20.30.010 [Impact Mitigation] shall be followed.

20.30.030 Flood Hazard Reduction

The following provisions apply to actions taken to reduce flood damage or hazard, as well as to uses, development and shoreline modifications that may increase flood hazards. Flood hazard reduction measures may consist of nonstructural measures such as setbacks, land use controls, wetland restoration, biotechnical measures, and storm water management. Flood hazard reduction measures may also include structural measures such as floodwalls, dikes and elevation of structures consistent with the National Flood Insurance Program.

1. Policies

a. All new shoreline development and uses shall be located and designed to prevent the need for shoreline stabilization and structural flood hazard reduction measures for the life of the development.

b. Flood protection structures may be allowed in shoreline jurisdiction if a shoreline substantial development permit is obtained. Structures that are near and generally parallel to the ordinary high water mark shall be considered a bulkhead and require a conditional use permit consistent with *bulkhead* regulations. (See BMC 20.30.001 Figure 4).

c. New and expanded public flood protection measures may be permitted subject to City of Burien review and approval of a critical area study and the approval of a Federal Biological Assessment by the federal agency responsible for reviewing actions related to a federally listed species.

d. New structural flood protection measures should only be allowed when necessary to protect existing development or to facilitate restoration projects.

e. When emergency repair of flood protection structures are necessary, permits for the work including mitigation, should be obtained upon abatement of the emergency or the structure must be removed.

f. New structural flood hazard reduction measures in shoreline jurisdiction are allowed only when it can be demonstrated by a scientific and engineering analysis that they are necessary to protect existing development or facilitate restoration projections, that nonstructural measures are not feasible, that impacts to ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss and that appropriate vegetation conservation actions are undertaken consistent with Section 20.30.040.

g. Flood protection structures may be allowed in shoreline jurisdiction if a shoreline substantial development permit is obtained. In addition, flood protection structures at or near, and parallel to, the ordinary high water mark requires a conditional use permit.

(For additional policies refer to Chapter II General Goals and Policies, pg. 16.)

2. Regulations

a. Non-structural flood protection measures shall be used instead of structural solutions unless the project proponent demonstrates that a non-structural solution is not feasible and there would be no net loss of shoreline ecological functions.

b. All flood protection measures, including repair and maintenance, shall conform to standards set forth in approved floodplain management plans, when available.

c. Flood protection shall not have adverse impacts on the property of others.

d. Flood control methods must be consistent with BMC 15.55-Flood Damage Prevention and BMC 19.40-Critical Areas.

e. Subdivision proposals shall be consistent with the need to minimize flood damage by conforming to the adopted Base Flood Elevation regulations.

f. All new shoreline development and uses, including the replacement of a destroyed home, shall be located and designed to prevent the need for new or expanded structural flood hazard reduction measures for the life of the development. Exceptions may be made for the limited instances where flood hazard reduction is necessary to protect allowed uses where no alternative locations are available and no net less of ecological functions will result.

g. New structural flood hazard reduction measures in shoreline jurisdiction are allowed only when it can be demonstrated by a scientific and engineering analysis that they are necessary to protect existing development or facilitate restoration projects, that nonstructural measures are not feasible, that impacts to ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss, and that appropriate vegetation conservation actions are undertaken consistent with Section 20.30.040.

h. Flood protection structures may be allowed in shoreline jurisdiction if a shoreline substantial development permit is obtained. In addition, flood protection structures at or near, and parallel to, the ordinary high water mark require a conditional use permit.

20.30.035 Public Access

Public access can be either *physical access* or *visual access*. Physical access is the ability of the general public to reach, touch, and enjoy the water's edge, and/or to travel on the waters of the state. Visual access is to view the water and the shoreline from adjacent locations or access with improvements that provide only a view of the shoreline or water, but do not allow physical access to the shoreline.

1. Policies

a. Public access to shoreline areas should be designed to protect private property and public health and safety.

b. Public access should be provided as close as possible to the water's edge with no net loss of shoreline ecological function that cannot be mitigated.

c. Private views of the shoreline, although considered during the review process, are not expressly protected. Property owners concerned with the protection of views from private property are encouraged to obtain view easements, purchase intervening property or seek other similar private means of minimizing view obstruction.

(For additional policies refer to Chapter II General Goals and Policies, pg. 2-4 and Chapter III Management Policies, pg. 2-4.)

2. Regulations

a. Public access provided by shoreline street ends, rights-of-way, and other public lands shall provide, maintain, enhance and preserve visual access to the water and shoreline in accordance with RCW 35.79.035[Limitations on vacations of streets abutting bodies of water — Procedure].

b. Visual access to outstanding scenic areas shall be provided with the provision of roadway design features that allow for visual access opportunities and are sensitive to adjacent land uses and neighborhood characteristics.

c. If a public road is located within shoreline jurisdiction, any unused right of way shall be dedicated as public access unless vacated as set forth in RCW 35.79.035[Limitations on vacations of streets abutting bodies of water — Procedure].

d. Subject to constitutional limitations, public access shall be required for all new shoreline development and uses, except for water dependent uses, individual single family residences, and subdivisions of less than five parcels.

e. Public access to shoreline areas shall not be required, where it is demonstrated to be infeasible because of adverse ecological impacts that cannot be mitigated,

incompatible uses, safety, security, or constitutional and other legal limitations that may be applicable.

f. The City shall utilize alternate methods of providing public access when appropriate and *feasible*, such as off-site improvements, viewing platforms, separation of uses through site planning and design, and restricting hours of public access.

g. Public access improvements shall not result in a net loss of shoreline ecological functions.

h. Required public access sites shall be fully developed and available for public use at the time of occupancy or use of the development or activity.

i. Public access easements and permit conditions shall be recorded on the deed where applicable or on the face of a plat or short plat as a condition running in perpetuity with the land and shall occur at the time of permit approval.

j. Future actions by the applicant or other parties shall not diminish the usefulness or value of the public access site.

20.30.040 Shoreline Vegetation

Vegetation along the shoreline plays a number of important roles including providing bank stability, habitat and wildlife corridors, shade and cover, wood and organic debris recruitment. By slowing erosion and retaining sediments, riparian vegetation reduces pollutants including nitrogen, phosphorus, hydrocarbons, PCBs, metals, and pesticides. Shoreline vegetation also prevents excessive turbidity by slowing down and filtering surface water runoff and associated sediments. This section should be used in conjunction with BMC section 20.30.050 [Dimensional Standards for Shoreline Development].

WAC 173-26-221[5.b][SMP Guidelines, General master program provisions, vegetation conservation], sets forth the principles on how vegetation contributes to the overall health and sustainability of our shorelines. The applicability of these principles to Burien's SMP is supported by the appendices to this SMP (Shoreline Inventory, Shoreline Analysis and Characterization, Shoreline Cumulative Impacts Analysis and Supplemental Informational Documents.

1. Policies

a. Native plant communities within shoreline jurisdiction including, but not limited to, wetlands, lakes, streams and bluffs should be protected and maintained to minimize damage to the ecology and environment of the shoreline area.

b. Restoration and mitigation of shorelines degraded due to natural or manmade causes should, wherever feasible, use bioengineering techniques to arrest the processes of erosion and sedimentation, to improve water quality and to provide for properly functioning conditions.

c. Vegetation within the city shoreline areas should be enhanced over time to provide a greater level of ecological functions, human safety, and property protection. This should be accomplished by managing alterations within shoreline jurisdiction and implementing vegetation management standards that will maintain or enhance the ecological functions. Emphasis on vegetation maintenance and enhancement should be focused in degraded areas and areas that are most beneficial to shoreline ecological functions.

   (For additional policy guidance please see Chapter II General Goals and Policies, pg. 10-15.)

2. Regulations

a. *Alterations* to vegetation within shoreline jurisdiction (except for the maintenance of existing or approved conditions) are not allowed without review and approval by the City. When allowed, alterations to the vegetation shall result in no net loss of shoreline ecological value or function.

b. *Alterations* within the shoreline vegetation conservation buffer (except for the maintenance of existing or approved conditions) shall only be allowed through review and approval by the City of a vegetation management plan as set forth in paragraph d below.

c. If mitigation of impacts is necessary, it should take the form of vegetation enhancement and result in improvements to ecological functions. The vegetation management plan shall be prepared by a qualified professional and shall be consistent with the provisions of this chapter and BMC Chapter 19.40[Critical Areas]. Vegetation enhancement plans shall include:

   i. Revegetation of degraded buffer areas within Zone 1 of the Shoreline Buffer ~~20 feet of the ordinary high water mark~~ (or top of shore armoring if applicable) or wetland edge with dense native vegetation meeting the standards of paragraph (d)(iii-iv) below. The Administrator may require wider widths or other improvements to mitigate greater impacts.
   ii. The above revegetation area may be modified using area averaging when existing structures encroach into Zone 1 of the Shoreline Buffer~~the 20 foot width~~, when access through the area to waterfront facilities is needed, or when water-dependent activities need to take place in the area.

d. Within a shoreline vegetation conservation buffer as set forth in BMC 20.30.050[Dimensional Standards for Shoreline Development], *alterations* shall comply with the following;

   i. The applicant shall provide a vegetation management plan prepared by a qualified professional; and
   ii. The total area of vegetation removal or *alteration* shall be replaced at a size equal or greater to the area being altered; and
   iii. Where new or altered vegetation planting areas are proposed within the shoreline vegetation conservation buffer, either as a part of a project proposal or to replace any existing vegetation that is removed, the new vegetation shall be provided at a density to mimic natural conditions rather than a landscaped yard; and
   iv. When new vegetation planting areas are proposed within the shoreline vegetation conservation buffer, the new or altered

vegetation planting areas shall consist of mix of native trees, shrubs and ground cover; and

v. Vegetation management plans should place emphasis on surface water filtration and infiltration, and providing plantings as close to the water's edge or edge of bulkhead as feasible within Zone 1 of the Shoreline Buffer~~a 20 foot wide area parallel and adjacent to the shoreline~~; and

vi. New lawn areas are prohibited in Zone 1 of the Shoreline Buffer ~~the shoreline riparian buffer~~ due to their limited functional benefits and need for chemical and fertilizer application; and

vii. Appropriate limitations shall be included on the use of fertilizer, herbicides and pesticides as needed to protect lake and marine water quality.

e. Prior to issuance of a building permit, if applicable, the applicant shall submit a vegetation management plan pursuant to section h. The plans shall state what erosion control measures will be implemented during and after construction resulting in long term shoreline stabilization.

f. All clearing, grading and vegetation removal shall be the minimum necessary except for the removal of noxious and invasive vegetation. Hand equipment should be used when feasible.

g. Consistent with existing regulations, only noxious weeds shall be removed from critical areas or their buffer without approval of the Shoreline Administrator. Replacement of non-native vegetation may be allowed through approval of a vegetation management plan as prescribed in section h.

h. The Director shall establish standards for vegetation management plans. At a minimum, vegetation management plans shall comply with the following;

i. Describe the area to be disturbed and the proposed vegetation to be altered; and

ii. Outline specific actions or methods that will be used to minimize impacts to the ecological functions and values; and

iii. Indicate how existing shoreline vegetation will be preserved and protected; and

iv. Describe measures that will be used or enacted that will ensure any alteration and required vegetation will be maintained for a minimum of two years and preferably for the duration of the use or development; and

v. Delineate any applicable critical area and/or buffer; and

vi. The plan shall document how the proposed alteration will result in equal or better ecological function and value.

20.30.045 Water Quality, Storm Water and Nonpoint Pollution

Storm water picks up oil, grease, metals, yard and garden chemicals, dirt, bacteria, nutrients, and other pollutants from paved areas, and carries them to Puget Sound and Lake Burien without treatment. The higher rate of runoff from more impervious areas also results in decreased water quality by flushing more sediment into the water.

1. Policies

a. The City of Burien should protect against adverse impacts to the public health, to the land and its vegetation and wildlife, and to the waters of the state and their aquatic life, through implementation of the following principles:

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

ii) Ensure mutual consistency between shoreline management provisions and other regulations that address water quality and storm water quantity, including public health, storm water, and water discharge standards. The regulations that are most protective of ecological functions shall apply, except as otherwise provided in RCW 36.70A.480[Growth Management, shorelines of the state], regarding the level of protection for critical areas within shorelines of the state

(For additional policy guidance please see Chapter II General Goals and Policies, pg. 12.)

2. Regulations

a. Construction materials that come in continuous, direct contact with surface waters shall not be treated or coated with toxic materials. Untreated wood, precast concrete, plastic or nontoxic alternatives shall be used unless the project proponent demonstrates and the City of Burien building official determines that there is no feasible alternative to toxic treatments that will provide the structural characteristics necessary for the project. Wood products treated with creosote or pentachlorophenol are prohibited on all new structures or repair projects that come in direct contact with water or could leach into surface or ground water.

b. Low impact development methods shall be incorporated into any development or redevelopment in shoreline jurisdiction when feasible.

20.30.050 Dimensional Standards for Shoreline Development

The following buffers are based on the City of Burien Shoreline Inventory (Appendix 1), City of Burien Supplement to the Shoreline Inventory (Appendix 1.A), City of Burien Shoreline Analysis and Characterization (Appendix 2), the City Of Burien Supplement to the Shoreline Analysis and Characterization (Appendix 42.A), the City of Burien Shoreline Cumulative Impacts Analysis (Appendix 54), the City Of Burien Supplement to the Cumulative Impacts Analysis (Appendix 64), and Supplemental Informational Documents (Appendix 754.A) reports contained in this shoreline master program. The shoreline riparian buffers, common line building setbacks and vegetation conservation buffers are calculated from the ordinary high water mark. Buffer setbacks are measured landward from the outer edge of a buffer. For measurement methods, refer to BMC 19.17[Misc. Use, Development and Performance Standards].

A significant majority of Burien's marine shorelines are developed with single-family residential structures and appurtenances. Specifically reaches 1, 3 and 4, on the Puget Sound, there are many structures in close proximity to the ordinary high water mark and due to this existing development pattern there is are inherent conflicts in applying greater buffer widths while also retaining the ability of residents to continue use and maintain those areas that have been historically used in conjunction with those properties. Figure 4.56, Shoreline Planning Areas, illustrates the locations of altered and highly altered shoreline areas. The justification for this approach is supported by the documentation found in Appendix 5 of this SMP.

The riparian shoreline buffers and vegetation conservation buffers shown in Figure 5 and in BMC 20.30.055[Shoreline Buffers]:

1. Do not apply to legally established structures existing on _____ (effective date of the SMP).

2. Apply to new development, new structures, and additions/expansion of legally existing structures.

Figure 5 Dimensional Standards for Shoreline Development

	UC	SR-LB	SR-AL	SR-HA
Shoreline Buffer Zone 1 (1)	50 ft	30 ft	30 ft	20 ft
Shoreline Buffer Zone 2 (1)	100 ft	15 ft	15 ft	15 ft
Vegetation Conservation (2)	200 ft	150 ft	150 ft	150 ft
Lot Size (3)	RS-12,000	RS-7,200	RS-12,000	RS-12,000
Building Coverage (4)	30%	35%	35%	35%

UC: Urban Conservancy
SR-LB: Shoreline Residential – Lake Burien
SR-AL: Shoreline Residential – Marine alterted
SR-HA: Shoreline Residential – Marine highly altered

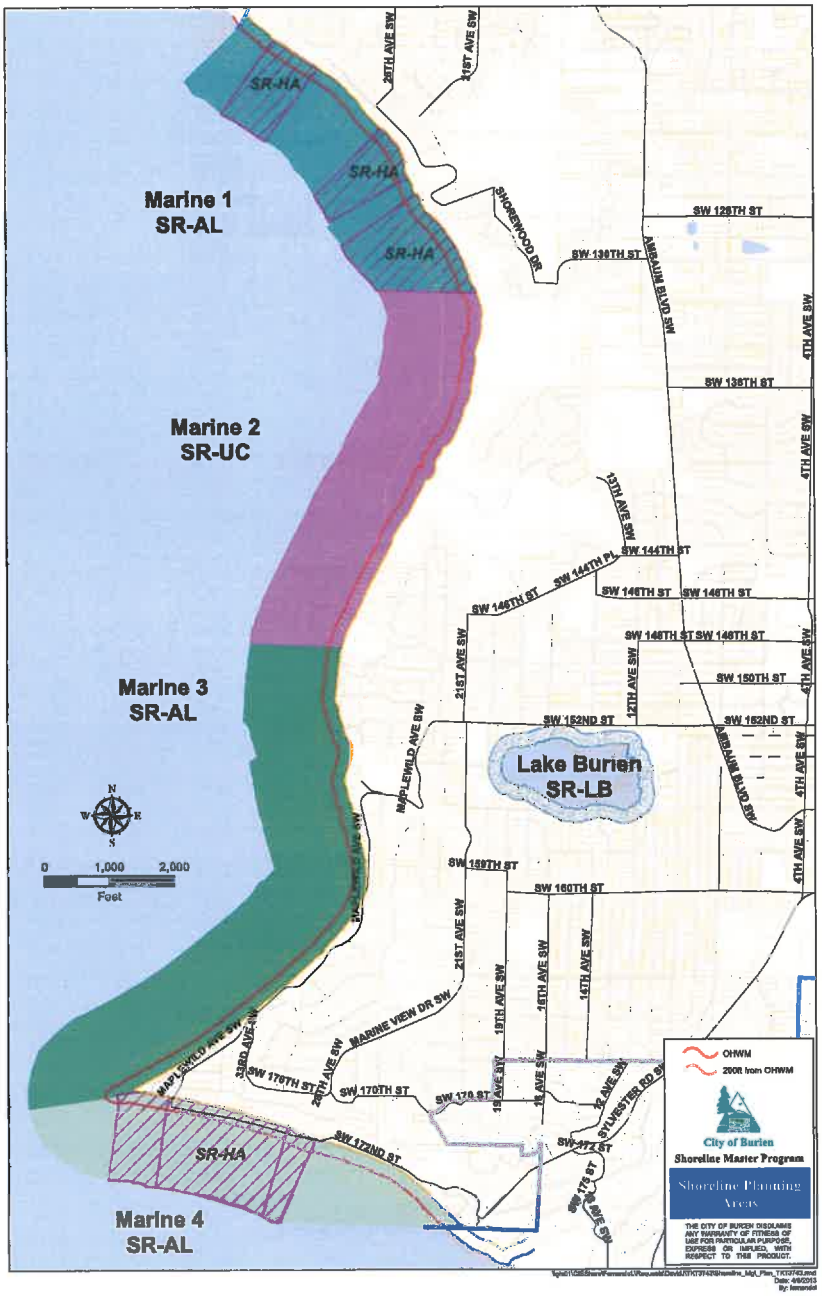
(Please refer to Figure 6 for a map detailing the locations of the areas listed above.)

~~**SHORELINE ENVIRONMENT DESIGNATION**~~

	~~Shoreline Residential~~	~~Urban Conservancy~~	~~Aquatic~~
~~Marine Riparian Buffer (3)~~	~~20 ft.~~	~~50 ft.~~	~~N/A~~
~~Building Setback~~	~~0 ft~~	~~15 ft~~	~~N/A~~
~~Lake Burien Riparian Buffer(1)~~	~~30 ft.~~	~~N/A~~	~~N/A~~
~~Building Setback~~	~~15 ft~~	~~N/A~~	~~N/A~~
~~Vegetation Conservation Buffer (2)~~	~~150 ft.~~	~~200 ft.~~	~~N/A~~
~~Height Limit (see BMC 19.15)~~	~~35 ft.~~	~~35 ft.~~	~~N/A.~~
~~Lot Size (4)~~	~~RS-12,000~~	~~RS-12,000~~	~~N/A~~
~~(see BMC 19.15)~~	~~RS-7,200 (Lake Burien)~~		
~~Building Coverage (see BMC 19.15)~~	~~35%~~	~~30%~~	~~N/A~~

(1) Consistent with BMC 19.40-critical areas and BMC 20.30.055(1). For single family residential development, the buffers prescribed in this section may be reduced pursuant to BMC 20.30.095, through the conditional use or variance permit process.
~~(1)~~
~~(2)~~ See BMC 20.30.040 Shoreline Vegetation Conservation for specific requirements.
~~(3)~~(2) ~~For single family residential development, the buffers prescribed in this section may be reduced pursuant to BMC 20.30.095, through the conditional use or variance permit process.~~
(3) See BMC 19.15 and ~~See~~ BMC 19.17.170 of the zoning code for minimum lot area requirements.
~~See BMC 19.15~~
(4)

Figure 6: Shoreline Planning Areas



20.30.055 Shoreline Buffers

Policy:

1. While buffer widths based on science are necessary to protect ecological functions, it presents challenges in existing heavily developed areas such as along some parts of Burien. In such areas, an alternative strategy is established using smaller buffers that are based on existing development pattern, in combination with mitigation requirements for new development that provide enhancement of the smaller buffer and other degraded features to address impacts of the new development outside the small buffer areas when part of a vegetation conservation plan.

Regulations:

1 ~~A twenty foot riparian buffer for the marine shoreline (thirty feet for Lake Burien) shall be established from the ordinary high water mark for all lots. The riparian buffer is measured landward from a perpendicular line from the edge of the OHWM.~~A Shoreline Buffer is established for the Marine Shoreline and for Lake Burien. This buffer consists of two zones; Zone 1 and Zone 2.

a) Zone 1 is adjacent to Ordinary High Water Mark (OHWM). New development that would introduce adverse impacts is strictly limited within Zone 1 and, if allowed, must be mitigated to assure no net loss.

b) Zone 2 is adjacent to the landward side of Zone 1. New development in Zone 2 that would introduce adverse impacts, if allowed, must be mitigated to assure no net loss, preferentially by restoration activities in Zone 1.

c) The size of these zones varies as shown in 20.30.050 Figure 5. Distances are measured on a horizontal plane in a direction that is perpendicular to the line of OHWM.

~~2. Appendix X defines the development standards for each Zone and provides a worksheet that an applicant for a shoreline permit may use to demonstrate that any adverse impacts will be mitigated. Alternatively, the applicant may submit an impact report that is prepared by a qualified expert.~~

Comment [d8]: Staff recommends that portions of Appendix X be inserted here. Specifically Sections X.1 through X.3. Those sections were put in code format below.

2. **No Net Loss Compliance.** All development within the buffers as set forth in BMC 20.30.050 and 20.30.055 shall demonstrate that unavoidable adverse impacts are mitigated to achieve no net loss.

a. Achieving no net loss can be achieved by;

i. avoiding an adverse impact, or
ii. relocating the adverse impact to be outside the buffer, or
iii. by mitigating the impact

b. Demonstrating that the development will comply with the no net loss standard can be accomplished by one of the following methods.

i. An applicant submitting an ecological impacts report prepared by a qualified professional, or
ii. Completion of a project worksheet as set forth in sub-section 5.

c. The Shoreline Administrator may prepare standards and guidelines on what shall be included in an ecological impacts report to satisfactorily demonstrate compliance with the standards.

3. Development Standards for Zone 1.

a. New development in Zone 1 shall be primarily for the following:

i. maintenance of existing structures, or
ii. restoration or remodeling of existing structures within the existing footprint, or
iii. voluntary restoration activities, or
iv. providing required mitigation for adverse impacts in Zone 2.

b. An access path from Zone 2 to the line of OHWM may be allowed as an exception. An access path shall be the minimum size and designed to serve this purpose. Additional flexibility may be allowed when it is necessary to meet the needs of users with limited mobility.

4. Development Standards for Zone 2.

a. New development in Zone 2 shall be primarily for the following:

i. maintenance of existing structures, or
ii. the restoration or remodeling of existing structures within the existing footprint, or
iii. voluntary restoration activities.

b. New developments that result in adverse impacts may occur in Zone 2, if those impacts are mitigated and the total development activity achieves no net loss.

5. Optional method. Demonstrating successful mitigation of unavoidable adverse impacts. An optional prescriptive worksheet (Figure 7) may be used in lieu of an ecological impact report. This method provides a means to quantify a measurement of certain adverse impacts and the benefits of certain improvements.

a. Adverse impacts. The scope of adverse impacts that can be evaluated are limited to the following:

i. creation or expansion of impervious surfaces, and
ii. removal of existing native vegetation.

b. Ecological Benefits. Improvements to ecological functions include are as follows:

i. removal or reduction of impervious surface, and
ii. introduction or expansion of native vegetation.

~~a.~~c. The optional worksheet review process may only be applied in the evaluation of single-family residential development proposals.

~~3.~~ 6. Overwater structures are allowed within the buffer as provided herein. Structures and development such as viewing platforms, boardwalks, benches, and trails are allowed when associated with public access. Pursuant to 20.30.095(2.g) – Residential

Development, fences less than 6-feet high, stairs and trams may be allowed within the buffer.

Comment [d9]: A DOE required change that has been edited for clarity.

~~4.~~7. Whenever the Shoreline Administrator determines that monitoring has established a significant adverse deviation from predicted impacts, or that mitigation or maintenance measures have failed, the applicant or the property owner shall be required to institute corrective action(s), which shall also be subject to further monitoring as provided in this section.

~~5.~~8. The Shoreline Administrator may require a performance bond(s) or other security in an amount sufficient to guarantee that all required mitigation measures will be completed in a manner that complies with conditions of approval and to guarantee satisfactory workmanship and materials for a period not to exceed five years. The Shoreline Administrator shall establish the conditions of the bond or other security according to the nature of the proposed mitigation, maintenance or monitoring and the likelihood and expense of correcting mitigation or maintenance failures.

~~6.~~9. All costs associated with the mitigation/monitoring and planning including city expenses, shall be the responsibility of the applicant.

Figure 7: Impact Assessment Worksheet

Comment [d10]: A new Figure added. Comment made for clarity. The worksheet was taken directly from the SWG appendix X.

Measure of adverse impacts in Zone 2

1)	Total square feet of new impervious surface	_____	X 4 points	= _____
2)	Total square feet of cleared native vegetation	_____	X 2 points	= _____
3)	Total measurement (add 1 and 2)			_____

Benefit of adding native vegetation in Zone 1

4)	Total square feet of impervious surface eliminated	_____	X 4 points	= _____
5)	Total square feet of partially functioning area improved	_____	X 2 points	= _____
6)	Benefit of improvements in Zone 1 (add 4 and 5)			_____

Benefit of improvements in Zone 2

7)	Impervious surface to native vegetation (sq ft)	_____	X 2 points	= _____
8)	Partially functioning area to native vegetation (sq ft)	_____	X 1 points	= _____
9)	Impervious surface to partially functioning area (sq ft)	_____	X 0.5 points	= _____
10)	Benefit of improvements in Zone 2 (add 7 – 9)			_____

No Net Loss Indicator

11)	Measurement of adverse impacts (line 3)	_____
12)	Total benefit of improvements (add 6 and 10)	_____

The project will meet the no net loss standard if line 11, the measurement of adverse impacts, is less than or equal to line 12, the benefit of improvements.

20.30.060 Select Shoreline Uses and Modifications

Shoreline master programs establish a comprehensive program of use regulations for shorelines and provisions for specific uses to assure consistency with the policy of the act and where relevant within the jurisdiction. This section provides specific policies and regulations for the following types of uses and modifications:

- Aquaculture
- Bulkheads and Other Shoreline Stabilization Structures
- Docks, Piers and Floats
- Habitat Restoration and Enhancement
- Recreation
- Recreational Mooring Buoys
- Residential
- Transportation Facilities and Parking
- Utilities

20.30.065 Aquaculture

Aquaculture means the culture, harvesting or farming of food fish, shellfish, or other aquatic plants and animals. Sport fishing is not considered an aquaculture activity. Aquaculture activities include the hatching, cultivating, planting, feeding, raising, harvesting, and processing of aquatic plants and animals and the maintenance and construction of necessary equipment, buildings and growing areas. Cultivation methods include but are not limited to fish pens, fish hatcheries, shellfish rafts, racks and long lines, seaweed floats and nets and the culture of clams and oysters on tidelands and subtidal areas.

1. Policies

a. Aquaculture should not be permitted in areas where it would result in a net loss of ecological functions, adversely impact eelgrass and macroalgae, or significantly conflict with existing adjacent uses.

b. Aquacultural facilities must be designed and located so as not to spread disease to native aquatic life, establish new nonnative species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline.

2. Regulations

a. Aquaculture shall be limited to geoduck harvesting within Department of Natural Resources' tracts or for recovery of a native aquatic population in accordance with a government and/or tribal approved plan.

b. Aquaculture is not permitted in areas where it would result in a net loss of ecological functions, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses.

c. Aquaculture is prohibited in critical saltwater habitat or within a 10 foot buffer from these areas.

d. No aquatic organism shall be introduced into City of Burien shoreline areas without the prior written approval of the Washington State Department of Fish and Wildlife or the appropriate regulatory agency for the specific organism.

e. No aquacultural processing, except for the sorting or culling of the cultured organism and the washing or removal of surface materials or organisms, shall be permitted waterward of the ordinary high water mark unless fully contained within a tending boat or barge.

f. Shellfish seeding and culturing is allowed when conducted for native population recovery in accordance with a government and/or tribal approved plan.

20.30.070 Bulkheads and Other Shoreline Stabilization Structures

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

Nonstructural methods include building setbacks, relocation of the structure to be protected, ground water management, planning and regulatory measures to avoid the need for structural stabilization.

1. Policies

a. New development should be located and designed to avoid the need for future shoreline stabilization to the greatest extent *feasible*.

b. New and replacement bulkheads should be designed to blend in with the natural surroundings and not detract from the aesthetic qualities or degrade the natural processes of the shoreline.

c. Burien should take active measures to preserve natural unaltered shorelines, and prevent the proliferation of new bulkheads and other forms of shoreline armoring.

d. Non-structural stabilization measures including relocating structures, increasing buffers, enhancing vegetation, managing drainage and runoff and other measures are preferred over new structural shoreline armoring.

e. Where feasible, any failing, harmful, unnecessary, or ineffective structural shoreline armoring that cannot be repaired or replaced should be removed, and shoreline ecological functions and processes should be restored using non-structural methods.

