



AGENDA

SHORELINE CITY COUNCIL REGULAR MEETING

Monday, May 6, 2019
7:00 p.m.

Council Chamber · Shoreline City Hall
17500 Midvale Avenue North

	<u>Page</u>	<u>Estimated Time</u>
1. CALL TO ORDER		7:00
2. FLAG SALUTE/ROLL CALL		
(a) Proclaiming May as National Bike Month	<u>2a-1</u>	
3. REPORT OF THE CITY MANAGER		
4. COUNCIL REPORTS		
5. PUBLIC COMMENT		
<i>Members of the public may address the City Council on agenda items or any other topic for three minutes or less, depending on the number of people wishing to speak. The total public comment period will be no more than 30 minutes. If more than 10 people are signed up to speak, each speaker will be allocated 2 minutes. Please be advised that each speaker's testimony is being recorded. Speakers are asked to sign up prior to the start of the Public Comment period. Individuals wishing to speak to agenda items will be called to speak first, generally in the order in which they have signed. If time remains, the Presiding Officer will call individuals wishing to speak to topics not listed on the agenda generally in the order in which they have signed. If time is available, the Presiding Officer may call for additional unsigned speakers.</i>		
6. APPROVAL OF THE AGENDA		7:20
7. CONSENT CALENDAR		7:20
(a) Approving Minutes of Regular Meeting of March 18, 2019	<u>7a1-1</u>	
Approving Minutes of Regular Meeting of March 25, 2019	<u>7a2-1</u>	
Approving Minutes of Workshop Dinner Meeting of April 22, 2019	<u>7a3-1</u>	
(b) Authorizing the City Manager to Enter into an Agreement for Federal Land and Water Conservation Funding Through the State of Washington Recreation and Conservation Office for \$448,000 for the Hidden Lake Dam Removal Project	<u>7b-1</u>	
(c) Authorizing the City Manager to Execute an Agreement with the Transportation Improvement Board to obligate \$500,000 for the Complete Streets Work Program	<u>7c-1</u>	
8. ACTION ITEMS		
(a) Adopting Resolution No. 434 - Adopting the 2020-2025 Transportation Improvement Plan	<u>8a-1</u>	7:20
9. STUDY ITEMS		
(a) Discussing Ordinance No. 856 – Amending the Shoreline Master Program Pursuant to the Periodic Review Required by the Shoreline Management Act	<u>9a-1</u>	7:40

10. ADJOURNMENT

8:40

The Council meeting is wheelchair accessible. Any person requiring a disability accommodation should contact the City Clerk's Office at 801-2231 in advance for more information. For TTY service, call 546-0457. For up-to-date information on future agendas, call 801-2236 or see the web page at www.shorelinewa.gov. Council meetings are shown on Comcast Cable Services Channel 21 and Verizon Cable Services Channel 37 on Tuesdays at 12 noon and 8 p.m., and Wednesday through Sunday at 6 a.m., 12 noon and 8 p.m. Online Council meetings can also be viewed on the City's Web site at <http://shorelinewa.gov>.

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Proclamation Declaring National Bike Month in the City of Shoreline		
DEPARTMENT:	CMO/CCK/PW		
PRESENTED BY:	Nora Daley-Peng, Senior Transportation Planner		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion
	<input type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	<input checked="" type="checkbox"/> Proclamation

ISSUE STATEMENT:

May is National Bike Month which is celebrated in communities nationwide with an ever-expanding diversity of events to promote bicycling for recreation and transportation.

On December 6, 2018, the City of Shoreline was honored to receive a Bronze Bicycle Friendly Community (BFC) award from the League of American Bicyclists for our work at developing a bicycle network throughout Shoreline that is safe and convenient for all riders. The creation of bicycling-friendly communities has been shown to improve people’s health, well-being, and quality of life; grow the local economy, improve traffic safety, support student learning outcomes, and reduce pollution, congestion, and wear and tear on streets.

Events and activities scheduled for the month of May, especially Bike Everywhere Day on Friday, May 17, 2019, reaffirm the City’s commitment to the value and benefit of using bicycles for recreation and transportation and emphasize the health and economic health benefits derived from biking throughout Shoreline. This proclamation encourages all citizens to join communities across the nation in celebrating May 2019 as National Bike Month.

Kathy Plant and fellow Shoreline bike advocates, who created the first Shoreline Bicycle Rodeo in 2017 through a neighborhood mini-grant to teach children and their parents how to bike safely and are hosting an upcoming Shoreline Bicycle Rodeo on Saturday, June 1, 2019 from 2:00 to 4:00 p.m. at Sunset School Park, will be present to accept the proclamation.

RECOMMENDATION

The Mayor should read the proclamation.

Approved By: City Manager **DT** City Attorney **MK**



P R O C L A M A T I O N

WHEREAS, on December 6, 2018, the City of Shoreline was honored to receive a Bronze Bicycle Friendly Community (BFC) award from the League of American Bicyclists for our work at developing a bicycle network throughout Shoreline that is safe and convenient for all riders; and

WHEREAS, residents and visitors of all ages and abilities engage in bicycling for recreation and transportation; and

WHEREAS, using a bicycle as a mode of transportation helps to reduce pollution and congestion, stimulate the local economy, and improve bicyclists' health and well-being; and

WHEREAS, groups are promoting greater public awareness of bicycle operation and safety to reduce collisions and improve health and safety for everyone on the road; and

NOW, THEREFORE, I, Will Hall, Mayor of the City of Shoreline, on behalf of the Shoreline City Council, hereby proclaim the month of May 2019 as

NATIONAL BIKE MONTH

in the City of Shoreline and encourage all citizens to celebrate the month of May by bicycling for recreation and transportation.

Will Hall, Mayor

CITY OF SHORELINE
SHORELINE CITY COUNCIL
SUMMARY MINUTES OF REGULAR MEETING

Monday, March 18, 2019
7:00 p.m.

Council Chambers - Shoreline City Hall
17500 Midvale Avenue North

PRESENT: Deputy Mayor McConnell, Councilmembers McGlashan, Scully, Chang, Robertson, and Roberts

ABSENT: Mayor Hall

1. CALL TO ORDER

At 7:00 p.m., the meeting was called to order by Deputy Mayor McConnell who presided.

2. FLAG SALUTE/ROLL CALL

Deputy Mayor McConnell led the flag salute. Upon roll call by the City Clerk, all Councilmembers were present with the exception of Mayor Hall.

Councilmember Scully moved to excuse Mayor Hall for personal reasons. The motion was seconded by Councilmember McGlashan and passed unanimously, 6-0.

3. REPORT OF CITY MANAGER

Debbie Tarry, City Manager, provided reports and updates on various City meetings, projects and events.

4. COUNCIL REPORTS

Councilmember Roberts reported attending the National League of Cities Conference. He shared highlights from the event and said he met with staff from Representative Jayapal's office and with Congressman Larson.

Councilmember McGlashan said that he appreciated that the Transportation Infrastructure Committee created a forum to discuss the infrastructure needs of individual cities at the National League of Cities Conference. He said he feels the federal government needs to think about an infrastructure package.

Deputy Mayor McConnell thanked the volunteers who were members of Shoreline's most recent CityWise cohort, and said she is grateful for their commitment to connecting community to City staff. She then read a statement expressing condolences for the recent injuries and deaths as the

result of shootings at two New Zealand mosques. She affirmed the City's commitment to being a welcoming, safe, and inclusive community.

5. PUBLIC COMMENT

Councilmember Roberts moved to extend public comment to allow all those signed up an opportunity to speak. The motion was seconded by Councilmember McGlashan, and passed unanimously, 6-0.

Carmen Tran, Shoreline resident and Shorewood student, shared information about the environment and the impacts of climate change, and asked Council to support Proposed Amendment #4 to the Comprehensive Plan.

Nara Kim, Shoreline resident and Shorewood student, voiced her support for Proposed Amendment #4 and urged Shoreline to become a leading figure in transforming the way local government approaches worldwide issues.

Maria Solano, Shoreline resident and Shorewood student, said climate change is a human rights issue and the biggest threat to her generation. She asked Council to support Proposed Amendment #4.

Joseph Irons, Shoreline resident, said he supports the proposed rezone of his property at 1510 and 1517 Northeast 170th Street. He said the property has been used as a business for a decade.

Melissa Irons, Shoreline resident, said she supports the rezone of her property at 1510 and 1517 Northeast 170th Street and shared details and comments on how their business positively impacts the City. She informed Council that mistruths are being spread about their property and business.

Venetia and Samaria Irons, Shoreline residents, asked the Council to support the rezone of their parents' property at 1510 and 1517 Northeast 170th Street. They said her parents are good neighbors and their family business depends on the rezone being approved.

Lee Keim, Shoreline resident, said she has concerns about climate change and its effects on the world for future generations and asked that Council support the Proposed Amendment #4.

Matt Orren, Shoreline resident, spoke about Irons Brothers Construction's commitment to the community and asked Council to support the potential rezone at 1510 and 1517 Northeast 170th Street.

John McCoy, Shoreline resident, spoke on behalf of Save Shoreline Neighborhoods, and said commercial zoning should not erode the integrity of what makes Shoreline neighborhoods distinct. He displayed a map of households who are opposed to the rezone of 1510 and 1517 Northeast 170th Street and asked Council to deny the proposed rezone.

Mark Rettmann, Shoreline resident, said he opposes the proposed rezone at 1510 and 1517 Northeast 170th Street and asked the Council to review all the submitted comments opposing the rezone and to instead enforce the existing code.

Yuna McCoy, Shoreline resident, shared the reasons she moved to Shoreline and urged the Council to vote no on the rezone request from Iron Brothers Construction.

Kristi Rettmann, Shoreline resident, shared the short and long term impacts of the proposed rezone at 1510 and 1517 Northeast 170th Street and asked Council to deny Proposed Amendment #3.

Diane McCoy, Shoreline resident, shared the reasons she moved to Shoreline in 1985 and said that the traffic from Irons Brothers Construction has changed her neighborhood, and that a rezone would permanently change the area.

Kelly Martinez, Shoreline resident, shared her concerns for the proposed rezone at 1510 and 1517 Northeast 170th Street and listed the negative impacts it would have on her neighborhood.

Dennis Heller, Shoreline resident, urged the Council to support expanding the proposed Community and Aquatics Center to include dedicated space for a Senior Center.

Justin Sakounthong, Shoreline resident, shared his frustration with the impact of Irons Brothers Construction on his neighborhood. He asked the Council to deny the proposed rezone of 1510 and 1517 Northeast 170th Street.

Allison Sakounthong, Shoreline resident, said she is concerned for the safety of her street should the rezone at 1510 and 1517 Northeast 170th Street be approved.

Kaye Pethe, Lake Forest Park resident, thanked the Council for the ongoing support of the Senior Center and said it is a true asset to the neighborhood.

Helju Coder, Mukilteo resident, identified as an employee of All City Electric and endorses Irons Brothers Construction for their mindful, safe practices.

Brian Ellsworth, Shoreline resident, said he opposes the proposed rezone at 1510 and 1517 Northeast 170th Street because he is concerned about preserving the small neighborhood feel of the street.

Ann Lynch, Shoreline resident, said she is in support of Proposed Amendment #4, and impressed upon Council the severe impact of climate change.

Yoshiko Saheki, Shoreline resident, shared her concerns about the proposed rezone of 1510 and 1517 Northeast 170th Street and listed the timeline of the zoning violations by Irons Brothers Construction.

Lois Harrison, Shoreline resident, spoke to the negative impacts of climate change and said she is in support of Proposed Amendment #4.

Joshua Tubbs, Seattle resident, said as an employee he wants Council to know that the Irons Brothers are good employers and community members.

Carter Case, Shoreline resident, spoke in favor of the proposed updates to the Climate Action Plan and asked Council to support clean air and clean water.

Mary Haanen, Shoreline resident and Shorewood student, spoke in favor of Proposed Amendment #4, stating drastic change is needed to protect the environment.

Sandra Distefano, Shoreline resident, said that she opposes the proposed rezone of 1510 and 1517 Northeast 170th Street and shared reasons for her opinion.

6. APPROVAL OF THE AGENDA

The agenda was approved by unanimous consent.

7. CONSENT CALENDAR

Upon motion by Councilmember Roberts and seconded by Councilmember Scully and unanimously carried, 6-0, the following Consent Calendar items were approved:

- (a) Approving Minutes of Special Workshop Dinner Meeting of March 4, 2019**
- (b) Authorizing the City Manager to Execute a Construction Contract with Westwater Construction Company in the Amount of \$831,865 for the Meridian Avenue N and N 155th Street Intersection Phase Changes Project**
- (c) Authorizing the City Manager to Execute a Contract with Otak, Inc. for On-Call Surface Water Engineering and Environmental Services in an Amount Not to Exceed \$150,000 Annually**
- (d) Adopting Ordinance No. 852 – 2019-2020 Biennial Budget Amendment for Sidewalk Projects**

8. STUDY ITEMS

- (a) Discussing the 2019 Comprehensive Plan Amendment Docket

Steve Szafran, Senior Planner; and Rachael Markle, Director of Planning and Community Development; delivered the staff presentation. Mr. Szafran reviewed the rules of Comprehensive Plan Amendments as defined by the State Growth Management Act. He explained the process in which items are added to the Docket and said that the purpose of the presentation is to give Council information, so they can decide if any of the proposed amendments should be studied or not. He said that there were four proposed amendments submitted for the 2019 Docket, and that

there was an additional amendment proposed by the 32nd District Legislators that Council may choose to add.

Mr. Szafran said the Planning Commission recommended including the following two items on the 2019 Docket:

1. Change the land use designation and zoning of two parcels at 1510 and 1517 NE 170th Street from Medium Density Residential to Mixed-Use 2 (Land Use) and Residential-8 to Community Business (Zoning).
2. Amend the language in Natural Environmental Goal V to limit greenhouse gas emissions to 1.5° C of global warming above pre-industrial levels.

Mr. Szafran stated the Planning Commission did not recommend consideration of the two proposed carry-over amendments, one related to the annexation of 145th Street (SR523) and the other to consider amendments to the Point Wells Subarea Plan. He then explained that the amendment requested by the 32nd District Legislators is to amend Comprehensive Plan Figure LU-1 Land Use Designations to change the portion of the Fircrest Campus identified as surplus from Campus to Mixed-Use 2, and to change its zoning from Campus to Mixed Use 2. He concluded with outlining the process Council would take to establish the final 2019 Docket.

Councilmember Chang recused herself from the discussion on Recommended Amendment #1, citing a personal relationship with the father of one of the applicants.

It was confirmed that by not considering the amendment to the Point Wells Subarea Plan no current or anticipated decision-making activity on the parcel would be jeopardized. Mr. Szafran said that Ordinance No. 845 protects the City from this possibility, and that the permitting timeline would be long enough that amendments could be made, if needed.

Councilmembers pointed out that any decision making around Recommended Amendment #1 would be focused on Land Use designation and zoning criteria, and not on the applicant's personal or business character and references. It was also clarified that tonight's discussion is focused on whether to add items to the Docket to be studied at a later date, and there would be no decisions to approve or deny the actual amendments tonight.

Councilmembers Scully and Robertson spoke against including Recommended Amendment #1 on the Docket, while other Councilmembers said they felt the amendment was worthy of being added to the Docket for additional study and discussion.

Councilmember Robertson asked what changing the language in Recommended Amendment #2 would mean in terms of implementation. Ms. Markle replied that, should the amendment be placed on the Docket, the City would look at this question and the research findings would be part of the City's analysis.

Councilmember Scully said he supports adding the new item request by the 32nd District Legislators to the Docket. Councilmember Roberts pointed out the property owner has not begun

the process of rezoning the parcel, and expressed concern with the process being proposed. He said he has no problem with the substance of the research, but he does not think the City Council should start the process of rezoning a property without the permission of the parcel owner. Councilmember McGlashan said he feels it is important and appropriate for the City to initiate action. Councilmember Scully generally agreed with Councilmember Roberts in that the City should not do the State's work for them, but stated he feels it is important to proactively study a land use change at this location in preparation for State action. Deputy Mayor McConnell said that she would also like to include the item on the Docket.

Ms. Tarry summarized that it was her understanding that Councilmembers have requested City staff to draft amendment language to remove Recommended Amendment #1 and to add the new Amendment request from the 32nd District Legislators.

- (b) Discussing Amendment # 1 to the City's 2017 – 2027 Comprehensive Garbage, Recyclables, and Compostables Collection Contract with Recology CleanScapes Inc. and Proposed Ordinance No. 858 Amending SMC 3.01.500 Solid Waste Rate Schedule to Reflect the Amendment to the Contract with Recology CleanScapes Inc.

Randy Witt, Director of Public Works; delivered the staff report. Mr. Witt introduced Kevin Kelly, General Manager of Recology, as a guest presenter, and explained that the purpose of the amendment is to reduce the contamination levels for recyclables and compostables, to support cost-effective recovery, and to support advancements at the Material Recovery Facility (MRF) that improve material quality. Mr. Witt reviewed the current Solid Waste Collection Contract highlights and shared general customer data. He explained the current challenges with recycling, which include improper disposal/contamination and the current halting of exports to China, and noted Recology has been pursuing new markets, enhancing their operations and equipment, and is focusing on customer outreach. He reported no clear market alternatives have been discovered and it is extremely difficult to meet China's minimum contamination standards.

Mr. Witt explained the contamination reduction plan and elaborated on the proposed steps to audit and reduce the contamination at the customer level. He said Recology's monitoring efforts would include visual pad inspections and monthly reporting to the City. He shared the proposed rate and fee schedule increases and reminded Council that this contract amendment would be effective on June 1, 2019 and requires passing Ordinance No. 858 to amend the Solid Waste Rate Schedule.

Councilmember Scully said he understands the need for the fee increase but he does not support the compliance program because he does not feel it will win customer buy-in and improve recycling efforts. He said his preference is to increase fees and address the compliance standards at the MRF while focusing on customer education and working toward long-term improvements.

Councilmember Roberts agreed that work is needed on both packaging and education, but he does not feel the proposed level of education is enough and recommended more education before tagging and fines are imposed. He asked for details on recycling plastic film from packaging and envelopes. Mr. Kelly shared the reasons behind refusal of plastic bags and plastic film.

Councilmember Chang said the proposed warning system seemed reasonable to her and asked how well the warning and tagging programs worked in Seattle. Mr. Kelly responded that there is not a lot of good data on the successes of the project, but that components of the proposed approach for Shoreline have been implemented in other cities, and most customers are responsive to the feedback. When asked, he said the warning tags could be available in multiple languages to support understanding, and he explained that the revised rates were established through a financial audit process. Mr. Witt described the conversations between the Recology customer cities that contributed to setting the new fees.

In general, the Council expressed understanding for the price increase. The opinion was expressed that tagging bins and refusing collection seems punitive and counterproductive. Mr. Kelly explained that if recycling was determined unacceptable, it would be collected as garbage, and not left for the consumer to dispose of themselves.

The Council was divided on whether the proposed regulations were appropriate, citing concerns with implementation, customer discontent, and effectiveness. Councilmembers generally agreed that advance noticing and more education for residents would be an important component of any changes to collection policies.

Mr. Witt clarified that if Council requests change to the contract language, to the contract would need to be renegotiated. Ms. Tarry added that if Council gave direction to renegotiate the contract, the City would need to re-evaluate all associated pieces before moving forward for approval.

It was agreed that the item would return to the Council as an Action Item.

(c) Discussing Ordinance No. 857 – Permanent Regulations for Plat Alterations

Julie Ainsworth-Taylor, Assistant City Attorney, described proposed Ordinance No. 857. She reviewed the history of the process, which included public hearings for both the interim and the permanent regulations. She explained the need for plat alteration regulations and gave examples of restrictions that might be attached to the plats. She reviewed the rules associated with requests for alterations to a subdivision or any part of a subdivision and shared information on the appeal process. Ms. Ainsworth-Taylor reminded Council that the alteration regulations apply to plat notes, not private covenants, and provided an informational handout describing the procedures. She confirmed that without majority consensus from owners within the plat, no application for alteration can be made and explained the hierarchy of regulations within plat alterations.

When asked for specifics on the process to update Discriminatory Plat Notes or Restrictive Covenants, Ms. Ainsworth-Taylor explained that the historic record on Plat Alterations is updated, but not deleted, when a parcel is altered.

It was agreed that Ordinance No. 857 would return to Council on April 1, 2019 as a Consent Item.

9. ADJOURNMENT

At 9:23 p.m., Deputy Mayor McConnell declared the meeting adjourned.

Jessica Simulcik Smith, City Clerk

DRAFT

CITY OF SHORELINE
SHORELINE CITY COUNCIL
SUMMARY MINUTES OF REGULAR MEETING

Monday, March 25, 2019
7:00 p.m.

Council Chambers - Shoreline City Hall
17500 Midvale Avenue North

PRESENT: Mayor Hall, Deputy Mayor McConnell, Councilmembers McGlashan, Scully, Chang, Robertson, and Roberts

ABSENT: None.

1. CALL TO ORDER

At 7:00 p.m., the meeting was called to order by Mayor Hall who presided.

2. FLAG SALUTE/ROLL CALL

Mayor Hall led the flag salute. Upon roll call by the City Clerk, all Councilmembers were present.

(a) Proclamation of Cesar Chavez Day

Mayor Hall read a proclamation declaring March 31, 2019 as Cesar Chavez Day in Shoreline. Cesar Garcia, a leader in the Shoreline Latinx community, accepted the proclamation. Mr. Garcia recognized cultural diversity as a strength and reflected on his involvement with the Shoreline-Lake Forest Park Arts Council. He described his work in designing a Dia De Los Muertos celebration and a Latino Cultural Room at the Arts Festival. He spoke to the empowerment that community involvement gives first generation immigrants and their families and shared recollections on the actions and words of Cesar Chavez.

3. REPORT OF CITY MANAGER

Debbie Tarry, City Manager, provided reports and updates on various City meetings, projects and events.

4. COUNCIL REPORTS

Councilmember Chang said that she attended the Regional Transit Committee meeting and shared information on Committee elections. She said the meeting focused on how Metro Transit is transforming from a transit agency to a mobility agency, taking into consideration other elements of transportation and their impacts on, and association with, mass transit.

Councilmember Scully said at the recent Salmon Recovery Council meeting they reviewed the Orca Task Force report and considered recommendations. He encouraged City Council to support further steps towards protection and recovery for salmon and orcas. Mayor Hall stated that it is important for the legislators to hear from all constituent groups on this important regional topic.

Mayor Hall reported on this evening's dinner meeting with guests from the Port of Seattle, with topics including a discussion of regional opportunities and updates on the Port's activities and initiatives.

Mayor Hall said that the King County Regional Policy Committee will be looking at a proposal to renew the King County Parks Levy. He said that requested amendments to the proposal include renovation and replacement funding resources for pools and for regional bicycle and pedestrian connections. It was generally agreed to express support for these amendments.

5. PUBLIC COMMENT

Ev E Phillips, Shoreline resident, asked how to encourage dog owners to leash their pets and recounted a situation she witnessed in which an unleashed dog attacked a library patron outside a Shoreline library.

Bill Boyington, Shoreline resident, said the property in front of his home is used as storage for commercial equipment. He shared images of his view of the property. He described his frustration and efforts to resolve the issue and asked the City to take further action in enforcing the existing code violations.

Mark Rettmann, Shoreline resident and member of Save Shoreline Neighborhoods, spoke against the proposed rezone at 1510 and 1517 NE 170th Street and described the organization's efforts for community outreach and communication on this topic. He displayed a map of the neighboring property owners who oppose the rezone and listed his concerns with City actions around the use of this property. He asked Council to oppose the proposed rezone.

Pam Cross, Shoreline resident, spoke to the application process and Planning Commission recommendation regarding the proposed rezone at 1510 and 1517 NE 170th Street. She asked Council to approve the amendment for inclusion on the 2019 Comprehensive Plan Docket.

George Whiteside, Shoreline resident, thanked the Council for the ongoing work on the 185th Street Corridor. He said he is concerned with the additional traffic the Light Rail Station will draw through his neighborhood of 187th/188th and 12th Avenue NE and described the current traffic conditions and associated dangers. He suggested making improvements to resolve the issues before the Light Rail Station opens.

6. APPROVAL OF THE AGENDA

The agenda was approved by unanimous consent.

7. CONSENT CALENDAR

Upon motion by Councilmember Scully and seconded by Councilmember McGlashan and unanimously carried, 7-0, the following Consent Calendar items were approved:

- (a) Approving Minutes of Regular Meeting of January 28, 2019**
- Approving Minutes of Special Dinner Meeting of February 15, 2019**
- Approving Minutes of Workshop Dinner Meeting of February 25, 2019**

- (b) Approving Expenses and Payroll as of March 8, 2019 in the Amount of \$1,945,625.73**

***Payroll and Benefits:**

Payroll Period	Payment Date	EFT Numbers (EF)	Payroll Checks (PR)	Benefit Checks (AP)	Amount Paid
1/27/19-2/9/19	2/15/2019	83109-83354	16126-16150	73201-73208	\$899,468.63
					<u>\$899,468.63</u>

***Wire Transfers:**

Expense Register Dated	Wire Transfer Number	Amount Paid
2/25/2019	1143	\$6,727.17
		<u>\$6,727.17</u>

***Accounts Payable Claims:**

Expense Register Dated	Check Number (Begin)	Check Number (End)	Amount Paid
2/14/2019	73082	73084	\$9,241.10
2/14/2019	73085	73101	\$628.35
2/14/2019	73102	73103	\$10,547.03
2/14/2019	73104	73109	\$8,487.75
2/14/2019	73110	73113	\$592.00
2/14/2019	73114	73132	\$75,312.80
2/14/2019	73133	73155	\$60,384.00
2/20/2019	73156	73156	\$789.61
2/20/2019	73157	73158	\$70,625.12
2/21/2019	73159	73162	\$5,709.23
2/21/2019	73163	73164	\$14,272.78
2/21/2019	73165	73180	\$68,180.56
2/21/2019	73181	73200	\$100,277.45
2/28/2019	73209	73211	\$23,542.89
2/28/2019	73212	73233	\$127,752.68
2/28/2019	73234	73241	\$562.12
2/28/2019	73242	73252	\$37,123.53
2/28/2019	73253	73271	\$123,677.12

2/28/2019	73272	73287	\$11,618.87
2/28/2019	73288	73288	\$2,958.70
2/28/2019	73289	73291	\$14,030.71
3/6/2019	73292	73320	\$188,058.06
3/6/2019	73321	73331	\$606.84
3/6/2019	73332	73359	\$83,527.71
3/6/2019	71648	71648	(\$178.43)
3/6/2019	73360	73360	\$178.43
3/7/2019	69923	69923	(\$19.81)
3/7/2019	73361	73364	\$942.73
			\$1,039,429.93

(c) Adopting Resolution No. 435 – Extending an Interfund Loan to the General Capital Fund from the General Fund in an Amount Not to Exceed \$2,100,000 with Interest Charges for the Police Station at City Hall Project Pending the Sale of the Former Police Station

(d) Authorizing the City Manager to Execute Amendment #5 to Contract #8584 with West Coast Code Consultants for Regulatory Plan Review and Inspection Services for Light Rail Facilities

8. STUDY ITEMS

(a) Discussing Draft Options for the 185th Corridor

Nora Daley-Peng, Senior Transportation Planner; Miranda Redinger, Senior Planner; and Kendra Dedinsky, Traffic Engineer, delivered the staff presentation. Ms. Daley-Peng said this presentation on the 185th Corridor would summarize the Fall public outreach and debut the draft materials being shown to the public for review and comment at an upcoming Open House. She explained that the materials include preliminary roadway cross sections, a comparison of roadway options, and draft concepts for community gathering spaces. She stated the goal of the project is to create a vision that is future-focused and supports the needs of all users. She clarified that the 185th Street Corridor is a collection of three streets – N/NE 185th Street, 10th Avenue NE, and NE 180th Street, and the goal of connecting these three streets is to unite the Aurora Corridor with the 185th Street Light Rail Station and the North City Business District.

Ms. Daley-Peng displayed images of a preliminary cross section of NE 185th Street and described the modes of transportation to be accommodated. She talked about how public feedback gathered to-date has shaped the options being presented tonight and highlighted the future opportunities the public will have to review these designs to help refine an optimal concept for the Corridor.

Ms. Daley-Peng displayed a map of the Corridor which identified segments A-E as areas for improvement, and noted that segments A and C were not designated for improvements by the City. She described the existing conditions and dimensions of N/NE 185th Street and shared the following options of improvements for Segments B, D, and E:

Segment B (N/NE 185th Avenue):

- Option 1: Two travel lanes and a center turn lane with bike lanes
- Option 2: Four lanes, two dedicated for Business Access and Turn (BAT); and protected bike lanes
- Option 3: Five lanes, four as travel lanes and one a center turn lane; and a bi-directional shared-use path

Segment D (10th Avenue NE):

- Option 1: Two travel lanes, buffered bike lanes, and enhancements to the pedestrian zone
- Option 2: Two travel lanes, bike lanes, and on-street parking
- Option 3: Two travel lanes, a center turn lane, and bike lanes

Segment E (NE 180th Street):

- Option 1: Two travel lanes, bike lanes, and improvements to the pedestrian zone
- Option 2: Two travel lanes, buffered bike lanes, and on-street parking

Ms. Daley-Peng shared the value-based criteria used to evaluate each option against project goals and objectives and explained the scaling used. She then displayed the results of the evaluation of the comparison of options, and said the comparison tables will be useful in dialogue with Council, the public, and other stakeholders. She emphasized that the review and comparison of the options will reveal opportunities, constraints, trade-offs, and priorities.

Kendra Dedinsky, City Traffic Engineer, described the City's adopted level of service (LOS) standards and displayed the LOS selected for the Corridor's roadway segments. She displayed traffic data that projects all of the proposed options for Segment B will fail in achieving the City's adopted LOS. She said Council could discuss establishing a new LOS standards or could choose to exempt the Corridor from meeting the current standard.

Ms. Daley-Peng concluded the presentation by sharing design ideas for the proposed community gathering spaces; she displayed images of the four identified sites and described design elements for each one. She shared a timeline for next steps for the project; which include open houses, surveys, and continued stakeholder and Council meetings.

Councilmembers questioned if there is a possibility of the corridor changes being significant enough to bring the volume to capacity ratio within standards. Ms. Dedinsky explained that mode shift happens when the change presents a more efficient alternative and said it was likely that with the changes to the corridor the modes of transportation chosen by travelers would become more efficient.

Ms. Dedinsky reviewed the traffic concurrency and the City's adopted LOS standards for each segment. She identified the potential LOS failures and said the City is working on determining appropriate mitigations. It was reiterated that the modeling is based on best projections using current methods, but time may provide unanticipated changes.

Councilmembers shared their views on the importance of safety of pedestrian and bike zones, and concern was expressed about the safety of a shared-use, bi-directional path. Ms. Dedinsky

indicated that design-specific considerations would come into play later in the process, and there are many treatments available in bike infrastructures to manage speeds.

Councilmembers expressed a preference for design elements in Option 2 for NE 185th Street. It was noted that whether the City up-zones or not, there will be significant traffic increases going to the Light Rail Stations. It was asked if more could be done to make Segment C match the City's vision. Ms. Dedinsky said the curb lines Sound Transit is intending to set should be somewhat compatible with a 4-lane segment if this change were to be needed in the future.

Councilmembers examined the possibility of preserving the mature trees on the north side of the street. Ms. Redinger explained that the three distinct options were created within the existing width constraints (footprints). She said that if the curbs are moved, it would compromise the tree zone. She described the options available in the flex zones and said hybrid versions of many design elements could be combined for future discussions.

A majority of Council commented that it is imperative that the design not create new bottlenecks, specifically referring to when two lanes merge into one and create a backup.

It was suggested that the corridor design and review should include the roadway from 10th Avenue NE to NE Perkins Way and take into consideration secondary, cut-through, routes. Ms. Redinger explained that the corridor is designed to connect Aurora Avenue to North City. She added that the Master Street Plan is currently being updated, and said it includes the dimensional standards for areas that are not in the subareas but will be impacted by them. Perkins Way is on the list of future Capital Projects to be funded separately. Ms. Dedinsky added that Perkins Way has massive design constraints, and the area would need more design review to adequately assess improvement needs. She said the area has been preliminarily analyzed and is part of the Transportation Improvement Plan, but there is no current plan for funding the improvements. It was mentioned that the City's goal is for NE 188th Street to serve as the intentional access route for the Light Rail Stations and that it is important to think of ways to divert or slow down traffic on this route.

Councilmembers expressed the opinion that the objective should be to move people where they want to go, focusing on alternative modes of transportation and prioritizing pedestrian and bicycle transit on the Corridor. Recognizing this broader objective, changing the definition of measured LOS from moving *vehicles* to moving *people* was suggested.

Upon questioning, Ms. Redinger said new proposed townhouse design standards include consideration of orientation. She added that to support a mix of uses, prior to Phase Two of the 185th Street upzoning, Council would receive a report on development to-date which will include data on percentages and types of redevelopment.

Councilmember Roberts left the meeting at 8:28 p.m.

(b) Discussing the 2019-2021 City Council Goals and Work Plan

John Norris, Assistant City Manager, reviewed the proposed 2019-2021 City Council Goals and Work Plan. He shared an overview of the goals conversation at Council's recent Strategic Planning Workshop. He said it was agreed by Councilmembers that the goals remain relevant and supportive of Vision 2029. He described the amended language to Council Goal #2 and added that there were proposed language amendments to many of the action steps. He said the Council Goals and Work Plan are scheduled for Council adoption on April 8, 2019.

It was unanimously agreed that the Council approves of the proposed amendments and Councilmembers expressed gratitude for the Staff support on this process and recommended the item be seen on consent.

9. EXECUTIVE SESSION: Litigation and Potential Litigation – RCW 42.30.110(1)(i)

At 8:33 p.m., Mayor Hall recessed into Executive Session for a period of 30 minutes as authorized by RCW 42.30.110(1)(i) to discuss with legal counsel matters relating to agency enforcement actions, litigation, and potential litigation and stated Council will potentially take final action following the Executive Session. Staff attending the Executive Session included Debbie Tarry, City Manager; John Norris, Assistant City Manager; Margaret King, City Attorney; and Don Moritz, Human Resources and Organizational Development Director. The Executive Session ended at 9:00 p.m.

Councilmember Scully moved to authorize the City Manager to negotiate and execute a severance agreement under the parameters discussed and under the supervision of the City Attorney. The motion was seconded by Councilmember McGlashan. The motion passed unanimously, 6-0.

10. ADJOURNMENT

At 9:01 p.m., Mayor Hall declared the meeting adjourned.

Jessica Simulcik Smith, City Clerk

CITY OF SHORELINE
SHORELINE CITY COUNCIL
SUMMARY MINUTES OF WORKSHOP DINNER MEETING

Monday, April 22, 2019
5:45 p.m.

Conference Room 303 - Shoreline City Hall
17500 Midvale Avenue North

PRESENT: Mayor Hall, Deputy Mayor McConnell, Councilmembers Chang, McGlashan, Roberts, Robertson, and Scully

ABSENT: None

STAFF: Debbie Tarry, City Manager; John Norris, Assistant City Manager; Jim Hammond, Intergovernmental Program Manager, and Allison Taylor, Deputy City Clerk

GUESTS: Yazmin Mehdi, Outreach Coordinator for Representative Jayapal

At 5:45 p.m., the meeting was called to order by Mayor Hall.

Mayor Hall welcomed Yazmin Mehdi, Outreach Coordinator for Congresswoman Pramila Jayapal. Ms. Mehdi described her role in the district office and recapped Congresswoman Jayapal's initiatives and committee work. She added that Congresswoman Jayapal is committed to outreach and helping residents navigate Agency assistance and shared examples of the support that is available to all constituents. She asked Council to communicate the availability of services to the residents of Shoreline.

Ms. Mehdi recognized the breadth of development coming to Shoreline in connection with the Light Rail and asked for an update. There was conversation around ways to support infrastructure development, specifically focused on transportation needs. Councilmembers shared that it is important for the definition of transportation funding packages to be multi-modal, not just vehicle, focused. It was communicated to Ms. Mehdi that the City needs legislative support to expand options for small and medium sized cities to be able to fairly compete for Federal transportation funding. Solutions suggested ranged from set-asides reserved for smaller cities to dedicating funding to metropolitan planning organizations. It was stated that the City is well-prepared to apply for Federal grants, but that options are limited.

Councilmembers communicated concern about the impact the Light Rail will have on traffic management on the NE 145th Corridor and the need for a bicycle/pedestrian bridge at 148th Street was emphasized. The City recounted its work to secure funding from a wide range of sources and described the its financial commitment to the project. It was mentioned that a partnership with the City of Seattle is in process and Staff expressed gratitude for the support of the Federal Delegation.

Councilmembers updated Ms. Mehdi on the City's efforts toward stormwater and culvert improvements and associated funding options were discussed.

Ms. Mehdi asked for an update on Shoreline-specific priorities. The first item discussed was the potential Community and Aquatics Center. After describing the condition and location of the current pool, the scope of the project for a new Center was outlined.

A conversation around the City's efforts to sustain affordable housing followed. It was recognized that the City needs to build housing in order to support a growing workforce. Councilmembers mentioned the value of early intervention to help people remain in their homes and the successes in Shoreline's Community Development Block Grants were reviewed. The City updated Ms. Mehdi on the development of the 198th Affordable Housing Project.

It was mentioned that it is important to develop and maintain parks and green spaces as the City grows in density. Councilmembers described the efforts dedicated toward parks improvements and creation of additional green spaces.

The concept of a small business recognition program was discussed, and Staff were asked to explore useful ways to draw attention to local, small businesses.

Mayor Hall thanked Ms. Mehdi for her time and attention to the Shoreline's priorities.

At 6:45 p.m. the meeting adjourned.

Allison Taylor, Deputy City Clerk

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorizing the City Manager to Enter into an Agreement for Federal Land and Water Conservation Funding Through the State of Washington Recreation and Conservation Office for \$448,000 for the Hidden Lake Dam Removal Project
DEPARTMENT:	Public Works
PRESENTED BY:	John Featherstone, Engineer II
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

Staff is requesting that Council authorize the City Manager to execute an agreement with the State of Washington Recreation and Conservation Office (RCO) Funding Board for \$448,000 in federal Land and Water Conservation Funds (LWCF) for the Hidden Lake Dam Removal project. In accordance with the City’s purchasing policies, Council authorization is required for staff to obligate grant funds exceeding \$50,000.

Hidden Lake is a man-made pond on Boeing Creek located east of the intersection of NW Innis Arden Way and 10th Avenue NW, partially within Shoreview Park. King County constructed the present dam and re-established Hidden Lake in 1996. After incorporation, maintenance of the lake became a City responsibility which included seven separate dredging projects from 2002 to 2013. On September 8, 2014, the City Council discussed this issue as presented in the Hidden Lake Management Plan Feasibility Study and authorized staff to cease dredging the lake and begin a phased approach to remove Hidden Lake Dam and re-establish Boeing Creek at Hidden Lake.

On May 23, 2016, the City Council discussed the results of the Hidden Lake Dam Removal alternatives analysis and authorized staff to initiate design for removal of the existing dam and artificial impoundment (Hidden Lake). Council also authorized staff to restore Boeing Creek through the existing Hidden Lake and dam area within Shoreview Park and replace the NW Innis Arden Way culverts. The project is currently in the design phase, with 60% design expected in July 2019. Final design is expected to be completed by late 2020, with Hidden Lake Dam Removal construction scheduled for the summer of 2021.

Staff applied for the competitive LWCF in 2016 and was awarded the full amount requested of \$448,000 in 2019. The RCO Funding Board Project Agreement for the LWCF is attached as Attachment A. The LWCF Project Agreement General Provisions are included as Attachment B.

To optimize the recreation-oriented funding appeal, the within-park portion of the Hidden Lake Dam Removal project was named on the grant application as the “Shoreview Park Trail and Creek Improvement Project”. The LWCF grant will be used to partially fund design and construction of habitat restoration and recreational improvements within the Shoreview Park portion of the project area, including new and restored trails and stream and planting restoration. Project trail work will be increased from 300 linear feet (the minimum required following dam removal) to 750 linear feet, which will allow for greater enhancement of park user features. The project scope will be amended to include the additional trail replacement work and other new work elements which are grant-related.

FINANCIAL IMPACT:

The Hidden Lake Dam Removal project is listed in the 2019-2024 Capital Improvement Plan with a total project budget of \$4,238,394. The LWCF grant is expected to add approximately \$246,977 in new project expenditures associated with grant-required work, such as design and construction for the additional 450 linear feet of new and restored trails. The table below references the most current estimated project costs and revenues. The Hidden Lake Dam Removal Project CIP budget will be updated at a later date to reflect grant-related and other recent budget changes as driven by the project’s in-progress design.

EXPENDITURES

Project Administration – pre-LWCF grant scope	\$1,091,394
Project Administration – new LWCF-driven work	\$34,477
Construction – pre-LWCF grant scope	\$3,147,000
Construction – new LWCF-driven work	\$212,500
<hr/>	
Total Cost	\$4,485,371

REVENUE

Land and Water Conservation Funding	\$448,000
King County Flood Control District Flood Reduction Grant	\$300,000
Surface Water Capital Fund ¹	\$3,737,371
<hr/>	
Total Revenue	\$4,485,371

¹ The grant reduces the Surface Water Capital Fund contribution from \$3,938,394 to \$3,737,371.

RECOMMENDATION

Staff recommends that Council authorize the City Manager execute an agreement with the State of Washington Recreation and Conservation Funding Board for \$448,000 in federal Land and Water Conservation Funds for the Hidden Lake project.

ATTACHMENTS:

- Attachment A – RCO Funding Board Project Agreement - LWCF
- Attachment B – LWCF Project Agreement General Provisions

Approved By: City Manager **DT** City Attorney **MK**



Funding Board Project Agreement

Project Sponsor: City of Shoreline

Project Number: 16-1621D

Project Title: Shoreview Park Trail & Creek Improvement

Approval Date: 9/24/2018

A. PARTIES OF THE AGREEMENT

This Funding Board Project Agreement (Agreement) is entered into between the State of Washington by and through the Recreation and Conservation Funding Board (RCFB or funding board) and the Recreation and Conservation Office (RCO), P.O. Box 40917, Olympia, Washington 98504-0917 and City of Shoreline (Sponsor, and primary Sponsor), 17500 Midvale Ave N, Shoreline, WA 98133, and shall be binding on the agents and all persons acting by or through the parties.

All Sponsors are equally and independently subject to all the conditions of this Agreement except those conditions that expressly apply only to the primary Sponsor.

Per the Applicant Resolution/Authorizations submitted by all sponsors (and on file with the RCO), the identified Authorized Representative(s)/Agent(s) have full authority to legally bind the Sponsor(s) regarding all matters related to the project, including but not limited to, full authority to: (1) sign a grant application to the funding board for grant assistance, (2) enter into this project agreement on behalf of the Sponsor(s) (including indemnification and waiver of sovereign immunity, if applicable, as provided therein), (3) enter into any amendments thereto on behalf of the Sponsors, and (4) make any decisions and submissions required with respect to the project. Agreements and amendments must be signed by the Authorized Representative/Agent(s) of all sponsors, unless otherwise allowed in Section J.

If a Sponsor wishes to change its Authorized Representative/Agent as identified on the original signed Applicant Resolution/Authorization, the Sponsor has the obligation to provide to RCO in writing a new Applicant Resolution/Authorization signed by its governing body. Unless a new Applicant Resolution/Authorization has been provided, RCO will be entitled to rely upon the fact that the current Authorized Representative/Agent has the authority to bind the Sponsor to the Agreement (including any amendments thereto) and decisions related to implementation of the Agreement.

For the purposes of this Agreement, as well as for grant management purposes with RCO, only the primary Sponsor may act as a fiscal agent to obtain reimbursements (see Section 11. PROJECT REIMBURSEMENTS).

B. PURPOSE OF AGREEMENT

This Agreement sets out the terms and conditions by which a grant is made from the General Fund - Federal of the State of Washington. The grant is administered by the Recreation and Conservation Office (RCO).

C. DESCRIPTION OF PROJECT

The City of Shoreline will use this grant to reconstruct damaged creek-side loop trail, restore natural creek channel through the impoundment area, and install new spur trail along the restored creek, interpretive signage, a viewpoint, native plantings, and natural landscaping. This project will provide the primary means for the public to access and enjoy the future benefits of the long-term creek restoration effort. The primary recreational opportunities provided by this project are trail walking, nature viewing and outdoor play.

D. PERIOD OF PERFORMANCE

The period of performance begins on September 24, 2018 (project start date) and ends on October 31, 2021 (project end date). No allowable cost incurred before or after this period is eligible for reimbursement unless specifically provided for by written amendment or addendum to this Agreement, or specifically provided for by applicable RCWs, WACs, and any applicable RCO manuals as of the effective date of this Agreement.

The Sponsor must request extensions of the period of performance at least 60 days before the project end date.

The Sponsor has obligations beyond this period of performance as described in Section F: LONG-TERM OBLIGATIONS.

E. STANDARD TERMS AND CONDITIONS INCORPORATED

The Standard Terms and Conditions of the Recreation and Conservation Office Agreement are hereby incorporated by reference as part of this Agreement.

F. LONG-TERM OBLIGATIONS

For this development, renovation and restoration project, the sponsor's on-going obligations shall be in perpetuity and shall survive the completion/termination of this Project Agreement unless otherwise identified in the Agreement or as

approved by the funding board. It is the intent of the funding board's conversion policy (see Section 25: Long-Term Obligations Of The Project Sponsors) that all lands acquired and/or facilities and areas developed, renovated, or restored with funding assistance remain in the public domain in perpetuity.

G. PROJECT FUNDING

The total grant award provided for this project shall not exceed \$448,000.00. The RCO shall not pay any amount beyond that approved for grant funding of the project and within the percentage as identified below. The Sponsor shall be responsible for all total project costs that exceed this amount. The minimum matching share provided by the Sponsor shall be as indicated below:

	Percentage	Dollar Amount	Source of Funding
RCFB - Land and Water Conservation	45.00%	\$448,000.00	Federal
Project Sponsor	55.00%	\$547,500.00	
Total Project Cost	100.00%	\$995,500.00	

H. FEDERAL FUND INFORMATION

If federal funding information is included in this section, this project is funded by, matched by, and/or funded in part by the following federal award, or subaward:

Federal Agency: US Dept of Interior
 Catalog of Federal Domestic Assistance Number and Name: 15.916 - Land & Water Conservation Fund
 Federal Award Identification Number: P18AP00370
 Federal Fiscal Year: 2018
 Federal Award Date: 09/24/2018
 Total Federal Award: \$448,000
 Federal Award Project Description: 53-00731 Shoreview

This funding is not research and development (R&D).

If the Sponsor's total federal expenditures are \$750,000 or more during the Sponsor's fiscal-year, the Sponsor is required to have a federal single audit conducted for that year in compliance with 2 C.F.R. Part 200, Sub Part F Audit Requirements, Section 500 (2013). The Sponsor must provide a copy of the final audit report to RCO within nine months of the end of the Sponsor's fiscal year, unless a longer period is agreed to in advance by the federal agency identified in this section.

RCO may suspend all reimbursements if the Sponsor fails to timely provide a single federal audit; further the RCO reserves the right to suspend any and all RCO Agreement(s) with the Sponsor if such noncompliance is not promptly cured.

I. RIGHTS AND OBLIGATIONS INTERPRETED IN LIGHT OF RELATED DOCUMENTS

All rights and obligations of the parties under this Agreement are further specified in and shall be interpreted in light of the Sponsor's application and the project summary and eligible scope activities under which the Agreement has been approved as well as documents produced in the course of administering the Agreement, including the eligible scope activities, the milestones report, progress reports, and the final report. Provided, to the extent that information contained in such documents is irreconcilably in conflict with this Agreement, it shall not be used to vary the terms of the Agreement, unless those terms are shown to be subject to an unintended error or omission. This "Agreement" as used here and elsewhere in this document, unless otherwise specifically stated, has the meaning set forth in the definitions of the Standard Terms and Conditions of the Project Agreement.

J. AMENDMENTS TO AGREEMENT

Except as provided herein, no amendment (including without limitation, deletions) of any of the terms or conditions of this Agreement will be effective unless provided in writing signed by all parties. Extensions of the period of performance and minor scope adjustments consented to in writing (including email) by the Sponsor need only be signed by RCO's director or designee, unless otherwise provided for in another agreement a Sponsor has with the RCO. This exception does not apply to a federal government Sponsor or a Sponsor that requests and enters into a formal amendment for extensions or minor scope adjustments.

It is the responsibility of a Sponsor to ensure that any person who signs an amendment on its behalf is duly authorized to do so, and such signature shall be binding on the Sponsor if the representative/agent signing has been authorized to do so by Applicant Resolution/Authorization provided to the RCO and such Applicant Resolution/Authorization has not been withdrawn by the governing body in a subsequent resolution.

Any amendment to this Agreement, unless otherwise expressly stated, shall be deemed to include all current federal, state, and local government laws and rules, and policies applicable and active and published in the applicable RCO manuals or on the RCO website in effect as of the effective date of the amendment, without limitation to the subject matter of the amendment. Provided, any update in law, rule, policy or a manual that is incorporated as a result of an amendment shall apply only prospectively and shall not require that an act previously done in compliance with existing requirements be redone.

K. COMPLIANCE WITH APPLICABLE STATUTES, RULES, AND POLICIES

This Agreement is governed by, and the sponsor shall comply with, all applicable state and federal laws and regulations, applicable RCO manuals as identified below, and any applicable federal program and accounting rules effective as of the date of this Agreement, and with respect to any amendments to this Agreement, as of the effective date of that amendment. Provided, any update in law, rule, policy or a manual that is incorporated as a result of an amendment shall apply only prospectively and shall not require that an act previously done in compliance with existing requirements be redone.

For the purpose of this Agreement, WAC Title 286, RCFB policies, and the following RCO manuals are deemed applicable and shall apply as terms of this Agreement:

- Development Projects - Manual 4
- Land and Water Conservation Fund - Manual 15
- Long Term Obligations - Manual 7
- Reimbursements - Manual 8

L. SPECIAL CONDITIONS**1. Cultural Resources**

Federal Land and Water Conservation Funds (LWCF), derived from the National Park Service (NPS) and provided through this grant agreement, require that this project be reviewed and consulted upon in compliance with Section 106 of the National Historic Preservation Act. The project sponsor has indicated that the RCO/NPS funded project is a portion of a larger project that will require the issuance of a permit from the US Army Corps of Engineers (USACOE). RCO/NPS is deferring action under Section 106 until such time that the USACOE has defined their Area of Potential Effect (APE). If the USACOE APE is inclusive of the LWCF funded project, RCO/NPS will defer to the determination of effect made by the USACOE.

The project sponsor must provide RCO documentation of the USACOE's Section 106 compliance, including the APE map(s) used for review and consultation. If the APE does not include all LWCF funded activities; NPS and the Park Service will review and consult independently. All cultural resources survey reports and site forms should be completed in compliance with Section 106 and submitted to consulting parties by the lead federal agency. No ground disturbing activities, including demolition, may occur until a NEPA determination has been made and a notice to proceed has been issued by the RCO grants manager.

M. AGREEMENT CONTACTS

The parties will provide all written communications and notices under this Agreement to the mail address or the email address listed below if not both:

Sponsor Project Contact

Name: John Featherstone
 Title:
 Address: 17500 Midvale Ave. N
 Shoreline, WA 98133
 Email: jfeatherstone@shorelinewa.gov

RCO Contact

DeAnn Beck
 Natural Resources Building
 PO Box 40917
 Olympia, Washington 98504-0917
 deanna.beck@rcowa.gov

These addresses and contacts shall be effective until receipt by one party from the other of a written notice of any change. Decisions relating to the Agreement must be made by the Authorized Representative/Agent, who may or may not be the Project Contact for purposes of notices and communications.

N. ENTIRE AGREEMENT

This Agreement, with all amendments and attachments, constitutes the entire Agreement of the parties. No other understandings, oral or otherwise, regarding this Agreement shall exist or bind any of the parties.

O. EFFECTIVE DATE

This Agreement, for project 16-1621D, shall be subject to the written approval of the RCO's authorized representative and shall not be effective and binding until the date signed by both the Sponsor and the RCO, whichever is later (effective date). Reimbursements for eligible and allowable costs incurred within the period of performance identified in Section D: PERIOD OF PERFORMANCE are allowed only when this Agreement is fully executed and an original is received by RCO.

The Sponsor has read, fully understands, and agrees to be bound by all terms and conditions as set forth in this Agreement and the Standard Terms and Conditions of the Project Agreement. The signators listed below represent and warrant their authority to bind the parties to this Agreement.

City of Shoreline

By: _____ Date: _____
Name: (printed) _____
Title: _____

**State of Washington Recreation and Conservation Office
On behalf of the Recreation and Conservation Funding Board (RCFB or funding board)**

By: _____ Date: _____
Kaleen Cottingham
Director
Recreation and Conservation Office

Pre-approved as to form:

By: Bruce Fuller Date: October 6, 2017
Assistant Attorney General

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Standard Terms and Conditions of the Project Agreement

Project Sponsor: City of Shoreline
Project Title: Shoreview Park Trail & Creek Improvement

Project Number: 16-1621D
Approval Date: 9/24/2018

SECTION 1. CITATIONS, HEADINGS AND DEFINITIONS

- A. Any citations referencing specific documents refer to the current version on the effective date of this Agreement or the effective date of any amendment thereto.
- B. Headings used in this Agreement are for reference purposes only and shall not be considered a substantive part of this Agreement.
- C. Definitions. As used throughout this Agreement, the following terms shall have the meaning set forth below:

acquisition project – A project that purchases or receives a donation of fee or less than fee interests in real property. These interests include, but are not limited to, conservation easements, access/trail easements, covenants, water rights, leases, and mineral rights.

Agreement or project agreement – The document entitled “Funding Board Project Agreement” accepted by all parties to the present transaction, including without limitation these Standard Terms and Conditions of the Project Agreement, all attachments, addendums, and amendments, and any intergovernmental agreements or other documents that are incorporated into the Funding Board Project Agreement subject to any limitations on their effect.

applicant – Any party that meets the qualifying standards, including deadlines, for submission of an application soliciting a grant of funds from the funding board.

application – The documents and other materials that an applicant submits to the RCO to support the applicant’s request for grant funds; this includes materials required for the “Application” in the RCO’s automated project information system, and other documents as noted on the application checklist including but not limited to legal opinions, maps, plans, evaluation presentations and scripts.

Authorized Representative/Agent – A Sponsor’s agent (employee, political appointee, elected person, etc.) authorized to be the signatory of this Agreement and any amendments requiring a Sponsor signature. This person has the signature authority to bind the Sponsor to this Agreement, grant, and project.

Boating Infrastructure Grant (BIG) – A program administered through the United States Fish and Wildlife Service.

C.F.R. – Code of Federal Regulations

contractor – An entity that receives a contract from a Sponsor related to performance of work or another obligation under this Agreement.

conversion – A conversion occurs 1) when facilities acquired, developed, renovated or restored within the project area are changed to a use other than that for which funds were approved, without obtaining prior written formal RCO or board approval, 2) when property interests are conveyed to a third party not otherwise eligible to receive grants in the program from which funding was approved without obtaining prior written formal RCO or board approval, or 3) when obligations to operate and maintain the funded property are not complied with after reasonable opportunity to cure.

development project – A project that results in the construction of, or work resulting in, new elements, including but not limited to structures, facilities, and/or materials to enhance outdoor recreation resources.

director – The chief executive officer of the Recreation and Conservation Office or that person's designee.

education project – A project that provides information, education, and outreach programs for the benefit of outdoor recreationists.

education and enforcement project – A project that provides information, education, and outreach programs; encourages responsible recreational behavior, and may provide law enforcement for the benefit of outdoor recreationists.

effective date – The date when the signatures of all parties to this agreement are present in the agreement.

enhancement project – 1) A project that brings a site back to its historic function as part of a natural ecosystem or that improves the ecological functionality of a site, or 2) a project that (i) supports hatchery reform to improve hatchery effectiveness to minimize impacts to wild fish populations, (ii) ensures compatibility between hatchery production and salmon recovery programs, or (iii) supports sustainable fisheries (WAC 420.04.010).

equipment – Tangible personal property (including information technology systems) having a useful service life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the Sponsor or \$5,000 (2 C.F.R. § 200.33 (2013)).

funding board or board – The board that authorized the funds in this Agreement, either the Recreation and Conservation Funding Board (RCFB) created under RCW 79A.25.110, or the Salmon Recovery Funding Board (SRFB) created under RCW 77.85.110.

grant program – The source of the grant funds received. May be an account in the state treasury, or a grant category within a larger grant program, or a federal source.

indirect cost – Costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved (2 C.F.R. § 200.56 (2013)).

long-term compliance period – The period of time after the project end date or end of the period of performance (depending on the project types and grant program). During this period, the Sponsor has continuing obligations under the Agreement. This period may have a nonspecific end date (in perpetuity) or an expressly specified number of years.

long-term obligations – Sponsor's obligations after the project end date, as specified in the Agreement and applicable regulations and policies.

landowner agreement – An agreement that is required between a Sponsor and landowner for projects located on land not owned, or otherwise controlled, by the Sponsor.

maintenance – A project that maintains existing areas and facilities through repairs and upkeep for the benefit of outdoor recreation or salmon recovery.

maintenance and operation – A project that maintains and operates existing areas and facilities through repairs, upkeep, and routine services for the benefit of outdoor recreationists.

match or matching share – The portion of the total project cost provided by the Sponsor.

milestone – An important event with a defined date to track an activity related to implementation of a funded project and monitor significant stages of project accomplishment.

monitoring project – Means a project that tracks the effectiveness of salmon recovery restoration actions, or provides data on salmon populations or their habitat conditions.

monitoring and research project – Means a project that tracks the effectiveness of salmon recovery restoration actions, or provides data on salmon populations or their habitat conditions.

