



**SPECIAL/REGULAR CITY COUNCIL STUDY SESSION
WEDNESDAY, FEBRUARY 6, 2013
LOCATION: BAINBRIDGE ISLAND CITY HALL
280 MADISON AVENUE N., BAINBRIDGE ISLAND, WASHINGTON**

AGENDA

- 1. EXECUTIVE SESSION**
6:00 PM Collective Bargaining Negotiations, Issues, or Proceedings (RCW 42.30.140)
Property Disposition (RCW 42.30.110(1)(c))
- 2. CALL TO ORDER / ROLL CALL**
7:00 PM Mayor: Steven Bonkowski
Councilmembers: Anne Blair Debbi Lester
 Sarah Blossom Bob Scales
 Kirsten Hytopoulos David Ward
- 3. ACCEPTANCE OR MODIFICATION OF AGENDA / CONFLICT OF INTEREST DISCLOSURE**
7:05 PM
- 4. PRESENTATION**
7:10 PM
A. Subject: Green Power Challenge – 10 min.
Discussion Leaders: Puget Sound Energy Representatives
Discussion Goal: Information only.
- 5. STAFF INTENSIVE**
7:20 PM
A. Subject: Resolution No. 2013-05, City Committees and Commissions, AB 13-016 – 5 min.
Discussion Leader: Executive
Discussion Goal: Consider motion to approve.
- 6. COUNCIL DISCUSSION**
7:25 PM
A. Subject: Public Comment on Water System Management Options – 45 min.
Discussion Leader: Council
Discussion Goal: Receive public comment. Forward to February 13, 2013 business meeting for possible vote.

B. Subject: Letter Supporting Kitsap Peninsula Water Trails Plan Being Designated as Part of the National Water Trails System, AB 13-014 – 5 min.
Discussion Leader: Mayor Bonkowski
Discussion Goal: Consider motion to approve.
- 7. REGIONAL COMMITTEE REPORTS**
8:15 PM
- 8. REVIEW OF UPCOMING COUNCIL MEETING AGENDAS**
8:20 PM – Schedule Upcoming Ward Meetings (bring calendar)

Times listed on this agenda are approximate. Public comment may be limited to allow time for Council to deliberate.



Americans with Disabilities Act (ADA) accommodations provided upon request. Those requiring special accommodations, please contact the City Clerk at 206-842-2545 (cityclerk@bainbridgewa.gov) by noon on the day preceding the Meeting.

9. FOR THE GOOD OF THE ORDER

8:30 PM

10. SHORELINE MASTER PROGRAM UPDATE

8:35 PM

Subject: Point Monroe Special Provisions; Nonconforming Development (SSB 5451) 1 hr. 25 min.

Discussion Leader: Planning

Discussion Goal: Review.

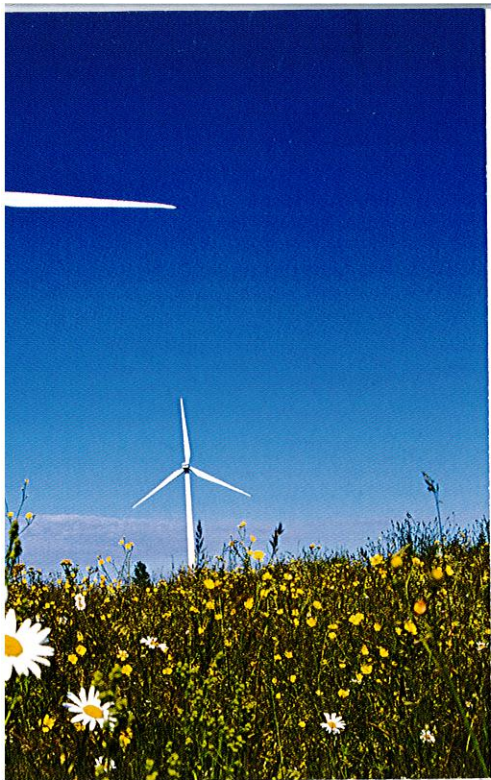
11. ADJOURNMENT

10:00 PM

Times listed on this agenda are approximate. Public comment may be limited to allow time for Council to deliberate.



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- Protect the natural beauty of the Pacific Northwest.
- Leave a clean-energy legacy for future generations.

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CITY OF BAINBRIDGE ISLAND

CITY COUNCIL AGENDA BILL



PROCESS INFORMATION

Subject: Resolution No. 2013-05 relating to City committees and commissions	Date: February 6, 2013
Agenda Item: Staff Intensive	Bill No.: 13-016
Proposed By: Douglas Schulze, City Manager	Referral(s):

BUDGET INFORMATION

Department:	Fund:	Munis Contract #
Expenditure Req:	Budgeted? ☒ Yes ☐ No	Budget Amend. Req? ☐ Yes ☐ No

REFERRALS/REVIEW

Study Session November 7, 2012	Recommendation: Bring forward a Resolution
City Manager ☒ Yes ☐ No ☐ N/A	Legal ☒ Yes ☐ No ☐ N/A Finance ☒ Yes ☐ No ☐ N/A

DESCRIPTION/SUMMARY

Action Item:

Consideration of Resolution No. 2013-05 relating to City committees and commissions and establishing a minimum number of members and a policy on advertising for open positions on City committees and commissions.

History:

At the November 7, 2012 City Council meeting, City Council discussed establishing a minimum number of members and a policy on advertising for open positions on City committees and commissions. City Council requested that staff bring forward a resolution setting the minimum number of committee and commission members at five and authorizing advertising for open positions when the number drops below five. Attached for Council's consideration is the requested resolution.

RECOMMENDED ACTION

Motion:

I move that the City Council approve Resolution No. 2013-05 relating to City committees and commissions.

RESOLUTION NO. 2013-05

A RESOLUTION of the City Council of Bainbridge Island, Washington, relating to City committees and commissions and establishing a minimum number of members and a policy on advertising for open positions on City committees and commissions.

WHEREAS, at the November 7, 2012 City Council meeting, City Council discussed establishing a minimum number of members and a policy on advertising for open positions on City committees and commissions; and

WHEREAS, City Council requested that staff bring forward a resolution setting the minimum number of committee and commission members at five and authorizing advertising for open positions when the number drops below five; now, therefore,

THE CITY COUNCIL OF THE CITY OF BAINBRIDGE ISLAND DOES RESOLVE AS FOLLOWS:

Section 1. The minimum number of members on a City committee or commission is five.

Section 2. The City will advertise for open positions on a committee or commission when the number of members drops below five.

PASSED by the City Council this ____ day of February, 2013.

APPROVED by the Mayor this ____ day of February, 2013.

By: _____
Steven Bonkowski, Mayor

ATTEST/AUTHENTICATE:

By: _____
Rosalind D. Lassoff, CMC
City Clerk

FILED WITH THE CITY CLERK: February 1, 2013

PASSED BY THE CITY COUNCIL:

RESOLUTION NO. 2013-05

CITY OF BAINBRIDGE ISLAND

CITY COUNCIL AGENDA BILL



PROCESS INFORMATION

Subject: Letter Supporting Kitsap Peninsula Water Trails Plan
being designated as part of the National Water Trails System

Date: February 6, 2013

Agenda Item: Council Discussion

Bill No.: 13-014

Proposed By: Mayor Bonkowski

Referral(s):

DESCRIPTION/SUMMARY

Action Item:

Authorize Mayor Bonkowski to sign letter of support to designate the Kitsap Peninsula Water Trails Plan as part of the National Water Trails System.

History:

President Obama launched the America's Great Outdoors Initiative to develop a 21st Century conservation and recreation agenda. America's Great Outdoors: Promise to Future Generations takes as its premise that lasting conservation solutions should rise from the American people – that the protection of our natural heritage is a non-partisan objective shared by all Americans.

On February 29, 2012, as part of the America's Great Outdoors Initiative, Secretary of the Interior Ken Salazar unveiled the National Water Trails System, a new network to increase access to water-based outdoor recreation, encourage community stewardship of local waterways, and promote tourism that fuels local economies across America.

Secretary Salazar signed a Secretarial Order that establishes national water trails as a class of national recreational trails under the National Trails System Act of 1968. The order sets the framework for Secretarial designation of water trails that will help facilitate outdoor recreation on waterways in and around urban areas, and provide national recognition and resources to existing, local water trails. Under the Secretarial Order, the National Park Service will coordinate the national water trail nomination process.

“Rivers, lakes, and other waterways are the lifeblood of our communities, connecting us to our environment, our culture, our economy, and our way of life,” stated Ken Salazar, the Secretary of the Interior. “The new National Water Trail System will help fulfill President Obama's vision for healthy and accessible rivers as we work to restore and conserve our nation's treasured waterways.”

This letter is being sent to the Secretary of the Interior specifically to support the designation of the Kitsap Peninsula Water Trails Plan as part of this new National Water Trails System. This Kitsap Peninsula Water Trails Plan includes upwards of 30 Bainbridge Island water trail locations.

Motion: *I move that the City Council authorize Mayor Bonkowski to sign the letter to Secretary of the Interior to request the designation of the Kitsap Peninsula Water Trails Plan as part of the National Water Trails System.*

February 6, 2013

Ken Salazar
Secretary of the Interior
National Water Trail System
1849 C Street NW
Washington, D.C. 20240

Dear Secretary Ken Salazar,

I am writing on behalf of the City Council of Bainbridge Island to endorse the Kitsap Peninsula Water Trails Plan and request that it be officially designated as part of the National Water Trails System.

As you so aptly stated during your introduction of the new National Water Trails System, “Rivers, lakes, and other waterways are the lifeblood of our communities, connecting us to our environment, our culture, our economy, and our way of life.” The National Water Trail System will help to restore and conserve our nation’s treasured waterways while at the same time providing recreation, education, conservation, community support, public information, trail maintenance, and planning.

As an island, our shorelines and waterways year-round offer incredible vistas, tranquil settings, and attract watercraft of all types including sailboats, canoes, kayaks, motorboats, and rowing shells. Our waterways provide economic benefits as well as great cultural, social, and recreational value to our community.

Out of approximately 53 miles of shoreline, Bainbridge Island has 30 designated shoreline locations for public use and enjoyment in the central Puget Sound region (see attached Kitsap Water Trails Map). Much collaboration from City officials, citizen volunteers, non-profit organizations, municipal agencies, local tribes, and water sports enthusiasts has gone into creating these water trail plans, fundraising, sometimes purchasing of lands, restoring shorelines, and constructing the road ends, landings, and public docks.

The Comprehensive Plan of the City of Bainbridge Island specifically designates shoreline parks and city road ends for public use and is highlighted in the Kitsap Peninsula Water Trails Plan and Map. The Kitsap Peninsula Water Trails Plan serves as an important guide highlighting the great work accomplished to date, as well as focusing our future efforts that enhance Kitsap County’s most important and sustainable resource – our waterways.

Inclusion of the Kitsap Peninsula Water Trails in the National Water Trail System would increase the visibility of these important waterways and promote both recreational tourism and jobs in Kitsap County. The Kitsap Peninsula Water Trails also provides a focus for environmental protection, preservation, and restoration.

Thank you for your consideration and effort to establish this important local designation of the Kitsap Peninsula Water Trails as part of the National Water Trail System. Most importantly, thank you for your efforts that protect the nation’s shorelines and our national legacies.

Sincerely,

Mayor Steven Bonkowski
City of Bainbridge Island, Washington



The Kitsap Peninsula Water Trails Map

JAN
2013

Boat & Kayak Launches Amenities • Resources

The Kitsap Peninsula has more than 371 miles of shoreline making it the ideal destination for year round kayaking and other boat adventures.



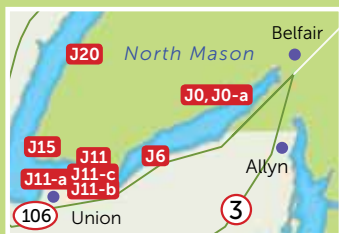
Photos: Tom Woltjer

MAP AREA IDENTIFIER

Letter = Segment

- A = Port Gamble to Foulweather Bluff
- B = Bainbridge Island (see reverse side)
- C = Foulweather Bluff to Kingston
- D = Kingston to Keyport
- E = Keyport to Poulsbo
- F = Brownsville to Bremerton
- G = Dyes Inlet
- H = Sinclair Inlet
- I = Manchester to Gig Harbor
- J = Belfair to Dewatto
- K = Dewatto to Seabeck
- L = Seabeck to Hood Canal Bridge

note: RR = restroom, pkg=parking
Number Identifier :Number = miles from beginning of segment ie., C3 - Norwegian Park | Section C (Foulweather Bluff) 3 miles from Foulweather Bluff (start of segment)



Kitsap Peninsula Launches & Amenities

A0	Salsbury Point County Park	Boat Launch, Parking, RR
A1	Port Gamble Mill Site	Kayak Launch, Rentals, Parking, Town, Store
A3	Hood Canal Dr	Shore Access
A4	Hood Canal Place Rd End	Shore Access
A7	Twin Spits Rd End	Kayak Launch, Parking
C3	Norwegian Point Park	Kayak Launch, Parking
C4	Point No Point Lighthouse	Kayak Launch, Parking, RR
C7	Pilot Point	Kayak Launch, Parking
C8	Port of Eglon* (no link)	Boat Launch, Parking, RR
C10	Ludlow Dr Rd End	Shore Access
C13	North Beach	Kayak Launch, Parking
C14	Port of Kingston* Marina 360.297.3545	Launch, Parking, Kayak Racks, Overnight Moorage/Services,
C14-a	Arness Park	Kayak Launch
D2	South Villa Dr	Shore Access
D6	Port of Indianola*	Boat Launch, Parking, Store
D7	Indianola Waterfront Preserve	Shore Access
D8	Suquamish Tribal Dock	Boat Launch, Parking, Town
D9	Old Man House Park	Kayak Launch, Parking, RR
E1-a	Skookum Rd End	Shore Access
E1-b	Ona Rd End	Shore Access
E1-c	Port of Keyport* Marina 360.394.4422	Boat Launch, Parking, Town Overnight Moorage/Services
E3-a	Oyster Plant Park	Kayak Launch, Parking
E3-b	Poulsbo Lions Park	Shore Access
E4-a	Olympic Outdoor Center Dock	Kayak Launch, Rentals
E4-b	Port of Poulsbo* Marina 360.779.3505	Boat Launch, Parking, Town Overnight Moorage/Services
E4-c	American Legion Park	Kayak Launch, Parking
E4-d	Liberty Rd End	Kayak Launch, Parking
E8	Keyport Saltwater Park	Kayak Launch, Parking
F1	Port of Brownsville* Marina 360.692.5498	Launch, Parking, Store, Camping Overnight Moorage/Services
F3	Illahee State Park	Kayak Launch, Parking, Camping
F3-a	Port of Illahee	Boat Launch, Parking, Store
G1	Evergreen Park	Boat Launch, Parking
G2	Lions Park	Kayak Launch, Parking
G4	Port of Tracyton*	Launch, Parking, RR, Store
G6	J.A. & Anna Smith Park	Shore Access Only, RR
G7	Port of Silverdale* Docks 360.698.4819	Boat Launch, Parking, Town Overnight Moorage/Services
G10	Chico Boat Launch	Boat Launch, Parking
H0	Port of Bremerton* Marina 360.373.1035	Boat Launch, Parking, Town Overnight Moorage/Services
H7-a	Port Orchard Marina 360.876.5535	Dock, Parking, Town Overnight Moorage/Services
H7-b	Water Street Boat Launch	Boat Launch, Parking, Town
H8	Retsil Boat Launch	Boat Launch, Parking
I1	Manchester State Park	Kayak Launch, Parking, Camping
I2	Port of Manchester*	Parking
I2-a	Pomeroy Park	Kayak Launch, Parking

I3	Yukon Harbor Harper Boat	Kayak Launch, Parking
I4	Blake Island State Park	Camping
J0	Belfair State Park	Boat Launch, Pkg, Store, Camp
J0-a	Port of Allyn* Dock 360.275.2430	Boat Launch, Parking, Store Overnight Moorage
J6	Twanoh State Park	Boat Launch, Pkg, Store, Camp
J11	Tahuya	Boat Launch, Parking
J11-a	Union Boat Ramp	Boat Launch, Parking
J11-b	Alderbrook Resort	Boat Launch, Parking, Resort
J11-c	Hood Canal Adventures	Kayak Launch, Parking, Rentals
J15	Menards Landing	Boat Launch, Parking
J20	Dewatto	Kayak Launch, Parking
K19	Misery Point Boat Launch	Boat Launch, Parking
L0	Seabeck Marina	Boat Launch, Parking, Store
L16	Kitsap Memorial Park	Parking, Restroom, Camping

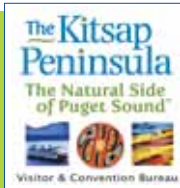
Paddle Bainbridge Island Launches

B0	Agate Pass Bridge East Side	Kayak Launch, Parking
B1	Sanwick Street Rd End	Kayak Launch, Parking
B2	North Street Rd End	Shore Access
B3	West Pt Madison Nature Preserve	Kayak Launch, Parking
B4-c	Hidden Cove Park	Parking, Restrooms
B4-d	T'chookwop Park	Shore Access
B4-e	NE Lafayette Ave Rd End	Kayak Launch, Parking
B5	Fay Bainbridge Park	Parking, Restrms, Showers, Camping
B9	Manitou Park Blvd	Kayak Launch, Parking
B10	Yaquina Place Rd End	Kayak Launch, Parking
B12-b	Hawley Cove Park	Shore Access
B12-c	Waterfront Park	Parking, Restrooms, Dock, Town, Lodging
B12-d	Strawberry Park	Kayak Launch, Parking
B12-e	Japanese Memorial Park	Parking, Restroom
B12-f	Pritchard Park	Parking, Restroom
B15	Rockaway Beach Park	Kayak Launch, Parking
B16	Blakely Harbor Park	Kayak Launch, Parking, RR
B20-a	Fort Ward Park	Shore Access
B20	Fort Ward Park	Parking, RR, Launch, Camping
B21-b	Wharf Street Rd End	Kayak Launch, Parking
B23	Schell Chelb Estuary	Shore Access
B25	Point White Dock	Kayak Launch, Parking, RR
B26	Westwood Rd End	Shore Access
B27	Gazzam Lake Park	Shore Access
B28	Fletcher Landing	Shore Access
B29	Battle Point	Shore Access
B30	Fairy Dell Park	Shore Access
B31	Dock Street Rd End	Kayak Launch, Parking
B33	Hidden Cove Rd End	Kayak Launch, Parking
B34	Seabold Rd End	Parking

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For Water Trails activities,
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dining • Brews & Bites • wineries

Map produced by the Kitsap Peninsula VCB ©2013



City of Bainbridge Island
PLANNING & COMMUNITY DEVELOPMENT



MEMORANDUM

TO: City Council

FROM: Kathy Cook, Director
Christopher Wierzbicki, Community Development Administrator
Ryan Ericson, Associate Planner

DATE: January 2, 2013

RE: SMP Update – Council Study Session January 16, 2013

Purpose of the Meeting

- Preliminary approval of the specific provisions for Point Monroe (see Attachment B)
- Preliminary approval of the following draft regulations (see Attachment H, SMP Draft Update, April 12, 2012, clean version, as amended with City Council and staff recommendations to date):
 - *Nonconforming Development* – Nonconforming Development Section 4.2.1.1 - 4.2.1.9; pages 111 through 118. Determination on whether to accept the Planning Commission recommendation for *Nonconforming Development*, Section 4.2.1, or consider alternative options provided in SSB 5451.