(For additional policy guidance please see Chapter II General Goals and Policies, pg. 7, 11, 13.)

2. Regulations

a. A shoreline stabilization structure legally existing on _____ (the effective date of the SMP):

i. May be repaired and maintained.
ii. May be replaced with a similar structure if the following apply:

1) There is a demonstrated need to protect legally established principal uses or structures and legally established appurtenances necessary for use and enjoyment of a single-family home, which appurtenances shall

not include fences, from erosion caused by currents, tidal action, or waves.

2) The existing structure can no longer adequately serve its purpose of stabilizing the shoreline to protect established uses and structures.

3) Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark or existing structure unless the residence was occupied prior to January 1, 1992 and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.

4) Where a net loss of ecological functions associated with *critical saltwater habitats* would occur by leaving the existing structure, removal of that structure may be required as part of the construction of the replacement.

5) Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high water mark.

b. Jetties, breakwaters and other in-water stabilization structures except for bulkheads are prohibited except for protection or restoration of ecological functions. New bulkheads and other shoreline stabilization structures such as gabions, revetments, retaining walls and bluff walls are allowed if there would be no net loss of shoreline ecological functions and the following requirements are met:

i. Non structural methods (e.g., building setbacks, biotechnical vegetation measures, anchor trees, upland drainage control, and beach enhancement) are not feasible to protect a residence or other *primary structure* or essential public facility.

ii. The necessity to protect existing *primary structures* is demonstrated in the following manner:

1) A geotechnical analysis, accepted by the Administrator, confirming that there is a significant possibility that the *primary structure* will be damaged within three years as a result of shoreline erosion caused by tidal action, currents, or waves in the absence of an armoring structural solution. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need.

2) The geotechnical analysis should evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization.

c. The following requirements apply to both new and replacement bulkheads:

i. Bulkheads shall be located and constructed in a manner which will not result in adverse effects on littoral drift and adjacent properties.

ii. Bulkheads shall not be installed solely for the purpose of creating upland by filling behind the bulkhead.

iii. The size and quantity of material utilized for the bulkhead shall be the minimum necessary to protect the structure from the estimated energy intensity of the shoreline hydraulic system.

iv. The maximum height of a new bulkhead on the marine shoreline shall be no greater than four (4) vertical feet above the OHWM. The height of a replacement bulkhead shall not exceed four (4) vertical feet above the OHWM or exceed the height of the existing bulkhead, whichever is greater.

d. All new and replacement shoreline structures shall be designed to minimize the transmission of wave energy.

e. All new shoreline development and uses, including the replacement of a destroyed home, shall be located and designed to prevent the need for new or expanded shoreline stabilization measures for the life of the development. Exceptions may be made for the limited instances where shoreline stabilization measures are necessary to protect allowed uses, where no alternative locations are available and no net less of ecological functions will result.

~~d.~~

20.30.075 Over-Water Structures—Including Docks, Piers and Floats

Docks are fixed structures floating upon the water. *Piers* are fixed, pile-supported structures. *Floats* (rafts) are floating structures that are moored, anchored, or otherwise secured in the water that are not directly connected to the shoreline. All of these types of overwater structures are found in the City's shoreline jurisdiction. These structures typically require permits from local, state and federal agencies. For structures overlying state owned lands, an Aquatic Lands lease and authorization from the Department of Natural Resources is required. For the purposes of this section, docks, piers, and floats will be called Over-Water Structures and addressed together unless otherwise noted. In addition to the following policies and regulations, applicants for an over-water structure should contact other permitting agencies including the Washington State Dept. of Fish and Wildlife and U.S. Army Corps of Engineers for their requirements, including dimensional standards.

1. Policies

a. Over-water structures should be designed to minimize impacts to ecological functions of the water body including but not limited to water quality, anadromous and forage fish habitat, spawning and rearing areas, migration, and passage.

b. New over-water structures should be restricted to the minimum size necessary and permitted only when the applicant has demonstrated that a specific need exists to support the intended *water dependent* use.

c. Ensure that over-water structures are designed and maintained to avoid adverse impacts to the environment and shoreline aesthetics and minimize interference with the public's use of the water and public beach area.

d. Encourage the use of mooring buoys in place of over-water structures.

e. Encourage shared docks between multiple owners for single family waterfront development to minimize over-water coverage adversely impacting shoreline ecological functions.

f. Over-water structures should be designed to avoid the need for maintenance dredging. The moorage of a boat larger than provided for in the original moorage design shall not be grounds for approval of dredging.

2. Regulations

a. New over-water structures shall be limited to those required as part of a permitted water dependent use, ecological restoration or public access.

b. Over-water structure design and construction shall be restricted to the minimum necessary to meet the needs of the proposed water dependent use.

c. Private, single residence over-water structures for the sole use of the property owner shall not be considered an outright use on City of Burien marine shorelines. An over-water structure may be allowed on the marine shoreline when the applicant has demonstrated a need for moorage and the following alternatives have been investigated and are not available or feasible:

   i. Commercial or marina moorage;
   ii. Floating moorage buoys;
   iii. Joint use moorage pier.

d. The design and construction of over-water structures as well as their subsequent use and operation, shall:

   i. Be capable of withstanding expected environmental conditions; and,
   ii. Minimize interference with adjacent water uses and navigation; and
   iii. Minimize adverse effects on fish, shellfish, wildlife, water quality public views and geohydraulic processes by limiting the size of the structure and the use of hazardous materials, incorporating grating to allow light passage or reflective panels to increase light refraction; and spaced and oriented to minimize shading and avoid a 'wall' effect that would block or baffle wave patterns, currents, littoral drive, or movement of aquatic life forms.

e. *Over-water structures* shall not be used for residential dwelling purposes nor provide moorage for boats that are occupied longer than two (2) days unless pump-out facilities are available and then no longer than seven (7) days total.

f. Only joint use over-water structures are allowed for attached dwelling unit developments.

g. Only one over-water structure is allowed for each single family detached residential lot.

h. No covered moorage is allowed waterward of the ordinary high water mark.

i. When permitted, new residential development of two or more dwellings shall provide joint use or community docks, rather than individual docks, when feasible, rather than allow individual docks for each residence.

j. Dredging associated with over-water structures is prohibited in the Aquatic environment.

20.30.080 Habitat Restoration and Enhancement

Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines. Restoration or enhancement of shoreline areas means a change of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic ecological functions of a former or degraded wetland or fish and wildlife habitat conservation area.

1. Policy

a. Habitat restoration or enhancement projects that are not exempt pursuant to WAC 173-27-040[Developments exempt from substantial development permit requirement], may be allowed in shoreline jurisdiction if a shoreline substantial development permit is obtained.

   (For additional policy guidance please see Chapter II General Goals and Policies, pg. 16 & 17.)

2. Regulations

a. Shoreline restoration or enhancement shall be designed to result in a natural shoreline with functions, vegetative communities and structure similar to what would historically have been found on the site or in the vicinity.

b. All shoreline restoration or enhancement projects shall ensure that critical areas and their functions are not degraded by the action.

c. Shoreline restoration projects shall implement the City's adopted shoreline restoration plan and be conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.

d. Nonstructural approaches for shoreline restoration or enhancement shall be used for shoreline stabilization instead of bulkheads or other structural stabilization measures, where feasible.

e. Shoreline restoration projects that are not specifically listed in the City's adopted shoreline restoration plan shall be considered subject to approval of the Shoreline Administrator.

f. Existing artificial structures on the site of a shoreline restoration or enhancement project that appear to be impeding natural recovery of a species or habitat shall be removed.

g. When habitat is restored or enhanced, priority shall be given to retention of snags and trees that provide overhanging vegetation and/or nesting or perching branches for eagles, other raptors, or priority species.

h. Shoreline habitat restoration or enhancement projects shall not adversely impact sediment processes, littoral drift, wetlands or fish and wildlife habitat conservation areas.

i. Beach enhancement shall not be allowed within spawning, nesting or breeding habitats unless the completed project will result in a greater long term benefit to the ecological functions and values.

j. Restoration of native vegetation shall comply with the vegetation conservation section BMC 20.30.040. In addition to the provisions of BMC section 20.30.040 a re-vegetation plan shall include a monitoring and maintenance program that shall, at a minimum, include the following:
   i. Goals and objectives for the mitigation plan; and
   ii. Criteria for assessing the effectiveness of the mitigation; and
   iii. Monitoring plan including annual progress reports submitted to the Shoreline Administrator. The plan shall be in effect for a period of time sufficient to establish that performance standards have been met as determined by the Shoreline Administrator, but no less than five years; and
   iv. A contingency/adaptive management plan.

k. Restoration resulting in movement of the *OHWM* shall meet the following standards.

   i. The Shoreline Administrator may grant relief from shoreline master program development standards and use regulations when the following apply:
      (a) A shoreline restoration project causes or would cause a landward shift in the ordinary high water mark, resulting in the following:
         (i) (A) Land that had not been regulated under this Shoreline Master Program prior to construction of the restoration project is brought under shoreline jurisdiction; or
         (B) Additional regulatory requirements apply due to a landward shift in required shoreline buffers or other regulations of the shoreline master program; and
         (ii) Application of shoreline master program regulations would preclude or interfere with use of the property permitted by other development regulations, thus presenting a hardship to the project proponent;
      (b) The proposed relief meets the following criteria:
         (i) The proposed relief is the minimum necessary to relieve the hardship;

(ii) After granting the proposed relief, there is net environmental benefit from the restoration project;

(iii) Granting the proposed relief is consistent with the objectives of the shoreline restoration project and consistent with the shoreline master program; and

(iv) Where a shoreline restoration project is created as mitigation to obtain a development permit, the project proponent required to perform the mitigation is not eligible for relief under this section; and

(c) The application for relief must be submitted to the Department of Ecology for written approval or disapproval. This review must occur during the Department of Ecology's normal review of a shoreline substantial development permit, conditional use permit, or variance. If no such permit is required, then the Department of Ecology shall conduct its review when the City of Burien provides a copy of a complete application and all supporting information necessary to conduct the review.

(i) Except as otherwise provided in subsection (2) of this section, the Department of Ecology shall provide at least twenty-days (20) notice to parties that have indicated interest to the department in reviewing applications for relief under this section, and post the notice on their web site.

(ii) The department shall act within thirty calendar days of close of the public notice period, or within thirty days of receipt of the proposal from the local government if additional public notice is not required.

ii. The public notice requirements of subsection (1)(c) of this section do not apply if the relevant shoreline restoration project was included in a shoreline master program or shoreline restoration plan as defined in WAC 173-26-201[Comprehensive process to prepare or amend shoreline master programs], as follows:

(a) The restoration plan has been approved by the Department of Ecology under applicable shoreline master program guidelines;

(b) The shoreline restoration project is specifically identified in the shoreline master program or restoration plan or is located along a shoreline reach identified in the shoreline master program or restoration plan as appropriate for granting relief from shoreline regulations; and

(c) The shoreline master program or restoration plan includes policies addressing the nature of the relief and why, when, and how it would be applied.

iii. A substantial development permit is not required on land that is brought under shoreline jurisdiction due to a shoreline restoration project creating a landward shift in the ordinary high water mark.

20.30.085 Recreational Development

Shoreline recreational development includes facilities for activities such as hiking, fishing, picnicking, swimming, photography and viewing. It also includes facilities for more intensive uses, such as parks. This section applies to both publicly- and privately-owned shoreline facilities intended for use by the public or private group, association, or individual.

1. Policies

a. Allow a variety of active and passive recreation opportunities in the shoreline areas.

b. Encourage provision of view points, rest areas and picnic facilities in public shoreline areas.

(For additional policy guidance, including policies that provide for public access planning as set forth in WAC 173-26-221(4)(c)[General master program provisions, Planning process to address public access], please see Chapter II General Goals and Policies, pg. 4-7)

2. Regulations

a. Commercial recreational development or use in Seahurst Park shall be consistent with the provisions of this section.

b. Recreation facilities shall be designed to take maximum advantage of and enhance the natural character of the shoreline area.

c. Recreation areas shall promote public health, safety and security and not materially interfere with the normal public use of the water and shorelines.

d. Recreation facilities shall provide adequate provisions to prevent the general public from trespassing and overflowing into adjacent, privately owned properties.

e. Recreation facilities shall provide signage that prohibits tree cutting and collecting of marine life, driftwood and other natural materials.

f. Jet skis and water craft with combustion engines are prohibited on Lake Burien.

g. No person shall moor, anchor or dock a boat or other object overnight on or within 50 feet of the ordinary high water mark at any city beachfront park without authorization from the City of Burien Parks Department.

~~h. Should public access occur on Lake Burien, no watercraft access is allowed from public access areas.~~

~~i.~~h. Shoreline recreational development is a priority and shall be primarily related to access to, enjoyment and use of the water and shorelines of the State.

20.30.090 Recreational Mooring Buoys

A recreational mooring buoy is a device used to tie up a boat and typically consists of a line from the boat attached to a float at the water's surface with a cable or line fixed underwater to the submerged ground. The anchor line allows the boat to float and swing around the fixed buoy anchor.

1. Policies

a. Recreational boat mooring buoys are the preferred method to provide moorage instead of constructing new residential docks, piers or floats on the marine waters in the City of Burien.

(For additional policy guidance please see Chapter II General Goals and Policies, pg. 7.)

2. Regulations

a. Mooring buoys shall be located as close to the shore as possible while avoiding beaching under all tidal situations and no farther waterward than existing authorized mooring buoys unless the drift of the boat dictates it.

b. Mooring buoys shall be located away from critical saltwater habitat.

c. Mooring buoys shall utilize a system design that minimizes damage to underwater lands and marine vegetation.

d. Individuals owning residential property abutting aquatic lands may install a mooring buoy for recreational purposes after obtaining approval from the State of Washington Department of Natural Resources (DNR), Washington Department of State Fish and Wildlife (WDFW) and the Army Corps of Engineers as appropriate.

e. Recreational mooring buoys shall be installed using a DNR or WDFW approved system.

f. Buoys shall be visible under normal daylight conditions at a minimum of 100 yards during daylight hours and must have reflectors for night time visibility.

g. Recreational mooring buoys are prohibited for commercial and transient uses or live-aboards.

h. Boats must be sixty feet or less in length to tie up to a recreational mooring buoy.

i. A *Community Beach* may have one mooring buoy for every one hundred (100) lineal feet of waterfront.

j. Mooring buoys are prohibited on Lake Burien.

20.30.095 Residential Development

Single family residences are the most common form of shoreline development and are identified as a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment. Residential development shall mean the creation of new residential lots and the construction or exterior alteration of one or more buildings, structures or portions thereof which are designed for and used to provide a place of abode for human beings including one and two family detached dwellings, multi-family residences, townhouses and condominiums, together with appurtenances and accessory structures. For purposes of this master program, Bed and Breakfast establishments are considered an accessory use (see also Use Table under Commercial Use and Development).

1. Policy

Residential development should demonstrate that the development and its related activities will not be detrimental to the public interest and uses of the shoreline and its associated water bodies.

(For additional policy guidance please see Chapter II General Goals and Policies, pg. 8-15.)

2. Regulations

a. **General.** Consistent with WAC 173-26-221(4)(d)(iv)[General master program provisions, Standards for height limits, setbacks, and view corridors], residential development shall protect existing shoreline and water views promote public safety, avoid adverse impacts to marine bluffs and nearshore habitat, and not result in a net loss of shoreline ecological functions.

b. **Dimensional Standards.** Residential development in shoreline jurisdiction shall conform to the dimensional standards found in BMC 20.30.050.

c. **Common-line ~~riparian~~ buffer and building setback standards.** Shoreline ~~Riparian~~ buffer and setback standards for new or expanded single-family primary residential structures may be reduced through the shoreline variance permit process. In addition the Shoreline Administrator may approve a reduced buffer and setback for residential development under the following conditions without a variance permit:

i. Where there are existing legally constructed single-family primary residential structures that are located within the ~~riparian~~ shoreline buffer~~s~~ designated in BMC 20.30.050 and within 50 feet of either side of the proposed building site, the required ~~riparian~~ shoreline buffer of the new or expanded home may be reduced. As an alternative in such cases, the proposed new or expanded single-

family primary residential structure may be set back from the *OHWM* common to the average of the buffers of the existing adjacent residences. (see Figure ~~6~~8)

ii. In those instances where only one existing single family primary residence is within 50 feet of the proposed building site, the *OHWM* setback of the proposed structure may be reduced to the average of the *OHWM* setbacks for the existing adjacent residence and the applicable setback for the adjacent vacant parcel ~~(65 feet for marine shorelines, 45 feet for Lake Burien)~~.

Comment [d11]: Removed to avoid conflict with the newly proposed buffers

iii. In no case shall the reduced buffer be less than 20 feet landward of the *OHWM* without a variance.

iv. In cases where the common line setback does not apply, expansion of existing single-family primary residential structures within the designated ~~riparian~~ shoreline buffer may be allowed through a conditional use permit, if there is no development waterward of the existing primary residential structure.

v. Any ~~riparian~~ shoreline buffer reduction beyond that allowed in this section shall require approval of a shoreline variance permit.

d. **Lot size calculations.** Lot size calculations shall not include portions of the lot that are waterward of the ordinary high water mark.

e. **Bluff top protection.** New development located at the top of bluffs in shoreline jurisdiction must be setback to ensure that shoreline stabilization is unlikely to be necessary for the life of the structure as demonstrated by a geotechnical analysis.

f. **Vegetation removal for access.** Private access from single family detached residences to the shoreline shall avoid removal of trees and other woody vegetation when *feasible*.

g. **Accessory structures and appurtenances.** New a~~A~~ccessory structures and appurtenances must be proportional in size and purpose to the residence and compatible with onsite and adjacent structures, uses and natural features. New a~~A~~ccessory structures and appurtenances are not permitted within the shoreline ~~riparian~~ buffer except for:
   a. Fences less than 6 feet high or less
   b. Water-dependent features (buoys, docks and floats) used for recreational or personal use.
   c. Stairs and trams pursuant to section i below.

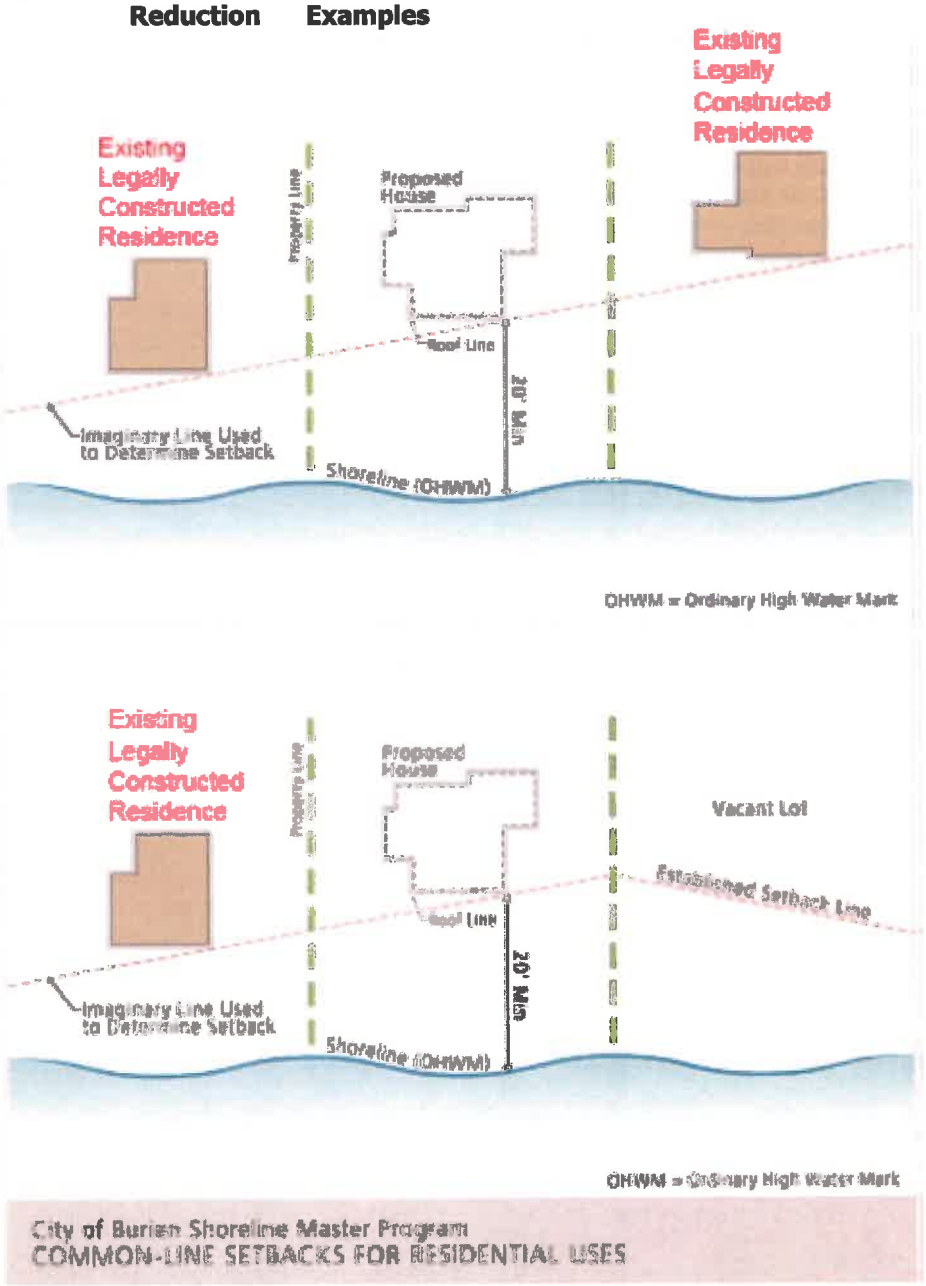
h. **Floating homes or houseboats**. Floating homes or houseboats are prohibited in shoreline jurisdiction.

i. **Stairs and trams.** Construction of new stairs and trams to the beach are allowed within required ~~riparian~~ shoreline buffer areas, except on feeder bluffs, provided the project proponent demonstrates that existing shared, public or community facilities are not adequate or available for use and the possibility of a multiple-owner or multiple-user facility has been thoroughly investigated and is not *feasible*. New facilities are encouraged to be share with adjacent properties that do not already have such facilities, and shall include shared maintenance easements and agreements as necessary. Only one stair or tram system is allowed for each primary residential structure – duplicate facilities are not allowed.

j. **Beach stairs and trams design.** New beach stairs and trams shall be designed and located such that no fill or other modification waterward of the ordinary high water mark is necessary to construct or use the structure. Stairways, trams and landings shall be located upland of existing bulkheads.

k. **Detached Accessory Dwelling Units.** New detached accessory dwelling units shall not be located in ~~riparian buffers or setbacks~~the shoreline buffer.

Figure ~~7~~8~~6~~ Common-line ~~Riparian~~ Buffer and Building Setback Reduction Examples



20.30.100 Transportation Facilities and Parking

Transportation facilities are those structures and developments that aid in land and water surface movement of people, animals, goods and services. They include streets, bridges, bikeways, trails and other related facilities.

1. Policies

a. All new or expanded roadways should be designed and located to minimize impacts to shoreline ecological functions including riparian and nearshore areas, and the natural landscape.

b. Parking is not a preferred use in shorelines and should only be allowed to support authorized uses where no feasible alternatives exist.

(For additional policy guidance please see Chapter II General Goals and Policies, pg. 7 & 8.)

2. Regulations

a. New transportation and parking facilities shall be located outside of the shoreline jurisdiction or as far landward from the ordinary high watermark as feasible, unless they support public access or other authorized use.

b. Transportation facilities shall be designed and maintained to minimize erosion, preserve natural drainage ways and utilize low impact development techniques.

c. Transportation and utility facilities shall share rights-of-way to minimize disturbance in shoreline areas.

d. The City shall give preference to mechanical means rather than the use of herbicides for roadside brush control on City streets in shoreline areas.

e. Construction debris, overburden and other waste materials shall not be allowed to enter into any water body by disposal or erosion from drainage, high water or other means.

f. Transportation facilities shall provide public access appropriate to the location and extent of the facility.

g. All shoreline areas disturbed by road construction and maintenance shall be replanted and stabilized. Such vegetation shall be maintained by the agency or developer constructing or maintaining the road until established.

h. Landscaping shall be provided to minimize visual impacts for all new and expanded transportation facilities in shoreline areas. A landscape plan shall be provided in conjunction with review and issuance of a shoreline substantial development permit.

20.30.105 Utilities

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

1. Policies

a. On-site utility features serving a primary use, such as water, sewer or gas lines to a residence, are considered a part of the primary use.

b. Utilities production and processing facilities, such as sewage treatment plants, or parts of those facilities that are non-water-oriented should not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available.

c. Utilities should be located and designed to assure no net loss of shoreline ecological functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.

d. New development of pipelines and cables on tidelands, particularly those running roughly parallel to the shoreline, and development of facilities that may require periodic maintenance which would disrupt shoreline ecological functions should be discouraged except where no other feasible alternative exists.

(For additional policy guidance please see Chapter II General Goals and Policies, pg. 4 & 9.)

2. Regulations

a. Utilities shall be placed underground pursuant to BMC 12.40[Utility Undergrounding Policy].

b. New development of underwater pipelines and cables on tidelands is prohibited except for deepwater outfalls and facilities where no other feasible alternative exists.

c. New cable crossings for telecommunications and power lines entering or leaving a body of water shall be bored or buried below the surface of the water body's bed from the ordinary high water mark out to a minimum water depth of minus ten feet (-10') below mean lower low water.

~~d.~~ Directional boring, instead of excavation or trenching is required where *feasible*.
d.

e. New transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located outside of the shoreline area where *feasible* and when necessarily located within the shoreline area shall assure no net loss of shoreline ecological functions. When allowed, utility and transportation facilities shall share rights-of-way to minimize disturbance in shoreline areas.

f. New or altered aerial utility lines and vertical utility facilities shall make maximum use of topography to minimize visual impact on the surrounding area.

g. Communication, radio towers and personal wireless service facilities shall not obstruct or destroy scenic views of the water. This may be accomplished by design, orientation and location of the tower, height, camouflage of the tower, or other features consistent with utility technology.

h. Culverts shall be located and installed in accordance with City of Burien standards and specifications.

i. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

j. Except for water lines, all underwater pipelines transporting substances hazardous to aquatic life or water quality are prohibited unless no other feasible alternative exists. Such facilities shall include an automatic shut off valve on both shorelines and have established maintenance procedures.

k. Expansion or repair of existing, underground utilities within shoreline jurisdiction shall include reclamation of areas disturbed during construction including, where *feasible*, replanting and maintenance care until the newly planted vegetation is established.

Chapter V. Administration and Shoreline Permit Procedures

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20.35.001 Purpose and Applicability

The purpose of this chapter is to establish a program for the administration and enforcement of the permit system for shoreline management provided by the Shoreline Management Act of 1971 (RCW Chapter 90.58). This chapter applies to all development within shorelines of the state within the City of Burien's shoreline jurisdiction. The City's shoreline administrative procedures are intended to be consistent with all provisions, criteria, application requirements, public notice requirements, and local or state review procedures set forth in WAC 173-27, Shoreline Management Permit and Enforcement Procedures. In the event of any inconsistencies between this Shoreline Master Program and WAC 173-27, the WAC shall govern.

All development in designated shoreline areas shall comply with the policy, provisions, and intent of the City of Burien Shoreline Master Program. Definitions contained in the Shoreline Management Act of 1971 (RCW Chapter 90.58) and the Shoreline Master Program Guidelines (WAC Chapter 173-26) shall apply to all terms and concepts used in this chapter, provided that definitions contained in this title shall be applicable where not in conflict with the Shoreline Management Act and the Shoreline Master Program Guidelines. In addition, the City will establish minimum application requirements, checklists, handouts, forms and fees for shoreline permits and shoreline exemption determinations.

Amendments to the City of Burien Shoreline Master Program will not become effective until approval by the Washington State Department of Ecology pursuant to RCW 90.58.090 (Approval of Master Program).

20.35.005 Authority and Rule of Liberal Construction

This chapter is promulgated pursuant to the authority and mandate of RCW 90.58.140(3) (Development Permits). Compliance with this chapter shall constitute compliance with the Shoreline Management Act, the Shoreline Master Program Guidelines, and the City of Burien Shoreline Master Program (SMP) for evaluating permits on shorelines of the state.

As provided under RCW 90.58.900 (Liberal Construction), the Shoreline Management Act (SMA) is exempted from the rule of strict construction. The SMA and the City of Burien Shoreline Master Program shall, therefore, be liberally construed to give full effect to the purposes, goals, policies, and standards for which the SMA and this Master Program were enacted. Exemptions from the Act or this Master Program are to be narrowly construed.

20.35.010 Shoreline Permit Types and Review Procedures

1. **Non-Exempt Development.** Substantial development that is not otherwise exempt or uses that are identified as requiring conditional use permits within the City of Burien's shoreline jurisdiction must obtain a *Shoreline Substantial Development Permit*, *Shoreline Conditional Use Permit*, or *Shoreline Variance* from the City.

2. **Exempt Development.** Development within the City of Burien's shoreline jurisdiction that is exempt from the requirement to obtain a *Shoreline Substantial Development Permit* shall comply with BMC 20.35.025. An exempt development that requires a Conditional Use Permit or Variance shall also comply with applicable provisions related to those processes.

3. **Pre-application Meeting**. The owner of the subject property or the authorized agent of the owner is encouraged to have a pre-application meeting with the Shoreline Administrator to determine the appropriate type of shoreline permit needed for the proposed action.

   Permit Review. Shoreline permits shall be reviewed using the land use decision processes in BMC Chapter 19.65 (Procedures).