Office – Means the Recreation and Conservation Office or RCO.

notice of grant – As required by RCO or another authority, a document that has been legally recorded in the county or counties where the project property is located that describes the grant funded project located on the property, the funding sources, and agencies responsible for awarding the grant.

pass-through entity – A non-Federal entity that provides a subaward to a subrecipient to carry out part of a Federal program (2 C. F. R. § 200.74 (2013)). If this Agreement is a federal subaward, RCO is the pass-through entity.

period of performance – The period beginning on the project start date and ending on the project end date.

planning (RCFB projects only) – A project that results in one or more of the following: a study, a plan, construction plans and specifications, and permits to increase the availability of outdoor recreational resources.

planning (SRFB projects only) – A project that results in a study, assessment, project design, or inventory.

pre-agreement cost – A project cost incurred before the period of performance.

primary Sponsor – The Sponsor who is not a secondary Sponsor and who is specifically identified in the Agreement as the entity to which RCO grants funds to and authorizes and requires to administer the grant. This administration includes but is not limited to acting as the fiscal agent for the grant (e.g. requesting and accepting reimbursements, submitting reports). Primary Sponsor includes its officers, employees, agents and successors.

project – An undertaking that is, or may be, funded in whole or in part with funds administered by RCO on behalf of the funding board.

project area, RCFB – A geographic area that delineates a grant assisted site which is subject to project agreement requirements (WAC 286.04.010).

project area, SRFB – The area consistent with the geographic limits of the scope of work of the project and subject to project agreement requirements. For restoration projects, the project area must include the physical limits of the project's final site plans or final design plans. For acquisition projects, the project area must include the area described by the legal description of the properties acquired for or committed to the project (WAC 420.04.010).

project cost – The total allowable costs incurred under this Agreement and all required match share and voluntary committed matching share, including third-party contributions (2 C.F.R. § 200.83 (2013)).

project end date – The specific date identified in the Agreement on which the period of performance ends, as may be changed by amendment. This date is not the end date for any long-term obligations.

project start date – The specific date identified in the Agreement on which the period of performance starts.

research project – Means a project that studies salmon and the effectiveness of recovery restoration efforts on the population or habitat condition.

RCO – Recreation and Conservation Office – The state office that provides administrative support to the Recreation and Conservation Funding Board and Salmon Recovery Funding Board. RCO includes the director and staff, created by RCW 79A.25.110 and 79A.25.150 and charged with administering this Agreement by RCW 77.85.110 and 79A.25.240.

reimbursement – RCO's payment of funds from eligible and allowable costs that have already been paid by the Sponsor per the terms of the Agreement.

renovation project – A project intended to improve an existing site or structure in order to increase its useful service life beyond current expectations or functions. This does not include maintenance activities to maintain the facility for its originally expected useful service life.

restoration project – A project that brings a site back to its historic function as part of a natural ecosystem or improving the ecological functionality of a site.

restoration and enhancement project – A project that brings a site back to its historic function as part of a natural ecosystem or that improves the ecological functionality of a site or a larger ecosystem which improvement may include benefiting fish stocks.

RCFB – Recreation and Conservation Funding Board

RCW – Revised Code of Washington

Recreational Trails Program (RTP) – A Federal Highways Administration grant program.

secondary Sponsor – One of two or more Sponsors who is not a primary Sponsor. Only the primary Sponsor may be the fiscal agent for the project.

Sponsor – A Sponsor is an organization that is listed in and has signed this Agreement.

Sponsor Authorized Representative/Agent – A Sponsor's agent (employee, political appointee, elected person, etc.) authorized to be the signatory of this Agreement and any amendments requiring a Sponsor signature. This person has the signature authority to bind the Sponsor to this Agreement, grant, and project.

SRFB – Salmon Recovery Funding Board

subaward – Funds allocated to the RCO from another organization, for which RCO makes available to or assigns to another organization via this Agreement. Also, a subaward may be an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of any award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a federal or other program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract. Also see 2 C.F.R. § 200.92 (2013). For federal subawards, a subaward is for the purpose of carrying out a portion of a Federal award and creates a federal assistance relationship with the subrecipient (2 C.F.R. § 200.330 (2013)). If this Agreement is a federal subaward, the subaward amount is the grant program amount in Section G: Project Funding.

subrecipient – Subrecipient means an entity that receives a subaward. For non-federal entities receiving federal funds, a subrecipient is an entity that receives a subaward from a pass-through entity to carry out part of a federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other federal awards directly from a federal awarding agency (2 C.F.R. § 200.93 (2013)). If this Agreement is a federal subaward, the Sponsor is the subrecipient.

useful service life – Period during which an asset or property is expected to be useable for the purpose it was acquired, developed, renovated, and/or restored per this Agreement.

WAC – Washington Administrative Code.

SECTION 2. PERFORMANCE BY THE SPONSOR

The Sponsor shall undertake the project as described in this Agreement, and in accordance with the Sponsor's proposed goals and objectives described in the application or documents submitted with the application, all as finally approved by the funding board. All submitted documents are incorporated by this reference as if fully set forth herein.

Timely completion of the project and submission of required documents, including progress and final reports, is important. Failure to meet critical milestones or complete the project, as set out in this Agreement, is a material breach of the Agreement.

SECTION 3. ASSIGNMENT

Neither this Agreement, nor any claim arising under this Agreement, shall be transferred or assigned by the Sponsor without prior written consent of the RCO.

SECTION 4. RESPONSIBILITY FOR PROJECT

While the funding board undertakes to assist the Sponsor with the project by providing a grant pursuant to this Agreement, the project itself remains the sole responsibility of the Sponsor. The funding board undertakes no responsibilities to the Sponsor, or to any third party, other than as is expressly set out in this Agreement. The responsibility for the implementation of the project is solely that of the Sponsor, as is the responsibility for any claim or suit of any nature by any third party related in any way to the project. When a project is Sponsored by more than one entity, any and all Sponsors are equally responsible for the project and all post-completion stewardship responsibilities and long-term obligations unless otherwise stated in this Agreement.

The RCO has no responsibility for reviewing, approving, overseeing or supervising design or construction of the project and leaves such review, approval, oversight and supervision exclusively to the Sponsor and others with expertise or authority. In this respect, the RCO will act only to confirm at a general, lay, and nontechnical level, solely for the purpose of compliance and payment and not for safety or suitability, that the project has apparently been completed as per the Agreement.

SECTION 5. INDEMNIFICATION

The Sponsor shall defend, indemnify, and hold the State and its officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the actual or alleged acts, errors, omissions or negligence in connection with this Agreement (including without limitation all work or activities thereunder), or the breach of any obligation under this Agreement by the Sponsor or the Sponsor's agents, employees, contractors, subcontractors, or vendors, of any tier, or any other persons for whom the Sponsor may be legally liable.

Provided that nothing herein shall require a Sponsor to defend or indemnify the State against and hold harmless the State from claims, demands or suits based solely upon the negligence of the State, its employees and/or agents for whom the State is vicariously liable.

Provided further that if the claims or suits are caused by or result from the concurrent negligence of (a) the Sponsor or the Sponsor's agents, employees, contractors, subcontractors or vendors, of any tier, or any other persons for whom the Sponsor is legally liable, and (b) the State its employees and agents for whom it is vicariously liable, the indemnity obligation shall be valid and enforceable only to the extent of the Sponsor's negligence or the negligence of the Sponsor's agents, employees, contractors, subcontractors or vendors, of any tier, or any other persons for whom the Sponsor may be legally liable.

This provision shall be included in any agreement between Sponsor and any contractors, subcontractor and vendor, of any tier.

The Sponsor shall also defend, indemnify, and hold the State and its officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions by the Sponsor or the Sponsor's agents, employees, contractors, subcontractors or vendors, of any tier, or any other persons for whom the Sponsor may be legally liable, in performance of the work under this Agreement or arising out of any use in connection with the Agreement of methods, processes, designs, information or other items furnished or communicated to the State, its agents, officers and employees pursuant to the Agreement. Provided, this indemnity shall not apply to any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions resulting from the State's, its agents', officers' and employees' failure to comply with specific written instructions regarding use provided to the State, its agents, officers and employees by the Sponsor, its agents, employees, contractors, subcontractors or vendors, of any tier, or any other persons for whom the Sponsor may be legally liable.

As part of its obligations provided above, the Sponsor specifically assumes potential liability for actions brought by the Sponsor's own employees or its agents against the State and, solely for the purpose of this indemnification and defense, the Sponsor specifically waives any immunity under the state industrial insurance law, RCW Title 51.

The funding board and RCO are included within the term State, as are all other agencies, departments, boards, councils, committees, divisions, bureaus, offices, societies, or other entities of state government.

SECTION 6. INDEPENDENT CAPACITY OF THE SPONSOR

The Sponsor and its employees or agents performing under this Agreement are not officers, employees or agents of the funding board or RCO. The Sponsor will not hold itself out as nor claim to be an officer, employee or agent of RCO, a funding board or of the state of Washington, nor will the Sponsor make any claim of right, privilege or benefit which would accrue to an employee under RCW 41.06 or Section 30B.

The Sponsor is responsible for withholding and/or paying employment taxes, insurance, or deductions of any kind required by federal, state, and/or local laws.

SECTION 7. CONFLICT OF INTEREST

Notwithstanding any determination by the Executive Ethics Board or other tribunal, RCO may, in its sole discretion, by written notice to the Sponsor terminate this Agreement if it is found after due notice and examination by RCO that there is a violation of the Ethics in Public Service Act, RCW 42.52; or any similar statute involving the Sponsor in the procurement of, or performance under, this Agreement.

In the event this Agreement is terminated as provided herein, RCO shall be entitled to pursue the same remedies against the Sponsor as it could pursue in the event of a breach of the Agreement by the Sponsor. The rights and remedies of RCO provided for in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or this Agreement.

SECTION 8. COMPLIANCE WITH APPLICABLE LAW

In implementing the Agreement, the Sponsor shall comply with all applicable federal, state, and local laws (including without limitation all applicable ordinances, codes, rules, and regulations). Such compliance includes, without any limitation as to other applicable laws, the following laws:

- A. **Nondiscrimination Laws.** The Sponsor shall comply with all applicable federal, state, and local nondiscrimination laws and/or policies, including but not limited to: the Americans with Disabilities Act; Civil Rights Act; and the Age Discrimination Act. In the event of the Sponsor's noncompliance or refusal to comply with any nondiscrimination law or policy, the Agreement may be rescinded, cancelled, or terminated in whole or in part, and the Sponsor may be declared ineligible for further grant awards from the funding board. The Sponsor is responsible for any and all costs or liability arising from the Sponsor's failure to so comply with applicable law.

- B. **Secular Use of Funds.** No funds awarded under this grant may be used to pay for any religious activities, worship, or instruction, or for lands and facilities for religious activities, worship, or instruction. Religious activities, worship, or instruction may be a minor use of the grant supported recreation and conservation land or facility.

- C. **Wages and Job Safety.** The Sponsor agrees to comply with all applicable laws, regulations, and policies of the United States and the State of Washington or other jurisdiction which affect wages and job safety. The Sponsor agrees when state prevailing wage laws (RCW 39.12) are applicable, to comply with such laws, to pay the prevailing rate of wage to all workers, laborers, or mechanics employed in the performance of any part of this contract, and to file a statement of intent to pay prevailing wage with the Washington State Department of Labor and Industries as required by RCW 39.12.040. The Sponsor also agrees to comply with the provisions of the rules and regulations of the Washington State Department of Labor and Industries.
 - 1. **Exception, Service Organizations of Trail and Environmental Projects (RCW 79A.35.130).** If allowed by state and federal law and rules, participants in conservation corps programs offered by a nonprofit organization affiliated with a national service organization established under the authority of the national and community service trust act of 1993, P.L. 103-82, are exempt from provisions related to rates of compensation while performing environmental and trail maintenance work provided: (1) The nonprofit organization must be registered as a nonprofit corporation pursuant to RCW 24.03; (2) The nonprofit organization's management and administrative headquarters must be located in Washington; (3) Participants in the program must spend at least fifteen percent of their time in the program on education and training activities; and (4) Participants in the program must receive a stipend or living allowance as authorized by federal or state law. Participants are exempt from provisions related to rates of compensation only for environmental and trail maintenance work conducted pursuant to the conservation corps program.

- D. **Archaeological and Cultural Resources.** RCO facilitates the review of applicable projects for potential impacts to archaeological sites and state cultural resources. The Sponsor must assist RCO in compliance with Governor's Executive Order 05-05 or the National Historic Preservation Act before and after initiating ground-disturbing activity or construction, repair, installation, rehabilitation, renovation, or maintenance work on lands, natural resources, or structures. The funding board requires documented compliance with Executive Order 05-05 or Section 106 of the National Historic Preservation Act, whichever is applicable to the project. If a federal agency declines to consult, the Sponsor shall comply with the requirements of Executive Order 05-05. In the event that archaeological or historic materials are discovered during project activities, work in the location of discovery and immediate vicinity must stop instantly, the area must be secured, and notification must be provided to the following: concerned Tribes' cultural staff and cultural committees, RCO, and the State Department of Archaeology and Historic Preservation. If human remains are discovered during project activity, work in the location of discovery and immediate vicinity must stop instantly, the area must be secured, and notification provided to the concerned Tribe's cultural staff and cultural committee, RCO, State Department of Archaeology, the coroner and local law enforcement in the most expeditious manner possible according to RCW 68.50.

- E. Restrictions on Grant Use.** No part of any funds provided under this grant shall be used, other than for normal and recognized executive-legislative relationships, for publicity or propaganda purposes, or for the preparation, distribution, or use of any kit, pamphlet, booklet, publication, radio, television, or video presentation designed to support or defeat legislation pending before the U.S. Congress or any state legislature.

No part of any funds provided under this grant shall be used to pay the salary or expenses of any Sponsor, or agent acting for such Sponsor, related to any activity designed to influence legislation or appropriations pending before the U.S. Congress or any state legislature.

- F. Debarment and Certification.** By signing the Agreement with RCO, the Sponsor certifies that neither it nor its principals nor any other lower tier participant are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by Washington State Labor and Industries. Further, the Sponsor agrees not to enter into any arrangements or contracts related to this Agreement with any party that is on Washington State Department of Labor and Industries' "Debarred Contractor List."

SECTION 9. RECORDS

- A. Digital Records.** If requested by RCO, the Sponsor must provide a digital file(s) of the project property and funded project site in a format specified by the RCO.
- B. Maintenance.** The Sponsor shall maintain books, records, documents, data and other evidence relating to this Agreement and performance of the services described herein, including but not limited to accounting procedures and practices which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Agreement. Sponsor shall retain such records for a period of six years from the date RCO deems the project complete, as defined in Section 11: PROJECT REIMBURSEMENTS. If any litigation, claim or audit is started before the expiration of the six (6) year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved. In order to satisfy 15 CFR 24.42(b) & (c) For projects that contain Pacific Coast Salmon Recovery Funds or are used as match to Pacific Coast Salmon Recovery Funds the sponsor shall retain records for a period of nine years from the date RCO deems the project complete as defined in Section 11: PROJECT REIMBURSEMENTS.
- C. Access to Records and Data.** At no additional cost, the records relating to the Agreement, including materials generated under the Agreement, shall be subject at all reasonable times to inspection, review or audit by RCO, personnel duly authorized by RCO, the Office of the State Auditor, and federal and state officials so authorized by law, regulation or agreement. This includes access to all information that supports the costs submitted for payment under the grant and all findings, conclusions, and recommendations of the Sponsor's reports, including computer models and methodology for those models.
- D. Public Records.** Sponsor acknowledges that the funding board is subject to RCW 42.56 and that this Agreement and any records Sponsor submits or has submitted to the State shall be a public record as defined in RCW 42.56. RCO administers public records requests per WAC 286-06 and 420-04. Additionally, in compliance with RCW 77.85.130(8), Sponsor agrees to disclose any information in regards to expenditure of any funding received from the SRFB. By submitting any record to the State, Sponsor understands that the State may be requested to disclose or copy that record under the state public records law, currently codified at RCW 42.56. The Sponsor warrants that it possesses such legal rights as are necessary to permit the State to disclose and copy such document to respond to a request under state public records laws. The Sponsor hereby agrees to release the State from any claims arising out of allowing such review or copying pursuant to a public records act request, and to indemnify against any claims arising from allowing such review or copying and pay the reasonable cost of state's defense of such claims.

SECTION 10. PROJECT FUNDING

- A. **Authority.** This Agreement is funded through a grant award from the recreation and conservation funding board per WAC 286 and/or the salmon recovery funding board per WAC 420. The director of RCO enters into this Agreement per delegated authority in RCW 79A.25.020 and 77.85.120.
- B. **Additional Amounts.** The funding board shall not be obligated to pay any amount beyond the dollar amount as identified in this Agreement, unless an additional amount has been approved in advance by the funding board or director and incorporated by written amendment into this Agreement.
- C. **Before the Agreement.** No expenditure made, or obligation incurred, by the Sponsor before the project start date shall be eligible for grant funds, in whole or in part, unless specifically provided for by funding board policy, such as a waiver of retroactivity or program specific eligible pre-Agreement costs. For reimbursements of such costs, this Agreement must be fully executed and an original received by RCO. The dollar amounts identified in this Agreement may be reduced as necessary to exclude any such expenditure from reimbursement.
- D. **Requirements for Federal Subawards.** Pre-Agreement costs before the federal award date in Section H: FEDERAL FUND INFORMATION are ineligible unless approved by the federal award agency (2 C.F.R § 200.458 (2013)).
- E. **After the Period of Performance.** No expenditure made, or obligation incurred, following the period of performance shall be eligible, in whole or in part, for grant funds hereunder. In addition to any remedy the funding board may have under this Agreement, the grant amounts identified in this Agreement shall be reduced to exclude any such expenditure from participation.

SECTION 11. PROJECT REIMBURSEMENTS

- A. **Reimbursement Basis.** This Agreement is administered on a reimbursement basis per WAC 286-13 and/or 420-12. Only the primary Sponsor may request reimbursement for eligible and allowable costs incurred during the period of performance. The primary Sponsor may only request reimbursement after (1) this Agreement has been fully executed and (2) the Sponsor has remitted payment to its vendors. RCO will authorize disbursement of project funds only on a reimbursable basis at the percentage as defined in Section G: PROJECT FUNDING. Reimbursement shall not be approved for any expenditure not incurred by the Sponsor or for a donation used as part of its matching share. RCO does not reimburse for donations. All reimbursement requests must include proper documentation of expenditures as required by RCO.
- B. **Reimbursement Request Frequency.** The primary Sponsor is required to submit a reimbursement request to RCO, at a minimum for each project at least once a year for reimbursable activities occurring between July 1 and June 30 or as identified in the milestones. Sponsors must refer to the most recently published/adopted RCO policies and procedures regarding reimbursement requirements.
- C. **Compliance and Payment.** The obligation of RCO to pay any amount(s) under this Agreement is expressly conditioned on strict compliance with the terms of this Agreement and other agreements between RCO and the Sponsor.
- D. **Retainage Held Until Project Complete.** RCO reserves the right to withhold disbursement of the total amount of the grant to the Sponsor until the project has been completed. A project is considered "complete" when:
 1. All approved or required activities outlined in the Agreement are done ;
 2. On-site signs are in place (if applicable);
 3. A final project report is submitted to and accepted by RCO ;
 4. Any other required documents and media are complete and submitted to RCO;

5. A final reimbursement request is submitted to RCO;
6. The completed project has been accepted by RCO;
7. Final amendments have been processed;
8. Fiscal transactions are complete, and
9. RCO has accepted a final boundary map, if requested by RCO, for which the Agreement terms will apply in the future.
10. Notice of Grant (if applicable) filed with the county lands records office and a stamped copy received by RCO

E. Requirements for Federal Subawards: Match. The Sponsor's matching share must comply with 2 C.F.R. § 200.306 (2013). Any shared costs or matching funds and all contributions, including cash and third party in-kind contributions, can be accepted as part of the Sponsor's matching share when such contributions meet all of the following criteria:

1. Are verifiable from the non-Federal entity's (Sponsor's) records;
2. Are not included as contributions for any other Federal award;
3. Are necessary and reasonable for accomplishment of project or program objectives;
4. Are allowable under 2 C.F.R. Part 200, Subpart E—Cost Principles (2013);
5. Are not paid by the Federal Government under another Federal award, except where the Federal statute authorizing a program specifically provides that Federal funds made available for such program can be applied to matching or cost sharing requirements of other Federal programs;
6. Are provided for in the approved budget when required by the Federal awarding agency identified in Section H: FEDERAL FUND INFORMATION of this Agreement; and
7. Conform to other provisions of 2 C.F.R. Part 200, Subpart D—Post Federal Award Requirements (2013), as applicable.

F. Requirements for Federal Subawards: Close out. Per 2 C.F.R § 200.343 (2013), the non-Federal entity (Sponsor) must:

1. Submit, no later than 90 calendar days after the end date of the period of performance, all financial, performance, and other reports as required by the terms and conditions of the Federal award. The Federal awarding agency or pass-through entity (RCO) may approve extensions when requested by the Sponsor.
2. Liquidate all obligations incurred under the Federal award not later than 90 calendar days after the end date of the period of performance as specified in the terms and conditions of the Federal award.
3. Refund any balances of unobligated cash that the Federal awarding agency or pass-through entity (RCO) paid in advance or paid and that are not authorized to be retained by the non-Federal entity (Sponsor) for use in other projects. See OMB Circular A-129 and see 2 C.F.R § 200.345 Collection of amounts due (2013), for requirements regarding unreturned amounts that become delinquent debts.

4. Account for any real and personal property acquired with Federal funds or received from the Federal Government in accordance with 2 C.F.R §§ 200.310 Insurance coverage through 200.316 Property trust relationship and 200.329 Reporting on real property (2013).

SECTION 12. ADVANCE PAYMENTS

Advance payments of or in anticipation of goods or services are not allowed unless approved by the RCO director and are consistent with legal requirements and Manual 8: Reimbursements. See WAC 420-12.

SECTION 13. RECOVERY OF PAYMENTS

- A. **Recovery for Noncompliance.** In the event that the Sponsor fails to expend funds under this Agreement in accordance with state and federal laws, and/or the provisions of the Agreement, or meet its percentage of the project total, RCO reserves the right to recover grant award funds in the amount equivalent to the extent of noncompliance in addition to any other remedies available at law or in equity.
- B. **Overpayment Payments.** The Sponsor shall reimburse RCO for any overpayment or erroneous payments made under the Agreement. Repayment by the Sponsor of such funds under this recovery provision shall occur within 30 days of demand by RCO. Interest shall accrue at the rate of twelve percent (12%) per annum from the time that payment becomes due and owing.
- C. **Requirements for Federal Subawards.** RCO, acting as a pass-through entity, may impose any of the remedies as authorized in 2 C.F.R §§ 200.207 Specific conditions and/or 200.338 Remedies for noncompliance (2013).

SECTION 14. COVENANT AGAINST CONTINGENT FEES

The Sponsor warrants that no person or selling agent has been employed or retained to solicit or secure this Agreement on an agreement or understanding for a commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established agents maintained by the Sponsor for the purpose of securing business. RCO shall have the right, in the event of breach of this clause by the Sponsor, to terminate this Agreement without liability or, in its discretion, to deduct from the Agreement grant amount or consideration or recover by other means the full amount of such commission, percentage, brokerage or contingent fee.

SECTION 15. INCOME (AND FEES) AND USE OF INCOME

RCFB Projects. See WAC 286-13-110 for additional requirements for projects funded from the RCFB.

A. Income.

1. **Farm and Forest Account (Farmland and Forestland Preservation Grants).** Excepted from this section is income generated and fees paid on/for properties which received funds from the Farm and Forest Account (RCW 79A.15.130).
2. **Firearms and Archery Range Recreation Projects.** Excepted from this section are safety classes (firearm and/or hunter) for which a facility/range fee must not be charged (RCW 79A.25.210).
3. **Compatible source.** The source of any income generated in a funded project or project area must be compatible with the funding source and the Agreement and any policies adopted by the RCFB or SRFB.

- B. Use of Income.** Subject to any limitations contained in applicable state or federal law and applicable rules and policies, income or fees generated at a project work site (including entrance, utility corridor permit, cattle grazing, timber harvesting, farming, etc.) during or after the reimbursement period cited in the Agreement, must be used to offset:
1. The Sponsor's matching resources;
 2. The project's total cost;
 3. The expense of operation, maintenance, stewardship, monitoring, and/or repair of the facility or program assisted by the funding board grant;
 4. The expense of operation, maintenance, stewardship, monitoring, and/or repair of other similar units in the Sponsor's system;
 5. Capital expenses for similar acquisition and/or development and renovation; and/or
 6. Other purposes explicitly approved by RCO
- C. Fees.** User and/or other fees may be charged in connection with land acquired or facilities developed, maintained, renovated, or restored with funding board grants if the fees are consistent with the:
1. Grant program laws, rules, policies, and funding board policies;
 2. Value of any service(s) furnished;
 3. Value of any opportunities furnished; and
 4. Prevailing range of public fees in the state for the activity involved.
- D. Requirements for Federal Subawards.** Sponsors must also comply with 2 C.F.R. § 200.307 Program income (2013).

SECTION 16. PROCUREMENT REQUIREMENTS

- A. Procurement Requirements.** If the Sponsor has, or is required to have, a procurement process that follows applicable state and/or federal law or procurement rules and principles, it must be followed, documented, and retained. If no such process exists the Sponsor must follow these minimum procedures:
1. Publish a notice to the public requesting bids/proposals for the project;
 2. Specify in the notice the date for submittal of bids/proposals;
 3. Specify in the notice the general procedure and criteria for selection; and
 4. Sponsor must contract or hire from within its bid pool. If bids are unacceptable the process needs to be repeated until a suitable bid is selected.
 5. Comply with the same legal standards regarding unlawful discrimination based upon race, gender, ethnicity, sex, or sex-orientation that are applicable to state agencies in selecting a bidder or proposer.

Alternatively, Sponsor may choose a bid from a bidding cooperative if authorized to do so.

This procedure creates no rights for the benefit of third parties, including any proposers, and may not be enforced or subject to review of any kind or manner by any entity other than the RCO. Sponsors may be required to certify to the RCO that they have followed any applicable state and/or federal procedures or the above minimum procedure where state or federal procedures do not apply.

B. Requirements for Federal Subawards.

1. For all Federal subawards except RTP projects, non-Federal entities (Sponsors) must follow 2 C.F.R §§ 200.318 General procurement standards through 200.326 Contract Provisions (2013).
2. For RTP subawards, Sponsors follow such policies and procedures allowed by the State when procuring property and services under a Federal award (2 C.F.R § 1201.317 (2013)). State procurement policies are in subsection A of this section.

SECTION 17. TREATMENT OF EQUIPMENT AND ASSETS

Equipment shall be used and managed only for the purpose of this Agreement, unless otherwise provided herein or in published funding board policies, or approved by RCO in writing.

- A. Discontinued Use.** Equipment obtained under this Agreement shall remain in the possession of the Sponsor for the duration of the project, or RULES of applicable grant assisted program. When the Sponsor discontinues use of the equipment for the purpose for which it was funded, RCO may require the Sponsor to deliver the equipment to RCO, or to dispose of the equipment according to RCO published policies.
- B. Loss or Damage.** The Sponsor shall be responsible for any loss or damage to equipment.
- C. Requirements for Federal Subawards.** Except in the RTP, procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award or match for the award, until disposition takes place will, at a minimum, meet the following requirements (2 C.F.R § 200.313 (2013)):
 1. Property records must be maintained that include a description of the property, a serial number or other identification number, the source of funding for the property (including the Federal Award Identification Number), who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the project costs for the Federal award under which the property was acquired, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.
 2. A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.
 3. A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.
 4. Adequate maintenance procedures must be developed to keep the property in good condition.
 5. If the non-Federal entity is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.
- D. Requirements for RTP Subawards.**
 1. The subrecipient (Sponsor) shall follow such policies and procedures prescribed by and allowed by the State, as well as federal law and federal rules issued by the Federal Highways Administration and 2 CFR 200.

2. Sponsor may be required to pay prevailing wage rates as required by the Davis Bacon Act as amended.

SECTION 18. RIGHT OF INSPECTION

The Sponsor shall provide right of access to the project to RCO, or any of its officers, or to any other authorized agent or official of the state of Washington or the federal government, at all reasonable times, in order to monitor and evaluate performance, long-term obligations, compliance, and/or quality assurance under this Agreement.

If a landowner agreement or other form of control and tenure as described in Section 23.C: Control and Tenure has been executed, it will further stipulate and define the funding board and RCO's right to inspect and access lands acquired or developed with funding board assistance.

SECTION 19. STEWARDSHIP AND MONITORING

Sponsor agrees to perform monitoring and stewardship functions as stated in funding board policy, this Agreement, or as otherwise directed by RCO consistent with existing policies. Sponsor further agrees to utilize, where applicable and financially feasible, any monitoring protocols recommended by the funding board.

SECTION 20. PREFERENCES FOR RESIDENTS

Sponsors shall not express a preference for users of grant assisted projects on the basis of residence (including preferential reservation, membership, and/or permit systems) except that reasonable differences in admission and other fees may be maintained on the basis of residence. Fees for nonresidents must not exceed twice the fee imposed on residents. Where there is no fee for residents but a fee is charged to nonresidents, the nonresident fee shall not exceed the amount that would be imposed on residents at comparable state or local public facilities.

SECTION 21. ACKNOWLEDGMENT AND SIGNS

- A. Publications.** The Sponsor shall include language which acknowledges the funding contribution of the applicable grant program to this project in any release or other publication developed or modified for, or referring to, the project during the project period and in the future.
- B. Signs.**
 1. During the period of performance through the period of long-term obligation, the Sponsor shall post openly visible signs or other appropriate media at entrances and other locations on the project area that acknowledge the applicable grant program's funding contribution, unless exempted in funding board policy or waived by the director; and
 2. During the period of long-term obligation, the Sponsor shall post openly visible signs or other appropriate media at entrances and other locations to notify the public of the availability of the site for reasonable public access.
- C. Ceremonies.** The Sponsor shall notify RCO no later than two weeks before a dedication ceremony for this project. The Sponsor shall verbally acknowledge the applicable grant program's funding contribution at all dedication ceremonies.
- D. Federally Funded Projects.** When issuing statements, press releases, requests for proposals, bid solicitations, and other documents describing a project funded in whole or in part with federal money provided for in this grant, Sponsors shall clearly state:
 1. The fund source;
 2. The percentage of the total costs of the project that is financed with federal money;

3. The dollar amount of federal funds for the project; and
4. The percentage and dollar amount of the total costs of the project that is financed by nongovernmental sources.

SECTION 22. PROVISIONS FOR BOATING PROJECT GRANTS

If requested by RCO, or required per state or federal law or rule with respect to any project or project element that supports recreational boating, Sponsor shall manage the project or project element per federal rules to include 2 C.F.R. Part 200, and place a United States Coast Guard (or other federal agency) logo and funding program information at the project site.

SECTION 23. PROVISIONS APPLYING TO DEVELOPMENT, MAINTENANCE, RENOVATION, AND RESTORATION PROJECTS

The following provisions shall be in force only if the project described in this Agreement is for construction of land or facilities in a development, maintenance, renovation or restoration project:

- A. **Operations and Maintenance.** Properties, structures, and facilities developed, maintained, or operated with the assistance of money granted by the board and within the project area shall be built, operated, and maintained according to applicable regulations, laws, building codes, and health and public safety standards to assure a reasonably safe condition and to prevent premature deterioration (WAC 286.13.130). It is the Sponsor's sole responsibility to ensure the same are operated and maintained in a safe and operable condition. The RCO does not conduct safety inspections or employ or train staff for that purpose.
- B. **Document Review and Approval.** Prior to commencing construction or finalizing the design, the Sponsor agrees to submit one copy of all construction and restoration plans and specifications to RCO for review solely for compliance with the scope of work to be identified in the Agreement. RCO does not review for, and disclaims any responsibility to review for safety, suitability, engineering, compliance with code, or any matters other than the scope so identified. Although RCO staff may provide tentative guidance to a Sponsor on matters related to site accessibility by persons with a disability, it is the Sponsor's responsibility to confirm that all legal requirements for accessibility are met even if the RCO guidance would not meet such requirements.
 1. Change orders that impact the amount of funding or changes to the scope of the project as described to and approved by the funding board or RCO must receive prior written approval of the board or RCO.
- C. **Control and Tenure.** The Sponsor must provide documentation that shows appropriate tenure (such as landowner agreement, long-term lease, easement, or fee simple ownership) for the land proposed for construction. The documentation must meet current RCO requirements identified in the appropriate grant program policy manual as of the effective date of this Agreement and determines the long-term compliance period unless otherwise approved by the board.
- D. **Nondiscrimination.** Except where a nondiscrimination clause required by a federal funding agency is used, the Sponsor shall insert the following nondiscrimination clause in each contract for construction of this project:

"During the performance of this contract, the contractor agrees to comply with all federal and state nondiscrimination laws, regulations and policies."

- E. Use of Best Management Practices.** Sponsors are encouraged to use best management practices including those developed as part of the Washington State Aquatic Habitat Guidelines (AHG) Program. AHG documents include "Integrated Streambank Protection Guidelines", 2002; "Land Use Planning for Salmon, Steelhead and Trout: A land use planner's guide to salmonid habitat protection and recovery", 2009; "Protecting Nearshore Habitat and Functions in Puget Sound", 2010; "Stream Habitat Restoration Guidelines", 2012; "Water Crossing Design Guidelines", 2013; and "Marine Shoreline Design Guidelines", 2014. These documents, along with new and updated guidance documents, and other information are available on the AHG Web site. Sponsors are also encouraged to use best management practices developed by the Washington Invasive Species Council (WISC) described in "Reducing Accidental Introductions of Invasive Species" which is available on the WISC Web site.

SECTION 24. PROVISIONS APPLYING TO ACQUISITION PROJECTS

The following provisions shall be in force only if the project described in this Agreement is an acquisition project (including projects with any acquisition component):

- A. Evidence of Land Value.** Before disbursement of funds by RCO as provided under this Agreement, the Sponsor agrees to supply documentation acceptable to RCO that the cost of the property rights acquired has been established according to funding board policy.
- B. Evidence of Title.** The Sponsor agrees to provide documentation that shows the type of ownership interest for the property that has been acquired. This shall be done before any payment of financial assistance.
- C. Legal Description of Real Property Rights Acquired.** The legal description of the real property rights purchased with funding assistance provided through this Agreement (and protected by a recorded conveyance of rights to the State of Washington) shall be delivered to RCO before final payment.
- D. Conveyance of Rights to the State of Washington.** When real property rights (both fee simple and lesser interests) are acquired, the Sponsor agrees to execute an appropriate document conveying certain rights and responsibilities to RCO, on behalf of the State of Washington. These documents include a Deed of Right, Assignment of Rights, Easements and/or Leases as described below. The Sponsor agrees to use document language provided by RCO, to record the executed document in the County where the real property lies, and to provide a copy of the recorded document to RCO. The document required will vary depending on the funding board project type, the real property rights being acquired and whether or not those rights are being acquired in perpetuity.
- 1. Deed of Right.** The Deed of Right conveys to the people of the state of Washington the right to preserve, protect, access, and/or use the property for public purposes consistent with the funding source and project agreement. See WAC 286 or 420. Sponsors shall use this document when acquiring real property rights that include the underlying land. This document may also be applicable for those easements where the Sponsor has acquired a perpetual easement for public purposes.
 - 2. Assignment of Rights.** The Assignment of Rights document transfers certain rights to RCO and the state such as public access, access for compliance, and enforcement. Sponsors shall use this document when an easement or lease is being acquired under this Agreement. The Assignment of Rights requires the signature of the underlying landowner and must be incorporated by reference in the easement document.
 - 3. Easements and Leases.** The Sponsor may incorporate required language from the Deed of Right or Assignment of Rights directly into the easement or lease document, thereby eliminating the requirement for a separate document. Language will depend on the situation; Sponsor must obtain RCO approval on the draft language prior to executing the easement or lease.

- E. Real Property Acquisition and Relocation Assistance** In the event that housing and relocation costs and procedures are required by local, state, tribal, or federal law, or rule; the Sponsor agrees to provide such housing and relocation assistance as a condition of the Agreement and receiving grant funds.
- F. Buildings and Structures.** In general, grant funds are to be used for outdoor recreation, conservation, or salmon recovery. Sponsors agree to remove or demolish ineligible structures. Sponsor must consult with RCO regarding treatment of such structures and compliance with Section 8.D Archeological and Cultural Resources.
- G. Hazardous Substances.**
1. **Certification.** The Sponsor shall inspect, investigate, and conduct an environmental audit of the proposed acquisition site for the presence of hazardous substances, as defined in RCW 70.105D.020(13), and certify:
 - a. No hazardous substances were found on the site, or
 - b. Any hazardous substances found have been treated and/or disposed of in compliance with applicable state and federal laws, and the site deemed "clean."
 2. **Responsibility.** Nothing in this provision alters the Sponsor's duties and liabilities regarding hazardous substances as set forth in RCW 70.105D.
 3. **Hold Harmless.** The Sponsor will defend, protect and hold harmless the State and any and all of its employees and/or agents, from and against any and all liability, cost (including but not limited to all costs of defense and attorneys' fees) and any and all loss of any nature from any and all claims or suits resulting from the presence of, or the release or threatened release of, hazardous substances on the property the Sponsor is acquiring, except to the extent, if any, that the State, its officers and agents caused or contributed to the release. The funding board and RCO are included within the term State, as are all other agencies, departments, boards, councils, committees, divisions, bureaus, offices, societies, or other entities of state government.
- H. Requirements for Federal Subawards.** The non-federal entity (Sponsor) must submit reports at least annually on the status of real property in which the federal government retains an interest, unless the federal interest in the real property extends 15 years or longer. In those instances where the federal interest attached is for a period of 15 years or more, the federal awarding agency or the pass-through entity (RCO), at its option, may require the Sponsor to report at various multi-year frequencies (e.g., every two years or every three years, not to exceed a five-year reporting period; or a federal awarding agency or RCO may require annual reporting for the first three years of a federal award and thereafter require reporting every five years) (2 C.F.R § 200.329 (2013)).

SECTION 25. LONG-TERM OBLIGATIONS OF THE PROJECTS AND SPONSORS

- A. Long-Term Obligations of RCFB Projects.** Sponsor shall comply with WAC 286-13-160, 170, and 180.
- B. Long-Term Obligations of SRFB Projects.** Sponsor shall comply with WAC 420.
- C. Perpetuity.** For acquisition, development, and restoration projects, or a combination thereof, unless otherwise allowed by policy, program rules, or this Agreement, or approved in writing by RCO or the funding board, RCO requires that the project area continue to function as intended after the period of performance in perpetuity.

- D. Conversion.** The Sponsor shall not at any time convert any real property (including any interest therein) or facility acquired, developed, renovated, and/or restored pursuant to this Agreement, unless provided for in applicable statutes, rules, and policies. Conversion includes, but is not limited to, putting such property to uses other than those purposes for which funds were approved or transferring such property to another entity without prior approval via a written amendment to the Agreement. Also see WAC Title 286 or 420 and applicable policies. All real property or facilities acquired, developed, renovated, and/or restored with funding assistance shall remain in the same ownership and in public use/access status in perpetuity unless otherwise expressly provided in the Agreement or applicable policy or unless a transfer or change in use is approved by the funding board through an amendment. Failure to comply with these obligations is a conversion. Further, if the project is subject to operation and or maintenance obligations, the failure to comply with such obligations, without cure after a reasonable period as determined by the RCO, is a conversion. Determination of whether a conversion has occurred shall be based upon this Agreement, applicable law and RCFB/SRFB policies.

For acquisition projects that are expressly term limited in the Agreement, such as one involving a lease or a term-limited restoration, renovation or development project or easement, the restriction on conversion shall apply only for the length of the term, unless otherwise provided in this Agreement, by funding board policy, other RCO approved written documents, or required by applicable state or federal law.

When a conversion has been determined to have occurred, the Sponsor is required to remedy the conversion per established funding board policies, and the board or RCO may pursue such remedies as are allowed by law and board policies, and/or this Agreement.

SECTION 26. CONSTRUCTION, OPERATION, USE AND MAINTENANCE OF ASSISTED PROJECTS

The following provisions shall be in force only if the project described in this Agreement is an acquisition, development, maintenance, renovation, or restoration project:

- A. Property and facility operation and maintenance.** Sponsor must ensure that properties or facilities assisted with funding board funds, including undeveloped sites, are built, operated, used, and maintained:
1. According to applicable federal, state, and local laws and regulations, including public health standards and building codes;
 2. In a reasonably safe condition for the project's intended use;
 3. Throughout its estimated useful service life so as to prevent undue deterioration;
 4. In compliance with all federal and state nondiscrimination laws, regulations and policies.
- B. Open to the public.** Unless otherwise specifically provided for in the Agreement of funding board policies, and in compliance with applicable statutes, rules, and funding board policies, facilities must be open and accessible to the general public, and must:
1. Be constructed, maintained, and operated to meet or exceed the minimum requirements of the most current guidelines or rules, local or state codes, Uniform Federal Accessibility Standards, guidelines, or rules, including but not limited to: the International Building Code, the Americans with Disabilities Act, and the Architectural Barriers Act, as amended and updated.
 2. Appear attractive and inviting to the public except for brief installation, construction, or maintenance periods.

3. Be available for appropriate use by the general public at reasonable hours and times of the year, according to the type of area or facility, unless otherwise stated in RCO manuals, by a decision of the board, or by RCO in writing. Sponsor shall notify the public of the availability for use by posting and updating that information on its website and by maintaining at entrances and/or other locations openly visible signs with such information.

SECTION 27. RECORDED NOTICE OF GRANT

At the request of RCO, Sponsor shall record a notice of grant on the property and shall submit to the RCO a recorded and registry stamped copy of such notice. The purpose of the notice of grant is to ensure that the present and future use of the facility is and shall remain subject to the terms and conditions described in this Agreement. The notice of grant shall be in a format specified by RCO.

SECTION 28. PROVISIONS RELATED TO CORPORATE (INCLUDING NONPROFIT) SPONSORS

A corporate Sponsor, including any nonprofit Sponsor, shall:

- A. Maintain corporate status with the state, including registering with the Washington Secretary of State's office, throughout the Sponsor's obligation to the project as identified in the Agreement.
- B. Notify RCO before corporate dissolution at any time during the period of performance or long-term obligations. Within 30 days of dissolution the Sponsor shall name a qualified successor that will agree in writing to assume any on-going project responsibilities, and transfer all property and assets to the successor. A qualified successor is any party eligible to apply for funds in the subject grant program and capable of complying with the terms and conditions of this Agreement. RCO will process an amendment transferring the Sponsor's obligation to the qualified successor if requirements are met.
- C. Maintain sites or facilities open to the public and may not limit access to members.

SECTION 29. PROVISIONS FOR FEDERAL SUBAWARDS ONLY

The following provisions shall be in force only if the project described in this Agreement is funded with a federal subaward as identified in Section H: FEDERAL FUND Information:

- A. **Sub-Recipient** (Sponsor) must comply with the cost principles of 2 C.F.R. Part 200 Subpart E (2013). Unless otherwise indicated, the cost principles apply to the use of funds provided under this Agreement to include match and any in-kind matching donations. The applicability of the cost principles depends on the type of organization incurring the costs.
- B. **Binding Official.** Per 2 CFR 200.415, Sponsor certifies through its actions or those of authorized staff, at the time of a request for reimbursement, the following: "To the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812)."
- C. **Equal Employment Opportunity.** Except as otherwise provided under 41 C.F.R. Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. § 60- 1.4(b), in accordance with Executive Order 11246, Equal Employment Opportunity (30 Fed. Reg. 12319, 12935, 3 C.F.R. Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, Amending Executive Order 11246 Relating to Equal Employment Opportunity, and implementing regulations at 41 C.F.R. Part 60 (Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor). See 2 C.F.R. Part 200, Appendix II, paragraph C.

1. **Federally Assisted Construction Contract.** The regulation at 41 C.F.R. § 60-1.3 defines a “federally assisted construction contract” as any agreement or modification thereof between any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the Government or borrowed on the credit of the Government pursuant to any Federal program involving a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, or any application or modification thereof approved by the Government for a grant, contract, loan, insurance, or guarantee under which the applicant itself participates in the construction work.
2. **Construction Work.** The regulation at 41 C.F.R. § 60-1.3 defines “construction work” as the construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.

- D. Davis-Bacon Act, as amended (40 U.S.C. 3141-3148).** When required by federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-federal entities (Sponsors) must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3148) as supplemented by Department of Labor regulations (29 C.F.R. § 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”).

In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-federal entity (Sponsor) must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity (Sponsor) must report all suspected or reported violations to the federal awarding agency identified in Section H: Federal Fund Information.

The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U. S. C. 3145), as supplemented by Department of Labor regulations (29 C.F.R Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient (Sponsor) must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity (Sponsor) must report all suspected or reported violations to the Federal awarding agency identified in Section H: Federal Fund Information.

- E. Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708).** Where applicable, all contracts awarded by the non-federal entity (Sponsor) in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

- F. Rights to Inventions Made Under a Contract or Agreement.** If the Federal award meets the definition of "funding agreement" under 37 C.F.R § 401.2(a) and the recipient or subrecipient (Sponsor) wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient (Sponsor) must comply with the requirements of 37 C.F.R Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.
- G. Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as Amended.** Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency identified in Section H: Federal Fund Information and the Regional Office of the Environmental Protection Agency (EPA).
- H. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352).** By signing this Agreement, the Sponsor certifies (per the certification requirements of 31 U.S.C.) that none of the funds that the Sponsor has (directly or indirectly) received or will receive for this project from the United States or any agency thereof, have been used or shall be used to engage in the lobbying of the Federal Government or in litigation against the United States. Such lobbying includes any influence or attempt to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this project. Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the non-federal award.
- I. Procurement of Recovered Materials.** A non-federal entity (Sponsor) that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- J. Required Insurance.** The non-federal entity (Sponsor) must, at a minimum, provide the equivalent insurance coverage for real property and equipment acquired or improved with federal funds as provided to property owned by the non-federal entity. Federally-owned property need not be insured unless required by the terms and conditions of the Federal award (2 C.F.R § 200.310 (2013)).
- K. Debarment and Suspension (Executive Orders 12549 and 12689).** The Sponsor must not award a contract to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the Office of Management and Budget (OMB) guidelines at 2 C.F.R § 180 that implement Executive Orders 12549 (3 C.F.R part 1986 Comp., p. 189) and 12689 (3 C.F.R part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

- L. **Conflict of Interest.** Sponsor agrees to abide by the conflict of interest policy and requirements of the federal funding agency established pursuant to 2 C.F.R 200.

SECTION 30. PROVISIONS FOR BOATING INFRASTRUCTURE GRANTS

- A. **Use of Sport Fish Restoration Logo.** Per 50 CFR 86 Sec 75 and 76, the user of the logo must indemnify and defend the United States and hold it harmless from any claims, suits, losses, and damages from; any allegedly unauthorized use of any patent, process, idea, method, or device by the user in connection with its use of the logo, or any other alleged action of the user; and any claims, suits, losses, and damages arising from alleged defects in the articles or services associated with the logo. No one may use any part of the logo in any other manner unless the United States Fish and Wildlife Service's Assistant Director for Wildlife and Sport Fish Restoration or Regional Director approves in writing.

SECTION 31. PROVISIONS FOR FIREARMS AND ARCHERY RANGE RECREATION PROJECTS ONLY

The following provisions shall be in force only if the project described in this Agreement is funded from the Firearms and Archery Range Recreation Account.

- A. **Liability Insurance.** The Sponsor of a firearms or archery range recreation project shall procure an endorsement, or other addition, to liability insurance it carries, or shall procure a new policy of liability insurance, in a total coverage amount the Sponsor deems adequate to ensure it will have resources to pay successful claims of people who may be killed or injured, or suffer damage to property, while present at the range facility to which this grant is related, or by reason of being in the vicinity of that facility; provided that the coverage shall be at least one million dollars (\$1,000,000) for the death of, or injury to, each person.
- B. **Insurance Endorsement.** The liability insurance policy, including any endorsement or addition, shall name Washington State, the funding board, and RCO as additional insured and shall be in a form approved by the funding board or director.
- C. **Length of Insurance.** The policy, endorsement or other addition, or a similar liability insurance policy meeting the requirements of this section, shall be kept in force throughout the Sponsor's obligation to the project as identified in this Agreement in Section F. LONG-TERM OBLIGATIONS.
- D. **Notice of Cancellation.** The policy, as modified by any endorsement or other addition, shall provide that the issuing company shall give written notice to RCO not less than thirty (30) calendar days in advance of any cancellation of the policy by the insurer, and within ten (10) calendar days following any termination of the policy by the Sponsor.
- E. **Government Agencies.** The requirement of Subsection A through D above shall not apply if the Sponsor is a federal, state, or municipal government which has established a program of self-insurance or a policy of self-insurance with respect to claims arising from its facilities or activities generally, including such facilities as firearms or archery ranges, when the applicant declares and describes that program or policy as a part of its application to the funding board.
- F. **Sole Duty of the Sponsor.** By this requirement, the funding board and RCO does not assume any duty to any individual person with respect to death, injury, or damage to property which that person may suffer while present at, or in the vicinity of, the facility to which this grant relates. Any such person, or any other person making claims based on such death, injury, or damage, must look to the Sponsor, or others, for any and all remedies that may be available by law.

SECTION 32. PROVISIONS FOR LAND AND WATER CONSERVATION FUND PROJECTS ONLY

If the project has been approved by the National Park Service, US Department of the Interior, for funding assistance from the federal Land and Water Conservation Fund (LWCF), the "LWCF Grant Agreement General Provisions" are made part of this Agreement and incorporated herein. The Sponsor shall abide by these LWCF General Provisions, in addition to this Agreement, as they now exist or are hereafter amended. Further, the Sponsor agrees to provide RCO with reports or documents needed to meet the requirements of the LWCF General Provisions.

SECTION 33. PROVISIONS FOR FARM AND FOREST ACCOUNT PROJECTS (FARMLAND AND FORESTLAND PRESERVATION PROJECTS ONLY)

The following sections will not apply to Farmland and Forestland Preservation Projects if covered separately in a recorded RCO approved Agricultural Conservation Easement, or Forest Conservation Easement (or other method):

- A. Section 15 - Income and Income Use;
- B. Section 19 - Stewardship and Monitoring;
- C. Section 21 - Acknowledgement and Signs;
- D. Section 24 -- Provisions Applying To Acquisition Projects, Sub-sections D, F, and G;
- E. Section 25C -Perpetuity; and
- F. Section 26 -- Construction, Operation, Use and Maintenance of Assisted Projects.

SECTION 34. PROVISIONS FOR SALMON RECOVERY FUNDING BOARD PROJECTS ONLY

For habitat restoration projects funded in part or whole with federal funds administered by the SRFB the Sponsor shall not commence with clearing of riparian trees or in-water work unless either the Sponsor has complied with 50 C.F.R. § 223.203 (b)(8) (2000), limit 8 or until an Endangered Species Act consultation is finalized in writing by the National Oceanic and Atmospheric Administration. Violation of this requirement may be grounds for terminating this Agreement. This section shall not be the basis for any enforcement responsibility by RCO.

SECTION 35. PROVISIONS FOR PUGET SOUND ACQUISITION AND RESTORATION PROJECTS ONLY

The following provisions shall be in force only if the project described in this Agreement is funded in part or wholly from the Puget Sound Acquisition and Restoration program.

The Sponsor agrees to the following terms and conditions:

- A. **Cost Principles/Indirect Costs For State Agencies.** GRANT RECIPIENT agrees to comply with the cost principles of 2 CFR 200 Subpart E as appropriate to the award. In addition to the US Environmental Protection Agency's General Terms and Conditions "Indirect Cost Rate Agreements," if the recipient does not have a previously established indirect cost rate, it agrees to prepare and submit its indirect cost rate proposal in accordance with 2 CFR 200 Appendix VII.
- B. **Credit and Acknowledgement.** In addition to Section 21: Acknowledgement and Signs, materials produced must display both the Environmental Protection Agency (EPA) and Puget Sound Partnership (PSP) logos and the following credit line: "This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use." This requirement is for the life of the product, whether during or after the Agreement period of performance.

- C. Hotel Motel Fire Safety Act.** Sponsor agrees to ensure that all conference, meeting, convention, or training space funded in whole or part with federal funds, complies with the federal Hotel and Motel Fire Safety Act (PL 101-391, as amended). Sponsors may search the Hotel-Motel National Master List @ <http://www.usfa.dhs.gov/applications/hotel> to see if a property is in compliance or to find other information about the Act.
- D. Drug Free Workplace Certification.** Sub-recipient (Sponsor) shall make an ongoing, good faith effort to maintain a drug-free workplace pursuant to the specific requirements set forth in 2 C.F.R. Part 1536 Subpart B. Additionally, in accordance with these regulations, the recipient organization shall identify all known workplaces under its federal awards, and keep this information on file during the performance of the award. Sponsors who are individuals must comply with the drug-free provisions set forth in 2 C.F.R. Part 1536 Subpart C. The consequences for violating this condition are detailed under 2 C.F.R. Part 1536 Subpart E.
- E. Management Fees.** Management fees or similar charges in excess of the direct costs and approved indirect rates are not allowable. The term "management fees or similar charges" refers to the expenses added to direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities or for other similar costs that are not allowable. Management fees or similar charges may not be used to improve or expand the project funded under this Agreement, except for the extent authorized as a direct cost of carrying out the scope of work.
- F. Trafficking in Persons and Trafficking Victim Protection Act of 2000 (TVPA).** This provision applies only to a sub-recipient (Sponsor), and all sub-awardees of sub-recipient (Sponsor), if any. Sub-recipient (Sponsor) shall include the following statement in all sub-awards made to any private entity under this Agreement.

"You as the sub-recipient, your employees, sub-awardees under this award, and sub-awardees' employees may not engage in severe forms of trafficking in persons during the period of time that the award is in effect; procure a commercial sex act during the period of time that the award is in effect; or use forced labor in the performance of the award or sub-awards under this Award."

The sub-recipient (Sponsor), and all sub-awardees of sub-recipient (Sponsor) must inform RCO immediately of any information you receive from any source alleging a violation of this prohibition during the award term.

The federal agency funding this Agreement may unilaterally terminate, without penalty, the funding award if this prohibition is violated, Section 106 of the Trafficking Victims Protection Act of 2000, as amended.

- G. Lobbying.** The chief executive officer of this recipient agency (Sponsor) shall ensure that no grant funds awarded under this Agreement are used to engage in lobbying of the Federal Government or in litigation against the United States, unless authorized under existing law. The recipient (Sponsor) shall abide by its respective Cost Principles (OMB Circulars A-21, A-87, and A-122), which generally prohibits the use of federal grant funds for litigation against the United States, or for lobbying or other political activities.

The Sponsor agrees to comply with 40 C.F.R. Part 34, New Restrictions on Lobbying. Sponsor shall include the language of this provision in award documents for all sub-awards exceeding \$100,000, and require that sub-awardees submit certification and disclosure forms accordingly.

In accordance with the Byrd Anti-Lobbying Amendment, any Sponsor who makes a prohibited expenditure under 40 C.F.R. Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure.

All contracts awarded by Sponsor shall contain, when applicable, the anti-lobbying provisions as stipulated in the Appendix at 40 C.F.R. Part 30.

Pursuant to Section 18 of the Lobbying Disclosure Act, Sponsor affirms that it is not a non-profit organization described in Section 501(c)(4) of the Internal Revenue Code of 1986; or that it is a non-profit organization described in Section 501(c)(4) of the code but does not and will not engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act.

- H. Reimbursement Limitation.** If the Sponsor expends more than the amount of RCO funding in this Agreement in anticipation of receiving additional funds from the RCO, it does so at its own risk. RCO is not legally obligated to reimburse the Sponsor for costs incurred in excess of the RCO approved budget.
- I. Disadvantaged Business Enterprise Requirements.** The Sponsor agrees to comply with the requirements of EPA's Utilization of Small, Minority and Women's Business Enterprises in procurements made under this award.
- J. Minority and Women's Business Participation.** Sponsor agrees to solicit and recruit, to the maximum extent possible, certified minority owned (MBE) and women owned (WBE) businesses in purchases and contracts initiated after the effective date of this Agreement.

These goals are expressed as a percentage of the total dollars available for purchase or agreement and are as follows:

Purchased Goods 8% MBE 4% WBE

Purchased Services 10% MBE 4% WBE

Professional Services 10% MBE 4% WBE

Meeting these goals is voluntary and no agreement award or rejection shall be made based on achievement or non-achievement of the goals. Achievement of the goals is encouraged, however, and Sponsor and ALL prospective bidders or people submitting qualifications shall take the following affirmative steps in any procurement initiated after the effective date of this Agreement:

1. Include qualified minority and women's businesses on solicitation lists.
 2. Assure that qualified minority and women's business are solicited whenever they are potential sources of services or supplies.
 3. Divide the total requirements, when economically feasible, into smaller tasks or quantities, to permit maximum participation by qualified minority and women's businesses.
 4. Establish delivery schedules, where work requirements permit, which will encourage participation of qualified minority and women's businesses.
 5. Use the services and assistance of the State Office of Minority and Women's Business Enterprises (OMWBE) and the Office of Minority Business Enterprises of the U.S. Department of Commerce, as appropriate.
- K. MBE/WBE Reporting.** In accordance with the deviation from 40 C.F.R. §33.502, signed November 8, 2013, DBE reporting is limited to annual reports and only required for assistance agreements where one or more the following conditions are met:
1. There are any funds budgeted in the contractual/services, equipment or construction lines of the award;
 2. \$3,000 or more is included for supplies; or
 3. There are funds budgeted for subawards or loans in which the expected budget(s) meet the conditions as

4. Described in items (a) and (b).

When completing the form, recipients (Sponsors) should disregard the quarterly and semi-annual boxes in the reporting period Section 1B of the form. For annual submissions, the reports are due by October 30th of each year or 90 days after the end of the project period, whichever comes first.

The reporting requirement is based on planned procurements. Recipients (Sponsors) with funds budgeted for non-supply procurement and/or \$3,000 or more in supplies are required to report annually whether the planned procurements take place during the reporting period or not. If no procurements take place during the reporting period, the recipient should check the box in Section 5B when completing the form.

MBE/WBE reports should be sent to the DBE Coordinator in the Sponsor's region. Contact information can be found at <http://www.epa.gov/osbp/contactpage.htm>. The coordinators also can answer any questions.

Final MBE/WBE reports must be submitted within 90 days after the project period of the grant ends. To be in compliance with regulations, the Sponsor must submit a final MBE/WBE report. Non-compliance may impact future competitive grant proposals. The current EPA Form 5700-52A can be found at the EPA Office of Small Business Program's Home Page at http://www.epa.gov/osbp/dbe_reporting.htm.

L. Procurement involving an EPA Financial Assistance Agreement. Pursuant to 40 C.F.R. § 33.301, the Sponsor agrees to make the following six good faith efforts whenever procuring construction, equipment, services and supplies under an EPA financial assistance agreement, and to require that sub-recipients (Sponsors), and prime contractors also comply. Records documenting compliance with the six good faith efforts shall be retained:

1. Ensure Disadvantaged Business Enterprise (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government Sponsors, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government Sponsors, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when an agreement is too large for one of these firms to handle individually.
5. Use the services and assistance of the Small Business Administration (SBA) and the Minority Business Development of the Department of Commerce.
6. If the Sponsor awards subcontracts, require the Sponsor to take the steps in paragraphs (a) through (e) of this section.

M. Lobbying & Litigation. By signing this Agreement, the Sponsor certifies that none of the funds received from this Agreement shall be used to engage in the lobbying of the Federal Government or in litigation against the United States unless authorized under existing law.