The following table is organized by topic, and summarizes and provides electronic links to existing sections in the current Shoreline Master Program (SMP); the corresponding section in the draft SMP (clean version); the state guideline provisions; relevant pages of the consistency analysis prepared by the City's consultant, ICF; public comment on the topics; and related Planning Commission meeting minutes.

Topic	1996 SMP Section	PC Draft SMP Section	WAC Provisions	Consistency Document	Public Comment	PC Meeting Minutes
Point Monroe Provisions	N/A		N/A	N/A	August 27 meeting notes	N/A
Nonconforming Development	Section VII (K)	Section 4.2.1	WAC 173-26-191(2)(a)(iii)(A)	No comments	As of January 8, 2013	June 21, 2011 ; Oct. 6, 2011 ; Oct. 13, 2011 ; Oct. 20, 2011 ; Feb. 2, 2012

Topic 1: Specific Provisions for Point Monroe Sand Spit

On July 11, 2012, the City Council approved a contract with Herrera Environmental Inc. for scientific and technical services to assist the City in developing tailored regulations and an integrated mitigation approach for the Point Monroe spit as part of the Shoreline Master Program Update. Those services were based on a survey of appropriate science as agreed by the Council at their June 13, 2012 meeting. As part of this effort, the City held a community meeting on August 27, 2012 to discuss the results of the Herrera report (Attachment A *Spit Science Summary – Point Monroe*, August 2012) and to solicit input from the community on what provisions might be appropriate for the spit, based on the science summary. The meeting notes are included in Attachment B.

Based on the Herrera science summary reports (the *Addendum to the Science Summary*, 2011 and the *Spit Science Summary – Point Monroe*, 2012) and the input at the community meeting, staff drafted provisions intended to address residential development issues on Point Monroe. As directed by the City Council, the spit will retain the proposed shoreline designation of Shoreline Residential Conservancy, and special provisions will apply that are specific to Point Monroe.

On September 24, 2012, the City held a second community meeting to present the staff draft provisions for Point Monroe. The attached table (Attachment C) was distributed at the community meeting, summarizing the following:

- Issues identified at the August 27 community meeting;
- How these issues are addressed in the draft SMP;
- Staff proposals to address each of the issues in a specific way for Point Monroe; and
- Details of the proposed provisions.

Those participating in the September meeting agreed with most of the proposed provisions as presented by staff. Staff's recommendations included a 15-foot buffer along the spit; this recommended dimension is based on the rear yard setback that would be required by zoning and the 15-foot building setback required in the critical areas provisions. However, the Department of Ecology expressed concern over the proposed 15-foot buffer, as did several meeting participants. Based on these comments, staff recommends that the proposed provisions be amended to include a 30-foot buffer for Point Monroe.

Attachment D includes the specific language for each of the Point Monroe specific provisions. These proposed provisions are included in the revised draft SMP that the Council is considering and includes the following amendments:

- Sections 4.1.2.5 & 4.1.3.5 – Environmental Impacts & Vegetation Management: Re-vegetation & vegetation standards specific to the spit, including a 30-foot buffer; and site-specific vegetation management area developed for Point Monroe.
- Section 4.1.7 – Flood Provisions: Allow redevelopment of existing foundations on Point Monroe for those foundations that are also considered flood control structures.

Section 4.2.1.7 – Nonconforming Provisions: The SMP Update includes provisions for the redevelopment of lots encumbered by critical areas and vegetation management areas. As proposed, these provisions would not apply to Pt. Monroe. Instead, dimensional standards specific to Point Monroe would apply.

- Section 5.9 – Residential Development Provisions specific to Point Monroe:
 - Prohibit increase in intensity of overwater residences and ADUs;
 - New ADUs would be prohibited;
 - Require that 15% of lot width remain open as side yards, rather than the 30% required elsewhere;
 - Require 30-foot setback for new single family residences and require that any development meet flood protection standards (Section 6.2.8), environmental impact standards (Section 4.1.2), stormwater conveyance standards (Section 4.1.6), view protection, and overwater structure standards (Section 6.3.4);
 - Provide special provisions for redevelopment of existing overwater structures, in order to allow landward expansion, but not waterward expansion or increases in height.
- Section 6.2.8 – Stabilization Provisions: Allow existing development to use the Herrera report as a substitute for a site-specific geotechnical report for replacement of existing stabilization on Point Monroe. Provide specific regulations for Point Monroe including meeting FEMA flood zone requirements. Prohibit new stabilization except in Area III of Point Monroe.
- Section 6.3 – Overwater Structure Provisions: Allow docks in Priority Aquatic B adjacent to the Point Monroe spit provided there is no pickleweed. (Pickleweed is an indicator species for salt marshes. Salt marshes are identified as a protected ecosystem by the Army Corp of Engineers, as a critical saltwater habitat by the Department of Ecology, and as a priority habitat by Washington Department of Fish and Wildlife.)

Topic 2: Existing Nonconforming Development

The Planning Commission recommendation includes a new section that provides policies and regulations specific to existing development that does not conform to the adopted standards, referred to as nonconforming development. Provisions affecting existing development have been of high interest throughout the SMP update process.

Presentations: The City Council and community have considered issues related to existing development at several meetings during the past two years, including June 21, October 13, and November 17, 2011; and February 2, March 29, April 12 and June 20, 2012.

Re-cap of Previous Council Discussion: At the last study session on this topic (June 20, 2012), staff discussed the discretionary provisions included in Substitute Senate Bill 5451 (Attachment E), which allows a jurisdiction to consider existing lawfully constructed residential structures to be “conforming” rather than “nonconforming,” even if these structures do not meet the new standards adopted as part of the SMP Update. The bill states that redevelopment, expansion or replacement of these structures would still need to meet the new provisions, including no net loss of ecological functions.

The Planning Commission recommended against utilizing the legislation since it essentially provides only a semantic change. Council agreed to consider the legislation again after reviewing the high interest topics of the SMP.

Many shoreline homeowners expressed concern over devaluation related to nonconforming status, although no data has been presented to the Department of Ecology or the City indicating that home values decline as a result of becoming nonconforming to new buffer provisions. At the June 20, 2012 study session, staff provided data on the sales for shoreline properties within a one year period (June

2011 – June 2012), which indicates that there is negligible difference in sales price between those properties that conform to the existing buffer and those that do not.

At the study session, Council Member Hytopoulos requested that staff look at a longer period of time and perhaps comparable properties, or possibly hire a realtor or consultant to analyze whether the values are adversely impacted when buffer provisions make an existing house nonconforming. As a result of that request, staff contacted an economic consultant, Chris Mefford, principle at Community Attributes, who indicated that such an analysis could be performed based on assessed value if the data sets are available. The consultant said that to meet statistical parameters such an analysis should include more properties than the shoreline properties on the Island. However, the consultant felt that results of such an analysis would likely not provide the level of assurance that the Council might want for policy development, and suggested that staff could provide similar information based on assessed value of properties before and after new buffer regulations were put in place. The staff Assessed Value Analysis that compares assessed values for properties before and after new buffer regulations were changed with the adoption of the 1996 SMP is included as Attachment G.

Background Information: The City’s development codes, including the existing and proposed SMP, allow existing development to continue and be maintained and repaired. This allowance for existing development to continue after adoption of new land use regulations is often termed “grandfathered.” Conformity to the new regulations is only required when a change or new construction is proposed to the established nonconforming development, and generally the new land use regulations would apply only to the new portions of the development.

In both the 1996 SMP and the draft SMP, special provisions are included that addresses nonconforming development, including both *uses* and *structures*. At the June 20, 2012 City Council study session, staff presented an overview of the provisions related to existing development.

The 1996 SMP nonconforming provisions provide the following:

- Nonconforming *uses* may continue, provided the use is not altered or expanded, and if discontinued for more than 12 months, the “grandfathered” status ceases;
- Nonconforming *structures* may continue, be repaired and maintained, and may be expanded if there is no increase in the nonconformity. If damaged or destroyed, the structure may be replaced in the same footprint and to the same dimensions, provided the reconstruction is commenced within two years of the date of damage.

The Planning Commission draft SMP provisions for existing development address nonconforming *uses* in much the same way as the 1996 SMP. However, the draft SMP provides *more* flexibility for redevelopment of nonconforming structures, including:

- Allowing reconstruction and expansion for existing residences located within buffer areas beyond the existing building footprint.
- Allowing existing overwater structures to be repaired and also replaced if the current standards for materials are utilized.
- Allowing existing shoreline armoring to be repaired (up to 50% of the structure) or replaced (more than 50% of the structure) if a need to protect a primary structure is demonstrated.

Reference Materials

The City Council may also find the following documents helpful in reviewing the meeting topics:

- Department of Ecology letter regarding nonconforming draft regulations, [February 2, 2012](#)
- Department of Ecology SMP Handbook
 - o [Existing Development](#)
- SSB 5451, relating to shoreline structures, amending RCW 90.58, [April, 2011](#)

Attachments

- A: *Spit Science Summary – Point Monroe*, 2012, Herrera Environmental
- B: Point Monroe District Community Meeting #1 Notes, August 27, 2012
- C: Point Monroe Summary Table of Issues and Provisions
- D: Proposed Provisions for Point Monroe Spit – Amendments to the draft SMP sections
- E: SSB 5451
- F: Ecology letter to Kathy Cook regarding nonconforming lots and structures, August 10, 2011
- G: Analysis Assessed Value Analysis -Shoreline Property Tax Assessed Values
- H. Proposed Nonconforming Provisions – As amended from the April 12, 2012 Planning Commission Recommendation

SPIT SCIENCE SUMMARY

POINT MONROE



Prepared for
City of Bainbridge Island
Planning & Community Development



Prepared by
Herrera Environmental Consultants



Note:

Some pages in this document have been purposely skipped or blank pages inserted so that this document will copy correctly when duplexed.

SPIT SCIENCE SUMMARY

Point Monroe

Prepared for
City of Bainbridge Island
Planning & Community Development
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August 24, 2012

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INTRODUCTION

Point Monroe spit is approximately two-thirds of a mile long on the northeastern end of Bainbridge Island, Washington, and its entire extent constitutes the study area (Figure 1). It is bisected by Point Monroe Drive NE, which is a public roadway for the first third of a mile from the neck of the spit, with the remainder in private ownership. The entire study area is within the City of Bainbridge Island (City) shoreline jurisdiction boundary.

The purpose of this science summary is to provide the scientific basis for applicable Shoreline Management Act regulation of future development on Point Monroe. The spit is unique in the City because of its physical environment, the density of development, and lack of opportunities to mitigate for future impacts. Although the focus of the summary is not to assess the future ongoing ecological consequences associated with maintenance of existing shoreline infrastructure, some discussion of past impacts is included as it relates to the ecological ramifications of future development and recommendations for mitigation. Therefore, only expansion of existing or placement of new 1) shoreline protection structures, 2) overwater structures, and 3) impervious surfaces are discussed in this document. New fill and expansion of existing residential overwater homes are not discussed as these actions are currently prohibited under the existing shoreline management plan and state law. It is also assumed that the maximum structure height restriction of 30 feet will continue to be enforced.

This report summarizes the state of scientific understanding of Puget Sound spits and barrier lagoons (geomorphic features), particularly information related to Point Monroe and its lagoon. It also describes existing Point Monroe conditions, including physical and ecological processes, and anticipated environmental impacts from new development.

The following parameters limit the scope of this document:

- Only one site visit was scoped for this report. It occurred during relatively low tidal conditions in the summer.
- The study included no topographic survey.
- Biological monitoring of species present at the site was not within the scope of this report; only existing data sources were used to identify species use.
- The discussion does not cover aquatic designations, nonconforming/conforming uses or other island-wide issues not specific to Point Monroe.
- Sea level rise and geohazards are a significant issue for residents living on Point Monroe; however, a discussion of sea level rise and geohazards known to occur on spits was not within the scope of this report.
- A detailed analysis of whether on-site septic systems at Point Monroe are an environmental concern was outside the scope of this report.
- No special provisions were identified associated with overwater residences because overwater residences are prohibited by WAC 173-26-241(3)(j); however, overwater residences are acknowledged as an extensive, existing use on the spit.



Legend

 Undeveloped

Geomorphic areas

 Lagoon

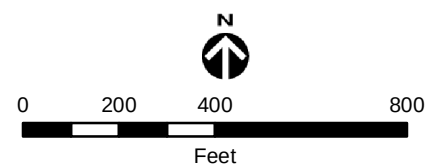
 Outer middle

 Outer neck

 Tip



Figure 1. Point Monroe vicinity map, City of Bainbridge Island, Washington.



Photography: Aerials Express (2009)
K:\Projects\10-04851-000\Project\Vicinity_Map.mxd (8/22/2012)

METHODS

Analysis and conclusions presented in this report are based primarily on examination of the existing scientific literature of Puget Sound spits and barrier lagoons. A site visit was made to the area and the entire length of the spit was walked by a Herrera geomorphologist, along with three local residents and two City staff. Geomorphic indicators were photographed and noted. No physical or biological measurements were made. Plants were identified where possible, but no formal assessment of vegetation conditions was made. Several residents were interviewed during the site visit about past occurrences and their observations of site conditions, and these observations were verified with other publically available information where possible.

Site Visit

The site visit occurred between approximately 2 and 4 PM on July 19, 2012. The road (Point Monroe Drive NE) was walked from the northern parking lot within Fay Bainbridge Park along the length of public roadway. Along the way, access to two residences was graciously provided by Harold Snow and Peter McCormick to examine each side of the spit (sound side and lagoon side). From the end of the public roadway, the sound side beach was walked to the tip of the spit. The lagoon side of the spit was then walked from the tip of the spit to the point on the spit, where homes begin on the south side of the privately owned portion of Point Monroe Drive NE. The visit occurred during a flood tide, between an observed low tide of -1.4 feet mean lower low water (MLLW) at 11:48 AM and a high tide of 11.3 feet MLLW at 6:54 PM at Seattle (NOAA 2012). Seattle's tides are virtually indistinguishable from tides at Point Monroe.

Literature Review

The approach to the literature review was to identify those peer-reviewed publications that were directly applicable to the ecology and geomorphology of spits in Puget Sound, and those that addressed ecological impacts from the types of development that may be expected to occur at Point Monroe. The peer reviewed literature was accessed using Web of Knowledge™ searches using a variety of search terms including, but not limited to, “spit setback”, “Puget Sound spits”, and “spit mitigation”. Web of Knowledge™ is a commonly used database of the scientific literature and contains bibliographic information from over 23,000 scientific journals.

Once peer-reviewed literature was identified, agency literature, called gray literature, was identified that addressed these same topics. These materials include those referenced in the primary peer-reviewed literature and studies that Herrera was familiar with from working throughout Puget Sound at locations similar to Point Monroe. Gray literature sources were primarily references that investigated development impacts.

Herrera also used collections of best available science developed specifically for the City (Williams et al. 2003; Herrera 2011) and for Washington Department of Fish and Wildlife (Herrera 2007). In addition, a master's thesis that summarized the ecology and fish use observations at Point Monroe (Ericson 2011) was used to document existing fish, bird, and invertebrate use of the spit.

Predevelopment Processes at Point Monroe

Because of the paucity of data available on undisturbed Puget Sound spits, conditions are heavily based on historical documents, such as the T-sheet (U.S. Coast and Geodetic Survey 1916), H-sheet (U.S. Coast and Geodetic Survey 1868), and gray literature available for reference sites, such as Ala Spit (Herrera 2008), Ediz Hook (Galster 1989; Herrera 2009) and West Point (Troost and Stein 1995).

Existing Conditions at Point Monroe

Existing conditions were primarily assessed on the site visit, professional experience working on other Puget Sound spits and similar nearshore environments, and on literature retrieved in the literature review. Where possible, the existing conditions assessment draws on publically available information including the Washington Coastal Atlas (Ecology 2012), Google Earth imagery, and Kitsap County public records.

RESULTS

Site Visit

Nearly all of the independently owned parcels have been built upon. Six parcels are identified by the City as undeveloped but developable, including three located in the middle portion of the spit. These three lots are only developable as one lot due to septic system requirements that limit full development on all three (R. Ericson, personal communication). Of the three remaining undeveloped properties, two are located in the Lagoon side of the spit and one is located in the Outer Middle (Figure 1). However, the parcel located in the Outer Middle is currently undergoing development (R. Ericson, personal communication).