   Shoreline permits are processed as a Type 1 land use decision pursuant to BMC Chapter 19.65 (Procedures). A Type 1 decision is a written administrative decision issued following public notice, consideration of written public comments and review of a written staff recommendation. For the purposes of this Master Program, the Shoreline Administrator is the decision maker on a shoreline permit using the Type 1 land use decision. The Type 1 land use decision can be appealed to the City's Hearing Examiner.

   If any shoreline use or development is subject to other approvals or permits under another permit authority, such as the zoning or subdivision codes, they shall be subject to a consolidated review and the decision maker designated for the non-shoreline approval or permit shall be the decision maker for the consolidated review.

   Depending on the underlying land use permits, the shoreline permit may be processed as a Type 2 or 3 land use review involving the Hearing Examiner or the City Council.

4. **Public Notice.** Public notice of an application for a shoreline permit shall be provided pursuant to BMC Chapter 19.65 (Procedures) unless otherwise specifically stated in this code. The minimum public notice period for shoreline permits shall be thirty (30) days. If there are conflicting public notice time

periods with State Law or Administrative Codes, or local laws, the longer notice period shall be used.

5. **Department of Ecology Notification.** The Washington Department of Ecology-SEA Division (Ecology) shall be notified of the permit decision.

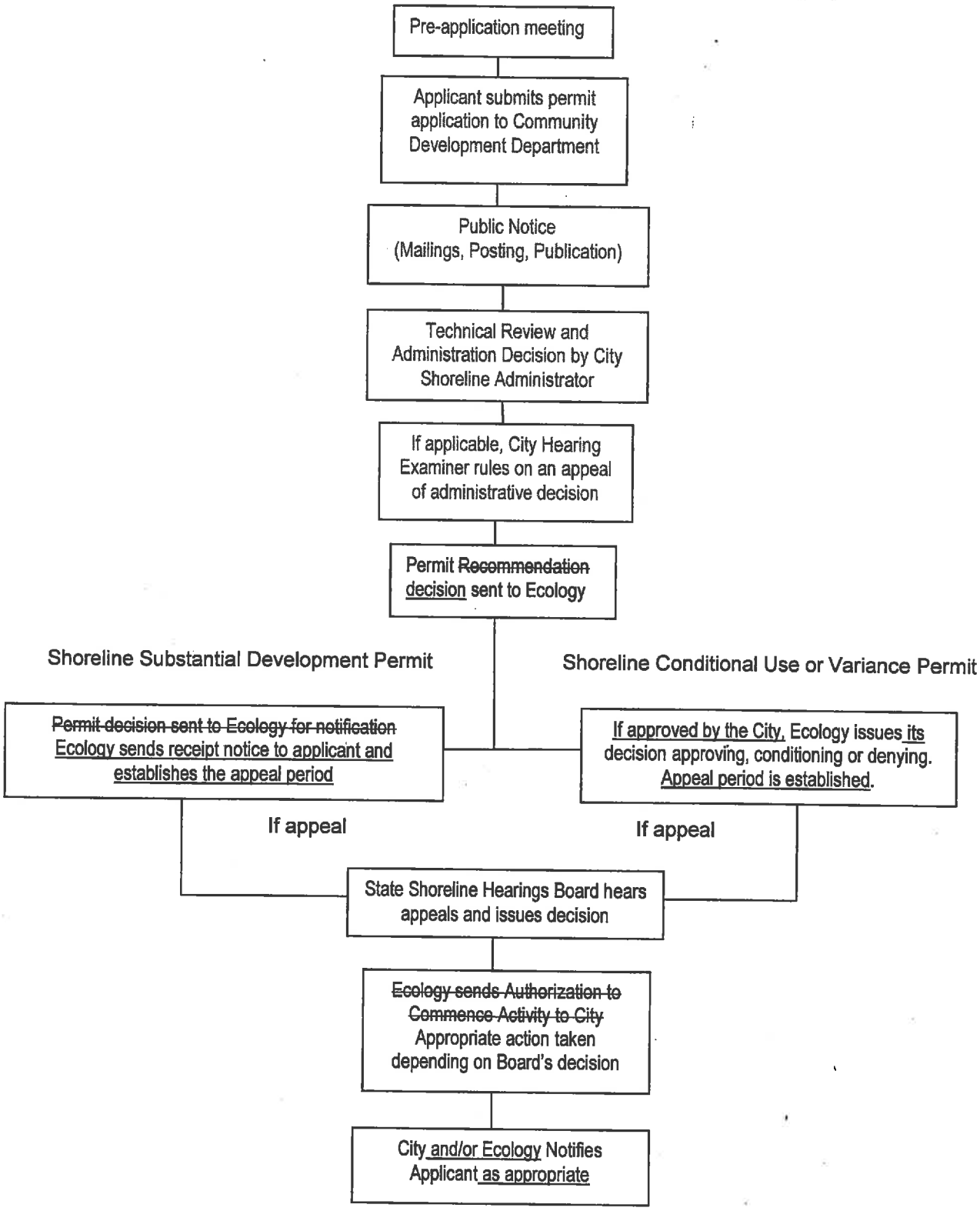
6. **Compliance with Regulations**. In the case of either a shoreline conditional use permit or a shoreline variance, the Shoreline Administrator shall determine the application's compliance with the relevant review criteria and render a decision that is then forwarded to Ecology for review and approval. The City's decision may include issuing the shoreline permit, issuing the shoreline permit with conditions, or denial of the requested shoreline permit.

7. **Shoreline Conditional Use Permit required.** A development activity or use that is listed as a conditional use pursuant to this master program or is an unlisted use, must obtain a conditional use permit even if the development or use does not require a substantial development permit. The conditional use permit application shall be processed as indicated in BMC 20.35.010.3.

8. **Shoreline Variance Required.** When a development or use is proposed that does not comply with the bulk, dimensional and performance standards of the master program, such development or use can only be authorized by approval of a shoreline variance, consistent with WAC 173-27-170 (Variances). The variance application shall be processed as set forth in BMC 20.35.010.3.

Figure 7 is a flow chart illustrating the shoreline permit review process for a type 1 shoreline permit.

Figure 7 Shoreline Permit Review for Type 1 Process



20.35.015 Shoreline Substantial Development Permits

1. **Substantial Development Permit Required**. Prior to any shoreline substantial development within a shoreline of the state, a shoreline substantial development permit shall be obtained. Development undertaken pursuant to the issuance of a permit shall be limited to that specifically delineated on the official site plan submitted by the applicant. The development shall be in compliance with any and all conditions imposed upon such permit at its issuance, including any impact mitigation measures identified in documents submitted in support of the application.

2. **Approval Criteria**. A substantial development permit shall be granted by the Shoreline Administrator only when the development proposed is consistent with the following;
   a. City of Burien Comprehensive Plan, Burien Municipal Code, and Burien Shoreline Master Program; and
   b. The proposed development or activity must also be found to be consistent with policies, guidelines, and regulations of the state Shoreline Management Act (RCW 90.58, WAC 173-26 and WAC 173-27).

3. **Authority to Condition.** The Shoreline Administrator may attach conditions to the approval of permits and shoreline exemptions as necessary to assure this consistency.

20.35.020 Substantial Development Permits for Limited Utility Extensions

1. **Procedures**. An application for a substantial development permit for a limited utility extension shall be subject to the following procedures:

   a. The public comment period shall be 20 days. The public notice issued pursuant to BMC 19.65.040 (Notice of Application) shall explain how the public may obtain a copy of the city's decision on the application no later than two days following its issuance consistent with BMC 19.65.055 (Notice of Decision). If there is an appeal of the decision to grant or deny the permit to the local government legislative authority, the appeal shall be finally determined by the legislative authority within thirty days.

   b. For purposes of this section, a limited utility extension means the extension of a utility service that:

      i. Is categorically exempt under RCW Chapter 43.21C (State Environmental Policy Act) for one or more of the following: natural gas, electricity, telephone, water or sewer;
      ii. Will serve an existing use in compliance with RCW Chapter 90.58 (Shoreline Management Act); and

iii. Will not extend more than 2,500 linear feet within the shorelines of the state.

20.35.025 Exemptions from Shoreline Substantial Development Permits (See WAC 173-27-040 (Exemptions From Substantial Development Permit Requirement) for additional language and details)

1. **Rule of Narrow Construction.** There are several types of development activities that are exempt from the requirement to obtain a Shoreline Substantial Development Permit. State law requires that such exemptions be construed narrowly and if any part of the development is not eligible for exemption, then a Substantial Development Permit is required for the entire proposed development. No pre-application meeting is required for a shoreline exemption, and the City usually makes a determination on the exemption within thirty days of application. The Department of Ecology does not review shoreline exemptions unless State or Federal agency approvals are required for the project.

2. **Shoreline Exemption Process.** Exemption from the Shoreline Substantial Development Permit process does not constitute exemption from compliance with the policies and use regulations of the SMA (RCW 90.58), the provisions of this master program, or other applicable city, state or federal permit requirements. The Shoreline Administrator is authorized to grant or deny requests for exemptions from the shoreline substantial development permit requirement for uses and developments within shorelines that are specifically listed in the Shoreline Permit Matrix (Figure 4) of this master program.

   Such requests shall be applied for on forms provided by the Shoreline Administrator. The request shall be in writing and shall indicate the specific exemption of this SMP that is being applied to the development. The Shoreline Administrator shall prepare an analysis of the consistency of the project with this SMP and the SMA. As appropriate, the Shoreline Administrator's analysis and decision shall include statements of exemption, which may contain conditions and/or mitigating measures of approval to achieve consistency and compliance with the provisions of the SMA and SMP. A denial of an exemption shall be in writing and shall identify the reason(s) for the denial.

   The Shoreline Administrator's actions on the issuance of a statement of exemption or a denial are subject to appeal. The appeal shall be processed using the appeal procedures for the underlying land use approval pursuant to BMC 19.65 (Procedures). If there is no underlying land use approval, the appeal shall be processed pursuant to the Type 1 appeal procedures in BMC 19.65.065 (Type 1 Decisions).

3. **Agency Approvals Required**. Even though a project is exempt from obtaining a substantial development permit, it may still need approvals from other agencies. For example, if the proposal involves construction within navigable water or if the project includes dredging or placement of fill, a U.S. Army Corps of Engineers Section 10

and/or 404 permit is required. In addition, if the project involves construction or other activity waterward of the ordinary high water mark or if the project includes an activity that will use, divert, obstruct, or change the natural flow or bed of any state waters, a Hydraulic Project Approval from the Washington State Department of Fish and Wildlife is required.

4. **Exemptions.** The developments listed below shall not require a local Shoreline Substantial Development Permit. Developments not meeting the provisions below must obtain a Shoreline Substantial Development Permit.

   a. Any development of which the total cost or fair market value, whichever is higher, does not exceed five thousand seven hundred and eighteen dollars ($5,718), if such development does not materially interfere with the normal public use of the water or shorelines of the state and does not result in a net loss of ecological functions. For purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state as defined in RCW 90.58.030 (2)(c) (Definitions and Concepts). The total cost or fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials. The dollar amount above will be periodically adjusted for inflation by the State Office of Financial Management pursuant to WAC 173-27-040(2)(a) (Exemptions From Substantial Development Permit Requirement). When a revised dollar amount is in effect, it will be provided on forms provided by the Shoreline Administrator.

   b. **Normal Maintenance and Repair.** Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition, including, but not limited to its size, shape, configuration, location and external appearance, except where repair involves total replacement which is not common practice or causes substantial adverse effects to the shoreline resource or environment. The need for replacement resulting from neglect or maintenance and repair is not considered a common method of repair. Normal repair must occur within a reasonable period after decay or partial destruction. If decay or partial destruction occurs to an extent of fifty percent or greater of the replacement cost of the original development, repair or replacement must be addressed within one year. Restoration may include total replacement of buildings and structures when supported by a statement from the Building Official that complete replacement is common practice.

   c. **Construction of a normal protective bulkhead common to single family residences**. An exempt "normal protective" bulkhead shall be constructed at or near the ordinary high water mark and shall be for the purpose of protecting a single family residence from erosion, not for the purpose of creating land. When an existing bulkhead is being replaced, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new

footings. When an exempt bulkhead has deteriorated such that an ordinary high water mark has been established by the presence and action of water landward of the bulkhead then the replacement bulkhead must be located at or near the actual ordinary high water mark. Bioengineered erosion control and alternative bank stabilization projects may be considered an exempt normal protective bulkhead, when any structural elements are consistent with the above requirements and when the project has been approved by the Department of Fish and Wildlife. Backfill behind a constructed exempt normal protective bulkhead is allowed; however, no more than 1 cubic yard of fill per 1 horizontal foot of bulkhead wall may be used.

d. **Emergency Construction.** Emergency construction necessary to protect property from damage by the elements. An *emergency* is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this chapter. Emergency construction does not include development of new permanent protective structures where none previously existed, except where new protective structures are deemed by the administrator to be the appropriate means to address the emergency situation. Upon abatement of the emergency situation the new structure shall be removed or any permit be obtained which would have been required, absent an emergency, pursuant to RCW Chapter 90.58 (Shoreline Management Act), or the Burien Shoreline Master Program.

e. **Single Family Residence.** Construction on shorelands by an owner, lessee or contract purchaser of a single family residence for his/her own use or for the use of his/her family, which residence does not exceed a height of thirty-five (35) feet above average grade level and which meets all requirements of the state agencies having jurisdiction and the City. "Single-family residence" means a detached dwelling designed for and occupied by one family, including those structures and developments within a contiguous ownership which are a normal appurtenances. An *appurtenance* is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the ordinary high water mark and the perimeter of a wetland. Appurtenances typically include a garage, decks, driveway, utilities and fences. Construction of a single-family residence may include grading which does not exceed two hundred fifty (250) cubic yards, and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark. Construction authorized under this exemption shall be located landward of the ordinary high water mark.

f. **Marking of Property Lines**. The marking of property lines or corners on state owned lands, when such marking does not significantly interfere with normal public use of the surface of the water.

g. **Navigational Aids**. Construction or modification, by or under the authority of the Coast Guard, of navigational aids such as channel markers and anchor buoys.

h. **State Certified Project**. Any project with a certification from the Governor pursuant to RCW Chapter 80.50 (Energy Facilities).

i. **Site Exploration and Investigation**. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this chapter, if:

   i. The activity does not interfere with the normal public use of the surface waters;

   ii. The activity will have no significant adverse impact on the environment including but not limited to fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values;

   iii. The activity does not involve the installation of any structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity;

   iv. A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to ensure that the site is restored to preexisting conditions;

   v. The activity is not subject to the permit requirements of RCW 90.58.550 (oil or natural gas exploration in marine waters).

j. **Noxious Weeds**. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020 (Weeds, Rodents and Pests), through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or Ecology jointly with other state agencies under RCW Chapter 43.21C (State Environmental Policy Act).

k. **Watershed Restoration Projects.** The Shoreline Administrator shall review *watershed restoration projects* for consistency with the this master program in an expeditious manner and shall issue a decision along with any conditions within forty-five days of receiving all materials necessary to review the request for exemption from the applicant. No fee will be charged for accepting and processing requests for a shoreline exemption for watershed restoration projects as used in this section.

l. **Private or Public Restoration Projects.** A public or private project, the primary purpose of which is to improve fish or wildlife habitat or fish passage, when all of the following apply:

   i. The project has been approved in writing by the Washington State Department of Fish and Wildlife (WDFW) as necessary for the improvement of the habitat or passage and appropriately designed and sited to accomplish the intended purpose;

   ii. The project has received hydraulic project approval by WDFW pursuant to RCW 77.55 (Construction Projects in State Waters); and

   iii. The Shoreline Administrator has determined that the project is consistent with this master program.

m. **Hazardous Substance Remedial Actions.** The procedural requirements of RCW Chapter 90.58 (Shoreline Management Act) shall not apply to a project for which a consent decree, order or agreed order has been issued pursuant to RCW Chapter 70.105D (Model Toxics Control Act) or to Ecology when it conducts a remedial action under RCW Chapter 70.105D (Model Toxics Control Act). Ecology shall, in consultation with the City, assure that such projects comply with the substantive requirements of RCW Chapter 90.58 (Shoreline Management Act), WAC Chapter 173–26 (SMP Guidelines) and this master program.

20.35.030 Letter of Exemption

1. **Letter of Exemption, General.** Persons requesting an exemption must obtain a written letter of exemption verifying the proposed development as not subject to a Shoreline Substantial Development Permit. The letter of exemption must state how the proposed action is consistent with the policies and regulations of the City of Burien Shoreline Master Program. For example, the approval of a Building Permit for a single-family residence and bulkhead can be conditioned on the basis of shoreline policy and use regulations. The Building Official or other permit authorizing official, through consultation with the Shoreline Administrator, shall attach shoreline management terms and conditions to a building permit or other permit approvals pursuant to RCW 90.58.140 (Development Permits).

2. **State and Federal Agencies.** Where shoreline development proposals are subject to review, approval, and permitting by a federal or state agency, the Shoreline Administrator shall prepare a letter and send to the Department of Ecology indicating the specific exemption provision from WAC 173-27-040 (Exemptions From Substantial Development Permit Requirement) that is being applied to the development and provide a summary of the City's analysis of the consistency of the project with the City of Burien Shoreline Master Program and the state Shoreline Management Act.

20.35.035 Shoreline Conditional Use Permits (See also WAC 173-27-160 (Conditional use Permits))

1. **Purpose.** The purpose of a shoreline conditional use permit is to allow greater flexibility in administering the use regulations of the Burien Shoreline Master Program in a manner consistent with the policies of the Shoreline Management Act. This allows for review of a proposed action which may have a potential for compatibility concerns with nearby uses of other impacts that could be resolved under special circumstances with appropriate mitigation measures or conditions of approval.

2. **Criteria.** Shoreline conditional uses identified in the Burien Shoreline Master Program Use Matrix or those that are unlisted uses but not prohibited uses, may be allowed only when the applicant can demonstrate all of the following:

a. The proposed use will be consistent with RCW 90.58.020 (Use Preference) and the Shoreline Management Act and the Burien Shoreline Master Program;

b. The proposed use will not interfere with the normal public use of public shorelines;

c. The proposed use and development of the site and design of the project will be compatible with other permitted and planned uses within the area;

d. The shoreline proposal will not result in significant adverse impacts on the shoreline environment and that the cumulative impact of additional requests for like actions in the area will remain consistent with the policies of the Shoreline Management Act and the Burien Shoreline Master Program.

e. That the proposed use will not cause a substantial detrimental effect to the public interest. In authorizing a shoreline conditional use permit, special conditions may be attached to the permit to prevent undesirable effects of the proposed use, to ensure consistency with the Shoreline Management Act and the Burien Shoreline Master Program, or to address cumulative impacts of all like actions.

20.35.040 Shoreline Variance Permits (See also WAC 173-27-170 (Variances))

1. **Applicability.** A shoreline variance permit is strictly limited to granting relief from specific bulk, dimensional or performance standards set forth in the Burien Shoreline Master Program where there are extraordinary or unique circumstances relating to the physical character or configuration of property such that strict implementation of the policies, regulations or development standards would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020 (Use Preference) or the Burien Shoreline Master Program. Shoreline variance permits should be granted in circumstances where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020 (Use Preference). The applicant must demonstrate that extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect. A variance permit cannot be granted for a use.

2. **Landward Variance Criteria.** Variance permits for development and/or uses that will be located landward of the ordinary high water mark and/or landward of a wetland may be authorized provided the applicant can demonstrate all of the following:

   a. The strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes reasonable use of the property;

b. The hardship described in (a) of this subsection is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant's own actions;

c. The design of the project is compatible with other authorized developments within the area and with uses planned for the area under the City's comprehensive plan and Shoreline Master Program and will not cause adverse impacts to the shoreline environment;

d. The variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;

e. The variance requested is the minimum necessary to afford relief; and

f. The public interest will suffer no substantial detrimental effect.

3. **Waterward Variance Criteria.** Variance permits for development and/or uses that will be located waterward of the ordinary high water mark or within a wetland, may be authorized provided the applicant can demonstrate all of the following:

   a. The strict application of the bulk, dimensional or performance standards set forth in the Burien Shoreline Master Program precludes all reasonable use of the property;

   b. The proposal is consistent with the criteria established (b) through (f) of section 2; and

   c. The public rights of navigation and use of the shorelines will not be adversely affected.

4. **Consideration of Cumulative Impacts.** In the granting of all variance 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 and/or uses in the area where similar circumstances exist, the total of the variances shall also remain consistent with the policies of RCW 90.58.020 (Use Preference) and shall not cause substantial adverse effects to the shoreline environment.

20.35.050 Appeals

Any person aggrieved by the granting, denying or rescinding of a Shoreline Substantial Development Permit pursuant to BMC 19.65.060 (Judicial Appeal) and RCW 90.58.140 (Development Permits) may seek review from the state shorelines hearings board by filing a petition for review within twenty-one days of the date of filing as defined in RCW 90.58.140(6) (Development Permits).

20.35.055 Effective Date and Duration of Shoreline Permits

Construction authorized by an approved shoreline permit shall not begin until 21 days after the date of filing as defined by RCW 90.58.140 (Development Permits). ~~WAC 173-27-130 (Filing With Ecology).~~ This restriction shall be stated on the permit. Construction shall be commenced or, where no construction is involved, the use or activity shall be commenced within two years and the construction related activity shall terminate within five years after the effective date of a shoreline permit or the final settlement date of any associated appeals or legal actions regarding the proposed action. Provided, that the City may authorize a single extension for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record and the Department of Ecology. The City shall notify the Department of Ecology in writing of any change to the effective date of a permit, as authorized by this section, with an explanation of the basis for approval of the change. Any change to the time limits of a permit other than those authorized by this section shall require a new permit application. See also WAC 173-27-090 for additional information regarding duration of permits.

20.35.060 Compliance and Enforcement

1. Choice of Action/Penalty; Conflict. The choice of enforcement action to be taken and the severity of any penalty to be imposed shall be guided by the nature of the violation, the damage or risk to the public or to public resources, and /or the existence or degree of bad faith of the person or persons subject to the enforcement action. The provisions of Section 20.35.060 shall supersede and take precedence over any other enforcement provisions of the Burien Municipal Code in conflict herewith.

2. Order to Cease and Desist; Notice of Correction: In the event any person is or has engaged in activity that violates any of the provisions of, BMC Chapter 20.35, RCW Chapter 90.58 (Shoreline Management Act), or a permit issued pursuant to BMC Chapter 20.35, the City may issue and serve upon such person or persons, a cease and desist order and/or an order to take corrective action.

a. Content of order. The order shall set forth and contain:

i. A description of the specific nature, extent, and time of violation and the damage or potential damage; and

ii. A notice that the act or acts causing a violation or a potential violation shall immediately cease and desist or, in appropriate cases, the specific corrective action to be taken within a specific and reasonable time, which corrective action may include, but is not limited to, restoration and/or mitigation of the site and other property damaged.

b. Effective date. An order issued under this section shall become effective immediately upon receipt by the person to whom the order is directed.

c. Compliance. Failure to comply with the terms of an order issued pursuant to BMC Section 20.35.060(B) shall be a violation of BMC Chapter 20.35 and can result in enforcement actions including, but not limited to, the issuance of a civil penalty.

d. Other Action. In addition to the issuance of the cease and desist order and/or an order to take corrective action, the City may take other enforcement action available at law including, issuance of a civil notice of violation and penalties pursuant to BMC Section 20.35.060(C), seeking injunctive or declaratory relief, imposition of criminal penalties, and permit rescission as set forth in RCW 90.58.140 (Development Permits). The City may combine an order issued pursuant to Section 20.35.060(B) with a notice of violation.

3. Civil Penalties; Procedures; Remission:

a. Civil Violations. It shall be a civil violation of this BMC Chapter 20.35 for any person to:

i. Use, construct or demolish any structure, or to conduct clearing, earth-moving, construction or other development not authorized under a Substantial Development Permit, Conditional Use Permit or Variance Permit, where such permit is required by BMC Chapter 20.35.

ii. Undertake or conduct any work which is not conducted in accordance with the plans, conditions, or other requirements in a permit approved pursuant to BMC Chapter 20.35, provided that the terms or conditions are stated in the permit or the approved plans;

iii. Remove or deface any sign, notice, complaint or order required by or posted in accordance with BMC Chapter 20.35;

iv. Misrepresent any material fact in any application, plans or other information submitted to obtain any shoreline use or development authorization;

v. Fail to comply with the requirements of a substantial development permit, conditional use permit or variance issued pursuant to BMC Chapter 20.35;

vi. Undertake a development or use on shorelines of the state without first obtaining a permit required pursuant to BMC Chapter 20.35;

vii. Fail to comply with an order issued under BMC Section 20.35.060(B);

b. Amount of penalty. The penalty for each civil violation shall not exceed one thousand dollars for each violation and shall not be less than twenty-five dollars. The amount of the penalty prescribed in the notice of violation shall be determined based upon the guidelines set forth in BMC Section 20.35.060(A).

c. Separate Violation. Each calendar day that a civil violation occurs or continues to occur shall constitute a separate civil violation.

d. Notice of Civil Violation. A notice of civil violation and penalty shall be imposed by issuance and service of a notice of civil violation in writing.

e. Contents of Notice of Violation. The notice of violation shall set forth and contain:

   i. A description of the specific nature, extent, and time of violation(s) and the damage or potential damage; and

   ii. A notice that the act or acts causing a violation or a potential violation shall immediately cease and desist or, in appropriate cases, the specific corrective action to be taken within a specific and reasonable time; and

   iii. A notice that any order included in the notice of violation shall become effective immediately upon receipt by the person to whom the order is directed.

f. Service of Notice of Violation. The notice of violation shall be served upon the person or persons alleged to have committed the violation either by certified mail with return receipt requested, at such person's or persons' last known address of record, or by personal service.

g. Application for Remission or Mitigation. Any person incurring a penalty may apply in writing, within thirty days of receipt of the penalty, to the Director for remission or mitigation of such penalty. The application shall be filed with the City Clerk and shall identify the specific violation or violations for which the applicant seeks remission or mitigation, set forth the specific facts establishing the extraordinary circumstances which the applicant desires the Director to consider, include complete copies of any documents or records applicant wishes the Director to consider, include the mailing address (not a post office box) at which the applicant will receive notice of the decision, and shall be signed by the applicant. Incomplete applications and applications filed with the City after the thirty-day period specified herein shall not be considered by the Director.

   Upon receipt of a complete application for remission or mitigation, the Director, or his/her designee, shall consider the application, together with any information the Director, or his/her designee, determines is relevant, and may remit or mitigate the penalty only upon a finding that that applicant has demonstrated

extraordinary circumstances, such as the presence of information or factors not considered in setting the original penalty. When a penalty is imposed jointly by the Department of Ecology and the City, the penalty may be remitted or mitigated only upon such terms as both the Department of Ecology and the City agree.

h. Right of Appeal.

i. Any person issued a notice of civil violation pursuant to BMC Section 20.35.060(C), may appeal the same to the City Council; provided that, if the penalty is imposed jointly by the City and the Department of Ecology, an appeal shall be filed with the shorelines hearings board in accordance with WAC 173-27-290 (Appeal of Civil Penalty).

ii. Timing of Appeal. Except as provided below, any person appealing a notice of civil violation to the City Council shall file a written notice of appeal with the City Clerk within thirty days of service of the notice of civil violation. In the event that a timely and completed application is filed with the City Clerk for remission or mitigation, an appeal of a civil violation that is the subject of the application for remission or mitigation shall be filed within thirty days of applicant's receipt of the City's written decision regarding the remission or mitigation. The applicant shall be deemed to have received the written decision upon the earlier of the date of personal service of the written decision or three days after the written decision is deposited in the United States Mail, in a postage pre-paid, properly addressed envelope, using the applicant's address as stated in the application.

iii. Notice of Appeal. All appeals shall be in writing and contain the following:

A. A heading in the words: "Before the Hearing Examiner;

B. A caption reading: "Appeal of _____" giving the name of all appellant(s);

C. A brief statement in concise language of the violation or violations protested, together with any material facts claimed to support the contentions of the appellant, including a copy of the notice of civil violation(s) being appealed;

D. A brief statement in concise language of the relief sought, and the reasons why it is claimed the protested notice of violation(s) should be reversed, modified or otherwise set aside;

E. The signatures of appellant and appellant's official mailing addresses;

F. The verification (by declaration under penalty of perjury under the laws of the State of Washington) of the appellant as to the truth of the matters stated in the appeal.

iv. Hearing. Within 10 days of receiving the written appeal, the city clerk shall fix a date, time and place for the hearing of the appeal. Such date shall be not less than 10 days nor more than 60 days from the date the appeal was filed; provided that, the Hearing Examiner may reset or continue a hearing upon request of the City or the party appealing, upon good cause shown, or sua sponte. Written notice of the date of the hearing shall be provided to the appellant by mailing such notice by first class mail, postage prepaid, to the appellant at the address shown on the notice of appeal. At the hearing the appellant shall be entitled to appear in person and be represented by counsel, and to offer evidence pertinent and material to those matters or issues specifically raised by the appellant in the written notice of appeal.

v. Evidence. Unless otherwise provided by law, evidence that is material and relevant to determination of the matter consistent with the applicable legal requirements and subject to administrative rules of proceedings before the Hearing Examiner, shall be admitted into the record whether or not such evidence was considered by the official issuing the notice of civil violation.

vi. Findings/Conclusions/Recommendation. The Hearing Examiner shall conduct adjudicative proceedings, receive and examine all evidence it finds relevant to the subject matter, and prepare a record thereof. When the Hearing Examiner renders a recommendation, the examiner shall make and enter written findings and conclusions which support such decision. The findings and conclusions shall set forth and demonstrate the manner in which the decision or recommendation is consistent with applicable laws, regulations and policies of the city of Burien. The Hearing Examiner may recommend that the notice of civil violation be affirmed, dismissed or modified consistent with his/her findings and conclusions. The decision or recommendation shall be rendered as soon as possible but in all events within 20 working days of the conclusion of the hearing.

vii. City Council. When taking final action, the City Council shall make and enter findings of fact from the record before the Hearing Examiner which support its action, may affirm, reverse, modify, or remand the decision of the hearing examiner, and may adopt all or portions of the examiner's findings and conclusions. The decision of the City Council shall be a final decision.

i. Penalties due.

i. Penalties imposed under BMC Section 20.35.060(C) shall become due and payable thirty days after receipt of notice of civil violation unless application for remission or mitigation is made or an appeal is filed. Whenever an application for remission or mitigation is made, penalties shall become due and payable thirty days after receipt of the City's decision regarding the remission or mitigation. Whenever an appeal of a penalty is filed, the penalty shall become due and payable upon completion of all review proceedings and upon the issuance of a final decision confirming the penalty in whole or in part.

ii. If the amount of a penalty owed the City is not paid within thirty days after it becomes due and payable, the City may take actions necessary to recover such penalty.

j. Aiding or abetting. Any person who, through an act of commission or omission procures, aids or abets in the civil violation shall be considered to have committed a civil violation for the purposes of the civil penalty.