The chief executive officer of this Sponsor agency shall ensure that no grant funds awarded under this Agreement are used to engage in lobbying of the Federal Government or in litigation against the United States unless authorized under existing law. The Sponsor shall abide by its respective Attachment in 2 C.F.R. Part 200, which prohibits the use of federal grant funds for litigation against the United States or for lobbying or other political activities.

For subawards exceeding \$100,000, EPA requires the following certification and disclosure forms:

1. Certification Regarding Lobbying, EPA Form 6600-06:
http://www.epa.gov/ogd/AppKit/form/Lobbying_sec.pdf
2. Disclosure of Lobbying Activities, SF LLL: http://www.epa.gov/ogd/AppKit/form/sfillin_sec.pdf
3. Legal expenses required in the administration of Federal programs are allowable. Legal expenses for prosecution of claims against the Federal Government are unallowable.

- N. Payment to Consultants.** EPA participation in the salary rate (excluding overhead) paid to individual consultants retained by recipients (Sponsors) or by a recipients' (Sponsor's) contractors or subcontractors shall be limited to the maximum daily rate for Level IV of the Executive Schedule (formerly GS-18), to be adjusted annually. This limit applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. This rate does not include transportation and subsistence costs for travel performed (the recipient will pay these in accordance with his/her normal travel reimbursement practices).

Subagreements with firms for services that are awarded using the procurement requirements in 40 C.F.R. Parts 30 or 31, are not affected by this limitation unless the terms of the contract provide the recipient (Sponsor) with responsibility for the selection, direction and control of the individual who will be providing services under the contract at an hourly or daily rate of compensation. See 40 C.F.R. § 30.27(b) or 40 C.F.R. § 31.369(j), as applicable, for additional information.

As of January 1, 2014, the limit is \$602.24 per day \$75.28 per hour.

- O. Peer Review.** Where appropriate, prior to finalizing any significant technical products the Principal Investigator (PI) of this project must solicit advice, review, and feedback from a technical review or advisory group consisting of relevant subject matter specialists. A record of comments and a brief description of how respective comments are addressed by the PI will be provided to the Project Monitor prior to releasing any final reports or products resulting from the funded study.
- P. International Travel (Including Canada).** All International Travel must be approved by the US Environmental Protection Agency's Office of International and Tribal Affairs (OITA) BEFORE travel occurs. Even a brief trip to a foreign country, for example to attend a conference, requires OITA approval. Please contact your Partnership Project manager as soon as possible if travel is planned out of the country, including Canada and/or Mexico, so that they can submit a request to the EPA Project Officer if they approve of such travel.
- Q. Unliquidated Obligations (ULO).** Sub-recipients, and all sub-awardees of Sub-Recipients, if any, should manage their agreement and subaward funding in ways that reduce the length of time that federal funds obligated and committed to subaward projects are unspent (not yet drawn down through disbursements to sub-recipients and sub-awardees).

SECTION 36. ORDER OF PRECEDENCE

This Agreement is entered into, pursuant to, and under the authority granted by applicable federal and state laws. The provisions of the Agreement shall be construed to conform to those laws. In the event of a direct and irreconcilable conflict between the terms of this Agreement and any applicable statute, rule, or policy or procedure, the conflict shall be resolved by giving precedence in the following order:

1. Federal law and binding executive orders;
2. Code of federal regulations;
3. Terms and conditions of a grant award to the state from the federal government ;
4. Federal grant program policies and procedures adopted by a federal agency that are required to be applied by federal law;
5. State law (constitution, statute);
6. Washington Administrative Code;
7. Funding board or RCO policies.

SECTION 37. LIMITATION OF AUTHORITY

Only RCO's Director or RCO's delegate by writing (delegation to be made prior to action) shall have the authority to alter, amend, modify, or waive any clause or condition of this Agreement; provided that any such alteration, amendment, modification, or waiver of any clause or condition of this Agreement is not effective or binding unless made as a written amendment to this Agreement and signed by the RCO Director or delegate.

SECTION 38. WAIVER OF DEFAULT

Waiver of any default shall not be deemed to be a waiver of any subsequent default. Waiver or breach of any provision of the Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the Agreement unless stated to be such in writing , signed by the director, or the director's designee, and attached as an amendment to the original Agreement.

SECTION 39. APPLICATION REPRESENTATIONS – MISREPRESENTATIONS OR INACCURACY OR BREACH

The funding board and RCO rely on the Sponsor's application in making its determinations as to eligibility for , selection for, and scope of, funding grants. Any misrepresentation, error or inaccuracy in any part of the application may be deemed a breach of this Agreement.

SECTION 40. SPECIFIC PERFORMANCE

The funding board and RCO may enforce this Agreement by the remedy of specific performance , which usually will mean completion of the project as described in this Agreement and/or enforcement of long-term obligations. However, the remedy of specific performance shall not be the sole or exclusive remedy available to RCO. No remedy available to the funding board or RCO shall be deemed exclusive. The funding board or RCO may elect to exercise any, a combination of, or all of the remedies available to it under this Agreement, or under any provision of law, common law, or equity, including but not limited to seeking full or partial repayment of the grant amount paid and damages.

SECTION 41. TERMINATION AND SUSPENSION

The funding board and RCO will require strict compliance by the Sponsor with all the terms of this Agreement including, but not limited to, the requirements of the applicable statutes, rules and all funding board and RCO policies, and with the representations of the Sponsor in its application for a grant as finally approved by the funding board. For federal awards, notification of termination will comply with 2 C.F.R. § 200.340.

A. For Cause.

1. The funding board or the director may suspend or terminate the obligation to provide funding to the Sponsor under this Agreement:

- a. If the Sponsor breaches any of the Sponsor's obligations under this Agreement;
 - b. If the Sponsor fails to make progress satisfactory to the funding board or director toward completion of the project by the completion date set out in this Agreement. Included in progress is adherence to milestones and other defined deadlines; or
 - c. If the primary and secondary Sponsor(s) cannot mutually agree on the process and actions needed to implement the project;
2. Prior to termination, the RCO or the funding board shall notify the Sponsor in writing of the opportunity to cure. If corrective action is not taken within 30 days or such other time period that the director or board approves in writing, the Agreement may be terminated. In the event of termination, the Sponsor shall be liable for damages or other relief as authorized by law and/or this Agreement.
 3. RCO reserves the right to suspend all or part of the Agreement, withhold further payments, or prohibit the Sponsor from incurring additional obligations of funds during the investigation of any alleged breach and pending corrective action by the Sponsor, or a decision by the RCO to terminate the Contract.
- B. For Convenience.** Except as otherwise provided in this Agreement, RCO may, by ten (10) days written notice, beginning on the second day after the mailing, terminate this Agreement, in whole or in part when it is in the best interest of the state. If this Agreement is so terminated, RCO shall be liable only for payment required under the terms of this Agreement prior to the effective date of termination. A claimed termination for cause shall be deemed to be a "Termination for Convenience" if it is determined that:
1. The Sponsor was not in default; or
 2. Failure to perform was outside Sponsor's control, fault or negligence.
- C. Rights of Remedies of the RCO.**
1. The rights and remedies of RCO provided in this Agreement are not exclusive and are in addition to any other rights and remedies provided by law.
 2. In the event this Agreement is terminated by the funding board or director, after any portion of the grant amount has been paid to the Sponsor under this Agreement, the funding board or director may require that any amount paid be repaid to RCO for redeposit into the account from which the funds were derived. However, any repayment shall be limited to the extent it would be inequitable and represent a manifest injustice in circumstances where the project will fulfill its fundamental purpose for substantially the entire period of performance and of long-term obligation.
- D. Non Availability of Funds.** The obligation of the RCO to make payments is contingent on the availability of state and federal funds through legislative appropriation and state allotment. If amounts sufficient to fund the grant made under this Agreement are not appropriated to RCO for expenditure for this Agreement in any biennial fiscal period, RCO shall not be obligated to pay any remaining unpaid portion of this grant unless and until the necessary action by the Legislature or the Office of Financial Management occurs. If RCO participation is suspended under this section for a continuous period of one year, RCO's obligation to provide any future funding under this Agreement shall terminate. Termination of the Agreement under this section is not subject to appeal by the Sponsor.

1. **Suspension:** The obligation of the RCO to manage contract terms and make payments is contingent upon the state appropriating state and federal funding each biennium. In the event the state is unable to appropriate such funds by the first day of each new biennium RCO reserves the right to suspend the Agreement, with ten (10) days written notice, until such time funds are appropriated. Suspension will mean all work related to the contract must cease until such time funds are obligated to RCO and the RCO provides notice to continue work.

SECTION 42. DISPUTE HEARING

Except as may otherwise be provided in this Agreement, when a dispute arises between the Sponsor and the funding board, which cannot be resolved, either party may request a dispute hearing according to the process set out in this section. Either party's request for a dispute hearing must be in writing and clearly state :

- A. The disputed issues;
- B. The relative positions of the parties;
- C. The Sponsor's name, address, project title, and the assigned project number.

In order for this section to apply to the resolution of any specific dispute or disputes, the other party must agree in writing that the procedure under this section shall be used to resolve those specific issues. The dispute shall be heard by a panel of three persons consisting of one person chosen by the Sponsor, one person chosen by the director, and a third person chosen by the two persons initially appointed. If a third person cannot be agreed on, the third person shall be chosen by the funding board's chair.

Any hearing under this section shall be informal, with the specific processes to be determined by the disputes panel according to the nature and complexity of the issues involved. The process may be solely based on written material if the parties so agree. The disputes panel shall be governed by the provisions of this Agreement in deciding the disputes.

The parties shall be bound by the decision of the disputes panel, unless the remedy directed by that panel shall be without the authority of either or both parties to perform, as necessary, or is otherwise unlawful.

Request for a disputes hearing under this section by either party shall be delivered or mailed to the other party. The request shall be delivered or mailed within thirty (30) days of the date the requesting party has received notice of the action or position of the other party which it wishes to dispute. The written agreement to use the process under this section for resolution of those issues shall be delivered or mailed by the receiving party to the requesting party within thirty (30) days of receipt by the receiving party of the request.

All costs associated with the implementation of this process shall be shared equally by the parties.

SECTION 43. ATTORNEYS' FEES

In the event of litigation or other action brought to enforce contract terms, each party agrees to bear its own attorney fees and costs.

SECTION 44. GOVERNING LAW/VENUE

This Agreement shall be construed and interpreted in accordance with the laws of the State of Washington . In the event of a lawsuit involving this Agreement, venue shall be in Thurston County Superior Court if legally proper; otherwise venue shall be in a county where the project is situated, if venue there is legally proper, and if not, in a county where venue is legally proper. The Sponsor, by execution of this Agreement acknowledges the jurisdiction of the courts of the State of Washington .

SECTION 45. PROVISIONS APPLICABLE ONLY IF FEDERALLY RECOGNIZED INDIAN TRIBE IS THE SPONSOR

In the cases where this Agreement is between the funding board (which includes the State of Washington for purposes of this Agreement) and a federally recognized Indian Tribe, the following terms and conditions apply, but only between those parties:

- A. Notwithstanding the above venue provision, if the State of Washington intends to initiate legal action against a federally recognized Indian tribe relating to the performance, breach, or enforcement of this Agreement, it shall so notify the Tribe. If the Tribe believes that a good faith basis exists for subject matter jurisdiction of such an action in federal court, the Tribe shall so notify the State within five days of receipt of such notice and state the basis for such jurisdiction. If the Tribe so notifies the State, the State shall bring such action in federal court, otherwise the State may sue the Tribe in the Thurston County Superior Court, or such other superior court where venue is proper, if not proper in Thurston County. Interpretation of the Agreement shall be according to applicable State law, except to the extent preempted by federal law. In the event suit is brought in federal court and the federal court determines that it lacks subject matter jurisdiction to resolve the dispute between the State and Tribal Party, then the State may bring suit in Thurston County Superior Court or such other superior court where venue is proper, if not proper in Thurston County.
- B. Any judicial award, determination, order, decree or other relief, whether in law or equity or otherwise, resulting from such actions under subsection A above, shall be binding and enforceable on the parties. Any money judgment or award against a Tribe, tribal officers, or employees, or the State of Washington, its agencies, or its officers and employees may exceed the amount of funding awarded under this Agreement.
- C. As requested by RCO, the Tribe shall provide to RCO its governing requirements and procedures for entering into Agreement with RCO and waiving its sovereign immunity. In addition, the tribe shall provide to RCO all authorizations the Tribe requires to authorize the person (s) signing the Agreement on the Tribe's behalf to bind the Tribe and waive the Tribe's sovereign immunity as provided herein.
- D. The Tribe hereby waives its sovereign immunity for suit in federal and state court for the limited purposes of allowing the State to bring and prosecute to completion such actions relating to the performance, breach, or enforcement of this Agreement as provided in subsection A above, and to bring actions to enforce any judgment arising from such actions. This waiver is not for the benefit of any third party and shall not be enforceable by any third party or by any assignee of the parties. In any enforcement action, the parties shall bear their own enforcement costs, including attorneys' fees.

For purposes of this provision, the State includes the funding board, the RCO, and any other state agencies as the term "agency" is broadly understood to include, but not be limited to, departments, commissions, boards, divisions, bureaus, committees, offices, councils, societies, etc.

SECTION 46. SEVERABILITY

The provisions of this Agreement are intended to be severable. If any term or provision is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of the Agreement.

Eligible Scope Activities

Project Sponsor: City of Shoreline
Project Title: Shoreview Park Trail & Creek Improvement
Program: Land and Water Conservation

Project Number: 16-1621
Project Type: Development
Approval: 9/24/2018

Project Metrics

Sites Improved

Project acres developed:

0.10

Assumes only new nature trails installed in the project fall under definition of development project: Development projects are those that result in the construction of, or work resulting in, new elements ... to enhance outdoor recreation resources. 450' of new trail x approximate 10' average width = 0.1 acre

Project acres renovated:

1.60

Assumes trail restoration and restoration of creek and other natural areas in the project fall under definition of renovation project: Renovation work is intended to improve an existing site or structure to increase its useful service life beyond original expectations or functions. Renovations include 300' of trail restoration (approximately 0.1 acre in area) and restoration of natural areas, including Boeing Creek.

Development Metrics

Worksite #1, Shoreview Park

Eligible Scope Activities

General Site Improvements**Develop circulation paths or access routes**

Select the surface of the path/walkway:

Crushed rock

Assumed design approach will bench the currently eroded trail section into the hillside up and away from the creek with a rockery on the upslope side as needed. Trail surfacing expected to be gravel, will be updated as design progresses.

750

Linear feet of path/walkway:

Approximate length of existing Hidden Lake Loop Trail path in need of restoration (300 feet) plus new trail along restored creek (450 feet); actual length to be confirmed in design.

No

Lighting provided (yes/no):

0 new, 0 renovated

Number of walkway bridges:

Develop viewpoint

Number of designated viewpoints:

1 new, 0 renovated

*Located at end of new trail segment adjacent to restored creek channel
Benches/seating*

Select the viewpoint structures:

Habitat enhancement

Acres of the habitat enhancement area :

0.10

*Revetment length = 464 ft * approx 10' width = approx 0.1 acre*

Acres of wetland created:

0.03

thin wetland bench along one side of new stream channel

Wetland acres restored / enhanced:

0.00

Linear feet of stream bank / shoreline restored or enhanced :

464

Revetment length

Install signs/kiosk

Number of kiosks:

0 new, 0 renovated

Number of interpretive signs/displays:

2 new, 0 renovated

Educational signage will provide information on surface water-related environmental topics, such as dam removal, habitat restoration, watershed management, and salmon recovery

Number of permanent entrance signs:

0 new, 0 renovated

Number of electronic signs:

0 new, 0 renovated

Project involves installation of informational signs (yes/no):

Yes

Landscaping improvements

Acres of landscaped area :

1.70

*Assumes landscaping work will effectively apply to overall project area
Boulders, Native vegetation, Other
Other includes cobbles, which are large rounded rocks, slightly smaller than boulders*

Select the landscape features:

Eligible Scope Activities

Site Preparation

General site preparation

Includes site clearing (\$6,000), temporary streamflow bypass during construction (\$40,000), common excavation supporting creek restoration and trail installation(\$202,000),

Cultural Resources

Cultural resources

Permits

Obtain permits

Architectural & Engineering

Architectural & Engineering (A&E)

Milestone Report By Project

Project Number: 16-1621 D
Project Name: Shoreview Park Trail & Creek Improvement
Sponsor: Shoreline City of
Project Manager: DeAnn Beck

X	!	Milestone	Target Date	Comments/Description
X		Project Start	09/24/2018	
		Design Initiated	04/15/2019	
		60% Plans to RCO	07/31/2019	
		Applied for Permits	07/31/2019	
	!	Progress Report Due	08/15/2019	
	!	Cultural Resources Complete	09/30/2019	Survey required, see Special Condition #1.
	!	Annual Project Billing Due	12/31/2019	
	!	Progress Report Due	02/01/2020	
	!	Progress Report Due	09/30/2020	
		All Bid Docs/Plans to RCO	10/31/2020	
		Bid Awarded/Contractor Hired	02/28/2021	
		SEPA/NEPA Completed	03/29/2021	
	!	Construction Started	07/01/2021	
		RCO Interim Inspection	07/31/2021	
		50% Construction Complete	08/01/2021	
		90% Construction Complete	09/01/2021	
		Funding Acknowl Sign Posted	09/15/2021	
		Construction Complete	09/15/2021	
		RCO Final Inspection	10/31/2021	
	!	Agreement End Date	10/31/2021	
		Final Billing Due	11/15/2021	
		Final Report Due	11/30/2021	

X = Milestone Complete

! = Critical Milestone

**LAND AND WATER CONSERVATION FUND
PROJECT AGREEMENT GENERAL PROVISIONS**

Part I – Definitions

- A. The term "NPS" or "Service" as used herein means the National Park Service, United States Department of the Interior.
- B. The term "Director" as used herein means the Director of the National Park Service, or any representative lawfully delegated the authority to act for such Director.
- C. The term "Manual" as used herein means the Land and Water Conservation Fund State Assistance Program Manual.
- D. The term "project" as used herein means a Land and Water Conservation Fund grant, which is subject to the project agreement and/or its subsequent amendments.
- E. The term "State" as used herein means the State or Territory that is a party to the project agreement, and, where applicable, the political subdivision or public agency to which funds are to be transferred pursuant to this agreement. Wherever a term, condition, obligation, or requirement refers to the State, such term, condition, obligation, or requirement shall also apply to the recipient political subdivision or public agency, except where it is clear from the nature of the term, condition, obligation, or requirement that it is to apply solely to the State. For purposes of these provisions, the terms "State," "grantee," and "recipient" are deemed synonymous.
- F. The term "Secretary" as used herein means the Secretary of the Interior, or any representative lawfully delegated the authority to act for such Secretary.

Part II - Continuing Assurances

The parties to the project agreement specifically recognize that the Land and Water Conservation Fund project creates an obligation to maintain the property described in the project agreement and supporting application documentation consistent with the Land and Water Conservation Fund Act and the following requirements.

Further, it is the acknowledged intent of the parties hereto that recipients of assistance will use monies granted hereunder for the purposes of this program, and that assistance granted from the Fund will result in a net increase, commensurate at least with the Federal cost-share, in a participant's outdoor recreation.

It is intended by both parties hereto that assistance from the Fund will be added to, rather than replace or be substituted for, State and local outdoor recreation funds.

- A. The State agrees, as recipient of this assistance, that it will meet the following specific requirements and that it will further impose these requirements, and the terms of the project agreement, upon any political subdivision or public agency to which funds are transferred pursuant to the project agreement. The State also agrees that it shall be responsible for compliance with the terms of the project agreement by such a political subdivision or public agency and that failure by such political subdivision or public agency to so comply shall be deemed a failure by the State to comply with the terms of this agreement.
- B. The State agrees that the property described in the project agreement and the signed and dated project boundary map made part of that agreement is being acquired or developed with Land and Water Conservation Fund assistance, or is integral to such acquisition or development, and that, without the approval of the Secretary, it shall not be converted to other than public outdoor recreation use but shall be maintained in public outdoor recreation in perpetuity or for the term of the lease in the case of leased property. The Secretary shall approve such conversion only if it is found to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions deemed necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location pursuant to Title 36 Part 59.3 of the *Code of Federal Regulations*. This replacement land becomes subject to Section 6(f)(3) protection. The approval of a conversion shall be at the sole discretion of the Secretary, or his designee.

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Prior to the completion of this project, the State and the Director may mutually alter the area described and shown in the project agreement and the signed and dated project boundary map to provide the most satisfactory public outdoor recreation unit, except that acquired parcels are afforded Section 6(f)(3) protection as Fund reimbursement is provided.

In the event the NPS provides Land and Water Conservation Fund assistance for the acquisition and/or development of property with full knowledge that the project is subject to reversionary rights and outstanding interests, conversion of said property to other than public outdoor recreation uses as a result of such right or interest being exercised will occur. In receipt of this approval, the State agrees to notify the Service of the potential conversion as soon as possible and to seek approval of replacement property in accord with the conditions set forth in these provisions and program regulations. The provisions of this paragraph are also applicable to: leased properties acquired and/or developed with Fund assistance where such lease is terminated prior to its full term due to the existence of provisions in such lease known and agreed to by the Service; and properties subject to other outstanding rights and interests that may result in a conversion when known and agreed to by the Service.

- C. The State agrees that the benefit to be derived by the United States from the full compliance by the State with the terms of this agreement is the preservation, protection, and the net increase in the quality of public outdoor recreation facilities and resources which are available to the people of the State and of the United States, and such benefit exceeds to an immeasurable and unascertainable extent the amount of money furnished by the United States by way of assistance under the terms of this agreement. The State agrees that payment by the State to the United States of an amount equal to the amount of assistance extended under this agreement by the United States would be inadequate compensation to the United States for any breach by the State of this agreement.

The State further agrees, therefore, that the appropriate remedy in the event of a breach by the State of this agreement shall be the specific performance of this agreement or the submission and approval of a conversion-of-use request as described in Section II.B above.

- D. The State agrees to comply with the policies and procedures set forth in the Manual. Provisions of said Manual are incorporated into and made a part of the project agreement.
- E. The State agrees that the property and facilities described in the project agreement shall be operated and maintained as prescribed by Manual requirements and published post-completion compliance regulations (Title 36 Part 59 of the *Code of Federal Regulations*).
- F. The State agrees that a notice of the grant agreement shall be recorded in the public property records (e.g., registry of deeds or similar) of the jurisdiction in which the property is located, to the effect that the property described and shown in the scope of the project agreement and the signed and dated project boundary map made part of that agreement, has been acquired or developed with Land and Water Conservation Fund assistance and that it cannot be converted to other than public outdoor recreation use without the written approval of the Secretary of the Interior.
- G. Nondiscrimination
1. By signing the LWCF agreement, the State certifies that it will comply with all Federal laws relating to nondiscrimination as outlined in the Civil Rights Assurance appearing at Part III-I herein.
 2. The State shall not discriminate against any person on the basis of residence, except to the extent that reasonable differences in admission or other fees may be maintained on the basis of residence as set forth in the Manual.

Part III - Project Assurances

- A. Applicable Federal Requirements

The State shall comply with applicable regulations, policies, guidelines and requirements as they relate to the application, acceptance, and use of Federal funds for this federally assisted project, including:

2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards;

2 CFR Parts 182 & 1401, Government-wide Requirements for a Drug-Free Workplace;

2 CFR Part 180 & 1400, Non-Procurement Debarment and Suspension, previously located at 43 CFR Part 42, "Government-wide Debarment and Suspension (Non-Procurement)";

43 CFR Part 18, New Restrictions on Lobbying;

FAR Clause 52.203-12, Paragraphs (a) and (b), Limitation on Payments to Influence Certain Federal Transactions;

2 CFR Part 25, System for Award Management (www.SAM.gov) and Data Universal Numbering System (DUNS); and

2 CFR Part 170, Reporting Subawards and Executive Compensation

B. Project Application

1. The Application for Federal Assistance bearing the same project number as the agreement and associated documents is by this reference made a part of the agreement.
2. The State possesses legal authority to apply for the grant, and to finance and construct the proposed facilities. A resolution, motion, or similar action has been duly adopted or passed authorizing the filing of the application, including all understandings and assurances contained herein, and directing and authorizing the person identified as the official representative of the State to act in connection with the application and to provide such additional information as may be required.
3. The State has the capability to finance the non-Federal share of the costs for the project. Sufficient funds will be available to assure effective operation and maintenance of the facilities acquired or developed by the project.

C. Project Execution

1. The project period shall begin at the date specified on the project agreement or the effective date of a waiver of retroactivity and shall terminate at the end of the stated or amended project period, unless the project is completed or terminated sooner in which event the project shall end on the date of completion or termination.
2. The State shall transfer to the project sponsor identified in the Application for Federal Assistance or the Description and Notification Form all funds granted hereunder except those reimbursed to the State to cover eligible expenses derived from a current approved negotiated indirect cost rate agreement.
3. The State will cause work on the project to start within a reasonable time after receipt of notification that funds have been approved and assure that the project will be implemented to completion with reasonable diligence.
4. The State will require the facility to be designed to comply with the Architectural Barriers Act of 1968 (Public Law 90-480) and DOI Section 504 Regulations (43 CFR Part 17). The State will be responsible for conducting inspections to insure compliance with these specifications by the contractor.
5. The State shall secure completion of the work in accordance with approved construction plans and specifications, and shall secure compliance with all applicable Federal, State, and local laws and

regulations.

6. In the event the project covered by the project agreement, cannot be completed in accordance with the plans and specifications for the project; the State shall bring the project to a point of recreational usefulness agreed upon by the State and the Director or his designee.
7. The State will provide for and maintain competent and adequate architectural/engineering supervision and inspection at the construction site to insure that the completed work conforms with the approved plans and specifications; that it will furnish progress reports and such other information as the NPS may require.
8. The State will comply with the terms of Title II and Title III, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646), 94 Stat. 1894 (1970), and the applicable regulations and procedures implementing such Act for all real property acquisitions and where applicable shall assure that the Act has been complied with for property to be developed with assistance under the project agreement.
9. The State will comply with the provisions of: Executive Order 11988, relating to evaluation of flood hazards; Executive Order 11288, relating to the prevention, control, and abatement of water pollution, and Executive Order 11990 relating to the protection of wetlands.
10. The State will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973, Public Law 93-234, 87 Stat. 975, approved December 31, 1976. Section 102(a) requires the purchase of flood insurance in communities where such insurance is available, as a condition for the receipt of any Federal financial assistance for construction or acquisition purposes, for use in any area that has been identified as an area having special flood hazards by the Flood Insurance Administration of the Federal Emergency Management Agency. The phrase "Federal financial assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any other form of direct or indirect Federal assistance.
11. The State will assist the NPS in its compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), Executive Order 11593, and the Archaeological and Historic Preservation Act of 1966 (16 U.S.C. 469a-1 et seq.) by (a) consulting with the State Historic Preservation Officer on the conduct of investigations, as necessary, to identify properties listed in or eligible for inclusion in the National Register of Historic Places that are subject to effects (see CFR Part 800.8) by the activity, and notifying the Federal grantor agency of the existence of any such properties, and by (b) complying with all requirements established by the Federal grantor agency to avoid or mitigate adverse effects upon such properties.
12. It is national policy to award a fair share of contracts to small and women- and minority-owned firms. The Department of the Interior and the National Park Service are strongly committed to the objectives of this policy and encourage all grant recipients to take affirmative steps to ensure such fairness. Positive efforts shall be made by recipients to utilize small businesses, minority-owned firms, and women's business enterprises whenever possible. In accordance with Executive Orders 11625, 12138, and 12432, recipients shall take the following steps to further this policy:
 - a) Ensure that small businesses, minority-owned firms, and women's business enterprises are used to the fullest extent practicable.
 - b) Make information on forthcoming opportunities available and arrange time frames for purchases and contracts to encourage and facilitate participation by small businesses, minority-owned firms, and women's business enterprises.
 - c) Consider in the contract process whether firms competing for larger contracts intend to subcontract with small businesses, minority-owned firms, and women's business enterprises.
 - d) Encourage contracting with consortiums of small businesses, minority-owned firms and women's business enterprises when a contract is too large for one of these firms to handle individually.

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- e) Use the services and assistance, as appropriate, of such organizations as the Small Business Development Agency in the solicitation and utilization of small business, minority-owned firms and women's business enterprises.

The National Park Service Regional Offices will work closely with the States to ensure full compliance and that grant recipients take affirmative action in placing a fair share of purchases with minority business firms.

- 13. If applicable, the State will comply with the intergovernmental review requirements of Executive Order 12372.

D. Construction Contracted for by the State Shall Meet the Following Requirements:

- 1. Contracts for construction shall comply with the applicable provisions of 2 CFR 200.
- 2. No grant or contract may be awarded by any grantee, subgrantee, or contractor of any grantee or subgrantee, to any party that has been debarred or suspended under Executive Order 12549. By signing the LWCF agreement, the State certifies that it will comply with debarment and suspension provisions appearing at Part III-J herein.

E. Retention and Custodial Requirements for Records

- 1. All Recipient financial and programmatic records, supporting documents, statistical records, and all other grant-related records shall be retained in accordance with 2 CFR 200.333 to .337 for a period of three years; except the records shall be retained beyond the three-year period if audit findings have not been resolved.
- 2. The retention period starts from the date of the final expenditure report for the project.
- 3. State and local governments are authorized to substitute copies in lieu of original records.
- 4. The Secretary of the Interior and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the State and local governments and their subgrantees which are pertinent to a specific project for the purpose of making audit, examination, excerpts and transcripts.

F. Project Termination

- 1. The Director may temporarily suspend Federal assistance under the project pending corrective action by the State or pending a decision to terminate the grant by the Service.
- 2. The State may unilaterally terminate the project at any time prior to the first payment on the project. After the initial payment, the project may be terminated, modified, or amended by the State only by mutual agreement.
- 3. The Director may terminate the project in whole, or in part, at any time before the date of completion, whenever it is determined that the grantee has failed to comply with the conditions of the grant. The Director will promptly notify the State in writing of the determination and the reasons for the termination, together with the effective date. Payments made to States or recoveries by the Service under projects terminated for cause shall be in accord with the legal rights and liabilities of the parties.
- 4. The Director or State may terminate grants in whole, or in part at any time before the date of completion, when both parties agree that the continuation of the project would not produce beneficial results commensurate with the further expenditure of funds. The two parties shall agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated. The grantee shall not incur new obligations for the terminated portion after the effective date, and shall

cancel as many outstanding obligations as possible. The NPS may allow full credit to the State for the Federal share of the non-cancelable obligations, properly incurred by the grantee prior to termination.

5. Termination either for cause or for convenience requires that the project in question be brought to a state of recreational usefulness agreed upon by the State and the Director or that all funds provided by the National Park Service be returned.

G. Lobbying with Appropriated Funds

The State must certify, for the award of grants exceeding \$100,000 in Federal assistance, that no Federally appropriated funds have been paid or will be paid, by or on behalf of the State, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding, extension, continuation, renewal, amendment, or modification of this grant. In compliance with 31 USC 1352, the State certifies, as follows:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

H. Provision of a Drug-Free Workplace

In compliance with the Drug-Free Workplace Act of 1988 (2 CFR Parts 182 & 1401), the State certifies that it will or continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about:

(1) The dangers of drug abuse in the workplace;

(2) The grantee's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation, and employee assistance programs; and

(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of a grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

- (1) Abide by the terms of the statement; and*
- (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;*

(e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted;

- (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or*
- (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;*

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

I. Civil Rights Assurance (Ref: DI-1350)

*The State certifies that, as a condition to receiving any Federal assistance from the Department of the Interior, it will comply with all Federal requirements relating to nondiscrimination. These include, but are not limited to: (a) Executive Order 11246, as amended; (b) Title VI of the Civil Rights Act of 1964, as amended (78 Stat. 252; 42 U.S.C. §§2000d *et seq.*), which prohibits discrimination on the basis of race, color, or national origin; (c) Title V, Section 504 of the Rehabilitation Act of 1973, as amended (87 Stat. 394, 29 U.S.C. §794), which prohibits discrimination on the basis of disability; (d) the Age Discrimination Act of 1975, as amended (89 Stat. 728, 42 U.S.C. §§6101 *et seq.*), which prohibits discrimination on the basis of age; and with all other applicable federal laws and regulations prohibiting discrimination, to the end that no person in the United States shall, on the grounds of race, color, sexual orientation, national origin, disability, religion, age, or sex, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity conducted by the applicant.*

THE APPLICANT HEREBY GIVES ASSURANCE THAT it will immediately take any measures necessary to effectuate this agreement.

THIS ASSURANCE shall apply to all aspects of the applicant's operations including those parts that have not received or benefited from Federal financial assistance.

If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Applicant by the Department, this assurance shall obligate the Applicant, or in the case of any transfer of such property, any transferee, for the period during which it retains ownership or possession of the property. In all other cases, this assurance shall obligate the Applicant for the period during which the Federal financial assistance is extended to it by the Department.

THIS ASSURANCE is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property, discounts or other Federal financial assistance extended after the date hereof to the Applicant by the Department, including installment payments after such date on account of applications for Federal financial assistance which were approved before such date.

The Applicant recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United State shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, its successors, transferees, assignees, and subrecipients and the person whose signature appears on the grant agreement and who is authorized to sign on behalf of the Applicant.

J. Debarment and Suspension

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission or embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The State further agrees that it will include the clause "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions" appearing below in any agreement entered into with lower tier participants in the implementation of this grant. Department of Interior Form 1954 (DI-1954) may be used for this purpose.

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion - Lower Tier Covered Transactions

(1) The prospective lower tier participant certifies, by submission of this application that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this application.

K. Anti-Deficiency Act.

Pursuant to 31 U.S.C. §1341 nothing contained in this Agreement shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of the appropriations made by Congress, for the purposes of this Agreement for that fiscal year, or other obligation for the further expenditure of money in excess of such appropriations.

L. Audit Requirements.

- 1) Non-Federal entities that expend \$750,000 or more during a year in Federal awards shall have a single or program-specific audit conducted for that year in accordance with the Single Audit Act Amendments of 1996 (31 U.S.C. 7501-7507) and 2 CFR Part 200, Subpart F, which is available at <http://www.ecfr.gov/cgi-bin/text-idx?SID=fd6463a517ceea3fa13e665e525051f4&node=sp2.1.200.f&rgn=div6>
- 2) Non-Federal entities that expend less than \$750,000 for a fiscal year in Federal awards are exempt from Federal audit requirements for that year, but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and General Accounting Office (GAO).
- 3) Audits shall be made by an independent auditor in accordance with generally accepted government auditing standards covering financial audits. Additional audit requirements applicable to this agreement are found at 2 CFR Part 200, Subpart F, as applicable. Additional information on single audits is available from the Federal Audit Clearinghouse at <http://harvester.census.gov/sac/>.

M. Recipient Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights

- 1) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239).
- 2) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712.
- 3) The Award Recipient shall insert the substance of this clause, including this paragraph (3), in all subawards or subcontracts over the simplified acquisition threshold, 42 CFR § 52.203-17 (as referenced in 42 CFR § 3.908-9).

N. Reporting Subawards and Executive Compensation

a) Reporting of first-tier sub-awards.

1. Applicability. Unless you are exempt as provided in paragraph D. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery Act funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a sub-award to an entity (see definitions in paragraph E. of this award term).
2. Where and when to report.
 - i. You must report each obligating action described in paragraph a)1. of this award term to <http://www.fsrs.gov>.
 - ii. For sub-award information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
3. What to report. You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

b) Reporting Total Compensation of Recipient Executives.

1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—
 - i. The total Federal funding authorized to date under this award is \$25,000 or more;

- ii. In the preceding fiscal year, you received—
 - a. 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - b. \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
2. Where and when to report. You must report executive total compensation described in paragraph A.1. of this award term:
- i. As part of your registration profile at <https://www.sam.gov>.
 - ii. By the end of the month following the month in which this award is made, and annually thereafter.
- c) Reporting of Total Compensation of Subrecipient Executives.
1. Applicability and what to report. Unless you are exempt as provided in paragraph D. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—
- i. In the subrecipient's preceding fiscal year, the subrecipient received—
 - a. 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - b. \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
 - ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:
- i. To the recipient.
 - ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year

(i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d) Exemptions.

1. If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:
 - i. Subawards, and
 - ii. The total compensation of the five most highly compensated executives of any subrecipient.

e) Definitions. For purposes of this award term:

1. Entity means all of the following, as defined in 2 CFR part 25:
 - i. A Governmental organization, which is a State, local government, or Indian tribe;
 - ii. A foreign public entity;
 - iii. A domestic or foreign nonprofit organization;
 - iv. A domestic or foreign for-profit organization;
 - v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
2. Executive means officers, managing partners, or any other employees in management positions.
3. Subaward:
 - i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - ii. The term includes your procurement of property and services needed to carry out the project or program. The term does not include procurement of incidental property and services needed to carry out the award project or program.
 - iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
4. Subrecipient means an entity that:
 - i. Receives a subaward from you (the recipient) under this award; and
 - ii. Is accountable to you for the use of the Federal funds provided by the subaward.
5. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
 - i. Salary and bonus.
 - ii. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

- iii. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
- iv. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
- v. Above-market earnings on deferred compensation which is not tax-qualified.
- vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

O. Conflict of Interest

- 1) The Recipient must establish safeguards to prohibit its employees and Sub-recipients from using their positions for purposes that constitute or present the appearance of a personal or organizational conflict of interest. The Recipient is responsible for notifying the Awarding Officer in writing of any actual or potential conflicts of interest that may arise during the life of this award. Conflicts of interest include any relationship or matter which might place the Recipient or its employees in a position of conflict, real or apparent, between their responsibilities under the agreement and any other outside interests. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, consideration of future employment arrangements with a different organization, or decision-making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Recipient and/or Recipient's employees and Sub-recipients in the matter.
- 2) The Awarding Officer and the servicing Ethics Counselor will determine if a conflict of interest exists. If a conflict of interest exists, the Awarding Officer will determine whether a mitigation plan is feasible. Mitigation plans must be approved by the Awarding Officer in writing.
- 3) Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR § 200.338, Remedies/or Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

P. Reporting of Matters Related to Recipient Integrity and Performance (Note: Applicable only to grants where the LWCF share is \$500,000 or greater)

1) General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you, as the recipient, during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2) Proceedings You Must Report

Submit the information required about each proceeding that:

- a) Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- b) Reached its final disposition during the most recent five year period; and
- c) Is one of the following:
 - 1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - 2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - 3) An administrative proceeding, as defined in paragraph 5 of this award term and condition, that resulted in a finding of fault and liability and payment of either a monetary fine or penalty of \$5,000 or more; or reimbursement, restitution, or damages in excess of \$100,000; or
 - 4) Any other criminal, civil, or administrative proceeding if:
 - i. It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;
 - ii. It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - iii. The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3) Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4) Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

- a) Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- b) Conviction means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
- c) Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - 1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - 2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorizing the City Manager to Execute an Agreement with the Transportation Improvement Board to Obligate \$500,000 for the Complete Streets Work Program
DEPARTMENT:	Public Works
PRESENTED BY:	Nora Daley-Peng, Senior Transportation Planner
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

Staff is requesting that the City Council authorize the City Manager to execute an agreement with the Transportation Improvement Board (TIB) to obligate \$500,000 of TIB Complete Streets grant funds for Complete Streets Work Plan improvements along N 195th Street. In accordance with the City’s purchasing policies, Council authorization is required in order for staff to obligate grant funds exceeding \$500,000.

On October 3, 2016, the Council adopted Ordinance No. 755 to establish a codified Complete Streets Program and to become eligible to apply for the TIB Complete Streets Award Program. In January 2017, the City was awarded a \$250,000 TIB Complete Streets Grant to design and implement a sidewalk along N 195th Street from the Interurban Trail to Ashworth Avenue N. The construction of this critical pedestrian link was completed in November 2018 and a ribbon cutting celebration with the community was held on April 5, 2019.

On March 31, 2019, the TIB awarded the City a \$500,000 Complete Streets Grant to design and implement a shared-use path along N 195th Street from east of the intersection of N 195th Street and 5th Avenue NE to the WSDOT Limited Access line, which is east of 7th Avenue NE. This improvement project was chosen to close the last gap of missing pedestrian and bicycle facilities along N 195th Street from the Interurban Trail to the 195th Street Pedestrian Bridge and to support non-motorized access to the future Shoreline North/185th Station.

The Complete Streets Work Plan was developed to match the design and implementation cost of the \$500,000 TIB Complete Street Grant Award Work Plan (see Attachment A). The Grant Award Agreement (see Attachment B) provides the City up to three years of the grant award to implement the Work Plan and allows the City to request revisions to the Work Plan, including the addition or removal of items.

RESOURCE/FINANCIAL IMPACT:

This project will be programmed in the 2021-2027 CIP with completion by March 2022. No additional staff resources are required for this request.

RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute an agreement with the Transportation Improvement Board to obligate \$500,000 for the Complete Streets Work Program.

ATTACHMENTS

Attachment A: TIB Complete Streets Award Work Plan
Attachment B: TIB Complete Streets Award Grant Agreement

Approved By: City Manager ***DT*** City Attorney ***MK***



Transportation Improvement Board Complete Streets Work Plan



Complete Streets Award

Once approved, all work shown must be completed before agency is eligible for future nominations.

Agency Shoreline Total Work Plan Complete Streets Funding \$500,000
 Agency Contact Nora Daley-Peng Complete Streets Funding \$500,000
 Phone 206-801-2483 Email ndaleypeng@shorelinewa.gov

Proposed Work Item	Description	Complete Streets Funding	Estimated Completion Year
N 195th - Ped/Bike Gap Filler	The N 195th St. Corridor is part of Shoreline's Transportation Master Plan and the Interurban/Burke-Gilman Trail Connectors Route, which is a joint venture between Shoreline and Lake Forest Park to improve ped/bike connectivity between the Interurban and Burke-Gilman Trails. In addition, the N 195th St. Corridor connects to the existing 195th St. Non-Motorized Bridge which provides an important east/west crossing of I-5 for pedestrians and cyclists and a linkage to the future Shoreline North/185th Station, which is expected to open in 2024. Currently, the N 195th St. Corridor includes a shared-use path from 5th Ave. NE to 1st Ave. NE, a trail from 1st Ave. NE to Meridian Ave. N, and ped/bike facilities via recent Safe Routes to School project from Meridian Ave. N to Echo Lake Elementary School, and recently constructed ped/bike facilities from Ashworth Ave. N to the Interurban Trail via TIB Complete Street Grant funding. Through the TIB Complete Streets Grant, the City of Shoreline proposes to design and construct a shared-use path from 5th Ave. NE to the WSDOT Limited Access line east of 7th Ave. NE.	\$ 500,000	2022

Agency Certification

Certification is hereby given that the proposed work plan represents projects that support and reflect our commitment to the Complete Streets ordinance and ethic.

Nora Daley-Peng Signature of Authorized Agency Official
Nora Daley-Peng City Manager
 Date 2/19/19
 Agency Official Name & Title

TIB Approval

[Signature] Project Engineer Review Date 2/27/2019
[Signature] Engineering Manager Date 2/28/19
Ashley Pulvart Executive Director Date 3-5-19



City of Shoreline
C-P-202(002)-1
Complete Streets Award

STATE OF WASHINGTON
TRANSPORTATION IMPROVEMENT BOARD
AND
CITY OF SHORELINE
GRANT AGREEMENT

THIS GRANT AGREEMENT ("Agreement") is made and entered into between the WASHINGTON STATE TRANSPORTATION IMPROVEMENT BOARD ("TIB") and the CITY OF SHORELINE, a Washington state municipal corporation ("RECIPIENT").

WHEREAS, the TIB has developed a grant program, Complete Streets, to provide for the retrofit of streets and roads ("Project") for eligible cities, towns, and counties to provide access to all users, including bicyclists, pedestrians, motorists, and public transportation riders, and

WHEREAS, the above-identified RECIPIENT is eligible to receive a Project grant pursuant to ordinance 755 and that it has the legal authority to receive such grant and to perform the Project pursuant to the terms of this grant

NOW, THEREFORE, pursuant to chapter 47.26 RCW, RCW 47.04.320, and WAC 479-10-500 *et seq*, the above recitals that are incorporated herein as if fully set forth below, and in consideration of the terms, conditions, and performances contained herein, and the attached Exhibits, if any, which are made a part hereof,

IT IS MUTUALLY AGREED AS FOLLOWS:

1. GRANT

TIB agrees to grant funds in the amount of FIVE HUNDRED THOUSAND AND NO/100 dollars (\$500,000) for the Project pursuant to the terms contained herein, and the RECIPIENT agrees to accept such grant funds and agrees to perform and be subject to the terms and conditions of this Agreement.

2. PROJECT AND BUDGET

The Project shall provide for the retrofit of identified streets or roads on the RECIPIENT's approved work plan. In accordance with applicable laws and ordinances, the RECIPIENT agrees to enter into an agreement with an independent contractor and/or material providers, or otherwise provide for the Project work plan to be completed by the RECIPIENT's own forces. The RECIPIENT further agrees that it shall be solely responsible for and shall pay its independent contractor and/or material providers. If RECIPIENT uses its own forces, it shall be solely responsible for paying the costs thereof. Under no circumstances shall the TIB be responsible to any third party for the payment of labor or materials used in completing the Project work plan. The Project work plan may be amended by the Parties, pursuant to Section 7.

3. PROJECT WORK PLAN AND DOCUMENTATION



The RECIPIENT agrees to and shall make reasonable progress and submit timely Project documentation, as applicable, throughout the term of this Agreement and Project.

Required documents include, but are not limited to the following:

- a) Project work plan describing eligible items with estimated costs;
- b) Documentation to support all costs expended on the Project work plan; and
- b) Project work plan Closeout Form.

4. PAYMENT AND RETURN OF GRANT FUNDS

TIB will pay the full grant award to the RECIPIENT after TIB approves the Project work plan and the Parties fully execute this Agreement; provided that there are legislatively appropriated funds available. The RECIPIENT agrees that it shall hold the grant funds in a separate and identifiable account and only use said funds to pay the actual direct and related indirect costs of the approved Project work plan. Grant funds not expended on approved Project work plan items within three years of the date of TIB's Grant approval shall be returned to TIB within ninety (90) days after receipt of TIB's written notification.

5. USE OF COMPLETE STREETS GRANT FUNDS

RECIPIENT agrees that the grant funds shall only be used to complete the approved Project work plan. Otherwise, RECIPIENT is subject to the Default and Termination provisions of Section 9.

6. RECORDS MAINTENANCE

6.1 The RECIPIENT shall maintain books, records, documents, data and other evidence relating to this Agreement and performance of the Project work plan, including but not limited to accounting procedures and practices which sufficiently and properly reflect all actual direct and related indirect costs of any nature expended in the performance of this Agreement. RECIPIENT shall retain such records for a period of six years after the completion of the Project work plan and TIB's acceptance of the Project work plan Closeout Form. At no cost to TIB, these records shall be provided when requested; including materials generated under the Agreement, and shall be subject at all reasonable times to inspection, review or audit by TIB personnel, the Office of the State Auditor, and federal and state officials so authorized by law, regulation or agreement.

6.2 If any litigation, claim or audit is started before the expiration of the six (6) year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved.

7. REVISIONS TO THE PROJECT WORK PLAN

RECIPIENT may request revisions to the Project work plan, including the addition or removal of items. Requests must be made in writing, and TIB, in its sole discretion, will determine whether to accept the proposed revisions. Should the TIB approve a Project work plan revision, the Parties shall amend this Agreement pursuant to Section 14. The RECIPIENT shall be solely responsible for all costs incurred in excess of the Agreement grant award.



8. TERM OF AGREEMENT

This Agreement shall be effective upon execution by the Parties and shall continue through closeout of the grant amount, or amendment thereof, or unless terminated as provided herein. In no event shall the Agreement term exceed three years, unless extended by Agreement amendment pursuant to Section 14.

9. NON-COMPLIANCE, DEFAULT AND TERMINATION

9.1 NON-COMPLIANCE

- a) In the event TIB determines, in its sole discretion, the RECIPIENT has failed to comply with the terms and conditions of this Agreement and applicable rules under WAC 479-10-500 *et seq*, TIB shall notify the RECIPIENT, in writing, of RECIPIENT's non-compliance.
- b) RECIPIENT shall provide a written response within ten (10) business days of receipt of TIB's notice of non-compliance, which shall include either a detailed plan to correct the non-compliance, a request to amend the Project work plan, or a denial accompanied by supporting documentation. An agreement to amend the Project work plan must be pursuant to Section 14.
- c) RECIPIENT shall have thirty (30) days in which to make reasonable progress toward compliance pursuant to its Project work plan to correct or implement an amendment to the Project work plan.
- d) Should RECIPIENT dispute non-compliance, TIB will investigate the dispute and, in its sole discretion, TIB may require the RECIPIENT to stop incurring additional Project work plan costs during the investigation. Should TIB require the RECIPIENT to stop incurring additional costs to be paid with the grant funds, the RECIPIENT shall be solely obligated for paying any additional costs incurred by such suspension of work, contractor claims, or litigation costs; such costs cannot be paid for with grant funds.

9.2 DEFAULT

RECIPIENT is in default if TIB determines, in its sole discretion, that:

- a) RECIPIENT is not making reasonable progress toward correction and compliance with this Agreement and the Project work plan;
- b) TIB denies the RECIPIENT's request to amend the Project work plan; and
- c) After investigation, TIB confirms RECIPIENT'S non-compliance.

9.3 TERMINATION

- a) In the event of default as determined pursuant to Section 9, TIB shall serve RECIPIENT with a written notice of termination of this Agreement, which may be served in person, by email or by certified letter. Upon service of notice of termination, the RECIPIENT shall immediately stop incurring costs chargeable against the grant funds and/or take such actions necessary as may be directed by TIB to protect TIB's grant funds.
- b) In the event of termination, the RECIPIENT may be liable for damages as authorized by law including, but not limited to, repayment of all grant funds.



- c) The rights and remedies of TIB provided in this Agreement are not exclusive and are in addition to any other rights and remedies provided by law.

10. DISPUTE RESOLUTION

- a) The Parties shall make good faith efforts to quickly and collaboratively resolve any dispute arising under or in connection with this Agreement. The dispute resolution process outlined in this Section applies to disputes arising under or in connection with the terms of this Agreement.
- b) Informal Resolution. The Parties shall use their best efforts to resolve disputes promptly and at the lowest organizational level.
- c) In the event that the Parties are unable to resolve the dispute, the Parties shall submit the matter to non-binding mediation facilitated by a mutually agreed upon mediator. The Parties shall share equally in the costs of the mediator.
- d) Each Party agrees to participate to the fullest extent possible and in good faith in resolving the dispute in order to avoid delays or additional incurred cost to the Project work plan.
- e) The Parties agree that they shall have no right to seek relief in a court of law in accordance with Section 11, until and unless the Dispute Resolution process has been exhausted.

11. GOVERNANCE, VENUE, AND ATTORNEYS FEES

This Agreement shall be construed and interpreted in accordance with the laws of the state of Washington and venue of any action brought hereunder shall be in the Superior Court for Thurston County. The Parties agree that each Party shall be responsible for its own attorneys' fees and costs.

12. INDEMNIFICATION, HOLD HARMLESS, AND WAIVER

12.1 RECIPIENT, shall protect, defend, indemnify, and save harmless the TIB, its officers, officials, employees, and authorized agents, while acting within the scope of their employment as such, from any and all costs, claims, judgments, and/or awards of damages (both to persons and/or property), arising out of, or in any way resulting from, RECIPIENT'S negligent acts or omissions which may arise in connection with its performance under this Agreement. RECIPIENT shall not be required to indemnify, defend, or save harmless the TIB if the claim, suit, or action for injuries, death, or damages (both to persons and/or property) is caused by the sole negligence of TIB; provided that, where such claims, suits, or actions result from the concurrent negligence of the Parties, or involves those actions covered by RCW 4.24.115, the indemnity provisions provided herein shall be valid and enforceable only to the extent of RECIPIENT's own negligence

12.2 RECIPIENT agrees that its obligations under this section extends to any claim, demand and/or cause of action brought by, or on behalf of, any of its officers, officials, employees or authorized agents. For this purpose, RECIPIENT, by mutual negotiation, hereby waives, with respect to TIB only, any immunity that would otherwise be available to it against such claims under the Industrial Insurance provisions of Title 51 RCW.



12.3 The obligations of this indemnification and waiver Section shall survive termination of this Agreement.

13. ASSIGNMENT

The RECIPIENT shall not assign or transfer its rights, benefits, or obligations under this Agreement without the prior written consent of TIB. The RECIPIENT is deemed to consent to assignment of this Agreement by TIB to a successor entity. Such consent shall not constitute a waiver of the RECIPIENT's other rights or obligations under this Agreement.

14. AMENDMENTS

This Agreement may be amended by mutual agreement of the Parties. Such amendments shall not be binding unless they are in writing and signed by persons authorized to bind each of the Parties.

15. INDEPENDENT CAPACITY

The RECIPIENT shall be deemed an independent contractor for all purposes and the employees of the RECIPIENT or any of its contractors, subcontractors, and employees thereof shall not in any manner be deemed employees of TIB.

16. ENTIRE AGREEMENT

This Agreement, together with the Exhibits, if any, the provisions of chapter 47.26 RCW, chapter 479 WAC, and TIB Policies, constitute the entire Agreement between the Parties and supersedes all previous written or oral agreements between the Parties. RECIPIENT agrees to abide by all applicable federal, state and local laws, ordinances, and rules when performing under the terms of this Agreement.

RECIPIENT

Transportation Improvement Board

Chief Executive Officer Date

Date

Print Name

Print Name

Approved as to Form

By: _____

ANN E. SALAY
Senior Assistant Attorney General

NOTE: Any changes to the terms of this Agreement shall require further approval of the Office of the Attorney General

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Adoption of Resolution No. 434 - Adopting the 2020-2025 Transportation Improvement Plan
DEPARTMENT:	Public Works
PRESENTED BY:	Nytasha Sowers, Transportation Services Manager
ACTION:	<input type="checkbox"/> Ordinance <input checked="" type="checkbox"/> Resolution <input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing <input type="checkbox"/> Discussion

PROBLEM/ISSUE STATEMENT:

In accordance with state law, the City is required to prepare a six-year Transportation Improvement Plan (TIP). The TIP should include transportation projects, such as road and bridge work, as well as new or enhanced bicycle or pedestrian facilities. In addition to local projects, the TIP should also identify projects and programs of regional significance for inclusion in the regional TIP. The City's TIP is used to secure federal funding for transportation projects as part of the Statewide TIP.

The draft 2020-2025 TIP was presented to the City Council on April 1, 2019 for discussion. The staff presentation was immediately followed by a public hearing on the plan, as required by RCW 35.77.010. Two people spoke at the Public Hearing, and staff referenced a comment received via mail. After the hearing, Council asked several questions regarding listed projects and possible new projects to consider which are addressed in this staff report. As a result of the Council discussion, there were no substantial modifications to the TIP presented in the draft 2020-2025 TIP on April 1, 2019. Tonight, Council may choose to adopt the 2020-2025 TIP as is or amend this document by motion prior to adoption of proposed Resolution No. 434.

RESOURCE/FINANCIAL IMPACT:

There is no financial impact associated with adoption of the TIP. The projects identified in the City's TIP are a combination of funded projects in the CIP, including projects that are partially funded or underfunded, as well as currently unfunded projects the City would like to undertake should funding become available. Listing projects in the TIP makes them grant eligible, as most grant programs will not fund projects not included in a jurisdiction's TIP. The vast majority of projects included in the TIP are unfunded or partially funded. All funded programs are considered underfunded as additional work could be completed through these programs with supplemental funding.

RECOMMENDATION

Staff recommends that Council adopt Resolution No. 434, which would adopt the 2020-2025 Transportation Improvement Plan as stipulated.

Approved By: City Manager *DT* City Attorney *MK*

BACKGROUND

In accordance with RCW 35.77.010, cities in Washington State are required to prepare and adopt a comprehensive six-year transportation improvement plan (TIP). A city's TIP must be consistent with its comprehensive plan transportation element. RCW 35.77.010 requires that the City hold at least one public hearing on the TIP and to submit the adopted TIP to the Washington State Secretary of Transportation. The Department of Transportation has historically accepted submittal of TIPs through the month of July.

The TIP identifies projects to meet local transportation needs, as well as projects of regional significance, such as the 145th Street corridor improvements. It also includes several on-going programs, including the Sidewalk Rehabilitation Program (formerly referred to as the Curb Ramp, Gutter and Sidewalk Program) and the Traffic Safety Improvements Program as well as the new Sidewalk Program – New Construction. The Sidewalk Program resulted from a voter approved Sales & Use Tax in November 2018. The City will secure bonds to begin design and construction. Although all 12 projects specifically listed on the ballot measure are considered fully funded and should be completed in 8-10 years, this program is considered underfunded and ongoing as additional new sidewalk identified in the 2018 Sidewalk Prioritization Plan could be constructed as additional funding becomes available.

The TIP identifies projects for all modes of transportation, including bicycles, pedestrians, vehicles and transit. The City's TIP is used to secure state and federal funding for transportation projects as part of the Statewide Transportation Improvement Plan.

Projects in the TIP can be funded and unfunded and the draft 2020 to 2025 TIP includes the transportation projects identified in the preliminary 2019-2025 Capital Improvement Plan (CIP). Including projects in the TIP improves the City's eligibility to secure grant funding. The TIP is prepared and presented to Council in advance of the CIP. The policy direction provided through adoption of the TIP is used to identify transportation projects for inclusion in the CIP. The City Council will review and discuss CIP updates of the City's proposed six-year CIP as part of the 2019-2021 mid-bi update later this year.

The current draft 2020-2025 TIP utilizes last year's TIP as its foundation. Projects and programs included in the TIP include high priority projects identified in the 2011 Transportation Master Plan (TMP) for safety and operations, as well as bicycle and pedestrian projects.

DISCUSSION

The draft 2020-2025 TIP was presented to Council on April 1, 2019. The staff report for this Council discussion can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2019/staffreport040119-8a.pdf>.

The staff presentation was immediately followed by a public hearing on the plan, as required by RCW 35.77.010. After the hearing, Council asked several questions about projects which are addressed in this staff report.

The Public Hearing comments and comment received by mail were in regard to two different projects. One comment regarded opposition to the 148th Street Non-Motorized Bridge with concerns of a substantial financial burden on taxpayers for a bridge that is replicated three blocks away at 145th Street and would likely only benefit the neighborhood on the westside of I-5. Others comment were about Meridian Avenue and moving forward with projects in the TIP that significantly affect residents without more discussion with those affected residents. The speaker's concerns included the potential loss of parking along Meridian Avenue with the addition of bike lanes. The speaker stated that traffic is already terrible at times on this busy stretch of roadway that is often used as an alternate route when Aurora or Interstate-5 are backed up.