Literature Review

The results of Web of Knowledge™ searches of the peer-reviewed literature yielded very little useful information. For instance, the search term “Puget Sound spits” generated no results and “Puget Sound lagoons” resulted in only four results, none of which were related to the type of barrier lagoon present at Point Monroe. Other references for “spits” in general did appear; however, they primarily were related to studies on the U.S. East Coast. It is questionable whether science and planning strategies in these locales are relevant to tectonically active sites devoid of large tropical cyclones, where the primary concern is salmonid and forage fish habitat. However, there have been a few peer-reviewed references regarding the geomorphology of Dungeness Spit (Schwartz et al. 1987) and Ediz Hook (Galster 1989), both on the Strait of Juan de Fuca. These spits are fundamentally different from Point Monroe in that they are exposed to ocean swell, which does not occur within the confines of Puget Sound (Finlayson 2006), and they are supplied largely by rivers updrift from them. However, these spits do have much more in common with the ecology of Point Monroe than spits elsewhere (such as spits on the East Coast or California) because they are formed from the same physical processes (namely, overwash deposition) and most of the species that occur at those locations are the same as at Point Monroe. In fact, Finlayson (2006) suggested that paraglacial environments in Alaska, the British Isles and New Zealand make for better analogs than spit sites closer to Washington such as in California (Neal et al. 2003).

Fortunately, in addition to the peer-reviewed literature, there are several gray literature studies on spits in Puget Sound. As most spits in Puget Sound have been developed, there are a number of reports produced to evaluate various actions on spits throughout the area. Probably the most exhaustive reporting was done on Ala Spit on the northeastern shoreline of Whidbey Island (Herrera 2008). Several other sites in Puget Sound, such as at West Point in Seattle (which was a spit prior to the Seattle Fault Earthquake approximately 1,100 years ago: Troost and Stein 1995) are also relevant. Although no longer a true spit, partly due to human modifications, West Point is probably the most similar feature to Point Monroe in Puget Sound, in that it is less than 5 miles away, on the same basin in Puget Sound (i.e., the main basin) and has been similarly influenced by Mount Rainier lahar sediment pulses and tectonic

subsidence from the Seattle Fault Earthquake. As a result, the evolution of West Point through the recent geologic past (in the last 6,000 years since sea level stabilized) is extremely similar to Point Monroe. Further, its intensive use from earliest European settlement of the region provides a useful comparison to the types of actions taken and the physical responses of the spit to those actions. However, because of subtle geographic differences and the significant differences in the use of the site (the principal use of West Point is now as a waste treatment facility), current conditions do differ.

Predevelopment Processes at Point Monroe

Point Monroe was likely a typical Puget Sound spit prior to development. That is, it was supplied by sediment originating primarily from the bluffs as far south as Skiff Point and northerly transport from dominant southerly winds (Williams et al. 2004). It likely began to form about 6,000 years ago when sea level stabilized following the retreat of the last glaciation, which formed the present Puget Sound (Finlayson 2006). The sediment supplied to the spit contained both sand and gravel, as is typical in Puget Sound (Finlayson 2006). The spit was (and is) highly recurved, meaning that the spit itself was influenced by wave refraction and waves originating from multiple directions. The eastern half of the spit is dominated by southerly waves that refracted around the shoal that supports the spit, while the less common and smaller northerly wave events, and weak summertime transport have forced the west end of the spit to arc southward, nearly enclosing the lagoon (Figure 1).

The lagoon had begun to close prior to development of the spit (Figures 2 and 3). Tidal flushing was essential to the maintenance of the lagoon. Note that tidal flushing capacity is a function of the lagoon area (volume) of inundation or tidal prism. Tidal prism is the volume of water exchanged between higher high and lower low tides. It is likely that the flushing included areas that have been subsequently filled to the south to provide access to the shoreline (such as for Point Monroe Drive NE and Fay Bainbridge Park). It is also likely that the spit subsided during the last Seattle Earthquake about 1,100 years ago, which may have led to the narrowing of the middle of the spit (Troost and Stein 1995; Figures 2 and 3). Further, it is common for there to be areas where spits become narrow along their length (Hugh Shipman, personal communication), particularly here where tectonic subsidence has occurred (Troost and Stein 1995). These narrow spit areas were maintained and reinforced by overwash. Overwash is a common physical process on coarse-clastic (sand and gravel) spits (Neal et al. 2003), and served as the primary mechanism by which the Point Monroe spit as well as associated habitats were likely maintained. Such habitats typically include dune communities, which provide habitat for wildlife species; the upper beach areas where forage fish spawn; lower beach and subtidal areas where shellfish typically occur (on the sound side of the spit); and salt marsh communities, including pickleweed (*Salicornia virginica*) and mudflats (on the lagoon side of the spit) that serve as nurseries for juvenile salmonids, their prey, and some bird species.

It is worth mentioning one less obvious, but important, geomorphic aspect of the spit prior to development. Prior to 1906, the White River, which drains the northern and eastern flank of Mt. Rainier, discharged most of its water and sediment load via the Duwamish River to Elliott Bay. Over the last few thousand years (since sea level stabilized and the spit began to grow), several massive lahars discharged copious amounts of fine sediment to Elliott Bay, moving the

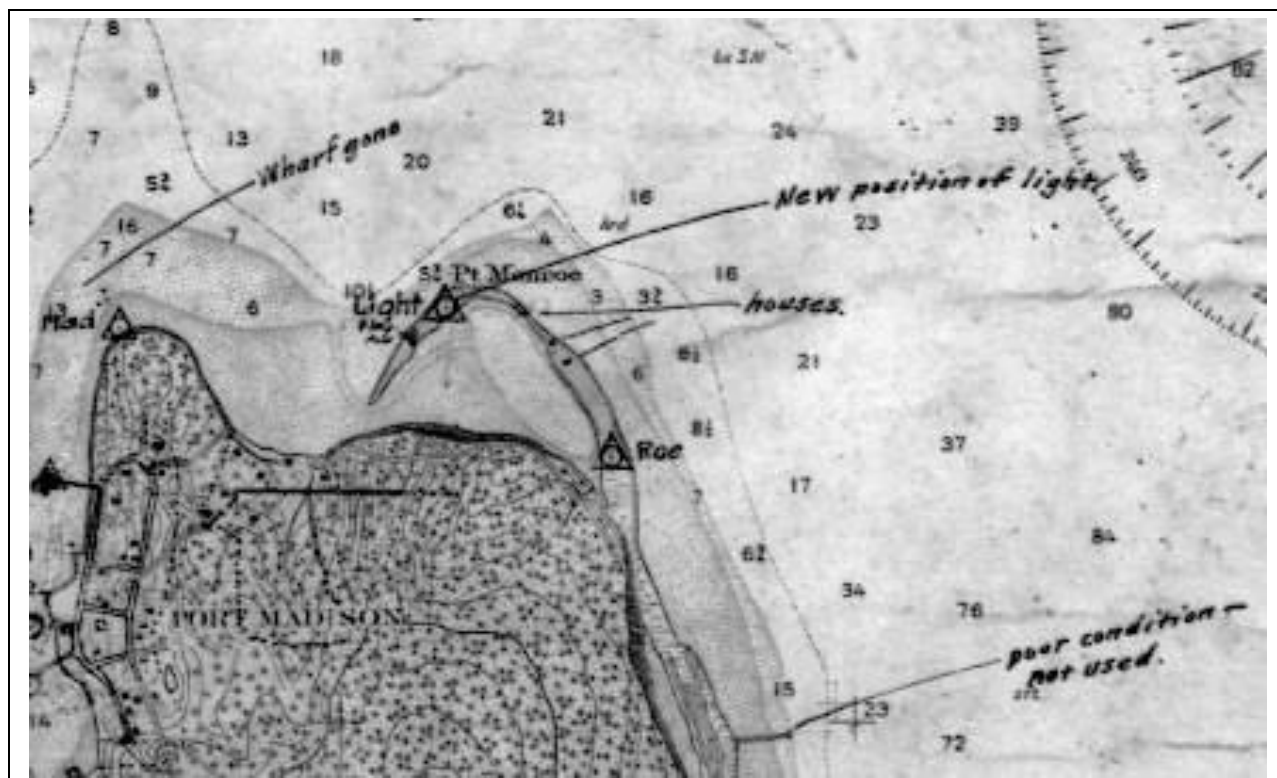


Figure 2. T-sheet Map of Point Monroe (U.S. Coast and Geodetic Survey 1916).



Figure 3. H-sheet of Point Monroe (U.S. Coast and Geodetic Survey 1868).

shoreline miles closer to Point Monroe (Zehfuss et al. 2003). Some fine sediment derived from lahars likely was transported to Point Monroe. Fine sediment may have even been transported there during large conventional floods, just as has been documented at Ala Spit from floods on the Skagit (Herrera 2008). Since the White River has been diverted and dammed, this source of fine sediment (primarily to the lagoon) has been effectively turned off. Transport of fine sediment is common several miles away from river mouths for relatively common flood events (Curran et al. 2002). The types of events in question produced many orders of magnitude more sediment (these events moved the shoreline miles [Zehfuss et al. 2003]; while floods only cause shoreline migration on the order of feet) and, therefore, the White River would likely have contributed significant sediment in the vicinity of Point Monroe.

The relevance of the physical context is important for understanding the types of habitat that could have occurred on the spit. Most certainly the spit possessed pickleweed meadows in high marsh areas (pickleweed zone), which is common at Ala Spit and undisturbed portions of Point Monroe in the present day. Currently the width of this zone at Point Monroe is approximately 30 feet in undisturbed portions of the spit.

On the beach ridge itself, where Point Monroe Drive NE and many of the residences now exist, accumulations of exposed unvegetated sediment were interspersed with dunegrass (*Leymus mollis*) and other dune plant communities, as currently occurs just to the south in Fay Bainbridge Park.

In the lower intertidal it is likely that eelgrass (*Zostera marina*) was common on the outer portion of the spit, as it is today. Although the Washington Coastal Atlas denotes the lagoon as having patchy eelgrass (Ecology 2012), Ericson (2011) found no eelgrass present, and existing eelgrass stands were not observed on the site visit. It is likely that eelgrass is minimally present, if at all, within the lagoon. Moreover, it is unlikely that eelgrass meadows were extensive within the confines of the lagoon in recent history due to the high clay content of the substrate (partially from erosion of adjacent clays, but also from past input from nearby rivers, including the White River), as well as the frequency of desiccation that would occur from tide changes given the lagoon bathymetry.

Existing Ecological Conditions at Point Monroe

A central aspect to beach spit formation in coarse-clastic (i.e., where gravel is prevalent) environments that were once glaciated is overwash (Neal et al. 2003). The importance of overwash to sustain spits has been described in several studies within the Puget Sound area (Herrera 2008; Shipman 2008). From on-site observations, this has largely ceased to occur throughout much of the spit, with the exception of near the tip. Most notably the foreshore elevation on the outer middle portion of the spit is quite low as compared to the height of the existing shoreline protection structures. It is uncertain whether this is caused by a large amount of fill being placed on the former beach or whether it has been caused by erosive forces. The overwash sediment supply has also been reduced to the lagoon portion of the shoreline. This is similar to conditions that occurred at Ala Spit due to shoreline armoring prior to restoration activities (Herrera 2008).

Despite the extensive armoring along the sound side of the spit, it is clear from examination of the shoreline and changes in recent aerial photographs that there is an intact foreshore,

transporting sediment to the tip of the spit. Further, between the 1990 and 2010 aerials, the pickleweed area near the tip expanded eastward by about 5 to 10 feet. While this expansion rate of the spit is slow compared to Ala Spit or Ediz Hook (Herrera 2009), it indicates that there remains some sediment supply to the tip. This is not unusual for spits where sediment supply, by definition, is high, even when there have been impairments to that supply, as is the case at Point Monroe. Both Ala Spit prior, and Ediz Hook under existing conditions have intact foreshores even though they have narrowed and lost sediment offshore due to placed infrastructure along the necks of the spits (Galster 1989; Herrera 2008, 2009).

The growth of the spit at Point Monroe indicates that the sediment supply from the bluffs south of the spit is not entirely shut off. It has been well documented that some armoring in the drift cell to the south has starved the drift cell of predevelopment volumes of sediment (Herrera 2011); however, the length of the drift cell in question and the presence of some intact bluffs does mean some sediment is actively delivered. While there are also likely increased losses of sediment to areas offshore from the armoring as is evident by the elevation of the beach as compared to the base of the shoreline protection structures, these losses do not completely eliminate sediment supply to the tip of the spit, particularly in light of on-site observations of mobile sand along the entire base of the armored portions of the spit.

The remaining vegetation communities on Point Monroe spit also appear to be relatively intact, despite the elimination of overwash and the intensity of development and land use, which has removed dune and strand communities that historically covered the spit. Other vegetation, including Pacific madrone (*Arbutus menziesii*), which is not typical of spits is present. The most common plant found was pickleweed, a key indicator species for pocket estuarine marshes (Beamer et al. 2003; Beamer 2007). Most of the residences occupy dune community habitat and thus its historic extent has been reduced.

Another factor in assessing the ecological condition of the shoreline is the presence of large woody debris. Wood has been shown to be important for a range of nearshore biota, including, but not necessarily limited to, macroinvertebrates and other salmonid food sources (Sobocinski 2003; Sobocinski et al. 2010; Tonnes 2008). Spits are noted repositories for large woody debris. In fact, at Ala Spit, the tip of the spit is covered almost entirely with large woody debris (Herrera 2008). At Point Monroe, the fill and protective structures have prevented wood from accumulating on many portions of the spit. However, there are portions, such as the sound side of the spit where wood does actively accumulate and provides many of the ecological functions typically found in backshore areas (Sobocinski 2003).

Existing fish use of the area has been documented by a single set of seine observations at the tip of the spit within the lagoon (Ericson 2011). These observations indicated that at least three salmon species are present, including Chinook (*Oncorhynchus tshawytscha*), pink (*O. gorbuscha*), and chum (*O. keta*) at various life stages. Habitat use of the spit by these species is likely for rearing and foraging within the lagoon and as a migration corridor outside the lagoon along the spit. Although not detectable as part of a seine survey like this, some shellfish species are also likely present in this area.

Nearby seining at Fay Bainbridge indicates that coastal cutthroat trout (*O. clarki clarki*) are also present in the nearshore (Ericson 2011). Anecdotal observations of herring spawning on the eelgrass on the bench on the sound side of the spit are also consistent with the conditions observed on site. Finally, various species of shrimp and crab are found in the mud flats in the lagoon (Ericson 2011; Jim Brennan, personal communication). No data on bird use specific to the spit were available for this report; however, it is likely used by a number of marine birds such as grebes and scoters.

Existing Development Conditions at Point Monroe

The main distinguishing feature associated with the development of the Point Monroe spit is the physical loss of the habitat areas that the footprint of each development occupies. This habitat loss is a direct impact of the development, and has likely affected the fish and wildlife species that depend upon such habitat to reproduce, rear, and forage. Nonetheless, such development has likely caused other more indirect impacts that may not be readily apparent, including impacts to water quality. Stormwater discharges from roofs and residential septic systems are two potential sources of water quality impacts. In general, direct stormwater discharge to Puget Sound is a well-documented contributor to poor water quality in the sound (Herrera 2011) and thus does not require additional discussion in this document, except to discuss specific areas of the Point Monroe spit where this is most likely an issue. A detailed analysis of whether on-site septic systems at Point Monroe are an environmental concern was also outside the scope of this report; however, some mention of environmental concerns is appropriate and thus is provided below.

The Kitsap County Board of Health regulates the permitting of on-site septic systems within the City of Bainbridge Island through Ordinance 2008A-01. The ordinance allows new septic system construction based on lot size, soil type, and system design, and specifies setback requirements accordingly. Although City staff has recommended that sewer service for Point Monroe be provided, currently homes on the spit are serviced by on-site septic systems.

Septic system setbacks required by the ordinance are variable and range from 100 feet to 50 feet (if a variance is obtained) (R. Ericson, personal communication). No monitoring of water quality within the lagoon or sound side of the spit occurs therefore, it is unknown whether the required septic system setbacks are sufficient to protect water quality, particularly in the lagoon where leaking nitrogen and phosphate could trigger microalgae blooms or excessive growth of macroalgae. Both, microalgae blooms and excessive growth of macroalgae can affect the habitat conditions in the lagoon by creating eutrophic conditions (eutrophication) or even physically impairing pickleweed growth and altering the substrate conditions.

There is limited research on whether septic systems affect marine ecosystems via polluted groundwater discharging directly to the ocean. However, California Sea Grant researchers found elevated levels of nitrogen and phosphate in the surf zone during periods of high groundwater flows to the beach from septic effluent. Their conclusion was that septic systems could affect coastal water quality through submarine groundwater discharge (see <http://www-csgc.ucsd.edu/NEWSROOM/NEWSRELEASES/2009/CoastalWaterQuality.html>). Similarly, monitoring data from sample wells and thermal infrared aerial imagery allowed

researchers in Rhode Island to identify the sources and location of nitrogen discharges and determined that the largest contributor of nitrogen was septic systems (~80 percent), and that total sewerage to eliminate on-site disposal system wastewater discharges would alter the nitrogen budget by 78 percent (Urish and Gomez 1998).

Although, the general link between eutrophication and algal blooms is widely recognized for both marine and freshwater ecosystems, the ecological effect of on-site wastewater treatment at Point Monroe is unknown as there is no monitoring of water quality. Nevertheless, eutrophication is an important environmental concern and may require additional regulatory attention.

Because the spit has been effectively separated by Point Monroe Drive NE, and the separation itself is different in different locations, it is helpful to subdivide the spit into specific geomorphic areas as the impacts from existing development vary throughout the spit. This is not to say that future modifications made in one area do not have impacts on another. It is rather that the types of environmental impacts (both existing and future) from existing infrastructure and the mitigation strategies will be different in each area. These geomorphic areas are identified on Figure 1 and described separately in each subsection below.

Outer Neck

The primary existing impact to natural processes in this portion of the study area is the placement of impervious surfaces in areas that were formerly vegetated by dune communities. These impervious surfaces have degraded the spit ecosystem and have caused a loss of dune habitat area (equal to their footprint), and thus likely also the loss of wildlife species that depend upon such habitat. One of the homes in this geomorphic zone is constructed on fill and two homes have a riprap shoreline protection structure at or near the mean higher high water elevation on all or a portion of their property (R. Ericson, personal communication). The wave energy in this area may be somewhat increased by ship traffic, but that effect is unknown, although it has been observed elsewhere (Finlayson 2006). Sediment supply reductions in the drift cell to the south could also increase the propensity for erosion to occur, but these changes have not had a measurable impact on geomorphic conditions on these properties according to recent aerial photographs. Compared to historic conditions, these energy increases and sediment supply reductions may have affected the forage fish spawning habitat and potentially shellfish habitat along this portion of the spit.