4. Criminal Penalties.

In addition to incurring civil penalties under BMC Section 20.35.060(C), any person found to have willfully engaged in activities on shorelines of the state in violation of the provisions of BMC Chapter 20.35, shall be guilty of a gross misdemeanor, and shall be punished by:

a. A fine of not less than twenty-five dollars ($25) or more than one thousand dollars ($1,000);

b. Imprisonment in the County/City jail for not more than ninety (90) days; or

c. Both such fine and imprisonment; provided that, the fine for the third and all subsequent violations in any five (5) year period shall not be less than five hundred dollars ($500) nor more than ten thousand dollars ($10,000); provided further, that fines for violations of RCW 90.58.550 (Oil and Natural Gas Exploration), or any rule adopted thereunder, shall be determined under RCW 90.58.560 (Oil and Natural Gas Exploration).

5. Inspection Access.

The Director and his/her authorized representatives, may for the purpose of inspection for compliance with the provisions of a permit issued pursuant to BMC Chapter 20.35, enter all properties that are subject to such a permit. All persons applying for a permit under this BMC Chapter 20.35 shall be deemed to have given their consent to entry upon the property upon issuance of the permit. No owner or occupant of any premises shall fail to

provide prompt entry to the Director or authorized representative for the purposes of inspection under this section. If such entry is refused, the City shall have recourse to every remedy provided by law to secure entry, including, issuance of a notice of a notice of correction and issuance of a notice of civil violation.

Whenever entry is required for purposes of inspection pursuant to this section, if the premises are occupied, the persons conducting the inspection shall present proper credentials and request entry, and if the premises are unoccupied, reasonable effort shall first be made to locate the owner of the premises and request entry.

6. Other Remedies.

a. In addition to the civil and criminal penalties provided for herein, the City may, pursuant to RCW Chapter 90.58 (Shoreline Management Act), bring such injunctive, declaratory, or other actions as are necessary to insure that no uses are made of the shorelines of the state located within the City of Burien in conflict with the provisions of, RCW Chapter 90.58 (Shoreline Management Act), BMC Chapter 20.35, a permit issued pursuant to BMC Chapter 20.35, or other regulations adopted pursuant state law or city code, and to otherwise enforce the provisions of the City's Shoreline Master Program.

b. Any person subject to the regulatory provisions of this Program or the Act who violates any provision thereof, or permit, or permit condition issued pursuant thereto shall be liable for all damage to public or private property arising from such violation, including the cost of restoring the affected area to its condition prior to violation. The City Attorney may bring suit for damages under this section on behalf of the City and on the behalf of all persons similarly situated pursuant to RCW Chapter 90.58 (Shoreline Management Act).

7. Abatement.

Structures or development on shorelines considered by the Director to present a hazard or other public nuisance to persons, properties or natural features may be abated by the City using all lawful means available.

20.35.065 Revisions to Shoreline Permits (See also WAC 173-27-100 (Revisions to Permits))

~~1.~~ **Revision required.** A permit revision is required whenever an applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the shoreline permit. Changes are considered substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, the Burien Shoreline Master Program and/or the policies and provisions of RCW Chapter 90.58 (Shoreline Management Act). Changes which are not substantive in effect do not require approval of a revision.

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2. **Required Information.** When an applicant seeks to revise a permit, the city will request from the applicant detailed plans and text describing the proposed changes. If the Shoreline Administrator determines that the proposed changes are within the scope and intent of the original permit, and are consistent with the Burien Shoreline Master Program and the Shoreline Management Act, the city may approve a revision.

   "Within the scope and intent of the original permit" means all of the following:

   a. No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred square feet or ten percent from the provisions of the original permit, whichever is less;

   b. Ground area coverage and height may be increased a maximum of ten percent from the provisions of the original permit;

   c. The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of the applicable master program except as authorized under a variance granted as the original permit or a part thereof;

   d. Additional or revised landscaping is consistent with any conditions attached to the original permit and with the applicable county master program;

   e. The use authorized pursuant to the original permit is not changed; and

   f. No adverse environmental impact will be caused by the project revision.

3. **New Permits Required**. If the revision, or the sum of the revision and any previously approved revisions will violate the criteria specified in (a)-(f) of the preceding section, the City shall require that the applicant apply for a new shoreline permit. Revisions to permits may be authorized after original permit authorization has expired under WAC 173-27-080(2) (Legally Established Structures). The purpose of such revisions shall be limited to authorization of changes which are consistent with this section and which would not require a permit for the development or change proposed under the terms of RCW Chapter 90.58 (Shoreline Management Act), the Burien Shoreline Master Program and this section. If the proposed change constitutes substantial development, then a new permit is required. Provided, this subsection shall not be used to extend the time requirements or to authorize substantial development beyond the time limits of the original permit. The revision approval, including the revised site plans and text consistent with the provisions of WAC 173-27-180 (Application Requirements) as necessary to clearly indicate the authorized changes, and the final ruling on consistency with this section shall be filed with the Washington State Department of Ecology. In addition, the city shall notify parties of record of the action.

4. **Revisions to Conditional Use or Variance Permits.** If the revision to the original permit involves a conditional use or variance, the city shall submit the revision to the Department of Ecology for the required state's approval, approval with conditions, or denial, and shall indicate that the revision is being submitted under the requirements of this subsection. The Department of Ecology shall render and transmit to the City and the applicant its final decision within fifteen days of the date of their receipt of the submittal from the City. The City of Burien shall notify parties of record of the Department of Ecology's final decision.

5. **Effective Date.** The revised permit is effective immediately upon final decision by the City or, when appropriate, upon final action by the Department of Ecology.

6. **Appeals.** Appeals shall be to the state shorelines hearings board in accordance with RCW 90.58.180 (Appeals) and shall be filed within twenty-one days from the date of receipt of the City's action by the Department of Ecology or the date the Department of Ecology's final decision is transmitted to the City and the applicant.

7. **Construction Authorization.** Construction undertaken pursuant to that portion of a revised permit not authorized under the original permit is at the applicant's own risk until the expiration of the appeals deadline. If an appeal is successful in proving that a revision is not within the scope and intent of the original permit, the decision shall have no bearing on the original permit.

20.35.070 Rescission of Shoreline Permits and Exemptions (See also RCW 90.58.140(8) (Development Permits))

Whenever any development or use is in violation of a permit or shoreline exemption issued pursuant to this chapter, the City may, concurrent with or as an alternative to any other remedy provided by this title or other law or ordinance, initiate permit rescission proceedings by scheduling a public hearing before the hearing examiner and serving the applicant with written notice thereof. Notice shall be provided in accordance with BMC 19.65.045 (Type 1 Decisions) and contain a general description of the alleged noncompliance and date, time, and place of public hearing. It shall be served by registered mail at least 15 calendar days prior to such hearing. The permit rescission request shall be processed as a Type 2 decision in accordance with the procedures established in BMC Chapter 19.65 (Procedures).

Chapter VI. Shoreline Definitions

Definitions contained in the Shoreline Management Act of 1971 (RCW Chapter 90.58) and the Shoreline Master Program Guidelines (WAC Chapter 173-26) shall apply to all terms and concepts used in this shoreline master program, provided that definitions contained in this title shall be applicable where not in conflict with the Shoreline Management Act and the Shoreline Master Program Guidelines and Shoreline Management procedural rules.

20.40.000 Alteration means any human activity ~~which~~ that results or is likely to result in a significant impact upon the existing condition of a critical area. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except storm water, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in a significant impact to existent vegetation, hydrology, wildlife or wildlife habitat. Alterations do not include walking, fishing or any other passive recreation or other similar activities.

20.40.005 Appurtenance means development necessarily connected to the use and enjoyment of a single family residence and located landward of the perimeter of an associated wetland and landward of the ordinary high water mark. Normal appurtenances include a garage; deck; driveway; utilities solely servicing the subject single family residence; fences; and grading which does not exceed 250 cubic yards.

20.40.010 Aquaculture means the culture, harvesting or farming of food fish, shellfish, or other aquatic plants and animals. Activities include the hatching, cultivating, planting, feeding, raising, harvesting, and processing of aquatic plants and animals and the maintenance and construction of necessary equipment, buildings and growing areas. Cultivation methods include but are not limited to fish pens, fish hatcheries, shellfish rafts, racks and long lines, seaweed floats and nets and the culture of clams and oysters on tidelands and subtidal areas.

20.40.015 Associated wetlands means those wetlands which are in proximity to and either influence or are influenced by tidal waters or a lake or stream subject to the Shoreline Management Act.

20.40.020 Beach means the zone of unconsolidated material that is moved by waves, wind, and tidal currents, extending landward to the coastline.

20.40.025 Boat ramp means graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.

20.40.030 Bulkhead means a solid or open pile wall erected generally parallel to and near the ordinary high water mark for the purposes of protecting adjacent uplands from waves or current action.

20.40.035 Community Beach means a beach area jointly owned by a homeowners association for use of the neighborhood.

20.40.040 Community residential facility means living quarters meeting applicable federal and state standards that function as a single housekeeping unit and provide supportive services, including but not limited to counseling, rehabilitation and medical supervision, excluding drug and alcohol detoxification; if staffed by nonresident staff, each 24 staff hours per day equals one full-time residing staff member for subclassifying community residential facilities as follows:

1. Community residential facility-I: Nine to ten residents and staff.

2. Community residential facility-II: Eleven or more residents and staff. [BMC 19.10.065]

20.40.042 Critical saltwater habitat means all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sandlance; shellfish beds; mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association.

20.40.044 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.

20.40.045 Docks are fixed structures floating upon the water.

20.40.050 Dredging means the removal of earth, sand, sludge or other materials from the bottom of a stream, river, lake, bay or other water body. However, the creation of temporary depressions or contour alterations on tidelands or bedlands through the use of aquaculture harvesting equipment approved by the Washington State Department of Fish and Wildlife shall not be construed to be dredging.

20.40.055 Feasible means actions that meet all of the following conditions:
(a) The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;
(b) The action provides a reasonable likelihood of achieving its intended purpose; and
(c) The action does not physically preclude achieving the project's primary intended legal use.

In cases where this SMP requires certain actions unless they are infeasible, the burden of proving infeasibililty is on the applicant.

In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

20.40.060 Fill means any material, such as earth, clay, sand, concrete, rubble, wood chips, bark or waste of any kind which is placed, stored or dumped upon the surface of the ground resulting in an increase in the natural surface elevation.

20.40.065 Floating home means a structure designed and operated substantially as a permanently based structure and not as a vessel and is typically characterized by permanent utilities, a semi-permanent anchorage/moorage design, and by the lack of adequate self-propulsion to operate as a vessel.

20.40.070 Floats (rafts) are floating structures that are moored, anchored, or otherwise secured in the water that are not directly connected to the shoreline.

20.40.073 Government Facility – Services and facilities operated by any level of government, excluding those use listed separately in this Code. [BMC 19.10.210]

20.40.074 Grading means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

20.40.075 Houseboat means a vessel used for living quarters but licensed and designed substantially as a mobile structure by means of detachable utilities or facilities, anchoring, and the presence of adequate self-propulsion to operate as a vessel.

20.40.080 In-water structure means a structure located waterward of the ordinary high water mark that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow.

20.40.085 Littoral drift means the mud, sand, or gravel materials moved parallel to the shoreline in the nearshore zone by waves and currents.

20.40.088 Mean higher high water or "MHHW" means the tidal elevation obtained by averaging each day's highest tide at a particular location over a period of nineteen years. It is measured from the mean lower low water = 0.0 tidal elevation.

20.40.090 Mooring buoy means a floating object anchored to the bottom of a water body that provides tie up capabilities for vessels.

20.40.095 Normal protective bulkhead means a bulkhead, common to single family residences, constructed at or near the ordinary high water mark to protect an existing single family residence, the sole purpose of which is to protect land from erosion, not for the purpose of creating new land.

20.40.097 Office – A place of employment providing professional, administrative, educational, business or governmental services other than production, distribution, sale or repair of goods or commodities. The following is a nonexclusive list of office uses: medical, dental or other health care; veterinary, accounting, architectural, engineering, consulting or other similar professional services; management, administrative, secretarial, marketing, advertising, personnel or other similar services; sales offices where no inventories or goods are available on the premises, real estate, insurance, travel agent, brokerage or other similar services.[BMC 19.10.385]

20.40.100 Ordinary High Water Mark (OHWM) means on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition existing on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department: PROVIDED, That in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water.

20.40.101 Partially functioning areas means areas that provide one or more reduced ecological functions and are neither native vegetation nor impervious surface. Ecological functions may include sediment removal, erosion control, pollution removal, wildlife habitat, and infiltration. Partially functioning areas specifically include lawns, slat decks that allow infiltration, and non-native landscaped areas.

20.40.102 Personal wireless service facility (*PWSF*) – A *site*, *building*, and/or *structure* that contains facilities to provide *personal wireless services*. A personal wireless service facility includes at least one of the following: *antenna*, *support structure*, and/or *equipment enclosure*. [Ord. 265 § 23, 1999], [BMC 19.10.397]

20.40.105 Piers are fixed, pile-supported structures extending over the water.

20.40.110 Physical access means the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations.

20.40.115 Primary structure means any permanent building, road, bridge or utility requiring a permit or approval which is necessary to support the primary use of a site.

20.40.116 Public park and recreation facilities – A natural or landscaped area, *buildings* or *structures*, provided by a unit of government, to meet the active or passive recreational needs of people. [BMC 19.10.210]

20.40.117 Retail – A commercial enterprise which: provides goods and/or services directly to the consumer; and, whose goods are available for immediate purchase and/or rental; and, whose goods are available for immediate removal from the premises by the purchaser and/or whose services are traditionally not permitted within an *office use*. The sale and consumption of food are included if: a) the seating and associated circulation area does not exceed ten percent of the *gross floor area* of the *use*, and b) it can be demonstrated to the City that the floor plan is designed to preclude the seating area from being expanded. Goods and services offered include, but are not limited to: *convenience retail uses*. [BMC 19.10.465]

20.40.119 School - An institution of learning offering instruction in the several branches of learning and study required by the Education Code of the state of Washington. The following are categories of schools:

1. Elementary, and middle/junior high schools: Grades kindergarten through nine, including associated meeting rooms, auditoriums and athletic facilities.

2. Secondary or high school schools: Grades 9 through 12, including associated meeting rooms, auditoriums and athletic facilities.

20.40.120 Shorelands means those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and 100-year floodplains; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the State of Washington Shoreline Management Act.

20.40.125 Shoreline Administrator means the City Manager or his or her designee in the Community Development Department who is responsible for administering the City of Burien Shoreline Master Program.

20.40.130 Shoreline conditional use means a use or modification classified by the City of Burien Shoreline Master Program as a conditional use or modification for certain shoreline environments or is an unlisted use/modification.

20.40.135 Shoreline modification means an action that modifies the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a breakwater, dock, boat launch ramp, or other shoreline structures. A shoreline modification also can consist of other activities, such as dredging and filling.

20.40.140 Shoreline permit means any substantial development, variance, conditional use, or revision thereto authorized under the provisions of the City of Burien Shoreline Master Program subject to review by the Washington State Department of Ecology.

20.40.145 Shoreline substantial development means any development of which the total cost, or fair market value, whichever is higher, exceeds $6,416~~5,718~~ or the dollar amount as periodically adjusted by WAC 173-27-040(2.a), so long as such~~any~~ development does not~~which~~ materially interfere~~s~~ with the normal public use of the water or shorelines of the state ~~(See also WAC 173-27-040(2.a)~~.

20.40.150 Shoreline variance means a permit for the limited purposes of granting relief to specific bulk, dimensional, or performance standards set forth in the City of Burien Shoreline Master Program.

20.40.155 Shoreline environment designations means the categories of shorelines established by the City of Burien Shoreline Master Program in order to provide a uniform basis for applying policies and use regulations within physically distinct shoreline areas. The City of Burien Shoreline Master Program classifies shorelines into three shoreline environment designations: Urban Conservancy, Aquatic and Shoreline Residential.

20.40.160 Shoreline jurisdiction means the proper term describing all of the geographic areas regulated by the City of Burien Shoreline Master Program.

20.40.165 Shoreline master program means the general term for shoreline comprehensive plans and regulations prepared under the jurisdiction of the Shoreline Management Act.

20.40.170 Shorelines means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (1) shorelines of statewide significance, (2) shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second or less, and the wetlands associated with such upstream segments, and (3) shorelines on lakes less than 20 acres in size, and wetlands associated with such small lakes.

20.40.175 Shorelines of statewide significance means shorelines designated by the State of Washington that are major resources from which all people in the state derive benefit. Shoreline areas in the City of Burien that are designated as shorelines of statewide significance are portions of the Puget Sound adjacent to the city limits extending out to mid channel from extreme low tide.

20.40.180 Shorelines of the state means the total of all "shorelines" and "shorelines of statewide significance" within the state.

20.40.185 Tidal waters means marine and estuarine waters bounded by the ordinary high mark. Where a stream enters the tidal waters, the tidal water is bounded by the extension of the elevation of the marine ordinary high water mark within the stream.

20.40.190 Tidelands means the land on the shore of marine water bodies between the line of ordinary high tide and the line of extreme low tide.

20.40.195 Tram means a conveyance that transports passengers or freight in carriers on rails or suspended from cables supported by a series of towers.

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

20.40.205 Visual access means access with improvements that provide only a view of the shoreline or water, but do not allow physical access to the shoreline.

20.40.210 Water dependent means a use or a portion of a use which requires direct contact with the water and cannot exist at a nonwater location due to the intrinsic nature of its operations. Examples of water dependent uses may include ship cargo terminal loading areas, ferry and passenger terminals, barge loading facilities, ship building and dry docking, marinas, aquaculture, float plane facilities, and sewer outfalls.

20.40.215 Water enjoyment means a recreational use, or other use facilitating public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general character of the use and which through the location, design and operation assures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water enjoyment use, the use must be open to the general public and the shoreline space of the project must be devoted to provisions that accommodate public shoreline enjoyment. Examples may include parks, piers, museums, restaurants, educational/scientific reserves, resorts, and mixed use projects.

20.40.220 Water oriented means any combination of water dependent, water related, and/or water enjoyment uses. Nonwater oriented serves to describe those uses which have little or no relationship to the shoreline. Examples of nonwater oriented uses include professional office, automobile sales or repair shops, mini storage facilities, multifamily residential development, department stores, and gas stations.

20.40.225 Water related means a use or a portion of a use which is not intrinsically dependent on a waterfront location but whose operation cannot occur economically without a waterfront location. Examples of water related uses may include warehousing of goods transported by water, seafood processing plants, hydroelectric generating plants, gravel storage when transported by barge, oil refineries where transport is by tanker, and log storage.

20.40.230 Watershed restoration plan means a plan, developed or sponsored by the department of fish and wildlife, the department of ecology, the department of natural resources, the department of transportation, a federally recognized Indian tribe acting within and pursuant to its authority, a city, a county, or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a water body or reach, drainage area, or watershed for which agency and public review

has been conducted pursuant to chapter 43.21C RCW, the State Environmental Policy Act.

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

Supplement to the Shoreline Inventory

This document is a supplement to the *Shoreline Inventory* report that was prepared by Grette Associates LLC in 2008 as an element of the City of Burien's Shoreline Master Program Update (SMP). This supplement provides

- an update to the inventory based on information available in 2012
- a level of quantitative and qualitative detail that is unavailable in the baseline inventory
- data corrections

This supplement provides new information in both a narrative and quantitative style. It serves as the basis for the *Supplement to the Shoreline Analysis and Characterization* that is also an element of this work product.

1) Executive Summary

This inventory provides data and preliminary analysis that demonstrates the following broad development characteristics within Burien's Shoreline Jurisdiction.

The Lake Burien shoreline consists of 70 waterfront properties and 8 upland properties on just over a mile of waterfront. While every property is unique, development patterns are reasonably uniform. The properties are typically 15K to 26K sq. ft. in area with moderate levels of building coverage and total impervious surface. Setbacks from Ordinary High Water Mark (OHWM) are typically 80' to 125'. Most of the properties are extensively landscaped. Approximately 67% of the perimeter includes bulkheads and retaining walls. There is clear evidence of the presence of wetlands at multiple points around the lake. There is only one undeveloped property on the lake but it is a small parcel that appears to be unbuildable.

The Marine Shoreline consists of 304 waterfront properties and 74 upland properties on just less than five miles of waterfront. Development patterns are considerably more diverse than for Lake Burien.

Approximately 22.5% of the Marine shoreline, measured by length, is in a broadly natural condition.

Approximately 25% of the Marine shoreline is developed at a density that is considerably greater than is expected for RS-12000. These properties are typically between 5K and 9K sq. ft. in area with relatively high levels of building coverage and total impervious surface. Building setbacks from OHWM are typically 25' to 35'. Some of these properties include meaningful amounts of native vegetation but, if so, it is primarily on the landward side of the home at distances of over 100' from OHWM.

The remaining 52.5% of the Marine shoreline is developed in a style that is broadly consistent with RS-12000. The properties are typically 8K to 18K sq. ft. in area and generally meet the guidelines for building coverage and total impervious surface. However many of these properties are impacted to some degree by steep slopes which limit flexibility for new development. Most of the properties are protected by bulkheads; many of these are substantial structures.

Nearly three-quarters of these properties are developed towards OHWM with typical setbacks from OHWM of 25' to 60'. For these properties the land towards OHWM is generally impervious surface and partially functioning areas for the first 100' or so with a greater tendency for native vegetation in the remaining 100'. Another 20% of these properties are developed towards the top of steep slopes with setbacks of well over 200'. For these properties the land towards OHWM is generally native vegetation. Finally there are 10 undeveloped private properties.

2) Methodology and Terminology

The quantitative data is derived from a number of sources including public King County data, primarily the Department of Assessments database and various parcel mapping tools, a careful evaluation of high quality aerial imagery, USGS digital elevation model (DEM) data, and multiple physical surveys. We focus on the following indicators of development conditions

- Tax Parcel Outlines - available in several formats at the King County website
- Waterfront Footage - taken directly from King County Tax Parcel database when available
- Property Depth - developed from careful evaluation of aerial imagery
- Lot size - based on aerial imagery and validated by reference to the Tax Parcel database
- Setbacks from OHWM - developed from aerial imagery
- Bulkhead type - based on physical surveys

It is important to note that most of these indicators are based on evaluations of aerial imagery rather than professional physical surveys. It is believed that the accuracy of the resulting measures is sufficient to support effective planning decisions in the context of the SMP guidelines.

It is impractical to present and fully evaluate these indicators at the tax parcel level; it becomes necessary to summarize the values using convenient statistical methods. In some discussions it is sufficient to consider the **average** (mean) value of an indicator. Mean is particularly useful for values that are distributed in a uniform manner. In other cases it may be helpful to refer to the **minimum** (min), **median**, and **maximum** (max) values which are defined in the common way.

More generally it is helpful to consider the indicators in quartiles and report the 1st percentile (i.e. the minimum), the 25th percentile, the 50th percentile (also the median), the 75th percentile, and the 100th percentile (i.e. the maximum). When this report provides the **typical** values for an indicator we mean the 50% of the range between the 25th and 75th percentile.

The term **generally** is used in a more informal way that is intended to convey the same sense as **typically** but without a meaningful number of samples or statistical calculation.

Distances are measured in feet in the horizontal plane, rather than along the slope (if present).

When this report uses the term **setback** without further qualification it should be interpreted as the setback from OHWM i.e. the minimum distance of the primary structure from the line of Ordinary High Water Mark measured in the horizontal plane.

High quality aerial imagery is available from several sources; this report uses Google Earth. This tool provides relatively detailed imagery and simple drawing tools that can be used to add annotations, mark reference locations, and draw polygons around features of interest.

3) Shoreline Inventory Reaches

The original report considered Burien's two shorelines to be partitioned into a sequence of five Shoreline Inventory reaches. Table 1 shows the five reaches and descriptions from the original report but provides updated estimates of the lengths of each reach. These estimates of the lengths of the reaches are noticeably smaller than those provided in the Grette Inventory except for M3. The updated estimates have been validated by a number of efforts; we have no explanation for the magnitude of the differences between these estimates and those in the original reports.

Reach		Description	Length		
			(ft)	(mi)	(%)
Marine	M1	Primarily residential marine shoreline extending south from City limit to the north edge of Seahurst Park.	5,463	1.0	21.2
	M2	North edge of Seahurst Park south to the point at which consistent residential development begins again. Corresponds to a line projected west from SW 149th Street to intersection with the shoreline	5,811	1.1	22.5
	M3	Consistent residential development extending south to the tip of Three Tree Point.	9,084	1.7	35.2
	M4	Consistent residential development from the tip of Three Tree Point to the southern City limit.	5,469	1.0	21.2
		Marine Subtotal	25,827	4.9	100.0
Lake Burien	LB	Entire Perimeter of Lake Burien	5,374	1.0	100.0
		Total Jurisdictional Shoreline	31,201	5.9	

Table 1: Shoreline Inventory Reaches in the City of Burien.

Note: summing the distance in miles and the percentages may reveal the effect of rounding.

4) Shoreline Inventory Segments

This report will demonstrate that development conditions along the Marine Shoreline vary to a degree that is not fully captured by 4 large reaches. This evaluation introduces a refinement of Shoreline Inventory Reaches, *Inventory Segments*, to facilitate a thoughtful evaluation of existing conditions.

Seg		Description	Count		Length	
			Wft	Up	(ft)	(%)
M1	A	Homes along SW Seola Ln on level ground	6	2	362	1.4
	B	Homes along 30th Ave SW at base of steep slope	12	4	983	3.8
	C	A community beach and a portion of Shorewood Dr SW	16	4	1,310	5.1
	D	Shorewood Ln SW at base of steep slope	10	6	816	3.2
	E	A substantial property in a valley at mouth of Salmon creek	1	0	390	1.5
	F	Homes along Standring Lane SW at base of steep slope	23	1	1,602	6.2
M2	A	Seahurst Park	1	0	4,355	16.9
	B	Homes along 24th/25th Ave primarily along top of slope	13	0	1,156	4.5
	C	Eagle Landing Park	1	0	300	1.2
M3	A	28th Ave SW with homes primarily at base of steep slope	23	4	1,513	5.9
	B	27th Ave SW and a portion of Maplewild Ave SW	24	7	2,407	9.3
	C	Properties along the Indian Trail	56	31	3,702	14.3
	D	Level properties along 3 Tree Point Ln and SW 171st St	14	0	1,462	5.7
M4	A	Properties on south beach along SW 171st St	15	0	740	2.9
	B	Properties impacted by SW 172nd St and a steep slope	42	8	1,875	7.3
	C	Seacoma Blvd developed on water-ward side of SW 172nd	9	3	438	1.7
	D	Homes at top and bottom of steep slope along SW 172nd St	23	1	1,390	5.4
	E	SW 173rd Pl / SW 174th St with moderate slopes	15	3	1,026	4.0
		Marine subtotal	304	74	25,827	
LB		Entire Perimeter of Lake Burien	70	8	5,374	
		Total Jurisdictional Shoreline	374	82	31,201	

Table 2: Shoreline Inventory Segments in the City of Burien.