Council asked staff to address the 148th Bridge concern, and staff stated that a feasibility analysis for Interstate-5 crossings had been completed about two years ago. This analysis found a significant increase in walkshed for station access with the addition of the 148th Bridge. Two Councilmembers shared their support of the 148th Bridge stating that it will open up a larger section of Shoreline population able to access the station, and Council as a whole did not advise staff to take a different direction at this time.

Council did share some concerns about Meridian Avenue, realizing that there can be high traffic volumes on that roadway that include commuters from Snohomish County. A Councilmember noted that when evaluating a roadway, parking preservation should be reviewed, and lane widths and bike lanes should be properly analyzed. It was mentioned that a dual left-turn lane (3rd lane) would help ease back-ups from turning traffic and make it easier for residents to enter Meridian Avenue.

An overview of the Council questions on the draft 2020 -2025 TIP and staff responses are as follows:

- **Project 37: 195th Pedestrian and Bike Connector**

Council noted that this was a continuation of the improvements that were implemented from 1st to 5th Avenue along 195th Street. Council questioned if staff would need to communicate with WSDOT and Sound Transit. Staff indicated that they would be coordinating with WSDOT on the west side of Interstate-5. On the eastside, there will be some Sound Transit reconfigurations, but Sound Transit will not be affecting the 195th pedestrian/bike bridge. Staff will work in conjunction with Sound Transit in connections to the Trail Along the Rail project. Staff indicated that the 195th Pedestrian and Bike Connector project recently received verification of Transportation Improvement Board (TIB) Complete Streets funding after this draft TIP was compiled and that this project would be moved under Funded Projects in the final 2020-2025 TIP.

In addition to the TIP project discussed above, comments regarding two transportation related issues were also provided:

- **145th Corridor Bicycle Connection Between the Interurban Trail and Burke Gilman Trail**

One Councilmember wondered if the scope of a current project could be expanded in order to study the potential to make sure a connection between the Interurban Trail and Burke Gilman Trail is identified (with bicycle facilities either directly on the 145th Corridor and/or in adjacent neighborhoods) so that this bicycle connection is not lost to future opportunities. Staff responded that this type of access is included with and being looked at as part of the broader 145th Corridor improvements. Staff will review the scope of the 145th projects and monitor progress to see if anything should be identified for future TIP inclusion.

- **New Safe Routes to School (SRTS) Project**

One Councilmember asked that a sidewalk project near the Cascade School (K-8) and Aldercrest Annex, specifically on NE 200th Street in the vicinity of these facilities, be added as a new/separate “unfunded” project in the 2020-2025 TIP. Staff have verified that sidewalks on NE 200th Street (from approximately 23rd Avenue NE to 30th Avenue NE) are included in the Council adopted 2018 Sidewalk Prioritization Plan. The Sidewalk Program (the second program listed in the 2020-2025 TIP list of programs and projects) encompasses new sidewalk projects included in the 2018 Sidewalk Prioritization Plan. The 2018 Sidewalk Prioritization Plan shows that NE 200th Street (adjacent to Cascade School on the south side) is ranked as a medium priority project. In the vicinity, 25th Avenue NE (west of Cascade School) is listed as a high priority project (one of several projects scoring a 12), although many streets ranked higher in priority (many projects scored 13 or higher).

The 2018 Sidewalk Prioritization Plan and its prioritized list of projects is to be used as a tool. Council has the ability to direct funding to sidewalk projects as it deems appropriate. As a reminder, there may be funding available for additional new sidewalk projects once the 12 identified projects from the 2018 ballot measure supporting new sidewalk projects are completed.

Staff continue to evaluate projects that may be competitive for Safe Routes to School funding, including the previously mentioned streets. Cascade is a K-8 choice school which means families apply for entrance to the school and do not necessarily live near the school (as might be expected for other elementary schools). The City does not have a walk route posted online for Cascade as it does for other schools. This is not to say that children and/or families do not walk or bike to this school, but it is likely a lesser amount than other schools which could put this project at a competitive disadvantage. It is still eligible, and staff could keep this project as part of the Sidewalk Program (Program 2 in the 2020-2025 TIP for new sidewalks) and add it to the list of potential SRTS projects for further consideration and discussion with WSDOT for the spring 2020 application cycle.

Since Council had no further discussion on this issue on April 1 and no specific direction was given, staff has left the TIP as presented on April 1 in regard to this issue. If the Council wishes to add NE 200th Street as a separate unfunded project to the 2020-2025 TIP, a motion at tonight's Council meeting to add this project would be the appropriate method.

As a result of the Council discussion, staff has made no project additions, deletions, or critical edits to the draft 2020-2025 TIP. With the recent verification of funding for the 195th Pedestrian/Bike project (formerly Project 37), the 2020-2025 TIP presented at the April 1, 2019 Council meeting has been amended to move that project to the end of the Funded section as Project 21. The prior Project 21 (N 160th from Aurora to Dayton) has been moved to the end of the unfunded projects as Project 37, and both have been renumbered on their respective project sheets and the corresponding map. Tonight, Council may choose to further amend the 2020-2025 TIP by motion or adopt the 2020-2025 TIP by proposed Resolution No. 434 (Attachment A) as stipulated.

COUNCIL GOAL(S) ADDRESSED

Overall, the TIP addresses Council Goal 2 to improve Shoreline's infrastructure. By identifying and developing a plan for multi-modal transportation improvements, the City is working to preserve and enhance the infrastructure. Some projects also help support Council Goal 1 to strengthen economic climate and opportunities. Indirectly, infrastructure enhancements draw developers and provide residents with access to more housing and employment connections. Several of the projects directly support Council Goal 3 to continue preparation for regional mass transit in Shoreline. Several projects are for multi-modal access improvements in the station areas. Finally, programs like the Traffic Safety Improvements and several projects also address Council Goal 5 by helping to maintain a safe community.

RESOURCE/FINANCIAL IMPACT

There is no financial impact associated with adoption of the TIP. The projects identified in the City's TIP are a combination of funded projects in the CIP, including projects that are partially funded or underfunded, as well as currently unfunded projects the City would like to undertake should funding become available. Listing projects in the TIP makes them grant eligible, as most grant programs will not fund projects not included in a jurisdiction's TIP. The vast majority of projects included in the TIP are unfunded or partially funded. All of the funded programs are identified as underfunded, as additional work could be completed through these programs with supplemental funding.

RECOMMENDATION

Staff requests Council to adopt Resolution No. 434, which would adopt the 2020-2025 Transportation Improvement Plan as stipulated.

ATTACHMENTS

Attachment A: Proposed Resolution No. 434, including Exhibit A: 2020-2025 Transportation Improvement Plan

Attachment A

RESOLUTION NO. 434

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHORELINE, WASHINGTON, ADOPTING A SIX-YEAR (2020-2025) TRANSPORTATION IMPROVEMENT PLAN AND DIRECTING THE SAME TO BE FILED WITH THE WASHINGTON STATE SECRETARY OF TRANSPORTATION AND TRANSPORTATION IMPROVEMENT BOARD.

WHEREAS, the City Council of the City of Shoreline has previously adopted a Comprehensive Plan as required by the Growth Management Act, chapter 36.70A RCW, which includes a Transportation Element that serves as the basis for the six-year comprehensive transportation program required by RCW 35.77.010; and

WHEREAS, the City Council of the City of Shoreline has reviewed the work accomplished under the 2019-2024 program adopted by Resolution No. 429, determined current and future City Street needs, and based upon these findings a revised and extended Six-Year Transportation Improvement Plan for the ensuing six (6) calendar years (2020-2025) has been prepared as part of the Capital Improvement Plan Update; and

WHEREAS, on April 1, 2019, the City Council conducted a properly noticed public hearing to receive public comment on the Six-Year Transportation Improvement Plan;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SHORELINE, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

Section 1. Plan Adopted. The Six-Year Transportation Improvement Plan for the City of Shoreline for the ensuing six (6) calendar years (2020-2025 inclusive) attached hereto as Exhibit A and incorporated herein by this reference, which Plan sets forth the project location, type of improvement and estimated cost thereof, is hereby adopted.

Section 2. Filing of Transportation Improvement Plan. Pursuant to RCW 35.77.010, the City Clerk is hereby authorized and directed to file a copy of this resolution, together with the Exhibit attached hereto, with the Secretary of Transportation and a copy with the Transportation Improvement Board for the State of Washington no later than thirty (30) days after the adoption of this Resolution.

ADOPTED BY THE CITY COUNCIL ON MAY 6, 2019.

Mayor Will Hall

ATTEST:

Jessica Simulcik Smith
City Clerk

Exhibit A

City of Shoreline 2020-2025 Transportation Improvement Plan

1. What is the Six-Year Transportation Improvement Plan (TIP)?

The City of Shoreline Six-Year Transportation Improvement Plan (TIP) is a short-range planning document that is updated annually based upon needs and policies identified in the City's Comprehensive Plan and Transportation Master Plan. It identifies Shoreline's current needed transportation projects and programs for the next six years. Some projects identified in the TIP are significant enough in nature that they will take longer than six years to complete.

2. What is included in the TIP?

A project sheet for each project or program in the TIP has been developed and includes the following:

- **Scope/Narrative:** A description of the project or program including the specific work to be performed, project elements, project/program purpose and/or interagency coordination efforts.
- **Funding:** Identifies whether a project is funded, partially funded or unfunded and known funding sources.
- **Funding Outlook:** A description of the current funding projection for the project, including possible funding sources (when applicable).
- **Project Status:** Identifies Council goals achieved by each project, the stage of a project (such as design, environmental review or construction), previous years' work and expenditures and/or potential revenue sources for projects.
- **Purpose/Goals Achieved:** Identifies which of several purposes the project satisfies and/or general goals the project achieves including Non-motorized Transportation; System Preservation; Growth Management; Improves Efficiency and Operations; Safety; Major Structures; Corridor Study; and/or Interjurisdictional Coordination.

Projects in the TIP are sorted into three categories: Funded Programs, Funded (Fully or Partially), Unfunded Projects. Projects and programs that are underfunded or partially funded are included in the funded categories. Generally, funded projects are those included in the City's 2020-2025 Capital Improvement Plan. All of the funded programs are identified as underfunded, as additional work could be completed through these programs with supplemental funding.

3. Project Costs and Funding

Each project listed in the TIP includes an estimated cost, the amount of funding secured or unsecured and the funding source(s) for the six year period covered by the TIP. Existing and new project and program costs need to cover all phases of a project (described below), including the staff time necessary to administer them. If grant

funding has been secured from a specific source, it is identified. The Funding Outlook section of each project sheet identifies the total project cost and any previous expenditures. Potential grant funding sources are also identified in this section. Projects listed that are necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees. The costs for projects programmed for the first three years of the TIP have been developed with a higher level of detail whereas those in the latter years have been developed with less specificity, as the projects are generally less defined. Unless otherwise noted, project costs do not include the costs for placing overhead utilities underground.

4. Developing the TIP

The annual TIP update starts with the previously adopted TIP. Projects in the previously adopted TIP are reviewed and projects that have been completed, or because of changing conditions, are no longer needed are removed from the TIP. Existing projects may also be updated based upon completed studies, refined project scopes or revised cost estimates. The remaining projects carried over from the previous TIP are reviewed for changes to cost estimates, project funding, schedule, or scope during the update process to ensure that the best information is represented in the TIP.

New projects are generated from many sources, including the City's adopted Transportation Master Plan (TMP), Comprehensive Plan, Council priorities, identification of new issues or deficiencies, response to growth, accident locations or the potential to secure grant funding. The City may use tools such as pavement management rating, analysis of accident data and transportation modeling to help identify potential new projects. Potential new projects undergo a review of scope, priority, schedule and cost analysis.

Updated projects from the previous TIP and new projects are then used to create a draft TIP project list. The phasing and funding of these projects in the draft TIP is based on an evaluation of project priority compared with priorities laid out in the TMP and Comprehensive Plan, commitments to projects and programs that are already underway, secured grants, partnerships the City has entered into with other jurisdictions and agencies and new opportunities that arise to leverage local transportation funding in combination with other funding sources.

Once the draft TIP has been developed, a public hearing is held to provide an opportunity for the community comment. Based on the results of the public hearing and comments from the Shoreline City Council a final version of the TIP is developed. This final version is then adopted by the City Council.

5. Funding Challenges and New Funding Sources in 2019

As is the case for most jurisdictions, the need for transportation improvements in Shoreline greatly outweighs the City's ability to fund them in both the short and long term. In addition to major capital projects such as intersection or corridor improvements, there is an on-going need to maintain the existing system. This includes

repair, maintenance and preservation work, such as Bituminous Surface Treatment (BST) or overlays, upgrades and repairs to traffic signals, installation of new street lights and curb ramp upgrades. It is difficult to estimate the annual backlog or degree to which the City's transportation program is underfunded, as new projects are identified annually and maintenance is a continuous necessity. The unfunded projects and programs included in this six year TIP (not including the unfunded portions of partially funded projects) total over \$50 million.

The City of Shoreline funds transportation capital projects from the General Fund, Real Estate Excise Tax (REET), Transportation Benefit District (TBD), and grant revenue from local, state and federal governments. Because some of these revenue sources are so closely tied to the health of the economy they can be somewhat unpredictable, making it challenging for the City to plan for transportation improvements with assurance that funding will be available.

Historically the largest sources of funding for Shoreline's transportation programs and projects have been grants. Funding for transportation projects is available from federal, state and local resources. Each funding source has specific rules and guidelines about what types of projects they will fund, how much of a project will be funded and timelines for expenditure of funds.

Most grant programs require a funding match, which means that the City must also contribute funding to the cost of a project. The granting agency may also have restrictions about the source of the funding match. For example, a state funded grant might be restricted from having another state funded grant serve as the match. Funding programs for bicycle and pedestrian transportation projects are very limited, especially in comparison to funding for highway and roadway projects. Quite often, granting agencies prefer to fund construction of projects rather than planning, design or environmental work. Having projects fully designed and "shovel ready" improves their ability to compete for funding. The competitive nature of grant funding and the specific requirements associated with available grants narrow the opportunities for many of the City's high priority projects to obtain outside funding.

Two additional funding sources were approved in 2018 to add to the City's Transportation Benefit District (see link for a description to the purpose of a Transportation Benefit District) and support the repair and/or construction of priority sidewalks: a \$20 increase in Vehicle License Fees (VLF) adopted by City Council for sidewalk rehabilitation and a Sales & Use Tax approved by voters on the November 2018 ballot for new sidewalk construction. These two additional funding sources have resulted in a change to a prior program and the addition of a new program in the TIP. Program 1 Curb Ramp, Gutter and Sidewalk Program is being renamed the Sidewalk Rehabilitation Program and includes a discussion of VLF funding and projects it will support under this program. A new Program 2 is listed in this 2020-2025 TIP identified as the Sidewalk Program – New Construction. A minimum of 12 sidewalk projects will be funded under this new program with all projects currently anticipated to be completed within eight to ten years.

6. Lifecycle of a Project

Depending upon the size and/or degree of complexity associated with a project, it can take several years to complete. For example, the three-mile Aurora Corridor Improvement Project which was substantially completed in 2016, began the initial planning work in 1997. Large projects may be divided into several smaller projects in order to manage the project more effectively, comply with grant funding requirements or minimize inconvenience to the community during construction. Throughout all phases of a project, the City is committed to maintaining open communications with the community. The process to develop projects generally includes the following steps.

Planning and Alternatives Development – During this phase, conceptual ideas for a project are identified, evaluated, and narrowed, sometimes to a single option. Citizens, community organizations, neighboring jurisdictions and other stakeholders help shape the project. Public meetings provide updates to the community and help the City gather feedback.

Preliminary Design and Environmental Review – This phase identifies potential environmental impacts of the project alternative(s). The level of review and documentation depends on the scope of the project and its potential for environmental impacts. An Environmental Impact Statement (EIS) is prepared for large projects with potentially significant impacts. Development of a State Environmental Policy Act (SEPA) checklist may be prepared for projects not requiring an EIS. A similar review under the National Environmental Policy Act (NEPA) is required for projects that receive federal funding. The project's design moves from conceptual to preliminary as initial engineering begins.

During this phase:

- If required, a SEPA checklist or Draft EIS is published followed by a public comment period. Responses to those comments are found in the Final EIS.
- Preliminary design is completed.
- The City selects the project that will eventually be built.

Final Design and Property Acquisition – In this phase, architects and engineers define what the project will look like as well as the technical specifications for the project. Field work is performed including testing soil conditions and ground water levels, surveying, and locating utilities. Additionally, the City acquires any necessary private property and easements. This phase is often referred to as "Projects, Specifications and Estimate (PS and E)".

Construction – Construction time varies widely from project to project. The City balances the need to complete the project on time and on budget while minimizing construction impacts to the community. Unforeseen site conditions, weather, design corrections and the complexity of a project are some of the factors that can influence the schedule. Construction schedules can also be affected by environmental restrictions, such as permissible timeframes to work in fish bearing waters.

7. Relationship of the TIP to other Transportation Documents

A. Six-Year Capital Improvement Plan

Once adopted, the TIP helps to guide funding and implementation priorities during the development of the transportation portion of the Capital Improvement Plan (CIP). The CIP is a six-year financial plan addressing capital needs and is updated along with the development of the City's operating budget. The CIP shows the City-funded portion of projects and is constrained by current budget forecasts, whereas the TIP shows the complete project list, including unfunded projects and programs. The first two years of the CIP are adopted as part of the biennial budget, with any updates adopted annually.

B. Transportation Master Plan

The City of Shoreline's Transportation Master Plan (TMP) is the long-range blueprint for travel and mobility, describing a vision for transportation that supports the City's adopted Comprehensive Plan. The TMP provides guidance for public and private sector decisions on local and regional transportation investments, including short-, mid-, and long-range transportation and related land-use activities. In this way, the City can assess the relative importance of projects and schedule their planning, engineering and construction as growth takes place and the need for the facilities and improvements is warranted. It also establishes a prioritization of the projects to be included in future capital improvement plans. The TMP covers all forms of personal travel – walking, bicycling, transit and automobile.

C. State and Federal Requirements

State law requires that each city develop a local TIP and that it be annually updated (RCW 35.77.010). It also requires that projects be included in the TIP in order for cities to compete for transportation funding grants from most federal and state sources. Federal grant funded and regionally significant projects from the first three years of the City's TIP are included in the Regional TIP, which is assembled by the Puget Sound Regional Council for King, Kitsap, Pierce, and Snohomish Counties. The Regional TIPs from around the State are then combined to form the State TIP, which is approved by the Governor and then submitted to the Federal Highway Administration and Federal Transit Authority for their review and approval.

Contact Information

For additional information, contact Nytasha Walters, Transportation Services Manager, 206.801.2481, nwalters@shorelinewa.gov.

The following is a list of projects included in the TIP. A description of each project can be found in the following pages.

FUNDED PROGRAMS (FULLY OR UNDERFUNDED)

1. Sidewalk Rehabilitation Program – Repair & Maintenance (*underfunded*)
2. Sidewalk Program – New Construction (*underfunded*)
3. Traffic Safety Improvements (*underfunded*)
4. Annual Road Surface Maintenance Program (*underfunded*)
5. Traffic Signal and Intelligent Transportation System (ITS) Improvements (*underfunded*)

FUNDED PROJECTS (FULLY OR PARTIALLY)

6. 145th Street (SR 523) Corridor Improvements, Aurora Ave N to I-5 (*partially*)
7. SR 523 (N/NE 145th Street) & I-5 Interchange Improvements (*partially*)
8. 148th Street Non-Motorized Bridge (*partially*)
9. Trail Along the Rail (*partially*)
10. Westminster and N 155th Improvements
11. N/NE 175th Street Corridor Improvements (*partially*)
12. N/NE 185th Street Corridor Improvements (*partially*)
13. Greenwood Ave N / Innis Arden / N 160th Street Intersection Improvements
14. Light Rail Access Improvements: 1st Ave NE, 149th to 155th (*partially*)
15. Light Rail Access Improvements: 5th Ave NE, 180th to 182nd
16. Light Rail Access Improvements: 5th Ave NE, 175th to 180th (*partially*)
17. Light Rail Access Improvements: 1st Ave NE, 145th to 149th
18. Meridian Avenue N – N 145th Street to N 205th Street
19. Ridgecrest Safe Routes to School
20. Citywide Spot Safety Improvements
21. 195th Pedestrian and Bike Connector

UNFUNDED PROJECTS

22. 15th Avenue NE – NE 175th Street to NE 205th Street
23. NE Perkins Way Improvements – 10th Ave NE to 15th Ave NE
24. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety
25. Ballinger Way - NE 205th St to 19th Ave NE Access Control Preliminary Design
26. N 185th Street and Linden Avenue N Intersection Improvements
27. Fremont Avenue N - N 175th Street to N 185th Street
28. Westminster Way (South) - N 155th St to Fremont Ave NB Frontage Improvements
29. NE 168th Street and 25th Ave NE Intersection Improvements
30. 145th Street (Interurban Trail to 3rd Ave NW)
31. Interurban Trail Crossing at SR-104
32. Light Rail Access Improvement – 10th Ave NE (180th to 185th)
33. Light Rail Access Improvement – 5th Ave NE, NE 185th to 190th
34. Light Rail Access Improvement – 5th Ave NE, NE 190th to NE 195th
35. Light Rail Access Improvement – 1st Ave NE, N 190th to NE 195th Street
36. 3rd Ave NE Woonerf
37. N 160th from Aurora to Dayton

PROJECT SCHEDULED FOR SUBSTANTIAL COMPLETION IN 2019

1. NE 175th Street Pavement Preservation
2. Meridian Ave N & N 155th Street Signal Improvements
3. 2019 Bituminous Surface Treatment (BST)

PROJECTS SCHEDULED FOR SUBSTANTIAL COMPLETION IN 2018

PROJECT NAME	PROJECT DESCRIPTION	COST	FUNDING SOURCES
NE 175th Street Pavement Preservation	Overlay NE 175th from Interstate 5 to 15th Avenue NE. Includes construction of a RT lane from EB 175th to SB 15th Ave NE. Does NOT include paving or other work within WSDOT/I-5 ROW.	\$1,500,000 to \$1,700,000	COS Roads Capital Fund (ARSM Program) - 100%
Meridian Ave N & N 155th Street Signal Improvements	Construct new traffic signal system, reconstruct curb ramps, portions of sidewalk, and overlay the intersection and intersecting streets to limits consistent with excavation for signal system.	\$1,100,000	Roads Capital Fund: \$579,382 Highway Safety Improvement Program (HSIP): \$303,980 Annual Road Surface Maintenance Program: \$116,690 Traffic Signal Rehabilitation: \$50,000
2019 Bituminous Surface Treatment (BST)	Apply BST (chip seal) to various streets in NW Shoreline.	\$ 600,000	COS Roads Capital Fund (ARSM Program) - 100% (cost includes staff)

Project	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
FUNDED PROGRAMS (FULLY OR PARTIALLY)							
1. Sidewalk Rehabilitation Program	\$ 1,000,000	\$ 900,000	\$ 900,000	\$ 830,000	\$ 830,000	\$ 830,000	\$ 5,290,000
2. Sidewalk Program - New Construction	\$ 650,000	\$ 1,100,000	\$ 1,100,000	\$ 650,000	\$ 1,100,000	\$ 1,100,000	\$ 5,700,000
3. Traffic Safety Improvements	\$ 167,000	\$ 175,400	\$ 184,100	\$ 193,300	\$ 199,100	\$ 208,500	\$ 1,127,400
4. Annual Road Surface Maintenance Program	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 7,200,000
5. Traffic Signal and Intelligent Transportation System (ITS) Improvements	\$ 134,000	\$ 140,700	\$ 147,800	\$ 152,200	\$ 156,700	\$ 163,400	\$ 894,800
							\$ 20,212,200
FUNDED PROJECTS (FULLY OR PARTIALLY)							
6. 145th Street (SR 523) Corridor Improvements, Aurora Ave N to I-5	\$ 9,330,000	\$ 3,330,000	\$ 4,573,000	\$ 10,400,000	\$ 5,900,000	\$ 10,200,000	\$ 43,733,000
7. SR 523 (N/NE 145th Street) & I-5 Interchange Improvements	\$ 3,000,000	\$ 2,000,000	\$ 9,600,000	\$ 8,000,000	\$ -	\$ -	\$ 22,600,000
8. 148th Street Non-Motorized Bridge	\$ 3,700,000	\$ 1,300,000	\$ 5,500,000	\$ 5,500,000	\$ -	\$ -	\$ 16,000,000
9. Trail Along the Rail	\$ 200,000	\$ 500,000	\$ 2,300,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 9,000,000
10. Westminster and N 155th St Improvements	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000,000
11. N/NE 175th Street Corridor Improvements	\$ 1,400,000	\$ 1,400,000	\$ 1,300,000	\$ 2,200,000	\$ 2,200,000	\$ 7,150,000	\$ 15,650,000
12. N/NE 185th Street Corridor Improvements	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000
13. Greenwood/Innis Arden/160th Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,056,000
14. Light Rail Access Improvements: 1st Ave NE (149th to 155th)	\$ -	\$ 726,275	\$ -	\$ -	\$ -	\$ -	\$ 726,275
15. Light Rail Access Improvements: 5 th Ave NE (180 th to 182 th)	\$ -	\$ 560,250	\$ -	\$ -	\$ -	\$ -	\$ 560,250
16. Light Rail Access Improvements: 5 th Ave NE (175th to 180 th)	\$ -	\$ 1,439,750	\$ -	\$ -	\$ -	\$ -	\$ 1,439,750
17. Light Rail Access Improvements: 1st Ave NE (145 th to 149 th)	\$ -	\$ 1,273,725	\$ -	\$ -	\$ -	\$ -	\$ 1,273,725
18. Meridian Avenue N (N 145th Street to N 205th Street)	\$ 60,000	\$ 186,800	\$ 916,900	\$ 8,617,000	\$ 8,617,000	\$ -	\$ 18,397,700
19. Ridgecrest Safe Routes to School	\$ 11,700	\$ 62,200	\$ 15,500	\$ 392,000	\$ -	\$ -	\$ 481,400
20. Citywide Spot Safety Improvements	\$ 51,000	\$ 216,800	\$ 1,136,500	\$ -	\$ -	\$ -	\$ 1,404,300
21. 195th Pedestrian and Bike Connector	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000
							\$ 136,837,400
UNFUNDED PROJECTS							
22. 15th Avenue NE (NE 175th Street to NE 205th Street)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,200,000
23. NE Perkins Way Improvements (10th Avenue NE to 15th Avenue NE)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,405,000
24. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,500,000
25. Ballinger Way - NE 205th St to 19th Ave NE Access Control Preliminary Design	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ 300,000
26. N 185th Street and Linden Avenue N Intersection Improvements	\$ -	\$ -	\$ 500,000	\$ 1,000,000	\$ -	\$ -	\$ 1,500,000
27. Fremont Avenue N (N 175th Street to N 185th Street)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,300,000
28. Westminster Way N (South) (N 155th St to Fremont Ave NB)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000	\$ 3,500,000
29. NE 168th Street and 25th Ave NE Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 500,000
30. 145th Street (Interurban Trail to 3rd Ave NW)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,700,000
31. Interurban Trail Crossing at SR-104	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,200,000	\$ 1,200,000
32. Light Rail Access Improvement – 10 th Ave NE (180 th to 185 th)	\$ -	\$ -	\$ -	\$ 1,694,250	\$ -	\$ -	\$ 1,694,250
33. Light Rail Access Improvement - 5th Ave NE (NE 185th to NE 190th)	\$ -	\$ -	\$ -	\$ 1,741,500	\$ -	\$ -	\$ 1,741,500
34. Light Rail Access Improvement - 5th Ave NE (NE 190th to NE 195th)	\$ -	\$ -	\$ -	\$ 1,687,500	\$ -	\$ -	\$ 1,687,500
35. Light Rail Access Improvement - 1st Ave NE (N 190th to NE 195th Street)	\$ -	\$ -	\$ -	\$ 1,220,400	\$ -	\$ -	\$ 1,220,400
36. 3rd Ave NE Woonerf	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,780,000
37. N 160th from Aurora to Dayton	\$ 300,000	\$ 400,000	\$ -	\$ -	\$ -	\$ 700,000	\$ 1,400,000
							\$ 51,628,650
	\$ 25,218,700	\$ 17,411,900	\$ 29,373,800	\$ 47,478,150	\$ 22,502,800	\$ 28,751,900	\$ 208,678,250

FUNDED PROGRAMS
(FULLY OR PARTIALLY)

Project # and Name

1. Sidewalk Rehabilitation Program (Repair & Maintenance)

Scope / Narrative

Title II under the Americans with Disabilities Act (ADA) requires a public entity to perform a self-evaluation of its programs, activities, and services, along with all policies, practices, and procedures that govern their administration. Shoreline is also required to create and implement an ADA Transition Plan to make reasonable modifications to remove barriers - both physical and programmatic.

In 2017-2018 the City completed an assessment and inventory of all sidewalk facilities and developed a draft Transition Plan focused on facilities in the right-of-way such as curb, ramps, and sidewalks. Prioritization and preliminary schedules were also included in the report. Under the Sidewalk Rehabilitation program, the City will be identifying those projects to be completed within the next 6 years and moving forward with those improvements. As the sum to complete all ADA upgrades and provide maintenance is a very high, this will be an ongoing program.

Funding

	FUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Roads Capital	\$ 1,000,000	\$ 900,000	\$ 900,000	\$ 830,000	\$ 830,000	\$ 830,000	\$ 5,290,000

Funding Outlook

Sidewalk, curb, and gutter repairs and maintenance had historically been funded through an annual transfer from the General Fund and was underfunded. In 2018, City Council approved a \$20 increase in Vehicle License Fees (VLF) to supplement funding for repair and maintenance. VLF will be collected starting in March 2019.

Based on the City's assessment and initial estimates, the cost to complete retrofits and remove all barriers in the right of way to meet ADA standards in the City is in excess of \$191 million (2018 dollars).

Project Status

As of March 1, 2019, staff is developing the program implementation plan and will begin design for 2020 construction at mid-year. This program helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

2. Sidewalk Program (New Sidewalk Construction)

Scope / Narrative

The City Council approved the 2018 Sidewalk Prioritization Plan on June 4, 2018 which created the groundwork for a ballot measure in the November 2018 general election. The ballot measure, Proposition 1, was approved by voters to fund new sidewalk construction. The New Sidewalk Program will be funded through the issuance of bonds supported by Transportation Benefit District 0.2% Sales Tax collected over a 20-year period. The ballot measure identified 12 specific projects to be completed under this program. These projects are listed below in no particular order:

1. 15th Ave NE (from NE 150th ST to NE 160th ST)
2. Meridian Ave N (from N 194th ST to N 205th ST)*
3. 8th Ave NW (from north side of Sunset Park to Richmond Beach RD NW)
4. Dayton Ave N (from N 178th ST to N Richmond Beach RD)
5. 19th Ave NE (from NE 196th ST to NE 205th ST)
6. 1st Ave NE (NE 192nd ST to NE 195th ST)
7. Westminster Way N (from N 145th ST to N 153rd ST)
8. Ballinger Way NE (19th Ave NE to 25th Ave NE)*
9. Dayton Ave N (from N 155th ST to N 160th ST)**
10. 5th Ave NE (from NE 175th ST to NE 185th ST)**
11. Linden Ave N (from N 175th ST to N 185th ST)
12. 20th Ave NW (from Saltwater Park entrance to NW 195th ST)

* *Puts sidewalk on second side (bus route)*

** *Two sides of the street (bus route)*

Prioritization of these projects will be driven by the 2018 sidewalk prioritization plan and specific opportunities to combine with other capital projects and funding.

If there should be additional funds from this source after completion of the 12 projects listed, additional projects will be selected from the 2018 Sidewalk Prioritization Plan. The 2018 Sidewalk Prioritization Plan identifies and provides initial prioritization for additional new construction. The City will continue to look for outside funding opportunities. New sidewalk will also be constructed as the result of private development.

[Link to the 2018 Sidewalk Prioritization Plan](#)

Funding

FUNDING SOURCE	FUNDED (annual amounts are currently estimates)						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Bond Issued	\$ 650,000	\$ 1,100,000	\$ 1,100,000	\$ 650,000	\$ 1,100,000	\$ 1,100,000	\$ 5,700,000

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Funding Outlook

A series of Limited Tax General Obligation bonds will be issued that will be repaid by the revenue generated by the 0.2% TBD Sales Tax. The principal amount will be limited to \$42 million, which is the amount that staff estimates could be supported by the estimated \$59 million in revenue. The bond series authorized for issuance will have a decreasing laddered maturity with a maximum 20-year maturity to match the remaining term of the tax.

Staff will compare the revenue projections and the expenditures to determine and assess opportunities to build additional projects in accordance with the ballot measure during each biennial budget process and prior to issuing each debt series.

Project Status

Part of the initial program development includes assessing delivery of this program and project prioritization. The preliminary target is to construct two (2) projects per year beginning in 2020, which would result in the completion of these initial 12 projects in 2026 or 2027.

This program helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input checked="" type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

3. Traffic Safety Improvements

Scope / Narrative

This program addresses priority traffic and pedestrian safety concerns on both arterial and local streets. The primary purpose of this program is to design and implement small spot improvement projects to improve safety and enhance the livability of neighborhoods. Projects include traffic calming devices (speed humps, radar speed display signs, etc.), capital infrastructure (curb ramps, sidewalks, etc.), and operational changes (bike lanes, turn lanes, school signing, etc.).

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Roads Capital	\$ 167,000	\$ 175,400	\$ 184,100	\$ 193,300	\$ 199,100	\$ 208,500	\$ 1,127,400

Funding Outlook

This program is currently underfunded. Additional improvements that could be implemented with supplemental funding include street lighting, ADA compliance upgrades, small sidewalk projects, and projects identified in the Neighborhood Traffic Action Plans. Addressing all the projects identified as high priority by residents in the traffic plans is estimated at over \$40 million.

Project Status

Annual program, 2020-2025. This program helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service and Goal 5: Promote and enhance the City's safe community and neighborhood programs and initiatives.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

4. Annual Road Surface Maintenance Program

Scope / Narrative

The City's long-term road surface maintenance program is designed to maintain the City's roadway system at the highest Pavement Condition Index (PCI) rating within the limits of available funding. PCI is reassessed and recalibrated City-wide at 5 year intervals. Roadway maintenance is accomplished by using a combination of asphalt concrete overlays and bituminous surface treatment (BST), both of which are preventative maintenance techniques. Asphalt overlays are used to maintain the structure of arterial streets, which have higher traffic volumes and higher wear, and BST is employed on residential streets, which have lower traffic volumes, lower wear and, if well maintained, a generally longer life span. These techniques typically extend pavement life between 10 and 15 years. Each year, the City identifies streets that require maintenance through this program. To maximize the impact of available funding and staff and coordinate with grant funding cycles, the City alternates each year between overlays and BST. As part of this program, the City renews pavement markings, traffic channelization and signs and incorporates Complete Street elements.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Roads Capital	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 7,200,000
Federal - STP							\$ -
PROJECT TOTAL	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 7,200,000

Funding Outlook

This program is currently funded at approximately 50 percent.

Project Status

Annual program 2020-2025. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

5. Traffic Signal and Intelligent Transportation System (ITS) Improvements

Scope / Narrative

The maintenance of safe and efficient traffic signals is an important part of the City's responsibility to all users of the transportation network including drivers, pedestrians, and bicyclists. New traffic signal technology provides superior functionality compared to older, obsolete equipment. Intersection improvements are one of the most cost effective ways to improve traffic flow while effective maintenance and operation of traffic signals can increase safety and extend the life of the signal, decreasing overall program costs. Examples of signalized intersection improvements include, but are not limited to:

- New controllers which can accommodate transit signal priority, dynamic emergency vehicle preemption, and coordination of traffic signals along a corridor for increased efficiency.
- Functional detection to ensure signals operate dynamically, based on actual user demand.
- Back up battery systems to keep signals operational during power outages.
- Communication to a central system for efficient signal timing changes, troubleshooting, and reporting.
- Accessible Pedestrian Signals and countdown signal heads for improved safety and ADA compliance.

The ability to keep traffic signals operating and vehicles moving is a key part of Shoreline's Emergency Management Plan.

Intelligent Transportation Systems (ITS) is the application of advanced information and communications technology to transportation. ITS helps roadway users make more informed decisions about travel routes thereby improving efficiency, safety, productivity, travel time and reliability. Elements of an ITS system can include variable message signs, license plate or bluetooth/wi-fi readers, real-time traffic flow maps, traffic monitoring cameras, and communication between traffic signals and a Traffic Management Center (TMC). Existing City ITS components include fiber optic lines, traffic monitoring cameras, and a central signal system for signals along Aurora. The City began operation of a TMC in 2013 to help manage these systems which may be expanded or modified as the City's ITS system grows. This project will fully integrate all City signals, with ITS improvements where appropriate, including traffic monitoring cameras. Future expansions of the system may include coordination with traffic signals in Seattle, cities to the north, and those operated by WSDOT.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Roads Capital	\$ 134,000	\$ 140,700	\$ 147,800	\$ 152,200	\$ 156,700	\$ 163,400	\$ 894,800

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Funding Outlook

Historically King County supported the City of Shoreline's major signal rehabilitation efforts. King County is no longer able to support major signal rehabilitation efforts. This shift in how the program is delivered significantly increases the cost of signal rehabilitation. Approximately \$300,000 is needed in order to rebuild a single signalized intersection using a standard design and contracting process. Under the current funding scenario, this allows for approximately one signal to be rebuilt every two years. The City has remained on schedule to rebuild an average of two signals each year, in part due to grant-funded CIP projects, such as the Aurora Corridor Improvement Project and the Meridian & 155th Intersection Improvements however without new grant awards, the City will fall behind schedule. The program is currently underfunded by approximately \$472,000 annually to stay on the intended schedule of rebuilding two signalized intersections each year. An additional \$750,000 is needed to complete the ITS components of this project. The ITS portion of the project is currently unfunded as well.

Project Status

Annual program 2020-2025. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

FUNDED PROJECTS
(FULLY OR PARTIALLY)

Project # and Name

6. 145th Street (SR 523) Corridor Improvements, Aurora Ave N to I-5

Scope / Narrative

This project is part of the implementation of the 145th Street Multimodal Corridor Study. The project will make improvements to signalized intersections in order to improve transit service, general purpose traffic, and pedestrian crossings. The project will improve pedestrian facilities along its full length of the north side of the street. The Design Phase for this project is fully funded. Given the highly competitive and limited availability of funding to complete the Right-ofWay (ROW) and Construction (CN) phases of this corridor, the City is planning to purchase ROW and construct the corridor in segments. The three corridor segments are: I-5 to Corliss, Corliss to Wallingford, and Wallingford to the Interurban Trail. The City is striving to complete the ROW and CN phases of the I-5 to Corliss segment of the project by 2023. The City has received \$25M towards implementation of the 145th Street Multimodal Corridor Study projects. At the time of publishing this document, the City is considering using approximately \$10M of this program to fund ROW from 3rd Ave to Corliss (Phase 1 below) and is pursuing multiple potential funding sources to support construction of this segment of the corridor.

The project construction schedule will be phased in 3 parts:

Phase 1: I-5 to Corliss (2018 to 2020 Design; 2019 to 2021 ROW; 2022 to 2023 CN)

Phase 2: Corliss to Wallingford (2022 Design; 2023 ROW; 2025 CN)

Phase 3: Wallingford to Aurora (unknown schedule)

Funding

FUNDING SOURCE	FUNDED		PARTIALLY FUNDED	UNFUNDED			2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Roads Capital	\$ 180,000	\$ 180,000	\$ 23,000				\$ 383,000
STP	\$ 1,150,000	\$ 1,150,000	\$ 150,000				\$ 2,450,000
Connecting Washington	\$ 8,000,000	\$ 2,000,000					\$ 10,000,000
TBD			\$ 4,400,000	\$ 10,400,000	\$ 5,900,000	\$ 10,200,000	\$ 30,900,000
PROJECT TOTAL	\$ 9,330,000	\$ 3,330,000	\$ 4,573,000	\$ 10,400,000	\$ 5,900,000	\$ 10,200,000	\$ 43,733,000

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Funding Outlook

The project is funded through local Roads Capital funds, federal STP funds, and other unknown funding sources (TIB or Connecting Washington). The project is separated into three phases to make each phase meaningful, logical, and fundable. All phases have design phase funding which is shared by a federal STP grant and local Roads Capital funds. Federal STP grants will be sought separately for the Right-of-Way Phase and Construction Phase of each project phase. Additional project costs will occur after 2025. Total project cost to implement the 145th Multi-modal Corridor study from I-5 to the Interurban Trail is estimated at \$94M.

Project Status

The project is in the design phase. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

7. SR 523 (N/NE 145th Street) & I-5 Interchange Improvements

Scope / Narrative

The City of Shoreline is currently designing the 145th and I-5 Interchange. The City's initial improvement concept, included in the City's Preferred Design Concept, proposed a new I-5 northbound on-ramp, revised 145th bridge deck channelization, and a new pedestrian bridge. The City's revised concept includes three roundabouts for the two signalized interchange intersections and the existing I-5 northbound on ramp. Traffic modeling of the roundabouts demonstrated better performance for transit and general-purpose traffic than the concept initially proposed in the City's Preferred Design Concept and at a lower cost. The Design Phase for this project is fully funded. The City is striving to complete the Right-of-Way and Construction phases of the project by 2023, prior to the opening of the light rail station near NE 145th Street and the I-5 Interchange. A specific funding source to complete this project in the desired timeframe has not been identified and the City continues to be strategic in securing funding partners to enable construction of the project by 2023.

Funding

FUNDING SOURCE	FUNDED	UNFUNDED					2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
STP	\$ 2,600,000						\$ 2,600,000
Roads Capital	\$ 400,000						\$ 400,000
Unkown		\$ 2,000,000	\$ 9,600,000	\$ 8,000,000			\$ 19,600,000
PROJECT TOTAL	\$ 3,000,000	\$ 2,000,000	\$ 9,600,000	\$ 8,000,000	\$ -	\$ -	\$ 22,600,000

Funding Outlook

The estimated costs for 2020 are for right-of-way acquisition and estimated costs for 2021-2023 are for construction. Those funds are expected to be supplemented with \$4.76M of federal STP funds. Project is currently scheduled for completion in 2023. Total project cost is \$24.1 million.

Project Status

The project is in the design phase. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service and Goal 3: Continue preparation for regional mass transit in Shoreline.

Continued on next page

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input checked="" type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

8. 148th Street Non-Motorized Bridge

Scope / Narrative

This project will provide a new non-motorized bridge crossing over I-5 from the neighborhood in the vicinity of N 148th Street on the westside of I-5 into the Sound Transit Lynnwood Link Shoreline South/145th Station to be located on the eastside of I-5.

Funding

FUNDING SOURCE	UNFUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
CIP LOCAL FUNDS - 30% Design and Enviro Review	\$ 200,000						\$ 200,000
Unknown - Final Design and Permitting	\$ 2,000,000	\$ 1,300,000					\$ 3,300,000
Unknown - ROW	\$ 1,500,000						\$ 1,500,000
Unknown - Construction			\$ 5,500,000	\$ 5,500,000			\$ 11,000,000
PROJECT TOTAL	\$ 3,700,000	\$ 1,300,000	\$ 5,500,000	\$ 5,500,000	\$ -	\$ -	\$ 16,000,000

Funding Outlook

The total cost for this project is estimated to be approximately \$16.5 million. The \$200,000 shown in 2020 for design would require a Council amendment to the CIP or additional grant funding. These funds would be used for the study and design of multimodal access improvements from 1st Ave NE to the westside bridge landing, including a potential new pick-up/drop-off site. 30% design phase will be complete in 2020. It has been determined that the combined grant awards from all of the federal and state funding sources that the City has typically been successful in receiving will not be adequate to fund this bridge. Therefore the City will be seeking funding from the state legislature and alternative funding sources to construct this bridge.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input checked="" type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

9. Trail Along the Rail

Scope / Narrative

This project will provide an approximately 2.5 mile multi-use trail that roughly parallels the Lynnwood Link Light Rail guideway from 145th Street Station through the 185th Street Station and to the 195th Street Pedestrian Overcrossing. It is anticipated that portions of the Trail Along the Rail will be built by Sound Transit and it is assumed that steps can be taken working with Sound Transit to ensure that the ability to complete the Trail Along the Rail in a future year is not precluded. In order to be more competitive for funding and to better utilize development partnership opportunities the project is anticipated to be constructed in segments as follows:

Ridgecrest Park Segment: NE 161st St to NE 163rd St

Phase 1: N 185th St Station to the NE 195th St Non-motorized trail, and on-street trail connections

Phase 2: N 145th Station to N 155th St

Phase 3: N 155th St to N 175th St

Phase 4: N 175th St to N 185th St

Funding

FUNDING SOURCE	FUNDED	UNFUNDED					2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Ridgecrest Park	\$ 200,000		\$ 800,000				\$ 1,000,000
Phase 1		\$ 500,000	\$ 1,000,000				\$ 1,500,000
Phase 2			\$ 500,000	\$ 1,500,000			\$ 2,000,000
Phase 3				\$ 500,000	\$ 1,000,000		\$ 1,500,000
Phase 4					\$ 1,000,000	\$ 2,000,000	\$ 3,000,000
PROJECT TOTAL	\$ 200,000	\$ 500,000	\$ 2,300,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 9,000,000

Funding Outlook

The total cost for this project is estimated to be approximately \$9 million. Staff hope to leverage primarily non-federal grant sources to implement design, environmental, and construction of the various phases. Light Rail and other private development will also be building portions of the trail.

Continued on next page

Project Status

As of March 1, 2019 design for the Ridgecrest Park Phase is about to start. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

10. Westminster and N 155th St Improvements

Scope / Narrative

This project incorporates a series of improvements in the Community Renewal Area. Individual projects include the following:

- a. Realign the intersection at N 155th St and Westminster Way N. This project improves the main vehicle intersection and increases safety for pedestrians and bicyclists. Includes improvements to the section of N 155th St between Westminster Way N and Aurora Ave N. Most effectively done at one time and in conjunction with the redevelopment of the Sears property.
- b. Create a more pedestrian and bicycle friendly Westminster Way N from 200' SW of N 155th St to N 157th St. Envisioned as a project in the Aurora Square CRA Renewal Plan, reworking Westminster Way N in this section provides a more pedestrian and bicycle friendly section with street parking that can help unite the small triangle property to the rest of Aurora Square. Most effectively completed with the redevelopment of the triangle property.
- c. Construct a one-way N 157th St from Westminster Way N to Aurora Ave N. New street connection makes Westminster between 155th and 157th pedestrian and cycle-friendly, creates a better entrance to Aurora Square, connects the triangle property to the rest of Aurora Square, and alleviates congestion at the N 155th St Intersection. Most effectively completed with the redevelopment of the triangle property.

Funding

FUNDING SOURCE	FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
a. N 155th St (West) including intersection at Westminster - TIB Funds + Pvt. Donation	\$ 2,000,000						\$ 2,000,000
b. Westminster Way N (North) N 157th to Aurora - Development Frontage	\$ 1,500,000						\$ 1,500,000
c. Construct N 157th St - Pvt. Donation	\$ 500,000						\$ 500,000
PROJECT TOTAL	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000,000

Funding Outlook

These projects will be designed by the City and constructed by private development as properties within the Aurora Square Community Renewal Area are redeveloped. The cost estimate does not include funding for utility undergrounding.

Project Status

As of March 2019 project is at 100% design. ROW phase is underway. Project will be advertised later in 2019. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

11. N/NE 175th Street Corridor Improvements (Stone Ave to I-5)

Scope / Narrative

This project improves corridor safety and capacity, designing and constructing improvements which will tie in with those recently constructed by the Aurora project. This project is identified as a "growth" project in the Transportation Master Plan, thus needed to support re-development. The improvements include reconstruction of the existing street to provide two traffic lanes in each direction with a center lane for two-way left turn areas; medians and turn pockets; bicycle lanes (integrated into the sidewalk); curb, gutter, and sidewalk with planter strip where feasible; illumination; landscaping; and retaining walls. Intersections with high accident rates will be improved as part of this project. The profile of the roadway between Ashworth Avenue N and Stone Avenue N will be lowered to meet standard sight distance requirements.

The 175th project has been segmented into two phases for construction: from the I-5 interchange to Meridian; and from Meridian to Stone (just east of City Hall). 175th Street is considered a high priority as it is a primary access route to I-5, has relatively high levels of congestion, substandard sidewalks adjacent to an area with high pedestrian volumes next to elementary schools, a church with sizeable park-and-ride lot, a park, and bus stops. Given its priority both regionally and locally, the schedule is to have both segments completed in the next 10 years, after completion of the I-5 to Corliss segment of the 145th corridor.

These projects have been identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service. These projects may be funded in part by transportation impact fees.

Funding

FUNDING SOURCE	FUNDED					UNFUNDED	2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Design and Enviro Review - Federal STP	\$ 1,211,000	\$ 1,211,000	\$1,124,500				\$ 3,546,500
Design and Enviro Review - Impact Fees	\$ 189,000	\$ 189,000	\$175,500				\$ 553,500
ROW - Impact Fees (TIF)				\$ 2,200,000	\$ 2,200,000		\$ 4,400,000
Construction - Unfunded						\$ 6,184,750	\$ 6,184,750
Construction - Impact Fees						\$ 965,250	\$ 965,250
PROJECT TOTAL	\$ 1,400,000	\$ 1,400,000	\$ 1,300,000	\$ 2,200,000	\$ 2,200,000	\$ 7,150,000	\$ 15,650,000

Funding Outlook

Projects identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees. The City pursued federal grant funding for design and environmental work through the Surface Transportation Program administered by PSRC in 2014 and was included as the first project eligible for funding on the contingency list. In February 2016 this project was selected off the contingency list and fully funded for design and environmental review. It is anticipated that the City will use transportation impact fees collected from private development to serve as the match for this project. The total project is expected to cost \$22,800,000.

Continued on next page

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input checked="" type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input checked="" type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

12. N/NE 185th Street Corridor Improvements

Scope / Narrative

The 185th Street Corridor Strategy will develop a corridor plan for 185th Street/10th Avenue NE/NE 180th Street that includes multi-modal transportation facilities necessary to support projected growth in the subarea, a phasing plan for implementation, and a funding strategy plan for improvements. This project is identified in the 185th Street Station Subarea Plan. Planned improvements at the intersection of 185th Street and Meridian Avenue are identified as a "growth" project in the Transportation Master Plan and can be funded by TIF funds.

The 185th Corridor will be implemented in phases. 185th Street breaks into two logical segments: 1) Aurora Ave to 1st Ave NE and 2) east of 1st Ave NE to 10th Ave NE. Segment 1 from Aurora Avenue to 1st Ave NE is proposed because it is already experiencing redevelopment and a portion of the segment is within the 185th Street Station Subarea. It also has the highest level of congestion on the corridor and will be served by King County Metro (Metro) as well as Community Transit Swift (BRT) by the year 2024.

For Segment 2, Sound Transit Lynnwood Link Light Rail Project will be constructing a significant portion of the segment east of 1st Ave NE to 10th Ave NE in time for the Shoreline North/185th Station opening in 2024. The 185th Corridor Strategy effort has assumed these improvements will remain in place. Within Segment 2, the portion east of 8th Ave NE (Shoreline North/185th Station) is expected to have lower number of bus routes, but Metro is considering a frequent service route on 10th Ave to 180th St to North City business district and beyond to Lake Forest Park. Traffic volumes on Segment 2 and 3 are expected to be less congested than Segment 1.

The remaining phases are Segment 3: 10th Ave (between 185th St and 180th St); and Segment 4: 180th St (between 10th Ave NE and 15th Ave NE). They can be implemented separately or together.

The plan is to complete Segment 1: Aurora Ave to 1st Ave NE by 2029. Segment 2: 1st Ave NE to 10th Ave NE will be substantially constructed by Sound Transit by 2024. Segment 3 and 4 is to be completed by 2037.

Funding

FUNDING SOURCE	FUNDED		UNFUNDED				2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
185th St Corridor Strategy (CIP)	\$15,000						\$ 15,000
185th St Corridor Improvements							\$ -
PROJECT TOTAL	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000

Funding Outlook

Currently, there is no funding secured for this project beyond the 185th St Corridor Strategy (CIP funded). Cost estimate for 185th St improvements is approximately 50 million. Cost estimate for 10 Ave improvements is approximately 9 million. Cost estimate for 180th St improvements is approximately 7 million. Projects identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees.

Project Status

Bicycle lanes were installed in 2013. The City is currently conducting the 185th Corridor Strategy and expects to have consensus on a shared vision for the corridor by 2020. This project helps to support City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input checked="" type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

13. Greenwood Ave N /Innis Arden/ N 160th St Intersection Improvements

Scope / Narrative

Acquire right-of-way and design and construct a roundabout intersection at Greenwood Ave. N, N 160th St. and N Innis Arden Way, adjacent to Shoreline Community College campus. A specific year of expenditure is not known shown only in the 2020-2025 Total column.

Funding

PARTIALLY FUNDED							
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown							\$ 1,056,000

Funding Outlook

Funds are anticipated from Shoreline Community College to help fund this project as mitigation for additional traffic volume generated by the expansion of their college campus. The exact amount is unknown at this time.

Project Status

As of March 2019 preliminary design is underway. Final concept expected to be chosen by fall 2019. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

14. Light Rail Access Improvements: 1st Ave NE (149th to 155th)

Scope / Narrative

This project enhances pedestrian access to the 145th Street light rail station by constructing sidewalks on both sides of 1st Ave NE between NE 149th and NE 155th. The project assumes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along both sides of the project area. Where possible the project will retain existing sidewalks.

Funding

FUNDING SOURCE	PARTIALLY FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Funded by Sound Transit <i>(scope adjusted to match available funding)</i>		\$ 726,275					\$ 726,275
PROJECT TOTAL	\$ -	\$ 726,275	\$ -	\$ -	\$ -	\$ -	\$ 726,275

Funding Outlook

Sound Transit is providing \$2 million for access improvements serving the 145th station. This project was initially scoped at \$1,503,900.00. Only partial funds of \$726,275.00 are available through Sound Transit to fund these access improvements (see Project No. 17). The project scope will be reduced to match the current available funding. Staff will continue to seek additional funding and add additional scope if it becomes available.

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

15. Light Rail Access Improvements: 5th Ave NE (180th to 182nd)

Scope / Narrative

This project enhances pedestrian access to the 185th Street light rail station by constructing sidewalks on both side of the street to connect with Sound Transit improvements. The project assumes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along both sides of the project area.

Funding

FUNDING SOURCE	FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Sound Transit		\$ 560,250					\$ 560,250
PROJECT TOTAL	\$ -	\$ 560,250	\$ -	\$ -	\$ -	\$ -	\$ 560,250

Funding Outlook

Sound Transit is providing \$2 million for access improvements serving the 185th station. This project will be fully funded through these Sound Transit funds at \$560,250.00 (also see Project No. 16).

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

16. Light Rail Access Improvements: 5th Ave NE (175th to 180th)

Scope / Narrative

This project enhances pedestrian and bicycle access to the 185th Street light rail station. The project assumes design & construction of sidewalks, an amenity zone, and curb and gutter as well as bike lanes along both sides of 5th Ave NE from NE 175th to 180th.

Funding

FUNDING SOURCE	FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Partially funded by Sound Transit <i>(scope adjusted to match available funding)</i>		\$ 1,439,750					\$ 1,439,750
							\$ -
PROJECT TOTAL	\$ -	\$ 1,439,750	\$ -	\$ -	\$ -	\$ -	\$ 1,439,750

Funding Outlook

Sound Transit is providing \$2 million for access improvements serving the 185th station. This project was initially scoped at \$1,765,800.00. Only partial funds of \$1,439,750.00 are available through Sound Transit to fund these access improvements (see Project No. 15). The project scope will be reduced to match the current available funding. Staff will continue to seek additional funding and add additional scope if it becomes available.

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

17. Light Rail Access Improvements: 1st Ave NE (145th to 149th)

Scope / Narrative

This project enhances pedestrian access to the 145th Street light rail station by constructing sidewalks on both side of 1st Ave between NE 145th and 149th. The project assumes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along both sides of the project area.

Funding

FUNDING SOURCE	FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Sound Transit		\$ 1,273,725					\$ 1,273,725
PROJECT TOTAL	\$ -	\$ 1,273,725	\$ -	\$ -	\$ -	\$ -	\$ 1,273,725

Funding Outlook

Sound Transit is providing \$2 million for access improvements serving the 145th station. This project will be fully funded through these Sound Transit funds at \$1,273,725.00 (also see Project No. 14).

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

18. Meridian Avenue N – N 145th Street to N 205th Street

Scope / Narrative

This project incorporates a series of improvements along this corridor to improve safety and capacity including:

- Rechannelization of the roadway to add a center two-way left-turn lane and bicycle lanes (requires removal of on-street parking).
- Installation of traffic calming measures.
- Repair of damaged sidewalks, curbs and gutters, and installation of new sidewalks where missing.
- Installation of curb ramps to improve ADA accessibility.
- Roadway overlay work.
- Possible undergrounding of utilities.

Right-of-way may need to be acquired in order to meet ADA requirements around trees. This project has been identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service. These projects may be funded in part by transportation impact fees. Overlay from N 190th Street - N 205th Street is scheduled to occur in conjunction with Project #4.

Construction of corridor improvements will be done in segments with the first segment of improvements to be completed for the N 155th Street to N 175th Street segment by 2021. Specific improvements to this segment will include:

- Channelization of Meridian Ave N from N 155th Street to N 175th Street from one lane in each direction with curb side parking to one northbound lane, center turn lane, one southbound lane.
- Bike lanes in both directions or retain curb side parking as deemed appropriate.
- Updated curb ramps, install median islands, install streetlights, and
- Installation of pedestrian activated flashing beacons for existing crosswalk at N 170th Street, and at N 163rd Street.

Funding

FUNDING SOURCE	PARTIALLY FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Unknown				\$ 8,617,000	\$ 8,617,000		\$ 17,234,000
Roads Capital	\$ 6,000	\$ 18,700					\$ 24,700
Federal - HSIP	\$ 54,000	\$ 168,100	\$ 916,900				\$ 1,139,000
PROJECT TOTAL	\$ 60,000	\$ 186,800	\$ 916,900	\$ 8,617,000	\$ 8,617,000	\$ -	\$ 18,397,700

Continued on next page

Funding Outlook

The N 155th Street to N 175th Street segment of the corridor is funded through the local Roads Capital funds, and federal Highway Safety Improvement Program (HSIP) funds. Proposed corridor improvements have been identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service and may be funded in part by transportation impact fees. The majority of impact fees generated in the near term are anticipated to be allocated towards project #11: N/NE 175th St Corridor Improvements. This project is anticipated to receive any remaining TIF funds for local match after 175th local match requirements are met with TIF funds.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

19. Ridgcrest Safe Routes to School

Scope / Narrative

This project will install School Speed Zone Flashers on NE 165th Street at the beginning of the school zone in both directions. This project will also install a pedestrian curb bulb out at NE 165th Street and 12th Avenue Northeast for increased crossing safety.