Outer Middle

The homes located on the outer middle are in the most geomorphically active, energetic portion of the spit. These parcels experience intense wave activity from both natural and possibly from human sources such as ship traffic; however, Finlayson (2006) documented that ship traffic was insignificant compared to wave energy on energetic shorelines, albeit in a less travelled place. Regardless, the presence of shoreline protective structures likely results in energy increases and thus impacts to forage fish habitat, as discussed above for the Outer Neck of the spit. In addition, these shoreline protective structures likely significantly reduce the frequency of spit inundation during large storms and extreme tides. The parcels in this

portion of the spit have the largest number of human modifications. Those modifications and their impacts are:

- Fill - Not all of the parcels have been filled, but it is clear from visual elevation interpretation of some of the residences that fill has been placed to raise the properties above high marine water levels. The fill and associated shoreline protection structures reduces overwash events.
- Shoreline protection structures (i.e., bulkheads) - All of the developed parcels have shoreline protection structures on them. Only a short stretch of the shoreline is not armored. This area shows signs of active erosion and retreat of the beach, likely from loss of sediment supply to areas offshore. Recent aerial photographic analysis also indicates signs of erosion since 1993 (Coastal Solutions 2010). The erosion has caused the beach to lowered as is typical with shoreline protection structures (Herrera 2007) and impairs or precludes the presence of forage fish habitat as well as juvenile salmon feeding, refuge, and migration habitat. It could also have an impact on shellfish habitat.
- Native vegetation removal - The residences currently occupy areas that were likely the site of dune plant communities thus native habitat was removed and thus wildlife species impacted (for example, through loss of bird nesting habitat).
- Loss of large woody debris - Large woody debris plays an important role in the maintenance of healthy backshore areas (Sobocinski 2003; Herrera 2007). The removal of large woody debris from these areas has eliminated the ecological functions it provides. This ecological function loss has likely resulted in a loss of rearing, nesting, and foraging opportunities for wildlife species that would have used the dune communities.
- Impervious surfaces - Because these parcels are nearly entirely built out, there has been conversion from pervious to impervious conditions, which necessitate roof drainage via small drainpipes that drain directly to the beach. This discharge causes the direct discharge of stormwater to Puget Sound, which as stated earlier is a well-documented contributor to poor water quality in the sound (Herrera 2011).

Lagoon

The lagoon parcels are separated from Puget Sound by Point Monroe Drive NE. Prior to development the lagoon parcels were intermittently inundated by marine waters from overwash during marine high water events. This overwash was also a major source of sediment to the lagoon. This source of sediment has been cut off by fill, structures, and residences on the outer portion of the spit. Many homes in this area are located overwater. Although erosion rates and hazards are less for these properties, they often have fill associated with them that requires structural protection. Placement of fill and the residences themselves likely eliminated pickleweed habitat, a key nursery for juvenile salmonids (Beamer 2007). Based on visual observations during the site visit, the structures themselves now have vigorous attached biological communities that are more typical of rocky

environments. Hence, a habitat type transformation has also resulted from development as has also been documented elsewhere (Bulleri and Chapman 2010).

Tip

Like the neck of the spit, the homes in this area are generally setback from the active foreshore. These properties exhibit ongoing sediment deposition (such as the sand present in front of the anchored wood in Figure 4). Unlike the neck, wave energy is much reduced from areas on the spit further east, due to the protection from main Puget Sound basin waves by the northerly arc of the spit itself. The primary impacts to the nearshore ecosystem have been the placement of residences themselves (resulting in loss of habitat), and the placement of impervious surfaces (potentially resulting in water quality impacts). While habitat area has been lost and has likely impacted wildlife species that depended on such habitat, the presence of the residences seems to have not affected the viability of the remaining and reduced pickleweed and dune communities in their immediate vicinity. This is possibly because these residences are spaced further apart than in other areas of the spit.



Figure 4. Recent Sand Deposited in Front of Anchored Wood.

RECOMMENDATIONS FOR MITIGATION OF FUTURE IMPACTS

The best approach to address potential ecological impacts is avoidance. When avoidance is not feasible, then minimization by design is preferred. Any remaining impacts should be mitigated. Since it is likely that future development will occur at Point Monroe, recommendations for mitigation are provided here. While mitigation can compensate for habitat impacts and potentially benefit species over time, in the short term, habitat loss results in immediate impacts on species.

Although the extent and intensity of development on the spit is significant and has disrupted historical geomorphic processes and habitat functions, remaining natural areas of the spit are relatively stable and provide some ecological functions. The most significant and probable future development on the spit is the construction of new residences on at least three undeveloped parcels identified by the City (R. Ericson, personal communication). Two of these parcels have existing bulkheads that would be grandfathered in as existing structures. The third, which has a permit under review for a new septic system, is on the sound side Tip area and likely does not require structural shoreline protection to accommodate a residence, though soft shore protection may be desired. This action should be subject to the City's standard approach to installation of soft shore protection.

Aside from the new residences, most of potential actions covered by new City regulation will be expansion of existing infrastructure. Table 1 summarizes the impacts to fish (finfish and shellfish) and wildlife habitat from these and other possible actions and ranks them as to whether they are high, medium or low. Impacts are characterized in terms of the following categories: hydraulic changes, geomorphic changes, substrate changes, habitat area loss, pickleweed removal, dunegrass removal, water quality degradation, aquatic habitat shading, and fish behavioral changes.

Table 1 draws heavily on Herrera (2007), which describes the impacts associated with shoreline modifications, as adapted to the particular conditions found at Point Monroe. Most of the impacts are comparable to what would occur elsewhere on City shorelines. However, there are several particular actions where impacts will be significantly different from similar actions elsewhere in the City. Key actions and impacts that are different on the spit from other areas in the City are:

- Overwater structures in the Point Monroe lagoon may not have easy-to-measure impacts associated with changing predation risk (by predatory fish) on juvenile salmonids. Because those predator species responsible for the increased risk (e.g., adult rockfish and sculpin) elsewhere, these predators are generally not likely present in the lagoon, due to regular complete tidal flushing. Hence, such predatory fish, which typically display affinity to structures such piles, cannot likely establish permanent

Table 1. Summary of Potential Actions and Associated Impacts.

Actions		Potential Impacts on Fish (fin and shellfish) and Wildlife Habitats								
		Hydraulic Changes	Geomorphic Changes	Substrate Changes	Habitat Area Loss ^a	Pickleweed Removal ^b	Dunegrass Removal ^b	Water Quality Degradation ^c	Aquatic Habitat Shading	Fish Behavioral Changes
Residential buildings (not including impervious surface impacts)	New	H ^e	H ^e	H ^e	H ^e	H ^e	H		M	L
	Expansion	M ^e	M ^e	M ^e	M ^e	M ^e	M		M	L
Impervious surface	New							M		
	Expansion							L		
Traditional shoreline protection structure	New	H	H	M	H		M			H
	Expansion	M	M	L	M		M			M
Soft-shore protection structure ^d	New		L		L					
	Expansion		L		L					
Overwater structures	New					H	M			
	Expansion					M	M			
Piles	New	L		L	L	L			L	L

Notes:

H = High, M = Medium, L = Low

^a Only includes aquatic habitat

^b If present

^c If treatment is not provided

^d Assumes there is also associated dunegrass planting

^e Only in Tip geomorphic area where overwash currently occurs

residence in the lagoon or hover for long periods under the dock structures waiting for juvenile salmon to prey upon. However, to the extent that these overwater structures may attract predatory fish during periods of high tides and during the months when juvenile salmon may be migrating along City's shorelines, increased predation risk could exist. Likewise, to the extent that these overwater structures may attract predatory birds, an increased predation risk from such birds may be an issue. Overwater structures also will have impact on the footprint of where piles are placed.

- Shading impacts from residences may affect juvenile salmonid migration by forcing juveniles away from the water's edge and causing an increased predation risk by species such as adult and pre-adult coastal cutthroat trout. It is important to mention that because migration only occurs on the outside of the spit (the lagoon is likely mostly used for rearing and foraging), and existing height requirements limit potential shading envelopes, this impact will only be incurred in the Outer Middle geomorphic area.
- Impacts may occur with expanding impervious area, but they could be mitigated by on-site infiltration due to porous geology, and generally well-drained conditions. This statement implicitly refers to future development that will be in areas previously filled and/or protected by existing bulkheads. Placement of new impervious surfaces in areas not previously filled and protected with an existing bulkhead may have other impacts to physical habitat that will also have to be addressed. In addition, infiltration potential may be limited given the lot sizes on the spit, and the leach field and setback requirements for septic systems.
- Vegetation impacts would occur in only certain geographic areas associated with important plant communities (dunegrass and pickleweed). Areas of existing fill have already experienced these impacts and generally do not possess this type of vegetation.
- By disrupting the overwash and deposition process, shoreline stabilization structures on the spit have cut off sediment supply that nourishes beach formation. Due to the extent and location, there are likely cumulative effects (both geographic and over time) as well as direct impacts from individual structures. There is also a possibility of additional impacts associated with new shoreline armoring and development.

Spits are generally susceptible to flooding and storm surge damage and property owners often request the construction of flood protection in the form of shoreline armoring and/or stabilization. The National Marine Fisheries Service (NMFS) issued a Biological Opinion (BiOp) concerning the effects of flood protection measures on endangered species and their habitats. In response, FEMA has provided guidance on habitat assessment and mitigation required according to the National Flood Insurance Program (NFIP). In return for federally supported flood insurance, local governments had to agree to regulate development in their floodplains in accordance with the Program's criteria. Hence, the City is required to consider the impacts on Endangered Species Act (ESA) listed species and their habitat as well as Essential Fish Habitat (EFH, defined by the Magnuson-Stevens Fishery Conservation and Management Act) when issuing a permit for a conventional shoreline protection structure. The

reason is that bulkheads and levees are considered flood protection development. Specific to Point Monroe, the BiOp and FEMA guidance pertinent to NFIP requires the City to consider impacts on Chinook salmon, steelhead, and bull trout (listed species). While only Chinook are documented to use the lagoon (Ericson 2011), the potential exist for juvenile steelhead and pre-adult bull trout to use the lagoon for rearing and foraging. It also requires the City to consider critical habitat for Chinook salmon, steelhead, and bull trout, and EFH, all of which have been mapped by NMFS and the US Fish and Wildlife Service (USFWS) along the City's shoreline. On one hand, because the lagoon is open to Puget Sound, and these listed species would therefore not be stranded if swept into the lagoon by extreme tides or large storm events, it is unlikely that such species would be adversely affected from stranding by a conventional shoreline protection structure located above the mean higher high water elevation. These fish species would be expected to seek the lagoon outlet as waters recede. On the other hand, conventional shoreline protection structures could result in impacts to critical habitat for these species, even if located above the mean higher high water elevation. These impacts are similar to those discussed earlier in this section of the document.

A summary table of potential mitigation options for each category of impact listed in Table 1 is provided in Table 2. In addition, there is significant variability in the ecological impacts of the actions likely to occur throughout the spit based on geomorphic area. Specific recommendations for each geomorphic area are discussed below in individual subsections.

Note that there is no scientific research specifying mitigation ratios for the pickleweed and dunegrass plant communities as recommended in Table 2. However, a greater than 1:1 ratio of mitigation area to impacted area is recommended since plantings do not all survive. Dunegrass communities are recommended at a 2:1 mitigation ratio because when well rooted and deeply planted, dunegrass will generally successfully establish. A higher mitigation ratio of 4:1 is recommended for pickleweed because while dunegrass is commercially available and can be planted, pickleweed is generally not commercially available and mitigation of impacts would depend on natural colonization, which necessarily implies more risk. However, the odds of natural colonization on Point Monroe are high given that most undisturbed areas of the lagoon have pickleweed present at the preferred elevations. In most cases, mitigation will have to occur on-site unless additional properties are acquired considering that the spit is largely intact outside existing development. If additional properties are acquired to provide off-site mitigation, it should be in-kind and in the closest proximity to Point Monroe as possible.

It is recommended that a site-specific analysis be required for any new residential development planned for undisturbed areas on currently undeveloped lots. This is to ensure that all potential effects are evaluated prior to construction, and sufficient mitigation is provided to prevent no further degradation of remaining ecological functions associated with Point Monroe. In addition, a site-specific analysis is recommended for expansion of residential structures in the Tip area. This is because the Tip has extensive native vegetation and is regularly overtopped during extreme high tides; thus expansion of residences could have numerous impacts.

Table 2. Summary of Recommended Mitigation Options for Associated Impacts.										
Actions		Impacts and Recommended Mitigation								
		Hydraulic Changes	Geomorphic Changes	Substrate Changes	Habitat Area Loss	Pickleweed Removal	Dunegrass Removal	Water Quality Degradation	Aquatic Habitat Shading	Fish Behavioral Changes
Residential buildings (not including impervious surface impacts)	New	Site-specific analysis if new construction is planned for undisturbed areas on undeveloped lots	Site-specific analysis if new construction is planned for undisturbed areas on undeveloped lots	Site-specific analysis if new construction is planned for undisturbed areas on undeveloped lots	Site-specific analysis if new construction is planned for undisturbed areas on undeveloped lots	Recreate pickleweed elevation of 4x area through nourishment	Plant 2x equivalent area		Nourishment sufficient to move active salmon migration corridor seaward and outside of dominantly shaded area ^b	Covered by nourishment for shading ^c
	Expansion	Site-specific analysis if expansion is into undisturbed areas located on Tip	Site-specific analysis if expansion is into undisturbed areas located on Tip	Site-specific analysis if expansion is into undisturbed areas located on Tip	Site-specific analysis if expansion is into undisturbed areas located on Tip	Recreate pickleweed elevation of 4x area through nourishment	Plant 2x equivalent area		Nourishment sufficient to move active salmon migration corridor seaward and outside of dominantly shaded area ^b	Covered by nourishment for shading ^c
Impervious surface	New							Infiltrate on-site		
	Expansion							Infiltrate on-site		
Traditional shoreline protection structure ^a	New	Site-specific analysis recommended	Site-specific analysis recommended	Site-specific analysis recommended	Site-specific analysis recommended		Site-specific analysis recommended			New bulkheads are not recommended
	Expansion	Site-specific analysis recommended	Site-specific analysis recommended	Site-specific analysis recommended	Site-specific analysis recommended		Site-specific analysis recommended			Expanded bulkheads are not recommended
Soft-shore protection structure ^b	New		Nourishment sufficient to counteract future losses		Nourishment sufficient to counteract future losses					
	Expansion		Nourishment sufficient to counteract future losses		Nourishment sufficient to counteract future losses					
Overwater structures	New					Recreate pickleweed elevation of 4x area through nourishment	Plant 2x equivalent area			
	Expansion					Recreate pickleweed elevation of 4x area through nourishment	Plant 2x equivalent area			
Piles	New	Minimize number/footprint of piles		Minimize number/footprint of piles	Minimize number/footprint of piles	Minimize number/footprint of piles			Minimize number/footprint of piles	Minimize number/footprint of piles

Notes:

^a Sediment supply to Point Monroe is impaired due to placement of traditional shoreline protection structures. It is recommended that no new or expanded structures of this type be allowed unless a site-specific analysis indicates that spit conditions would not be further impaired.

^b Assumes there is also associated dunegrass planting.

^c If erosion is expected, consideration should be given to the need for additional nourishment over time.

Sediment supply to Point Monroe is impaired due to placement of traditional shoreline protection structures. In some cases, new or expanded traditional shoreline protection structures could be allowed if mitigation is provided to restore updrift feeder bluffs that would effectively increase sediment supply to the spit (Coastal Geologic Services, Inc. 2010). In fact, restoration of the drift cell culminating at Fay Bainbridge State Park located immediately south of Point Monroe is specifically identified in *Strategies for Nearshore Protection and Restoration in Puget Sound* as an important project for Bainbridge Island and the South Central Sub-basin of Puget Sound (Cereghino et al. 2012). However, this option should be carefully evaluated in a site-specific analysis to ensure sediment supply to the spit is improved and no further degradation occurs as a consequence.

Therefore, it is recommended that no new or expanded traditional shoreline protection structures be allowed unless a site-specific analysis indicates that spit conditions would not be further impaired. In addition, all properties currently at risk from erosion have structures in place that can be maintained or replaced under the City's shoreline regulations. If a site-specific analysis is recommended, it should address all the potential impacts identified in Tables 1 and 2. These include hydraulic changes, geomorphic changes, substrate changes, habitat loss, pickleweed removal, dunegrass removal, water quality degradation, aquatic habitat shading and fish behavioral changes.

All mitigation projects should include a monitoring plan, which should be implemented for at least 5 years. The monitoring plan should include adaptive management strategies indicating how to proceed in the event that the restoration projects are found not to be performing as expected from the design.

For recommended mitigation requirements for repair or replacement of traditional shoreline protection structures, see the City of Bainbridge Island *Single Family Residence Shoreline Mitigation Manual*.

Outer Neck

The outer neck is completely built out. These three developed parcels are setback from the ordinary high water mark and the active and intact foreshore. The absence of existing shoreline protection structures and intact sediment supply indicate that erosion on these parcels, if it occurs at all, is primarily episodic and slow in the long term. As a result, no hard shoreline structures should be required to protect the existing residences; however, performing a risk assessment on such properties was not part of the science summary scope of work. If shoreline protection is proposed, it is recommended that a soft-shore approach be used (beach nourishment may also be an option if feasible)¹. It is assumed that new overwater structures will not occur in this area due to an energetic nearshore. Expansion of the existing residences will not have negative ecological consequences if they are expanded in a landward

¹ While nourishment would have positive ecological benefits to all portions of the outer spit and could help reduce adverse effects that loss of sediment has on habitat at places further down-drift, the financial and operational efficacy of nourishment would need to be evaluated.

direction within already disturbed areas. Expansion in the seaward direction could affect important intact vegetation communities, and if large enough, could have shading impacts.