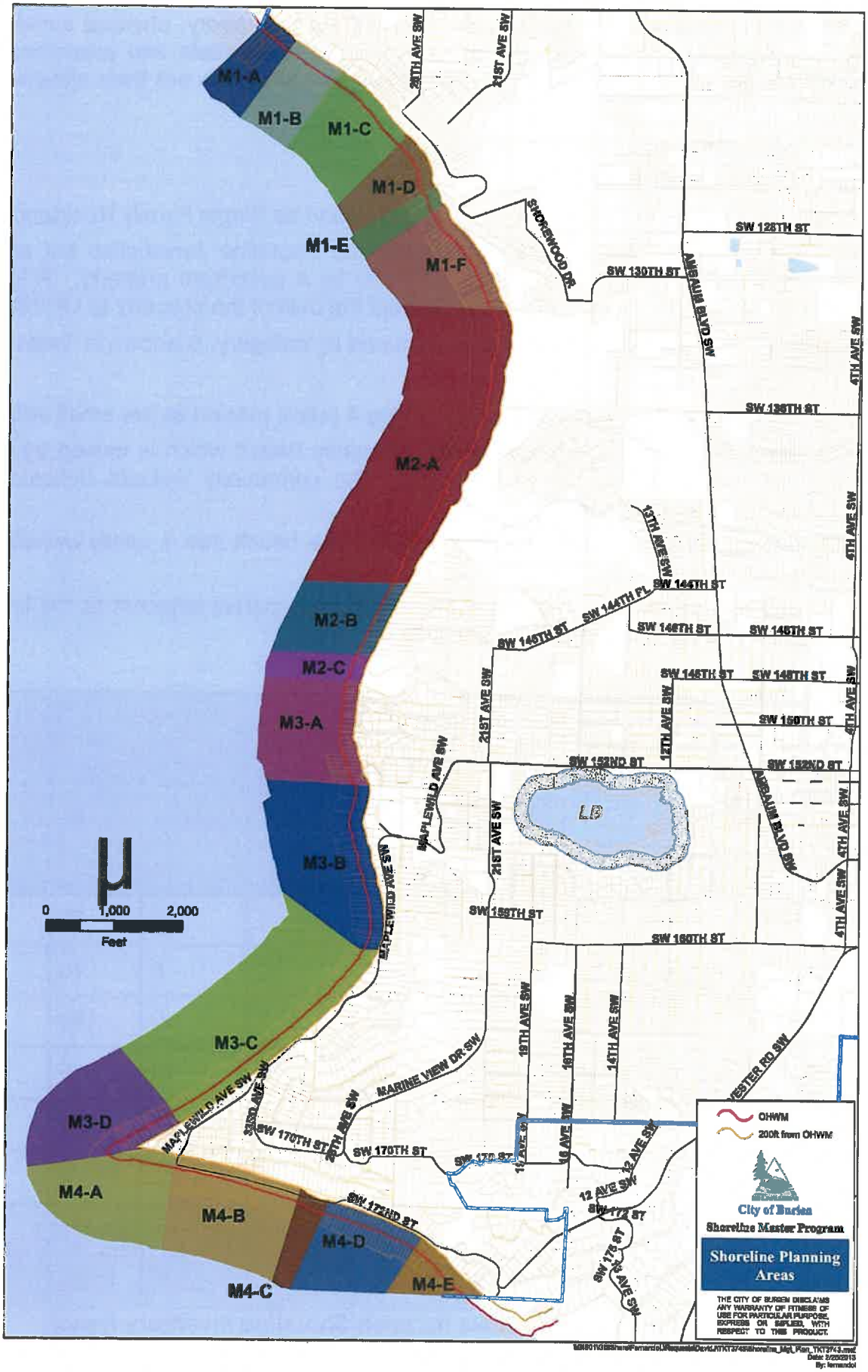


Figure 1: Approximate location of the 19 Shoreline Inventory Segments

5) Properties vs Tax Parcels

A **property** consists of one or more tax parcels. Detailed aerial imagery, physical surveys, and the King County Tax Assessors database were used to merge tax parcels into properties based on ownership and patterns of development. Properties along the shoreline are then classified into four categories:

- Public parks and street ends
- Community owned private properties
- Private waterfront properties. Most of these are developed as Single Family Residences (SFR)
- Private upland properties that intrude significantly into Shoreline Jurisdiction but are generally separated from Ordinary High Water Mark (OHWM) by a waterfront property. A few of these properties include narrow access paths that connect the bulk of the property to OHWM.

Summary information for the Shoreline properties, grouped by category, is shown in Table 3.

The two public properties in M2 are parks. The remaining 4 public properties are small street ends.

The community property in M1 is the Shorewood Community Beach which is owned by a non-profit corporation that is responsible for its maintenance. The community website indicates that this corporation serves 458 local households.

The community property in M4 is a narrow access path to the beach that is jointly owned by a small number of nearby properties.

The community property on Lake Burien is a small unbuildable parcel adjacent to the lake which is co-owned by the three homes that sit directly behind it.

Reach		Properties						Parcels
		Waterfront				Upland	Total	
		Public	Comm	Private				
				Dev	Undev			
Marine	M1	0	1	66	1	17	85	97
	M2	2	0	13	0	0	15	22
	M3	3	0	107	7	42	159	184
	M4	1	1	100	2	15	119	122
	Total	6	2	286	10	74	378	425
	% by Length	18.8%	1.5%	76.2%	3.1%	0.4%	100%	
Lake Burien	Total	0	1	68	1	8	78	82
	% by Length	0.0%	1.7%	97.3%	0.7%	0.3%	100%	

Table 3: Properties and Parcels for each Shoreline Inventory Reach

6) Lake Burien

Lake Burien consists of 70 private waterfront properties on slightly over 1 mile of shoreline. The lake is approximately 2100 ft long and 750 ft wide.

Figure 2 provides an aerial image of a representative portion of the lake from Google Earth. The road at the top of the image is SW 152nd St and, for scale, is approximately 185' from the lake at the center for this image. This image includes examples of the wetlands that exist at a number of points around the lake.

Fig 2: A representative portion of properties on the north side of Lake Burien

Lake Burien is zoned as RS-7200. Existing development conditions for the homes around the lake are generally uniform and broadly consistent with RS-12000 for area and building coverage. Homes are typically between 80' and 125' from OHWM and the properties are extensively landscaped.

There is one property of note at the north-east corner of the lake; the Ruth Dykeman Children's Center. This is a non-profit group home that serves a modest number of residents. This property is a special planning district in Burien's comprehensive plan and is developed at an intensity that approximates the private homes around this lake.

The level of the lake varies by almost 3' during a typical year; it is highest in the winter and lowest in the summer. Approximately 67% of the lake perimeter is protected by either a bulkhead or a retaining wall. The bulkheads are almost fully submerged when the lake is at its highest point. The bulkheads may also be subject to wave action during storms.

More than 3/4 of the waterfront properties include a dock.

There is only one property that has not been developed, a small parcel towards the south east corner of the lake. This property is less than 2500 sq. feet and appears to be unbuildable.

The properties on Lake Burien were converted from septic to municipal sewer around 1960. The sewer pipes ring the lake at a distance of approximately 45' from OHWM. Maintenance of the sewer line limits opportunities for developing or expanding a primary structure closer to OHWM than these pipes.

There is clear evidence of the presence of wetlands at a number of sites around the Lake. Figure 2 includes several sites where this is particularly easy to observe but a professional scientific survey would be necessary to identify every existing wetland.

Table 4 provides a summary of four dimensional indicators for the private waterfront properties.

Indicator	Excluding Ruth Dykeman Children's Center			Dykernan Center
	Min	Typical	Max	
Footage (ft)	20	60 - 87	144	345
Depth (ft)	125	187 - 295	745	700
Area (sq ft) (000's)	3.1	15.2 - 26.0	87.8	334
Setback (ft)	40	80 - 125	200	80

Table 4: Summary of Development Indicators for Lake Burien

7) Marine Shoreline

Table 5 provides four dimensional indicators for the private waterfront properties along the Marine shoreline. This table hints at the variation in conditions that is to be found along the Marine shoreline. Consider, for example, the ratio of the 25th percentile and the 75th percentile; for some of the indicators the value at the 75th percentile is two to three times that at the 25th percentile even within a single Reach.

As noted in Section 4, we respond to this level of variation by dividing the four Marine Shoreline Reaches into eighteen Inventory Segments. Segments are defined by geographic identifiers and by patterns of development.

Reach	Indicator	Min	Typical	Max
M1	Footage (ft)	10	60 - 77	390
	Depth (ft)	60	80 - 200	835
	Area (sq ft) (000's)	3.6	5.2 - 16.8	225.1
	Setback (ft)	10	25 - 43	273
M2	Footage (ft)	32	70 - 80	280
	Depth (ft)	295	610 - 740	835
	Area (sq ft) (000's)	31.5	46.3 - 69.6	178.7
	Setback (ft)	45	315 - 505	570
M3	Footage (ft)	20	60 - 81	579
	Depth (ft)	80	122 - 242	635
	Area (sq ft) (000's)	4.4	7.3 - 16.7	128.4
	Setback (ft)	5	25 - 68	250
M4	Footage (ft)	21	40 - 60	150
	Depth (ft)	95	157 - 217	320
	Area (sq ft) (000's)	4.4	7.6 - 13.4	69.1
	Setback (ft)	15	45 - 96	150

Table 5: Summary of Development Indicators for Private Waterfront Properties

7.1) Segments in Reach M1

SW Seola Lane (M1-A)

Figure 3 shows an aerial image of all eight homes in this segment. The image is rotated so that OHWM is roughly horizontal. The compass in the upper-right corner can be used to determine map directions. The image includes an estimate of the property boundaries, excluding the tidelands, and an estimate of the location of OHWM. The properties are labeled with the final 4 digits of the tax parcel id.

This segment consists of 6 waterfront homes and 2 upland homes on generally level ground at the mouth of the Seola Creek valley. SW Seola Lane is approximately 200' from OHWM towards the northern end of the segment and closes to approximately 160' at the south-east end.

These properties are developed at a level that is toward the denser level for RS-12000. The waterfront homes are setback between 40 and 115 ft from OHWM. Conditions between the homes and OHWM are consistent with the definition of partially functioning areas [BMC 20.40.101]. The native vegetation is primarily on the landward side of the homes.

The properties include bulkheads that are approximately 2' high.

Fig 3: The eight homes within shoreline jurisdiction in Segment M1-A

30th Ave SW (M1-B)

This segment is defined by 12 waterfront homes along the landward side of 30th Ave SW between the northern extent of 30th Ave SW and the northern edge of the Shorewood Community Beach. The road runs along the bottom of a steep slope and is generally between 60' and 80' from OHWM. The road rises to an altitude of approximately 50' above sea-level as one travels to the south-east along this segment.

The parcels on the water ward side of the road are typically between 5K and 7K square feet in area. This is the entire land area for six of the properties; the other six properties include land on the steep slope on the landward side of the road.

It appears that the building coverage and total impervious surface exceed the standards for RS-12000, and perhaps even for RS-7200, if one excludes the area on the steep slope.

The land within 100' of OHWM is dominated by impervious surface; the roadway, driveways, buildings, concrete decks, bulkheads, etc with the remaining surface being partially functioning. In contrast the area on the landward side of 30th Ave SW consists exclusively of mature native vegetation.

Fig 4: A representative portion of M1-B

Shorewood Dr SW (M1-C)

This segment consists of the Shorewood Community Beach, the final home at the south-east end of 30th Ave SW, and 14 waterfront homes with addresses along Shorewood Dr SW. Shorewood Dr SW is approximately 350' from OHWM at an altitude of approximately 130' above Puget Sound.

Development along this segment is strongly impacted by the slope between the road and OHWM.

Approximately 1/2 of these homes, generally those at the north end of this segment, are located at the top of the slope. These homes are well over 200' from OHWM and the land between the home and OHWM is densely vegetated. All of these properties include significant bulkheads.

The remaining homes are in close proximity to OHWM at the base of the slope. Setbacks from OHWM are generally between 25' and 45'. Conditions between the home and OHWM are primarily impervious surface and partially functioning areas while the land between the home and the road is densely vegetated steep slope. All of the properties include significant bulkheads.

One of the properties, located at the center of figure 5, is undeveloped.

Fig 5: A representative portion of M1-C

Shorewood Lane SW (M1-D)

This segment includes 10 waterfront homes at the base of Shorewood Lane SW. Much of this private road has the character of a single track shared driveway that zig-zags across the steep slope in this area.

The label for the road in this image is approximately 200' from OHWM. The properties are generally between 5K and 17K sq. ft. where the larger properties include land that stretch across the lane, e.g. the properties labeled 9077 and 9067 in the image.

Setbacks from OHWM are typically between 15' and 30'. The area between the homes and OHWM is dominated by impervious surface or partially functioning area. Native vegetation is primarily on the landward side of the homes. All of these homes are protected by significant bulkheads.

The waterfront property at the northern end of this segment, just to the left of this image, is being redeveloped; a tiny cabin is being replaced with a modern 3000 sq. ft. home on two levels.

Fig 6: A representative portion of M1-D

Standring Lane SW (M1-E)

This segment consists of a single substantial property that is located in the valley at the mouth of Salmon Creek. Figure 7 shows, approximately, the portion of this property that is within shoreline jurisdiction. This property includes a substantial bulkhead.

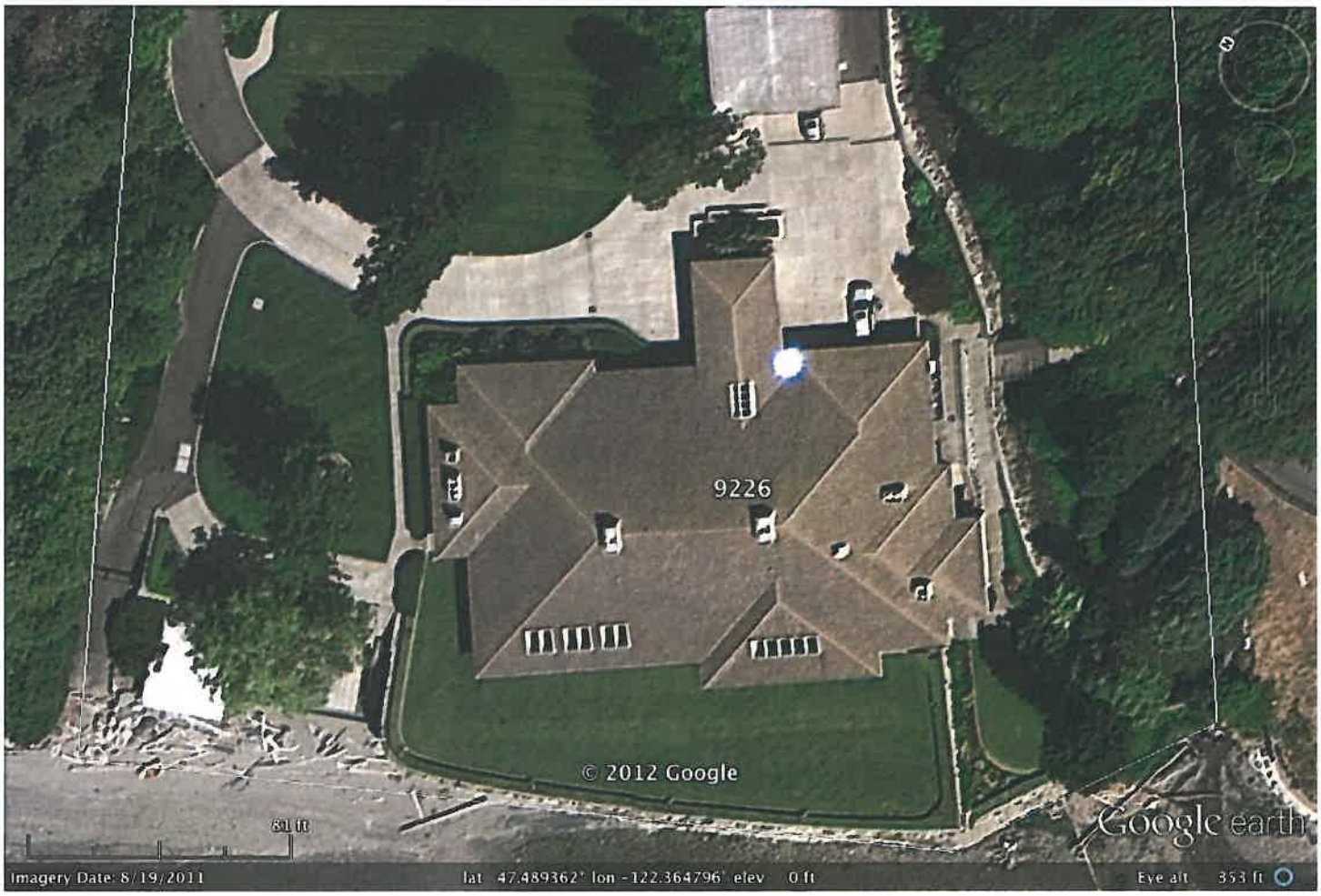


Fig 7: A significant property at the entrance to Standring Lane SW

Standring Lane SW continued (M1-F)

This segment consists of the 23 waterfront homes that are located on the landward side of Standring Lane SW as it runs along the base of a steep slope and approximately parallel to OHWM. The road is generally between 75' and 100' from OHWM.

The 6 properties at the south end of this lane include land on the steep slope on the landward side of this road. Figure 8 includes the first of these 6 properties; note that the road continues directly to the rear of 0090 but is occluded by the tree coverage in this image.

The portions of the properties on the water ward side of the lane are typically between 5K and 8K sq. ft. and this land is generally dominated by the home. The homes are typically setback between 22' and 35' from OHWM.

The land within 125' of OHWM is dominated by impervious surface; the roadway, the homes, driveways, concrete decks, and significant bulkheads. Some of the properties include limited amounts of partially functioning area.

The remaining 75' within shoreline jurisdiction, on the landward side of Standring Lane SW, is densely vegetated along the lower portion of a steep slope.

Fig 8: A representative portion of M1-F. Height of image is approximately 200'

	Len (ft)	Indicator	Min	Typical	Max
M1-A	362	Depth (ft)	135	151 - 223	234
		Area (sq ft) (000's)	4.6	11.6 - 18.4	18.6
		Setback (ft)	40	62 - 110	115
M1-B (*)	983	Depth (ft)	60	70 - 80	90
		Area (sq ft) (000's)	3.6	4.9 - 6.8	9.8
		Setback (ft)	15	25 - 35	35
M1-C	1310	Depth (ft)	170	310 - 345	350
		Area (sq ft) (000's)	11.0	16.8 - 21.8	23.7
		Setback (ft)	20	26 - 244	273
M1-D	816	Depth (ft)	65	116 - 191	200
		Area (sq ft) (000's)	6.1	8.9 - 16.5	17.9
		Setback (ft)	10	16 - 30	45
M1-E	390	Depth (ft)	835	835	835
		Area (sq ft) (000's)	225	225	225
		Setback (ft)	55	55	55
M1-F (*)	1602	Depth (ft)	75	75 - 120	120
		Area (sq ft) (000's)	4.3	4.8 - 8.4	16.5
		Setback (ft)	20	22 - 35	55

Table 6: Summary of Dimensional indicators for Segments in M1

(*) Depth/Area excludes portion landward of roadway

7.2) Segments in Reach M2

Seahurst Park (M2-A)

This award winning park provides the primary opportunity for public access to Puget Sound in Burien. While there is a great deal of native vegetation, providing for recreation and public access means that there are also paved and non-paved walkways, several structures, a parking lot, and lawn. There are significant bulkheads in this park but these are a target of on-going restoration efforts by the public.

24th / 25th Ave SW (M2-B)

This segment is defined by 13 waterfront homes that are primarily along 24th Ave SW and 25th Ave SW. The roads are more than 650' from OHWM and are at an altitude of approximately 300'. Most of the homes are at the top of this steep slope but one home has been constructed at the bottom of the hill.

Eagle Landing Park (M2-C)

A smaller public park with shoreline access. Primarily a nature walking trail.

	Len (ft)	Indicator	Min	Typical	Max
M2-A	4355	Depth (ft)	NA	NA	NA
		Area (sq ft) (000's)	NA	NA	NA
		Setback (ft)	NA	NA	NA
M2-B	1156	Depth (ft)	295	610 - 740	825
		Area (sq ft) (000's)	31.5	46.4 - 69.6	178.7
		Setback (ft)	45	315 - 505	570
M2-C	300	Depth (ft)	675	675	675
		Area (sq ft) (000's)	256.1	256.1	256.1
		Setback (ft)	NA	NA	NA

Table 7: Summary of Dimensional indicators for Segments in M2

7.3) Segments in Reach M3

28th Ave SW / SW 115st PL (M3-A)

This segment includes 22 private waterfront properties along 28th Ave SW and SW 115st PL. The roads are approximately 200' - 250' from OHWM at an altitude of 100' to 150' above Puget Sound. The homes are along the base of the slope towards OHWM and served by trams. The properties have substantial bulkheads.

The properties are typically between 10K and 17K sq. ft. in area but are significantly impacted by slopes. The homes are typically setback between 35' and 55' from OHWM. Conditions between the homes and OHWM are primarily impervious surface and partially functioning area. All of the properties include substantial bulkheads.

There are two adjacent undeveloped properties towards the middle of this segment. These are towards the right of figure 9; 0401 and 0420.

Fig 9: A representative portion of M3-A

27th Ave SW / SW 156th St / Initial portion of Maplewild Ave SW (M3-B)

This segment includes 24 waterfront properties between 27th Ave SW and the point at which the Indian Trail meets Maplewild Ave SW. The roads are between 200' and 300' from OHWM at an altitude of approximately 100' above Puget Sound.

The properties are typically between 15K and 30K sq. ft. in area. The steep slope in this segment is generally towards OHWM. For example, the primary structure on the property labeled 0095 towards the left of figure 10 is located at an altitude that is comparable to, but slightly lower than, Maplewild Ave SW and close to the beginning of the steep slope that drops down to OHWM.

There are 14 homes at the base of the steep slope. These homes are generally setback between 25' and 45' from OHWM. Conditions adjacent to OHWM include impervious surface, partially functioning areas, and native vegetation. All of these properties include substantial bulkheads.

There are 7 homes at the top of the steep slope and along Maplewild Ave SW. These are generally approximately 150' from OHWM. All of these properties include substantial bulkheads and some of these have small accessory structures and decks adjacent to the bulkhead.

There are 3 undeveloped properties in this segment. One is a substantial tax parcel at the north end of the segment, one is the more modest property labeled 0185 in the center of the image, and the final property is a substantial property at the south end of the segment. The property at the south of this segment is composed of 6 adjacent tax parcels; 2 waterfront parcels and 4 upland parcels. These properties include bulkheads.

Fig 10: A representative portion of M3-B

Indian Trail (M3-C)

The Indian Trail is a public walking trail that runs for almost 3/4 of a mile between Maplewild Ave SW and Puget Sound. The trail runs generally parallel to OHWM and is approximately 100' from OHWM for most of its length. It is generally at an altitude of 30' - 50' above OHWM although it drops close to sea-level at the public access location at SW 163rd PL and again at the south end of the trail at the public access location at SW 170th St. The distance between the trail and Maplewild Ave SW is more variable but is generally between 150' and 250'.

There are 55 private waterfront properties and 31 private upland properties. Approximately 60% of the waterfront properties are entirely on the water ward side of the trail, and hence are relatively shallow lots. The remaining 40% of the properties span the full distance from Maplewild to OHWM. However all but 4 of the waterfront properties are developed on the water ward side of the trail. The landward side of the trail is generally used for accessory structures; primarily for garages.

There are two undeveloped properties; both of these are in the steepest portion of this segment.

Most of the properties along this segment include significant bulkheads; in many places these rock walls stand over 6' tall. The bulkheads become less substantial towards the final 750' at the south of the segment.

Many of the properties, particularly those towards the middle of segment, include substantial levels of native vegetation on the water ward side of the trail i.e. within the first 100' from OHWM.

Fig 11: A more natural, and generally steeper, portion of M3-C

Fig 12: A more altered, and generally less steep, portion of M3-C

SW Three Tree Point Lane / SW 171st St (M3-D)

This segment, which is effectively level, contains the public access point on SW 170th St and 13 waterfront homes down to and including the property on the point itself at the boundary of M3 and M4.

The properties in this segment are typically between 200' and 250' feet deep and the properties are typically between 11K and 20K sq. ft. in area. Building coverage and impervious surface densities appear to be broadly consistent with RS-12000.

The typical setback from OHWM is 45' - 90'. Conditions between the homes and OHWM are generally partially functioning areas or impervious surfaces. Six of the properties include accessory structures in this area although there are pockets of native vegetation.

These properties include relatively modest bulkheads.

Fig 13: A representative portion of M3-D

Table 8 provides dimensional indicators for private waterfront properties along M3. Adjustments are made for segment M3-C to reflect the development constraint that is imposed by the Indian Trail. It was noted that approximately 40% of the waterfront properties include land on both sides of the trail yet all but 4 of the primary residences are on the water ward side of the trail. In Table 8, for segment M3-C, the reported depth/area is that of the land that contains the primary structure even if the property line spans the trail.

	Len (ft)	Indicator	Min	Typical	Max
M3-A	1513	Depth (ft)	82	148 - 268	328
		Area (sq ft) (000's)	4.6	9.8 - 16.7	32.4
		Setback (ft)	5	33 - 56	70
M3-B	2407	Depth (ft)	100	138 - 323	635
		Area (sq ft) (000's)	8.1	15.5 - 29.5	128.4
		Setback (ft)	15	20 - 135	250
M3-C (*)	3702	Depth (ft)	80	108 - 161	326
		Area (sq ft) (000's)	4.4	6.2 - 8.6	49.5
		Setback (ft)	10	25 - 68	245
M3-D	1462	Depth (ft)	178	200 - 252	286
		Area (sq ft) (000's)	9.0	11.5 - 19.6	49.5
		Setback (ft)	20	47 - 90	130

Table 8: Summary of Dimensional indicators for Waterfront homes for Segments in M3
(*) Depth/Area reflects impact of Indian Trail (see discussion)

7.4) Segments in Reach M4

SW 171st St (M4-A)

This segment contains 15 homes on relatively narrow parcels between OHWM and SW 171st St. The typical properties have footages between 40' and 55' and areas between 7K and 8K sq. ft. The properties are dominated by the structures and other impervious surfaces. The land between the homes and OHWM is impervious surfaces, e.g. decks, and small lawns. All of the properties include bulkheads.

Fig 14: A representative portion of M4-A

SW 172nd St (M4-B)

This segment consists of the first 1800' of SW 172nd St, including the public street end, up to the intersection of SW 172nd St and Seacoma Blvd. This section of SW 172nd St runs roughly parallel to OHWM and is between 50' and 75' from OHWM. The 41 residences along this segment are located on the landward side of this roadway and are constrained to the rear by a steep slope.

The area on the water ward side of this portion of SW 172nd St is used for parking by the residents of this segment and is generally developed with small accessory structures and small landscaped areas.

These properties include minor bulkheads that control erosion on a daily basis but which are overtopped during moderate storms.

Fig 15: A representative portion of M4-B

Seacoma Blvd (M4-C)

This small development contains 9 waterfront homes between SW 172nd St, which begins to move away from Puget Sound at this point, and OHWM. Figure 16 includes all of the waterfront and upland properties in this segment.

These properties are typically between 5K and 6K sq. ft. Setbacks range from 25' to 105'.

Six of the waterfront properties are primarily impervious surface between the home and OHWM. The final three properties include significant levels of partially functioning areas and perhaps even some native vegetation.

All of these properties include significant concrete wall bulkheads that are 6' to 10' tall.

Fig 16: The properties in M4-C

SW 172nd St (M4-D)

SW 172nd St begins to move away OHWM at Seacoma Blvd so that it follows the top of the steep slope that intrudes more closely towards the shore. SW 172nd St is generally approximately 250' from OHWM at an altitude of 70' - 90' above the Puget Sound within this segment.

This segment contains 23 waterfront properties and 1 upland property on lots that are typically 13K to 15K sq. ft in area. The waterfront properties are impacted by a steep slope.

Sixteen of the waterfront homes are located at the top of the slope along SW 172nd St with setbacks from OHWM that are generally between 115' and 140'. The land between the home and OHWM is dominated by native vegetation. All of these properties include substantial bulkheads.

The five remaining waterfront homes are at the base of the slope and generally setback 40' - 50' from OHWM. These properties include impervious surfaces, partially functioning areas, and native vegetation adjacent to OHWM. The land between the home and SW 172nd St is dominated by native vegetation. All of the properties include significant bulkheads.

The final two waterfront properties are undeveloped. One is toward the north of the segment, the property labeled 0270 in figure 17, and the other is towards the south. The second property is owned by a corporation on behalf of several local residents that live on the landward side of SW 172nd St. These two properties include bulkheads.

Fig 17: A representative portion of M4-D

SW 174th St / SW 173rd PL (M4-E)

SW 172nd St moves even further away from OHWM at the southern end of Burien and the slope becomes slightly less steep. This provides space for the final development along the shore.

This segment includes 14 waterfront homes on lots that are typically 10.5K to 20K sq. ft. in area. Most of these properties include modest slopes adjacent to OHWM and the homes tend to be landward of these slopes with typical setbacks of 35' to 65'.

Conditions between the home and OHWM are primarily impervious surface and partially functioning areas but some properties include native vegetation within the first 100' from OHWM.

All of the properties include significant bulkheads.

Fig 17 shows a few properties in this segment. The property labeled 0410, for example, is located behind a modest slope and is perhaps 10' above the level of the land immediately adjacent to OHWM.

Fig 18: A representative portion of M4-E

	Len (ft)	Indicator	Min	Typical	Max
M4-A	740	Depth (ft)	200	200	200
		Area (sq ft) (000's)	4.5	7.1 - 8.3	17.3
		Setback (ft)	25	35 - 55	60
M4-B (*)	1875	Depth (ft)	132	150 - 215	240
		Area (sq ft) (000's)	4.4	7.2 - 10.4	13.8
		Setback (ft)	47	70 - 95	110
M4-C	438	Depth (ft)	95	110 - 130	185
		Area (sq ft) (000's)	4.8	5.0 - 5.8	14.7
		Setback (ft)	20	25 - 75	105
M4-D	1390	Depth (ft)	126	217 - 250	261
		Area (sq ft) (000's)	6.6	13.0 - 15.4	18.5
		Setback (ft)	25	100 - 135	150
M4-E	1026	Depth (ft)	125	150 - 225	320
		Area (sq ft) (000's)	7.7	10.4 - 19.9	69.1
		Setback (ft)	15	35 - 65	125

Table 9: Summary of Dimensional indicators for Waterfront homes for Segments in M4
(*) Setbacks are determined by location of SW 172nd St. Areas include SW 172nd St.

8) Summary

Development in Burien's Shoreline can be grouped in to 4 broad categories

Lake Burien consists of a mile of shoreline and the properties around the lake are developed at a level that is consistent with RS-12000. These properties are extensively landscaped.

Approximately 22.5% of the marine shoreline, reach M2, is in a relatively natural condition with extensive natural vegetation that extends for 100's of feet landward of shoreline jurisdiction. 80% of this reach is public park. Seahurst Park has been a focal point for restoration efforts.