Detailed Project Description:

1. School Speed Zone Flashers and Radar Speed Feedback Displays
 - a. NE 165th Street and 9th Ave NE – Facing West
 - b. NE 165th Street and 15th Ave NE – Facing East
2. Pedestrian Crossing Curb Extension, Crosswalk Signage, and Markings
 - a. NE 165th Street and 12th Ave NE
3. Educational outreach to surrounding neighborhood and school postcards will be sent to residents within a quarter mile of the project, and to the school for distribution, informing drivers of the new School Speed Zone Flashers, and generally sending a reminder to be courteous and cautious within school zones.

Funding

FUNDING SOURCE	FULLY FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Roads Capital	\$1,700	\$3,000	\$3,000	\$6,000			\$ 13,700
State - SRTS	\$10,000	\$59,200	\$12,500	\$386,000			\$ 467,700
PROJECT TOTAL	\$ 11,700	\$ 62,200	\$ 15,500	\$ 392,000	\$ -	\$ -	\$ 481,400

Funding Outlook

The project is funded through local Roads Capital funds, and Washington State' Safe Routes to School (SRTS) funds.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

20. Citywide Spot Safety Improvements

Scope / Narrative

This project adds a midblock crossing on NW Richmond Beach Rd between 8th Ave NW and 3rd Ave NW. In addition, pedestrian-activated rectangular rapid flashing beacon systems, and radar speed feedback signs will be installed at spot locations citywide.

1. On NW Richmond Beach Rd between 8th Ave NW and 3rd Ave NW, install a midblock crossing, including median refuge island, pedestrian activated flashing beacons, improved lighting, and ADA improvements.
2. Install a pedestrian-activated rectangular rapid flashing beacon system at Meridian Ave N/N 192nd St, Meridian Ave N/N 180th St, Meridian Ave N/N 150th St, NW Richmond Beach Rd/12th Ave NW, 200th St/Ashworth Ave N, N 185th St/Ashworth Ave N, 1st Ave NE/N 195th St, 5th Ave NE/N 195th St, and 15th Ave NE/NE 148th St.
3. Install radar speed feedback signs on 155th St west of Densmore Ave. N, NE Perkins Way west of 11th Ave NE, 15th Ave NE north of NE 192nd St.
4. Pedestrian-activated rectangular rapid flashing beacon systems will be installed at additional locations if funding allows.

Funding

FUNDING SOURCE	FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Roads Capital	\$10,000	\$16,800					\$ 26,800
Federal - HSIP	\$41,000	\$200,000	\$1,136,500				\$ 1,377,500
PROJECT TOTAL	\$ 51,000	\$ 216,800	\$ 1,136,500	\$ -	\$ -	\$ -	\$ 1,404,300

Funding Outlook

The project is funded through local Roads Capital funds, and federal Highway Safety Improvement Program (HSIP) funds.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

21. 195th Pedestrian and Bike Connector

Scope / Narrative

This project will construct a shared-use path from 5th Ave. NE to the WSDOT Limited Access line east of 7th Ave. NE.

Funding

FUNDING SOURCE	FULLY FUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
TIB - Complete Streets		\$500,000					\$ 500,000

Funding Outlook

This project is funded through a TIB Complete Streets grant.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

UNFUNDED PROJECTS

Project # and Name

22. 15th Avenue NE – NE 175th Street to NE 205th Street

Scope / Narrative

This project would construct sidewalks and accessible bus stops on the west side of the road from NE 180th St to NE 205th St. There are significant topographic challenges related to constructing a sidewalk on the west side of this arterial. A corridor study will be performed to identify a preferred transportation solution for this roadway segment. Alternatives to accommodate bicycles will be analyzed, including rechannelization of the roadway from four lanes to three. The cross-section of the road from NE 175th St to NE 180th St would be reduced from four lanes to three and bicycle lanes would be installed. Right-of-way may need to be purchased to complete this project. This project is currently unfunded and a specific year for funding is not known, therefore project costs only shown in the 2020 to 2025 Total column of the Funding table.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown							\$ 6,200,000

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, project costs are shown only in the 2020-2025 Total column as a placeholder. More refined construction costs and a timeline for completion will be updated in future TIPs.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

23. NE Perkins Way Improvements – 10th Ave NE to 15th Ave NE

Scope / Narrative

Construct bicycle and pedestrian improvements on NE Perkins Way from 10th Ave NE to 15th Ave NE. This roadway segment currently includes two travel lanes and a pedestrian walkway on the north side separated from the travel lanes by jersey barriers. No bicycle facilities are present. This segment is part of the Northern Connector route from the Interurban Trail in Shoreline to the Burke-Gilman Trail in Lake Forest Park. Upon completion of the separated trail at NE 195th Street from 1st Ave NE to 5th Ave NE and installation of signage along the remainder of the route, this segment will remain the final gap within the connector route.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown							\$ 4,405,000

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, project costs are shown only in the 2020-2025 Total column as a placeholder. More refined construction costs and a timeline for completion will be updated in future TIPs. This project is likely to be competitive for grant funding.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

24. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety

Scope / Narrative

This project will improve an odd-shaped intersection to improve visibility and safety, as well as providing pedestrian safety features. The design has not been started; an initial step will be to develop design alternatives to improve service level and safety.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown							\$ 5,500,000

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, project costs are shown only in the 2020-2025 Total column as a placeholder. More refined construction costs and a timeline for completion will be updated in future TIPs.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

25. Ballinger Way - NE 205th St to 19th Ave NE Access Control Preliminary Design

Scope / Narrative

Access control and pedestrian improvements along this corridor are needed to address vehicular and pedestrian collisions as identified in the City's Annual Traffic Report. Preliminary design to determine the scope of access control and intersection improvements is needed as a first step. Scoping will also identify pedestrian safety improvement opportunities, specifically related to midblock crossings. Right-of-way may need to be acquired in order to provide U-turns at signals and/or at access points.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown					\$ 300,000		\$ 300,000

Funding Outlook

This project is competitive for funding from the Citywide Safety Grant administered through WSDOT.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

26. N 185th Street and Linden Avenue N Intersection Improvements

Scope / Narrative

This project would rebuild the intersection of Linden Ave N and N 185th Street in order to revise signal phasing to address at-angle collisions as noted in the City's Annual Traffic Report. This project would also decrease intersection radii to lower vehicle turning speeds and reduce pedestrian crossing distances for increased pedestrian safety. Sidewalks, curb ramps and pedestrian signal systems for ADA compliance would also be addressed. The current signal infrastructure does not have capacity to provide these phase changes and pedestrian improvements unless the intersection is rebuilt.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown			\$ 500,000	\$ 1,000,000			\$ 1,500,000

Funding Outlook

This project is competitive for funding from the Citywide Safety Grant administered through WSDOT.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

27. Fremont Avenue N – N 175th Street to N 185th Street

Scope / Narrative

This project incorporates a series of improvements along this corridor to improve safety and capacity including:

- Rechannelization of the roadway to a three lane cross-section (one travel lane in each direction with a center turn lane) with bicycle lanes.
- Construction of sidewalks on both sides of the street. All sidewalks would be five to eight feet wide, include curb and gutter and five foot amenity zones separating the pedestrians from the roadway.
- Perform overlay/preservation work.

These projects can be constructed individually, allowing the complete set of improvement to be phased over time.

Fremont Ave N serves as a primary route to Shorewood High School and Shoreline's Town Center.

Funding

UNFUNDED							
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown							\$ 7,300,000

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, project costs are shown only in the 2020-2025 Total column as a placeholder. More refined construction costs and a timeline for completion will be updated in future TIPs.

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic climate and opportunities and Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

28. Westminster Way N (South) - N 155th St to Fremont Ave NB Frontage Improvements

Scope / Narrative

This project includes frontage and channelization improvements including widening sidewalks and/or a multi-use trail, installation of a planted median, and ADA improvements at intersections.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown						\$ 3,500,000	\$ 3,500,000

Funding Outlook

This projects will be constructed by private development as properties within the Aurora Square Community Renewal Area are redeveloped. The cost estimate does not include the funding needed for utility undergrounding.

Project Status

As of March 2019, the first sidewalk section within 100 feet of 155th will be completed by a City project with funding from TIB. This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

29. NE 168th Street and 25th Ave NE Intersection Improvements

Scope / Narrative

This project includes installation of sidewalks and curb bulb outs for pedestrian safety and visibility and realignment of the east leg of NE 168th Street to allow for a 90 degree angle to improve traffic safety.

Funding

FUNDING SOURCE	UNFUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Unknown						\$ 500,000	\$ 500,000

Funding Outlook

This project is competitive for funding from the Pedestrian & Bicycle Program administered through WSDOT, Safe Routes to School, and the PSRC TAP grant. Interim improvements will be made in 2019/2020 as part of Kellog Middle School mitigation requirements. This will include all way stop control for the west leg, and realignment of the east leg.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

30. 145th Street (Interurban Trail to 3rd Ave NW)

Scope / Narrative

The 145th Street Corridor Study identified future improvements to 145th Street between Aurora Avenue and 3rd Avenue. These improvements modify the roadway to a 3-lane section with on-street bike lanes where space allows.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unknown							\$ 9,700,000

Funding Outlook

No funding has been identified for this project at this time, therefore this project cost is only shown in the 2020 to 2025 Total column. Design and construction of this segment of roadway is anticipated to begin in 2023 after completion of Project No. 6 which is 145th Street (SR 523), Aurora Ave N to I-5 Corridor Improvements and Project No. 7 which is SR 523 (N/NE 145th Street) & I-5 Interchange Improvements.

Project Status

This project is scheduled to be completed after the 145th interchange and segment from I-5 to Aurora. This project would support City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input checked="" type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

31. Interurban Trail Crossing at SR-104

Scope / Narrative

This project improves safety and accessibility for the Interurban Trail crossing at SR-104 and Meridian Ave N. In addition, bike lane connections to the north (City of Edmonds) and the south (City of Shoreline) would be improved by providing dedicated bike lanes and improving access for bicyclists on this missing link of the Interurban. The scope of this project includes design and construction for:

- Curb/gutter/sidewalk to reduce vehicle turning speeds, shorten the nonmotorized crossing, and improve accessibility.
- Pavement marking removal and installation for realigned lanes and bike lane markings.
- Accessible Pedestrian Signals to improve pedestrian safety and accessibility.
- Signal pole and mast arm replacement to provide illumination for the Interurban crossing where there is currently none.
- Signal detection for bicyclists within new dedicated bike lanes.
- Sign installation and removal where needed.

Funding

FUNDING SOURCE	UNFUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Unknown						\$ 1,200,000	\$ 1,200,000

Funding Outlook

This project is competitive for funding from the Pedestrian & Bicycle Program administered through WSDOT, as well as the PSRC TAP grant.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

32. Light Rail Access Improvement – 10th Ave NE (180th to 185th)

Scope / Narrative

This project will provide enhanced pedestrian access to the 185th light rail including connecting to North City. Project includes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along both sides of 10th Ave NE between NE 180th street and NE 185th Street.

Funding

FUNDING SOURCE	UNFUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Unfunded				\$ 1,694,250			\$ 1,694,250

Funding Outlook

Sound Transit is providing \$2 million to fund access improvement projects serving the 185th Station. This project is a lower priority and access improvement funding is not expected to be available for this project.

Project Status

This project is scheduled to be completed after the 145th interchange and segment from I-5 to Aurora. This project would support City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

33. Light Rail Access Improvement - 5th Ave NE, NE 185th to NE 190th

Scope / Narrative

This project is identified as an access improvement project to enhance pedestrian safety in accessing the 185th Station. The project includes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along both sides of 5th Ave NE within the project area.

Funding

FUNDING SOURCE	UNFUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Unfunded				\$ 1,741,500			\$ 1,741,500

Funding Outlook

Sound Transit is providing \$2 million to fund access improvement projects serving the 185th Station. This project is a lower priority and access improvement funding is not expected to be available for this project.

Project Status

This project is scheduled to be completed after the 145th interchange and segment from I-5 to Aurora. This project would support City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

34. Light Rail Access Improvement - 5th Ave NE, NE 190th to NE 195th

Scope / Narrative

This project is identified as an access improvement project to enhance pedestrian safety in accessing the 185th Station. The project includes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along both sides of 5th Ave NE within the project area.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Unfunded				\$ 1,687,500			\$ 1,687,500

Funding Outlook

Sound Transit is providing \$2 million to fund access improvement projects serving the 185th Station. This project is a lower priority and access improvement funding is not expected to be available for this project.

Project Status

This project is scheduled to be completed after the 145th interchange and segment from I-5 to Aurora. This project would support City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

35. Light Rail Access Improvement - 1st Ave NE, N 190th to NE 195th Street

Scope / Narrative

This project is identified as an access improvement project to enhance pedestrian safety in accessing the 185th Station. The project includes design & construction of cement concrete sidewalk, amenity zone, and curb and gutter along the west side of 1st Ave NE within the project area.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
Sound Transit				\$ 1,220,400			\$ 1,220,400

Funding Outlook

Sound Transit is providing \$2 million to fund access improvement projects serving the 185th Station. This project is a lower priority and access improvement funding is not expected to be available for this project.

Project Status

This project is scheduled to be completed after the 145th interchange and segment from I-5 to Aurora. This project would support City Council Goal 1: Strengthen Shoreline's economic climate and opportunities, Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service, and Goal 3: Continue preparation for regional mass transit in Shoreline.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

36. 3rd Ave NE Woonerf

Scope / Narrative

A “woonerf” is an urban design tool which originated in the Netherlands. It is intended to transform streets from car prioritized spaces to shared spaces for all modes of transport, including pedestrians. Woonerfs are designed to reduce vehicular travel speeds, as opposed to using the traditional method of signs and speed-bumps.

A woonerf blends the line between pedestrian and vehicle paths. By removing curbs and any indication of a car travel line, while at the same time adding landscaping and street furniture, the public realm for pedestrians is expanded into what was the street. Parking areas are dispersed to prevent a wall of cars blocking access to the street. Curves are used to reduce sight lines for drivers. If a driver is able to see an exit in the distance, they will try to get there as fast as possible while disregarding the pedestrians. Sidewalks are also eliminated in a woonerf, since the idea is that people and vehicles share the same space.

The concept for the 3rd Avenue NE Woonerf is the creation of a slow-paced, curbless street where pedestrian and bicycle movements are prioritized and vehicles are invited guests by extending 3rd Avenue NE between NE 149th Street and NE 151st Street. The 3rd Avenue NE Woonerf creates a pedestrian and bike connection to the adjacent Shoreline South/145th Station and incorporates the eastern terminus of the proposed 148th street non-motorized bridge and north/south alignment of the proposed Trail Along the Rail.

Funding

	UNFUNDED						
FUNDING SOURCE	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	2020-2025 Total
No identified source							\$ 3,780,000

Funding Outlook

2018-2023 CIP budget does not include budget for design development. Because construction costs are unknown at this time, project costs are shown only in the 2020-2025 Total column as a placeholder. However, City staff plans to incorporate the Woonerf’s street and frontage improvements into the Master Street Plan Update, continue project coordination with Sound Transit, and utilize the conceptual renderings as communication tools when working with the public and potential developers, and apply for grant funding.

Continued on next page

Project Status

A preliminary concept of the 3rd Ave NE Woonerf was presented to City Council on January 8, 2018. The design of the Woonerf will be advanced through ongoing coordination with Sound Transit and through the Master Street Plan Update process. In addition, the City will work with potential developers of adjacent properties to the Woonerf to coordinate street frontage and access improvements. This project supports City Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input checked="" type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

37. N 160th from Aurora to Dayton

Scope / Narrative

This project will restripe N 160th Street from Dayton Ave N to approximately Linden to 3-lanes and bike lanes as represented within the Transportation Master Plan, and subsequent Community Renewal Area planning efforts. Additional phases include new sidewalks, a gateway entrance on N 160th St for Aurora Square, and a midblock pedestrian crossing, most effectively implemented with adjacent property redevelopment.

Funding

FUNDING SOURCE	UNFUNDED						2020-2025 Total
	2020 Estimate	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate	
Greenwood/ N 160th St/ Innis Arden intersection	\$ 300,000	\$ 400,000				\$ 700,000	\$ 1,400,000
PROJECT TOTAL	\$ 300,000	\$ 400,000	\$ -	\$ -	\$ -	\$ 700,000	\$ 1,400,000

Funding Outlook

Early phases of this project assume the restriping from Dayton Ave N to approximately Linden Ave N, sidewalk improvements along the south side of N 160th from Dayton Ave N to approximately Linden Ave N, and construction of a midblock pedestrian crossing between Linden Ave N and Fremont Pl N, funded and constructed by private development associated with the Sears property and WSDOT. Additional sidewalk improvements along the north side of N 160th, or east of the Sears property line are unfunded at this time. The cost estimate does not include the funding needed for utility undergrounding.

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic climate and opportunities and Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of Ordinance No. 856 – Amending the Shoreline Master Program Pursuant to the Periodic Review Required by the Shoreline Management Act
DEPARTMENT:	Planning & Community Development
PRESENTED BY:	Miranda Redinger, AICP, Senior Planner
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input type="checkbox"/> Motion <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

The City’s current Shoreline Master Program (SMP) was adopted on August 5, 2013 via Ordinance No. 668 and became effective on September 2, 2013. In 2003, the Shoreline Management Act (SMA), chapter 90.58 RCW, was amended to require cities to regularly update their SMPs. For the City of Shoreline, RCW 90.58.080(2) requires the City to update its SMP on or before June 30, 2019, and then once every eight years after the date of approval by the Department of Ecology. Thus, it is now time to perform a Periodic Review of the current SMP to comply with state law.

The purpose of the statutorily-mandated review is to assure that the City’s SMP complies with the SMA and its implementing guidelines, WAC 173-26 to 173-27, and to assure consistency of the SMP with the City’s Comprehensive Plan and development regulations adopted under the Growth Management Act, chapter 36.70A RCW, and other local requirements. Tonight, Council will discuss proposed Ordinance No. 856 (Attachment A), which would amend the SMP. Proposed Ordinance No. 856 is scheduled to be brought back to Council for adoption on June 17, 2019.

RESOURCE/FINANCIAL IMPACT:

The Periodic Review and update to the SMP have no direct financial impact on the City. The Department of Ecology and the City entered into a grant agreement wherein the City is eligible for \$25,000 to perform the review and update. Of this \$25,000, the City used \$15,663.75 to contract with Environmental Services Associates to draft an addendum to the 2012 Cumulative Impacts Analysis (Attachment A, Exhibit D2) and the remaining \$9,336.25 to reimburse for staff work.

RECOMMENDATION

This item is before the City Council for discussion tonight. The Planning Commission recommends that Council adopt the proposed SMP amendments as set forth in Ordinance No. 856. The Washington Department of Ecology requires or recommends additional revisions, outlined in Attachment E, to be consistent with the SMA. Staff

concurs with the recommendations from the Planning Commission and the Department of Ecology and recommends that the Council amend the Planning Commissions' recommendation as proposed by the Department of Ecology, amendments both required and recommended, when adopting Ordinance No. 856 on June 17, 2019.

Approved By: City Manager DT City Attorney MK

BACKGROUND

What is the Shoreline Management Act (SMA)?

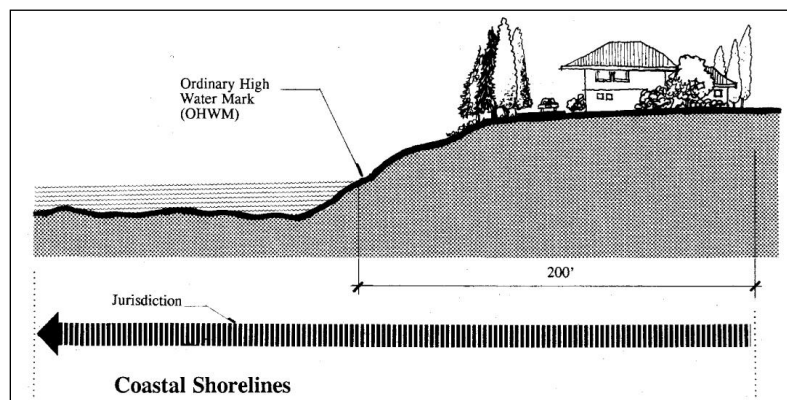
Recognizing that shorelines were among the most valuable and fragile of Washington's natural resources, the SMA was passed by the Washington State Legislature in 1971 and adopted by the public in a 1972 referendum. The SMA acknowledged the demand for a planned, rational, and concerted effort, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines (RCW 90.58.020).

The SMA has three broad policies:

1. *Encourage water-dependent and water-oriented uses:* "[U]ses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment or are unique to or dependent upon use of the state's shorelines"
2. *Promote public access:* "[T]he public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally."
3. *Protect shoreline natural resources,* including "...the land and its vegetation and wildlife, and the water of the state and their aquatic life...."

Where Does the SMA Apply?

The SMA applies to all "shorelines of the state" and "shorelands." Under the SMA, "shorelines of the state" include all shorelines and shorelines of statewide significance. The Puget Sound coastline is a shoreline of statewide significance, and the only area in the City of Shoreline subject to the SMA (See Shoreline Environmental Designations Map - Figure SMP1 in Attachment A, Exhibit D1). Shorelines, in general, include all rivers and streams having a mean annual flow of 20 cubic feet per second or greater, and lakes over 20 acres in size.



"Shorelands" is defined as the land extending landward 200 feet in all directions from the ordinary high-water mark (measured on a horizontal plane) and all associated wetlands. The SMA jurisdiction can be expanded to include the entire contiguous floodplain associated with "shorelines of the state."

What are Shoreline Master Programs (SMP) and What Do They Regulate?

Shoreline Master Programs are local land-use policies and regulations that guide use of Washington shorelines. SMPs apply to both public and private uses for Washington's more than 28,000 miles of lake, stream, wetland, and marine shorelines. They protect natural resources for future generations, provide for public access to public waters and shores, and plan for water-dependent uses.

A SMP is both a planning and a regulatory tool, comprised of two components. First, like a Growth Management Act (GMA) comprehensive plan, it sets forth goals and policies that provide a basis for regulations that govern use and development. Second, it contains “use regulations” that regulate development within the jurisdictional boundaries of the SMP through the issuance of permits – substantial development permits, conditional use permits, and variance permits. All use or development activities within the shoreline jurisdiction must meet the goals, policies, and regulations in the SMP regardless of the type of shoreline permit required. This includes over-water structures, new buildings and structures, and land development activities such as clearing, grading, or filling.

Policies and regulations developed under the SMA guidelines are designed to achieve the following:

- Achieve no net loss of ecological functions necessary to sustain shoreline natural resources
- Use the most current, accurate, and complete scientific and technical information for development of policies and regulations
- Ensure that each permitted development causes no net loss of ecological functions
- Ensure that exempt development in the aggregate causes no net loss of ecological functions
- Address and fairly allocate the burden of mitigating cumulative impacts of development among development opportunities
- Plan for restoration of ecological functions where they have been impaired
- Promote restoration of ecological functions through a combination of regulatory and nonregulatory programs by a combination of public and private actions
- Prioritize reservation of areas for protecting and restoring ecological functions over provision for water-dependent uses and other uses, and limit non-water-oriented uses in the shoreline
- Require mitigation of adverse impacts of individual developments in accordance with the following sequence:
 - Avoidance of impact
 - Minimization of impact
 - Rectification of impact
 - Reduction or elimination of impact over time
 - Compensation with substitute resources
 - Monitoring
- Require mitigation in proportion to and not in excess of that necessary to ensure no net loss of ecological functions
- Provide preference for compensatory mitigation, when mitigation is required, to be located within the immediate vicinity of the impact
- Ensure that new development meets vegetation conservation objectives
- When there is uncertainty about the extent or condition of an existing ecological resource, ensure that the resource is protected

Unlike GMA comprehensive plans and development regulations, a local jurisdiction’s SMP is consolidated into the “State Master Program” administered by the Department of Ecology as part of a cooperative program between local government and the State. It is

for this reason, unlike the GMA, that a City's SMP does not become effective until it has been approved by Department of Ecology. In other words, it is the Department of Ecology, not a City, that has final approval authority of the SMP.

City of Shoreline SMP

As part of its pre-incorporation procedures in 1995, the City adopted by reference Title 25 of the King County Code to serve as its Interim SMP (Ordinance No. 23). The City's current SMP was adopted on August 5, 2013 via Ordinance No. 668 and became effective on September 2, 2013. It is contained in Appendix A of the Comprehensive Plan and SMC Title 20, Division II, SMC 20.200 to 20.230. The City's current SMP is available at the following link:

<http://www.shorelinewa.gov/home/showdocument?id=18579>.

SMP Periodic Review Process

In 2003, the SMA, chapter 90.58 RCW, was amended to require cities to regularly update their SMPs. For the City of Shoreline, RCW 90.58.080(2) requires the City to update its SMP on or before June 30, 2019, and then once every eight years after the date of approval by the Department of Ecology.

To perform this Periodic Review, the Planning Commission held an introductory study session for the SMP on December 6, 2018. The staff report for this meeting is available here: <http://www.shorelinewa.gov/home/showdocument?id=41429>.

The Planning Commission then held a study session on January 17, 2019 to review the State required updates and three (3) of the SMC Chapters (20.200 Shoreline Master Plan, 20.210 Definitions, and 20.220 Administrative Procedures) that address City-recommended updates. The staff report for this meeting is available here:

<http://www.shorelinewa.gov/home/showdocument?id=41810>.

The Planning Commission held another study session on February 21, 2019 to review the remaining SMC Chapters (20.230 General Policies and Regulations, 20.240 SMP Critical Areas Regulations, 13.12 Floodplain Management, and 20.80 Citywide Critical Areas) and proposed changes to the City of Shoreline Comprehensive Plan. The staff report for this meeting is available here:

<http://www.shorelinewa.gov/home/showdocument?id=42564>.

On April 4, 2019, the Planning Commission held a joint public hearing with the Department of Ecology to review the entire SMP, and elements that had not been previously discussed, including the Determination of Nonsignificance (Attachment B), SEPA Checklist (Attachment C), and Addendum to the Cumulative Impacts Assessment. The staff report for this meeting is available here:

<http://www.shorelinewa.gov/home/showdocument?id=42730>.

No public comment was submitted during the public hearing. The Planning Commission requested no revisions and unanimously voted to forward the proposal to Council for adoption.

It is important to note that the public hearing packet was 456 pages long, and this Council packet is even larger due to inclusion of proposed Ordinance No. 856 and the

exhibits that outline all of the proposed changes. Some of the length is due to the logistics of legislative formatting, in that moving text from the general Critical Areas section (SMC 20.80) into a new SMP Critical Areas section (SMC 20.240) requires showing all text being removed from 20.80 in strikethrough, while the same text must be shown in underline format in 20.240. Additionally, including documents from the 2013 and 2019 SMP updates in the Supporting Analysis section of the Comprehensive Plan adds hundreds of pages to this report.

DISCUSSION

Proposed regulatory changes to the SMP fall primarily into two categories: those required by the Department of Ecology to incorporate changes in State guidance since the 2013 SMP, and those recommended by the City, primarily to integrate changes that were adopted through the Critical Areas Ordinance (CAO) in 2015 into the SMP. The City is also proposing changes to the Comprehensive Plan as a result of this Periodic Review. Each of these recommended changes is described below.

State Recommended Updates

The Department of Ecology Periodic Review Checklist (Attachment C, Appendix A) outlines all options recommended by the State for the 2019 Periodic Review. Not all of them are applicable to Shoreline. The January 17, 2019 Planning Commission staff report provides a thorough analysis of each of the recommended options, including summaries of State direction, current SMP language, an analysis, and proposed action.

The items that the City is recommending incorporating into regulations include:

- Revising the cost threshold for substantial development;
- Updating the definition of “Development”;
- Clarifying exceptions to local review;
- Clarifying permit filing procedures;
- Clarifying the scope and process for Periodic Reviews;
- Establishing an optional SMP amendment process;
- Citing RCW and WAC exemptions, rather than listing them in the SMP;
- Repealing the existing wetlands section and replacing with new guidance; and
- Establishing a target for local review of WSDOT projects.

City Recommended Updates - Development Code Regulations

RCW 90.58.090(4) and RCW 36.70A.480(3) require an SMP to provide for management of designated critical areas located within the shorelines of the state. The current SMP incorporates by reference the 2006 critical areas regulations adopted by Ordinance No. 398. In 2015, via Ordinance No. 723, the City did an extensive update to its critical area regulations. Since incorporation of the 2015 regulations into the City’s SMP required review and approval by the Department of Ecology, the 2006 regulations remain applicable within the shoreline jurisdictional area due to a time consideration. This can make pertinent regulations difficult to locate, which can result in gaps and a lack of clarity.

The updated SMP will:

- Incorporate the 2015 CAO by embedding it within the SMP;
- Codify rather than adopt the CAO by reference;
- Make the pertinent CAO regulations easier to locate in the code, rather than as an attachment to the SMP; and
- Provide the ability to amend CAO language as necessary to fit the shoreline jurisdiction, which will increase clarity and fill gaps.

Other proposed code changes are summarized below, by section. All changes are shown in legislative format in Attachment A; Exhibits A, B, and C.

SMC Chapter 20.200 Shoreline Master Plan

Proposed revisions include removal of references to the 2006 CAO, as well as minor amendments for housekeeping and clarification.

SMC Chapter 20.210 Definitions

Proposed revisions include minor amendments for housekeeping and clarification.

SMC Chapter 20.220 Administrative Procedures

Proposed revisions include minor amendments for housekeeping and clarification.

SMC Chapter 20.230 General Policies and Regulations

Proposed revisions include removal of the section addressing environmentally sensitive areas within the shoreline, as the 2015 CAO standards are to be located in a separate chapter, 20.240. Additionally, revisions are proposed to clarify that existing, previously permitted stabilization measures, such as bulkheads and retaining walls, are considered engineered and abated hazards and shall not be classified as geologic hazard areas. Proposed revisions also include minor amendments for housekeeping and clarification.

SMC Chapter 20.240 SMP Critical Areas Regulations

This is a new proposed chapter that integrates the 2015 CAO, along with subsequent amendments, into the SMP consistent with the SMA's requirements. For the most part, SMC Chapter 20.80, Critical Areas, has been copied into the new proposed Chapter 20.240. However, note that some of the provisions from 20.80 were excluded from the SMP Critical Areas Regulations due to conflicts with the SMA. These provisions include reasonable use exceptions, administrative exemptions, and waivers.

SMC Chapter 13.12 Floodplain Management

Proposed revisions include designating the Planning and Community Development Director as the floodplain administrator so that all authority is in one department, rather than dividing the authority with Public Works.

SMC Chapter 20.80 Critical Areas

Proposed revisions include a minor update to the reference to the SMP Critical Areas Regulations to refer to the new proposed Chapter 20.240.

City Recommended Updates - Comprehensive Plan

In December 2012, when Council adopted a major update to the Comprehensive Plan through Ordinance No. 649, the SMP was included as an Appendix rather than an Element, and SMP Goals & Policies and Supporting Analysis documents were referenced rather than included directly within the Comprehensive Plan document. The current SMP Periodic Review process is an opportunity to remedy this and bring the Comprehensive Plan into alignment with RCW 36.70A.480(1), which states that the goals and policies of an SMP “shall be considered an element” of the Comprehensive Plan.

According to RCW 36.70A.130(2)(a)(iii) Comprehensive plans - Review procedures and schedules - Amendments:

Amendments may be considered more frequently than once per year under the following circumstances:

(iii) The adoption or amendment of a shoreline master program under the procedures set forth in chapter [90.58](#) RCW.

Attachment A, Exhibits D1 and D2 show proposed changes to the Comprehensive Plan. Exhibit D1 represents the updated Goals and Policies section of the new SMP Element. Legislative format shows changes within the InDesign formatting used for all Comprehensive Plan Goals and Policies sections. The goals and policies included in the exhibit are currently contained in SMC 20.200.040 Shoreline elements. No changes are proposed to the language of the goals and policies; the only change is the proposed relocation.

Exhibit D1 also includes the revised Table of Contents for the Comprehensive Plan. Changes include deleting the current SMP (Appendix A) and adding the revised SMP as Element 10, both in the Goals and Policies section and the Supporting Analysis section.

Exhibit D1 also shows the formatting used for all Supporting Analysis sections of the Comprehensive Plan, which will be used to format Attachment A, Exhibit D2 once approved. Due to the length of this exhibit it is shown in legislative format, but as a pdf.

The documents included in Exhibit D2 are the 2010 SMP Inventory and Characterization Report, the 2012 SMP Cumulative Impacts Analysis (CIA), and the 2019 addendum to the CIA. The first two (2) documents were developed for the 2013 Comprehensive Update to the SMP, the last document was developed for this Periodic Review.

DEPARTMENT OF ECOLOGY INITIAL DETERMINATION OF CONSISTENCY

On April 26, the Department of Ecology provided the City with their Initial Determination of Consistency (Attachment E). This determination consists of a memorandum outlining the amendment history and review process, which summarizes consistency with Chapter 90.58 RCW; guidelines contained in Chapter 173-26 WAC, Part III; SEPA requirements; and other studies and analyses. The memorandum also contains a summary of issues identified by Ecology as relevant to its decision, specifically the department’s recommendation to revise language in Shoreline’s SMP with regard to the

following categories: shoreline restoration projects, wetland exceptions, wetland mitigation ratios, and some additional items. Required changes (Items labeled Req-1, 2 and 3) and recommended changes (Items labeled Rec 1, 2, 3, 4, 5, 6, 7, 8 and 9) to the Planning Commission's recommended amendments to the SMP are included in legislative format along with rationale for the proposed changes. Staff analysis of DOE's required and recommended changes are included below. DOE provides detailed rationale for the recommended changes in Attachment E. Staff has asked DOE for clarification on a couple of the items, but as of the publication of this staff report had not received a response. If DOE has additional comments regarding our staff recommendations to Council regarding the changes detailed in the Initial Determination of Consistency, these comments will be shared with Council during the May 6th Council meeting.

Staff Analysis of DOE Required and Recommended Changes

Required Changes

Staff reviewed DOE's **required** changes labeled Req-1, 2 and 3.

- a) **Req-1** adds language to proposed SMC 20.240.056 Shoreline Restoration Projects. As recommended by the Planning Commission, SMC 20.240.056 is incomplete. This section is labeled as "Shoreline Restoration Projects" and refers to WAC 173-27-215 and RCW 90.58.580. The complete subject reference from the WAC and RCW is "Shoreline Restoration projects – Relief from shoreline master program development standards and regulations". DOE is requiring the City to update SMC 20.240.056 to reflect the full content of WAC 173-27-215 and RCW 90.58.580.

Staff recommends amending the Planning Commission's recommendation to incorporate Req – 1 as required by DOE in Attachment E.

- b) **Req -2** - The Planning Commission recommended standards for regulating wetlands associated with regulated shorelines. The standards mirror the standards for wetlands that apply citywide. This approach is largely consistent with WAC 173-26-201(2) a and c except for the Planning Commission recommended standards for Category IV Wetlands in SMC 20.240.324(E) and (F). The Planning Commission proposed standards for Type IV Wetlands provide an exemption to the mitigation sequencing that first requires an applicant to avoid the impact altogether. Such an exemption would not provide adequate protection for the functions and values of shoreline ecological functions and therefore does not comply with the SMA. Therefore, DOE is requiring the City to delete the Planning Commission recommended SMC 20.240.324 (E) and (F).

The deletion of SMC 20.240.324 (E) and (F) as required by DOE leaves no development standards for Category IV Wetlands. Staff is recommending that Type IV wetlands regulated by the SMP adhere to the same development standards as proposed for Type II and III wetlands. The staff recommended amendment to SMC 20.240.324(D) is as follows:

D. Category II, and III and IV Wetlands. Development activities and uses that result in alteration of Category II, and III and IV wetlands shall be prohibited subject to the shoreline variance provisions of SMC 20.220.040 and the following criteria:

1. The basic project proposed cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland;
2. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction to the size, scope, configuration, or density of the project are not feasible; and
3. Full compensation for the loss of acreage and functions and values of wetland and buffers due to unavoidable impacts shall be provided in compliance with the mitigation performance standards and requirements of this chapter.

Staff recommends amending the Planning Commission's recommendation to incorporate Req-2 as required by DOE in Attachment E and as amended by staff.

- c) **Req-3-** The Planning Commission's recommended Wetland – Compensatory mitigation performance standards and requirements in SMC Table 20.240.350(G)¹ includes preservation of wetlands at specified ratios as a method of compensatory mitigation. Best Available Science (BAS) may allow for preservation in combination with other compensatory mitigation on a case by case basis. However, SMC Table 20.240.350(G) does not specify that preservation must be used in combination with other mitigation methods and that it may or may not be allowed based on specific circumstances. DOE is requiring the City to remove "Preservation" from proposed SMC Table 20.240.350(G), citing that preservation alone is not consistent with WAC 173-26-201(2)(a) Use of scientific information and WAC 173-26-201(2)(c) Protection of ecological functions of the Shoreline.

Staff recommends amending the Planning Commission's recommendation to incorporate Req-3 as required by DOE in Attachment E.

DOE's **recommended** changes labeled Rec-2, Rec-3 and Rec-8 correct typographical and mathematical errors: wrong word, incorrect numbering, and an incorrect calculation respectively.

¹ (G) is an incorrect reference and should be corrected to (E).

DOE's Rec-1, 4, 5 and 6 do not change the intent of the Planning Commission recommended amendments to the SMP. These recommendations add clarity to the regulations.

- a) Rec-1 proposes "word choice" amendments to SMC 20.210.010 the definition of a Nonconforming Use that distinguishes a nonconforming use from a nonconforming structure.
- b) Rec-4 removes an obsolete reference.
- c) Rec-5 clarifies that the reference "encroachment into a critical area or critical area buffer" in SMC 20.220.040(C)(1) is related to encroachments that are temporary or construction related.
- d) Rec-6 adds a cross reference from SMC 20.240.050 "Alteration of critical areas" to SMC 20.220.040 "Shoreline Variance". The Shoreline Variance is the process used to approve or deny development that would exceed the standards for alteration of critical areas defined in SMC 20.240.050.

DOE's Rec 7 and 9 suggest edits to Planning Commission's recommended new Chapter 20.240 SMP Critical Area Regulations. These edits make subtle changes to aid in transitioning the City's Critical Area regulations that apply citywide to standards unique to critical areas located within a regulated shoreline.

Rec-7 aligns the "Minimum Performance Standards for Restoration" (proposed SMC 20.240.130 Unauthorized critical area alterations) for flood hazard and geologic hazard areas with the SMA by stating that altered areas shall be replanted not only to minimize the hazard but to also restore the ecological functions and values provided to the shoreline. Ensuring no net loss of shoreline ecological functions is a fundamental goal of the SMA.

Rec-9 DOE recommends:

- a. placing the flood hazard regulations in the SMP instead of referencing the SMC Chapter 13 Flood Hazard Regulations;
- b. adding policy language specific to flood management in the shoreline jurisdiction; and
- c. specifying both the SMP and SMC Title 13 regulate floodplains within the regulated shoreline.

The SMA includes more specificity regarding floodplain management related to the regulated shoreline. Therefore, DOE has recommended amendments to incorporate these specific policies and standards into Shoreline's SMP. Staff recommends DOE's new SMC 20.240.360 Floodplain Management be in SMC Subchapter 3. Shoreline Modifications Policies and Regulations 20.230.150(A) instead of Subchapter 5 – Shoreline Flood Hazard Areas. DOE's new SMC 20.240.360 is primarily policy which is in Subchapter 3 whereas the regulations are largely found in Subchapter 5.

Staff recommends amending the Planning Commission's recommendation to incorporate the recommended changes Rec 1-8 as proposed by DOE in Attachment E; and Rec-9 as proposed by DOE and amended by staff.

STAKEHOLDER OUTREACH

As stated in RCW 90.58.130 and WAC 173-26-090, a Public Participation Plan (PPP) is required to be established so as to inform, involve, invite, and encourage participation by all interested persons, private entities, tribes, and governmental agencies. The City's PPP outlined techniques to encourage meaningful engagement, including:

- Small group meetings with impacted residents, notably homeowners on 27th Avenue NW (otherwise known as Apple Tree Lane);
- Development of a Frequently Asked Questions document and a web page (www.shorelinewa.gov/smpupdate);
- Hosting an Open House prior to the April 4 public hearing;
- Sending the Determination of Nonsignificance and SEPA Checklist to neighboring jurisdictions and tribes; and
- Holding a joint public hearing on April 4, which was also noticed by the Department of Ecology.

RESOURCE/FINANCIAL IMPACT

The Periodic Review and update to the SMP have no direct financial impact on the City. The Department of Ecology and the City entered into a grant agreement wherein the City is eligible for \$25,000 to perform the review and update. Of this \$25,000, the City used \$15,663.75 to contract with Environmental Services Associates to draft an addendum to the 2012 Cumulative Impacts Analysis (Attachment A, Exhibit D2) and the remaining \$9,336.25 to reimburse for staff work.

RECOMMENDATION

This item is before the City Council for discussion tonight. The Planning Commission recommends that Council adopt the proposed SMP amendments as set forth in Ordinance No. 856. The Washington Department of Ecology requires or recommends additional revisions, outlined in Attachment E, to be consistent with the SMA. Staff concurs with the recommendations from the Planning Commission and the Department of Ecology and recommends that the Council amend the Planning Commissions' recommendation as proposed by the Department of Ecology, amendments both required and recommended, when adopting Ordinance No. 856 on June 17, 2019.

ATTACHMENTS

Attachment A: Ordinance No. 856

- Exhibit A: Proposed revisions to existing SMC language in legislative format (20.200, 20.210, 20.220, and 20.230)
- Exhibit B: Proposed new SMC subchapter (20.240)
- Exhibit C: Proposed revisions to existing SMC language in legislative format (20.80 and 13.12)
- Exhibit D: Comprehensive Plan
 - D1: Comprehensive Plan SMP Element 10 Goal and Policy Section
 - D2: Comprehensive Plan SMP Element 10 Supporting Analysis Section
 - 2010 Inventory & Characterization Report
 - 2012 Cumulative Impacts Assessment
 - 2019 CIA Addendum

Attachment B: Signed Determination of Nonsignificance

Attachment C: Signed SEPA Checklist

- Appendix A: Department of Ecology Periodic Review Checklist

Attachment D: Affidavit of Publication of Public Hearing Notice from *Seattle Times*

Attachment E: Department of Ecology Initial Determination of Consistency

Attachment F: Commerce Notice of Intent to Adopt

ORDINANCE NO. 856

AN ORDINANCE OF THE CITY OF SHORELINE, WASHINGTON, AMENDING THE CITY'S SHORELINE MASTER PROGRAM, SHORELINE MUNICIPAL CODE TITLE 20 DIVISION II, PURSUANT TO THE PERIODIC REVIEW REQUIRED BY THE SHORELINE MANAGEMENT ACT, CHAPTER 90.58 RCW, AND AMENDING CHAPTER 13.12 FLOODPLAIN MANAGEMENT AND CHAPTER 20.80 CRITICAL AREAS.

WHEREAS, with the adoption of Ordinance No. 668 in 2013, the City adopted its first Shoreline Master Program as required by the Shoreline Management Act, chapter 90.58 RCW, codifying it at SMC Title 20 Division II, effective on September 2, 2013; and

WHEREAS, RCW 90.58.080(4) requires the City to periodically review and, if necessary, revise its Shoreline Master Program to ensure compliance with the statutory and regulatory requirements that have been added or modified since the effective date of the City's Shoreline Master Program; and

WHEREAS, RCW 90.58.080(4) directs that the City of Shoreline complete the periodic review and adopt any necessary amendments no later than June 30, 2019; and

WHEREAS, for this periodic review, the City elected to participate in the optional joint review process set forth in WAC 173-26-104 which combines the local and state public comment periods, and during this process the City worked collaboratively with the Department to address local interests while ensuring proposed amendments were consistent with the Shoreline Management Act and implementing regulations; and

WHEREAS, with the adoption of Ordinance No. 723 in 2015, the City updated its Critical Areas Regulations, chapter 20.80 SMC, but the City's current Shoreline Master Program incorporates by reference Critical Areas Regulations adopted in 2006; and

WHEREAS, the scientific and technical information pertaining to critical areas has changed since 2006 so as to require revisions, therefore, the City reviewed chapter 20.80 SMC to ensure these regulations meet the Shoreline Management Act requirements for critical area protections and modified those regulations accordingly to ensure compliance; and

WHEREAS, the City utilized the checklist of legislative and rule amendments and guidelines developed by the Washington State Department of Ecology to determine if the City's Shoreline Master Program needed to be revised pursuant to the Periodic Review; and

WHEREAS, based on this review, the City determined that goal, policies, and use regulations contained in the Shoreline Master Program needed to be amended; and

WHEREAS, based on this review, the City determined minor, housekeeping amendments were needed for chapter 13.12 SMC Floodplain Management and chapter 20.80 SMC Critical Areas; and

WHEREAS, the City prepared an addendum to the 2012 Cumulative Impacts Analysis to provide updated information regarding cumulative impacts of reasonably foreseeable future development in areas subject to the jurisdiction of the Shoreline Management Act; and

WHEREAS, as required by RCW 90.58.130 and WAC 173-26-090, the City prepared a public participation plan and complied with the provisions of that plan including holding meetings to provide opportunities for public comment, engaging in stakeholder outreach, and providing a page on the City's website; and

WHEREAS, on December 6, 2018, January 17, 2019, and February 21, 2019, the City of Shoreline Planning Commission reviewed the proposed Shoreline Master Program amendments; and

WHEREAS, pursuant to WAC 173-26-104(2), the City and the Washington State Department of Ecology provide a joint local/state public comment period of at least thirty days and published such notice in the *Seattle Times* and the City's website; the public comment period ran from March 1, 2019 to April 4, 2019; and

WHEREAS, on April 4, 2019, the City of Shoreline Planning Commission in conjunction with the Washington State Department of Ecology held a joint local/state public hearing on the proposed Shoreline Master Program amendments in accordance with WAC 173-26-104(2)(c)(ii); and

WHEREAS, at the conclusion of the public hearing, the City of Shoreline Planning Commission recommended that the amendments proposed by Staff be approved by the City Council; and

WHEREAS, on April 19, 2019, as required by WAC 173-26-104(3), the City submitted its proposed amendments to the Washington State Department of Ecology for initial review; and

WHEREAS, on April 26, 2019, the Washington State Department of Ecology issued its Initial Determination which stated that the proposed amendments, subject to twelve (12) required changes, are consistent with applicable laws and rules; and

WHEREAS, on May 6, 2019, the City Council held a study session on the proposed Shoreline Master Program amendments as recommended by the Planning Commission and the changes required by the Washington State Department of Ecology's in its Initial Determination; and

WHEREAS, the City Council has considered the entire public record, public comments, written and oral, the Planning Commission's recommendation, and the changes delineated in the Initial Determination; and

WHEREAS, the Growth Management Act at RCW 36.70A.130(2)(a)(iii) permits the City to amend its Shoreline Master Program outside of the once-a-ear annual review process; and

WHEREAS, pursuant to WAC 173-26-104(2), on April 12, 2019, the City provided the Washington State Department of Commerce with a notice of intent to adopt the amendment(s) to its Shoreline Master Program pursuant to RCW 36.70A.106; and

WHEREAS, the environmental impacts of the updates and amendments resulted in the issuance of a Determination of Non-Significance (DNS) on March 1, 2019; and

WHEREAS, the City Council has determined the proposed amendments are consistent with and implement the Shoreline Management Act, chapter 90.58 RCW, and implementing regulations and accepts the Initial Determination of the Washington State Department of Ecology and the required changes;

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF SHORELINE, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Periodic Review. The Periodic Review required by RCW 90.58.080(4) for the City of Shoreline has been completed as set forth in the recitals above and the amendments in Section 2.

Section 2. Amendment – SMC Title 20 Division II. SMC Title 20 Division II is amended as follows:

- A. The following chapters of the SMC Title 20 Division II are amended as set forth in Exhibit A:
 - 1. Chapter 20.200 SMC;
 - 2. Chapter 20.210 SMC;
 - 3. Chapter 20.220 SMC;
 - 4. Chapter 20.230 SMC.
- B. A new chapter, Chapter 20.240 Shoreline Master Program Critical Area Regulations is added to SMC Title 20, Division II as set forth in Exhibit B.

Section 3. Amendment – Section SMC 20.80.010. SMC 20.80.010(A) is amended as set forth in Exhibit C.

Section 4. Amendment – Sections SMC 13.12.105 and 13.12.200.

- A. The definition of “Director” as set forth in SMC 13.12.105 is amended as set forth in Exhibit C.
- B. SMC 13.12.200(A) is amended as set forth in Exhibit C.

Section 5. Amendment – City of Shoreline Comprehensive Plan. The City of Shoreline Comprehensive Plan is amended as follows:

- A. A new section, Section 10 Shoreline Master Program, is added to the Comprehensive Plan as set forth in Exhibit D-1.
- B. A new section, Shoreline Master Program Support Analysis, is added to the Comprehensive Plan as set forth in Exhibit D-2.

Section 6. Corrections by City Clerk or Code Reviser. Upon approval of the City Attorney, the City Clerk and/or the Code Reviser are authorized to make necessary corrections to this ordinance, including the corrections of scrivener or clerical errors; references to other local, state, or federal laws, codes, rules, or regulations; or ordinance numbering and section/subsection numbering and references.

Section 7. Submission to the Washington State Department of Ecology – Final Approval. The Director of the Department of Planning and Community Development, or designee, is directed to promptly submit a copy of this Ordinance and all supporting exhibits to the Washington State Department of Ecology for final agency approval as required by WAC 173-26-104(4). The Director, or designee, shall promptly provide the City Clerk with a copy of the Department of Ecology’s written notice of final action once issued.

Section 8. Severability. Should any section, subsection, paragraph, sentence, clause, or phrase of this ordinance or its application to any person or situation be declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to any person or situation.

Section 9. Publication and Effective Date. A summary of this Ordinance consisting of the title shall be published in the official newspaper. This Ordinance shall take effect fourteen (14) days from the date of the Washington State Department of Ecology’s written notice of final action to the City stating that the Department of Ecology has approved the proposed amendments. The Clerk shall append that notice to this Ordinance.

PASSED BY THE CITY COUNCIL ON JUNE 17, 2019

Mayor Will Hall

ATTEST:

APPROVED AS TO FORM:

Jessica Simulcik Smith
City Clerk

Margaret King
City Attorney

Date of Publication: _____, 2019

Effective Date: _____, 2019

Attachment A, Exhibit A

Proposed revisions to Shoreline Municipal Code (SMC) language in legislative format -
Chapters 20.200, 20.210, 20.220, and 20.230

Division II.

Shoreline Master Plan Program

Chapter 20.200

Shoreline Master Plan Program

Sections:

20.200.010 Title.

20.200.020 Authority.

20.200.025 Liberal Construction.

Subchapter 1. Goals and Objectives

20.200.030 Purpose.

20.200.040 Shoreline elements.

Subchapter 2. General Provisions

20.200.050 Purpose.

20.200.060 Administrator.

20.200.070 Applicability.

20.200.080 Master Program review and update.

20.200.090 Amendments to Master Program.

20.200.010 Title.

This ~~chapter~~ title shall be known as the City's Shoreline Master Program, hereafter referred to as the Master Program.

20.200.020 Authority.

The Master Program is adopted in accordance with ~~the~~Washington State's Shoreline Management Act, ~~c~~(Chapter 90.58 RCW, hereinafter referred to as the SMA,) and the ~~State~~master program shoreline guidelines adopted by the State in ~~(C~~chapter 173-26 WAC).

Where these regulations require that public access be provided, the requirement shall be construed to be limited to the extent of the lawful and constitutional authority of the City of Shoreline (hereinafter referred to as the City) to require public access or to require the easement, fee ownership or interest requested.

20.200.025 Liberal Construction.

As provided in the SMA, this Master Program shall be liberally construed to give full effect to the purposes, goals, objectives, and policies for which the SMA and this Master Program were enacted.

Subchapter 1. Goals and Objectives

20.200.030 Purpose.

The purpose of this Master Program is to:

- Promote the public health, safety, and general welfare of the community;
- Manage shorelines in a positive, effective, and equitable manner;
- Achieve no net loss to the ecological functions of the City's shorelines;
- Assume and carry out the responsibilities established by the ~~Shoreline Management Act~~ (SMA);
- Adopt and foster the policies contained in ~~Chapter 90.58 RCW, the State Shoreline Management Act~~ the SMA, for shorelines of the State; and
- Assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights.

20.200.040 Shoreline elements.

The following elements have been considered in the preparation of this Master Program for the ~~City of Shoreline~~. The goals and objectives established for these elements provide the basis for policies and regulations included under the general use requirements of this Master Program.

ECONOMIC DEVELOPMENT ELEMENT

Goal Provide for economically productive uses that are particularly dependent on their shoreline location or use.

Objective Plan for economic activity that is water-dependent, water-related, or that provides an opportunity for a substantial number of people to enjoy the shoreline and water.

PUBLIC ACCESS ELEMENT

Goal Increase public access to publicly owned areas of the shoreline.

Objective Provide for public access to publicly owned shoreline areas, except where deemed inappropriate due to safety hazards, inherent security problems, environmental impacts, or conflicts with adjacent uses.

RECREATIONAL ELEMENT

Goal Develop public and private recreation opportunities that are compatible with adjacent uses and that protect the shoreline environments.

Objective Provide for the preservation and enlargement of public and private recreational opportunities and recreational facilities along the shoreline, including but not limited to parks and recreational areas, wherever appropriate.

CIRCULATION ELEMENT

Goal Provide interconnected, efficient, and safe transportation networks to and around the shoreline to accommodate vehicles, transit, pedestrians, and cyclists.

Objective Provide for a safe and adequate circulation system, including existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities within the shoreline jurisdiction that benefit permitted uses without degrading the environment or aesthetic values of the area.

SHORELINE USE ELEMENT

Goal Regulate land use patterns to locate activity and development in areas of the shoreline that will be compatible with adjacent uses and will be sensitive to existing shoreline environments, habitat, and ecological systems.

Objective Include protections for the natural environment and adjacent uses in SMC Title 20~~the Shoreline Development Code~~, Point Wells Subarea Plan, Saltwater Park master planning efforts, and other regulatory framework for development along the shoreline.

CONSERVATION ELEMENT

Goal Conserve and protect the natural resources of the shoreline including, but not limited to, scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection.

Objective Through the use of best available science, develop and implement siting criteria, design standards, and best management practices that promote the long-term enhancement of unique shoreline features, natural resources, and fish and wildlife habitat.

HISTORICAL, CULTURAL, SCIENTIFIC, AND EDUCATIONAL ELEMENT

Goal Identify, preserve, protect, and restore shoreline areas, buildings, and sites having historical, cultural, educational, or scientific values.

Objective Educate citizens on historical, cultural, and scientific significance of shoreline structures, amenities, and functions.

FLOOD HAZARD MANAGEMENT

Goal Protect the ~~City of Shoreline~~ and other property owners from losses and damage created by flooding along the coast and sea-level rise.

Objective Seek regional solutions to flooding problems through coordinated planning with State and Federal agencies, other appropriate interests, and the public.

Objective Develop a plan to mitigate and adapt to potentially altered environmental conditions along the coastline resulting from climate change.

RESTORATION ELEMENT

Goal Improve water quality, reduce the impacts of flooding events; and restore natural areas, vegetation, and habitat functions.

Objective Seek funding for restoration projects within the shoreline jurisdiction and require development proposals to address habitat restoration and water quality.

Objective Engage in discussions with other municipalities that border the Puget Sound and BNSF railroad regarding efforts to benefit fish passage and nutrient transfer.

Subchapter 2. General Provisions

20.200.050 Purpose.

This chapter defines requirements for implementation of the Master Program and sets an orderly process for project review and permitting. The development regulations in the Master Program are intended to make shoreline development responsive to specific design needs and opportunities along the City's shorelines, and to protect the public's interest in the shorelines' recreational and aesthetic values.

20.200.060 Administrator.

The Planning and Community Development Director or designee is the Shoreline Administrator, hereinafter known as the Director, and is vested with authority to:

- Administer the Master Program;
- Approve, approve with conditions, or deny shoreline substantial development permits;
- Grant exemptions from shoreline substantial development permits;
- Determine compliance with Chapter 43.21C RCW, the State Environmental Policy Act (SEPA); and
- Adopt rules that are necessary and appropriate to carry out the provisions of this chapter.

The Director's duties and responsibilities include:

- Making administrative decisions and interpretations of the policies and regulations of this program and the ~~SMA Shoreline Management Act~~;
- Developing and proposing amendments to this Master Program to more effectively and

equitably achieve its goals and policies;

Seeking remedies for violations of this Master Program, the provisions of the SMAShoreline

- ~~Management Act~~, or the conditions of substantial development permits issued by the City; and

Forwarding shoreline permits to Washington State Department of Ecology for ~~Ecology~~

- ~~action~~ its approval or disapproval.

20.200.070 Applicability.

A. The regulations of this title apply to all areas within the shoreline jurisdiction, including shorelines of the state, shorelines of statewide significance, ~~and~~ their associated wetlands within the City, and to the waters and underlying land of the Puget Sound extending to the middle of Puget Sound adjacent to Kitsap County, between the northern and southern limits of the City, and to shorelands, that area 200 feet landward of the ordinary high water mark (OHWM).

B. These ~~standards~~ regulations provide a preference for permit issuance for measures to protect single-family residences occupied prior to January 1, 1992. Nothing in this Master Program shall constitute authority for requiring or ordering the removal of any structures, improvements, docks, fills, or developments placed in navigable waters prior to December 4, 1969, and the consent and authorization of the State of Washington to the impairment of public rights of navigation, and corollary rights incidental thereto, caused by the retention and maintenance of said structures, improvements, docks, fills or developments are hereby granted; provided, that the consent herein given shall not relate to any structures, improvements, docks, fills, or developments placed on tidelands, shorelands, or beds underlying said waters which are in trespass or in violation of State statutes.

C. Regulation of private property to implement ~~program~~ Master Program goals, such as public access and protection of ecological functions and processes, must be consistent with all relevant constitutional and other legal limitations. These include, but are not limited to, civil rights guaranteed by the U.S. and State constitutions, ~~recent~~ applicable Federal and State case law, and State statutes, such as RCW 34.05.328 and 43.21C.060 and Chapter 82.02 RCW, as amended from time to time.

D. All proposed uses and development, as defined in this ~~chapter title~~, occurring within the shoreline jurisdiction shall comply with this Master Program and ~~Chapter 90.58 RCW~~ the SMA whether or not a shoreline permit is required for such use or development.