Outer Middle

It appears that these parcels have the greatest geomorphic risk; however, as previously stated, performing a risk assessment on such properties was not part of the science summary scope of work. They experience intense wave activity from both natural and potentially human sources such as ship traffic. The fill and associated structures with these properties also provide some protection to the spit from inundation during large storms and extreme high tide events. All of these parcels require protection for residences. Consequently, all developed parcels have some form of existing shoreline protection structure. Only three parcels are not protected. One is owned by the United States Government, and presumably will not be developed in the future, while the other two are owned by an adjacent landowner. Further development of the privately owned parcels would likely necessitate the placement of fill owing to the small footprint available due to past erosion; however, new fill is not allowed by the SMA WAC 173-26-231(c). Expansion of the residences upward could trigger shading impacts on the nearshore, though these impacts will be highly dependent on the specific details of the action and could be shown to be negligible if a shading analysis is performed. Increased runoff from additional impervious surface area could be mitigated by on-site infiltration such as discharging to a rain garden, or use of pervious pavement or other pervious materials due to well-drained soils. None of the parcels on this side of the spit have docks or other related overwater structures, and it is assumed that the wave energy in this area will continue to preclude the construction of these structures in the future.

Lagoon

The lagoon parcels are separated from Puget Sound by Point Monroe Drive NE and shoreline protection structures on the outer portion of the spit. These parcels typically have homes that are overwater structures. Because the erosion rates and hazards are less than that in most other parts of the City, new bulkheads should not be necessary to protect new or expanded residences. Previously placed fill areas are generally already protected by existing shoreline protection structures. Therefore, it is not expected that new shoreline protection structures will be required in the Lagoon geomorphic area; however, performing a risk assessment on such properties was not part of the science summary scope of work.

Docks are common in this section of the spit. Expansion of existing docks in the lagoon seaward direction may not have significant ecological impacts beyond the impacts caused by the structures that already exist on the lagoon, particularly if new piles are not required. Expansion of existing docks alongshore in areas already disturbed and free of native vegetation (pickleweed) may also have minimal effects, although would preclude future vegetation colonization if the possibility exists based on site conditions. However, destruction or loss of pickleweed meadows would constitute a significant ecological impact and would require mitigation through the creation of pickleweed meadows elsewhere in the lagoon. New docks would only have ecological impacts from piles if the docks could be constructed without causing a loss of pickleweed meadows or dune plant communities. In addition, to the extent

that overwater structures may attract predatory fish during periods of high tides and during the months when juvenile salmon may be migrating along City's shorelines, increased predation risk could exist. Likewise, to the extent that these overwater structures may attract predatory birds, an increased predation risk from such birds could be also a resulting impact. Expanded height of upland structures would not have shading impacts due to the orientation of the shoreline and existing height restrictions. Expanded residences on existing fill likely will have only impervious surface impacts. The increased runoff from impervious surfaces could be mitigated by infiltrating the runoff on-site which also would protect water quality.

Tip

Like the neck of the spit, the homes in this area are generally setback from the active foreshore, probably because the spit has historically been wider in this area (Figures 2 and 3). These properties also show signs that sediment deposition is occurring. Wave energy is significantly less than the outer portions of the spit. Hence, all further protection if desired should consist of soft shore protection structures. Expansion of existing residences will likely not have significant ecological impacts, if the expansion does not induce the loss of native vegetation communities, excepting the increase in impervious surface, which can be mitigated by on-site infiltration. Because of extensive native vegetation and generally low topography (i.e., it is regularly overtopped during extreme high tides), new construction or expansion of residences will likely have numerous impacts (see Table 1) that should be examined in detail in a site-specific analysis provided to the City as part of a development application.

CONCLUSION

Point Monroe is distinguished by significant development, which has largely resulted in the direct loss of fish and wildlife habitat and has thus likely affected the fish and wildlife species that depend upon such habitat to reproduce, rear, and forage. In addition, development has likely caused other more indirect impacts that may not be readily apparent, including impacts to water quality. Most significantly, sediment supply to Point Monroe is impaired due to placement of traditional shoreline protection structures both updrift and on the spit.

In most cases, mitigation for new or expanded structures on Point Monroe should occur on the spit where the impact can be directly mitigated. The exception to this general recommendation is when restoration of up drift feeder bluffs would improve sediment supply to Point Monroe. Existing development on the spit and the relatively intact habitat that remains allows few opportunities for local mitigation. Considering that the spit is largely intact outside existing development, mitigation should be directed to restore existing disturbed areas or potentially on remaining undeveloped properties. In the case of Point Monroe, it may make sense to allow permanent preservation of existing undeveloped properties as mitigation in order to prevent further habitat loss from development.

GLOSSARY

Downdrift - In the direction of dominant, alongshore sediment transport, which on Point Monroe follows the spit from east to west.

Desiccation - The removal of moisture from something, as in the loss of water due to low tide conditions.

Eutrophication - The ecosystem response or process by which a body of water acquires a high concentration of nutrients, especially phosphates and nitrates. These typically promote excessive growth of algae. As the algae die and decompose, high levels of organic matter and the decomposing organisms deplete the water of available oxygen.

Forage fish - A term for a variety of small fish species that commonly use the Puget Sound nearshore, including sand lance (*Ammodytidae* sp.), surf smelt (*Hypomesus pretiosus*), and Pacific herring (*Clupea pallasii*).

Foreshore - The steep part of the beach that is generally composed of gravel, although it can contain sand or even boulders. The foreshore on the shoreline of Bainbridge Island extends from approximately 1 to 3 feet above MLLW to MHHW. It is the most sedimentologically active portion of the nearshore.

Littoral fish - Those fish that are found in the intertidal zone, moving in and out with the tide. They include anadromous salmonids, forage fish, and many marine fish species.

Mean higher-high water (MHHW) - The average elevation of the two high tides in each day over a tidal epoch (19 years).

Mean lower-low water (MLLW) - The average elevation of the two low tides in each day over a tidal epoch (19 years).

Nourishment - Where sediment (usually sand) is placed to protect an eroding beach.

Ordinary High Water Mark (OHWM) - The point on all water bodies that will be found by examining the bed and banks and ascertaining where the presence and action of water 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 as it may naturally change thereafter provided where such mark cannot be found on marine shorelines such point shall be the mean higher high tide line, and on freshwater shall be the mean high water line.

Overwash - The process by which waves overtop a spit and deposit on the landward/lagoon side of a spit.

Overwash splays - Deposits from overwash.

Pocket estuary - A small estuary that forms behind spit or barrier beach landform at a submerged, tectonically- or glacially-derived valley or at a small creek delta (Beamer et al. 2003).

Updrift - In the direction opposite of dominant alongshore sediment transport.

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POINT MONROE COMMUNITY MEETING
August 27, 2012

Staff: Libby Hudson, Ryan Ericson, Theresa Rice, Jeff Parsons (Herrera)

Planning Manager Libby Hudson explained that the purpose of the meeting was to present the science prepared by Herrera and to scope the project to develop provisions for Point Monroe, adding that another community meeting will be scheduled for the week of September 24.

Jeff Parsons, a geomorphologist with Herrera, gave a presentation on his firm's project to look at future impacts from future development on Point Monroe, establish existing baseline conditions, and recommend mitigation. As part of the process Herrera representatives surveyed peer-reviewed scientific literature and gray literature, walked the spit with local landowners, discussed present and expected development, and identified potential mitigation actions for different portions of the spit. The report divides the spit into several areas based on geomorphic and other physical characteristics. Key points from his presentation follow:

Predevelopment conditions

- Overwash is key geomorphic process maintaining spit
- Typically dune community backed by marsh (pickleweed community) – have some intact
- Very productive fishery and bird habitat (pocket estuary)

Existing

- Overwash not as extensive
- Some longshore sediment transportation
- Primary impact – development replacing wildlife habitat

Geomorphic divisions

- Outer neck – adjacent to Fay Bainbridge
- Outer middle – sound side of the road
- Tip
- Lagoon – most overwater structures

Recommendations

- New bulkheads or new residences in undisturbed portions of the spit should require a site specific analysis (extensive pickleweed or sedimentation)
- Regulated actions can be prescribed by the mitigation table included in the document

When asked if comments would be accepted on the report, Manager Hudson replied that as agreed under the consultant contract it is a final document, but comments are always accepted.

In response to a question from the audience, Councilmember Steve Bonkowski explained that the City Council chose just a summary of the best available science because that is all that is required by the state and to avoid turning the process “into a science project.”

When asked how the report establishes the baseline for no net loss, staff said it represents the baseline of what we know for Point Monroe, adding that there are other more numerical datasets that include where the eelgrass and pickleweed is growing.

Responding to a question from the audience, Jeff Parsons said that he doesn't think Point Monroe is very different today than it was in 2008.

Hal Snow is concerned about words such as "possibly" and "could" getting shifted to "should" statements over time and through staff turnover.

One member of the audience asked "What is large woody debris? Driftwood? And isn't that considered soft armoring?" Mr. Parson's answer was that it could be driftwood. "Do we need a permit to corral these logs on the beach?" Shoreline Planner Ryan Ericson said that soft armoring is allowed on the spit but it's a matter of how you do it so that you maintain the naturally-occurring interaction. However, naturally occurring driftwood is not considered "soft armoring" and would not require a permit.

Another attendee asked, "Don't you encourage overhanging vegetation?" Mr. Parsons said that riparian vegetation is really important to the shore, depending on what it is, and spoke briefly about the benefits provides. Planner Ericson added that he would encourage a homeowner to donate a hazardous tree to the large woody debris.

An audience member asked what the difference was between a tree shading the water and a dock shading the water. Planner Ericson said in general shading in the upper intertidal area moderates beach temperature and helps add to the nutrient supply, and also provide prey items for fish species. As you move into deeper water, shading is a negative impact – for example, shading out submerged aquatic vegetation.

Planning Manager Hudson then provided information that compared existing requirements to what is proposed in the SMP update, which lead to a brief discussion about Kitsap Health District septic system requirements and regulations, overwater residences, bulkheads, and docks.

Asked for the definition of "new development" Planning Manager Hudson said that it is new square footage or impervious surface.

Discussion points from the audience were recorded on a flip chart, and include:

- Make the buffers realistic for Point Monroe.
- Note known important microhabitats.
- Consider mitigation banking and a fee-in-lieu program – residents may support improving the stormwater outfall as appropriate community mitigation
- Bulkhead replacement requirements: utilize the Herrera report to justify bulkhead repair and replacement in the outer middle and lagoon areas instead of requiring individual geotechnical reports.
- Look at the replacement and upward expansion of overwater residences.

- Look at appropriate shoreline designations (Priority Aquatic A and B) in light of the science.
- Consider changes to dock limitations based on the impact information in the report.
- Determine what vegetation requirements are appropriate for the spit, taking stabilization into consideration.
- Determine appropriate mitigation for increases in impervious surfaces.
- Consider alternative lot coverage requirements for Point Monroe.

The meeting closed at 9:05 p.m.

Attachment C

Issues from Community Meeting	Current draft SMP Provisions	Staff Proposal for Point Monroe	Recommended Point Monroe Specific Provisions	SMP Sec.
Vegetation Management				
Make buffers realistic.	75-foot shoreline buffer applies. Lots must also meet the 30% side-yard setback requirement.	Eliminate buffer requirements and require vegetation areas instead.	Define a Point Monroe District; Require that all new primary and/or accessory structures be located minimum 15 feet from the OHWM; Require that structures meet side-yard setback requirements; Require that all properties in the Point Monroe District define a spit-specific vegetation management area (SVMA).	5.9.6 4.1.3.5
Determine appropriate vegetation requirements for spit taking existing stabilization into consideration. Note known important micro habitats.	Dual-zone buffer system applies, restricting development in the first 30 feet from OHWM. Protection of existing native vegetation communities required.	Require new development to retain existing vegetation along shoreline, and redevelopment to maintain what vegetation that is possible along the shoreline and side yards.	Require that all properties in the Point Monroe District retain existing native vegetation and a spit-specific vegetation management area (SVMA); The SVMA shall be managed and maintained in appropriate vegetation communities such as barrier spit vegetation, dunegrass and salt marsh plant communities.	4.1.3.5
Stabilization				
Consider using the Herrera report to justify bulkhead replacement when a demonstrated need is required.	Need must be demonstrated through a site-specific geotechnical report.	Discuss with Ecology whether the existing report could be used for the “demonstrated need” required for replacement of an existing bulkhead, but not be utilized for a proposed new bulkhead.	For stabilization replacement, allow the use of the 2012 Spit Science Summary, completed by Herrera Environmental to be utilized as the “demonstrated need” for an existing primary single family residence located in Point Monroe District.	6.2.8.1(2)(c)
Environmental Impacts				
Consider mitigation banking/fee-in-lieu.	Restoration Plan considers mitigation banking as potential option for future.	The Herrera report determines that there are no mitigation sites available on the spit itself. A mitigation bank may be possible at another location, but to determine this further study would be necessary.	No changes proposed.	N/A
Look at appropriate aquatic shoreline designation (Priority A & B) considering science	Southern portion of lagoon is currently designated Aquatic Conservancy and proposed draft includes designating the remaining lagoon Priority Aquatic B.	The lagoon meets the criteria for Priority Aquatic and staff recommends retaining the designation.	No changes proposed.	N/A

Attachment C

Consider changes in dock limitations based on the impact information in the spit science summary report.	Only joint-use docks are allowed in Aquatic B. No docks are allowed in Aquatic A (same as the current SMP)	The Herrera spit report concludes that predator issues related to docks are not as significant an issue as in other locations. Staff recommends allowing individual docks in the Priority Aquatic B designation-- only where there is no impact to pickleweed since on-site mitigation is not possible.	Allow individual docks in Priority Aquatic B adjacent to Point Monroe District, except in areas of pickleweed (<i>Salicornia</i> sp.)	6.3.4
Determine appropriate mitigation.	Under dual-zone buffer system, mitigation is required that includes revegetation of Zone 1 (to obtain a 65% canopy coverage within 10yrs)	Limit the development area on-site and require planting of area between the OHWM and the residence.	When new development requires vegetation mitigation, require replanting of appropriate vegetation plant communities within the 30-feet* upland of the OHWM, or if not possible there, where area is available on the site; Plantings would include such barrier spit vegetation as dunegrass or saltmarsh (pickleweed) plant communities.	4.1.2.5
Development				
Consider provisions for overwater residences to allow upward expansion.	Over water residences are not allowed and existing overwater residences may not be expanded (same as the current 1996 SMP)	Staff consulted with Ecology and determined that expansion upward of an overwater residence is considered an increase in intensity of a nonconforming use over the water and would not be allowed.	No change proposed	N/A
Consider alternative lot coverage requirements for Point Monroe.	Proposed nonconforming provisions allow up to 2500 square feet or 25% expansion of existing upland residences.	Determine an appropriate development area (not including on-site septic systems), while maintaining a 15-foot area between the OHWM and the residence for newly developed lots and as possible for redevelopment of developed lots.	Each lot is permitted a development area for house, garage, driveway (excluding septic) Allowed lot coverage is 50% of upland property area, not to exceed 1400 sqft	5.9.6

* - Staff recommends changing from 15 feet to 30 feet based on public comment, community member comments, and Department of Ecology comments.

Proposed Provisions for Point Monroe Spit

Date 1/03/2013

Yellow Highlight = Point Monroe specific changes

Environmental Impacts

4.1.2.5 Regulations – Revegetation Standards (page 63 & 64 of draft SMP)

4. When vegetation mitigation is required for new development, uses, or activities within the 200-foot shoreline jurisdiction (as determined through a site-specific impact analysis pursuant to Section 4.1.2.4), the mitigation plan shall include new plantings that are protective of views from the primary structure of the subject property and in proportion to the identified impact. Except for the Point Monroe District, which shall meet special provisions in subsection 6, the required mitigation plantings shall be planted as specified in Section 4.1.3.5(6), and implemented in the following sequence: (no proposed change to the sequence)

5. No change proposed

6. Special Mitigation Provisions for Point Monroe District – When vegetation mitigation is required for new development, uses, or activities in the Point Monroe District, the mitigation plan shall include new spit-appropriate vegetation communities for barrier spit, dunegrass, and/or salt marsh that shall be installed within the Point Monroe vegetation management area (PVMA) as defined in subsection 4.1.3.5(9).

Vegetation Management Provisions

4.1.3.5 Regulations – General (page 70 & 71; 78 of draft SMP)

1. Development within the shoreline jurisdiction shall be located and designed to protect existing native vegetation from disturbance to the fullest extent possible, to mitigate impacts to existing vegetation, and to meet the standard of no net loss of ecological functions, Section 4.1.2, Environmental Impacts.
2. Vegetation clearing, grading, or construction may not be undertaken within the shoreline jurisdiction without review and approval by the Administrator, unless otherwise exempt under Section 4.1.3.4, or as provided in subsection 7 below, with an approved Standard Operation Procedure (SOP) manual. Clearing and grading may be subject to Section 4.1.4, Land Modification and/or a clearing permit, pursuant to BIMC 15.18.
3. Two alternative methods may be used to meet the goals and policies of the Vegetation Management Section, as provided below, follows except that the Point Monroe District shall meet the special provisions provided in subsection 9:
4. No change proposed
5. No change proposed
6. No change proposed

7. No change proposed
8. No change proposed

9. Special Provisions for Point Monroe District. Shoreline Buffers or Site-specific Vegetation Management Areas are not required for properties located in the Point Monroe District; instead vegetation provisions specific to the sand spit shall apply:

- a. All properties in the Point Monroe District shall retain existing native vegetation and shall be subject to a Point Monroe Vegetation Management Area (PVMA).
- b. The PVMA shall include areas that are:
 - i. Within thirty (30) feet of the OHWM and within the required side yard and the salt marsh fringe; and
 - ii. Outside any designated development area as approved pursuant to Section 5.9.6(2).
- c. The PVMA shall be managed and maintained in vegetation communities appropriate to spit, barrier beach, sub-estuary, lagoon or salt marsh.
- d. Properties with existing development which meets or exceeds the allowable development area in subsection 5.9.6(2) shall retain existing native vegetation (appropriate to spit, barrier beach, sub-estuary, lagoon or salt marsh) in those areas that are not developed with legally established impervious surfaces.
- e. Any new development or alterations and expansion of existing development shall assess impacts to existing vegetation and meet the no net loss standard pursuant to Section 4.1.2, Environmental Impacts.