Approximately 52.5% of the marine shoreline is developed at a level that is broadly consistent with RS-12000. Many of these properties are impacted to some degree by a steep slope which is often naturally vegetated.

Approximately 25% of the marine shoreline is relatively densely developed at levels that are more consistent with RS-7200.

There is one, small undeveloped parcel on Lake Burien that appears to be unbuildable.

There are ten private undeveloped waterfront properties at various points along the marine shoreline; seven of these are in M3.

The information provided in this report is the basis for the *Supplement to the Shoreline Analysis* that is included as an element of the Shoreline Master Program.

Supplement to the Shoreline Analysis and Characterization

This document is a supplement to the *Shoreline Analysis and Characterization* report that was prepared by Grette Associates LLC in 2008 as an element of the City of Burien Shoreline Master Program Update (SMP). This supplement provides

- a refinement to the initial characterization to reflect the diversity along the Puget Sound
- application of DOE's guidance on indicators of No Net Loss (NNL) to Burien's shoreline
- the development of a quantitative metric based on NNL to guide local planning

1) Executive Summary

This supplement groups the nineteen Shoreline Inventory Segments that were identified in the *Supplement to the Shoreline Inventory* in to four Inventory Planning Areas based on environment and existing development conditions.

UC-NA The relatively natural conditions found in the Urban Conservancy designation

SR-AL Altered portions of the Marine that generally include meaningful native vegetation

SR-HA Highly altered portions of the Marine with relatively little ecological function

SR-LB Development around Lake Burien

The development of this analysis included a review of Chapter 4 from DOE's SMP Handbook; *No Net Loss of Shoreline Ecological Functions.* That chapter includes a section on potential no net loss indicators that were developed by DOE staff and advisors to help during the development of SMP updates. Five indicators were selected as particularly relevant for management in Burien's urban shoreline.

A planning metric has been developed, informed by the primary No Net Loss indicators, that summarizes the relative levels of ecological function along the varied shoreline. This metric varies between 0 and 10 where higher values imply more ecological function. The metric has three components that are added together; an indicator of bulkhead intensity that ranges from 0 to 1, an indicator of the level of vegetative function in the first 100' from OHWM that ranges from 0 to 6, and finally an indicator of vegetative function in the second 100' that ranges from 0 to 3. Table 1 provides a preview of this metric for the four planning areas; this table may reflect the effect of rounding. This table includes the typical values, the 50% of values between the 25th percentile and the 75th percentile, for several dimensional indicators using data that was collected for the Supplement to the Shoreline Inventory. The depth and area columns are typical values for properties.

	Length		Setback	Depth (ft)	Area (sq ft) (000's)	Metric			
	ft	%	ft			B	1st 100'	2nd 100'	Total
SR-LB	5,374	100.0	80 - 125	185 - 300	15 - 26	0.3	1.8	0.4	2.6
UC-NA	5,811	22.5	> 200	610 - 740	46 - 70	0.7	4.9	3.0	8.6
SR-AL	13,562	52.5	30 - 95	135 - 250	8 - 18	0.1	2.9	1.5	4.6
SR-HA	6,454	25.0	25 - 75	95 - 200	5 - 9	0.3	0.4	2.2	2.8
Marine	25,827	100.0	30 - 90	125 - 235	7 - 16	0.3	2.7	2.0	5.0

Table 1: Preview of planning areas and the planning metric

2) Characterization

The Grette/Reid evaluation assigned Environmental Designations to each Shoreline Inventory Reach based on the guidelines included in WAC 173-26-211. It was determined that M2 should be designated as Urban Conservancy and the remaining reaches should be designated as Shoreline Residential.

The earlier analysis observed that the Lake Burien reach is a freshwater shoreline and that the remaining reaches are along a marine shoreline but other than this there was little attention to the diversity of conditions that exist across the Shoreline Residential reaches.

The *Supplement to the Shoreline Inventory* demonstrated that existing development conditions along the Marine vary to a significant degree. That work refined the four Marine Shoreline Inventory Reaches into a set of 18 Shoreline Inventory Segments based on patterns of development and well defined geographical identifiers.

This report defines four *Shoreline Planning* areas:

SR-LB: This planning area consists of inventory reach LB. This area is designated as Shoreline Residential along a freshwater shoreline. This reach is zoned as RS-7200 but the current development is consistent with RS-12000 for area, building coverage, and total impervious surface. This area is extensively landscaped. Approximately 2/3 of the length of the shoreline includes bulkheads or retaining walls.

UC-NA: This planning area consists of inventory reach M2. This area is designated as Urban Conservancy environmental designation and is in a substantially natural condition.

SR-AL: This area consists of inventory segments M1-A, M1-C, M1-E, M4-D, M4-E and all of inventory reach M3. This area is zoned as RS-12000 and current development is consistent with this. Many of the properties in this area are impacted by steep slopes that are heavily vegetated. The remainder of the area is generally impervious surface and partially functioning areas. The majority of this area is armored, often with significant structures of over 6' in height.

SR-HA: This area consists of inventory segments M1-B, M1-D, M1-F, M4-A, M4-B, and M4-C. This area is zoned as RS-12000 but current development is closer to the lot-size for RS-7200 with building coverage and total impervious surface that is often denser than even RS-7200 allows. Most of the properties include bulkheads but they tend to be less substantial than those that are common in SR-AL. Segment M4-B, the initial north-west portion of SW 172nd St, presents special development constraints.

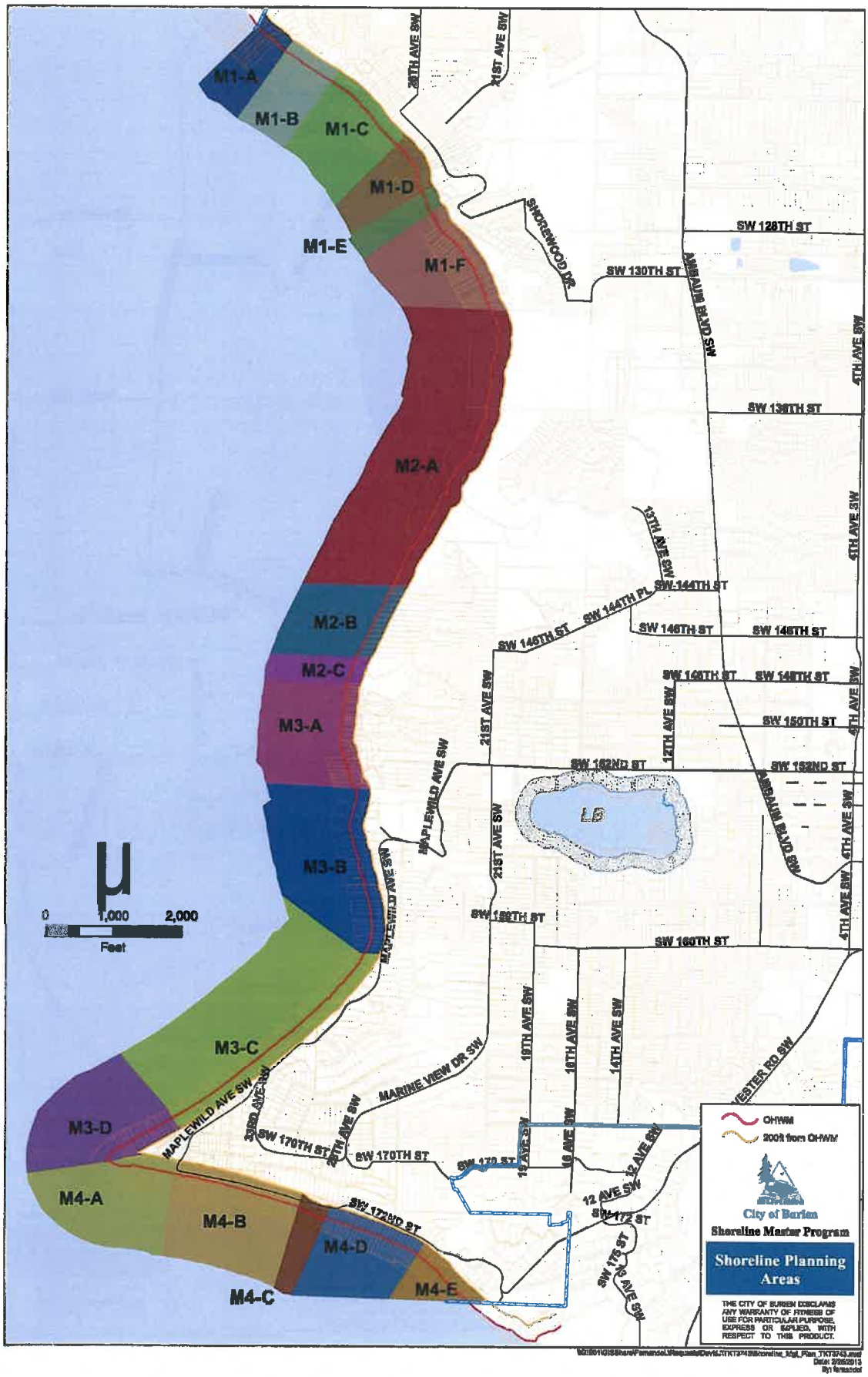


Figure 1: The 5 Inventory Reaches and 19 Inventory Segments

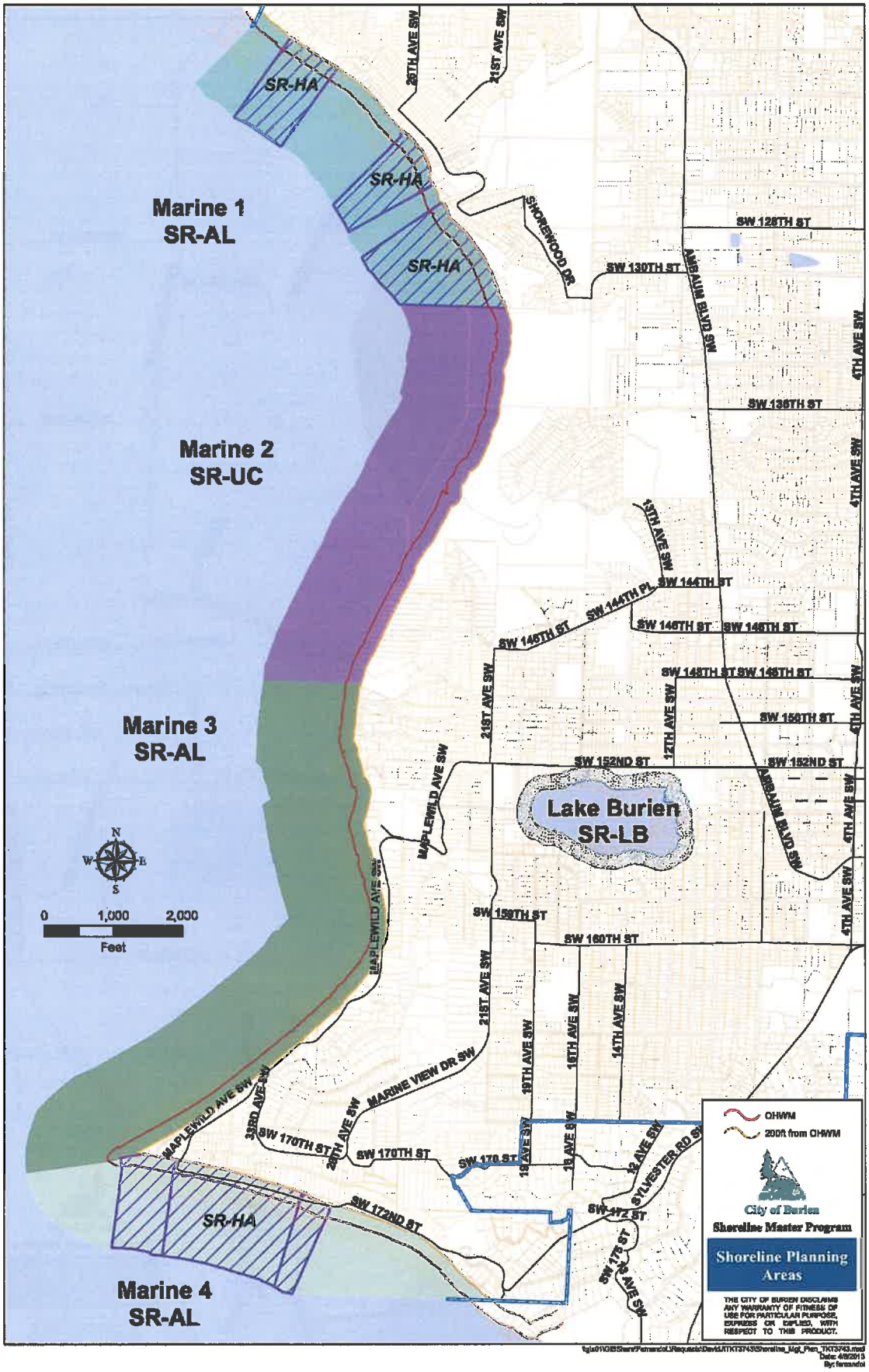


Figure 2: The 4 Planning Areas

3) No Net Loss Indicators

Under Washington State Shoreline Management Act Guidelines [WAC 173-26-186(8) & 201(2)(c)] all new development, activities and uses must meet the standard of no net loss of ecological functions and shoreline processes, and to meet no net loss, mitigate any adverse impacts of new development.

Chapter 4 of the Department of Ecology's (DOE) Shoreline Master Program Handbook, *No Net Loss of Shoreline Ecological Functions*, suggests that jurisdictions develop quantifiable indicators of Ecological Function and processes. That document provides a table of 15 potential indicators, *Table 4-1 of the handbook*, that might be relevant based on the jurisdiction.

Ten of these indicators were selected as being particularly relevant to Burien's urban shoreline and these were then partitioned these in to two sets as shown in Table 2. The indicators in the first set are relatively easy to measure and, more importantly, are subject to direct control by common city planning techniques. The second set of indicators include those that are either unlikely to change in a 25 year planning horizon or are indirectly impacted by local planning solutions. This partitioning does not imply any judgment regarding the relative importance of these indicators.

Indicator	Functions Affected
Impervious surface area (acres or percentage)	Water quality and habitat
Vegetation coverage; acres/percent by class	Water quality and habitat
Shoreline stabilization; Linear feet of bulkheads, retaining walls, etc.	Sediment supply
Piers/docks/floats, overwater structures; number or sq. ft.	Water quality and habitat
Wetlands acreage	Water quality
Water quality; DOE 303 (d) list	Water quality
Bald eagle & osprey nests and roosts & great blue heron rookeries	Habitat
Area of sea grasses, kelp, and emergent aquatic vegetation	Habitat
Road lengths (ft) within 200' of water body	Water quality
Acres of permanently protected areas	Water quality and habitat

Table 2: Applicable No Net Loss indicators from SMP Handbook

Over time it is appropriate that the City of Burien consider trends in all of these indicators in a shoreline context. Improvements in **all** indicators would suggest that restoration of ecological function has been accomplished while declines in **all** indicators would suggest that net loss has occurred. The concept of **net** loss and mitigation suggests that it is possible to trade-off a decline in one indicator with an improvement in another but there does not appear to be any science or policy guidance to provide an objective model for quantifying this concept.

4) A Metric to Approximate Ecological Function for Shoreline Evaluation

For the purposes of this report, we convert the guidance on *potential Indicators of No Net Loss* into a simple metric that can be used as a supplement to the other descriptive material that is provided. This metric was developed to facilitate a quantifiable evaluation of the varied conditions along Burien's complex shoreline. It is not intended that this metric be used during the permitting process for a proposed development.

This evaluation metric varies between 0 and 10 where 0 represents little or no ecological function and 10 represents broadly natural or unaltered conditions. The metric encompasses shoreline stabilization and the environmental function of the land within shoreline jurisdiction.

It is easiest to think of evaluating this metric for a strip of land 1' wide and 200' deep oriented in a direction that is perpendicular to the line of OHWM. The value for this 1' wide step can be averaged along any portion of the shoreline in the obvious way.

The metric assigns up to 1 point based on the presence of shoreline stabilization, up to 6 points for conditions in the first 100' from OHWM, and up to 3 points for the next 100'.

Points are assigned to the shoreline stabilization structure if present

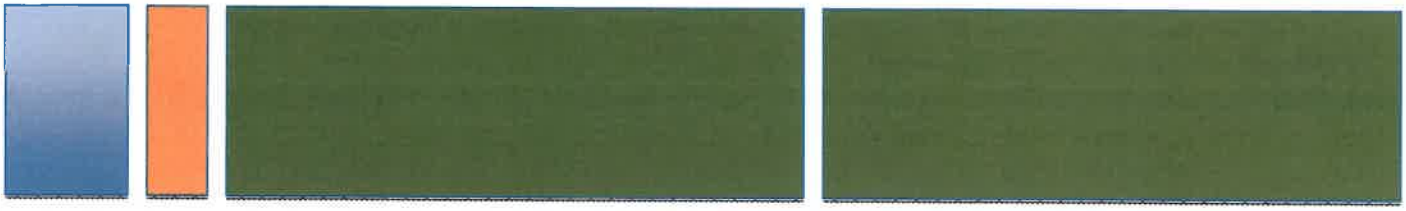
Shoreline Stabilization	Points
Little or no shoreline stabilization.	1.0
A modest wall that is primarily for the highest tides and storm surge	0.5
A significant structure that deflects wave energy on a daily basis	0.0

Points are assigned to each square foot of land

Quality of each Square Foot of Land	Points
Mature native vegetation	3
Partially functioning areas e.g. lawn, landscaping, slat decks [BMC 20.40.101]	1
Impervious surface	0

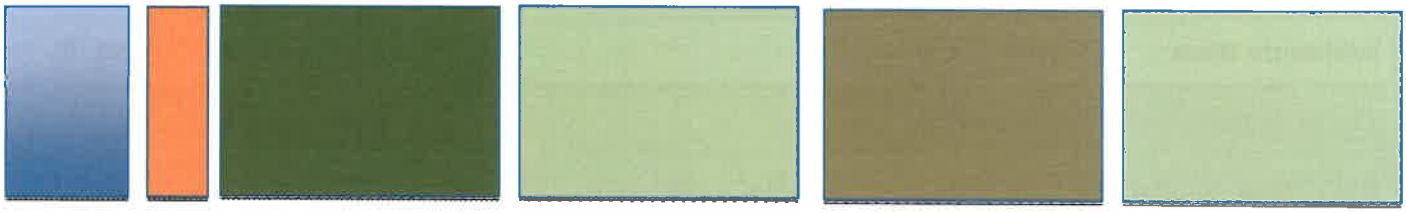
The points for each sq. ft. are averaged over the first 100' and separately over the second 100'. The final metric is the sum of these three components.

metric = stabilization + 2 * average land value of first 100' + average value for second 200'



1 2 * 3 * (100 / 100) 1 * 3 * (100 / 100)

A 1' wide strip of property with no bulkhead, 100' of natural conditions, and a second 100' of natural conditions is assigned 10 points: 1 point for the lack of a bulkhead, 6 points for the natural conditions in the first 100' and 3 points for the natural conditions in the second 100'.



1 2 * 3 * (50 / 100) 2 * 1 * (50 / 100) 1 * 0 * (50 / 100) 1 * 1 * (50 / 100)

A 1' wide strip of property with no bulkhead, 50' of natural conditions, 50' of landscaping, 50' of single family residence, and 50' of landscaping is assigned 5.5 points; 1 point for the lack of a bulkhead, 3 points for 50' of natural conditions in the first 100' from OHWM, 1 point for 50' of landscaping in the first 100' from OHWM, 0 points for impervious surface, and 0.5 points for 50' of landscaping in the second 100' from OHWM.

0 2 * 1 * (50 / 100) 2 * 0 * (50 / 100) 1 * 1 * (50 / 100) 1 * 3 * (50 / 100)

A 1' wide strip of property with a substantial bulkhead, 50' of landscaping, 50' of SFR, another 50' of landscaping, and a final 50' of natural conditions is assigned 3 points; 0 points for the bulkhead 1 point for 50' of landscaping in the first 100' from OHWM, 0 points for the impervious surface, 0.5 points for 50' of landscaping in the second 100' from OHWM, and 1.5 points for 50' of natural conditions in the second 100' from OHWM.

5) Analysis

In this section the planning areas are analyzed in the context of the indicators of No Net Loss and the proposed planning metric.

5.1) SR-LB

This planning area is the Shoreline Inventory Reach for Lake Burien. The supplement to the Inventory provides a clear overview of primary dimensional indicators for this area.

Indicator	Estimate
Impervious surface area (%)	25% - 45%
Vegetation coverage; percent by class	Primarily landscaped
Shoreline stabilization; Linear feet of bulkheads, retaining walls, etc.	Approx 3600 ft.
Piers/docks/floats, overwater structures; number or sq. ft.	Approx 3/4 of homes
Wetlands area	Approx 30,000 sq. ft.
Water quality; DOE 303 (d) list	Unlisted
Bald eagle & osprey nests and roosts & great blue heron rookeries	A few roots present
Area of sea grasses, kelp, and emergent aquatic vegetation	None
Road lengths (ft) within 200' of water body	Less than 500'
Acres of permanently protected areas	None

Table 3: Overview of NNL indicators for Lake Burien

It has been noted that Lake Burien is zoned as RS-7200 while existing conditions are typically consistent with RS-12000. This implies that there is some potential for sub-division to occur over the long term although it is difficult to determine how common this is likely to be. While the risk is hotly debated, it appears fair to suggest that significant levels of sub-division and new development would have an adverse impact on several of these indicators.

Approximately 67% of the perimeter includes bulkheads or retaining walls.

Land within the first 100' of OHWM is primarily partially functioning area. Impervious surface accounts for perhaps 10% of the area, on average, and then primarily towards the rear of this region. There are limited levels of native vegetation. There is clear evidence of wetlands at multiple sites; a professional survey would be required to provide an accurate measure of the full extent of the existing wetlands.

Land within the second 100' from OHWM includes substantially higher levels of impervious surface and could account for as much as 50% of the area. The remaining area is primarily partially functioning area.

These observations suggest the following initial estimate for the NNL planning metric

metric ~= 0.33 + 2 * (0 * 3 + 90 * 1 + 10 * 0) / 100 + 1 * (0 * 3 + 50 * 1 + 50 * 0) / 100

~= 0.33 + 1.81 + 0.41

~= 2.6

5.2) UC-NA

This planning area is the Shoreline Inventory Reach M2.

Indicator	Estimate
Impervious surface area (%)	Relatively little
Vegetation coverage; percent by class	Primarily native
Shoreline stabilization; Linear feet of bulkheads, retaining walls, etc.	Approx 30%
Piers/docks/floats, overwater structures; number or sq. ft.	None
Wetlands acreage	None or Low
Water quality; DOE 303 (d) list	Unlisted
Bald eagle & osprey nests and roosts & great blue heron rookeries	Multiple nest and roosts
Area of seagrasses, kelp, and emergent aquatic vegetation	Present
Road lengths (ft) within 200' of water body	Road and parking lots
Acres of permanently protected areas	80%

Table 4: Overview of NNL indicators for M2

Seahurst Park is just under 75% of the reach. This park provides the primary opportunity for recreation and public access in Burien's shoreline. Conditions are somewhat altered with parking lots, paved walking trails, a small number of structures, and significant levels of armoring. This park has been a focus of restoration efforts for many years and there is ongoing work to reduce the impact due to armoring.

Approximately 40% of Seahurst Park is armored

Within the first 100' Seahurst Park is ~10% impervious surface and 10% partially functioning. The remainder of the land is mature, dense, native vegetation.

Land within the second 100' from OHWM is primarily dense mature native vegetation

The remainder of the reach is almost completely natural for the first 200' from OHWM.

The thirteen private properties account for just under 20% of this reach by length and all but one of the homes sit at the top of an extremely steep slope and over 600' from OHWM.

The remaining 5% of this planning area is Eagle Landing Park which is in a highly natural condition in shoreline jurisdiction.

These observations suggest the following estimate for the NNL planning metric

metric ~= 0.7 * 1 + 2 * (80 * 3 + 10 * 1 + 10 * 0) / 100 + 1 * (100 * 3 + 0 * 1 + 0 * 0) / 100

~= 0.7 + 4.9 + 3.0

~= 8.6

5.3) SR-AL

This planning area consists of all of M3, just over 37% of M1, and approximately 44% of M4. This area is zoned as RS-12000 and existing development is consistent with this zoning. Development in a large fraction of this area is impacted to some degree by steep slopes.

Indicator	Estimate
Impervious surface area (%)	< 20%
Vegetation coverage; percent by class	Varied
Shoreline stabilization; Linear feet of bulkheads, retaining walls, etc.	>85% significant armor
Piers/docks/floats, overwater structures; number or sq. ft.	Limited but present
Wetlands acreage	None or Low
Water quality; DOE 303 (d) list	Unlisted
Bald eagle & osprey nests and roosts & great blue heron rookeries	Multiple nests and roosts
Area of sea grasses, kelp, and emergent aquatic vegetation	Present
Road lengths (ft) within 200' of water body	< 500'
Acres of permanently protected areas	Limited

Table 5: Overview of NNL indicators for SR-AL

Additional insights emerge if the private properties in this area are partitioned into four sets; homes on generally **level** terrain, homes generally towards the **low** side of a steep slope, homes generally towards the **high** side of a steep slope, and **undeveloped** properties. Table 6 indicates the proportions of each category, the typical setbacks, and the components for the NNL metric where **B** is the bulkhead indicator, **P** is the score for partially functioning areas, and **N** is for native vegetation.

	Length		Setbacks	Metric					
				B	First 100'		Second 100'		Total
	ft	%			P	N	P	N	
Level	3,339	24.8	41 - 90	0.3	0.5 * 2	0.0 * 6	0.2 * 1	0.1 * 3	2.0
Low	6,698	49.6	20 - 50	0.0	0.1 * 2	0.4 * 6	0.1 * 1	0.6 * 3	4.7
High	2,197	15.7	126 - 233	0.0	0.1 * 2	0.8 * 6	0.1 * 1	0.4 * 3	6.0
Undev (Pri)	803	5.9	NA	0.0	0.1 * 2	0.9 * 6	0.1 * 1	0.9 * 3	8.2
Undev (Other)	525	3.9	NA	0.8	0.1 * 2	0.8 * 6	0.0 * 1	0.8 * 3	8.1
Total	13,562	100.0	30 - 94	0.1	0.4	2.5	0.1	1.4	4.6

Table 6: Indicators for four categories of development in the Altered portion of the Marine

5.4) SR-HA

This planning area consists of approximately 63% of M1 plus 56% of M4. This area is zoned as RS-12000 but existing development is more consistent with RS-7200. Development in a large fraction of this area is impacted to a significant degree by steep slopes and roadways.

Indicator	Estimate
Impervious surface area (%)	Dominates area
Vegetation coverage; percent by class	Minor landscaping
Shoreline stabilization; Linear feet of bulkheads, retaining walls, etc.	~100% modest bulkhead
Piers/docks/floats, overwater structures; number or sq. ft.	None
Wetlands acreage	None or Low
Water quality; DOE 303 (d) list	Unlisted
Bald eagle & osprey nests and roosts & great blue heron rookeries	None
Area of sea grasses, kelp, and emergent aquatic vegetation	Present
Road lengths (ft) within 200' of water body	5600
Acres of permanently protected areas	None

Table 7: Overview of NNL indicators for SR-HA

The three segments in M1 are constrained to the rear by roadways that runs at the base of steep slopes. The water ward side of the road is highly altered and the landward side is heavily vegetated. Two of the segments in M4 are on level ground and are constrained to the rear by roads. Homes along SW 172nd St are constrained by a roadway in the front and a steep slope to the rear.

Table 8 is similar in structure to Table 6 and treats SW 172nd St separately. [Note: This table may show the result of rounding].

	Length		Setback	Metric					
				B	First 100'		Second 100'		Total
	ft	%			P	N	P	N	
Rest	4,644	72.0	25 - 35	0.2	0.2 * 2	0.0 * 6	0.0 * 1	0.7 * 3	2.9
SW 172nd St	1,810	28.0	70 - 95	0.5	0.0 * 2	0.0 * 6	0.0 * 1	0.7 * 3	2.6
Total	6,454	100.0	25 - 75	0.3	0.2	0.1	0.0	2.2	2.8

Table 8: Indicators for the Highly Altered portion of the Marine

6) Summary for the Planning Areas

Table 9 provides a summary of the setbacks and the NNL metric for the four planning areas ordered by the No Net Loss (NNL) metric.

Area UC-NA scores highest for this metric. Two of the segments, totaling about 25% of this area, are almost completely unaltered. Seahurst Park, the primary opportunity for public access along Burien's shoreline, is somewhat altered within the first 100' of OHWM.

Area SR-AL demonstrates a relatively high level of ecological function but this is primarily due to the significant levels of native vegetation on the steep slopes that dominate this planning area. The position of the slope relative to OHWM tends to alter the location of the native vegetation within the first 200'. It is intriguing to note that typical setbacks are larger for **level** parcels than for the **low** parcels; it appears that many property owners prefer to include lawns between the primary structure and OHWM if there is sufficient space to do so.

Area SR-HA achieves a relatively high measure on this planning metric. This can be seen to be a consequence of the abundant native vegetation that exists on the steep slopes behind 30th Ave SW and Standring Lane SW, and hence further than 100' from OHWM, and the relatively less substantial bulkheads.

Finally SR-LB achieves the lowest score on this metric despite having the largest typical setbacks and relatively low levels of building coverage and impervious surface. This is a consequence of the priority that is accorded to native vegetation when it does exist and the fact the Lake Burien is largely landscaped. It appears that conditions in the planning area are broadly comparable to the level properties that exist along Puget Sound.