E. Uses and development regulated by this Master Program are subject to applicable provisions of the Shoreline Municipal Code (SMC), the Comprehensive Plan, the ~~Washington State Shoreline Management Act (Chapter 90.58 RCW)~~ SMA and its implementing regulations, chapters 173-26 and 173-27 WAC, Growth Management Act, ~~(Chapter 36.70 RCW)~~, SEPA Environmental Policy Act, (Chapter 43.21C RCW) and its implementing regulations, and Chapter 197-11 WAC), and other applicable local, State and Federal laws, as amended from time to time. Project proponents are responsible for complying with all applicable laws prior to commencing any use, development, or activity.

F. The Master Program policies and regulations shall apply in addition to other City regulations. Where the regulations of the Master Program conflict with other regulations, the regulations that provide more shoreland and shoreline protection shall apply.

G. Nonconforming uses and improvements within the shoreline jurisdiction shall be subject to this program and SMC 20.220.150.

~~H. The City's critical areas ordinance, Chapter 20.80 SMC, which was passed on February 27, 2006, by Ordinance No. 398, is adopted as a part of the Master Program. The provisions of Chapter 20.80 SMC shall apply to any use, alteration or development within the shoreline jurisdiction whether or not a shoreline permit or written statement of exemption is required.~~

~~I. Uses and developments within the shoreline jurisdiction that meet the reasonable use exception provisions of SMC 20.30.336 require a shoreline variance in accordance with this chapter.~~

JH. All critical areas that are within the shoreline jurisdiction shall be managed and regulated per this Master Program. When a critical area overlaps into the shoreline jurisdiction or is partly within and partly outside of shoreline jurisdiction, only the buffer or setback from the portion of the critical area that is outside of the shoreline jurisdiction is subject to the City's critical area regulations, chapter 20.80 SMC. The exemptions and partial exemptions listed in SMC 20.80.030 and 20.80.040 shall not apply within the shoreline jurisdiction. Such activities may require a shoreline substantial development permit, shoreline variance, or shoreline conditional

~~use permit unless the Master Program and RCW 90.58.030(3)(e) specifically indicate the activity is exempt from the shoreline substantial development permit requirements.~~

20.200.080 Master Program review and update.

This Master Program shall be periodically reviewed and updated as provided in the SMA and the implementing regulations in WAC 173-26, as amended from time to time, ~~as necessary~~ to reflect changing local circumstances, new information or improved data, and changes in State statutes and regulations.

20.200.090 Amendments to Master Program.

Amendments shall comply with the applicable procedures set forth in the SMA and the implementing regulations in WAC 173-26, including WAC 173-26-104 Optional Joint Review Process, as amended from time to time.

No amendment shall be effective until approved by the Department of Ecology as provided in RCW 90.58.090(7), as amended from time to time.

~~Any of the provisions of this Master Program may be amended as provided for in RCW 90.58.120 and 90.58.200 and Chapter 173-26 WAC. Amendments to the Master Program do not become effective until approved by the Department of Ecology.~~

~~Proposals for shoreline environment redesignation, for example amendments to the shoreline maps and descriptions, must demonstrate consistency with the criteria set forth in WAC 173-16-040(4).~~

Chapter 20.210
SMP Definitions

Sections:

20.210.010 Definitions.

20.210.010 Definitions.

For the purpose of the Master Program, the following terms shall have the meaning ascribed to them below. Terms not defined in this section shall be defined as set forth in Chapter 20.20 SMC, Chapter 90.58 RCW, and WAC 173-26-020, and WAC 173-27-030, as amended from time to time, with the definitions contained in the RCW and WAC prevailing over the SMC. ~~Where definitions contained in Chapter 20.20 SMC conflict or differ from definitions contained in the Shoreline Management Act, the definitions in the RCW and WAC shall prevail.~~

Accretion. May be either natural or artificial. Natural accretion is the buildup of land, solely by the action of the forces of nature, on a beach by deposition of water- or airborne material. Artificial accretion is a similar buildup of land by reason of an act of man, such as the accretion formed by a groin, breakwater, or beach fill deposited by mechanical means.

Activity. An occurrence associated with a use; the use of energy toward a specific action or pursuit. Examples of shoreline activities include, but are not limited to, fishing, swimming, boating, dredging, fish spawning, or wildlife nesting.

Adjacent Lands. Lands adjacent to the lands within the shoreline jurisdiction. ~~The SMA directs local governments to develop land use controls (i.e., zoning, comprehensive planning) for such lands consistent with the policies of the SMA, related rules and the local shoreline master program (refer to RCW 90.58.340).~~

Agricultural Uses.

A. "Agricultural activities" means agricultural uses and practices including, but not limited to: producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, State, or Federal conservation program, or the land is

subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities; provided, that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation;

B. "Agricultural products" includes but is not limited to horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within 20 years of planting; and livestock including both the animals themselves and animal products including but not limited to meat, upland finfish, poultry and poultry products, and dairy products;

C. "Agricultural equipment" and "agricultural facilities" include, but are not limited to:

1. The following used in agricultural operations: equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including but not limited to pumps, pipes, tapes, canals, ditches, and drains;
2. Corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;
3. Farm residences and associated equipment, lands, and facilities; and
4. Roadside stands and on-farm markets for marketing fruit or vegetables; and

D. "Agricultural land" means those specific land areas on which agriculture activities are conducted as of the date of adoption of a local master program pursuant to these guidelines this Master Program as evidenced by aerial photography or other documentation. ~~After the effective date of the master program land converted to agricultural use is subject to compliance with the requirements of the master program.~~

Anadromous Fish. Fish born in fresh water, which spend most of their lives in the sea and return to fresh water to spawn. Salmon, smelt, shad, striped bass, and sturgeon are common examples.

Aquaculture. The culture or farming of fish, shellfish, or other aquatic plants and animals. Aquaculture does not include the harvest of wild geoduck associated with the State managed wildstock geoduck fishery and upland finfish.

Aquaculture Activity. Actions directly pertaining to growing, handling, or harvesting of aquaculture produce including, but not limited to, propagation, stocking, feeding, disease treatment, waste disposal, water use, development of habitat and structures. Excluded from this definition are related upland commercial or industrial uses such as wholesale and retail sales, sorting, staging, hatcheries, tank farms, and final processing and freezing.

Associated Wetlands. Those wetlands that are in proximity to and either influence, or are influenced by, tidal waters or a lake or stream subject to the SMAShoreline Management Act. Refer to WAC 173-22-030(1).

Backfill. The placement of earth material or other approved material behind a retaining wall or structure.

Boat Launch or Ramp. Graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.

Breakwaters. Structures constructed on coasts as part of coastal defense to protect an anchorage from the effects of weather and longshore drift.

Building Setback. The required linear distance between the structure/building and the shoreline or critical area. The building setback shall be equal to the depth of the required native vegetation conservation area.

Bulkheads. A vertical or nearly vertical structure placed parallel to the shoreline at or near the ~~ordinary high water mark (OHWM)~~ for the purpose of armoring the shoreline and protecting structures from the effects of erosion caused by wind or waves. Bulkheads generally consist of concrete, timber, steel, rock, or other material resistant to erosion. Bulkheads are used to protect banks by retaining soil at the toe of the slope, or by protecting the toe of the bank from erosion and undercutting.

Community Boat Launching Ramp. An inclined slab, set of pads, rails, planks, or graded slope used for launching boats with trailers or by hand for use in common by shoreline residents of a certain subdivision or community within shoreline jurisdiction.

Community Pier or Dock. Moorage for pleasure craft and/or landing for water sports for use in common by four or more residential units of a certain subdivision or community within the shoreline jurisdiction.

Conditional Use, Shoreline. A use, development, or substantial development that is classified as a conditional use or is not classified within the Master Program. ~~Refer to WAC 173-27-030(4).~~

Department of Ecology or Ecology. The state agency created under chapter 43.21A RCW responsible for the administration of the SMA.

Development, Shoreline. “Development” means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level. ~~RCW 90.58.030(3)(d).~~ Development does not include dismantling or removing structures if there is no other associated development or re-development.

Dredge Spoil. The material removed by dredging.

Dredge Spoil Disposal. The depositing of dredged materials on land or into water bodies for the purpose of either creating new or additional lands or for disposing of the material in an acceptable manner.

Dredging. The removal or displacement of earth such as gravel, sand, mud, or silt from lands covered by water. Lands covered by water include stream beds and wetlands. Dredging is normally done for specific purposes or uses such as maintaining navigation channels, constructing bridge footings, or laying submarine pipelines or cable.

Ecological Functions, Shoreline or Shoreline Functions. The work performed or the role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline’s natural ecosystem. ~~See WAC 173-26-201(e).~~

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

Exemption. ~~Certain specific developments as listed in WAC 173-27-040 are exempt from the definition of substantial developments, and are therefore exempt from the substantial development permit process of the SMA.~~

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

Feasible. An action, such as a development project, mitigation, or preservation requirement, ~~shall meet all of the~~ that meets all of the following conditions:

- A. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;
- B. The action provides a reasonable likelihood of achieving its intended purpose; and
- C. The action does not physically preclude achieving the project's primary intended legal use.

~~In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.~~

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

Gabions. Cages, cylinders, or boxes filled with soil or sand that are used in civil engineering, road building, and military applications, primarily for erosion control and building dams and retaining walls.

Geotechnical Report or Analysis. A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected landform and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-

current properties. ~~Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.~~

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

Groin. A rigid structure built out from a shore to protect the shore from erosion, to trap sand, or to direct a current for scouring a channel.

Ground Water Recharge. A hydrologic process where water moves downward from surface water to ground water. Recharge occurs both naturally (through the water cycle) and anthropologically (i.e., “artificial ground water recharge”), where rainwater and/or reclaimed water is routed to the subsurface.

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

Jetty. Any of a variety of structures used in river, dock, and maritime works that are generally carried out in pairs from river banks, or in continuation of river channels at their outlets into deep water; or out into docks, and outside their entrances; or for forming basins along the sea-coast for ports in tideless seas.

Joint Use. Moorage for pleasure craft and/or landing for water sports for use in common by two or more residential units of a certain subdivision or community within shoreline jurisdiction.

Land Disturbing Activities. Any activity resulting in a movement of earth, or a change in the existing soil cover, both vegetative and nonvegetative, or the existing topography excluding the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land. Land disturbing activities include, but are not limited to, clearing, grading, filling, excavation, or addition of new or the replacement of impervious surface.

Compaction, excluding hot asphalt mix, which is associated with stabilization of structures and road construction, shall also be considered a land disturbing activity.

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

Native Vegetation. Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site. Examples include trees such as madrona, Douglas fir, western hemlock, western red cedar, alder, big-leaf maple, and vine maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

Native Vegetation Conservation Area. Vegetated area between the native vegetation setback line and the OHWMErdinary high water mark.

Native Vegetation Setback Line. Unless otherwise indicated within this Master Program, the line that establishes the limits of all buildings, fencing and impervious surfaces along the shoreline.

Nonconforming Development or Nonconforming Structure. An existing structure that was lawfully constructed at the time it was built but is no longer full consistent with present regulations such as setbacks, buffers, area, bulk, height, or density standards due to subsequent changes to this Master Program.

Nonconforming Lot. An existing lot that met dimensional requirements of this Master Program at the time of its establishment but now contains less than the required width, depth, or area due to subsequent changes to this Master Program.

~~Nonconforming Use and Development.~~ ~~An existing shoreline use or development that was lawfully constructed or established prior to the effective date of the Act or the applicable this Master Program, or amendments thereto, but which does not conform to present regulations or standards of the program.~~

Non-Water-Oriented Uses. Those uses that are not water-dependent, water-related, or water-enjoyment.

Normal Maintenance. Usual acts to prevent a decline, lapse, or cessation from a lawfully established condition.

Normal Repair. To restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. ~~Replacement of a structure or development may be authorized as repair where such replacement is the common method of~~

~~repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment.~~

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

Public Access. Public access is the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the State, and to view the water and the shoreline from adjacent locations. ~~Refer to WAC 173-26-221(4).~~

Public Boat Launching Ramp. An inclined slab, set of pads, rails, planks, or graded slope used for launching boats with trailers or by hand for use by the general public.

Public Pier or Dock. Moorage for pleasure craft and/or landing for water sports for use by the general public.

Restoration. The reestablishment or upgrading of impaired ecological processes or functions. This may be accomplished through measures including but not limited to revegetation, removal of intrusive structures, toxic materials, or invasive or nonnative plants. Restoration does not imply a requirement for returning the area to pre-European settlement conditions.

Revetment. A sloped wall constructed of riprap or other suitable material placed on stream banks or other shorelines to retard bank erosion and minimize lateral stream movement. A revetment typically slopes away from the water and has a rough or jagged face. These features differentiate it from a bulkhead, which is a vertical structure. Revetments are a facing of stone, concrete, etc., built to protect a scarp, embankment, or shore structure against erosion by

waves or currents. The principal features of a revetment are: (A) heavy armor layer, (B) filter layer, and (C) toe protection.

Riparian. The characteristic of relating to or living or located on the bank of a natural watercourse (as a river) or sometimes of a lake or a tidewater.

Sediment. The fine-grained material deposited by water or wind.

Shorelands or Shoreland Areas. Those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ~~OHWM~~Ordinary high water mark; contiguous floodplain areas landward 200 feet; and all wetlands and deltas associated with the streams, lakes, and tidal waters that are subject to the provisions of ~~this chapter~~this Master Program; the same to be designated as to location by the ~~Washington State~~ Department of Ecology.

Shoreline Jurisdiction. All “shorelines of the State” and “shorelands” as defined in RCW 90.58.030, as amended from time to time.

Shoreline Management Act (SMA). The Shoreline Management Act of 1971, as adopted in chapter 90.58 RCW, and as amended from time to time.

Shoreline Master Program or Master Program. The comprehensive plan for the use of a described area, and the regulations for use of the area including maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020, as amended from time to time. ~~As provided in RCW 36.70A.480, the goals and policies of a shoreline master program for a county or city approved under Chapter 90.58 RCW shall be considered an element of the county or city’s comprehensive plan. All other portions of the shoreline master program for a county or city adopted under Chapter 90.58 RCW, including use regulations, shall be considered a part of the county or city’s development regulations.~~

Shoreline Modifications. Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, pier, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

Shoreline Municipal Code (SMC). The municipal code of the City of Shoreline.

Shorelines. All of the water areas of the State, including reservoirs, and their associated shorelands, together with the lands underlying them; except (A) shorelines of statewide

significance; and (B) shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

Shorelines of Statewide Significance. “Shorelines of the State” that meet the criteria for “shorelines of statewide significance” contained in RCW 90.58.030(2)(f), as amended from time to time. As it applies to the City of Shoreline, shorelines of statewide significance include those areas of Puget Sound and adjacent salt waters between the OHW~~Ordinary high water mark~~ and the line of extreme low tide.

Shorelines of the State. This term includes both “shorelines” and “shorelines of statewide significance.”

Substantial Development. ~~Any development with a total cost or fair market value of \$5,718 or more that requires a shoreline substantial development permit. The threshold total cost or fair market value of \$5,718 is set by the State Office of Financial Management and may be adjusted in the future pursuant to the SMA requirements, as defined in RCW 90.58.030(3)(e) as now or hereafter amended.~~ Any development of which the total cost or fair market value exceeds the amount set forth by the Washington State Office of Financial Management pursuant to RCW 90.58.030(3)(e) at the time of application submittal or any development which materially interferes with the normal public use of the water or shorelines of the state.

Washington Administrative Code (WAC). Specifically Chapter 173-26 Master Program Guidelines and Chapter 173-27 Permit and Enforcement, as amended from time to time.

Water-Dependent Use. A use or portion of a use which cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations.

Water Enjoyment Use. A recreational or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public’s ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

Water-Oriented Use. A use that is water-dependent, water-related, or water enjoyment, or a combination of such uses.

Water Quality. The physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics.

Water Quantity. ~~Where used in this chapter, the term “water quantity” r~~Refers only to development and uses regulated under ~~this chapter~~this Master Program and affecting water quantity, such as impermeable surfaces and stormwater handling practices. Water quantity, for purposes of ~~this chapter~~this Master Program, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340, as amended from time to time.

Water-Related Use. A use or portion of a use that is not intrinsically dependent on a waterfront location, but whose economic viability is dependent upon a waterfront location because: (A) the use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or (B) the use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Wave Return. A structure added on top of, or part of, an existing bulkhead or hard armoring which redirects wave action back waterward and helps prevent water from splashing landward, thereby protecting the armoring itself, and landward items such as natural ecology and other structures.

Weir. A dam in a watercourse, usually a stream or river, to raise the water level or divert its flow.

Wetland Delineation. A technical procedure performed by a wetland specialist pursuant to the manual adopted by the Department of Ecology pursuant to RCW 90.58.380, as amended from time to time, to determine the area of a wetland, ascertaining the wetland’s classification, function, and value, and to define the boundary between a wetland and adjacent uplands. ~~Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this program.~~

Wetlands. Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands

generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

Chapter 20.220
SMP Administrative Procedures

Sections:

Subchapter 1. Permits

- 20.220.010 Permit requirements – General.
- 20.220.015 Developments not required to obtain shoreline permits or local reviews.
- 20.220.020 Substantial development permit.
- 20.220.030 Development exempt from substantial development permit requirement~~Shoreline exemption.~~
- 20.220.040 Shoreline variance.
- 20.220.050 Shoreline conditional use permit.

Subchapter 2. SMP Permit Procedures

- 20.220.060 General.
- 20.220.070 Application review.
- 20.220.080 Permit process.
- 20.220.090 Local appeals.
- 20.220.110 Appeals to State Shoreline Hearings Board.
- 20.220.120 Initiation of development.
- 20.220.130 Expiration of permits.
- 20.220.140 Revision to permits.
- 20.220.150 Nonconforming use and development.
- 20.220.160 Enforcement.

Subchapter 1.
Permits

- 20.220.010 Permit requirements – General.

- A. Based on the provisions of this Master Program, the Director shall determine if a substantial development permit, a shoreline conditional use permit and/or a shoreline variance is required.
- B. A permit is required for substantial development as defined in SMC 20.210.010 and RCW 90.58.030(3)(e), as amended from time to time, within the shoreline jurisdiction.
- C. A substantial development permit is not required for exempt development. An exempt development requires a statement of exemption pursuant to SMC 20.220.030 and may require a shoreline variance from Master Program provisions and/or a shoreline conditional use permit.
- D. All uses and development shall be carried out in a manner consistent with the SMC and the Master Program regardless of whether a substantial development permit, statement of exemption, shoreline variance, or shoreline conditional use permit is required.
- E. When a development or use is proposed that does not comply with the bulk, dimensional and/or performance standards of this program, such development or use may only be authorized by approval of a shoreline variance, even if the development or use does not require a substantial development permit.
- F. A development or use listed as a shoreline conditional use pursuant to this chapter, or any unlisted use, must obtain a shoreline conditional use permit even if the development or use does not require a substantial development permit.
- G. Issuance of a statement of exemption, shoreline substantial development permit, shoreline variance, or shoreline conditional use permit does not constitute approval of any other ~~C~~city, ~~S~~state, or ~~F~~federal laws or regulations.
- H. All shoreline permits or statements of exemption issued for development or use within the shoreline jurisdiction shall include written findings prepared by the Director, documenting compliance with bulk and dimensional policies and regulations of the Master Program. The Director may attach conditions to the approval as necessary to assure consistency with the SMA and this Master Program ~~and Chapter 90.58 RCW~~. The conditions may include a requirement to post a performance financial guarantee assuring compliance with permit requirements, terms and conditions.

20.220.015 Developments not required to obtain shoreline permits or local reviews.

Requirements to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other review to implement the SMA do not apply to the following:

A. Remedial actions. Pursuant to RCW 90.58.355, any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to Chapter 70.105D RCW, or to the Department of Ecology when it conducts a remedial action under Chapter 70.105D RCW, as amended from time to time.

B. Boatyard improvements to meet NPDES permit requirements. Pursuant to RCW 90.58.355, as amended from time to time, any person installing site improvements for storm water treatment in an existing boatyard facility to meet requirements of a national pollutant discharge elimination system storm water general permit.

C. Washington State Department of Transportation (WSDOT) facility maintenance and safety improvements. Pursuant to RCW 90.58.356, as amended from time to time, WSDOT projects and activities meeting the conditions of RCW 90.58.356 are not required to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other local review.

D. Projects consistent with an environmental excellence program agreement pursuant to RCW 90.58.045, as amended from time to time.

E. Projects authorized through the Energy Facility Site Evaluation Council process, pursuant to Chapter 80.50 RCW, as amended from time to time.

20.220.020 Substantial development permit.

A. Substantial development ~~as defined by RCW 90.58.030~~ shall not be undertaken by any person on the shorelines of the State without first obtaining a substantial development permit from the Director, unless the use or development is specifically identified as exempt.

B. A substantial development permit shall only be granted by the Director when the development proposed is consistent with the policies and procedures of ~~the SMA, Chapter 90.58 RCW; the provisions of Chapter 173-27 WAC, as amended from time to time;~~ and ~~this~~ Master Program, ~~and this chapter.~~

~~C. An exemption from the substantial development permit requirements does not constitute an exemption from the policies and use regulations of the Shoreline Management Act, the provisions of this Master Program or other applicable City, State, or Federal requirements. A formal statement of shoreline exemption is required pursuant to SMC 20.220.030.~~

20.220.030 Development exempt from substantial development permit requirement
Shoreline exemption.

A. Exemptions – In general.

1. The development activities listed in RCW 90.58.030 and WAC 173-27-040, as amended from time to time, shall not require substantial development permits.
2. Exemptions are construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the substantial development permit process.
3. An exemption from the substantial development permit process does not constitute an exemption from compliance with the SMA, this Master Program, or any other applicable city, state, or federal regulations.
4. If any part of a proposed development of use is not eligible for exemption, then a substantial development permit is required for the entire proposed development project.
5. The burden of proof that a development or use is exempt from the permit process is on the applicant.

B. Letter of Exemption.

1. The Director is hereby authorized to approve or deny requests for ~~statements~~ letters of exemption from the shoreline substantial development permit requirement for uses and developments within shorelines that are specifically listed in RCW 90.58.030 and WAC 173-27-040, as amended from time to time.
2. Before issuing a shoreline exemption, the Director shall review the Master Program to determine if the proposed development requires a shoreline variance and/or a shoreline conditional use permit.
3. The ~~statement~~ letter of exemption shall be in writing and shall indicate the specific exemption of the Master Program that is being applied to the development, and shall provide a summary of the Director's analysis of the consistency of the project with this Master Program and the Act SMA. ~~WAC 173-27-040 delineates exemptions and is included below.~~

4. The Director may attach conditions to the exempted development and/or use as necessary to assure consistency of the project with the SMA and this Master Program.

Exempt developments include:

1. — Any development of which the total cost or fair market value, whichever is higher, does not exceed \$5,000, if such development does not materially interfere with the normal public use of the water or shorelines of the State. The dollar threshold established in this subsection must be adjusted for inflation by the Office of Financial Management every five years, beginning July 1, 2007, based upon changes in the consumer price index during that time period. “Consumer price index” means, for any calendar year, that year’s annual average consumer price index, Seattle, Washington area, for urban wage earners and clerical workers, all items, compiled by the Bureau of Labor and Statistics, United States Department of Labor. The Office of Financial Management must calculate the new dollar threshold and transmit it to the office of the code reviser for publication in the Washington State Register at least one month before the new dollar threshold is to take effect. For purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the State as defined in RCW 90.58.030(2)(c). The total cost or fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials.

2. — Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. “Normal maintenance” includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. “Normal repair” means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resources or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment.

~~3.— Construction of the normal protective bulkhead common to single-family residences. A “normal protective” bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the ordinary high water mark for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion. A normal protective bulkhead is not exempt if constructed for the purpose of creating dry land. When a vertical or near vertical wall is being constructed or reconstructed, not more than one cubic yard of fill per one foot of wall may be used as backfill. When an existing bulkhead is being repaired by construction of a vertical wall fronting the existing wall, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings. When a bulkhead has deteriorated such that an ordinary high water mark has been established by the presence and action of water landward of the bulkhead, then the replacement bulkhead must be located at or near the actual ordinary high water mark. Beach nourishment and bioengineered erosion control projects may be considered a normal protective bulkhead when any structural elements are consistent with the above requirements and when the project has been approved by the Department of Fish and Wildlife.~~

~~4.— Emergency construction necessary to protect property from damage by the elements. An “emergency” is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this chapter. Emergency construction does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the Administrator to be the appropriate means to address the emergency situation, upon abatement of the emergency situation the new structure shall be removed or any permit which would have been required, absent an emergency, pursuant to Chapter 90.58 RCW, these regulations, or the local Master Program, obtained. All emergency construction shall be consistent with the policies of Chapter 90.58 RCW and the local Master Program. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not an emergency.~~

~~5.— Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands, construction of a barn or similar agricultural structure, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation~~

channels; provided, that a feedlot of any size, all processing plants, other activities of a commercial nature, or alteration of the contour of the shorelands by leveling or filling other than that which results from normal cultivation shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations.

6.— Construction or modification of navigational aids such as channel markers and anchor buoys.

7.— Construction on shorelands by an owner, lessee or contract purchaser of a single-family residence for their own use or for the use of their family, which residence does not exceed a height of 35 feet above average grade level and which meets all requirements of the State agency or local government having jurisdiction thereof, other than requirements imposed pursuant to Chapter 90.58 RCW. “Single-family residence” means a detached dwelling designed for and occupied by one family including those structures and developments within a contiguous ownership which are a normal appurtenance. An “appurtenance” is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the ordinary high water mark and the perimeter of a wetland. On a statewide basis, normal appurtenances include a garage; deck; driveway; utilities; fences; installation of a septic tank and drainfield and grading which does not exceed 250 cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark. Local circumstances may dictate additional interpretations of normal appurtenances which shall be set forth and regulated within the applicable Master Program. Construction authorized under this exemption shall be located landward of the ordinary high water mark.

8.— Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single-family and multiple-family residences. A dock is a landing and moorage facility for watercraft and does not include recreational decks, storage facilities or other appurtenances. This exception applies if either:

a.— In salt waters, the fair market value of the dock does not exceed \$2,500; or

b.— In fresh waters, the fair market value of the dock does not exceed \$10,000, but if subsequent construction having a fair market value exceeding \$2,500 occurs within five years of completion of the prior construction, the subsequent construction shall be considered a substantial development for the purpose of this chapter.

c.— For purposes of this section, salt water shall include the tidally influenced marine and estuarine water areas of the State including the Pacific Ocean, Strait of Juan de Fuca, Strait of Georgia and Puget Sound and all bays and inlets associated with any of the above.

9.— Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water from the irrigation of lands.

10.— The marking of property lines or corners on State-owned lands, when such marking does not significantly interfere with normal public use of the surface of the water.

11.— Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed or utilized primarily as a part of an agricultural drainage or diking system.

12.— Any project with a certification from the governor pursuant to Chapter 80.50 RCW.

13.— Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this chapter, if:

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

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

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

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

~~e.—The activity is not subject to the permit requirements of RCW 90.58.550.~~

~~14.—The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the Department of Ecology jointly with other State agencies under Chapter 43.21C RCW.~~

~~15.—Watershed restoration projects as defined herein. Local government shall review the projects for consistency with the Shoreline Master Program in an expeditious manner and shall issue its decision along with any conditions within 45 days of receiving all materials necessary to review the request for exemption from the applicant. No fee may be charged for accepting and processing requests for exemption for watershed restoration projects as used in this section.~~

~~“Watershed restoration project” means a public or private project authorized by the sponsor of a watershed restoration plan that implements the plan or a part of the plan and consists of one or more of the following activities:~~

~~a.—A project that involves less than 10 miles of stream reach, in which less than 25 cubic yards of sand, gravel, or soil are removed, imported, disturbed or discharged, and in which no existing vegetation is removed except as minimally necessary to facilitate additional plantings;~~

~~b.—A project for the restoration of an eroded or unstable stream bank that employs the principles of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of flowing water; or~~

~~c.—A project primarily designed to improve fish and wildlife habitat, remove or reduce impediments to migration of fish, or enhance the fishery resource available for use by all of the citizens of the State; provided, that any structure, other than a bridge or culvert or in-stream habitat enhancement structure~~

~~associated with the project, is less than 200 square feet in floor area and is located above the ordinary high water mark of the stream.~~

~~d.—“Watershed restoration plan” means a plan, developed or sponsored by the Department of Fish and Wildlife, the Department of Ecology, the Department of Natural Resources, the Department of Transportation, a Federally recognized Indian tribe acting within and pursuant to its authority, a city, a county, or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a stream, stream segment, drainage area, or watershed for which agency and public review has been conducted pursuant to Chapter 43.21C RCW, the State Environmental Policy Act.~~

~~16.—A public or private project that is designed to improve fish or wildlife habitat or fish passage, when all of the following apply:~~

~~a.—The project has been approved in writing by the Department of Fish and Wildlife;~~

~~b.—The project has received hydraulic project approval by the Department of Fish and Wildlife pursuant to Chapter 77.55 RCW; and~~

~~c.—The local government has determined that the project is substantially consistent with the local Shoreline Master Program. The local government shall make such determination in a timely manner and provide it by letter to the project proponent.~~

~~Fish habitat enhancement projects that conform to the provisions of RCW 77.55.181 are determined to be consistent with local shoreline master programs, as follows:~~

~~i.—In order to receive the permit review and approval process created in this section, a fish habitat enhancement project must meet the criteria under subsections (A)(16)(c)(i)(A) and (B) of this section:~~

~~(A)—A fish habitat enhancement project must be a project to accomplish one or more of the following tasks:~~

- ~~Elimination of human-made fish passage barriers, including culvert repair and replacement;~~
- ~~Restoration of an eroded or unstable streambank employing the principle of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of flowing water; or~~
- ~~Placement of woody debris or other in-stream structures that benefit naturally reproducing fish stocks.~~

~~The Department of Fish and Wildlife shall develop size or scale threshold tests to determine if projects accomplishing any of these tasks should be evaluated under the process created in this section or under other project review and approval processes. A project proposal shall not be reviewed under the process created in this section if the Department determines that the scale of the project raises concerns regarding public health and safety; and~~

~~(B) A fish habitat enhancement project must be approved in one of the following ways:~~

- ~~By the Department of Fish and Wildlife pursuant to Chapter 77.95 or 77.100 RCW;~~
- ~~By the sponsor of a watershed restoration plan as provided in Chapter 89.08 RCW;~~
- ~~By the Department as a Department of Fish and Wildlife sponsored fish habitat enhancement or restoration project;~~
- ~~Through the review and approval process for the jobs for the environment program;~~
- ~~Through the review and approval process for conservation district sponsored projects, where the project complies with design standards established by the Conservation Commission through interagency agreement with the United States Fish and Wildlife Service and the Natural Resources Conservation Service;~~

- ~~Through a formal grant program established by the Legislature or the Department of Fish and Wildlife for fish habitat enhancement or restoration; and~~
- ~~Through other formal review and approval processes established by the Legislature.~~

ii. ~~Fish habitat enhancement projects meeting the criteria of subsection (A)(16)(c)(i) of this section are expected to result in beneficial impacts to the environment. Decisions pertaining to fish habitat enhancement projects meeting the criteria of subsection (A)(16)(c)(i) of this section and being reviewed and approved according to the provisions of this section are not subject to the requirements of RCW 43.21C.030(2)(c).~~

~~(A) A hydraulic project approval permit is required for projects that meet the criteria of subsection (A)(16)(c)(i) of this section and are being reviewed and approved under this section. An applicant shall use a joint aquatic resource permit application form developed by the Office of Regulatory Assistance to apply for approval under this chapter. On the same day, the applicant shall provide copies of the completed application form to the Department of Fish and Wildlife and to each appropriate local government. Local governments shall accept the application as notice of the proposed project. The Department of Fish and Wildlife shall provide a 15-day comment period during which it will receive comments regarding environmental impacts. Within 45 days, the Department shall either issue a permit, with or without conditions, deny approval, or make a determination that the review and approval process created by this section is not appropriate for the proposed project. The Department shall base this determination on identification during the comment period of adverse impacts that cannot be mitigated by the conditioning of a permit. If the Department determines that the review and approval process created by this section is not appropriate for the proposed project, the Department shall notify the applicant and the appropriate local governments of its determination. The applicant~~

~~may reapply for approval of the project under other review and approval processes.~~

~~(B) Any person aggrieved by the approval, denial, conditioning, or modification of a permit under this section may formally appeal the decision to the hydraulic appeals board pursuant to the provisions of this chapter.~~

~~iii. No local government may require permits or charge fees for fish habitat enhancement projects that meet the criteria of subsection (A)(16)(c)(i) of this section and that are reviewed and approved according to the provisions of this section.~~

~~17. Before issuing a shoreline exemption, the Director shall review the Master Program to determine if the proposed development requires a shoreline variance and/or a shoreline conditional use permit.~~

20.220.040 Shoreline variance.

The purpose of a variance is to grant relief to specific bulk, ~~or~~ dimensional, or performance requirements set forth in the Master Program where there are extraordinary or unique circumstances relating to the physical character or configuration of property such that the strict implementation of ~~this program~~ the Master Program would impose unnecessary hardships on the applicant or ~~diminish~~ thwart the policies set forth in RCW 90.58.020, as amended from time to time.

~~A. The Director is authorized to approve a shoreline variance from the performance standards of this Master Program only when all of the criteria enumerated in WAC 173-27-170 are met.~~

~~B. A shoreline variance should be granted in circumstances where denial of the permit would thwart the policies enumerated in RCW 90.58.020.~~

~~C. In all instances, the applicant must demonstrate that extraordinary circumstances exist and the public interest will not suffer substantial detrimental effect.~~

AD. The applicant for a shoreline variance must demonstrate that the variance meets the criteria in WAC 173-27-170, as amended from time to time. In all instances, the applicant must demonstrate that extraordinary circumstances exist and the public interest shall suffer no substantial detrimental effect.

~~E. Proposals that require a critical area reasonable use permit pursuant to SMC 20.30.336 shall also require a shoreline variance.~~

B. A shoreline variance should be granted in circumstances where denial of the permit would thwart the policies enumerated in RCW 90.58.020, as amended from time to time.

C. The Director is authorized to approve a shoreline variance from the bulk, dimensional, or performance standards of this Master Program only when all of the criteria enumerated in WAC 173-27-170 are met, as amended from time to time.

DF. Prior to approval of any shoreline variance, the Director shall consider the cumulative environmental impacts of previous, existing, and possible future requests for like actions in the area. The total effects of approved shoreline variances should remain consistent with the policies of RCW 90.58.020, as amended from time to time, and this Master Program and shall not produce significant adverse effects to the shoreline ecological functions, processes, or other users.

EG. Before making a determination to approve a shoreline variance, the Director shall consider issues related to the conservation of valuable natural resources and the protection of views from public lands.

FH. Shoreline variance requests based on the applicant's/proponent's desire to enhance the view from the subject development may be granted where there are no likely detrimental effects to existing or future users, views from public lands, critical areas, other features or shoreline ecological functions and/or processes, and where reasonable alternatives of equal or greater consistency with this program are not available.

GI. A shoreline variance shall not be granted:

1. When it would allow a greater height or lesser shoreline setback than what is typical for the area immediately surrounding the development site.

2. When it seeks relief from the use regulations of the Master Program.

HJ. A variance issued per SMC 20.30.310 shall not be construed to mean approval of a shoreline variance from ~~Shoreline~~-Master Program use regulations.

IK. An issued shoreline variance does not provide relief from the variance requirements under SMC 20.30.310.

20.220.050 Shoreline conditional use permit.

The purpose of a shoreline conditional use permit is to allow greater flexibility in the application of the use regulations of the Master Program in a manner consistent with the policies of RCW 90.58.020, as amended from time to time.

A. The applicant for a shoreline conditional use permit must demonstrate that all of the criteria in WAC 173-27-160 are met, as amended from time to time.~~The Director is authorized to issue shoreline conditional use permits only when all the criteria enumerated in WAC 173-27-160 are met.~~

B. Shoreline conditional use permits should be granted in a circumstance where denial of the permit would result in a conflict with the policies enumerated in RCW 90.58.020, as amended from time to time.

C. The Director is authorized to issue shoreline conditional use permits only when all the criteria enumerated in WAC 173-27-160 are met, as amended from time to time.

1. In granting conditional use permits, consideration shall be given to the cumulative impact of additional requires for like actions in the area.

2. In authorizing a shoreline conditional use, special conditions may be attached to the permit by the Director or by the Department of Ecology to minimize the effects of the proposed use. Uses that are specifically prohibited by the Master Program may not be authorized with the approval of a shoreline conditional use permit.

D. A conditional use permit shall not be issued when uses are specifically prohibited by this Master Program. Non-classified uses or uses not set forth in the Master Program may be authorized as a conditional use provided the applicant can demonstrate consistency with the requirements of this chapter.~~Proposals that require a critical area reasonable use permit pursuant to SMC 20.30.336 shall also require a shoreline variance.~~

Subchapter 2. SMP Permit Procedures

20.220.060 General.

A. Permits required under this chapter shall be processed consistent with the provisions of Chapter 20.30 SMC and the criteria in this subchapter.

B. No permit shall be approved unless the proposed development is consistent with the provisions of this Master Program, the ~~SMAShoreline Management Act of 1971~~, and the rules and regulations adopted by the Department of Ecology.

C. Applications for shoreline permits shall also demonstrate compliance with the provisions of this subchapter.

20.220.070 Application review.

A. Applications for shoreline permits shall comply with the submittal requirements developed pursuant to SMC 20.30.100 and WAC 173-27-180, as amended from time to time, and shall provide all information the Director determines necessary for an application to be complete.

B. **Burden of Proof.** It is the applicant's responsibility to provide proof that the proposed development is consistent with the permit criteria requirements.

C. **Approval.** The Director may approve, or approve with conditions, any application that complies with criteria imposed by ~~this~~ Master Program and the ~~SMA~~Shoreline Management Act.

D. **Conditions.** The Director may attach to a permit any suitable and reasonable terms or conditions necessary to ensure the purpose and objectives of this Master Program and the ~~SMA~~Shoreline Management Act.

E. **Denial.** The Director may deny any application that does not comply with criteria imposed by ~~this~~ Master Program or the ~~SMA~~Shoreline Management Act.

F. **Financial Guarantees.** The Director may require a financial guarantee to assure full compliance with the terms and conditions of any substantial development permit, shoreline variance or shoreline conditional use. The guarantee shall be in an amount to reasonably assure the City that permitted improvements will be completed within the time stipulated.

20.220.080 Permit process.

A. **Application Submittal.** Complete applications for a substantial development permit, shoreline variance, and a shoreline conditional use permit are Type B actions. The applications will be processed pursuant to the procedures identified in this subchapter and SMC 20.30.010 through 20.30.270 and Table 20.30.050. Unless the SMA or other applicable law provides otherwise, the target time for local review is as set forth in Chapter 20.30 SMC.

B. **Decision.** The Director shall provide notice of final decision per SMC 20.30.150. Pursuant to RCW 90.58.140(6), as amended from time to time, the Director shall send the final decision, including findings and conclusions, to the following State agencies:

1. Department of Ecology.
2. Attorney General.

C. **Department of Ecology Review of Permits.**

1. After the Director has approved a shoreline variance or shoreline conditional use permit, the Director shall file the permit with the Department of Ecology for its approval, approval with conditions, or denial.

~~2. When a substantial development permit, a shoreline variance, or a shoreline conditional use permit are required for a development, the local government's ruling on the permit shall be filed simultaneously with Ecology.~~

~~23.~~ The Department of Ecology will issue its decision on a shoreline variance or shoreline conditional use permit within 30 days of filing.

~~34.~~ Upon receipt of the Department of Ecology's decision, the Director shall notify those interested parties having requested notification of such decision.

D. Local Permit Filing Procedures. After all local permit administrative appeals are complete and the permit documents are amended to incorporate any resulting changes, the City shall mail the permit using return receipt requested mail to the Department of Ecology regional office and the Office of the Attorney General. Projects that require both Conditional Use Permits and or Variances shall be mailed simultaneously with any Substantial Development Permits for the project.

1. The permit and documentation of the final local decision will be mailed together with the complete permit application; a findings and conclusions letter; the final decision of the City, a permit data sheet required by WAC 173-27-190, as amended from time to time; and applicable SEPA documents.

2. Consistent with RCW 90.58.140(6), as amended from time to time, the State Shorelines Hearings Board twenty-one-day appeal period starts with the date of filing, which is defined below:

a. For projects that only require a Substantial Development Permit (SDP): the date that the Department of Ecology receives the City decision.

b. For a Conditional Use Permit (CUP) or Variance (VAR): the date that the Department of Ecology's decision on the CUP or Variance is transmitted to the applicant and the City.

c. For SDPs simultaneously mailed with a CUP or VAR to the Department of Ecology: the date that the Department of Ecology's decision on the CUP or Variance is transmitted to the applicant and the City.

20.220.090 Local appeals.

There are no administrative appeals for shoreline permit decisions made by the Director.

20.220.110 Appeals to State Shoreline Hearings Board.

A. Appeals of the final decision of the City with regard to shoreline management shall be governed by the provisions of RCW 90.58.180, as amended from time to time.

B. Appeals to the Shoreline Hearings Board of a decision on a shoreline substantial development permit, shoreline variance or shoreline conditional use permit may be filed by the applicant/proponent or any aggrieved party pursuant to RCW 90.58.180.

~~C. The effective date of the City's decision shall be the date of filing with the Department of Ecology as defined in RCW 90.58.140.~~

20.220.120 Initiation of development.

A. Development pursuant to a shoreline substantial development permit shall not be authorized until 21 days after the "date of filing" of the Director's decision with the Department of Ecology;

B. Development for which a shoreline variance or shoreline conditional use is required shall not begin and shall not be authorized until 21 days after the "date of filing" of the Department of Ecology's decision with the Director; or

C. All appeal proceedings before the ~~Washington~~ State Shoreline Hearings Board have terminated.

20.220.130 Expiration of permits.

The City of Shoreline may specify the length of time a shoreline permit will be effective based on the specific requirements of the development proposal. If a permit does not specify an expiration date, the following requirements apply, consistent with ~~WAC 173-14-060~~ WAC 173-27-090, as amended from time to time:

A. **Time Limit for Substantial Progress.** Construction activities, or substantial progress toward completion, or where no construction activities are involved, the use or activity must begin within two (2) years after ~~approval~~ the effective date of the permits.

B. **Extension for Substantial Progress.** If a request for extension has been filed before the expiration date and notice of the proposed extension is ~~The City of Shoreline may at its discretion, with prior notice given~~ to parties of record and the Department of Ecology, the City may authorize ~~extend the two-year time period for the substantial progress for a reasonable time up to one year~~ a single extension of no more than one (1) year based on reasonable factors, including the inability to expeditiously obtain other governmental permits that are required prior to the commencement of construction.

C. **Five-Year Permit Authorization.** If construction has not been completed within five years of ~~approval~~ the effective date of the permit ~~by the City of Shoreline~~ and a request for extension has been filed before the expiration date, the City may authorize a single extension of no more than one (1) year based on reasonable factors. ~~the City will review the permit and, upon showing of good cause, either extend the permit for one year, or terminate the permit.~~

D. Only one extension of up to one (1) year may be authorized.

E. Prior to the City authorizing any permit extensions, it shall notify any parties of record and the Department of Ecology. ~~Note: Only one extension is permitted.~~

20.220.140 Revision to permits.

A. A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from those which are approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, this Master P program or the Act SMA. Changes that are not substantive in effect do not require a permit revision.

B. An application for a revision to a shoreline permit shall be submitted to the Director. The application shall include detailed plans and text describing the proposed changes. The City shall

review and process the request in accordance with the requirements of WAC 173-27-100, as amended from time to time.

20.220.150 Nonconforming use and development.

A. Nonconforming Structures.

1. Structures that were legally established and are used for a conforming use, but which are nonconforming with regard to setbacks, buffers or yards, area, bulk, height, or density, may be maintained and repaired, and may be enlarged or expanded; provided, that said enlargement does not increase the extent of nonconformity by further encroaching upon or extending into areas where construction or use would not be allowed for new development or uses. Such normal appurtenances are by definition located landward of the OHWM~~ordinary high water mark~~.
2. A structure for which a shoreline variance has been issued shall be considered a legal nonconforming structure, and the requirements of this section shall apply as they apply to preexisting nonconformities.
3. A structure that is being or has been utilized for a nonconforming use may be used for a different nonconforming use only upon the approval of a shoreline conditional use permit. A shoreline conditional use permit may be approved only upon a finding that:
 - a. No reasonable alternative conforming use is practical;
 - b. The proposed use will be at least as consistent with the policies and provisions of the ~~Act~~ SMA and this Master Program, and as compatible with the uses in the area, as the preexisting use; and
 - c. Conditions may be attached to the permit as are deemed necessary to assure compliance with the above findings, the requirements of the Master Program and the SMA~~Shoreline Management Act~~, and to ensure that the use will not become a nuisance or a hazard.
4. Any structure nonconforming as to height or setback standards that becomes damaged may be repaired or reconstructed; provided, that:
 - a. The extent of the previously existing nonconformance is not increased; and

- b. The building permit application for repair or reconstruction is submitted within 12 months of the occurrence of damage or destruction.

B. Nonconforming Uses.

1. Uses that were legally established and are nonconforming with regard to the use regulations of the Master Program may continue as legal nonconforming uses. Such uses shall not be enlarged or expanded, without an approved conditional use permit, except that nonconforming single-family residences that are located landward of the ~~OHWM~~Ordinary high water mark may be enlarged or expanded in conformance with applicable bulk and dimensional standards by the addition of space to the main structure or by the addition of normal appurtenances as defined in WAC 173-27-040(2)(g), as amended from time to time.
2. A use which is listed as a conditional use but existed prior to adoption of the Master Program or any relevant amendment, and for which a conditional use permit has not been obtained, shall be considered a nonconforming use.
3. A use which is listed as a conditional use in SMC Table 20.230.081 but existed prior to the applicability of the Master Program to the site, and for which a shoreline conditional use permit has not been obtained, shall be considered a nonconforming use.
4. If a nonconforming use is abandoned for 12 consecutive months, or for 12 months during any two-year period, the nonconforming rights shall expire and any subsequent use shall be made conforming. A use authorized pursuant to subsection (B)(1) of this section shall be considered a conforming use for purposes of this section.

C. Nonconforming Lots. An undeveloped lot, tract, parcel, site, or division of land located landward of the ~~OHWM~~Ordinary high water mark which was established in accordance with Chapter 20.30 SMC, Subchapter 7, and State subdivision requirements prior to the effective date of the ~~Act~~SMA or the ~~applicable~~ Master Program that does not conform to the present lot size standards may be developed if permitted by other land use regulations of ~~the local government~~the City, as long as such development conforms to all other requirements of ~~this applicable~~ Master Program and the ~~Act~~SMA.

20.220.160 Enforcement.

A. The Director is authorized to enforce the provisions of this chapter and any rules and regulations promulgated hereunder pursuant to the enforcement and penalty provisions of WAC 173-27, as amended from time to time.

B. This program will be enforced by the means and procedures set forth in Chapter 20.30 SMC, Subchapter 9.

Chapter 20.230
SMP Shoreline Policies and Regulations

Sections:

Subchapter 1. General Policies and Regulations

20.230.010 General.

20.230.020 Environmental.

~~**20.230.030 Environmentally sensitive areas within the shoreline.**~~

20.230.040 Public access.

Subchapter 2. Specific Shoreline Use Policies and Regulations

20.230.070 General.

20.230.080 Shoreline environmental designations. ~~— Map included in Appendix D, page 205.~~

20.230.081 Permitted Uses and Modifications.

20.230.082 Native Conservation Area and Building Setbacks.

20.230.090 Boating facilities.

20.230.095 Breakwaters, jetties, groins, and weirs.

20.230.100 Nonresidential development.

20.230.110 In-stream structures.

20.230.115 Aquaculture.

20.230.120 Parking areas.

20.230.130 Recreational facilities.

20.230.140 Residential development.

Subchapter 3. Shoreline Modification Policies and Regulations

20.230.150 General.

20.230.160 Dredging and disposal of dredging spoils.

20.230.170 Piers and docks.

20.230.175 Pier and dock repair, replacement, or expansion.

20.230.180 Bulkheads.

20.230.190 Revetment.

20.230.200 Land disturbing activities.

20.230.210 Landfilling.

20.230.230 Signs.

20.230.240 Stormwater management facilities.

20.230.250 Transportation.

20.230.260 Unclassified uses and activities.

20.230.270 Utilities.

Subchapter 1.

General Policies and Regulations

20.230.010 General.

The general policies and regulations apply to all uses and activities that may occur within the City's shoreline jurisdiction regardless of this ~~Shoreline~~ Master Program's environment designation. These policies and regulations provide the overall framework for the management of the shoreline. Use these general regulations in conjunction with Subchapter 2 of this chapter, Specific Shoreline Use Policies and Regulations.

20.230.020 Environmental.

The ~~Shoreline Management Act (SMA)~~ is concerned with the environmental impacts that development, use, or activity may have on the fragile shorelines of the State. Development and certain uses or activities within the regulated shoreline may degrade the shoreline and its waters, and may damage or inhibit important species and their habitat.

A. General Environmental Policies and Regulations.

Policies

1. The adverse impacts of shoreline developments and activities on the natural environment, critical areas and habitats for proposed, threatened, and endangered species should be minimized during all phases of development (e.g., design, construction, operation, and management).
2. Shoreline developments that protect and/or contribute to the long-term restoration of habitat for proposed, threatened, and endangered species are consistent with the fundamental goals of this Master Program. Shoreline developments that propose to enhance critical areas, other natural characteristics, resources of the shoreline, and/or provide public access and recreational opportunities to the shoreline are also consistent with the fundamental goals of this Master Program, and should be encouraged.

Regulations

1. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that mitigates adverse impacts to the environment. When applying mitigation to avoid or minimize significant adverse effects and significant ecological impacts, the

City will apply the following sequence of steps in order of priority, with subsection (A)(1)(a) of this section being top priority:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action;
- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
- c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- d. Reducing or eliminating the impact over time by preservation and maintenance operations;
- e. Compensating for the impact by replacing, enhancing or providing substitute resources or environments; or
- f. Monitoring the impact and the compensation projects (from subsection (A)(1)(e) of this section) and taking appropriate corrective measures.

Efforts to avoid and minimize impacts must be documented in a manner acceptable to the Director prior to the approval of mitigation and/or compensation actions.

2. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that assures no net loss of shoreline ecological function.
3. All shoreline development shall be located, designed, constructed, and managed to protect the functions and values of critical areas consistent with ~~the Shoreline Critical Area Regulations (Appendix A).~~ the SMP Critical Areas Regulations contained in Chapter 20.240 SMC.
4. All shoreline development shall be located and designed to avoid or minimize the need for shoreline stabilization measures and flood protection works, such as bulkheads, revetments, dikes, levees, or substantial site regrading and dredging. Where measures and works are demonstrated to be necessary, biostabilization techniques shall be the preferred design option unless demonstrated to be infeasible, or when other alternatives will have less impact on the shoreline environment.
5. All shoreline development and activity shall be located, designed, constructed, operated, and managed to minimize interference with beneficial natural shoreline processes, such as water circulation, sand and gravel movement, erosion, and accretion to ensure no net loss of shoreline ecological function.
6. In approving shoreline developments, the Director shall ensure that the development will maintain, enhance, or restore desirable shoreline features, as well as ensure no net loss of ecological functions. To this end, the Director may adjust and/or prescribe project dimensions, location of project components on the site, intensity of use, screening, and mitigation as deemed appropriate. Mitigation shall be required of developments that would otherwise result in net loss of ecological functions.

7. In approving shoreline developments, the Director shall consider short- and long-term adverse environmental impacts. In addition, the Director shall consider the cumulative adverse impacts of the development, particularly the precedence effect of allowing one development, which could generate or attract additional development. Identified significant short-term, long-term, and cumulative adverse environmental impacts lacking appropriate mitigation shall be sufficient reason for permit denial.
8. As a condition of approval, the Director may require periodic monitoring for up to 10 years from the date of completed development to ensure the success of required mitigation. Mitigation plans shall include at a minimum:
 - a. Inventory of the existing shoreline environment including the physical, chemical, and biological elements, and provide an assessment of each element's condition;
 - b. A discussion of the project's impacts and their effect on the ecological functions necessary to support existing shoreline resources;
 - c. A discussion of any Federal, State, or local special management recommendations that have been developed for wetlands, species, or habitats located on the site;
 - d. An assessment of habitat recommendations proposed by resource agencies and their applicability to the proposal;
 - e. A discussion of measures to preserve existing habitats and opportunities to restore habitats that were degraded prior to the proposed land use activity. Mitigation plans shall include at a minimum: planting and soil specifications (in the case of mitigation planting projects), success standards, and contingency plans;
 - f. A discussion of proposed measures that mitigate the impacts of the project and establish success criteria;
 - g. An evaluation of the anticipated effectiveness of the proposed mitigation measures;
 - h. A discussion of proposed management practices that will protect fish and wildlife habitat after the project site has been fully developed, including proposed monitoring and maintenance programs;
 - i. A monitoring plan, including scientific procedures to be used to establish success or failure of the project, sampling points, success criteria, and a monitoring schedule; and
 - j. Any additional information necessary to determine the impacts of a proposal and appropriate mitigation.
9. Shoreline development shall not be permitted if it substantially degrades significantly impacts the natural character of the shoreline, natural resources, or public recreational use of

the shoreline. "Significant" is defined in the ~~State Environmental Policy Act (SEPA) Rules~~ in WAC 197-11-794, as amended from time to time.

10. Where provisions of this Master Program conflict with each other, or with other laws, ordinances or programs, the most restrictive provisions shall apply.

B. Earth.

Policies

1. Beaches are valued for recreation and may provide fish spawning substrate. Development that could disrupt these shoreforms may be allowed:
 - a. When such disruption would not reduce shoreline ecological function;
 - b. Where there is a demonstrated public benefit; and/or
 - c. Where the Washington State Department of Fish and Wildlife (WDFW) determines there would be no significant impact to the fisheries resource.

Regulations

1. Developments that alter the shoreline topography may be approved if:
 - a. Flood events will not increase in frequency or severity resulting from the alteration; and/or
 - b. The alteration would not impact natural habitat forming processes and would not reduce ecological functions. Mitigation is required for projects that would reduce ecological functions to ensure no net loss of function.
2. The applicant shall incorporate all known, available, and reasonable methods of prevention, control, and treatment measures into stormwater pollution prevention during and post construction.
3. All debris and other waste materials from construction shall be disposed of in such a manner as to prevent their entry into the water body.
4. All disposal sites for soils and materials resulting from the shoreline development shall be identified and approved before permit issuance.

C. Water.

Policies

1. Shoreline development and activities shall result in no net loss of ecological functions.
2. Development and regulated activities shall minimize impacts to hydrogeologic processes, surface water drainage, and ground water recharge.
3. Measures shall be incorporated into the development, use, or activity to protect water bodies and wetlands from all sources of pollution including, but not limited to, sediment and silt, petrochemicals, and wastes and dredge spoils.

4. Adequate provisions to prevent water runoff from contaminating surface and ground water shall be included in development design. The Director may specify the method of surface water control and maintenance programs. Surface water control must comply with the adopted stormwater manual.
5. All measures for the treatment of surface water runoff for the purpose of maintaining and/or enhancing water quality shall be conducted on site. Off-site treatment facilities may be considered if on-site treatment is not feasible.
6. Point and nonpoint source pollution should be managed on a basin-wide basis to protect water quality and support the efforts of shoreline property owners to maintain shoreline ecological functions.

Regulations

1. Pesticides, herbicides and fertilizers that have been identified by State or Federal agencies as harmful to humans, wildlife, or fish shall not be used on City-owned property within the shoreline jurisdiction or for development or uses approved under a substantial development permit, shoreline conditional use permit or shoreline variance, except as allowed by the Director for the following circumstances:
 - a. When use of pesticides, herbicides and fertilizers is consistent with the best management practices (BMPs) for the project or use proposed;
 - b. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health or the environment and that an otherwise prohibited application must be used as a last resort.

Where chemical fertilizer, herbicide, or pesticide use is necessary to protect existing natural vegetation or establish new vegetation as part of an erosion control or mitigation plan, the use of time release fertilizer and herbicides shall be preferred over liquid or concentrate application, except as used in targeted hand applications.

2. The release of oil, chemical, or hazardous materials onto or into the water is prohibited. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leakproof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected. During construction, vehicle refueling and vehicle maintenance shall occur outside of regulated shoreline areas.
3. The bulk storage of oil, fuel, chemical, or hazardous materials, on either a temporary or a permanent basis, is prohibited, except for uses allowed by the zoning classification. For the purpose of this section, heating oil, small boat fuel, yard maintenance, equipment fuel, propane,

sewage sumps, and similar items common to single-family residential uses are not included in this definition.

D. Plants and Animals.

Policies

1. In general, this Master Program shall strive to protect and restore anadromous fish resources in the Puget Sound and its tributaries within the ~~City of Shoreline~~.
2. Shoreline development, uses, and activities shall be:
 - a. Located and conducted in a manner that minimizes impacts to existing ecological values and natural resources of the area, conserves properly functioning conditions, and ensures no net loss of shoreline ecological functions;
 - b. Scheduled to protect biological productivity and to minimize interference with fish resources including anadromous fish migration, spawning, and rearing activity;
 - c. Designed to avoid the removal of trees in shorelines wherever practicable, and to minimize the removal of other woody vegetation. Where riparian vegetation is removed, measures to mitigate the loss of vegetation shall be implemented to ensure no net loss; and
 - d. Designed to minimize impacts to the natural character of the shoreline as much as possible.

Regulations

1. Mitigation shall be required of the applicant for the loss of fish and wildlife resources, and natural systems, including riparian vegetation, wetlands, and ~~sensitive~~ other environmentally critical areas. The mitigation required shall be commensurate to the value and type of resource or system impacted by development and activity in the shoreline. On-site compensatory mitigation shall be the preferred mitigation option, except where off-site mitigation can be demonstrated to be more beneficial to fish and wildlife resources, and natural systems, including riparian vegetation, wetlands, and ~~critical sensitive~~ areas. If on-site compensatory mitigation is not feasible or if off-site mitigation is demonstrated to be more beneficial to the shoreline environment, the applicant shall provide funding for a publicly sponsored restoration or enhancement program in the ~~City of Shoreline~~.
2. Enhancement, restoration, and/or creation of coniferous riparian forest or forested riparian wetland shall be the preferred mitigation for impacts to riparian vegetation and wetlands when avoidance is not possible. Preference will be based on site-specific recommendation of qualified professional. Alterations to fish and wildlife habitat conservation areas should be avoided. If they cannot be avoided, mitigation is required, and a habitat management plan shall be prepared as required in SMC 20.240.274~~20.80.290~~ and ~~20.80.300~~.