4.1.3.117 **Regulations – Shoreline Structure Setback View Requirement**

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

Flood Provisions

Section 4.1.7 Flood Hazard (page 103 of draft SMP)

4.1.7.3 Prohibited

- ~~1.7.~~ Flood control works are prohibited on estuary or embayment shores, on point and channel bars, and in salmon spawning areas, except for the purpose of fish or wildlife habitat

enhancement or restoration or as approved for a foundation for redevelopment of a legally established primary residential structure in the Point Monroe District.

Nonconforming Development Provisions

4.2.1.6.3 Nonconforming Structures – Residential Single-Family: Primary Structures

1. If a nonconforming primary residential structure is damaged or destroyed as describe in Section 4.2.1.6.1(3), the nonconforming primary residential structure configuration may be altered or expanded pursuant to subsections 4.2.1.6.3(2-5).
2. If a portion or all of a nonconforming primary residential structure is intentionally demolished, it may be reconstructed under the following conditions.
 - a. A nonconforming primary residential structure may be reconstructed to the same configuration of the foot print existing immediately prior to the demolition, provided that any new impacts are mitigated pursuant to Section 4.1.2, Environmental Impacts.
 - b. A nonconforming primary residential structure may be reconstructed and the building configuration may be altered or expanded, including the footprint and/or the height increased, to the extent allowed by this Program, provided:
 - i. The enlargement or expansion of the building configuration, including any new impervious surfaces located within the Shoreline Buffer, shall in no case exceed 25% of the original building footprint or when located in the Point Monroe District up to the allowed development area in subsection 5.9.6(2); the expansion shall be located landward of the existing or original building footprint; and
 - ii. No change proposed
 - iii. No change proposed
 - iv. No change proposed
 - v. No change proposed
 - vi. No change proposed.

4.2.1.7 Regulations - Encumbered and Nonconforming Lots (page 116 & 117 of draft SMP)

1. New-sSingle-family development and redevelopment, except in the Point Monroe District, that is proposed on any legal nonconforming lot located in the shoreline jurisdiction or proposed for a shoreline property that is significantly encumbered by shoreline or critical area buffers~~that is not subject to landslide hazard areas~~, may be allowed to develop without a shoreline variance when all of the following criteria are met:
 - a. Nonconforming lots with A lot containing an available development area of 2,500 square feet or more for a single-family residence and normal appurtenances, and is unrestricted by buffers from shorelines or critical areas shall comply with the provisions of this Program. The building area means the entire area that will be disturbed to construct the home, normal appurtenances (except drainfields), and landscaping; and or

- b. ~~Nonconforming lots~~ A lot that does not meet the requirement of subsection 1.a above, shall ~~meet the landslide hazard provisions of Section 4.1.5 and Appendix B and~~ provide the maximum buffer dimension feasible ~~for shoreline and other critical areas,~~ while also providing ~~for~~ a building area ~~not to exceed of not more than~~ 2,500 square feet, with maximum lot coverage of 1200 square feet. ~~The building area shall be located~~ on the portion of the lot farthest from the required Shoreline Buffer; provided that consideration shall be given to view impacts. All single-family ~~residential development residences~~ approved under this section shall ~~meet~~ ~~not extend waterward of~~ the shoreline structure view setback ~~provisions in as measured in accordance with~~ Section 4.1.3.11; and

Residential Development Provisions (page 184 & 187 of draft SMP)

5.9.4 Regulations –Prohibited

1. New overwater residences, including floating homes.
2. Increase in intensity, including height or bulk, for any existing legally established overwater residence, or for those portions of a residence that are located over the water.
3. New accessory dwelling units in the Point Monroe District.

5.9.5 Regulations – General

1. Residential development shall be permitted in the Shoreline Residential, Shoreline Residential Conservancy, and Urban designations; shall be a conditional use in the Island Conservancy designation; and shall be prohibited in the Natural, Aquatic, and Priority Aquatic designations.
2. Multifamily development shall be permitted in the Shoreline Residential and Urban designations and prohibited in the Shoreline Residential Conservancy, Island Conservancy and Natural designations.
3. Except in the Point Monroe District, aAccessory dwelling units, shall be allowed as a conditional use in the Shoreline Residential Conservancy, Shoreline Residential, and Urban designation shall be prohibited in the Natural and Island Conservancy designations.
4. Land subdivision, consistent with BIMC Title 17, is permitted in the Shoreline Residential, Shoreline Residential Conservancy, and Urban designations and shall be allowed as a conditional use in the Natural and Island Conservancy designations. Subdivision of property in the Aquatic and Priority Aquatic designations shall be regulated the same as the adjacent upland.
5. Residential development shall meet setback and height standards in Table 4-2 and dimensional provisions of the Zoning Code, BIMC Title 18.
6. Residential development shall meet all provisions of Section 4.1.2, Environmental Impacts, such that the development results in no net loss to shoreline ecological functions and processes.
7. The buffer requirements in Table 4-1 of this Program shall apply to residences and appurtenances, except when a site-specific analysis is provided in accordance with Section

4.1.3 Vegetation Management, or for new development proposed for the Point Monroe District, which shall meet vegetation requirements of Section 4.1.3.5.9. Residential development shall retain and protect existing native vegetation of the shoreline area, or restore and enhance native vegetation according to the Vegetation Management and Land Modification provisions of the SMP Section 4.1.3 and Section 4.1.4.

8. Side setbacks, except in the Urban designation and Point Monroe District, shall total at least thirty (30) percent of the lot width, and Side setbacks for the Point Monroe District shall total at least fifteen (15) percent of the lot width. These yards shall remain free of buildings and impervious surfaces except as described below.
 - a. No change proposed.
 - b. No change proposed
 - c. No change proposed
9. All residential development shall meet BIMC 15.20 and Section 4.1.6, Water Quality and Stormwater Management of this Program.
10. Home occupations meeting the criteria of BIMC Title 18 shall be considered a residential use.

5.9.6 Regulations – Primary Residential Design and Location

1. Residential Development, except in the Point Monroe District, shall follow the provision for Shoreline Exemption permit in the Shoreline Master Program Administration Section, BIMC Section 2.16.165 and shall be:
 - a. Located and designed to avoid the need for shoreline stabilization and flood protection works for the life of the structure, as provided for in Section 6.2,89 Shoreline Stabilization and Section 4.1.7, Flood Hazard.
 - b. Located and designed to protect existing ecological function in accordance with Section 4.1.2, Environmental Impact and Section 4.1.3, Vegetation Management and Section 4.1.6.5(3) to use low impact development techniques to:
 - i. Minimize area of disturbance as provide in the L~~and alteration~~ Modification, Section 4.14; and
 - ii. Minimize soil compaction; and
 - iii. Infiltrate stormwater runoff, when site is suitable.
 - c. Stormwater conveyance shall be designed according to the provisions of Section 4.1.6, Water Quality and Stormwater Management.
 - d. Located to protect existing views from adjacent primary structures ~~buildings~~ on adjacent properties.
 - i. Primary Structures shall meet the provisions for structure setback line in Vegetation Management, Section 4.1.3.7 ~~and shall follow the provision for Shoreline Exemption permit in Shoreline Master Program Administration Section, BIMC Section 2.16.165.~~
 - e. Designed to provide a physical separation to reinforce the distinction between public and private space. Including but not limited to:

- i. Screening with a landscape plan, approved by the Administrator, developed in accordance with vegetation requirements in the Vegetation Conservation Section and BIMC Landscaping, or
- ii. Provide an open space setback recorded on plat or title; or
- iii. Fences or other means.

2. Special Provisions for Point Monroe District – Primary and Accessory Structures. Residential development within the Point Monroe District shall follow the provisions for Shoreline Exemption permit in the Shoreline Master Program Administration Section, BIMC Section 2.16.165, and shall meet provisions of subsection 5.9.6(1)(a)-(c)&(e) and the following:

- a. Each lot is permitted a development area that is intended to accommodate the primary residence, garage, accessory structure, parking and driveway that does not exceed 50% of the upland lot area, up to a maximum development area of 1400 square feet. On-site septic systems may be located outside of this development area.
- b. All new primary structures shall be located a minimum of thirty (30) feet from the Ordinary High Water Mark (OHWM).
- c. Stabilization and flood protection works may be allowed provided the need is demonstrated as specified in Section 6.2.8.1 or 6.2.8.2, Shoreline Stabilization and 4.1.7, Flood Management.
- d. Overwater structures may be allowed pursuant to Sections 4.1.2, Environmental Impact and 6.3.4, in Overwater Structures.

5.9.7 Regulations – Accessory Design and Location. Including ADU)

- 1. Except in the Point Monroe District, a Accessory uses and structures proposed within the Shoreline Buffer shall meet the standards of Section 4.1.3, Vegetation Management.
 - a. Accessory structures allowed in the Shoreline Buffer in Table 4-3, which require a building permit, shall follow the provision for ~~noting~~ a Shoreline Exemption permit in the Shoreline Master Program Administration, Section 2.16.165, BIMC.
- 2. Accessory structures, except approved docks or stabilization, shall be located a minimum of fifteen (15) feet from the Ordinary High Water Mark (OHWM).
- 3. New accessory dwelling units are not permitted in the Point Monroe District and are a conditional uses for all lots wholly or partially within the shoreline jurisdiction.

5.9.8 Regulations – Residential Subdivisions (Single-Family and Multifamily, ~~including ADU~~)

- 1. Subdivision of properties ~~in water designations~~, Aquatic and Priority Aquatic designations, shall be regulated the same as the adjacent upland.
- 2. No change proposed
- 3. No change proposed
- 4. ~~Accessory dwelling units are~~ not permitted in the Point Monroe District and are conditional uses for all lots wholly or partially within the shoreline jurisdiction.

5.9.9 Regulations – Residential Development Overwater

- 1. No change proposed

2. No change proposed

3. Special Provisions for Point Monroe District.

- a. New overwater primary residential structures are prohibited.
- b. An existing overwater primary residential use may continue, and the structure may be repaired, maintained and remodeled in accordance with Section 4.2, Nonconforming Development, but the use may not be intensified and the overwater structure may not be enlarged or expanded.
- c. The upland portion of an existing primary residential structure that is partially located overwater may be repaired, maintained, remodeled or expanded to the extent allowed by this program and in accordance with Section 4.2.1.6.3, Nonconforming Development, Special Provisions for Point Monroe District.
- d. New individual or joint-use docks or piers are permitted in the Priority Aquatic B designation, only in area where pickleweed (*Salicornia sp*) does not exist in accordance with Section 6.3.4.

~~4.3.~~ All new subdivisions shall record a prohibition on new single use private docks on the face of the plat. Shared moorage with less than 6 slips may be approved if it meets all requirements for community docks in Boating Facilities.

Stabilization Provisions (page 197 – 199 of draft SMP)

Section 6.2.8 Regulations – New or Replacement Shoreline~~Structural~~ Stabilization

~~New and replacement shoreline stabilization is subject to the following provisions and the specific sections for the type of proposal and provisions for the kind (hard, soft, etc.) of shoreline stabilization measure being proposed.~~

1. When evaluating the need for new, expanded or replacement ~~structural~~ stabilization measures, the applicant shall provide an analysis from a qualified professional that examines and implements preferred alternatives in the following ~~order of preference sequence~~:
 - a. No action (allow the shoreline to retreat without intervention).
 - b. Non-structural measures such as vegetation enhancement or addressing upland drainage concerns.
 - c. Increase building setbacks and/or relocate structures to a feasible location and/or elevate the structures.
 - d. Implement flexible/natural materials and methods, beach nourishment, protective berms, bioengineered stabilization or other soft-treatment measures.
 - e. Hybrid structure.
 - f. Exclusively hard stabilization materials.
2. Analysis for these alternatives shall be included with each replacement or new structural stabilization application including a description of cost, maintenance needs and success in protecting the primary structure

3. Point District properties shall also meet provisions in Section 6.2.8.3, Specific Regulations Point Monroe District.

6.2.8.1 Specific Regulations: Replacement of Existing Structural Stabilization

1. Replacement of existing structural stabilization is allowed to protect public transportation infrastructure, essential public facilities, and primary structures when all the following apply:
 - a. The replacement is located landward of OHWM, ~~if it is~~ unless demonstrated to the satisfaction of the Administrator ~~to be that this is~~ infeasible, then it may be replaced is located in the same existing location, except as provided ~~in subsection 3, below in 6.2.6.1;~~ and
 - b. The danger of loss or substantial damage from shoreline erosion is caused by tidal action, current, and waves rather than landslides, sloughing or other forms of shoreline erosion unrelated to water actions at the toe of the slope and such has been identified through a geotechnical analysis except as provided in subsection ~~(b)(c)~~, below.
 - c. A geotechnical report demonstrates a need to protect the primary structure and primary appurtenance from danger of loss or substantial damage within five (5) years due to shoreline erosion, as discussed in (b) above, in the absence of hard structural stabilization; except the following is not required to identify danger of loss or substantial damage through a geotechnical report:
 - i. An existing primary single family residence located within ten (10) feet or less from OHWM; or
 - ii. An existing primary single family residence located within ten (10) feet or less from the top of a high bluff (>15ft) that is situated waterward of the structure; The top of bluff defined in Appendix B; or
 - iii. An existing primary single-family residence located within the Point Monroe District may use the *Spit Science Summary – Point Monroe*, Herrera Environmental, 2012, to substitute for a site-specific geotechnical report
 - d. The replacement structure is designed, located, sized, and constructed to assure no net loss of ecological function
 - e. Replacement structure may encroach waterward of OHWM for soft-treatment measure that provide restoration of ecological

6.2.8.3 Specific Regulations: Point Monroe District

1. New foundations and redevelopment of existing foundations that impede the natural overwash process within the FEMA flood zone are considered flood protection works and shall meet provisions in Section 5.9 Residential Development.
2. New hard shoreline stabilization measures are prohibited in Area I, II, and IV of the Point Monroe District as depicted in the Point Monroe District Map located in Appendix E.
3. An administrative conditional use permit shall be required for hybrid structural stabilization within Area III of the Point Monroe District as depicted on the Point Monroe District Map located in Appendix E.

Overwater Structures Provisions

6.3 Overwater Structures (page 204 & 205 of draft SMP)

6.3.4 Prohibited

1. Overwater structures in the Natural and Priority Aquatic designations, except ~~that~~:
 - a. Docks are allowed in Priority Aquatic B when adjacent to the Point Monroe District, except in areas of pickleweed (*Salicornia sp.*); and
 - b. Community or joint-use residential docks are allowed in Priority Aquatic Category B;
and
 - c. No change proposed

CERTIFICATION OF ENROLLMENT
SUBSTITUTE SENATE BILL 5451

Chapter 323, Laws of 2011

62nd Legislature
2011 Regular Session

SHORELINE MASTER PROGRAMS

EFFECTIVE DATE: 07/22/11

Passed by the Senate April 18, 2011
YEAS 48 NAYS 0

BRAD OWEN

President of the Senate

Passed by the House April 5, 2011
YEAS 77 NAYS 19

FRANK CHOPP

Speaker of the House of Representatives

CERTIFICATE

I, Thomas Hoemann, Secretary of the Senate of the State of Washington, do hereby certify that the attached is **SUBSTITUTE SENATE BILL 5451** as passed by the Senate and the House of Representatives on the dates hereon set forth.

THOMAS HOEMANN

Secretary

Approved May 12, 2011, 1:51 p.m.

FILED

May 13, 2011

CHRISTINE GREGOIRE

Governor of the State of Washington

**Secretary of State
State of Washington**

SUBSTITUTE SENATE BILL 5451

AS AMENDED BY THE HOUSE

Passed Legislature - 2011 Regular Session

State of Washington

62nd Legislature

2011 Regular Session

By Senate Natural Resources & Marine Waters (originally sponsored by Senators Ranker, Ericksen, Pridemore, Harper, Carrell, Hobbs, Rockefeller, Tom, White, and Shin)

READ FIRST TIME 02/21/11.

1 AN ACT Relating to shoreline structures in a master program adopted
2 under the shoreline management act; adding a new section to chapter
3 90.58 RCW; and creating a new section.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** (1) The legislature recognizes that there is
6 concern from property owners regarding legal status of existing legally
7 developed shoreline structures under updated shoreline master programs.
8 Significant concern has been expressed by residential property owners
9 during shoreline master program updates regarding the legal status of
10 existing shoreline structures that may not meet current standards for
11 new development.

12 (2) Engrossed House Bill No. 1653, enacted as chapter 107, Laws of
13 2010 clarified the status of existing structures in the shoreline area
14 under the growth management act prior to the update of shoreline
15 regulations. It is in the public interest to clarify the legal status
16 of these structures that will apply after shoreline regulations are
17 updated.

18 (3) Updated shoreline master programs must include provisions to
19 ensure that expansion, redevelopment, and replacement of existing

1 structures will result in no net loss of the ecological function of the
2 shoreline. Classifying existing structures as legally conforming will
3 not create a risk of degrading shoreline natural resources.

4 NEW SECTION. **Sec. 2.** A new section is added to chapter 90.58 RCW
5 to read as follows:

6 (1) New or amended master programs approved by the department on or
7 after September 1, 2011, may include provisions authorizing:

8 (a) Residential structures and appurtenant structures that were
9 legally established and are used for a conforming use, but that do not
10 meet standards for the following to be considered a conforming
11 structure: Setbacks, buffers, or yards; area; bulk; height; or
12 density; and

13 (b) Redevelopment, expansion, change with the class of occupancy,
14 or replacement of the residential structure if it is consistent with
15 the master program, including requirements for no net loss of shoreline
16 ecological functions.

17 (2) For purposes of this section, "appurtenant structures" means
18 garages, sheds, and other legally established structures. "Appurtenant
19 structures" does not include bulkheads and other shoreline
20 modifications or over-water structures.

21 (3) Nothing in this section: (a) Restricts the ability of a master
22 program to limit redevelopment, expansion, or replacement of over-water
23 structures located in hazardous areas, such as floodplains and
24 geologically hazardous areas; or (b) affects the application of other
25 federal, state, or local government requirements to residential
26 structures.

Passed by the Senate April 18, 2011.

Passed by the House April 5, 2011.

Approved by the Governor May 12, 2011.