	Style	Length		Setback	Area (sq. ft.) (000's)	Metric			
		(ft)	(%)			B	1st 100'	2nd 100'	Total
SR-LB	Level	5,374	100.0	80 - 125	15.1 - 26.1	0.3	1.8	0.4	2.6
UC-NA	Natural	5,811	22.5	> 200	46.3 - 69.6	0.7	4.9	3.0	8.6
SR-AL	Level	3,339	12.9	41 - 90	11.3 - 19.0	0.3	1.2	0.5	2.0
	Low	6,698	25.9	20 - 50	6.8 - 15.6	0.0	2.7	1.9	4.7
	High	2,197	8.5	126 - 233	13.9 - 21.2	0.0	4.8	1.2	6.0
	Undev	1,328	5.1	NA	11.4 - 32.1	0.4	5.3	2.6	8.3
	Total	13,562	52.5	30 - 94	8.2 - 17.5	0.1	3.0	1.5	4.6
SR-HA	Exc 172	4,644	18.0	25 - 35	5.0 - 8.5	0.2	0.5	2.2	2.9
	172nd	1,810	7.0	70 - 95	7.2 - 10.4	0.5	0.1	2.1	2.6
	Total	6,454	25.0	25 - 75	5.2 - 9.4	0.3	0.4	2.2	2.8
Marine	Total	25,827	100.0	30 - 90	7.4 - 15.0	0.3	2.7	2.0	5.0

Table 9: Indicators for Burien's Lake and Marine Shorelines

The no-net-loss planning metric provides an indicator of where ecological function is most concentrated within the shorelines. This metric is logically based on a strip of land 1' wide and 200' deep which can then be summed over any length of shoreline and averaged. One can use the same strategy to compute the total value of the metric for the entire shoreline and then compute the portion of this total for each of the partitions identified in Table 9.

The result of this is shown in Table 10. This view of the information confirms the expectation that UC-NA represents a greater fraction of the total ecological function than its relative length would suggest while SR-HA represents a smaller fraction than its relative length. This view of the planning metric also emphasizes that the ecological function that is present in SR-HA is heavily skewed to the second 100' from OHWM.

Circumstances are reversed around Lake Burien. There is relatively little native vegetation around the lake, similar to level properties on the marine, and conditions are dominated by landscaping and impervious surface with the impervious surface typically in the 2nd 100' from OHWM.

	Style	Length		Metric as % of Total Score			
		(ft)	(%)	B	1st 100'	2nd 100'	Total
SR-LB	Level	5,374	100.0	10.0	74.1	18.5	100.0
UC-NA	Natural	5,811	22.5	2.6	17.0	13.1	32.7
SR-AL	Level	3,339	12.9	0.5	4.0	2.0	6.5
	Low	6,698	25.9	0.0	11.1	12.6	23.6
	High	2,197	8.5	0.0	9.2	4.9	14.2
	Undev	1,328	5.1	0.0	6.0	3.0	9.0
	Total	13,562	52.5	0.5	30.3	22.5	53.3
SR-HA	Exc 172	4,644	18.0	1.7	0.7	7.7	10.1
	172nd	1,810	7.0	0.7	0.0	3.3	3.9
	Total	6,454	25.0	2.4	0.7	10.9	14.0
Marine	Total	25,827	100.0	5.5	52.1	38.9	100.0

Table 10: Indicators for Burien's Marine and Lake Shorelines

7) Primary challenges to No Net Loss from Future Development

Meeting the no net loss standard in Burien's altered urban shoreline requires attention to a limited number of issues. Burien does not have any commercial or industrial development within the shoreline jurisdiction and there are no plans for such development within a 25 year planning horizon.

The shoreline is primarily public parks and private properties that are developed as single family residences. The Ruth Dykeman Children's Center on Lake Burien is a non-profit group home that is developed at a level that is comparable to the private homes around Lake Burien and it is subject to special planning rules in Burien's comprehensive plan.

Meeting the No Net Loss requirement is therefore primarily a matter of considering the patterns of development that are typical of redevelopment of private properties consistent with current zoning regulations.

7.1) Development Creep

Consideration of the No Net Loss standard in an altered urban environment comparable to Burien's suggests a focus on the question of *development creep*; a presumption by some parties that over time there is a natural desire for property owners to move towards OHWM. While some may debate the particulars of this pressure it is hard to claim that this concern is invalid. The question then is where this potential pressure will have the most influence in Burien.

7.1.1) Undeveloped private properties

There are 11 undeveloped private properties; one is a small unbuildable property on Lake Burien and the other 10 are in the Marine shoreline and specifically in SR-AL.

The private properties along the marine have a total footage of just over 800' i.e. approximately 3.1% of the marine shoreline by length. All of the properties include significant bulkheads. It is difficult to guess how any of these properties might be developed over a 20 year planning horizon. Seven of these properties are in an unaltered state with the exception of the bulkheads but the remaining three are being maintained in a less natural condition.

Three properties have not had any sales transactions in the last 30 years, three have not had transactions in over 20 years, and the remaining four have had more recent transfers. One of the undeveloped properties in M3-A was purchased in 2012.

7.1.2) Relocation of existing structures

Several elements of the SMP guidelines concern the possibility of existing homes being relocated; either the risk of adverse impacts if a home is relocated substantially closer to OHWM or the restorative benefit that might occur if a home is relocated substantially further from OHWM whether voluntarily or after unplanned destruction.

SR-LB: The properties around Lake Burien are on generally level ground with typical setbacks of 80 - 125'. The sewer pipe for this neighborhood is approximately 45' from OHWM which limits adverse alterations beyond that point.

UC-NA: It appears relatively unlikely that any of the structures in this area will be relocated. There is one private residence towards OHWM that was developed by subdividing an existing parcel on the extremely steep slope. This property could not be relocated at the top of the slope.

SR-AL: Almost 10% of this area is undeveloped; this includes the community beach. Approximately 65% of this area is impacted by steep slopes with homes at either the top or bottom of the slope. Nearly 1/2 of these homes are further constrained by the Indian Trail. It is believed that relocation of the homes across the slope will be relatively unusual. The final 25% of this area is generally level. Homes are typically towards the rear of these properties, with setbacks of 41' to 90' and these are candidates for relocation towards OHWM.

SR-HA: The proximity of roads and/or steep slopes means that none of these homes are plausible candidates for relocation.

7.1.3) Expansion of existing structures

This is likely to be the most common pressure for new development that presents a risk of adverse impacts.

SR-LB: This area is zoned as RS-7200 but existing development is generally consistent with RS-12000. The homes are typically setback 80' - 125' from OHWM on generally level ground. It is reasonable to expect that some of these homes will be candidates for expansion in a 20 year planning horizon.

UC-NA: Twelve of the thirteen private properties in this area are well outside shoreline jurisdiction. The remaining home is located on a challenging slope and hence is unlikely to be expanded.

SR-AL: This area is 52.5% of the marine shoreline and 50% of the properties are developed towards OHWM at the base of a steep slope. Many of these residences occupy a substantial fraction of the buildable space. However there are a number of more modest structures, some of which have not been renovated in many years that are candidates for meaningful redevelopment.

SR-HA: These properties are developed with levels of building coverage and impervious surface that approach or exceed the standards for RS-12000. If any of these homes are expanded it is likely to be on to existing impervious surface.

7.1.4) New accessory structures and appurtenances

It is reasonable to anticipate some desire for new accessory structures such as garages, beach cabanas, and tool sheds within shoreline jurisdiction.

SR-LB: Many of the homes around Lake Burien include garages and it is expected that new garages would be placed on the landward side of the existing primary residence. It has already been noted that the typical home is setback by more than 80' from OHWM and that the terrain is generally level and landscaped. It is reasonable to anticipate that some residents will have an interest in erecting small structures on the water ward side of the existing sewer pipe, i.e. within 45' of OHWM, if the updated SMP allows this.

UC-NA: The location of the existing homes and the steep terrain make it highly unlikely that private property owners will attempt to construct new accessory structures with 200' of OHWM..

SR-AL: It has been noted that approximately 25% of this planning area is on relatively level ground with typical setbacks of over 40'. A number of these homes include cabanas and it can be imagined that other property owners may have an interest in adding a structure of this type.

Approximately 50% of this planning area is developed with homes at the base of a steep slope. Typical setbacks are between 20' and 50' and the home tends to back in to the slope. This leaves relatively little room to add an accessory structure towards OHWM.

Approximately 20% of this planning area is developed with homes at the top of a steep slope. Many of these properties include an accessory structure at the base of the slope that is accessed by tram or steep walkway. It is feasible that other property owners would seek to add modest cabanas if allowed.

SR-HA: These properties are highly developed towards OHWM and it is relatively unlikely that residents will attempt to add accessory structures between the primary residence and OHWM. Most of the properties in this planning area either have garages or have relatively little room to construct a garage without major renovation to the home.

7.2) Shoreline stabilization

The SMP guidelines include several sections that are intended to limit the creation or expansion of new structures for flood hazard reduction or shoreline stabilization.

SR-LB: The level of Lake Burien varies by approximately 3' during the year. Approximately 3/4 of the properties include a bulkhead or retaining wall to stabilize the shore. The longevity of development around the lake suggests that the level of stabilization has achieved a steady state.

UC-NA: Most of the bulkheads in this area are located in Seahurst Park. These bulkheads are being removed or reconfigured over time to reduce the possible impacts of these structures.

SR-AL: With the exception of M1-A, the last few hundred feet of M3-C and all of M3-D, the properties in this planning area include substantial bulkheads. These are frequently well over 4' tall, some are over 8' tall, and experience heavy wave action on a regular basis. There is little likelihood that these structures can be removed.

SR-HA: Nearly every property in this planning area includes a bulkhead. These are relatively modest in size for M1-B, M4-A, and M4-B, somewhat more significant in M1-D, and stand well over 6' in M4-C. With typical setbacks of 25' - 35', excluding SW 172nd St, there is little likelihood that these structures can be removed

There is a concern that climate change will raise sea level over time and/or increase the severity of storms. This may introduce pressure to expand and reinforce existing bulkheads along the Marine. There is debate about the specifics of this effect but it is anticipated that, if necessary, this issue will be accommodated by changes to state regulation and hence should not receive particular attention in this update.

8) Summary

This analysis synthesizes the information provided in the *Supplement to the Shoreline Inventory* in a manner that facilitates an understanding of the broad patterns of development to be found in Burien's shorelines. The nineteen inventory segments are grouped in to four planning areas based on environment and development conditions.

Lake Burien is a fresh water lake and development conditions are relatively uniform. The lake is zoned as RS-7200 but current conditions are broadly consistent with RS-12000. These properties are extensively landscaped. The majority of the properties include shoreline stabilization but these are relatively modest structures that protect the property during the annual cycle of change in the level of the lake.

Approximately 22.5% of the marine shoreline, by length, is in a relatively natural condition with abundant native vegetation. The primary alterations in this area are to support public access at Seahurst Park. This park has received significant attention to restore conditions with a focus on reconfiguring the bulkheads.

Approximately 52.5% of the marine shoreline is altered. This area is zoned as RS-12000 and conditions are generally consistent with this designation. Much of this area is impacted by steep slopes and these slopes are where native vegetation is particularly common. The majority of these properties include substantial bulkheads.

The final 25% of the marine shoreline is highly altered particularly in the first 100' from OHWM. Most of these properties include bulkheads but they are generally less substantial than in the remainder of the marine Shoreline Residential environmental designation.

The variety of conditions within these planning areas suggests that it is appropriate to define four dimension standards for regulating new development within Shoreline Jurisdiction.

Supplement to the Cumulative Impacts Analysis

This document is a supplement to the Cumulative Impacts Analysis that was prepared by Reid Middleton in August 2009 as an element of the City of Burien Shoreline Master Program (SMP) Update. This supplement provides an additional level of detail and an updated analysis based on the latest version of the Burien SMP.

1) Executive Summary

The Burien SMP consists of a package of policies and regulations that are designed to meet or exceed the goals of the Shoreline Management Act of 1971 (RCW 90.58) as reflected in the Shoreline Master Program Guidelines of 2003 and 2011 (WAC 173-26).

The policies and regulations in the Burien SMP include, but are not limited to

1) a variable width Shoreline Buffer
2) a variable width Vegetation Conservation Buffer
3) adoption of Burien's Critical Area Ordinances (CAO) by reference with minor exceptions
4) regulation for flood hazard reduction and shoreline stabilization

The preparation of the Supplement to the Shoreline Inventory demonstrated that development conditions in Burien's urban shoreline vary considerably particularly along the Puget Sound shoreline. The inventory identified 19 Shoreline Inventory Segments, 18 of them along the Marine, based on typical setbacks, density of impervious surfaces, density of natural vegetation, impacts based on terrain, and development impacts from existing roadways. The boundaries for these segments is based on these development conditions and well defined geographical markers.

The Supplement to the Shoreline Analysis and Characterization demonstrated that it is reasonable to assign each Inventory Segment to one of four Shoreline Planning Areas based on existing development patterns.

The SMP includes new regulations that place particular limits on new development within a Shoreline Buffer and a Vegetation Conservation Buffer. The dimensions of these buffers is fixed within a given Shoreline Planning Area but vary along the Shoreline.

This analysis will consider each planning area in turn and demonstrate that the SMP includes the policies and regulations that are required to meet the SMP guidelines, with particular attention to the no net loss standard, in the context of reasonably foreseeable future development.

2) Review of the Supplements to the Shoreline Inventory and Analysis

The original Shoreline Inventory developed by Grette Associates LLC partitioned Burien's shoreline in to five Shoreline Inventory Reaches; one for all of Lake Burien and four for the shoreline along Puget Sound. The original Shoreline Analysis and Characterization noted that Inventory Reach M2 is in a comparatively natural condition and assigned this reach to the Urban Conservancy environmental designation while the remaining reaches were assigned to Shoreline Residential. However most of the remaining discussion treated these reaches as if the environment and existing conditions were relatively consistent.

The *Supplement to the Shoreline Inventory* confirmed the decision to use two environmental designations and verified that development conditions around Lake Burien are reasonably uniform. However the additional detail in this supplement demonstrated that conditions within M1, M3, and M4 vary to a degree that was not evident in the initial inventory. The Supplement to the Shoreline Inventory surfaced this variation by refining the 5 Inventory Reaches into 19 Inventory Segments; one segment matches all of Lake Burien and the remaining 18 segments are along Puget Sound.

The *Supplement to the Shoreline Analysis* organized these segments in to 4 planning areas; one for Lake Burien (SR-LB), one for M2 (UC-NA), and two for the segments in M1, M3, and M4 based on the intensity of development adjacent to OHWM (SR-HA and SR-AL).

Figure 1 provides an indication of the boundaries of the 5 Inventory Reaches and the 19 Inventory Segments. Figure 2 indicates the aggregation of the Inventory Segments in to 4 Shoreline Planning Areas. Note that there are cases in which two or more adjacent Inventory Segments may be assigned to the same Shoreline Planning Area.

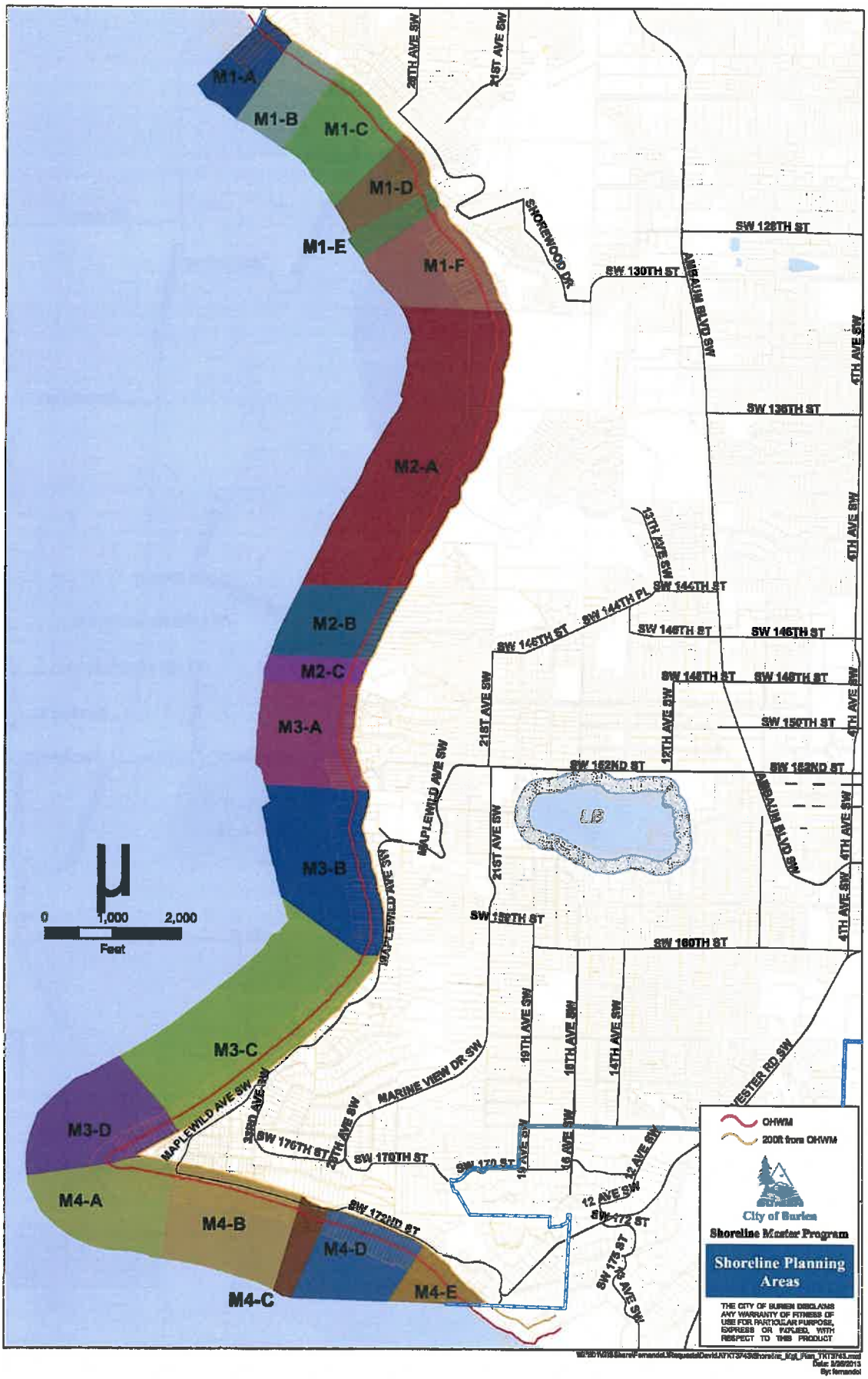


Figure 1: The Shoreline consists of 5 Inventory Reaches and19 Inventory Segments

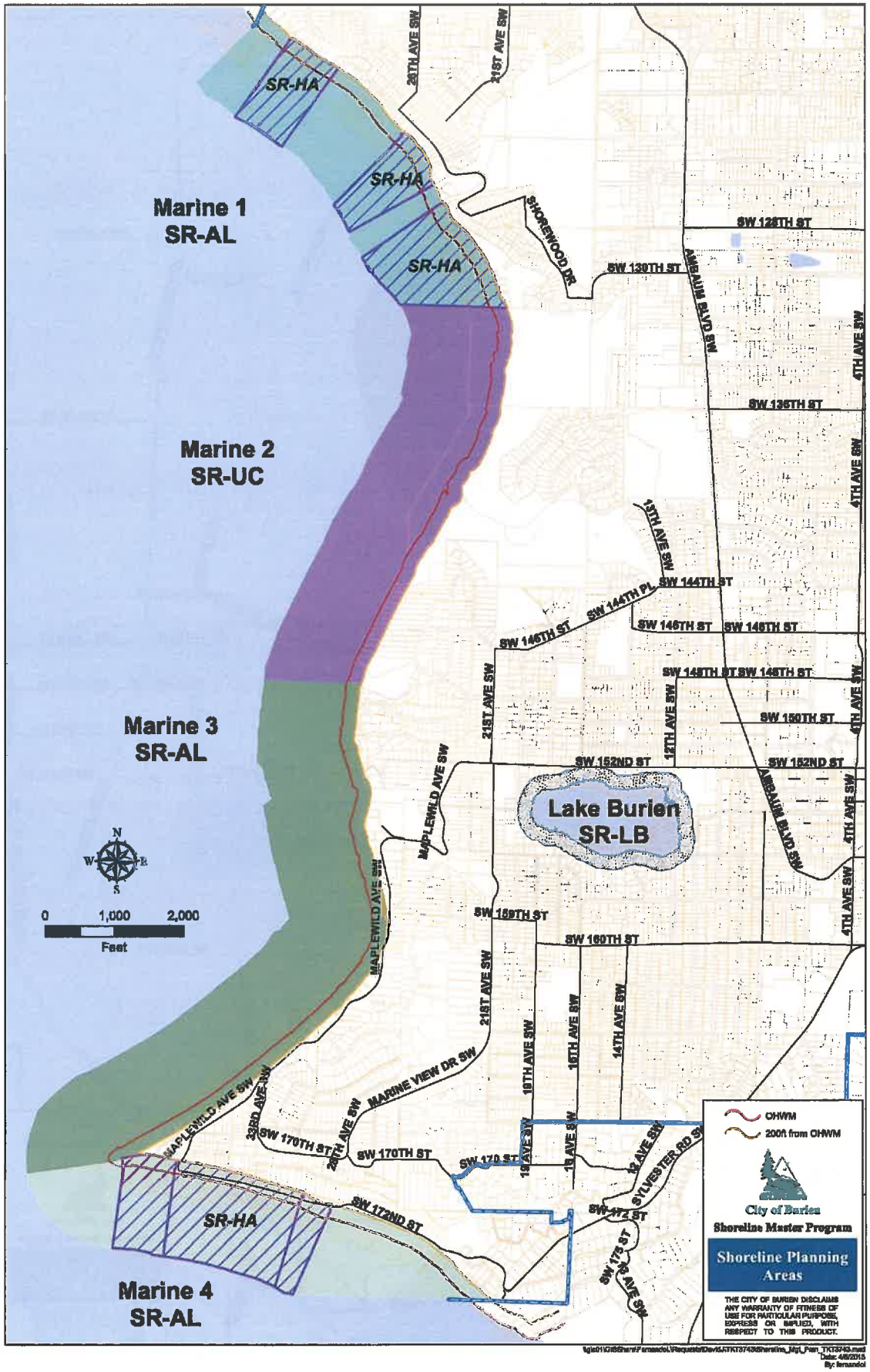


Figure 2: The Shoreline consists of 4 Planning Areas

The Supplement to the Analysis introduced a *Planning Metric* that provides a numerical measure that is correlated to the level of ecological function. A metric value of 0 implies little or no remaining ecological function and 10 implies largely natural function. Please refer to the analysis document for more detail on the developments of estimation of this metric.

Table 1 provides a review of a few of the more significant indicators of existing development grouped by Planning Area and style of development taken from the Supplement to the Shoreline Characterization and Analysis. Recall that the indicators for setbacks and area are *typical* values, values between the 25th and 75th percentile, and not the full range of values.

	Style	Length		Setback	Area (sq. ft.) (000's)	Metric			
		(ft)	(%)			B	1st 100'	2nd 100'	Total
UC-NA	Natural	5,811	22.5	> 200	46.3 - 69.6	0.7	4.9	3.0	8.6
SR-AL	Level	3,339	12.9	41 - 90	11.3 - 19.0	0.3	1.1	0.5	2.0
	Low	6,698	25.9	20 - 50	6.8 - 15.6	0.0	2.7	1.9	4.7
	High	2,197	8.5	126 - 233	13.9 - 21.2	0.0	4.7	1.2	6.0
	Undev	1,328	5.1	NA	11.4 - 32.1	0.4	5.3	2.6	8.3
	Total	13,562	52.5	30 - 94	8.2 - 17.5	0.0	3.0	2.2	5.2
SR-HA	Exc 172	4,644	18.0	25 - 35	5.0 - 8.5	0.5	0.2	2.2	2.9
	172nd	1,810	7.0	70 - 95	7.2 - 10.4	0.5	0.0	2.4	2.9
	Total	6,454	25.0	25 - 75	5.2 - 9.4	0.5	0.1	2.3	2.9
Marine	Total	25,827	100.0	30 - 90	7.4 - 15.0	0.3	2.7	2.0	5.0
SR-LB	Level	5,374	100.0	80 - 125	15.1 - 26.1	0.2	1.8	0.5	2.5

Table 1: Indicators for Burien's Marine and Lake Shorelines

The supplement to the analysis also considered the applicability of the Department of Ecology's Potential No Net Loss Indicators from chapter 4 of the SMP Handbook to Burien's shoreline. Ten of the indicators were determined to be particularly relevant to Burien's Shoreline and five of those were deemed to be particularly amenable to development planning activities. These five indicators are repeated in Table 2.

Indicator	Functions Affected
Impervious surface area (acres or percentage)	Water quality and habitat
Vegetation coverage in shoreline buffer; acres/percent by class	Water quality and habitat
Shoreline stabilization; Linear feet of bulkheads, retaining walls, etc.	Sediment supply
Piers/docks/floats, overwater structures; number or sq. ft.	Water quality and habitat
Wetlands acreage	Water quality

Table 2: Applicable No Net Loss indicators from SMP Handbook

More information on Inventory Segments, planning areas, and Indicators for No Net Loss can be found by reference to the aforementioned documents.

The Burien SMP incorporates a strategy for managing new development in the shoreline that includes a Shoreline Buffer, a Vegetation Conservation Buffer, and standards for flood hazard reduction and shoreline stabilization. This strategy is tailored to the four planning areas by customization of the sizes of the Shoreline Buffer and Vegetation Conservation Buffer as reflected in BMC 20.30.050 Dimensional Standards for Shoreline Development. Table 3 repeats that information with the addition of the allowed total impervious surface coverage for the underlying zoning designations.

	UC-NA	SR-LB	SR-AL	SR-HA
Shoreline Buffer Zone 1	50 ft	30 ft	30 ft	20 ft
Shoreline Buffer Zone 2	100 ft	15 ft	15 ft	15 ft
Vegetation Conservation	200 ft	150 ft	150 ft	150 ft
Lot Size	RS-12,000	RS-7,200	RS-12,000	RS-12,000
Building Coverage	30%	35%	35%	35%
Impervious Surface Coverage	45%	70%	45%	45%

Table 3: Dimensional Standards for Shoreline Development

UC-NA: Urban Conservancy
SR-LB: Shoreline Residential - Lake Burien
SR-AL: Shoreline Residential - Marine altered
SR-HA: Shoreline Residential - Marine highly altered

3) No Net Loss and Reasonably Foreseeable Future Development

The Department of Ecology is required to review the proposed updates to every jurisdiction's Shoreline Master Program to assure that it is consistent with Shoreline Master Program Guidelines of 2003 and 2011 (WAC 173-26).

A central element of this review is to verify that the SMP will assure no net loss of ecological function as a result of reasonably foreseeable future development. Presentations by the Department of Ecology (DOE) in Burien and discussions with representatives of DOE indicate that a primary concern is that, over time, there is a common trend for development to move closer and closer to OHWM and hence impact the ecological function and habitat of the shoreline.

This section considers the likely pressures for future development, evaluate the effectiveness of the update to the SMP to manage these pressures, and demonstrate that the no net loss standard is likely to be achieved. It is convenient to consider this standard for each Planning Area in turn.

This evaluation considers four dominant styles of possible development

- Development of currently undeveloped properties
- Maintenance and redevelopment of existing structures
- Addition of new structures to developed properties
- Restoration activities

In each case the attention is focused on the likelihood that the development activity will increase the overall levels of impervious surface and partially functioning surfaces at the cost of existing natural vegetation. This concern grows as the new development approaches OHWM.

It is important to note that Burien's shoreline is primarily public parks and privately owned parcels that are zoned as, and developed as, single family residences. There is no commercial development in Burien's shoreline and there is no expectation that commercial activities or multi-family residences will be allowed in the future.

3.1) Lake Burien (SR-LB)

Lake Burien is a fresh water lake of slightly over 1 mile in perimeter with 70 waterfront properties and 8 upland properties within Shoreline Jurisdiction. The lake is zoned as RS-7200 but existing development conditions are generally consistent with RS-12000; typical lot sizes are 15K to 26K sq. ft., building coverage is generally close to 35%, and impervious surface coverage is generally closer to 45% than 70%.

These properties are extensively landscaped and there is little mature native vegetation. Approximately 2/3 of the properties include bulkheads or retaining walls and approximately 2/3 of the properties include docks.

Approximately 10 of the properties include a Category 2 wetland; two of these are significant in size. These wetlands are protected by the Critical Area Ordinances that are adopted by reference into the SMP.

Undeveloped properties

There are two vacant waterfront properties on the lake; one is a TRCT parcel that is co-owned by the three properties directly behind it, and the other is a small parcel that appears to be unbuildable.

The RS-7200 zoning code provides opportunities for sub-division. While it must be assumed that this will occur over a 20 year planning horizon, it is believed that it will be relatively uncommon in practice. Excluding the Ruth Dykeman Center, the typical property is 60' - 86' wide and 185' - 290' deep with a building setback of 80' - 125' from OHWM. This suggests that if subdivision were to occur on a typical property, it would tend to create new upland properties rather new waterfront properties and would tend to impose the expense of relocating the existing primary structure. This is expected to dampen enthusiasm for this activity. When sub-division does occur it is unlikely to impact many of the indicators in Table 2 other than total impervious surface area in shoreline jurisdiction.

The Ruth Dykeman Children's Center is defined as a special planning area in Burien's comprehensive plan and hence will be subject to special oversight if there are ever efforts to redevelop this property.

If these assumptions prove to be incorrect then the City will have the ability to revisit the zoning code and dampen the opportunity for sub-division.