3. Habitat management plans shall be forwarded by the applicant to the appropriate State and/or Federal resource agencies for review and comment. The City will provide the applicant with a list of addressees for this purpose.
4. Based on the habitat management plan, and comments from other agencies, the Director may require mitigating measures to reduce the impacts of the proposal on the fish and wildlife habitat conservation areas. Mitigating measures may include, but are not limited to:
 - a. Increased or enhanced buffers;
 - b. Setbacks for permanent and temporary structures;
 - c. Reduced project scope;
 - d. Limitations on construction hours;
 - e. Limitations on hours of operation; and/or
 - f. Relocation of access.
5. Mitigation activities shall be monitored to determine effectiveness of the habitat mitigation plan. Monitoring shall be accomplished by a third party, subject to the approval by the Director, and shall have the concurrence of the U.S. Fish and Wildlife Service, NOAA Fisheries, WDFW~~Washington Department of Fish and Wildlife~~, and, where applicable, the ~~Washington~~ Department of Ecology. Monitoring shall occur for up to 10 years following implementation of the plan. Results of the monitoring shall be publicly available and reported to the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Reports shall contain the following information:
 - a. A list and map of parcels subject to this requirement;
 - b. The implementation status of the habitat management plans;
 - c. Status of the improvements (e.g., updates if success standards are being met, what types of remedial actions have been implemented); and
 - d. Recommendations for corrective measures if necessary.
6. If proposed mitigation is found to be inadequate, or if adequate mitigation is determined to be impossible, the application shall be denied.
7. Timing of in-water construction, development, or activity shall be determined by WDFW~~Washington Department of Fish and Wildlife~~.
8. Properties that are located in the urban conservancy shoreline environment designation shall retain trees that are 12 inches or more in diameter. Trees determined by a certified arborist to be hazardous or diseased may be removed upon approval by the City. If healthy or nonhazardous trees are removed, each removed tree must be replaced with at least three six-

foot-tall trees, one 18-foot-tall tree, or one 12-foot plus one six-foot-tall tree. Trees must be of the same species removed, or equivalent native tree species.

E. Noise.

Policy

1. Noise levels shall not interfere with the quiet enjoyment of the shoreline.

Regulations

1. Any noise emanating from a shoreline use or activity shall be muffled so as to not interfere with the designated use of adjoining properties. This determination shall take into consideration ambient noise levels, intermittent beat, frequency, and shrillness.

2. Ambient noise levels shall be a factor in evaluating a shoreline permit application.

Shoreline developments that would increase noise levels to the extent that the designated use of the shoreline would be disrupted shall be prohibited. Noise shall be evaluated pursuant to Chapter 9.05 SMC Noise Control. ~~Specific maximum environment noise levels can be found in WAC 173-60-040.~~

F. Public Health.

Policy

1. All development within the regulated shoreline shall be located, constructed, and operated so as not to be a hazard to public health and safety.

Regulations

1. Development shall be designed to conform to the codes and ordinances adopted by the City.

G. Land Use.

Policy

1. The size of the shoreline development and the intensity of the use shall be compatible with the surrounding environment and uses. ~~The City of Shoreline~~ may prescribe operation intensity, landscaping, and screening standards to ensure compatibility with the character and features of the surrounding area.

2. Shoreline developments shall minimize land use conflicts to properties adjacent to, upstream, and downstream of the proposed site.

Regulations

1. In reviewing permit applications, the City shall consider current and potential public use of the shoreline, total water surface reduction, and restriction to navigation.

2. Development within the designated shoreline shall comply with the development and uses standards for the underlying zoning district.

H. **Aesthetics.**

Policy

1. Development should be designed to minimize the negative aesthetic impact structures have on the shoreline by avoiding placement of service areas, parking lots, and/or view- blocking structures adjacent to the shoreline.

Regulations

1. Development shall be designed to comply with the code standards required in the underlying zoning districts.
2. If the zoning and use require landscaping, or if planting is required for mitigation by the Director, the property owner shall provide a landscape plan that provides suitable screening that does not block public views.
3. Development on or over the water shall be constructed as far landward as possible to avoid interference with views from surrounding properties and adjoining waters.
4. Development on the water shall be constructed of nonreflective materials that are compatible in terms of color and texture with the surrounding area.
5. Lighting shall be properly directed and shielded to avoid impacts to fish and off-site glare.

I. **Historical/Cultural.**

Policy

1. Development should strive to preserve historic or culturally significant resources.

Regulations

1. Developments that propose to alter historic or culturally significant resources identified by the National Trust for Historic Preservation, the Washington State Department of Archaeology and Historic Preservation, the King County Historic Preservation Program, or the City of Shoreline Historic Resource Inventory, or resources that could potentially be designated as historically or culturally significant, shall follow the applicable Federal, State, County, or local review process(es).
2. All shoreline permits issued by the City require immediate work stoppage and City notification when any item of archaeological interest is uncovered during excavation. The applicant or project owner shall notify the Washington State Department of Archaeology and Historic Preservation-~~Office~~, affected Indian tribes, and the City.
3. Where archaeological or historic sites have been identified, and it is determined that public access to the site will not damage or reduce the cultural value of the site, access may be required consistent with SMC 20.230.040.

~~20.230.030 Environmentally sensitive areas within the shoreline.~~

~~A.— Critical Areas.~~

~~General Policy~~

- ~~1.— Preserve and protect unique, rare, and fragile natural and manmade features and wildlife habitats.~~
- ~~2.— Enhance the diversity of aquatic life, wildlife, and habitat within the shoreline.~~
- ~~3.— Conserve and maintain designated open spaces for ecological, educational, and recreational purposes.~~
- ~~4.— Recognize that the interest and concern of the public are essential to the improvement of the environment, and sponsor and support public information programs.~~
- ~~5.— The level of public access should be appropriate to the degree of uniqueness or fragility of the geological and biological characteristics of the shoreline (e.g., wetlands, spawning areas).~~
- ~~6.— Discourage intensive development of shoreline areas that are identified as hazardous or environmentally sensitive.~~

~~General Regulations~~

- ~~1.— Critical areas in shoreline jurisdiction are regulated by the critical areas regulations (which were adopted on February 27, 2006, by Ordinance No. 398) codified under Chapter 20.80 SMC, which is herein incorporated into this SMP with the exceptions of the following:
 - ~~a.— SMC 20.80.030.~~
 - ~~b.— SMC 20.80.040.~~
 - ~~c.— Chapter 20.80 SMC, Subchapter 4, Wetlands.~~
 - ~~d.— SMC 20.80.310.~~
 - ~~e.— SMC 20.80.320.~~
 - ~~f.— SMC 20.80.330.~~
 - ~~g.— SMC 20.80.340.~~
 - ~~h.— SMC 20.80.350.~~~~
- ~~2.— The provisions of Chapter 20.80 SMC, Critical Areas, must be factored into decisions regarding development within the regulated shoreline and associated critical areas.~~
- ~~3.— All shoreline uses and activities shall be located, designed, constructed, and managed to protect or at least not adversely affect those natural features which are valuable, fragile, or unique in the region. They should also facilitate the appropriate intensity of human use of such features, including but not limited to:
 - ~~a.— Wetlands, including but not limited to marshes, bogs, and swamps;~~~~

b.— Fish and wildlife habitats, including streams and wetlands, nesting areas and migratory routes, spawning areas, and the presence of proposed or listed species;

c.— Natural or manmade vistas or features;

d.— Flood hazard areas; and/or

e.— Geologically hazardous areas, including erosion, landslide, and seismic hazard areas.

4.— The standards of the City of Shoreline's critical area regulations shall apply within the shoreline jurisdiction, where critical areas are present. If there are any conflicts or unclear distinctions between the Master Program and the City's critical areas regulations, the most restrictive requirements apply as determined by the City.

B.— Floodplain Management. The following policies and regulations must be factored into decisions regarding all flood management planning and development within that portion of the 100-year floodplain that falls within Shoreline's shoreline jurisdiction (within 200 feet of OHWM). Floodplain management involves actions taken with the primary purpose of preventing or mitigating damage due to flooding. Floodplain management can involve planning and zoning to control development, either to reduce risks to human life and property, or to prevent development from contributing to the severity of flooding. Floodplain management can also address the design of developments to reduce flood damage and the construction of flood controls, such as dikes, dams, engineered floodways, and bioengineering.

Policy

1.— Flood management planning should be undertaken in a coordinated manner among affected property owners and public agencies and should consider the entire coastal system. This planning should consider off-site impacts such as erosion, accretion, and/or flood damage that might occur if shore protection structures are constructed.

2.— Nonstructural control solutions are preferred over structural flood control devices, and should be used wherever possible when control devices are needed. Nonstructural controls include such actions as prohibiting or limiting development in areas that are historically flooded or limiting increases in peak flow runoff from new upland development. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to reduce the damage.

3.— Substantial stream channel modification, realignment, and straightening should be discouraged as a means of flood protection.

4.— Where possible, public access should be integrated into the design of publicly financed flood management facilities.

~~5.—The City supports the protection and preservation of the aquatic environment and the habitats it provides, and advocates balancing these interests with the City's intention to ensure protection of life and property from damage caused by flooding.~~

~~6.—Development should avoid potential channel migration impacts.~~

~~Regulations~~

~~1.—The City shall require and utilize the following information as appropriate during its review of shoreline flood management projects and programs:~~

~~a.—Stream channel hydraulics and floodway characteristics, up and downstream from the project area;~~

~~b.—Existing shoreline stabilization and flood protection works within the area;~~

~~c.—Physical, geological, and soil characteristics of the area;~~

~~d.—Biological resources and predicted impact to coastal ecology, including fish, vegetation, and animal habitat;~~

~~e.—Predicted impact upon area, shore, and hydraulic processes, adjacent properties, and shoreline and water uses; and/or~~

~~f.—Analysis of alternative flood protection measures, both nonstructural and structural.~~

~~2.—The City shall require engineered design of flood protection works where such projects may cause interference with normal geohydraulic processes, off-site impacts, or adverse effects to shoreline resources and uses. Nonstructural methods of flood protection shall be preferred over structural solutions when the relocation of existing shoreline development is not feasible.~~

~~C.—**Wetlands.** Presently, the wetlands within the City's shoreline jurisdiction have not been delineated and rated using current State standards. As the wetland category combined with the habitat functions rating defines the required buffers using current State standards, the requirements of this section apply to any new development application in the vicinity of an associated wetland. At that time, the wetland and its buffers would need to be categorized and delineated and the activities would be regulated using the following standards.~~

~~1.—**Policy.**~~

~~a.—Wetland ecosystems serve many important ecological and environmental functions, which are beneficial to the public welfare. Such functions include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and floodwaters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of sediments, nutrients, and toxicants; as well as education and scientific research.~~

- ~~b. Wetland areas should be identified according to established identification and delineation procedures and provided appropriate protection consistent with the policies and regulations of this Master Program.~~
- ~~c. The greatest protection should be provided to wetlands of exceptional resource value, which are defined as those wetlands that include rare, sensitive, or irreplaceable systems such as:~~
- ~~i. Documented or potential habitat for an endangered, threatened, or sensitive species;~~
 - ~~ii. High quality native wetland systems as determined by the Washington State Natural Heritage Program;~~
 - ~~iii. Significant habitat for fish or aquatic species as determined by the appropriate State resource agency;~~
 - ~~iv. Diverse wetlands exhibiting a high mixture of wetland classes and subclasses as defined in the U.S. Fish and Wildlife Service classification system;~~
 - ~~v. Mature forested swamp communities; and/or~~
 - ~~vi. Sphagnum bogs or fens.~~
- ~~d. A wetland buffer of adequate width should be maintained between a wetland and the adjacent development to protect the functions and integrity of the wetland.~~
- ~~e. The width of the established buffer zone should be based upon the functions and sensitivity of the wetland, the characteristics of the existing buffer, and the potential impacts associated with the adjacent land use.~~
- ~~f. All activities that could potentially affect wetland ecosystems should be controlled both within the wetland and the buffer zone to prevent adverse impacts to the wetland functions.~~
- ~~g. No wetland alteration should be authorized unless it can be shown that the impact is both unavoidable and necessary, and that resultant impacts are offset through the deliberate restoration, creation, or enhancement of wetlands.~~
- ~~h. Wetland restoration, creation, and enhancement projects should result in no net loss of wetland acreage and functions. Where feasible, wetland quality should be improved.~~
- ~~i. Wetlands that are impacted by activities of a temporary nature should be restored immediately upon project completion.~~
- ~~j. In-kind replacement of functional wetland values is preferred. Where in-kind replacement is not feasible or practical due to the characteristics of the existing wetland, substitute ecological resources of equal or greater value should be provided.~~

- k.— On-site replacement of wetlands is preferred. Where on-site replacement of a wetland is not feasible or practical due to characteristics of the existing location, replacement should occur within the same watershed and in as close proximity to the original wetland as possible.
- l.— Where possible, wetland restoration, creation, and enhancement projects should be completed prior to wetland alteration. In all other cases, replacement should be completed prior to use or occupancy of the activity or development.
- m.— Applicants should develop comprehensive mitigation plans to ensure long-term success of the wetland restoration, creation, or enhancement project. Such plans should provide for sufficient monitoring and contingencies to ensure wetland persistence.
- n.— Applicants should demonstrate sufficient scientific expertise, supervisory capability, and financial resources to complete and monitor the mitigation project.
- o.— Proposals for restoration, creation, or enhancement should be coordinated with appropriate resource agencies to ensure adequate design and consistency with other regulatory requirements.
- p.— Activities should be prevented in wetland buffer zones except where such activities have no adverse impacts on wetland ecosystem functions.
- q.— Wetland buffer zones should be retained in their natural condition unless revegetation is necessary to improve or restore the buffer.
- r.— Land use should be regulated to avoid adverse effects on wetlands and maintain the functions and values of wetlands throughout Shoreline, and review procedures should be established for development proposals in and adjacent to wetlands.

2.— Regulations.

- a.— **Identification and Delineation.** Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary.
- b.— **Rating.** Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington (Ecology Publication #04-06-025, or as revised and Wetlands Guidance for Small Cities Western approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.

i.—**Category I.** ~~Category I wetlands are: (1) relatively undisturbed estuarine wetlands larger than one acre; (2) wetlands that are identified by scientists of the Washington Natural Heritage Program/DNR as high quality wetlands; (3) bogs; (4) mature and old-growth forested wetlands larger than one acre; (5) wetlands in undisturbed coastal lagoons; and (6) wetlands that perform many functions well (scoring 70 points or more). These wetlands: (1) represent unique or rare wetland types; (2) are more sensitive to disturbance than most wetlands; (3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (4) provide a high level of functions.~~

ii.—**Category II.** ~~Category II wetlands are: (1) estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre; (2) interdunal wetlands larger than one acre; (3) disturbed coastal lagoons or (4) wetlands with a moderately high level of functions (scoring between 51 and 69 points).~~

iii.—**Category III.** ~~Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 30 and 50 points); and (2) interdunal wetlands between 0.1 and one acre. Wetlands scoring between 30 and 50 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.~~

iv.—**Category IV.** ~~Category IV wetlands have the lowest levels of functions (scoring fewer than 30 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.~~

c.—**Illegal Modifications.** ~~Wetland rating categories shall not change due to illegal modifications made by the applicant or with the applicant's knowledge.~~

3.—Regulated Activities.

a.—~~For any regulated activity, a critical areas report (see SMC 20.80.110) may be required to support the requested activity.~~

b.—~~The following activities are regulated if they occur in a regulated wetland or its buffer:~~

i.—~~The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;~~

ii.—~~The dumping of, discharging of, or filling with any material;~~

iii.—~~The draining, flooding, or disturbing of the water level or water table;~~

iv.—~~Pile driving;~~

v.—~~The placing of obstructions;~~

- vi.—~~The construction, reconstruction, demolition, or expansion of any structure;~~
- vii.—~~The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland;~~
- viii.—~~“Class IV—General Forest Practices” under the authority of the “1992 Washington State Forest Practices Act Rules and Regulations,” WAC 222-12-030, or as thereafter amended; and/or~~
- ix.—~~Activities that result in:~~
 - ~~(A) A significant change of water temperature;~~
 - ~~(B) A significant change of physical or chemical characteristics of the sources of water to the wetland;~~
 - ~~(C) A significant change in the quantity, timing, or duration of the water entering the wetland; and/or~~
 - ~~(D) The introduction of pollutants.~~
- c.—~~**Subdivisions.** The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:~~
 - ~~i.—Land that is located wholly within a wetland or its buffer may not be subdivided; and~~
 - ~~ii.—Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:~~
 - ~~(A) Located outside of the wetland and its buffer; and~~
 - ~~(B) Meets the minimum lot size requirements of SMC Table 20.50.020(1).~~
- d.—~~**Activities Allowed in Wetlands.** The activities listed below are allowed in wetlands. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:~~
 - ~~i.—Those activities and uses conducted pursuant to the Washington State Forest Practices Act and its rules and regulations, WAC 222-12-030, where State law specifically exempts local authority, except those developments requiring local approval for Class 4—General Forest Practice Permits (conversions) as defined in Chapter 76.09 RCW and Chapter 222-12 WAC.~~
 - ~~ii.—Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.~~
 - ~~iii.—The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.~~

~~iv.—Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.~~

~~v.—Enhancement of a wetland through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.~~

~~vi.—Educational and scientific research activities.~~

~~vii.—Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not expand the footprint of the facility or right-of-way.~~

~~4.—Wetland Buffers.~~

~~a.—**Buffer Requirements.** The standard buffer widths in Table 20.230.031 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.~~

~~i.—The use of the standard buffer widths requires the implementation of the measures in Table 20.230.032, where applicable, to minimize the impacts of the adjacent land uses.~~

~~ii.—If an applicant chooses not to apply the mitigation measures in Table 20.230.032, then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.~~

~~iii.—The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.~~

iv.— Additional buffer widths are added to the standard buffer widths. For example, a Category I wetland scoring 32 points for habitat function would require a buffer of 225 feet (75 + 150).

Table 20.230.031 Wetland Buffer Requirements for Western Washington

Wetland Category	Standard Buffer Width	Additional buffer width if wetland scores 21—25 habitat points	Additional buffer width if wetland scores 26—29 habitat points	Additional buffer width if wetland scores 30—36 habitat points
Category I: Based on total score	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Forested	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Estuarine	150 ft	NA	NA	NA
Category II: Based on score	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category III (all)	60 ft	Add 45 ft	Add 105 ft	NA
Category IV (all)	40 ft	NA	NA	NA

**Table 20.230.032 Required measures to minimize impacts to wetlands
(Measures are required, where applicable to a specific proposal)**

Disturbance	Required Measures to Minimize Impacts
Lights	Direct lights away from wetland.
Noise	Locate activity that generates noise away from wetland. If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source. For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10 ft heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.
Toxic runoff	Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered. Establish covenants limiting use of pesticides within 150 ft of wetland. Apply integrated pest management.
Stormwater runoff	Retrofit stormwater detention and treatment for roads and existing adjacent development.

**Table 20.230.032 Required measures to minimize impacts to wetlands
(Measures are required, where applicable to a specific proposal)**

Disturbance	Required Measures to Minimize Impacts
	Prevent channelized flow from lawns that directly enters the buffer. Use Low Intensity Development techniques (per PSAT publication on LID techniques).
Change in water regime	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns.
Pets and human disturbance	Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion. Place wetland and its buffer in a separate tract or protect with a conservation easement.
Dust	Use best management practices to control dust.
Disruption of corridors or connections	Maintain connections to off-site areas that are undisturbed. Restore corridors.

v. ~~**Increased Wetland Buffer Area Width.** Buffer widths shall be increased on a case-by-case basis as determined by the Administrator when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland. The documentation must include, but not be limited to, the following criteria:~~

~~(A) The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or~~

~~(B) The adjacent land is susceptible to severe erosion, and erosion control measures will not effectively prevent adverse wetland impacts; or~~

~~(C) The adjacent land has minimal vegetative cover or slopes greater than 30 percent.~~

vi. ~~Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:~~

~~(A) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower rated area;~~

~~(B) The buffer is increased adjacent to the higher functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion as demonstrated by a critical areas report from a qualified wetland professional;~~

~~(C) The total area of the buffer after averaging is equal to the area required without averaging;~~
and

~~(D) The buffer at its narrowest point is never less than either three fourths of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.~~

~~vii. Averaging through a shoreline variance may be permitted when all of the following are met:~~

~~(A) There are no feasible alternatives to the site design that could be accomplished without buffer averaging;~~

~~(B) The averaged buffer will not result in degradation of the wetland’s functions and values as demonstrated by a critical areas report from a qualified wetland professional;~~

~~(C) The total buffer area after averaging is equal to the area required without averaging; and~~

~~(D) The buffer at its narrowest point is never less than either three fourths of the required width or 75 feet for Category I and II, 50 feet for Category III and 25 feet for Category IV, whichever is greater.~~

~~b. To facilitate long-range planning using a landscape approach, the Administrator may identify and preassess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The Administrator will prepare maps of wetlands that have been preassessed in this manner.~~

~~c. **Measurement of Wetland Buffers.** All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers or included in buffer area calculations.~~

~~d. **Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.~~

e.—**Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the mitigation bond (subsection (C)(6)(h)(ii)(A)(8) of this section).

f.—**Impacts to Buffers.** Requirements for the compensation for impacts to buffers are outlined in subsection (C)(6) of this section.

g.—**Overlapping Critical Area Buffers.** If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

h.—**Allowed Buffer Uses.** The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

i.—**Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

ii.—**Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

(A)—Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer 25 percent of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable; and/or

(B)—Wildlife viewing structures.

iii.—Educational and scientific research activities.

iv.—Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

v.—The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

vi.—Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the

soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.

vii.—~~Enhancement of a wetland buffer through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.~~

viii.—**Stormwater Management Facilities.** ~~Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:~~

(A) ~~No other location is feasible;~~

(B) ~~The location of such facilities will not degrade the functions or values of the wetland; and~~

(C) ~~Stormwater management facilities are not allowed in buffers of Category I or II wetlands.~~

ix.—**Nonconforming Uses.** ~~Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.~~

i.—**Signs and Fencing of Wetlands and Buffers.**

i.—**Temporary Markers.** ~~The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.~~

ii.—**Permanent Signs.** ~~As a condition of any permit or authorization issued pursuant to this chapter, the Administrator may require the applicant to install permanent signs along the boundary of a wetland or buffer.~~

(A) ~~Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the Administrator:~~

Protected Wetland Area Do Not Disturb

Contact the City of Shoreline Regarding Uses, Restrictions, and Opportunities for Stewardship (B) — The provisions of subsection (C)(4)(i)(ii)(A) of this section may be modified as necessary to assure protection of sensitive features.

iii. — **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

5. — **Critical Area Report for Wetlands.**

a. — If the Administrator determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland, a wetland report, prepared by a qualified professional, shall be required. The expense of preparing the wetland report shall be borne by the applicant.

b. — **Minimum Standards for Wetland Reports.** The written report and the accompanying plan sheets shall contain the following information, at a minimum:

i. — The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the wetland critical area report; a description of the proposal; identification of all the local, State, and/or Federal wetland-related permit(s) required for the project; and a vicinity map for the project.

ii. — A statement specifying the accuracy of the report and all assumptions made and relied upon.

iii. — Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.

iv. — A description of the methodologies used to conduct the wetland delineations, rating system forms, or impact analyses including references.

v. — Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off site of the project site, estimate conditions within 300 feet of the project boundaries using the best available information.

vi. — For each wetland identified on site and within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (subsection (C)(2)(b) of this section); required buffers; hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of

~~inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site.~~

~~vii.—A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative.~~

~~viii.—An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development.~~

~~ix.—A description of reasonable efforts made to apply mitigation sequencing pursuant to Mitigation Sequencing (subsection (C)(6)(a) of this section) to avoid, minimize, and mitigate impacts to critical areas.~~

~~x.—A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity.~~

~~xi.—A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions.~~

~~c.—An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.~~

~~d.—A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:~~

~~i.—Maps (to scale) depicting delineated and surveyed wetland and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; grading and clearing limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates);~~

~~ii.—A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project; and~~

~~iii.—A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.~~

6.—Compensatory Mitigation.

a. ~~**Mitigation Sequencing.** Before impacting any wetland or its buffer, an applicant shall demonstrate that the following actions have been taken. Actions are listed in the order of preference:~~

- ~~i. Avoid the impact altogether by not taking a certain action or parts of an action.~~
- ~~ii. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.~~
- ~~iii. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.~~
- ~~iv. Reduce or eliminate the impact over time by preservation and maintenance operations.~~
- ~~v. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.~~
- ~~vi. Monitor the required compensation and take remedial or corrective measures when necessary.~~

b. ~~**Requirements for Compensatory Mitigation.**~~

- ~~i. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State — Part 2: Developing Mitigation Plans (Version 1), Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised.~~
- ~~ii. Mitigation ratios shall be consistent with subsection (C)(6)(g) of this section.~~
- ~~iii. Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft” (Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with subsection (C)(6)(h) of this section.~~

c. ~~**Compensating for Lost or Affected Functions.** Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:~~

- ~~i. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol;~~
~~or~~
- ~~ii. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.~~

d. — **Preference of Mitigation Actions.** Methods to achieve compensation for wetland functions shall be approached in the following order of preference:

i. — Restoration (reestablishment and rehabilitation) of wetlands.

ii. — Creation (establishment) of wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

iii. — Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

iv. — **Preservation.** Preservation of high quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

(A) — Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species;

(B) — There is no net loss of habitat functions within the watershed or basin;

(C) — Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost; and

(D) — The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland).

All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

e. — **Type and Location of Compensatory Mitigation.** Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of the following apply:

i. — There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or

~~within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);~~

~~ii.—Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and~~

~~iii.—Off-site locations shall be in the same sub-drainage basin unless:~~

~~(A)—Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; or~~

~~(B)—Credits from a State-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the bank's certification.~~

~~iv.—The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting).~~

~~Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.~~

~~f.—**Timing of Compensatory Mitigation.** It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.~~

~~i.—The Administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability~~

of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the City.

g. Wetland Mitigation Ratios.

Category and Type of Wetland	Creation or Reestablishment	Rehabilitation	Enhancement	Preservation
Category I: Bog, Natural Heritage site	Not considered possible	6:1	Case-by-case	10:1
Category I: Mature forested	6:1	12:1	24:1	24:1
Category I: Based on functions	4:1	8:1	16:1	20:1
Category II	3:1	6:1	12:1	20:1
Category III	2:1	4:1	8:1	15:1
Category IV	1.5:1	3:1	6:1	10:1

h. Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards:

Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State—Part 1: Agency Policies and Guidance—Version 1 (Ecology Publication No. 06-06-011a, Olympia, WA, March 2006 or as revised).

i. Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in the “Minimum Standards for Wetland Reports” section of this chapter.

ii. Compensatory Mitigation Report. The report must include a written report and plan sheets that must contain, at a minimum, the elements listed below. Full guidance can be found

~~in Wetland Mitigation in Washington State—Part 2: Developing Mitigation Plans (Version 1)
(Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised).~~

~~(A) The written report must contain, at a minimum:~~

~~(1) The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, State, and/or Federal wetland-related permit(s) required for the project; and a vicinity map for the project;~~

~~(2) Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands;~~

~~(3) Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (subsection (C)(2)(b) of this section);~~

~~(4) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site progress through natural succession?);~~

~~(5) A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;~~

~~(6) A description of the proposed mitigation construction activities and timing of activities;~~

~~(7) A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);~~

~~(8) A bond estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring; and~~

~~(9) Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas.~~

~~(B) The scaled plan sheets for the compensatory mitigation must contain, at a minimum:~~

~~(1) Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;~~

~~(2) Existing topography, ground-processed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;~~

~~(3) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;~~

~~(4) Conditions expected from the proposed actions on-site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;~~

~~(5) Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter;~~

~~(6) A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, timing of installation; and~~

~~(7) Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring schedule, and maintenance schedule and actions by each biennium.~~

~~i. **Buffer Mitigation Ratios.** Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.~~

20.230.040 Public access.

Public access to the shoreline is the physical ability of the general public to reach and touch the water's edge and/or the ability to have a view of the water and the shoreline from upland locations. There are a variety of types of public access, such as picnic areas, pathways and trails, promenades, bridges, street ends, ingress and egress, and parking.

A. Public Access Policies.

1. Public access provisions should be incorporated into all private and public developments. Exceptions may be considered for the following types of uses:
 - a. A single-family residence;
 - b. An individual multifamily structure containing four or less dwelling units; and/or
 - c. Where deemed inappropriate by the Director.
2. Development uses and activities on or near the shoreline should not impair or detract from the public's visual or physical access to the water.
3. Public access to the shoreline should be sensitive to the unique characteristics of the shoreline and should preserve the natural character and quality of the environment and adjacent wetlands; public access should assure no net loss of ecological functions.
4. Where appropriate, water-oriented public access should be provided as close as possible to the water's edge without adversely affecting a sensitive environment.
5. Except for access to the water, the preferred location for placement of public access trails is as close to the furthest landward edge of the native vegetation zone as practical. Public access facilities should provide auxiliary facilities, such as parking and sanitation, when appropriate, and shall be designed for accessibility by people with disabilities. Publicly owned shorelines should be limited to water-dependent or public recreation uses, otherwise such shorelines should remain protected open space.
6. Public access afforded by public right-of-way street ends adjacent to the shoreline should be preserved, maintained, and enhanced.
7. Public access should be designed to provide for public safety and to minimize potential impacts to private property and individual privacy. This may include providing a physical separation to reinforce the distinction between public and private space, providing adequate space, through screening with landscape planting or fences, or other means.
8. Public views from the shoreline upland areas should be enhanced and preserved. Enhancement of views should not be construed to mean excess removal of vegetation that partially impairs views.
9. Public access facilities should be constructed of environmentally friendly materials and support healthy natural processes, whenever financially feasible and possible.
10. Public access facilities should be maintained to provide a clean, safe experience, and to protect the environment.

B. Public Access Regulations.

1. Public access shall be required for all shoreline development and uses, except for a single-family residence or residential projects containing four or less dwelling units.

2. Requirement of public access to shorelines does not confer the right to enter upon or cross private property, except for dedicated and marked public easements.
3. A shoreline development or use that does not provide public access may be authorized provided the applicant demonstrates and the Director determines that one or more of the following provisions apply:
 - a. Unavoidable health or safety hazards to the public exist that cannot be prevented by any feasible means;
 - b. Security requirements cannot be satisfied through the application of alternative design features or other solutions;
 - c. The cost of providing the access, easement, or an alternative amenity is unreasonably disproportionate to the total long-term cost of the proposed development;
 - d. Unacceptable environmental harm, such as damage to fish spawning areas, will result from the public access that cannot be mitigated; and/or
 - e. Significant conflict between the proposed access and adjacent uses would occur and cannot be mitigated.
4. The applicant must also demonstrate that all reasonable means to public access have been exhausted, including but not limited to:
 - a. Regulating access by such means as limiting use to daylight hours;
 - b. Designing separation of uses and activities with such means as fences, terracing, hedges, or landscaping; and/or
 - c. Providing access that is physically separated from the proposal, such as a nearby street end, an off-site viewpoint, or a trail system.
5. Public access sites shall be made barrier free for people with disabilities.
6. Public access sites shall be connected directly to the nearest public street.
7. Required public access sites shall be fully developed and available for public use at the time of occupancy or use of the development or activity.
8. Public access easements and permit conditions shall be recorded on the deed where applicable or on the face of a plat or short plat as a condition running with the land. Said recording with the King County Recorder's office shall occur at the time of permit approval. ~~(RCW 58.17.110).~~
9. The standard Washington State approved logo and other approved signs that indicate the public's right of access and hour of access shall be constructed, installed, and maintained by the applicant in conspicuous locations at public access sites. Signs controlling or restricting public access may be approved as a condition of permit approval.

10. Development on or over the water shall be constructed as far landward as possible to avoid interference with views from surrounding properties to the shoreline and adjoining waters.

11. Physical public access shall be designed to prevent significant impacts to natural systems by employing low impact development techniques.

Subchapter 2.

Specific Shoreline Use Policies and Regulations

20.230.070 General.

Specific shoreline use provisions are more detailed than those listed in general policies and regulations. These use policies and regulations apply to the identified use categories and provide a greater level of detail for uses and their impacts. The policies establish the shoreline management principles that apply to each use category and serve as a bridge between the various elements listed in SMC 20.200.040 and the use regulations that follow.

This subchapter also includes those activities that modify the configuration or qualities of the shoreline area. Shoreline modification activities are, by definition, undertaken in support of or in preparation for a permitted shoreline use. Typically, shoreline modification activities relate to construction of a physical element such as a breakwater, dredged basins, landfilling, etc., but they can include other actions such as clearing, grading, application of chemicals, etc.

Shoreline modification policies and regulations are intended to prevent, reduce, and mitigate the negative environmental impacts of proposed shoreline modifications consistent with the goals of the SMAShoreline Management Act. A proposed development must meet all of the regulations for both applicable uses and activities as well as the general and environment designation regulations.

The following policies and regulations apply to specific types of development that may be proposed in the shoreline jurisdiction of the City. A proposal can consist of more than one type of development. In addition, all specific shoreline development must be consistent with the following shoreline environmental designations; the goals and objectives of Chapter 20.200 SMC; ~~and the general policies and regulations contained in Chapter 20.230 SMC, Subchapter 1-;~~ and the critical areas regulations contained in Chapter 20.240 SMC.

20.230.080 Shoreline environmental designations. — ~~Map included in Appendix D, page 205.~~¹

Aquatic Environment (A). Encompasses all submerged lands from OHWM to the middle of Puget Sound. The purpose of this designation is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM ~~Ordinary high water mark~~. New over-water structures are allowed only for water-dependent uses, public access, or ecological restoration and must be limited to the minimum necessary to support the structure's intended use.

Urban Conservancy Environment (UC). The purpose of this designation is to protect and restore relatively undeveloped or unaltered shorelines to maintain open space, floodplains, or habitat, while allowing a variety of compatible uses. This designation shall apply to shorelines that retain important ecological functions, even if partially altered. These shorelines are suitable for low intensity development, uses that are a combination of water-related or water enjoyment uses, or uses that allow substantial numbers of people access to the shoreline. Any undesignated shorelines are automatically assigned an urban conservancy designation.

Shoreline Residential Environment (SR). The purpose of this designation is to accommodate residential development and accessory structures that are consistent with this ~~Shoreline~~-Master Program. This designation shall apply to shorelines that do not meet the criteria for urban conservancy and that are characterized by single-family or multifamily residential development or are planned and platted for residential development.

Waterfront Residential Environment (WR). The purpose of this designation is to distinguish between residential portions of the coastline where natural and manmade features preclude building within the shoreline jurisdiction and the section along 27th Avenue NW where residential properties directly abut the Puget Sound.

Characteristics of 27th Avenue NW include:

- Only fully established residential property in the City of ~~Shoreline~~ directly abutting the Puget Sound;
- Substantial number of legally existing nonconforming lots and nonconforming structures;
- Exposure to high energy wind and wave action;

- Fully armored shoreline prior to December 4, 1969, and residences occupied prior to January 1, 1992; and

- Failure of an individual bulkhead would cause adverse effect on subject property as well as neighboring properties.

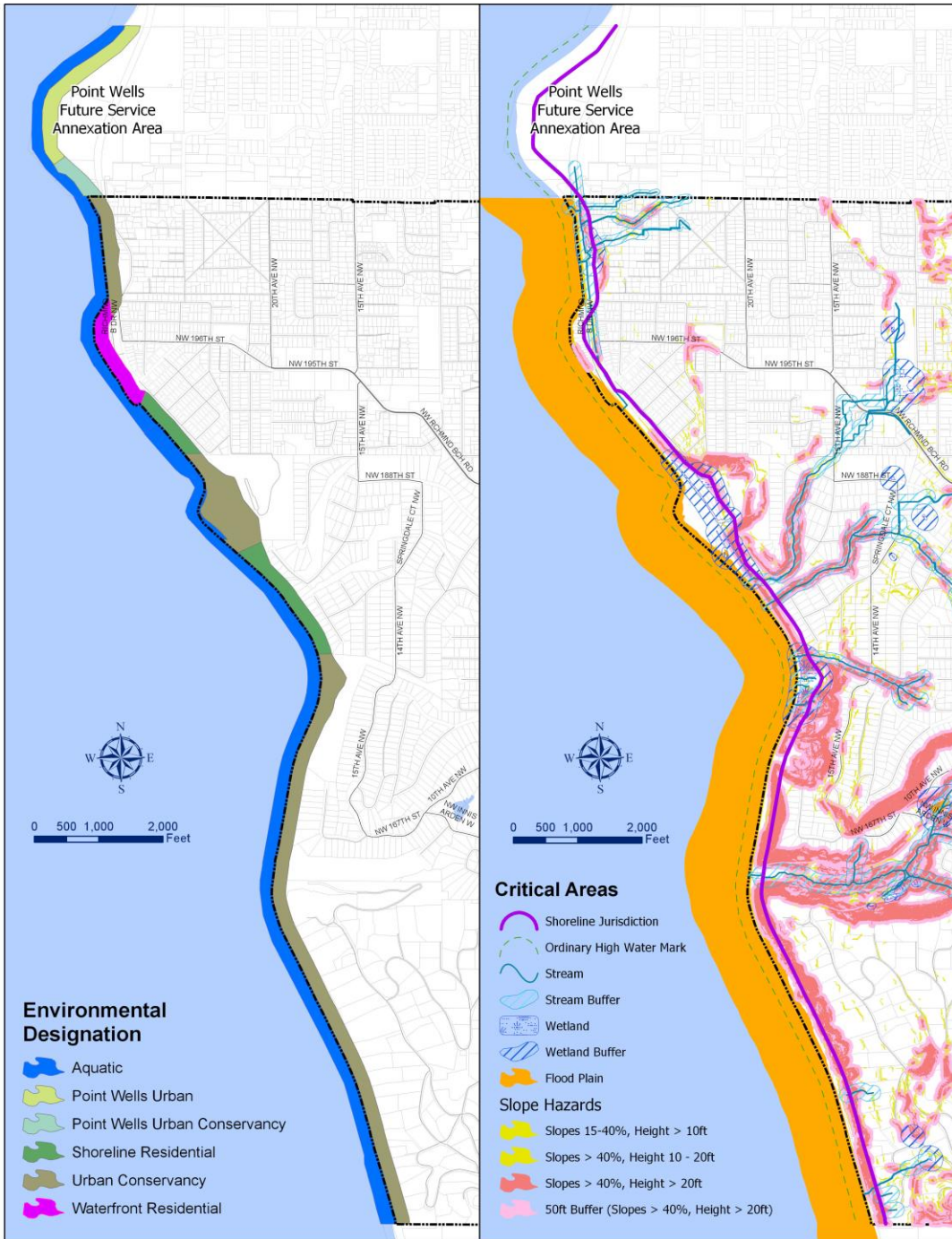
These unique circumstances and considerations warrant different regulations for 27th Avenue NW as compared to existing residential property that is cut off from the shoreline by bluffs and railroad tracks (UC and SR), and potential new residential properties in the Point Wells designations (PW and PWC).

Point Wells Urban Environment (PW). The purpose of this designation is to accommodate higher density uses while protecting existing ecological functions and restoring ecological functions that have been degraded.

Point Wells Urban Conservancy Environment (PWC). The purpose of this designation is to distinguish between differing levels of potential and existing ecological function within the Point Wells environment, and regulate uses and public access requirements appropriately.

Shoreline Environment Designations

Critical Areas



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Figure 20.230.080: Shoreline Environmental Designations and mapped critical areas.

SMC 20.230.081 Permitted Uses and Modifications.

Uses that are allowed in Tables 20.40.120 through 20.40.1650 are permitted uses in accordance with the underlying zone, this chapter, and the provisions of ~~the~~this Shoreline Master Program.

P = Permitted. Permitted uses may require shoreline substantial development permits and any other permits required by the Shoreline Municipal Code and/or other regulatory agencies.

C = Conditional Use. Conditional uses require shoreline conditional use permit and may require other permits required by the Shoreline Municipal Code and/or other regulatory agencies.

X = Prohibited.

Table 20.230.081 Permitted Uses and Modifications within the Shorelines

Shoreline Use	<i>Shoreline Environments</i>					
	Aquatic	Urban Conservancy	Shoreline Residential	Waterfront Residential	PW Urban Conservancy	PW Urban
Agriculture	X	X	X	X	X	X
Aquaculture	C	X	X	X	X	X
Boating Facilities (Boat Hoists and Launching Ramps)	P ¹	P: Boat launching ramps open to the public	P: Joint use boat launching ramps	P: Joint use boat launching ramps	X	P: Boat launching ramps open to the public
Nonresidential Development	X	X	X	X	P	P
Forest Practices	X	X	X	X	X	X
Industrial Development	X	X	X	X	P: Existing	P: Existing C: Expansion
In-Stream	P ¹	P: Part of a	P: Part of a	P: Part of a	P: Part of a	P: Part of a

Table 20.230.081 Permitted Uses and Modifications within the Shorelines

	Shoreline Environments					
Shoreline Use	Aquatic	Urban Conservancy	Shoreline Residential	Waterfront Residential	PW Urban Conservancy	PW Urban
Structures		fish habitat enhancement or a watershed restoration project	fish habitat enhancement or a watershed restoration project	fish habitat enhancement or a watershed restoration project	fish habitat enhancement or a watershed restoration project	fish habitat enhancement or a watershed restoration project
Mining	X	X	X	X	X	X
Mooring	P	X	X	X	X	X
Recreation Use (Water-related)	C: Water-dependent only	P	P	P	P: Limit to low intensity uses, passive uses	P
Recreation Facilities	C ⁹	P	P	P	P: Limit to low intensity uses, passive uses	P
Residential Developments	X	P	P	P	P	P
Signs	X ⁶	P	P	P	P	P
Permanent Solid Waste Storage or Transfer Facilities	X	X	X	X	X	X
Transportation Facilities (Roads and	X	C	P	P	C	P

Table 20.230.081 Permitted Uses and Modifications within the Shorelines

	Shoreline Environments					
Shoreline Use	Aquatic	Urban Conservancy	Shoreline Residential	Waterfront Residential	PW Urban Conservancy	PW Urban
Bridges)						
Transportation Facilities ³ (Railroads)	P	P	P	P	P	P
Utilities	C	P: Underground facilities C: Aboveground facilities	P: Underground facilities C: Aboveground facilities	P: Underground facilities C: Aboveground facilities	P: Underground facilities C: Aboveground facilities	P: Underground facilities C: Aboveground facilities
Unclassified Uses	C	C	C	C	C	C

Table 20.230.081 Permitted Uses and Modifications within the Shorelines

Shoreline Modifications	Aquatic	Urban Conservancy	Shoreline Residential	Waterfront Residential	PW Urban Conservancy	PW Urban
Breakwaters, Jetties, Groins, and Weirs	C ¹	X	X	X	X	X
Dredging	P ⁴ C: Related to navigation for PWU	P ⁴	P ⁴	P ⁴	P ⁴	P ⁴
Dredging Material Disposal	C	P ⁵	P ⁵	P ⁵	P ⁵	P ⁵

Table 20.230.081 Permitted Uses and Modifications within the Shorelines

Shoreline Modifications	Aquatic	Urban Conservancy	Shoreline Residential	Waterfront Residential	PW Urban Conservancy	PW Urban
Dune Modification	X	X	X	X	X	X
Piers and Docks	P ¹	P: Public	P: Joint use	P: Joint use	X	P: Existing associated with public use P: Public piers or docks C: Expansion of existing with water oriented industrial use
Structural Flood Hazard Reduction (Dikes and Levees)	X	X	X	X	X	X
Soft-Shore Stabilization	P ¹	P	P	P	P: With utilities	P
Repair, Replacement, and Maintenance of Existing Hard-Shore Armoring	P	P	P	P ⁸	P	P
Hard	X	C	C	C	X	C

Table 20.230.081 Permitted Uses and Modifications within the Shorelines

Shoreline Modifications	Aquatic	Urban Conservancy	Shoreline Residential	Waterfront Residential	PW Urban Conservancy	PW Urban
Shoreline Armoring where None Previously Existed						
Land Disturbing Activities	X	P ³	P ³	P ³	P ³	P ³
Landfilling	C ⁴	C ³	C ¹	C ¹	C ³	C ³
Shoreline Habitat and Natural Systems Enhancement Projects	P	P	P	P	P	P
Marinas	X	X	X	X	X	X

¹ Subject to the use limitations and permit requirements of the abutting upland shoreline environment designation.

² The City recognizes the Federal preemption for local permitting per the ICC Termination Act of 1995, 49 U.S.C. § 10501(b); however, for the purposes of coastal zone management consistency the railroad company would be required to comply with the policies of ~~this City of Shoreline's SMP~~ Master Program.

³ For activities associated with shoreline restoration or remediation; or limited if associated with public access improvement and allowed shoreline development.

⁴ For activities associated with shoreline or aquatic restoration or remediation.

⁵ For shoreline habitat and natural systems enhancement, fish habitat enhancement, or watershed restoration project.

⁶ Signs required by regulatory agencies for navigational operation, safety and direction purposes allowed in aquatic environment per SMC 20.230.230(B)(1).

⁷ Limited to water-dependent, public access, or shoreline stabilization activities.

⁸ This includes replacement.

⁹ Refer to SMC 20.230.130 for conditions.

20.230.082 Native Conservation Area and Building Setbacks.

The term “native conservation area” (NVCA) applies to areas where the shoreline is not armored, such as the PWC environment designation, and Richmond Beach Saltwater Park. NVCAs should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term “building setback” applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted. The area is measured horizontally from the OWHM and the structure or use.

Table 20.230.082 Native Conservation Area/Building Setbacks[†]

Shoreline Environmental Designation	Minimum Native Vegetation Conservation or <u>Building Setback Area</u>[†]
Urban Conservancy	150 feet or 50 feet from the top of a landslide hazard area, whichever is greater
Shoreline Residential	115 feet
Waterfront Residential	20 feet
Point Wells Urban	200 feet (restoration required as part of development)
Point Wells Urban Conservancy	200 feet

Bulk standards will be regulated by underlying zoning according to SMC Table 20.50.020(1). Zoning designation is R6 for UC, SR, and WR, and yet to be determined for PW and PWC.

~~[†]—The term “native conservation area” (NVCA) applies to areas where the shoreline is not armored, such as the PWC environment designation, and Richmond Beach Saltwater Park. NVCAs should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term “building setback” applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted.~~

20.230.090 Boating facilities.

Boating facilities serving two or more single-family dwelling units generally include boat launch ramps (public and private), wet and dry boat storage, and related sales and service for pleasure and commercial watercraft. For the purpose of this section, boat hoists, davits, lifts, and/or dry boat storage of private watercraft consistent with single-family residential properties are not included.

A. Boating Facilities Policies.

1. Boating facilities can have a significant impact on habitat. The impacts of boating facilities should be reviewed thoroughly before boating facilities are permitted in the shoreline jurisdiction.
2. Public and community boating facilities may be allowed. Individual private facilities are prohibited.
3. New nonresidential boating facilities may be allowed as a conditional use within the regulated shoreline. When allowed, such facilities should be designed to accommodate public access and enjoyment of the shoreline location. Depending on the scale of the facility, public access should include walkways, viewpoints, restroom facilities, and other recreational uses.
4. Dry boat storage should not be considered a water-oriented use. Only boat hoists, boat launch ramps, and access routes associated with a dry boat storage facility should be considered a water-oriented use.
5. Health, safety and welfare considerations must be addressed in application for development of boating facilities.
6. Navigation rights must be protected in development of boating facilities.
7. Extended moorage on waters of the State without a lease or permission is restricted and mitigation of impacts to navigation and access is required.

B. Boating Facilities Regulations.

1. Boating facilities may be permitted only if:
 - a. It can be demonstrated that the facility will not adversely impact fish or wildlife habitat areas or associated wetlands; and
 - b. Adequate mitigation measures ensure that there is no net loss of the functions or values of the shoreline and habitat as a result of the facility.
2. Boating facilities shall not be permitted within the following marine shoreline habitats because of their scarcity, biological productivity and sensitivity unless no alternative location is

feasible, the project would result in a net enhancement of shoreline ecological functions, and the proposal is otherwise consistent with this program:

- a. Critical saltwater habitats; and
- b. Marshes, estuaries and other wetlands.
3. Preferred ramp designs, in order of priority, are:
 - a. Open grid designs with minimum coverage of beach substrate;
 - b. Seasonal ramps that can be removed and stored upland; and
 - c. Structures with segmented pads and flexible connections that leave space for natural beach substrate and can adapt to changes in beach profile.
4. Ramps shall be placed and maintained near flush with the foreshore slope.
5. Boat launches shall be designed and constructed using methods/technology that have been recognized and approved by State and Federal resource agencies as the best currently available. Rail and track systems shall be preferred over concrete ramps or similar facilities.
6. Launch access for nonmotorized watercraft shall use gravel or other permeable material. Removal of vegetation for launch access should be limited to eight feet in width.
7. Before granting approval of a permit to allow a boat launch ramp, the proponent must satisfactorily demonstrate that:
 - a. Adequate facilities for the efficient handling of sewage and litter will be provided;
 - b. The boating facilities will be designed so that structures are aesthetically compatible with or enhance shoreline features and uses; and
 - c. The boating facilities will be designed so that existing or potential public access along beaches is not blocked or made unsafe, and so that public use of the surface waters is not unduly impaired.

C. Boat Launch Ramps.

1. Boat launch ramps shall be located on stable shorelines where water depths are adequate to eliminate or minimize the need for channel maintenance activities.
2. Boat launch ramps may be permitted on accretion shoreforms provided any necessary grading is not harmful to affected resources.
3. Where boat ramps are permitted, parking and shuttle areas shall not be located on accretion shoreforms.
4. Boat launch ramps may be permitted on stable, noneroding banks where the need for shore stabilization structures is minimized.
5. Ramp structures shall be placed near flush with the foreshore slope to minimize the interruption of geohydraulic processes.

6. Boat launch sites that are open to the public shall have adequate restroom facilities operated and maintained in compliance with King County Health District regulations.

D. Dry Boat Storage.

1. Dry boat storage shall not be considered a water-oriented use and must comply with the required shoreline environment setback.

2. Only water-dependent aspects of dry boat storage, such as boat hoists and boat launch ramps, may be permitted within shoreline environment setbacks.

3. Boat launch ramps associated with dry boat storage shall be consistent with applicable requirements in this section.

20.230.095 Breakwaters, jetties, groins, and weirs.

A. Breakwaters, Jetties, Groins and Weirs Policies.

1. Breakwaters, jetties, groins, and weirs should be permitted only for water-dependent uses and only where mitigated to provide no net loss of shoreline ecological functions and processes.

B. Breakwaters, Jetties, Groins and Weirs Regulations.

1. Groins are prohibited except as a component of a professionally designed public beach management program that encompasses an entire drift sector or reach for which alternatives are infeasible, or where installed to protect or restore shoreline ecological functions or processes.

2. Jetties and breakwaters are prohibited except as an integral component of a professionally designed harbor or port. Where permitted, floating, portable or submerged breakwater structures, or smaller discontinuous structures, are preferred where physical conditions make such alternatives with less impact feasible. Defense works that substantially reduce or block littoral drift and cause erosion of downdrift shores shall not be allowed unless an adequate long-term professionally engineered beach nourishment program is established and maintained.

20.230.100 Nonresidential development.

A. Nonresidential Development Policies.

1. Priority of any nonresidential development should be given to water-dependent and water-enjoyment uses. Allowed uses include restaurants that provide a view of the sound to customers, motels and hotels that provide walking areas for the public along the shoreline, office buildings, and retail sales buildings that have a waterfront theme with public access to the beach or water views.

2. Over-the-water nonresidential development shall be prohibited.

3. Nonresidential development should be required to provide on-site physical or visual access to the shoreline, or offer other opportunities for the public to enjoy shorelines of statewide significance. If on-site access cannot be provided, off-site access should be required. Off-site access could be procured through the purchase of land or an easement at a location appropriate to provide the access deemed necessary. Nonresidential developments should include multiple-use concepts such as open space and recreation.
4. Nonresidential development in the shoreline jurisdiction should include landscaping to enhance the shoreline area.

B. Nonresidential Development Regulations.

1. Over-water construction of nonresidential uses is prohibited, with the exception of boat facilities necessary for the operation of an associated nonresidential use.
2. All nonresidential development within the shoreline area shall provide for visual and/or physical access to the shoreline by the public. Where on-site public access is feasible, nonresidential development shall dedicate, improve, and provide maintenance for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for the general public. Public access easements shall be a minimum of 25 feet in width and shall comply with the public access standards contained in the "Public Access" section of this ~~Shoreline Master Program and the Shoreline Development Code~~ SMC Title 20.
3. All nonresidential loading and service areas shall be located on the upland side of the nonresidential activity or provisions shall screen the loading and service areas from the shoreline.
4. All nonresidential development within shoreline jurisdiction shall assure no net loss of shoreline ecological functions.
5. A shoreline setback is not required to be maintained for water-dependent nonresidential development.
6. Water-dependent, nonresidential development shall maintain a shoreline setback of either 25 feet from the OHWM or 10 feet from the edge of the base flood elevation, whichever is greater. If public access is provided to the shoreline, the setback may be reduced to 10 feet from the OHWM or the edge of the base flood elevation, whichever is greater.
7. Non-water-dependent nonresidential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082.

20.230.110 In-stream structures.

A. In-Stream Structures Policies.

1. In-stream structures should provide for the protection and preservation of ecosystem-wide processes, ecological functions, and cultural resources including, but not limited to, fish and fish passage, wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas. The location and planning of in-stream structures should give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.
2. Nonstructural and nonregulatory methods to protect, enhance, and restore shoreline ecological functions and processes and other shoreline resources should be encouraged as an alternative to structural in-stream structures.

B. In-Stream Structures Regulations.

1. Natural in-stream features such as snags, uprooted trees, or stumps should be left in place unless it can be demonstrated that they are actually causing bank erosion or higher flood stages.
2. In-stream structures shall allow for normal ground water movement and surface runoff.
3. In-stream structures shall not impede upstream or downstream migration of anadromous fish.
4. All debris, overburden and other waste materials from construction shall be disposed of in such a manner that prevents their entry into a water body.

20.230.115 Aquaculture.

A. Aquaculture Policies.

1. Potential locations for aquaculture are relatively restricted due to specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, wind protection, commercial navigation, and, in marine waters, salinity. The technology associated with some forms of present-day aquaculture is still in its formative stages and experimental. Therefore, the City recognizes the necessity for some latitude in the development of this use as well as its potential impact on existing uses and natural systems.
2. Aquaculture should not be permitted in areas where it would result in a net loss of ecological functions, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses. Aquacultural facilities should be designed and located so as not to spread disease to native aquatic life, establish new nonnative species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the

shoreline. Impacts to ecological functions shall be mitigated according to the mitigation sequence described in SMC 20.230.020.

B. Aquaculture Regulations.

1. Aquaculture is allowed as a conditional use in the Aquatic environment where it can be located, designed, constructed, and managed to avoid a net loss of ecological functions, not spread diseases to native aquatic life, not adversely impact native eelgrasses and macroalgae species or not significantly conflict with navigation.
2. The supporting infrastructure for aquaculture may be located landward of the aquaculture operation subject to ~~the City's land use code~~ SMC Title 20.
3. Aquaculture facilities are required to develop best management practices to minimize impacts from the construction and management of the facilities.
4. New aquatic species that are not previously cultivated in Washington State shall not be introduced into Shoreline's saltwaters or freshwaters without prior written approval of the Director of ~~WDFW~~ the Washington Department of Fish and Wildlife and the Director of the Washington Department of Health. This prohibition does not apply to: Pacific, Olympia, Kumomoto, Belon or Virginica oysters; Manila, Butter, or Littleneck clams; or Geoduck clams.
5. No aquacultural processing, except for the sorting or culling of the cultured organism and the washing or removal of surface materials or organisms, shall be permitted waterward of the ~~OHWM~~ Ordinary high water mark unless fully contained within a tending boat or barge.
6. Aquaculture wastes shall be disposed of in a manner that will ensure compliance with all applicable governmental waste disposal standards, including but not limited to the Federal Clean Water Act, Section 401, and Chapter 90.48 RCW, Water Pollution Control, as amended from time to time. No garbage, wastes, or debris shall be allowed to accumulate at the site of any aquaculture operation.

20.230.120 Parking areas.

A. Parking Area Policies.

1. Parking in shoreline areas should be minimized.
2. Parking within shoreline areas should directly serve a permitted use on the property.
3. Parking in shoreline areas should be located and designed to minimize adverse impacts including those related to stormwater runoff, water quality, visual qualities, public access, and vegetation and habitat maintenance.
4. Landscaping should consist of native vegetation in order to enhance the habitat opportunities within the shorelines area.

B. Parking Regulations. Parking for specific land use activities within the City of Shoreline is subject to the requirements and standards set forth in Chapter 20.50 SMC, Subchapter 6, Parking, Access, and Circulation. In addition, the following parking requirements shall apply to all developments within shorelands:

1. The location of parking areas in or near shoreland areas shall be located outside of the minimum setbacks listed in Table 20.230.082 for the shoreline designation.
2. Parking in the shorelands must directly serve an approved shoreline use.
3. Parking shall be located on the landward side of the development unless parking is contained within a permitted structure. Where there is no available land area on the landward side of the development, parking shall extend no closer to the shoreline than a permitted structure.
4. Landscape screening is required between the parking area and all adjacent shorelines and properties as set forth in Chapter 20.50 SMC, Subchapter 7 Landscaping.
5. The landscape screening for parking areas located within the shoreline areas shall consist of native vegetation, planted prior to final approval of project, which provides effective screening two years after planting. Adequate screening or landscaping for parking lots shall consist of one or more of the following:
 - a. A strip five feet wide landscaped with trees, shrubs, and/or groundcover;
 - b. A building or enclosed structure; and/or
 - c. A strip of land not less than two and one-half feet in width that is occupied by a continuous wall, fence, plant material, or combination of both; which shall be at least three and one-half feet high at time of installation. The plant material shall be evergreen and spaced not more than one and one-half feet on center if pyramidal in shape, or not more than three feet if wider in branching habit. If the plant material is used in conjunction with a wall or fence meeting the minimum height requirements, then said material may be of any kind and spacing. More restrictive screening may be required by Chapter 20.50 SMC, Subchapters 6 and 7. Required parking area screening may be incorporated into general landscaping requirements under Chapter 20.50 SMC, Subchapters 6 and 7.
6. The requirement for screening may be waived by the Director, where screening would obstruct a significant view from public property or public roadway.
7. Parking areas shall not be permitted over the water.
8. Parking as a primary use shall be prohibited within all shoreline environments.
9. Parking or storage of recreational vehicles or travel trailers as a primary use shall be prohibited in all shoreline environments.