Filed in Office of Secretary of State May 13, 2011.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

August 10, 2011

Kathy Cook, Director
City of Bainbridge Island
Planning and Community Development
280 Madison Avenue North
Bainbridge, WA 98110

Re: Nonconforming Lots and Structures

Dear Kathy Cook,

Thank you for your questions on the topic of non-conforming lots and structures. The purpose of this information is to answer your questions, to the best of our ability, avoid misinformation and the generation of unfounded fears and assist the City in its development of policies to provide for structures, uses and lots that may become non-conforming. In order to answer your questions and approach this topic in a clear and meaningful manner for your policy-makers, I have provided examples of Ecology's recent experience on this topic in updated SMPs. I have also overviewed Substitute Senate Bill-5451.

1) What has been Ecology's experience with the permitting and construction of nonconforming structures under new comprehensive SMP updates?

Experience: The Whatcom County SMP, updated in 2007, under the 2003 Guidelines (WAC 173-26), expanded the buffer sizes to 100 and 150 feet. Over the last 4 years, there have been over 60 applications for additions, enlargements, and improvements to existing homes that cannot meet the new buffer standards. Despite this physical fact, every one of these permits were approved and issued in a timely manner.

Loans and Insurance: Although, these home improvements were on lots and structures fitting the non-conforming classification, the homes were improved or expanded despite their location relative to the buffer.

2) What are the policy options and alternatives to provide for resulting non-conformities?

SMA Guidelines: The 2003 Guidelines do not require the City to classify properties as nonconforming. Rather, the Guidelines instruct the City to provide for those properties that could be considered non-conforming under the new SMP standards. It is understandable that this would become a topic of concern. At the same time, it is important that the Planning Commission and the City Council consider the options and draft policies and regulations that address those properties that could be reasonably expected to be impacted by larger buffers and setbacks.

WAC 173-26-191(2)(a)(iii)(A) states: "In some circumstances existing uses and properties may become non-conforming with regard to the regulations and master programs should include provisions to address these situations in a manner consistent with achievement of the policy of the act and consistent with constitutional and other legal limitations."

In June 2011, your City Attorney did a nice job of laying out the BIMC and SSB-5451. This is an important first step towards developing policies and regulations that can adequately address this subject. As SSB- 5451 reflects, the City has the freedom to define such lots as compliant and to set criteria for their expansion or redevelopment. It is not required that lots or buildings, become labeled as non-conforming, due to new standards. Through the combination of definitions and criteria-setting, the new SMP can avoid the label of non-conforming and set development standards for those properties to become compliant. This compliance can be achieved with their expansion or improvements.

Under SSB-5451, new/updated SMPs may consider residential structures to be "conforming", if they were legally built and if they are used for a conforming use, even if they do not meet new standards for setbacks, buffers, yards, area, bulk, height or density. SMPs may also allow redevelopment, expansion, change with the class of occupancy, or replacement of such structures, if the work is consistent with the SMP and its ability to meet no net loss of shoreline ecological functions.

3) How can the City provide for those properties that could become non-conforming under new standards?

The following example from Renton demonstrates how redefining non-conforming single-family homes can help the City get to no-net-loss; while allowing the homeowner to expand, even into the buffer or setback. (Note: The definition of non-conforming structures, lots and uses in other parts of the BIMC is relevant to how the City would consistently provide for non-conformance/conformance in the shoreline.)

Renton Example: Partial Compliance for Single-Family Development: Lawfully constructed single-family homes built before the adoption of the Shoreline Master Program shall be considered conforming if expansion or replacement is consistent with the standards below:

Alteration of an Existing Structure		Compliance Standard
Alteration Without Expansion	Expansion or remodel that does not change the building footprint or increase impervious surface.	No site changes required.
Minor Alteration	Expansion of building footprint by up to 500 sq.ft. outside of the required* setback; or	No site changes required.
	Expansion of impervious surface by up to 1,000 sq. ft. outside of the required* setback.	

Alteration of an Existing Structure		Compliance Standard
Moderate Alteration	Expansion of building footprint within the required* setback in any amount, or total expansion of 500 sq. ft. to 1,000 sq. ft.; or	• Install site improvements that protect the ecological functions and processes of the shoreline, consisting of either: ○ Partial compliance with Vegetation Conservation provisions of RMC 4-3-090.F.1 Vegetation Conservation consisting of revegetation of a native community of at least 80% of the area between an existing building and the water's edge provided that the area to be revegetated need not be more than 25% of the lot depth in feet, or ○ An alternate mitigation proposal prepared by a qualified professional and approved by the Reviewing Official that would provide at least equal protection of ecological functions and processes as the full required* setback and buffer. • Docks shall be required to replace solid decking with light penetrating surfacing materials.
	Expansion of impervious surface within the required* setback in any amount, or total expansion of 1,000 sq. ft. to 1,500 sq.ft.	
Major Alteration	Expansion of building footprint by more than 1,000 sq.ft., or	• Install site improvements that protect the ecological functions and processes of the shoreline, consisting of either: ○ Full compliance with Vegetation Conservation provisions of RMC 4-3-090.F.1 Vegetation Conservation consisting of revegetation of a native community of the full required* buffer, or 100% of the area between an existing building and the water's edge if the full buffer cannot be planted, or ○ An alternate mitigation proposal prepared by a qualified professional and approved by the Reviewing Official that would provide at least equal protection of ecological functions and processes as the full required* setback and buffer. • Docks shall be required to replace solid decking with light penetrating surfacing materials. • Developments with existing shoreline stabilization shall mitigate for the impacts of shoreline stabilization in one of the following ways: ○ Shoreline stabilization structures not conforming to, or otherwise permitted by, the provisions of this code shall be reviewed and upgraded according to the standards of RMC 4-3-090F.4.a.iii Shoreline Stabilization Alternatives Hierarchy, or ○ An alternative mitigation proposal prepared by a qualified professional and approved by the Reviewing Official that would identify near shore mitigation to improve shoreline function or values on-site, or ○ If the two alternatives above are infeasible, then the project proponent shall contribute to an off-site vegetation conservation fund, in accordance with RMC 4-3-090F.1.k.
	Expansion of impervious surface by more than 1,500 sq.ft.	

*The full buffer/setback as required in RMC 4-3-090D.7.a Shoreline Bulk Standards, or as modified under RMC 4-3-090F.1 Vegetation Conservation.

Whatcom Example: Owners of vacant lots that are too small to meet the new setbacks/buffers and are not located in a hazard area may take advantage of the following provision that allows a “building area” disturbance of 2,500 square feet as far from the water as possible, unless a shoreline variance is authorized. In no case shall the new structure be located closer to the water than the existing common-line setback within 50 feet of and between the two adjacent existing residences. The tailored vegetative buffer is required to be identified and provided, a notice recorded with the county auditor’s office, and mitigation provided for buffer impacts [SMP 23.90.06.B.3]

K. New single family development on non-conforming lots consisting of property under contiguous ownership less than 20,000 square feet in size and not subject to landslide hazard areas, alluvial fan hazard areas, or riverine and coastal erosion hazard areas or associated buffers as provided in WCC 16.16.310 may be allowed without a variance in accordance with the following criteria:

1. Non-conforming lots with a building area of 2,500 square feet or more available for a single family residence and normal appurtenances and unrestricted by setbacks or buffers from shorelines or critical areas shall comply with the provisions of this Program. The building area means the entire area that will be disturbed to construct the home, normal appurtenances (except drainfields), and landscaping.
2. Non-conforming lots that do not meet the requirement of subsection K.1 above shall provide the maximum setback and buffer dimension feasible while providing for a building area of not more than 2,500 square feet on the portion of the lot farthest from the required setback or buffer; provided that consideration shall be given to view impacts and all single family residences approved under this section shall not extend waterward of the common-line setback as measured in accordance with Appendix F.

Although, real estate and banking statistics have not been provided on this topic, Ecology’s management team will be compiling this information over the next few months. It is important to recognize the context of any answers posed to banking and real estate questions, to understand the nature of the answers provided. Thank you for requesting this information and helping to clarify this important topic. I hope this is helpful for your Council, Commission and Citizens. Please do not hesitate to call me at 425-649-4309, if you have questions on this topic. I have attached a copy of SSB-5451 with this letter.

Sincerely,



Barbara Nightingale, Shoreline Planner
Washington Department of Ecology, NWRO
3190 – 160th Avenue SE
Bellevue, WA 98008

Attachment

Cc: Geoff Tallent, ECY
Peter Skowlund, ECY
Tom Clingman, ECY

CERTIFICATION OF ENROLLMENT

SUBSTITUTE SENATE BILL 5451

Chapter 323, Laws of 2011

62nd Legislature
2011 Regular Session

SHORELINE MASTER PROGRAMS

EFFECTIVE DATE: 07/22/11

Passed by the Senate April 18, 2011
YEAS 48 NAYS 0

BRAD OWEN

President of the Senate

Passed by the House April 5, 2011
YEAS 77 NAYS 19

FRANK CHOPP

Speaker of the House of Representatives

Approved May 12, 2011, 1:51 p.m.

CERTIFICATE

I, Thomas Hoemann, Secretary of the Senate of the State of Washington, do hereby certify that the attached is **SUBSTITUTE SENATE BILL 5451** as passed by the Senate and the House of Representatives on the dates hereon set forth.

THOMAS HOEMANN

Secretary

FILED

May 13, 2011

CHRISTINE GREGOIRE

Governor of the State of Washington

Secretary of State
State of Washington

SUBSTITUTE SENATE BILL 5451

AS AMENDED BY THE HOUSE

Passed Legislature - 2011 Regular Session

State of Washington

62nd Legislature

2011 Regular Session

By Senate Natural Resources & Marine Waters (originally sponsored by Senators Ranker, Ericksen, Pridemore, Harper, Carrell, Hobbs, Rockefeller, Tom, White, and Shin)

READ FIRST TIME 02/21/11.

1 AN ACT Relating to shoreline structures in a master program adopted
2 under the shoreline management act; adding a new section to chapter
3 90.58 RCW; and creating a new section.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** (1) The legislature recognizes that there is
6 concern from property owners regarding legal status of existing legally
7 developed shoreline structures under updated shoreline master programs.
8 Significant concern has been expressed by residential property owners
9 during shoreline master program updates regarding the legal status of
10 existing shoreline structures that may not meet current standards for
11 new development.

12 (2) Engrossed House Bill No. 1653, enacted as chapter 107, Laws of
13 2010 clarified the status of existing structures in the shoreline area
14 under the growth management act prior to the update of shoreline
15 regulations. It is in the public interest to clarify the legal status
16 of these structures that will apply after shoreline regulations are
17 updated.

18 (3) Updated shoreline master programs must include provisions to
19 ensure that expansion, redevelopment, and replacement of existing

1 structures will result in no net loss of the ecological function of the
2 shoreline. Classifying existing structures as legally conforming will
3 not create a risk of degrading shoreline natural resources.

4 NEW SECTION. **Sec. 2.** A new section is added to chapter 90.58 RCW
5 to read as follows:

6 (1) New or amended master programs approved by the department on or
7 after September 1, 2011, may include provisions authorizing:

8 (a) Residential structures and appurtenant structures that were
9 legally established and are used for a conforming use, but that do not
10 meet standards for the following to be considered a conforming
11 structure: Setbacks, buffers, or yards; area; bulk; height; or
12 density; and

13 (b) Redevelopment, expansion, change with the class of occupancy,
14 or replacement of the residential structure if it is consistent with
15 the master program, including requirements for no net loss of shoreline
16 ecological functions.

17 (2) For purposes of this section, "appurtenant structures" means
18 garages, sheds, and other legally established structures. "Appurtenant
19 structures" does not include bulkheads and other shoreline
20 modifications or over-water structures.

21 (3) Nothing in this section: (a) Restricts the ability of a master
22 program to limit redevelopment, expansion, or replacement of over-water
23 structures located in hazardous areas, such as floodplains and
24 geologically hazardous areas; or (b) affects the application of other
25 federal, state, or local government requirements to residential
26 structures.

Passed by the Senate April 18, 2011.

Passed by the House April 5, 2011.

Approved by the Governor May 12, 2011.

Filed in Office of Secretary of State May 13, 2011.



City of Bainbridge Island
PLANNING & COMMUNITY DEVELOPMENT

MEMORANDUM

TO: City Council
 FROM: Libby Hudson, Long Range Planning Manager
 Ryan Ericson, Associate Planner
 DATE: August 30, 2012
 RE: SMP Update – Council Study Request June 20, 2012

At the June 20, 2012 Council study session, staff presented draft provisions for development that does not meet the standards of the proposed update to the Shoreline Master Program. Council was briefed on the number of shoreline houses sold during the last year (June 2012 to June 2011), and the difference in price between those properties that conformed to the existing buffer and those that did not. The comparison indicated that the number of houses sold was nearly equally split between the two categories. A Council member then asked if it would be possible to expand the data to include a longer time period and possibly investigate the change in value of an existing shoreline house that does not conform to new or updated land use regulations. Staff responded that there are a number of variables influencing change in house value, such as property condition, improvements, and market fluctuations. With these caveats in mind, staff obtained Assessor data and determined that the assessed market value might provide information on shoreline house values prior to adoption of the 1996 SMP, and values could be presented for a longer period of time to determine if there was a trend in values potentially associated with change in shoreline regulations.

To ensure consistency between the June 20 presentation and the new analyses, data was collected for the same 49 houses sold between June 2011 and June 2012. Market assessed value was selected to ensure a reported house value did not reflect discounts given to properties by the Assessor's Office for financial hardship or temporary discount for large property improvements. Three analyses were completed to look at the relationship between the values of houses that conform (C) and houses that do not conform (NC) to the existing 1996 Shoreline Master Program.

The first analysis plotted the assessed market values of (C) and (NC) by year to see if there was a relationship between years. The second analysis is a scatter plot representing the change in assessed market value between the years 1994 and 1997. The results reflect change in values after the current 1996 Shoreline Management Plan was adopted.

The third analysis provides the relative percent difference of two sample tax assessed values. The following equation was used to determine relative percent difference. The Excel formula used is $(v2 - v1) / \text{average}(v1, v2)$.

$$\frac{a - b}{(a+b)/2}$$

Tax Assessed Market Value Plot

To display the data, tax assessed values were sorted by year and house category, then the value was ranked low to high. House values are on the y-axis and the ranking order is on the x-axis. A distinct pattern between the years 2007/2012 and 1994/1997 is illustrated by Figure 1, Residential Shoreline Properties' Assessed Values. Values from the year 2007 group together with values in year 2012 and values from year 1994 group together with values in year 1997, this pattern shows that both house categories increased in value at a relative rate over the sampled time period, regardless of home category. Within the paired years 2007/2012 and 1994/1997, another pattern is evident in variation of values within each house category. In the years 1994/1997, there appears to be little variation between sample years and house category. A similar pattern is repeated in the years 2007/2012 with a slight separation between house category in 2012, with (NC) houses potentially having a greater tax assessed value. The plot illustrates shoreline property values did increase over the last 18 years and the rate of increase is similar for both house categories. The analysis suggests potential effects of 1996 Shoreline Master Program regulations on assessed values were not disproportionately skewed towards either house category.

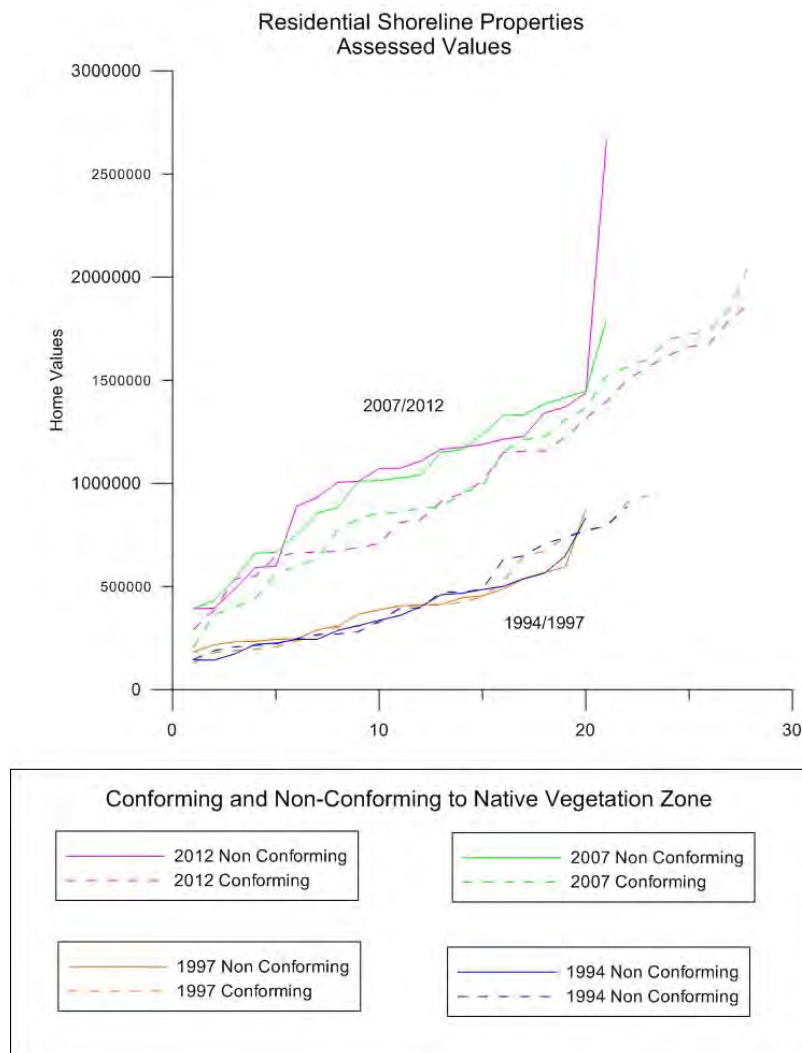


Figure 1.

Change in Tax Assessed Market Value Scatter Plot

For consistency between analyses, the data was sorted similarly as it was for Figure 1, Residential Shoreline Properties Assessed Values. The blue circles are houses within the (C) category and the orange circles are houses within the (NC) category. The scatter plot in Figure 2 does not show a relationship between variation of value from the 1994 assessed values and the 1997 assessed value. This would suggest that the change in land use regulations did not cause property values to increase or decrease.