Redevelopment of existing structures

It appears that the primary driver for new development over a 20 year planning horizon will be redevelopment and renovation of existing primary structures. Many properties are already developed at a level that approaches the allowed building coverage and there is little reason to believe that there will be significant efforts to increase total impervious coverage in the absence of building expansion.

Reference to Table 2, the primary indicators of no net loss, suggests that this class of redevelopment will have little impact on any of the indicators other than incremental increases in total impervious surface area. This will primarily come at the expense of the total area of lawns and flower beds.

Addition of new structures

The Shoreline Analysis identified two primary drivers for additional structures in SR-LB; cabanas and garages. BMC 20.30.095 (2.g) specifically precludes the addition of new accessory structures within the Shoreline Buffer. New garages are likely to be constructed on the landward side of the primary structure.

Opportunities for Restoration

Public comment during the development of the Burien SMP focused attention on the role of storm water management to maintain water quality; a common theme in SMPs in urban jurisdictions. Although the city's Storm Drainage Master Plan is not part of the SMP the requirements of this plan may well represent the best single opportunity to maintain the health of this shoreline over time.

3.2) Marine Reach M2 (UC-NA)

This reach represents approximately 22.5% of the length of the marine shoreline. The abundant dense native vegetation which continues for many 100's of feet beyond shoreline jurisdiction means that this reach contains a substantially larger fraction of the total ecological function along this shoreline than its length would suggest.

Seahurst Park is just under 75% of the reach and, slightly ironically, this park contains most of the alterations along the reach. The Seahurst Park Master Plan, initiated in 2002, called for the expenditure of over $11M of public money to restore the natural quality of this park with a focus on removing and reconfiguring the bulkheads and seawall.

The remainder of the reach is in a nearly natural condition and this is unlikely to change in a 20 year planning period. This portion of the reach includes particularly steep slopes and all but one of the private homes along this reach have been constructed at the top of this slope. The combination of the steep slope, the city's Critical Area Ordinances for steep slopes, the 150' shoreline buffer, and the 200' vegetation conservation buffer all but eliminates the likelihood that there will be adverse impacts from new development along this portion of the reach.

Undeveloped properties

All of the private waterfront properties in UC-NA have been developed, primarily along 25th Ave SW and 100's of feet from OHWM. These properties are considerably larger than 12,000 sq. ft. but most of the area is on the very steep slopes adjacent to OHWM. This suggests that it is unlikely that there will be significant pressure to sub-divide and then develop adjacent to OHWM.

Redevelopment of existing structures

All but one of the private properties are developed along 25th Ave SW. The steep slopes, the vegetative conservation buffer, and the shoreline buffer make it unlikely that these homes will be relocated towards OHWM. Any expansion of these homes will be well outside shoreline jurisdiction.

Addition of new structures

New accessory structures are expected to be constructed towards the current location of the existing structures and hence generally well outside of shoreline jurisdiction. There is one private residence within shoreline jurisdiction but the challenging terrain makes it unlikely that there will be an effort to construct an accessory structure.

Opportunities for Restoration

The primary opportunities for continued restoration are within Seahurst Park.

There is an additional opportunity for the public to create new permanently protected areas. This would require offering to purchase private land at the base of the steep slopes in M2-B with the associated sub-division to create tax parcels. This would not have an immediate impact on ecological function but it would add this land to permanently protected areas within shoreline jurisdiction.

3.3) Highly altered portions of the Marine (SR-HA)

Shoreline inventory segments M1-B, M1-D, M1-F, M4-A, M4-B, an M4-C have been identified as being highly altered, to contain little or no environmental function within the first 100' from OHWM, and to be relatively immune to adverse impacts from new development. In total these represent approximately 25% of the length of the marine shoreline and a substantially smaller fraction of the existing ecological function.

M4-B is the set of homes on the landward side of SW 172nd St and the remaining segments consist of relatively densely packed homes between a roadway and OHWM.

The Burien SMP replaces the existing 20' setback from OHWM with a 35' shoreline buffer. The first 20' of this buffer, zone 1, plays a role that is comparable to the current setback, and the next 15' of the shoreline buffer provides for limited expansion with mitigation if required. This planning area is also subject to the steep slope elements of the adopted CAO and a vegetation conservation buffer of 150'.

The *Supplement to the Shoreline Inventory* and the *Supplement to the Shoreline Analysis and Characterization* demonstrated that SR-HA has little or no ecological function and is dominated by impervious surface. Almost all of this portion of the shoreline includes bulkheads although they are generally less substantial than is typical for the Marine.

Undeveloped properties

There are no undeveloped waterfront properties in this planning area. However there are substantial levels of mature native vegetation on the landward side of the roads in M1-B and M1-F and behind the homes in M1-D and M4-B. The steep slopes and the vegetation conservation buffer will limit new development on those portions of this planning area.

Redevelopment of existing structures

This planning area is zoned as RS-12000 and the existing structures and total impervious surface coverage are generally at, or perhaps beyond, the allowed limits. The majority of the area around the structures is impervious surface and limited levels of partially functioning area. Any expansion of the existing structures, in the event it is allowed, is unlikely to create new impervious surface.

Addition of new structures

There is relatively little room to construct new structures towards OHWM in this planning area and BMC 20.30.095 (2.g) explicitly disallows new accessory structures within the Shoreline Buffer. The presence of roadways and steep slopes on the landward side of the primary residences is likely to limit applications to construct additional structures.

Opportunities for Preservation

The land adjacent to the structures are constrained by roads and/or steep slopes and there is limited space to install native vegetation between the homes and OHWM. There are few if any opportunities for incremental restoration adjacent to the structures e.g. installation of native vegetation.

It is conceivable that the public could choose to make offers to the existing property owners to purchase those portions of this planning area that are in relatively natural condition and hence add this land to the permanently protected area.

3.4) Altered portions of the Marine (SR-AL)

This planning area represents approximately 52.5% of the length of the marine shoreline. Conditions are substantially altered with single family residences but there are meaningful levels of native vegetation within shoreline jurisdiction. The variety of development patterns within this planning area adds some complexity to the evaluation.

The Burien SMP replaces the existing 20' setback from OHWM with a 45' shoreline buffer. The first 30' of this buffer, zone 1, plays a role that is comparable to the current setback, and the next 15' of the shoreline buffer provides for limited expansion with mitigation if required. This planning area is also subject to the steep slope elements of the adopted CAO and a vegetation conservation buffer of 150'.

Undeveloped private waterfront properties

All of the undeveloped waterfront properties in the Marine shoreline are in this planning area totaling approximately 3% of this shoreline by length. There are ten undeveloped parcels; one in M1-C, two in M3-A, three in M3-B, two in M3-C, and two in M4-D. All of these properties are substantially impacted by steep slopes and include substantial bulkheads.

M1-C: this property is approximately 60' wide and 330' long and stretches over a steep slope between Shorewood Dr SW and OHWM. Neighboring properties are generally developed towards the street, outside shoreline jurisdiction and the constraints of the Burien SMP will drive new development towards this location. Development at the bottom of the slope will require a shoreline variance.

M3-A: these two properties are adjacent to each other. The neighboring properties are developed at the bottom of the steep slope; perhaps because of constraints imposed by the slopes and the location of 28th Ave SW. If these properties are developed it appears it will be necessary to rely on the shoreline variance process.

M3-B: The first undeveloped property is approximately 200' wide and 600' deep. It is on a steep slope and is fully vegetated and is separated from the local roadways. Development within shoreline jurisdiction appears to be challenging without a shoreline variance.

The second property is at about the midpoint of this segment and is located along Mapelwild Ave SW. It is approximately 60' wide and 260' deep. Neighboring properties are developed at both the top and the bottom of the slope but the immediately adjacent properties are developed at the base of the slope. The common line setback element of the Burien SMP would appear to support development at the base of the slope although doing so is likely to result in an adverse impact.

The final undeveloped property in this segment consists of 2 waterfront tax parcels and 4 upland tax parcels. Development on the waterfront parcels would likely require a shoreline variance.

M3-C: The two undeveloped properties in this segment are located towards the steepest portion of the Indian Trail. Both of these properties consist of two tax parcels; one on either side of the Indian Trail. Both properties are significantly impacted by steep slopes and include bulkheads. Development of these properties will be constrained by the adopted CAO, the vegetation conservation buffer, and the shoreline buffer.

M4-D: The first property, towards the north end of this segment, is approximately 60' wide and 260' deep. This property consists of two sections of relatively level ground with a narrow steep slope approximately half-way between OHWM and SW 172nd St. The slope includes significant native vegetation but the level portions are partially functioning areas that appear to be maintained. The lower portion shows evidence of a legacy foundation although the King County assessors database does not include a record of a structure. The property includes a bulkhead.

The second property is approximately 60' wide and slightly over 200' deep. The property is relatively level for 125' from SW 172nd St. The remaining land is a steep slope to the significant bulkhead. A

club house has been constructed adjacent to the bulkhead. It appears that this property is co-owned by several properties on the landward of SW 172nd St.

It is to be expected that some, or even all, of these properties will be developed during a 20 year planning horizon although it must be noted that, with the exception of the club-house in M4-D, none of these properties have been developed during the previous 20 years. A strict application of the Burien SMP will be an obstacle to development towards OHWM for all of these properties. If development occurs then it is likely to be towards the rear of the property, often beyond shoreline jurisdiction, or the development effort will require a shoreline variance.

Relocation of existing structures

The *Supplement to the Shoreline Analysis* partitioned these properties into four categories based on the location of the primary residence and provided several indicators of development; this is repeated as Table 1 of this document. Consideration of these categories reveal five important patterns for relocation of an existing structure:

1) Relocation of a home on **level** ground
2) Relocation of a **low** home to another location at the base of the slope
3) Relocation of a **high** home to another location at the top of the slope
4) Relocation of a **low** home to the top of the slope so that it becomes a **high** home
5) Relocation of a **high** home to the bottom of the slope so that it becomes a **low** home

Level properties are approximately 24.6% of SR-AL and 12.9% of the marine shoreline by length. The typical setback from OHWM is 41' to 90' and homes are currently generally towards the rear of the property with mature landscaping to OHWM. The homes within each segment tend to be developed at a consistent distance from OHWM which allows each home to enjoy an unhindered view; this tends to relieve some of the pressure that would cause homes to creep forward over time.

The shoreline buffer for this planning area is 45' deep. Although the SMP allows for new impervious surface within zone 2 of this buffer, the requirements for mitigation sequencing prefers that the adverse impact not be made. This indicates a preference not to relocate the structure to impose on the shoreline buffer at all. If the structure were to enter zone 2, there would be a requirement to mitigate the adverse impact with new native vegetation in zone 1 hence achieving No Net Loss.

Low properties are approximately 49.4% of SR-AL and 25.9% of the marine shoreline. The typical setback for these properties 20' to 50' i.e. the majority of the homes are already partially within the shoreline buffer. Further the home is typically a substantial fraction of the width of the property. This all but eliminates the pressure to relocation of a low home elsewhere at the base of the slope.

High properties are approximately 16.2% of SR-AL and 8.5% of the marine shoreline. There is generally relatively little space at the top of the slopes and so it is also unlikely that there much effort to relocate a home at the top of the slope to some other location at the top of the slope.

It is unlikely that many home owners will be inclined to relocate a home that is at the base of s steep slope to the top of the slope. However even if this were desired many of these homes could not be moved to the top of the slope due to property boundaries or a lack of space at the top of the slope.

It is to be expected that some of the owners of homes at the top of a steep slope would be interested in having homes at the base of a steep slope. These properties are heavily vegetated at the base of the slope and there is generally relatively little land available. The 45' shoreline buffer can be expected to eliminate this class of re-development without the use of a shoreline variance.

Expansion of existing structures

A consideration of the impact of expanding existing structures follows a similar pattern but with fewer combinations to consider.

The majority of homes on level ground are currently landward of the shoreline buffer. A significant fraction of these are unlikely to intrude on the buffer for typical levels of expansion. Expansion of the few homes that are currently close to the shoreline buffer might create new impervious surface in Zone 2 but this will trigger compensatory mitigation with a preference for restoration in Zone 1 to achieve no net loss.

A similar line of argument applies to homes that are located at the base of a steep slope. However the typical setback of these homes is currently 20' to 50' which means that many of these homes are already partially in Zone 2. Some expansion may occur, with compensatory mitigation as required, but the SMP will curtail this pattern of development.

The typical setback for the high homes is approximately 125' to 235' which means that expansion of these homes will be well outside shoreline jurisdiction.

Addition of new structures

The Supplement to the Shoreline Analysis and Characterization partitioned the developed properties into three broad categories; those on generally level ground, those that are developed at the base of a steep slope and generally towards OHWM, and those that are developed at the top of a steep slope towards the landward edge of Shoreline Jurisdiction.

The properties on level ground have typical setbacks of 41' to 90' and generally have little or no native vegetation. BMC 20.30.095 (2.g) explicitly disallows new accessory structures within the Shoreline Buffer i.e. within 45' of OHWM which will tend to leave very little space for new structures between the primary residence and OHWM. Most of the homes have garages on the landward side of the primary residence and this is the expected location for any new garages.

The properties at the base of the steep slopes have typical setbacks of 20' to 50' i.e tend to overlap with the new Shoreline Buffer. There is therefore little opportunity to construct new accessory structures on the waterward side of the primary residence and little room for new structures between the primary structure and the slope. This will tend to force any new structures towards the top of the slope and, generally, towards the landward edge of Shoreline Jurisdiction.

Many of the properties that are developed at the top of the slope include accessory structures at the base of the slope and within the new Shoreline Buffer. BMC 20.30.095 (2.g) will prevent the creation of new accessory structures in this region.

Opportunities for Preservation

Ignoring the few small public street ends the shoreline properties in this planning area are privately owned. Ten properties, approximately 5.9% of this planning area by length or 3.1% of the marine shoreline, is undeveloped excluding the two community owned properties. These ten properties have been discussed in some detail in this report and it was noted that 8 of these are in a relatively natural condition. The public could consider seeking opportunities to purchase one or more of these properties and safeguard them from future development.

In addition there are a small number of developed properties with significant native vegetation that include a primary structure that is in a distressed condition. The public could choose to purchase some of these properties, remove the structure, and safeguard them from future development.

Focusing on preservation of these undeveloped or distressed properties may be more cost efficient than efforts to purchase developed properties and then restoring them to natural conditions.

4) Conclusion

This supplement has demonstrated that the update to the Burien SMP, as a package, meets the goals of the SMA and the requirements of the SMP Guidelines. The policies and regulations of Burien's SMP will assure No Net Loss from reasonably foreseeable future development.

Appendix X

Under Washington State Shoreline Management Act Guidelines [WAC 173-26-186(8) & WAC 173-26-201(2)(c)] all new development, activities and uses must meet the standard of no net loss of ecological functions and shoreline processes, and to meet no net loss, mitigate any adverse impacts of new development.

The Burien Shoreline Master Program (SMP), Title 20, has been updated and reviewed by the Department of Ecology for consistency with Chapter 90.58 RCW and WAC 173-26 and defines the policies and regulations that must be observed for new development within Burien's Shorelines.

Development activities within Shoreline Jurisdiction that are subject to review under the Shoreline Master Program include, but are not limited to,

- Addition or removal of impervious surface (e.g. structures, pathways, and driveways).
- Addition or removal of native vegetation (BMC 20.30.040)
- Addition or restoration of partially functioning areas (BMC 20.40.101)
- Installation or alteration of Flood Hazard reduction structures (BMC 20.30.030)
- Installation or alteration of Shoreline Stabilization Structures (BMC 20.30.070)
- Installation or alteration of Docks, Piers, and Floats (BMC 20.30.075)

An important component of the provisions that achieve the no net loss standard is the definition of a Shoreline Buffer adjacent to Ordinary High Water Mark (OHWM) in which new development is subject to additional review. The dimensions of this buffer are tailored to the varied conditions that are observed along Burien's shoreline at the time of the update.

Developments with significant impacts within Burien's regulated Shoreline are likely to require the assistance of a qualified professional to demonstrate that a proposed development meets the requirements of the Burien Shoreline Master Program. Examples of projects that are more likely to require this level of support include the construction of a new primary residence on a property that is currently undeveloped and projects that require the installation of, or the expansion of, structures for flood hazard reduction or shoreline stabilization.

Developments with less significant impacts may be able to demonstrate that the no-net-loss provisions can be met by reference to a worksheet that is included in Section X.3 of this appendix. It is particularly appropriate for the remodeling, renovation, and reconstruction of an existing structure, for minor expansions of existing structures, and for the construction of minor appurtenances. Use of this worksheet provides predictability and is intended to reduce cost and complexity in satisfying the permitting process.

X.1 Shoreline Buffers

The Burien SMP [BMC 20.30.050 and 20.30.055] defines a Shoreline Buffer adjacent to Ordinary High Water Mark (OHWM) in which new development is subject to enhanced review to assure no net loss. All development within this buffer must demonstrate that unavoidable adverse impacts are mitigated to achieve no-net loss.

Achieving no net loss can be done by avoiding an adverse impact, relocating the adverse impact to be outside the buffer, or by mitigating the impact. Demonstrating that the development will achieve the no net loss standard can be achieved by reference to an ecological impacts report developed by a qualified professional, or by reference to the worksheet in X.3. The Shoreline Administrator may define standards to guide the development of this report.

The Shoreline Buffer is further divided in to two zones, Zone 1 and Zone 2, with Zone 1 adjacent to OWHM and Zone 2 adjacent to the landward edge of Zone 1. The depth of these zones is based on existing patterns of development and hence varies along the Shoreline. The dimensions of the buffer for a given site can be determined by reference to BMC 20.30.050 and subsection X.?

X.1.a Development Standards for Zone 1

It is intended that new development in Zone 1 will be primarily for the maintenance of existing structures, the restoration or remodeling of existing structures within the existing footprint, voluntary restoration activities, or required mitigation for adverse impacts in Zone 2.

The primary exception to this prohibition on adverse impacts is to develop an access path from Zone 2 to the line of OHWM. This access path should be the minimum size and design to serve this purpose and respect the safety of its intended users. Additional flexibility may be required to meet the needs of users with limited mobility.

X.1.b Development Standards for Zone 2

It is intended that new development in Zone 2 will be primarily for the maintenance of existing structures, the restoration or remodeling of existing structures within the existing footprint, or for voluntary restoration activities. However new developments that result in adverse impacts, for example a modest expansion of an existing structure, may occur so long as these impacts are mitigated to achieve no net loss. It is likely that successful mitigation will be more easily achieved in Zone 1 but it is also possible to mitigate adverse impacts by improvements in Zone 2.

X.1.c Additional considerations

BMC 20.30.030 (2.f) and BMC 20.30.070 (2.e) limit new shoreline development that require the need for shoreline stabilization and structural hazard reduction measures for the life of the development. This regulation must be considered if the development requires the installation of, or the expansion of, structures for flood hazard reduction or shoreline stabilization.

X.2 Mitigation Sequencing

Consistent with WAC 173-26-201(2.e) it is necessary that, where required, mitigation measures shall be applied in the following sequence of steps listed in order of priority, with (A) of this subsection being top priority.

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

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

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

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

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

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

X.3 Demonstrating successful mitigation of unavoidable adverse impacts

This section provides a work sheet that may be useful to demonstrate that typical developments associated with Single Family Residences will meet the no net loss standard without a professional impacts report.

This worksheet provides a model for evaluating the costs of certain adverse impacts and the benefits of certain improvements. The scope of adverse impacts that can be evaluated are limited to the creation or expansion of impervious surface and the removal of existing native vegetation. Improvements are the removal or reduction of impervious surface and the introduction or expansion of native vegetation. BMC 20.40.101 defines partially functioning areas as areas that provide one or more reduced ecological functions, and is neither native vegetation of impervious surface. Ecological functions may include sediment removal, erosion control, pollution removal, wildlife habitat, and infiltration. Partially functioning areas specifically include lawns, slat decks that allow infiltration, and non-native landscaped areas.

Measure of adverse impacts in Zone 2

1)	Total square feet of new impervious surface	_____	X 4 points	= _____
2)	Total square feet of cleared native vegetation	_____	X 2 points	= _____
3)	Total cost (add 1 and 2)			_____

Benefit of adding native vegetation in Zone 1

4)	Total square feet of impervious surface eliminated	_____	X 4 points	= _____
5)	Total square feet of partially functioning area improved	_____	X 2 points	= _____
6)	Benefit of improvements in Zone 1 (add 4 and 5)			_____

Benefit of improvements in Zone 2

7)	Impervious surface to native vegetation (sq ft)	_____	X 2 points	= _____
8)	Partially functioning area to native vegetation (sq ft)	_____	X 1 points	= _____
9)	Impervious surface to partially functioning area (sq ft)	_____	X 0.5 points	= _____
10)	Benefit of improvements in Zone 2 (add 7 – 9)			_____

No Net Loss Indicator

11)	Cost of adverse impacts (line 3)	_____
12)	Total benefit of improvements (add 6 and 10)	_____

The project will meet the no net loss standard if line 11, the cost of adverse impacts, is less than or equal to line 12, the benefit of improvements.

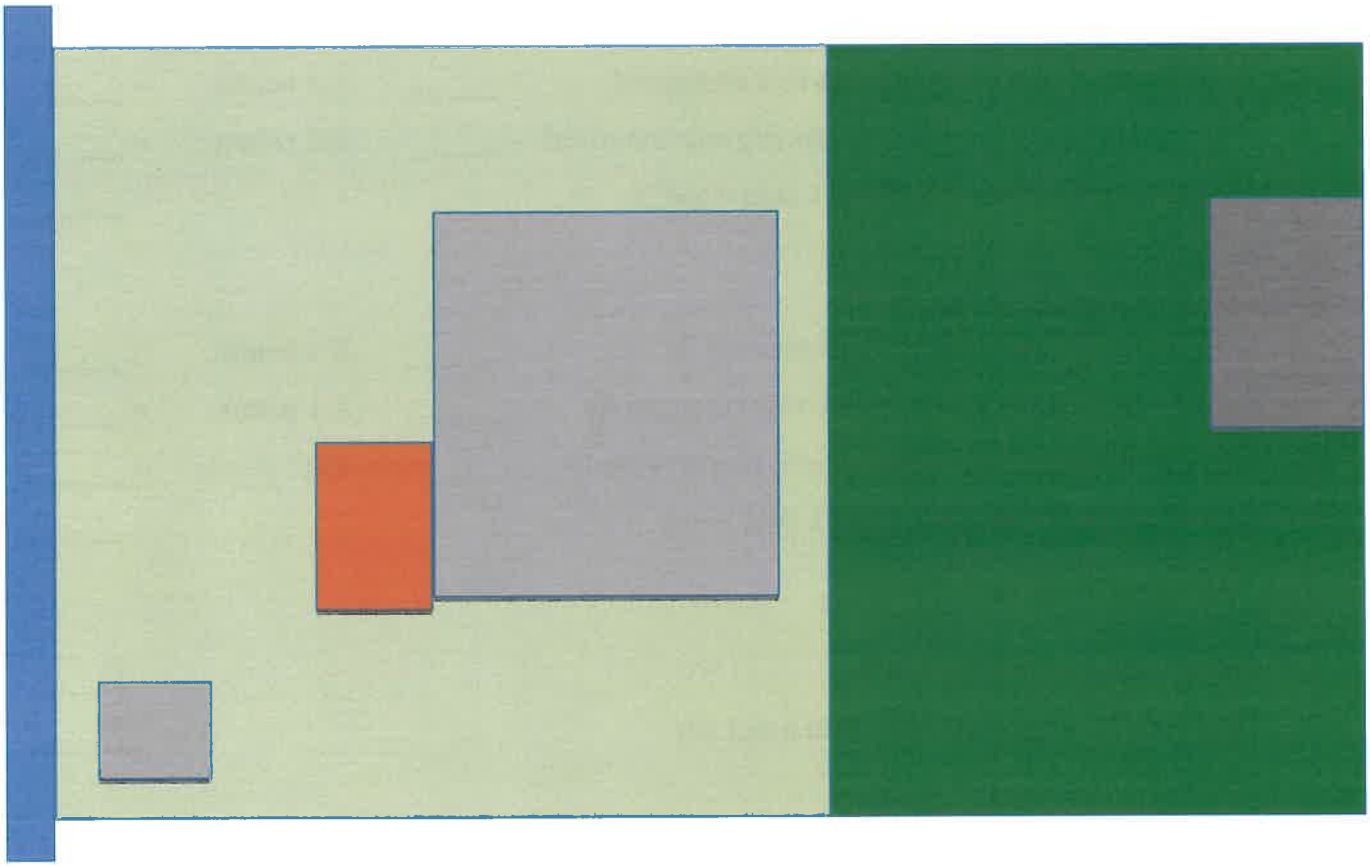
X.4 A worked example

A family is considering a new development in Burien's Marine shoreline within the SR-AL designation. This property is approximately 170' deep and 100' wide and stretches from the road to OHWM. There is a moderate slope towards the landward end of the parcel which is primarily native vegetation. There is a one car garage adjacent to the road and a residence a short distance water ward of the toe of the slope. This one story home was constructed in the early 1950's and is approximately 50' wide and 40' deep and is set back approximately 50' from the OHWM. A concrete patio, 20' wide and 15' deep, is attached to the water ward side of the home; this patio intrudes 10' into Zone 2 of the Shoreline Buffer. The land between the home and the bulkhead has been extensively landscaped with lawn and flower beds. There is a small, 15' by 15', cabana towards the bulkhead.

This family intends to expand the garage and update the primary structure; they plan to add a second story to the home and expand the footprint. The addition of the second floor will not exceed the 35' height limit. The slope at the rear of the home suggests that they expand the home towards OHWM. They decide to expand the home 15' towards OHWM by eliminating the patio and a 30' x 15' section of lawn.

They propose to remove the cabana and replace it with native vegetation. They will also revegetate a 15' x 30' section of landscaping adjacent to the cabana.

Figure 1: A graphic that depicts existing development conditions (Needs polish).



The existing garage is well outside the Shoreline Buffer and the proposed expansion will not require the removal of any vegetation and hence can be approved.

Adding a second story to the home does not increase the impervious surface area and will not exceed the 35' height limit. The expanded footprint will consume the concrete patio and replace 300 sq feet of lawn with new impervious surface

Measure of adverse impacts in Zone 2

1)	Total square feet of new impervious surface	200	X 4 points	= 800
2)	Total square feet of cleared native vegetation	_____	X 2 points	= _____
3)	Total cost (add 1 and 2)			800

Benefit of adding native vegetation in Zone 1

4)	Total square feet of impervious surface replaced	225	X 4 points	= 900
5)	Total square feet of partially functioning area replaced	450	X 2 points	= 900
6)	Benefit of improvements in Zone 1 (add 4 and 5)			1800

Benefit of improvements in Zone 2

7)	Impervious surface to native vegetation (sq ft)	_____	X 2 points	= _____
8)	Partially functioning area to native vegetation (sq ft)	_____	X 1 points	= _____
9)	Impervious surface to partially functioning area (sq ft)	_____	X 0.5 points	= _____
10)	Benefit of improvements in Zone 2 (add 7 – 9)			_____

No Net Loss Indicator

11)	Cost of adverse impacts (line 3)	800
12)	Total benefit of improvements (add 6 and 10)	1800

The use of this work sheet demonstrates that the proposed improvements in Zone 1 are sufficient to mitigate for the adverse impacts in Zone 2.

X.5 Shoreline Planning Areas

The Shoreline Inventory developed by Grette Associates partitioned the Burien Shoreline in to five (5) Inventory Reaches; four (4) along the Marine Shoreline and one (1) that encompasses the perimeter of Lake Burien. The Supplement to the Shoreline Inventory refined this coarse characterization in to nineteen (19) Shoreline Inventory Segments based on environment, existing development conditions, and well defined geographical markers. Finally the Supplement to the Shoreline Analysis and Characterization grouped the Inventory Segments in to four (4) Shoreline Planning Areas:

See BMC 20.30.050 Figure 6 for an image that indicates the location of these planning areas.

UC-NA The relatively natural conditions found in the Urban Conservancy designation
SR-LB Development around Lake Burien
SR-AL Altered portions of the Marine that generally include meaningful native vegetation
SR-HA Highly altered portions of the Marine with relatively little ecological function

See BMC 20.30.050 Figure 5 for the dimensions of Zone 1 and Zone 2 for the Shoreline Buffer in each Shoreline Planning Area.

See BMC 20.30.050 Figure 6 for an image that indicates the location of these planning areas.

The Urban Conservancy (UC-NA) planning area is bounded on the north by the northern end of Seahurst Park and on the south by the southern end of Eagle Landing Park.

The Shoreline Residential – Lake Burien (SR-LB) planning area encompasses all of Lake Burien

The Shoreline Residential – Altered (SR-AL) planning area groups 5 inventory segments along the Marine

1) A set of contiguous homes with addresses on SW Seola Lane at the northern border of Burien
2) A segment bounded on the north by the northern edge of the Shorewood Community Beach and at the south by the northern edge of those homes with addresses along Shorewood Lane SW
3) A substantial property at the mouth of Salmon Creek
4) An area bounded on the north by the southern end of Eagle Landing Park and at the south by the property at the tip of Three Tree Point
5) An area bounded on the north by the homes in the Seacoma Blvd development and the south by the City Limit with Normandy Park. The Seacoma Blvd development is a set of 9 waterfront homes in a small cul-de-sac off SW 172nd St at the point that this road begins to move away from Puget Sound.

The Shoreline Residential – Highly Alterned (SR-HA) planning area consists of the final 5 inventory segments

1) A set of contiguous homes with addresses on 30 Ave SW and bounded at the south by the Shorewood Community Beach
2) A set of contiguous homes with addresses on Standring Lane SW along that portion of the roadway that runs generally parallel to Puget Sound.
3) A set of contiguous homes along the South Beach edge of SW 171st St and SW 172nd St up to and including the 9 homes in the Seacoma Blvd cul-de-sac but not including the home at the tip of Three Tree Point.