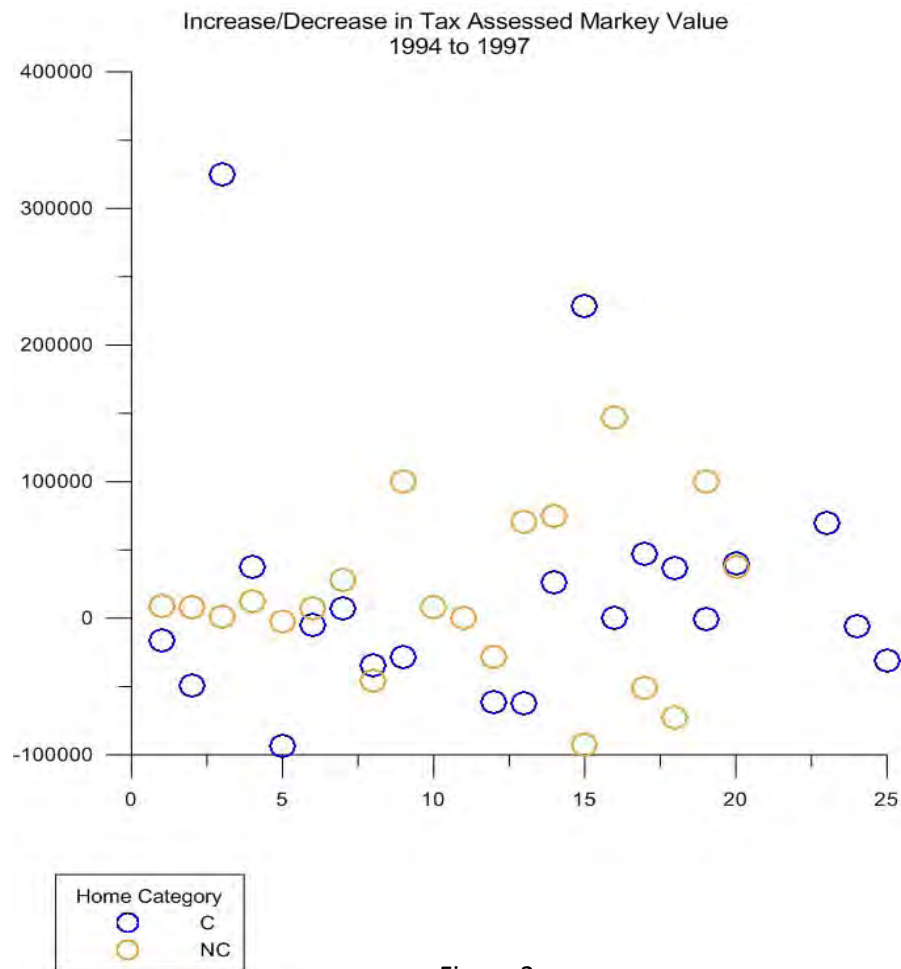


Figure 2.

Relative Percent Difference of Variation in Tax Assessed Value

This analysis looked at the properties which had a negative change in the tax assessed valuation. Relative percent difference tests the precision of the sample to ensure accuracy of the result. In this case, the relative difference is used to filter out bias in the sampling technique or how the properties were assessed. For this analysis, a conservative threshold of 0.10 or ten percent was selected to distinguish natural variation from actual change, in many situations a lower threshold of twenty percent is satisfactory. The data points selected for this analysis are distributed almost equally between the house categories, with 28 in the (C) category and 23 in the (NC) category. Category (C) has 11

properties, or 39%, with decreasing values between 1994 and 1997. In comparison, category (NC) has 7 properties or 33%, with decreasing values between 1994 and 1997. In category (NC), two values were above the ten percent change threshold and not considered natural variation, whereas six were above the threshold in (C) category. The greater number above the 10% threshold demonstrates that more houses decreased in values in category (C) than (NC). This test suggests other factors outside of the change in land use provisions may have an effect on the assessed values.

House Category	Number of Homes	Number of Properties Decrease	Percent of Properties Decrease
C	28	11	39%
NC	21	7	33%

Proposed Nonconforming Regulations

Date 1/03/2013

4.2 General Use

4.2.1 Nonconforming Development

4.2.1.1 Applicability

This section applies to shoreline uses and/or structures that were lawfully established or constructed prior to the effective date of the initial adoption of the Master Program (November 26, 1996) or its amendments, but which do not conform to present regulations or standards of the Master Program.

4.2.1.2 Goal:

It is the purpose of this program to recognize legally established primary residential structures, and to allow them to be maintained, repaired, remodeled, replaced and in some cases expanded in conformance with these rules. Residential structures that do not conform to this program should, over time, as the owner proposes changes to the structure, conform as completely as possible to this program, with due regard to unique site conditions and property rights.

It is further the purpose of this program to ultimately, over time, have uses and commercial structures conform to the provisions of this program. Over time, uses and commercial structures that do not conform to the standards of this program should be phased out as uses cease or redevelopment of structures occurs.

Note: Existing structures and uses that do not conform to this program are not required to meet its requirements, unless the owner proposes changes to a structure or use that would require review under this Program.

4.2.1.3 Policies

1. Lawfully constructed commercial and industrial structures shall be allowed to be repaired, maintained, and remodeled provided that the alteration does not increase the nonconformity.
2. Lawfully constructed structures, established uses, public facilities, transportation structures, and/or lots of record located within the shoreline jurisdiction prior to the effective date of the Master Program but which do not conform to the present policies, regulations or standards, shall be allowed to continue and be repaired and maintained.
3. Lawfully constructed residential structures may be repaired, maintained and remodeled provided the alteration meets the goals and provisions of this program.
4. Lawfully constructed residential structures may be expanded in some circumstances, provided the expansion will not result in adverse impacts to shoreline ecological functions and processes, and mitigation is provided.

5. Once discontinued, re-establishment of nonconforming uses located in the shoreline jurisdiction shall be restricted.
6. Lawfully constructed commercial structures that are located in the shoreline jurisdiction are to be phased out over time. Depending on the extent and intensity of the nonconformity, a primary residential structure and primary appurtenance, may be allowed certain alteration or expansion, provided that adverse impacts to shoreline ecological functions and shoreline processes are mitigated or restored.
7. Lawfully constructed structures that are destroyed by fire, explosion, flood, or other casualty may be restored or replaced without increasing or expanding the nonconformity, and are encouraged to decrease nonconformity. Legally established overwater structures that are destroyed may be reconstructed to the same size, but the configuration may be altered to reduce the impact to the shoreline environment provided the size of the nonconformity is not increased. Such redevelopments may be permitted provided that impacts to shoreline functions and processes are mitigated or restored, and the reconstruction application is submitted within two years of the date of destruction.
8. Provisions for reconstruction of a lawfully constructed residential house shall allow certain expansions of the nonconforming structure when it can be demonstrated that the expansion will not result in adverse impacts to shoreline ecological functions and shoreline processes are mitigated or restored.
9. Legally created nonconforming lots of record may be developed provided that adverse impacts to shoreline ecological functions and shoreline processes are mitigated or restored.
10. Redevelopment of nonconforming public rights-of-way and associated transportation structures may be permitted for purposes of facilitating essential public access, development of public trails and/or public shoreline access.

4.2.1.4 Regulations – General

1. Nonconforming uses, buildings, structures, and/or developments that were lawfully constructed or existed prior to the effective date of initial adoption of this Program (November 26, 1996), or its amendments, but which do not meet the specific standards of this Program, may be continued subject to the provisions of this section; provided that shoreline modifications shall conform to Shoreline Modification Section 6.1 and Shoreline Stabilization Section 6.2.
2. A complete application for any reconstruction under this section must be submitted within two (2) years of the date of damage or removal, and upon approval of the application, redevelopment must be completed within one (1) year of the commencement of reconstruction. A one (1) year extension may be granted, provided that a written request is submitted no later than twenty-one (21) days prior to either deadline and provided that the owner is not responsible for the delay.
3. An existing use designated as a conditional use that lawfully existed prior to the adoption of the Program or the adoption of an applicable amendment hereto and which has not obtained a conditional use permit, shall be considered a legal nonconforming

use and may be continued subject to the provisions of this section without obtaining a conditional use permit.

4. A structure for which a variance has been issued but which does not comply with applicable requirements of this Program as amended shall be considered a legal nonconforming structure and the requirements of this section shall apply.
5. Any permitted remodel or expansion shall not cause adverse impacts to shoreline ecological functions and/or processes.

4.2.1.5 Regulations - Nonconforming Uses

1. Nonconforming uses shall not be altered or expanded in any way that increases the nonconformity.
2. If a nonconforming use is discontinued for twelve (12) consecutive months, any subsequent use shall be conforming; except that if a nonconforming use is operated within a nonconforming structure that is accidentally damaged or destroyed and reconstruction is proposed under Section 4.2.1.6.1(3), then the use may be re-established within the same time period as the reconstruction for the nonconforming structure pursuant to Section 4.2.1.4(2)
3. A nonconforming use cannot be changed to another nonconforming use.
4. Change of ownership, tenancy, or management of a nonconforming use shall not affect its nonconforming status, provided that all provisions are met.

4.2.1.6 Regulations – Nonconforming Structures

4.2.1.6.1 General Provisions – Nonconforming Structures

1. Nonconforming structures shall not be altered or expanded except as provided in this section, or through a variance, or if being brought into conformance with this Program and the Shoreline Management Act.
2. Non conforming structures may be maintained, repaired, renovated, or remodeled to the extent that nonconformance with the standards and regulations of this Program is not increased, except as otherwise provided in this section, or the structure is brought into conformance with this Program; except that as a conditional use, a nonconforming dock may be modified, reoriented or altered within the same general location to be more consistent with the provisions of this Program.
3. If an existing primary nonconforming structure is damaged or destroyed by fire, explosion, earthquake, flooding or other casualty, it may be reconstructed to the configuration of the footprint existing immediately prior to the catastrophic event, provided the use is conforming or meets the provisions of Section 4.2.1.4 and 4.2.1.5, above.
 - a. This provision shall not apply to structures that are destroyed due to a criminal act initiated by the property owner; and

- b. The replacement structure shall not warrant new shoreline armoring for the life of the new structure.

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

1. Nonconforming commercial structures shall not be altered or expanded in any way that increases the nonconformity without first obtaining a variance.
2. Reconstruction of commercial structures and buildings intentionally demolished or destroyed in any other manner than described in Section 4.2.1.6.1(3), shall be in conformance with all standards of the Program.

4.2.1.6.3 Nonconforming Structures – Residential Single-Family: Primary Structures

1. If a nonconforming primary residential structure is damaged or destroyed as describe in Section 4.2.1.6.1(3), the nonconforming primary residential structure configuration may be altered or expanded pursuant to subsections 4.2.1.6.3(2-5).
2. If a portion or all of a nonconforming primary residential structure is intentionally demolished, it may be reconstructed under the following conditions.
 - a. A nonconforming primary residential structure may be reconstructed to the same configuration of the foot print existing immediately prior to the demolition, provided that any new impacts are mitigated pursuant to Section 4.1.2, Environmental Impacts.
 - b. A nonconforming primary residential structure may be reconstructed and the building configuration may be altered or expanded, including the footprint and/or the height increased, to the extent allowed by this Program, provided:
 - i. The enlargement or expansion of the building configuration, including any new impervious surfaces located within the Shoreline Buffer, shall in no case exceed 25% of the original building footprint or when located in the Point Monroe District up to the allowed development area in 5.9.6(2); the expansion shall be located landward of the existing or original building footprint; and
 - ii. Any vertical expansion must meet height requirements of this Program and be located within the existing building footprint; and
 - iii. Existing demolished foundation and/or impervious surfaces located within the Shoreline Buffer shall be removed; and
 - iv. Mitigation of the shoreline buffer is provided in accordance with Section 4.1.2, Environmental Impacts; and
 - v. The remodel or expansion shall not cause adverse impacts to shoreline ecological functions and/or processes; and
 - vi. All other applicable standards and provisions are met, including regulations of this Program, the Bainbridge Island Municipal Code, the septic system requirements of the Kitsap Health District, and any state and federal laws.

3. Permitted expansion of a nonconforming structure shall not substantially impact the existing views of the water from primary waterfront residences or public rights-of-way to any greater degree than a fully conforming structure.
4. Increases in structure footprint outside of the Shoreline Buffer shall be allowed, even if all or a portion of the nonconforming footprint is within the Shoreline Buffer. In such case, the addition or enlargement shall be treated as a separate building or structure in determining conformity to all of the requirements of this Program.
5. To the extent feasible based on available land area, the vegetation requirements of Sections 4.1.3.5 and 4.1.3.6 and Sections 4.1.2, Environmental Impacts shall apply for the following situations:
 - a. The proposal includes an increase of at least 10 percent in gross floor area of any nonconforming structure located in the shoreline jurisdiction, excluding detached dwelling unit and public park uses; or
 - b. The proposal includes an alteration to any nonconforming structure(s) in shoreline jurisdiction, the cost of which exceeds 50 percent of the replacement cost of all structures on the subject property.

4.2.1.6.4 Nonconforming Structures – Multifamily Residential: Primary Structures

1. If a nonconforming primary multifamily residential structure is damaged or destroyed by fire, explosion, earthquake, flooding or other casualty, it may be reconstructed to the configuration existing immediately prior to the catastrophic event, including building height and footprint of the structure.
 - a. This provision shall not apply to structures that are destroyed due to a criminal act involving the property owner; and
 - b. The replacement structure shall not warrant new shoreline armoring for the life of the new structure; and
 - c. The reconstruction shall not cause adverse impacts to shoreline ecological functions and processes.
2. ~~If a portion or all of a~~ A nonconforming primary multifamily residential structure ~~or portion thereof, is intentionally demolished, it~~ may be reconstructed, altered, or expanded, including the footprint and/or the height increased, to the extent allowed by this Program, if the following are met:
 - a. Public access is provided pursuant to Section 4.2.4.6; and
 - b. Mitigation of the shoreline buffer is provided to meet no net loss, as detailed in Section 4.1.2, Environmental Impacts, including revegetation standards in Section 4.1.2.5(3).

4.2.1.6.5 Nonconforming Structures – Residential: Accessory Structures

1. If a nonconforming residential accessory structure is damaged, destroyed or intentionally demolished, the reconstruction shall be in conformance with all standards of the Program, except as provided in subsection 3, below.
2. Expansion of nonconforming residential accessory structures is prohibited unless a variance is obtained and shall not be altered or expanded in any way that increases the nonconformity, except as provided in subsection 3, below.
3. Essential Single-Family Residential Accessory Structures. If a nonconforming accessory structure that is essential to a single-family residential development is damaged or destroyed by natural causes or casualty, or purposely destroyed or demolished, it may be reconstructed to the same size, location or configuration if mitigation of the shoreline buffer is provided as detailed in Section 4.1.2.5, Revegetation Standards.

4.2.1.7 Regulations – **Encumbered and Nonconforming Lots**

1. ~~New~~ Single-family development and redevelopment, except in the Point Monroe District, that is proposed on ~~any~~ legal nonconforming lot located in the shoreline jurisdiction or proposed for a shoreline property that is significantly encumbered by shoreline or critical area buffer that is not subject to landslide hazard areas, may be allowed to develop without a shoreline variance when all of the following criteria are met:
 - a. ~~Nonconforming lots with~~ A lot containing an available development area of 2,500 square feet or more for a single-family residence and normal appurtenances, and is unrestricted by buffers from shorelines or critical areas shall comply with the provisions of this Program. The building area means the entire area that will be disturbed to construct the home, normal appurtenances (except drainfields), and landscaping; ~~and or~~
 - b. ~~Nonconforming lots~~ A lot that does not meet the requirement of subsection 1.a above, shall meet the landslide hazard provisions of Section 4.1.5 and Appendix B and provide the maximum buffer dimension feasible for shoreline and other critical areas, while also providing for a building area not to exceed of not more than 2,500 square feet with maximum lot coverage of 1200 square feet. The building area shall be located on the portion of the lot farthest from the required Shoreline Buffer; provided that consideration shall be given to view impacts. All single-family residential development residences approved under this section shall meet not extend waterward of the shoreline structure view setback provisions in as measured in accordance with Section 4.1.3.11.7; and
 - c. The area between the structure and the shoreline and/or critical area shall comply with revegetation standards in Section 4.1.2.5(3), the vegetation conservation standards of Section 4.1.3, Vegetation Management, and provisions of Section 4.1.5 Critical Areas, and Appendix B; and
 - d. Development may not take place waterward of the ordinary high water mark; and

- e. Facilities such as a conventional drainfield system may be allowed outside of the building area specified above, and allowed within buffer areas, except wetlands buffers. Such facilities shall not be located closer than 75ft to OHWM; and shall be subject to regulations of Section 4.1.5, Critical Areas.

4.2.1.8 Regulations – Nonconforming Public Facilities & Transportation

1. Non conforming public facilities shall be allowed to continue and to be repaired, maintained, or remodeled.
2. Redevelopment of nonconforming public rights-of-way and associated transportation structures are allowed for purposes of facilitating essential public access, development of public trails, and/or public shoreline access, provided that, such redevelopment shall be otherwise consistent with the provisions of this Program, including but not limited to the provisions for public access and not net loss of shoreline ecological functions and processes.

4.2.1.9 Nonconforming Aquatic Structures - Residential and Commercial: Accessory Aquatic Structures

1. Nonconforming docks and floats may be repaired and replaced and shall comply with this Program's requirements for materials and standards, to the extent practicable.
2. Except for docks and floats, all replacement of more than 50% of the footprint of any nonconforming aquatic structures, including shoreline modifications, or buildings or portions thereof within the Aquatic or Priority Aquatic designations, shall only be done once within any five year period. Such replacements shall comply with this Program's requirements for materials and standards to the extent practicable; If the structure is composed of several components, then the 50% shall be calculated independently for each component.
3. The replacement shall meet Section 4.1.2, Environmental Impacts, including the mitigation sequencing standards of Section 4.1.2.6, to meet the standard of no net loss of shoreline ecological functions and/or processes. Shoreline stabilization shall also meet the alternative analysis provision of Section 6.2.8(1).