20.230.130 Recreational facilities.

Recreational development provides for low impact activities, such as hiking, photography, kayaking, viewing, and fishing, or more intensive uses such as parks. This section applies to both publicly and privately owned shoreline facilities.

A. Recreational Facilities Policies.

1. The coordination of local, State, and Federal recreation planning should be encouraged so as to mutually satisfy recreational needs. Shoreline recreational developments should be consistent with all adopted parks, recreation, and open space plans.
2. Parks, recreation areas, and public access points, such as hiking paths, bicycle paths, and scenic drives, should be linked.
3. Recreational developments should be located and designed to preserve, enhance, or create scenic views and vistas.
4. The use of jet-skis and similar recreational equipment should be restricted to special areas. This type of activity should be allowed only where no conflict exists with other uses and wildlife habitat.
5. All recreational developments should make adequate provisions for:
 - a. Vehicular and pedestrian access, both on site and off site;
 - b. Proper water, solid waste, and sewage disposal methods;
 - c. Security and fire protection for the use itself and for any use-related impacts to adjacent private property;
 - d. The prevention of overflow and trespass onto adjacent properties; and
 - e. Buffering of such development from adjacent private property or natural areas.

B. Recreational Facilities Regulations.

1. Valuable shoreline resources and fragile or unique areas, such as wetlands and accretion shoreforms, shall be used only for low impact and nonstructural recreation activities.
2. For recreation developments that require the use of fertilizers, pesticides, or other chemicals, the property owner shall submit plans demonstrating the methods to be used to prevent these chemical applications and resultant leachate from entering adjacent water bodies. The property owner shall be required to maintain a chemical-free swath at least 100 feet in depth adjacent to water bodies.
3. Recreational facilities shall make adequate provisions, such as screening, buffer strips, fences, and signs, to mitigate nuisance to nearby private properties.

4. No recreational buildings or structures shall be built waterward of the OHWM, except water-dependent and/or water enjoyment structures such as bridges and viewing platforms. Such uses may be permitted as a shoreline conditional use.
5. Proposals for recreational development shall include adequate facilities for water supply, sewage, and garbage disposal.

20.230.140 Residential development.

- A. 1. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities.
2. A shoreline substantial development permit is not required for construction of a single-family residence by an owner, lessee, or contract purchaser for their own use or the use of their family. Single-family residential construction and accessory structures must otherwise conform to this ~~Shoreline~~-Master Program.
3. A shoreline variance or shoreline conditional use permit may be required for residential development for situations specified in ~~the~~this ~~Shoreline~~-Master Program.
4. Uses and facilities associated with residential development, which are identified as separate use activities in this ~~Shoreline~~-Master Program, such as land disturbing activities, are subject to the regulations established for those uses in this section.

B. Residential Policies.

1. Public access should be provided in accordance with SMC 20.230.040.
2. Residential development and accessory uses should be prohibited over the water.
3. New subdivisions should be encouraged to cluster dwelling units in order to preserve natural features, minimize physical impacts, and provide for public access to the shoreline.
4. In all new subdivisions and detached single-family developments with four dwelling units, joint use shoreline facilities should be encouraged.
5. Accessory uses and structures should be designed and located to blend into the site as much as possible. Accessory uses and structures should be located landward of the principal residence when feasible.

C. Residential Regulations.

1. Residential development is prohibited waterward of the OHWM and within setbacks defined for each shoreline environment designation.
2. Residential development shall assure no net loss of shoreline ecological functions.
3. Residential development shall not be approved if geotechnical analysis demonstrates that flood control or shoreline protection measures are necessary to create a residential lot or site

area. Residential development shall be located and designed to avoid the need for structural shore defense and flood protection works.

4. If wetlands or other critical areas are located on the development site, clustering of residential units shall be required in order to avoid impacts to these areas.
5. Storm drainage facilities shall include provisions to prevent the direct entry of uncontrolled and untreated surface water runoff into receiving waters as specified in the Stormwater Manual.
6. Subdivisions and planned unit developments of four waterfront lots/units shall dedicate, improve, and provide maintenance provisions for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for all residents of the development and the general public. When required, public access easements shall be a minimum of 25 feet in width and shall comply with the public access standards in SMC 20.230.040. The design shall conform to the standards in the Engineering Development Manual.
7. Single-family residential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082.
8. Multifamily residential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082.
9. One accessory structure to the residence may be placed within the required shoreline setback provided:
 - a. No accessory structure shall cover more than 200 square feet.

Subchapter 3.

Shoreline Modification Policies and Regulations

20.230.150 General.

Shoreline modification involves developments that provide bank stabilization or flood control.

The purpose of the modification is to reduce adverse impacts caused by natural processes, such as current, flood, tides, wind, or wave action. Shoreline modification includes all structural and nonstructural means to reduce flooding and/or erosion of banks.

Nonstructural methods include setbacks of permanent and temporary structures, relocation of the structure to be protected, ground water management, planning, bioengineering or “soft” engineered solutions, and regulatory measures to avoid the need for structural stabilization.

“Hard” structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while “soft” structural measures rely on natural materials such as biotechnical vegetation or beach enhancement. Generally, the harder the construction measure,

the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions. New structural shoreline stabilization also often results in vegetation removal, as well as damage to nearshore habitat and shoreline corridors. There are a range of measures varying from soft to hard that include:

- Vegetation enhancement.
- Upland drainage control.
- Biotechnical measures.
- Beach enhancement.
- Anchor trees.
- Gravel placement.
- Rock revetments.
- Gabions.
- Concrete groins.
- Retaining walls and bluff walls.
- Bulkheads.

A. Shoreline Modification Policies – General.

1. Biostabilization and other bank stabilization measures should be located, designed, and constructed primarily to prevent damage to the existing primary structure.
2. All new development should be located and designed to prevent or minimize the need for shoreline stabilization measures and flood protection works. New development requiring shoreline stabilization shall be discouraged in areas where no preexisting shoreline stabilization is present.
3. Shoreline modifications are only allowed for mitigation or enhancement purposes, or when and where there is a demonstrated necessity to support or protect an existing primary structure or legally existing shoreline use that is otherwise in danger of loss or substantial damage.
4. Proposals for shoreline modifications should be designed to protect life and property without impacting shoreline resources.
5. Shoreline modifications that are natural in appearance, compatible with ongoing shoreline processes, and provide flexibility for long-term management, such as protective berms or vegetative stabilization, should be encouraged over structural means such as concrete bulkheads or extensive revetments, where feasible.

6. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to withstand the erosive forces of the current and waves.
7. The design of bank stabilization or protection works should provide for the long-term, multiple use of shoreline resources and public access to public shorelines.
8. In the design of publicly financed or subsidized works, consideration should be given to providing pedestrian access to shorelines for low impact outdoor recreation.
9. All flood protection measures should be placed landward of the natural flood boundary, including wetlands that are directly interrelated and interdependent with water bodies.
10. If through construction and/or maintenance of shoreline modification developments, the loss of vegetation and wildlife habitat will occur, mitigation should be required.
11. Existing, previously permitted stabilization measures, such as bulkheads and retaining walls, are considered engineered and abated hazards and shall not be classified as geologic hazard areas.

B. Shoreline Modification Regulations – General.

1. All new development, uses or activities within the shoreline area shall be located and designed to prevent or minimize the need for bank stabilization and flood protection works.
2. Permitted and shoreline conditional use requirements for bulkheads and revetments are specified in this chapter. All other forms of shoreline modification, except soft shore, must be approved as a shoreline conditional use within all shoreline environments.
3. All shoreline stabilization proposals require a geotechnical analysis.
4. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that mitigates impacts to the environment. The preferred mitigation sequence (avoid, minimize, mitigate, compensate) shall follow that listed in SMC 20.230.020(A)WAC 173-26-201(2)(e).
5. New non-water-dependent development, including single-family residences, that includes structural shoreline stabilization shall not be allowed unless all of the conditions below apply, otherwise new stabilization measures are limited to protecting only existing developments:
 - a. The need to protect the development from destruction due to erosion caused by natural processes, such as currents and waves, is demonstrated through a geotechnical/hydrogeological report prepared by a City-approved qualified professional.
 - b. The erosion is not caused by upland conditions, such as the loss of vegetation and/or drainage issues.

- c. There will be no net loss of shoreline ecological functions or impacts to adjacent or down-current properties.
 - d. Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements and soft structural solutions such as bioengineering, are not feasible or not sufficient.
 - e. The structure will not cause adverse impacts to the functions and values of critical areas or properly functioning conditions for proposed, threatened, and endangered species.
 - f. Other mitigation/restoration measures are included in the proposal.
6. Upon project completion, all disturbed shoreline areas shall be restored to as near pre-project configuration as possible and replanted with appropriate vegetation. All losses in riparian vegetation or wildlife habitat shall be mitigated at a ratio of 1:1.25 (habitat lost to habitat replaced).
 7. Shoreline stabilization and flood protection works are prohibited in wetlands and on point and channel bars. They are also prohibited in fish spawning areas.
 8. Developments shall not reduce the volume and storage capacity of streams and adjacent wetlands or flood plains.
 9. Use of refuse for the stabilization of shorelines is prohibited.

20.230.160 Dredging and disposal of dredging spoils.

A. Dredging and Dredge Spoil Policies.

1. Dredging waterward of the OHWM~~Ordinary high water mark~~ for the primary purpose of obtaining fill material is prohibited.
2. Dredging operations should be planned and conducted to minimize interference with navigation; avoid creating adverse impacts on other shoreline uses, properties, and ecological shoreline functions and values; and avoid adverse impacts to habitat areas and fish species.
3. Dredge spoil disposal in water bodies shall be prohibited except for habitat improvement.
4. Dredge spoil disposal on land should occur in areas where environmental impacts will not be significant.

B. Dredging and Dredge Spoil Regulations.

1. Dredging and dredge spoil disposal shall be permitted only where it is demonstrated that the proposed actions will not:
 - a. Result in significant damage to water quality, fish, and other essential biological elements;
 - b. Adversely alter natural drainage and circulation patterns, currents, or reduce floodwater capacities;

- c. Adversely impact properly functioning conditions for proposed, threatened, or endangered species; or
- d. Adversely alter functions and values of the shoreline and associated critical areas.
2. Proposals for dredging and dredge spoil disposal shall include all feasible mitigating measures to protect habitats and to minimize adverse impacts such as turbidity; release of nutrients, heavy metals, sulfides, organic materials, or toxic substances; depletion of oxygen; disruption of food chains; loss of benthic productivity; and disturbance of fish runs and/or important localized biological communities.
3. Dredging and dredge spoil disposal shall not occur in wetlands unless for approved maintenance or enhancement associated with a restoration project.
4. Dredging within the shorelines shall be permitted only:
 - a. For navigational purposes; or
 - b. For activities associated with shoreline or aquatic restoration or remediation.
5. When dredging is permitted, the dredging shall be the minimum necessary to accommodate the proposed use.
6. Dredging shall utilize techniques that cause minimum dispersal and broadcast of bottom material; hydraulic dredging shall be used wherever feasible in preference to agitation dredging.
7. Dredge material disposal shall be permitted in shoreline jurisdiction only as part of an approved shoreline habitat and natural systems enhancement, fish habitat enhancement or watershed restoration project.
8. Dredged spoil material may be disposed at approved upland sites. If these upland sites are dry lands and fall within shoreline jurisdiction, the disposal of dredge spoils shall be considered landfilling and must be consistent with all applicable provisions of the Master Program. Depositing dredge spoils within the Puget Sound shall be allowed only by shoreline conditional use for one of the following reasons:
 - a. For wildlife habitat improvements; or
 - b. To correct problems of material distribution that are adversely affecting fish resources.
9. If suitable alternatives for land disposal are not available or are infeasible, water disposal sites may be permitted by appropriate agencies, provided the sites are determined by the Director to be consistent with the following criteria:
 - a. Disposal will not interfere with geohydraulic processes;
 - b. The dredge spoil has been analyzed by a qualified professional and found to be minimally or nonpolluting;
 - c. Aquatic life will not be adversely affected; and

- d. The site and method of disposal meet all requirements of applicable regulatory agencies.
- 10. Disposal of dredge material shall be done in accordance with the Washington State Department of Natural Resources (DNR) Dredge Material Management Program. DNR manages disposal sites through a site use authorization (SUA); all other required permits must be provided to DNR prior to the DNR issuing a SUA for dredge disposal.
- 11. The City may impose reasonable limitations on dredge spoil disposal operating periods and hours, and may require buffer strips at land disposal sites.

20.230.170 Piers and docks.

Piers and docks may be allowed in accordance with Table 20.230.081 only when the following conditions are met:

- A. The public's need for piers and docks is clearly demonstrated, and the proposal is consistent with protection of the public trust, as embodied in RCW 90.58.020, as amended from time to time.
- B. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible, or would result in unreasonable and disproportionate cost to accomplish the same general purpose.
- C. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.
- D. The project is consistent with the State's interest in resource protection and species recovery.
- E. Private, noncommercial docks for joint or community use may be authorized; provided, that:
 - 1. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible; and
 - 2. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.
- F. An inventory of the site and adjacent beach sections to assess the presence of critical saltwater habitats and functions is required. The methods and extent of the inventory shall be consistent with accepted research methodology. Proposals will be evaluated using the Department of Ecology technical assistance materials for guidance.
- G. Community moorage to serve new development shall be limited to the amount of moorage needed to serve lots with water frontage; provided, that a limited number of upland lots may also be accommodated. Applications for shared moorage shall demonstrate that mooring buoys are not feasible prior to approval of dock moorage.

H. Piers and docks shall be constructed of materials that will not adversely affect water quality or aquatic plants and animals over the long term. Materials used for submerged portions of a pier or dock, decking, and other components that may come in contact with water shall be approved by applicable State agencies for use in water to avoid discharge of pollutants from wave splash, rain, or runoff. At a minimum, piles, floats, or other structural members in direct contact with the water shall be constructed of concrete or steel in accordance with best management practices (BMPs) published by ~~the Washington Department of Fish and Wildlife (WDFW)~~ and the United States Army Corps of Engineers (USACE), and they shall not be treated or coated with herbicides, fungicides, paint, or pentachlorophenol. Use of arsenate compounds or creosote is prohibited.

I. Pilings used in piers or docks shall have a minimum clearance of two feet above extreme high tide and a maximum clearance of five feet above the OHWM. Floats shall not rest on the substrate.

J. To minimize adverse effects on nearshore habitats and species caused by over-water structures that reduce ambient light levels, the following shall apply:

1. The width of docks, piers, floats, and lifts shall be the minimum necessary, and shall not be wider than six feet;
2. The length of docks and piers shall be the minimum necessary to prevent the grounding of floats and boats on the substrate during low tide;
3. Docks floats or floating docks shall include stops that serve to keep the float bottom off tidelands at low tide;
4. The length and location of docks, piers, floats, and lifts pilings shall be designed using the BMPs as conditioned in the permitting documents approved by WDFW and USACE; and
5. The size of shared docks or piers is limited to 700 square feet for two lots and 1,000 square feet for three or more lots.

K. All new piers or docks must be fully grated. Grating to allow light passage or reflective panels to increase light refraction into the water shall be used on piers, docks, floats and gangways in nearshore areas. Decking shall have a minimum open space of 40 percent and after installation at least 60 percent ambient light beneath the structure shall be maintained.

20.230.175 Pier and dock repair, replacement, or expansion.

A. Existing over-water structures may be repaired and/or replaced in the same location as the existing structure.

- B. Repair or replacement of 50 percent or more of an existing over-water deck structure shall include the replacement of the entire decking with grated material to achieve a minimum open space of 40 percent and shall result in at least 60 percent ambient light beneath the structure.
- C. Repair or replacement of less than 50 percent of the over-water deck structure shall use grated decking in the area to be replaced. If the cumulative repair in any three-year period exceeds 50 percent, the entire decking shall be replaced to achieve a minimum open space of 40 percent and shall result in at least 60 percent ambient light beneath the structure.
- D. Repair or replacement of structural members in contact with the water shall be constructed of concrete or steel in accordance with BMPs published by WDFW and USACE and they shall not be treated or coated with herbicides, fungicides, paint, or pentachlorophenol. Use of arsenate compounds or creosote is prohibited.
- E. Expansion of existing over-water structures is prohibited.
- F. Other repairs not described in this section to existing legally established structures are considered minor and may be permitted consistent with all applicable regulations.

20.230.180 Bulkheads.

Bulkheads are walls usually constructed parallel to the shore, whose primary purpose is to contain and prevent the loss of soil by erosion, wave, or current action. Bulkheads are typically constructed of poured-in-place concrete; steel or aluminum sheet piling; wood; or wood and structural steel combinations.

The ~~Washington State SMA~~ Shoreline Management Act only exempts the construction of a normal protective bulkhead associated with an existing single-family residence from the shoreline substantial development permit requirement. However, these structures are required to comply with all the policies and development standards of this ~~Shoreline~~ Master Program.

A. Bulkhead Policies.

1. Bulkheads constructed from natural materials, such as protective berms, beach enhancement, or vegetative stabilization, are strongly preferred over structural bulkheads constructed from materials such as steel, wood, or concrete. Proposals for bulkheads should demonstrate that natural methods are unworkable.
2. Bulkheads should be located, designed, and constructed primarily to prevent damage to the existing primary structure. New development that requires bulkheads is not permitted except as specifically provided under this Master Program.
3. Shoreline uses should be located in a manner so that a bulkhead is not likely to become necessary in the future.

4. Bulkheads should not be approved as a solution to geophysical problems such as mass slope failure, sloughing, or landslides. Bulkheads should only be approved for the purposes of preventing bank erosion by the Puget Sound.

B. Bulkhead Regulations.

1. New bulkheads may be allowed only when evidence is presented which demonstrates that one of the following conditions exists:

a. Serious erosion threatens an established use or existing primary structure on upland property.

b. Bulkheads are necessary to the operation and location of water-dependent, water-related, or water enjoyment activities consistent with this ~~Shoreline~~ Master Program; provided, that all other alternative methods of shore protection have proven infeasible; and/or

c. A bulkhead is necessary to retain landfilling that has been approved consistent with the provisions of this Master Program.

2. Proposals for bulkheads must first demonstrate through a geotechnical analysis that use of natural materials and processes and nonstructural or soft structural solutions to bank stabilization are not feasible.

3. The construction of a bulkhead for the primary purpose of retaining landfilling shall be allowed only in conjunction with:

a. A water-dependent use;

b. A bridge or navigational structure for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist; and/or

c. A wildlife or fish enhancement project.

4. Bulkheads shall not be located on shorelines where valuable geohydraulic or biological processes are sensitive to interference. Examples of such areas include wetlands and accretion landforms.

5. Bulkheads are to be permitted only where local physical conditions, such as foundation bearing materials, and surface and subsurface drainage, are suitable for such alterations.

6. If possible, bulkheads shall be located landward of the OHWM and generally parallel to the natural shoreline. In addition:

a. Where no other bulkheads are adjacent, the construction of a bulkhead shall be as close to the eroding bank as possible and in no case shall it be more than three feet from the toe of the bank;

b. A bulkhead for permitted landfilling shall be located at the toe of the fill; and

c. Where permitted, a bulkhead must tie in flush with existing bulkheads on adjoining properties, except where the adjoining bulkheads extend waterward of the base flood elevation, the requirements set forth in this section shall apply.

7. Replacement bulkheads may be located immediately waterward of the bulkhead to be replaced such that the two bulkheads will share a common surface, except where the existing bulkhead has not been backfilled or has been abandoned and is in serious disrepair. In such cases, the replacement bulkhead shall not encroach waterward of the OHWM or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns.

8. All bulkhead proposals require a geotechnical report prepared by a qualified professional. Bulkheads shall be sited and designed as recommended in approved geotechnical reports. For the waterfront residential environment designation, one geotechnical report could be prepared for multiple properties.

9. When a bulkhead is required at a public access site, provision for safe access to the water shall be incorporated into bulkhead design.

10. Bulkheads shall be designed for the minimum dimensions necessary to adequately protect the development.

11. Stairs or other permitted structures may be built into a bulkhead but shall not extend waterward of the bulkhead, unless they are retractable or removable.

12. Bulkheads shall be designed to permit the passage of surface or ground water without causing ponding or saturation of retained soil/materials.

13. Adequate toe protection consisting of proper footings, a fine retention mesh, etc., shall be provided to ensure bulkhead stability without relying on additional riprap.

14. Materials used in bulkhead construction shall meet the following standards:

a. Bulkheads shall utilize stable, nonerodible, homogeneous materials such as concrete, wood, and rock that are consistent with the preservation and protection of the ecological habitat;

b. Dredge spoils shall not be used for fill behind bulkheads, except clean dredge spoil from a permitted off-site dredge and fill operation; and

c. Backfill and wave returns to stabilize bulkheads are permitted.

20.230.190 Revetment.

A revetment is a sloped shoreline structure built to protect an existing eroding shoreline or newly placed fill against currents. Revetments are most commonly built of randomly placed boulders (riprap) but may also be built of sand cement bags, paving or building blocks, gabions (rock

filled wire baskets), or other systems and materials. The principal features of a revetment, regardless of type, is a heavy armor layer, a filter layer, and toe protection.

A. Revetment Policies.

1. The use of armored structural revetments should be limited to situations where it is determined that nonstructural solutions such as bioengineering, setbacks, buffers or any combination thereof, will not provide sufficient shoreline stabilization.
2. Revetments should be designed, improved, and maintained to provide public access whenever possible.

B. Revetment Regulation.

1. The proposed revetment shall be designed by a qualified professional engineer.
2. Design of revetments shall include and provide improved access to public shorelines whenever possible.
3. When permitted, the location and design of revetments shall be determined using engineering principles, including guidelines of the U.S. Soil Conservation Service and USACE.
4. Armored revetment design shall meet the following design criteria:
 - a. The size and quantity of the material shall be limited to only that necessary to withstand the estimated energy intensity of the hydraulic system;
 - b. Filter fabric must be used to aid drainage and help prevent settling;
 - c. The toe reinforcement or protection must be adequate to prevent a collapse of the system from scouring or wave action; and
 - d. Fish habitat components, such as large boulders, logs, and stumps, shall be considered in the design subject to a Hydraulic Project Approval by WDFW~~the Washington Department of Fish and Wildlife~~.

20.230.200 Land disturbing activities.

A. Land Disturbing Activity Policies.

1. Land disturbing activities should only be allowed in association with a permitted shoreline development.
2. Land disturbing activities should be limited to the minimum necessary to accommodate the shoreline development or a landscape plan developed in conjunction with the shoreline development.
3. Erosion shall be prevented and sediment shall not enter waters of the State.

B. Land Disturbing Activity Regulations.

1. All land disturbing activities shall only be allowed in association with a permitted shoreline development.
2. All land disturbing activities shall be limited to the minimum necessary for the intended development, including any clearing and grading approved as part of a landscape plan. Clearing invasive, nonnative shoreline vegetation listed on the King County Noxious Weed List is permitted in the shoreline area with an approved clearing and grading permit provided best management practices are used as recommended by a qualified professional, and native vegetation is promptly reestablished in the disturbed area.
3. Tree and vegetation removal shall be prohibited in required native vegetation conservation areas, except as necessary to restore, mitigate or enhance the native vegetation by approved permit as required in these areas.
4. All significant trees in the native vegetation conservation areas shall be designated as protected trees consistent with SMC 20.50.330 and removal of hazard trees must be consistent with SMC 20.50.310(A)(1).
5. All shoreline development and activities shall use measures identified in the 2014 Department of Ecology Stormwater Management Manual for Western Washington, or as revised. Stabilization of exposed surfaces subject to erosion along shorelines shall, whenever feasible, utilize soil bioengineering techniques.
6. For extensive land disturbing activities that require a permit, a plan addressing species removal, revegetation, irrigation, erosion and sedimentation control, and other methods of shoreline protection should be required.

20.230.210 Landfilling.

A. Landfilling Policies.

1. The perimeter of landfilling should be designed to avoid or eliminate erosion and sedimentation impacts, during both initial landfilling activities and over time.
2. Where permitted, landfilling should be the minimum necessary to provide for the proposed use and should be permitted only when conducted in conjunction with a specific development proposal that is permitted by ~~the~~this Shoreline-Master Program. Speculative landfilling activity should be prohibited.

B. Landfilling Regulations.

1. Landfilling activities shall only be permitted in conjunction with a specific development. Landfilling may be permitted as a shoreline conditional use for any of the following:

- a. In conjunction with a water-dependent use permitted under this ~~Shoreline~~ Master Program; and/or
 - b. In conjunction with a bridge, utility, or navigational structure for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist.
2. Pier or pile supports shall be utilized in preference to landfilling. Landfilling for approved road development in floodways or wetlands shall be permitted only if pile or pier supports are proven structurally infeasible.
 3. Landfilling shall be permitted only where it is demonstrated that the proposed action will not:
 - a. Result in significant damage to water quality, fish, and/or wildlife habitat; or
 - b. Adversely alter natural drainage and current patterns or significantly reduce floodwater capacities.
 4. Where landfilling activities are permitted, the landfilling shall be the minimum necessary to accommodate the proposed use.
 5. Landfilling from dredging and dredge material disposal shall be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided shall be mitigated in a manner that assures no net loss of shoreline ecological functions.
 6. Dredging waterward of the OHWM for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for the restoration of shoreline ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the OHWM.
 7. Landfilling shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area. Landfilling perimeters shall be designed and constructed with silt curtains, vegetation, retaining walls, or other mechanisms to prevent material movement. In addition, the sides of the landfilling shall be appropriately sloped to prevent erosion and sedimentation, during both the landfilling activities and afterwards.
 8. Fill materials shall be clean sand, gravel, soil, rock, or similar material. Use of polluted dredge spoils and sanitary landfilling materials are prohibited. The property owner shall provide evidence that the material has been obtained from a clean source prior to fill placement.
 9. Landfilling shall be designed to allow surface water penetration into aquifers, if such conditions existed prior to the fill.

20.230.230 Signs.

A. **Sign Policies.** Signs should be designed and placed so that they are compatible with the natural quality of the shoreline environment and adjacent land and water uses.

B. **Sign Regulations.** Signs within the City, including the shoreline area, are subject to the requirements and standards specified in Chapter 20.50 SMC, Subchapter 8. Signs are based on the underlying zoning. In addition, the following sign requirements shall apply to signs within shoreline areas:

1. Signs shall only be allowed in or over water for navigation purposes; at road or railroad crossings as necessary for operation, safety and direction; or as related and necessary to a water-dependent use.
2. Signs are permitted in all shoreline environments upland of the OHWM. These sign standards supplement the provisions of SMC 20.50.530 to 20.50.610. Where there is a conflict, the provisions herein shall apply.

C. **Prohibited Signs.**

1. All prohibited signs per SMC 20.50.550.
2. Balloons, any inflatable signs, or inflatable objects used to aid in promoting the sale of products, goods, services, events, or to identify a building.
3. Searchlights and beacons.
4. Electronic reader boards or changing message signs.
5. Neon signs.
6. Pole signs.
7. Backlit awnings used as signs.
8. Internally illuminated signs, except as allowed in subsection (D)(1) of this section.
9. Signs that impair visual access from public viewpoints in view corridors are prohibited in all shoreline environments.

D. **Illumination of Signs.**

1. Illumination of signs is only allowed as permitted by the underlying zoning.
2. Internal illumination of signs is only allowed with light provided by LED or other Energy Star rated luminaires, and is limited to:
 - a. Opaque cabinet signs where light only shines through the letters, not including symbols, images, or background; or
 - b. Shadow lighting, where letters are backlit, but light only shines through the edges of the letters.

3. All externally illuminated signs shall shield nearby properties from direct lighting. Light source must be within a maximum of six feet from the sign display, and limited to LED or other Energy Star rated luminaires.
4. No commercial sign shall be illuminated after 11:00 p.m. unless the commercial enterprise is open for business, and then may remain on only as long as the business is open.
5. The light from any illuminated sign shall be shaded, shielded or directed so that the light intensity or brightness shall not adversely affect:
 - a. Surrounding or facing premises;
 - b. Safe vision of operators of vehicles on public or private roads, highways, or parking areas;or
 - c. Safe vision of pedestrians on a public right-of-way.
6. Light from any sign shall not shine on, nor directly reflect into, residential structures, lots, or the water.
7. These provisions shall not apply to:
 - a. Lighting systems owned or controlled by any public agency for the purpose of directing or controlling navigation, traffic, and highway or street illumination;
 - b. Aircraft warning lights;
 - c. Temporary lighting used for repair or construction as required by governmental agencies; or
 - d. Temporary use of lights or decorations relating to religious or patriotic festivities.

20.230.240 Stormwater management facilities.

A. Stormwater Management Facilities Policies.

1. Stormwater facilities located in the shoreland area should be maintained only to the degree necessary to ensure the capacity and function of the facility, including the removal of nonnative, invasive plant species.
2. The stormwater facility should be planted with native vegetation.

B. Stormwater Management Facility Regulations.

1. New stormwater facilities shall be located so as not to require any shoreline protection works.
2. Stormwater facility development shall include public access to the shoreline, trail systems, and other forms of recreation, providing such uses will not unduly interfere with stormwater facility operations, endanger the public health, safety, and welfare, or create a significant and disproportionate liability for the owner.

3. Construction of stormwater facilities in shoreland areas shall be timed to avoid fish and/or wildlife migratory and spawning periods.

20.230.250 Transportation.

Transportation facilities are those structures and developments that aid in land and water surface movement of people, goods, and services. They include roads and highways, bridges and causeways, bikeways, trails, railroad facilities, and boat and floatplane terminals.

A. Transportation Policies.

1. New roads within the shoreline area should be minimized.
2. Roads and railroad locations should be planned to fit the topographical characteristics of the shoreline such that alteration of natural conditions is minimized.
3. Pedestrian and bicycle trails should be encouraged.
4. When existing transportation corridors are abandoned they should be reused for water-dependent use or public access.
5. Alternatives to new roads or road expansion in the shoreline area should be considered as a first option.
6. Joint use of transportation corridors within shoreline jurisdiction for roads, utilities, and motorized forms of transportation should be encouraged.
7. New roads should be designed to accommodate bicyclists, pedestrians and transit, where feasible.

B. Transportation Regulations.

1. Transportation facilities and services shall utilize existing transportation corridors wherever possible, provided the shoreline is not adversely impacted and the development is otherwise consistent with this ~~Shoreline~~ Master Program.
2. Transportation and primary utilities shall jointly use rights-of-way.
3. Landfilling activities for transportation facility development are prohibited in wetlands and on accretion beaches, except when all structural and upland alternatives have proven infeasible, and the transportation facilities are necessary to support uses consistent with this ~~Shoreline~~ Master Program.
4. Major new roads and railways shall avoid being located in the shoreline jurisdiction to the extent practical. These roads shall cross shoreline areas by the shortest, most direct route, unless this route would cause more damage to the environment.
5. New transportation facilities shall be located and designed to minimize or prevent the need for shoreline modification.

6. All bridges must be built high enough to allow the passage of debris, and provide three feet of clearance above the base flood elevation.
7. Shoreline transportation facilities shall be located and designed to avoid steep or unstable areas and fit the existing topography in order to minimize cuts and fills.
8. Bridge abutments and necessary approach fills shall be located landward of the OHWM, except bridge piers may be permitted in a water body as a shoreline conditional use.

20.230.260 Unclassified uses and activities.

In the event that a proposed shoreline use or activity is not identified or classified in this ~~Shoreline~~-Master Program, the following regulation shall apply.

A. Regulations. All uses and activities proposed in the shoreline area that are not classified by provisions in this ~~Shoreline~~-Master Program shall require a shoreline conditional use permit.

20.230.270 Utilities.

Primary utilities include substations, pump stations, treatment plants, sanitary sewer outfalls, electrical transmission lines greater than 55,000 volts, water, sewer or storm drainage mains greater than eight inches in diameter, gas and petroleum transmission lines, and submarine telecommunications cables. Accessory utilities include local public water, electric, natural gas distribution, public sewer collection, cable and telephone service, and appurtenances.

A. Utility Policies.

1. Utilities should utilize existing transportation and utility sites, rights-of-way, and corridors whenever possible. Joint use of rights-of-way and corridors should be encouraged.
2. Unless no other feasible alternative exists, utilities should be prohibited in the shoreline jurisdiction, wetlands, and other critical areas. There shall be no net loss of ecological functions or significant impacts to other shoreline resources or values.
3. New utility facilities should be located so as not to require extensive shoreline modifications.
4. Whenever possible, utilities should be placed underground or alongside or under bridges.
5. Solid waste disposal activities and facilities should be prohibited in shoreline areas.

B. Utility Regulations.

1. Utility development shall provide for compatible, multiple use of sites and rights-of-way when practical.
2. Utility development shall include public access to the shoreline, trail systems, and other forms of recreation, providing such uses will not unduly interfere with utility operations,

endanger the public health, safety, and welfare, or create a significant and disproportionate liability for the owner.

3. The following primary utilities, which are not essentially water-dependent, may be permitted as a shoreline conditional use if it can be shown that no reasonable alternative exists:
 - a. Water system treatment plants;
 - b. Sewage system lines, interceptors, pump stations, and treatment plants;
 - c. Electrical energy generating plants, substations, lines, and cables; or
 - d. Petroleum and gas pipelines.
4. New solid waste disposal sites and facilities are prohibited.
5. New utility lines including electricity, communications, and fuel lines shall be located underground, except where the presence of bedrock or other obstructions make such placement infeasible.
6. Transmission and distribution facilities shall cross shoreline areas by the shortest, most direct route feasible, unless such route would cause increased environmental damage.
7. Utilities requiring withdrawal of water shall be located only where minimum flows as established by WDFW~~the Washington State Department of Fish and Wildlife~~ can be maintained.
8. Utilities shall be located and designated so as to avoid the use of any structural or artificial shoreline modification.
9. All underwater pipelines are prohibited. If no other alternative exists, a shoreline conditional use permit is required.

Attachment A, Exhibit B

Proposed revisions to Shoreline Municipal Code (SMC) language in legislative format -
Chapter 20.240

Chapter 20.240 **SMP Critical Areas Regulations**

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Subchapter 1.

Critical Areas – General Provisions

20.240.010 Purpose.

A. The purpose of this chapter is to establish supplemental standards for the protection of critical areas and their associated buffers within the shoreline jurisdiction consistent with the goals and policies of the SMA.

B. The provisions of this chapter do not extend beyond the shoreline jurisdiction limits specified in this Master Program and the SMA.

C. By identifying and regulating development and alterations to critical areas and buffers within the shoreline jurisdiction it is the intent of this chapter to:

1. Protect the public from injury, loss of life, property damage or financial losses due to flooding, erosion, landslide, seismic events, or soils subsidence;

2. Protect unique, fragile and valuable elements of the environment;

3. Reduce cumulative adverse environmental impacts to water quality, wetlands, streams, and other aquatic resources, fish and wildlife habitat, landslide hazards, and other geologically unstable features and protect the functions and values of critical areas from overall net loss;

4. Ensure the long-term protection of ground and surface water quality;

5. Alert members of the public, including appraisers, assessors, owners, potential buyers, or lessees, to the development limitations of critical areas and their required buffers;

6. Serve as a basis for exercise of the City's substantive authority under SEPA, and the City's Environmental Procedures (chapter 20.30 SMC, Subchapter 8);

7. To comply with the requirements of the SMA and its implementing regulations;

8. Establish standards and procedures that are intended to protect critical areas and their associated buffers within the shoreline jurisdiction while accommodating the rights of property owners to use their property in a reasonable manner; and

9. Provide for the management of critical areas and buffers within the shoreline jurisdiction so as not to result in a net loss of ecological functions and to restore degraded ecosystems.

D. This chapter is to be administered with flexibility and attention to site-specific characteristics.

E. For the purpose of this chapter, critical areas and buffers shall have the same meanings as set forth in SMC 20.20 and RCW 36.70A.030(5), as amended from time to time.

F. For the purpose of this chapter, when referring to “functions and values” or “functions,” it is the critical area’s functions and values in relationship to the shoreline ecological functions.

20.240.015 Applicability.

A. Unless explicitly exempted, the provisions of this chapter shall apply to all land uses, development activity, and all structures and facilities within critical areas and buffers located within the City’s shoreline jurisdiction, whether or not a permit or authorization is required, and shall apply to every person or entity that owns, lease, or administers land within the City’s shoreline jurisdiction.

B. No person or entity shall alter a critical area of buffer in the shoreline jurisdiction except in compliance with the requirements of this chapter.

B. The City shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation or to construct or alter any structure or improvement in the shoreline jurisdiction without first assuring compliance with the requirements of this chapter.

C. Approval of a permit or development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.

D. The provisions of this chapter shall apply to any forest practices over which the City has jurisdiction pursuant to Chapter 76.09 RCW and WAC Title 222, as amended from time to time.

20.240.020 Relationship to other regulations.

A. These critical area regulations shall apply as an overlay in addition to use and development regulations established by the City consistent with the SMA and this Master Program. In the event of any conflict between these regulations and any other regulations of the City, the regulations which provide greater protection to the critical areas shall apply.

B. Areas characterized by particular critical areas may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some critical areas. In the event of any conflict between regulations for particular critical areas in this chapter, the regulations which provide greater protection to critical areas shall apply.

C. These critical areas regulations shall apply concurrently with review conducted under SEPA, as necessary and locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination.

D. Compliance with the provisions of this chapter does not constitute compliance with other Federal, State, and local regulations and permit requirements that may be required (for example, shoreline substantial development permits, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, USACE Section 404 permits, National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter.

20.240.025 Critical areas maps.

A. The approximate location and extent of identified critical areas within the City's planning area are shown on the critical areas maps adopted as part of this chapter, including but not limited to the maps identified in SMC 20.240.222, 20.240.272, and 20.240.322. These maps shall be used for informational purposes as a general guide only for the assistance of property owners and other interested parties. Boundaries and locations indicated on the maps are generalized. Critical areas and their buffers may occur within the shoreline jurisdiction which have not previously been mapped. A site inspection by staff or an applicant's critical area worksheet may also indicate the presence of a critical area.

B. Based on an indicated critical area in subsection A of this section, the actual presence or absence, delineation and classification of critical areas shall be identified in the field by a qualified professional, and confirmed by the City, according to the procedures, definitions and criteria established by SMC 20.240.080(D)(1) and (2). In the event of any conflict between the critical area location or designation shown on the City's maps and the criteria or standards of this chapter, the criteria and standards of this chapter shall prevail.

C. The critical areas maps shall be periodically updated by the City and shall reflect any permit activity, results of special studies and reports reviewed and approved by the City,

amendments to the Comprehensive Plan Natural Environment Element, and Department-identified errors and corrections.

20.240.040 Allowed activities.

A. Critical Area Report. Activities allowed under this section shall have been reviewed and permitted or approved by the City and any other agency with jurisdiction, but do not require submittal of a separate critical area report, unless such submittal was required previously for the underlying permit. The Director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this chapter to protect critical areas.

B. Best Management Practices. All allowed activities shall be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall require the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. Allowed Activities. The following activities are allowed:

1. Modifications to Existing Structures within Critical Areas. Structural modification of, addition to, maintenance, repair, or replacement of legally nonconforming structures consistent with SMC 20.220.150, which do not meet the building setback or buffer requirements for wetlands, fish and wildlife habitat conservation areas, or geologic hazard areas if the modification, addition, replacement or related activity does not increase the existing building footprint of the structure or area of hardscape lying within the critical area or buffer. Within landslide hazard areas, additions that add height to a nonconforming structure may only be allowed with review of a critical area report demonstrating that no increased risk of the hazard will occur. If such modification, alteration, repair, or replacement requires encroachment into a critical area or a critical area buffer to perform the work, then encroachment may be allowed subject to restoration of the area of encroachment to a same or better condition.

2. **Demolition.** Demolition of structures located within critical areas or their buffers, excluding demolition of structures necessary to support or stabilize landslide hazard areas, and subject to approval of a stormwater pollution prevention plan consistent with the adopted stormwater manual and clearing limits that will adequately protect the critical area.

3. **Permit Requests Subsequent to Previous Critical Area Review.** A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter, except for the notice to title provisions, as applicable if:

a. The City has previously reviewed all critical areas on the site; and

b. There is no material change in the development proposal since the prior review; and

c. There is no new information available which may alter previous critical area review of the site or a particular critical area; and

d. The permit or approval under which the prior review was conducted has not expired or, if no expiration date, no more than five years have lapsed since the issuance of that permit or approval; and

e. The prior permit or approval, including any conditions, has been complied with.

20.240.045 Critical areas preapplication meeting.

A. A preapplication meeting, pursuant to SMC 20.30.080, is required prior to submitting an application for development or use of land that may impact critical areas or buffers within the shoreline jurisdiction.

B. A determination may be provided through the preapplication meeting regarding whether critical area reports are required, and if so what level of detail and what elements may be necessary for the proposed project. An applicant may submit a critical area delineation and classification study prior to the City determining that a full critical area report is required.

This determination does not preclude the Director from requiring additional critical area report information during the review of the project. After a site visit and review of available information for the preapplication meeting, the Director may determine:

1. **No Critical Areas Present.** If the Director's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to result in a net loss of shoreline ecological functions provided by the critical area or buffer, then the Director shall determine that the critical area review is complete and note in the preapplication meeting summary letter the reasons that no further review is required.

2. **Critical Areas Present, But No Impact.** If the Director determines that there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to result in a net loss of shoreline ecological functions provided by the critical area or buffer, the Director may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:

a. There will be no alteration of the critical area or buffer;

b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter, this Master Program, and the SMA; and

c. The proposal is consistent with other applicable regulations and standards.

A summary of this analysis and the findings shall be included in the preapplication meeting summary letter and any staff report or decision on the underlying permit.

3. **Critical Areas May Be Affected by Proposal.** If the Director determines that a critical area(s) or buffer(s) may be affected by the proposal, then the Director shall notify the applicant that a critical area report(s) shall be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report. Additionally, the Director may indicate the sections or report types that shall be included in the critical report(s) consistent with SMC 20.240.080.

20.240.050 Alteration of critical areas.

In general, critical areas and buffers shall be maintained in their existing state including undisturbed, native vegetation to maintain the functions, values, resources, and public health and safety for which the critical areas and buffers are protected or allowed as the current, developed legally established condition such as graded areas, structures, pavement, gardens and lawns. Alteration of critical areas, including their established buffers, may only be permitted

subject to the criteria and standards in this chapter, and compliance with any Federal and/or State permits required. Unless otherwise provided in this chapter, if alteration of the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical areas report, so as to result in no overall net loss of shoreline ecological function provided by the critical area and no increased risk of hazards.

20.240.053 Mitigation requirements.

Mitigation shall ensure that each permitted development or use will not cause a net loss of ecological functions of the shoreline as provided by the critical area or buffer and to prevent risk from a hazard posed by a critical area. Mitigation shall not be implemented until after the Director has provided approval of a critical areas report that includes a mitigation plan.

A. Mitigation Sequencing. This section applies to mitigation required with all critical areas reviews, approvals, and enforcement pursuant to this chapter. This section is supplemented with specific measures under subchapters for particular critical areas. Mitigation for specific development proposals may include a combination of the measures below and shall be designed and constructed in accordance with the provisions of this section. Before impacting any critical areas or buffers, an applicant shall demonstrate that the following actions have been taken in the following sequential order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment or by restoring or stabilizing the hazard area through natural, engineering, or other methods;
4. Reducing or eliminating the impact over time through preservation and maintenance operations during the life of the action;
5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or

6. Monitoring, measuring and reporting the impact to the Director and taking appropriate corrective measures.

B. Applicants shall first demonstrate an inability to avoid or reduce impacts before the use of actions to mitigate potential impacts will be allowed. No activity or use shall be allowed that results in a net loss of the shoreline ecological functions provided by the critical areas or buffers or has a significant adverse impact on other shoreline functions fostered by the policies of this Master Program and the SMA.

C. Type, Location, and Timing of Mitigation. Unless it is demonstrated that a higher level of ecological functioning or greater reduction of hazard risk would result from an alternative approach or as otherwise allowed in this chapter, mitigation for adverse impacts shall be based on best available science, with preferential consideration given to measures that replace the impacted functions directly and in immediate vicinity of the impact and prior to the activities that will disturb the critical area. Mitigation measures that cannot be implemented prior to the critical area impacts shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

1. The Director may authorize a one-time temporary delay in completing construction or installation of the mitigation when the applicant provides a written explanation from a qualified professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay shall include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification shall be verified and approved by the City.

20.240.056 Shoreline restoration projects.

Shoreline restoration projects, defined as projects designed to restore impaired ecological functions of a shoreline, shall be reviewed and permitted or approved by the City and any other

agency with jurisdiction consistent with criteria established in WAC 173-27-215 and RCW 90.58.580, as amended from time to time.

20.240.060 Best available science.

A. Protect Shoreline Ecological Functions provided by Critical Areas with Special Consideration to Anadromous Fish. Critical area reports and decisions to alter critical areas or buffers shall rely on the best available science to protect the shoreline ecological functions provided by the critical areas and shall give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat, where applicable.

B. Best Available Science to Be Consistent with Criteria. The best available science is that scientific information, obtained through a valid scientific process, that is applicable to the critical area prepared by local, State, or Federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195 and RCW 36.70A.172, as amended from time to time.

C. Characteristics of a Valid Scientific Process. In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the shoreline ecological functions provided by the critical areas. To determine whether information received during the permit review process is reliable scientific information, the Director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:

1. Peer Review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a referenced scientific journal usually indicates that the information has been appropriately peer-reviewed;

2. Methods. The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to ensure their reliability and validity;

3. **Logical Conclusions and Reasonable Inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;

4. **Quantitative Analysis.** The data have been analyzed using appropriate statistical or quantitative methods;

5. **Context.** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and

6. **References.** The assumptions, analytical techniques, and conclusions are well-referenced with citations to relevant, credible literature, and other pertinent existing information.

D. **Nonscientific Information.** Nonscientific information, such as anecdotal observations, nonexpert opinion, and hearsay, may supplement scientific information, but it is not an adequate substitute for valid and available scientific information.

E. **Absence of Valid Scientific Information.** Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area, leading to uncertainty about the risk to shoreline ecological function provided by the critical area, for permitting an alteration of or impact to the critical area, the Director shall:

1. Take a “precautionary or a no-risk approach,” that strictly limits development and land use activities until the uncertainty is sufficiently resolved; and

2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

a. Address funding for the research component of the adaptive management program;

b. Change course based on the results and interpretation of new information that resolves uncertainties; and

c. Commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries.

20.240.070 Classification and rating of critical areas.

To promote consistent application of the standards and requirements of this chapter, critical areas within the City's shoreline jurisdiction shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance. Classification of critical areas shall be determined by the City using the following tools:

A. Application of the criteria contained in these regulations;

B. Consideration of the critical area reports submitted by qualified professionals in connection with applications subject to these regulations; and

C. Review of maps adopted pursuant to this chapter.

20.240.080 Critical area report – Requirements.

A. **Report Required.** If uses, activities, or developments are proposed within, adjacent to, or are likely to impact critical areas or their buffers, an applicant shall provide site-specific information and analysis in the form of critical area report(s) as required in this chapter. Critical area reports are required in order to identify the presence, extent, and classification/rating of potential critical areas, as well as to analyze, assess, and mitigate the potential adverse impact to or risk from critical areas for a development project. Critical area reports shall use standards for best available science in SMC 20.240.060. Critical area reports for two or more types of critical areas shall meet the report requirements for each type of critical area. The expense of preparing the critical area report(s) shall be borne by the applicant. This provision is not intended to expand or limit an applicant's other obligations under WAC 197-11-100, as amended from time to time.

B. **Preparation by Qualified Professional.** Critical area report(s) shall be prepared by qualified professional(s) as defined in SMC 20.20.042, with the required training and experience specific to the type(s) of critical area(s) present consistent with the requirements of SMC 20.240.240, 20.240.290, and 20.240.340. Proof of licensing, credentials, and resume of the

qualified professional(s) preparing the report shall be submitted for review by the City to determine if the minimum qualifications are met.

C. Third Party Review of Critical Area Reports. Review of required critical area reports by a qualified professional under contract with or employed by the City will be required by the Director at the applicant's expense in any of the following circumstances:

1. The project requires a shoreline variance application or a shoreline conditional use permit; or
2. Third party review is specifically required by the provisions of this chapter for the critical area(s) or critical area buffer(s) potentially being impacted; or
3. When the Director determines such services are necessary to demonstrate compliance with the standards and guidelines of this chapter.

D. Critical Area Report Types or Sections. Critical area reports may be met in stages through multiple reports or combined in one report. A critical area report shall include one or more of the following sections or report types unless exempted by the Director based on the extent of the potential critical area impacts. The scope and location of the proposed project will determine which report(s) alone or combined are sufficient to meet the critical area report requirements for the impacted critical area type(s). The typical sequence of required sections or reports that will fulfill the requirements of this section include:

1. **Reconnaissance.** The existence, general location, and type of critical areas in the vicinity of a project site (off site within 300 feet for wetlands and fish and wildlife habitat conservation areas and off site within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas) of a project site (if allowed by the adjoining property owners). Determination of whether the project will adversely impact or be at risk from the potential critical areas based on maximum potential buffers and possible application of SMC 20.240.220(A)(3), 20.240.280(D)(7) or 20.240.330(G)(10) should be addressed;
2. **Delineation.** The extent, boundaries, rating or classification, and applicable standard buffers of critical areas where the project area could potentially impact the critical area or its buffer including an assessment of the characteristics of or functions and values of the critical area and buffers identified;

3. **Analysis.** The proposal and impact assessment report documenting the potential project impacts to the critical area and buffers including a discussion of the efforts taken to avoid, minimize, and reduce potential impacts to those areas;

4. **Mitigation.** The measures that prevent or compensate for the potential impacts of the project designed to meet the requirements of this chapter, in SMC 20.240.082, Mitigation plan requirements, and the standards for the specific critical areas impacted. Mitigation includes, but is not limited to, adjustments to required buffer sizes, best practices to minimize impacts, and critical area or buffer enhancement, restoration, or preservation plans. Mitigation plans include habitat management plans, revegetation, or replanting plans, and restoration plans;

5. **Maintenance and Monitoring.** The goals of the mitigation proposed, performance standards for success, monitoring methods and reporting schedule, maintenance methods and schedule, and contingency actions. Maintenance and monitoring plans shall be consistent with the mitigation performance standards and requirements of this chapter, including SMC 20.240.250, 20.240.300, and 20.240.350.

E. **Minimum Report Contents.** At a minimum, critical area reports shall contain the following:

1. The name and contact information of the applicant;

2. Adequate information to determine compliance with the requirements of the critical area regulations, this chapter, including critical area report, impact and hazard assessment, and mitigation requirements specific to each critical area type, as indicated in the corresponding sections of this chapter;

3. The dates, names, and qualifications of the qualified professional(s) preparing the report and documentation of any fieldwork performed on the site;

4. A description of the proposal, proposal location including address and parcel number(s), and a vicinity map for the project;

5. Identification of the development permit(s) requested and all other local, State, and/or Federal critical area-related permits required for the project;

6. A copy of the site plan for the development proposal including;

a. A map to standard engineering scale depicting critical areas, buffers, the development proposal, and any areas to be altered. In addition to plan size site plans, a legible, reduced (eight and one-half inches by 11 inches) copy will be required if noticing is required for the project; and

b. A scaled depiction and description of the proposed stormwater pollution prevention plan, consistent with the adopted stormwater manual, for the development and consideration of impacts to critical areas due to drainage alterations;

7. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, and buffers within the vicinity of the proposed project area (off site within 300 feet for wetlands and fish and wildlife habitat conservation areas and off site within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas);

8. A statement specifying the accuracy of the report and all assumptions made and relied upon;

9. A description of the methodologies used to conduct the critical areas investigation, including references;

10. An assessment of the probable impacts to the critical areas resulting from the proposed development of the site based upon identified findings;

11. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.240.053, Mitigation requirements, to avoid, minimize, and mitigate impacts to critical areas; and

12. Plans for mitigation required to offset any critical areas impacts, in accordance with SMC 20.240.082, Mitigation plan requirements, and the corresponding mitigation performance standards sections of this chapter, including a discussion of the applicable development standards and cost estimates for determination of financial guarantee requirements.

F. Existing Reports. Unless otherwise provided, a critical areas report may incorporate, be supplemented by, or composed of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director. At the discretion of the Director, reports previously compiled or submitted as part of a

proposal for development may be used as a critical areas report to the extent that the requirements of this section and the report requirements for each specific critical area type are met. Critical areas reports shall be considered valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary. Supplemental critical area report(s) may be required to provide information and analysis to address changes to the project scope and potential impacts or to changes to applicable regulations that have been made subsequent to existing, valid critical area reports.

G. Modifications to Report Requirements.

1. Limitations to Study Area. The Director may limit the required geographic area of the critical areas report as appropriate if:

a. The applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area; or

b. The proposed activity will affect only a limited part of the subject site.

2. Modifications to Required Contents. The applicant may consult with the Director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation. In some cases, such as when it is determined that no geologic hazard area is present, a full report may not be necessary to determine compliance with the critical area regulations, this chapter, and in those cases a letter or reconnaissance only report may be required.

3. Additional Information Requirements. The Director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:

a. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

b. Grading and drainage plans; and

c. Information specific to the type, location, and nature of the critical area.

20.240.082 Mitigation plan requirements.

When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical area report. Mitigation plans shall meet the minimum requirements of SMC 20.240.080 and the applicable mitigation performance standards and requirements for the impacted type(s) of critical area(s) and buffer(s), including but not limited to SMC 20.240.250, 20.240.300, and 20.240.350. When the mitigation plan is submitted separately from other types or sections of the required critical area report(s), the mitigation plan shall meet the minimum content requirements of SMC 20.240.080(E) by inclusion or reference to other existing report(s). The mitigation plan shall include, at a minimum:

A. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the mitigation proposed and including:

1. A description of the anticipated impacts to the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of shoreline ecological functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the shoreline ecological functions provided by the impacted critical area; and
2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed.

B. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained at the end of the required monitoring period and whether or not the requirements of this chapter, this Master Program, and the SMA have been met.

C. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration;

2. Site plans showing grading and excavation details with minimum two-foot contour intervals;
3. Erosion and sediment control features;
4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

D. Monitoring Program and Contingency Plan.

1. A monitoring program shall be included in the mitigation plan and implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives of the mitigation plan are being met.
2. A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. Contingency plans include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. Corrective measures will be required by the City when the qualified professional indicates, in a monitoring report, that the contingency actions are needed to ensure project success by the end of the monitoring period. A performance and maintenance bond, or other acceptable financial guarantee, is required to ensure the applicant's compliance with the terms of the mitigation agreement consistent with SMC 20.240.120, Financial guarantee requirements.
3. Monitoring programs prepared to comply with this section shall include, at a minimum, the following requirements:
 - a. Best available scientific procedures shall be used to establish the success or failure of the mitigation project. A protocol outlining the schedule for site monitoring (for example, monitoring shall occur in years zero (as-built), one, three, and five after site

construction), and how the monitoring data will be evaluated to determine if the performance standards are being met.

b. For vegetation determinations, permanent sampling points shall be established.

c. Vegetative success shall, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. Alternative standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration of recommendations provided in a critical area report or as otherwise required by the provisions of this chapter.

d. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. Monitoring reports on the current status of the mitigation project shall be submitted, consistent with subsection E of this section, to the City on the schedule identified in the monitoring plan, but not less than every other year. The reports are to be prepared by a qualified professional and reviewed by the City, or a qualified professional retained by the City, and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable.

e. Monitoring programs shall be established for a period necessary to establish that performance standards have been met, but not for less than a minimum of five years without approval from the Director.

f. If necessary, failures in the mitigation project shall be corrected.

g. Dead or undesirable vegetation shall be replaced with appropriate plantings.

h. Damage caused by erosion, settling, or other geomorphological processes shall be repaired.

i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (D)(3)(d) of this section.

j. Correction procedures shall be approved by a qualified professional and the City.

k. If the mitigation goals are not obtained within the initial monitoring period, the applicant remains responsible for restoration of the impacted shoreline ecological functions provided by the critical areas or hazard risk reduction until the mitigation goals agreed to in the mitigation plan are achieved.

E. Monitoring Reports. Monitoring reports shall be submitted to the City consistent with the approved monitoring plan.

1. The as-built report, required prior to final inspection, shall, at a minimum, include documentation of the following to establish the baseline for monitoring:

a. Departures from the original approved plans;

b. Construction supervision provided by the qualified professional;

c. Approved project goals and performance standards;

d. Baseline data for monitoring per the approved monitoring methods;

e. Photos from established photo points; and

f. A site plan showing final mitigation as constructed or installed, monitoring points, and photo points.

2. Subsequent monitoring reports shall, at a minimum, include:

a. Monitoring visit observations, documentation, and analysis of monitoring data collected;

b. Photos from photo points;

c. Determination whether performance standards are being met; and

d. Maintenance and/or contingency action recommendations to ensure success of the project at the end of the monitoring period.

3. The applicant shall be responsible for the cost (at the current hourly rate) of review of monitoring reports and site inspections during the monitoring period, which are completed by the City or a qualified professional under contract with or employed by the City.

F. **Cost Estimates.** The mitigation plan shall include cost estimates that will be used by the City to calculate the amounts of financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the mitigation project, monitoring program, and any contingency measures shall be posted in accordance with SMC 20.240.120, Financial guarantee requirements.

G. **Approved Mitigation Projects – Signature.** On completion of construction, an as-built report for any approved mitigation project shall be prepared and signed off by the applicant's qualified professional and approved by the City. Signature of the qualified professional on the required as-built report and approval by the City will indicate that the construction has been completed as planned.

20.240.085 Pesticides, herbicides and fertilizers on City-owned property.

Pesticides, herbicides and fertilizers which have been identified by State or Federal agencies as harmful to humans, wildlife, or fish shall not be used in City-owned properties containing critical areas or their buffers within the shoreline jurisdiction except as allowed by the Director for the following circumstances:

A. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health, or the environment, and that an otherwise prohibited application shall be used as a last resort.

B. Compost or fertilizer may be used for native plant revegetation projects in any location.

C. Limited pesticide and herbicide use may be applied pursuant to the King County Noxious Weed Control Board best management practices, specific to the species needing control, when that is determined to be the best method of control for the location. Federal, State, and local regulations of pesticides and water quality shall be followed, including requirements for pesticide applicator licensing from the Washington State Department of Agriculture.

20.240.090 Buffer areas.

The establishment of buffer areas shall be required for all development proposals and activities in or adjacent to critical areas within the shoreline jurisdiction. In all cases the standard buffer shall apply unless the Director determines that additional buffer width is necessary or reduced buffer is sufficient to protect the shoreline ecological functions consistent with the provisions of this chapter, this Master Program, the SMA, and the recommendations of a qualified

professional. The purpose of the buffer shall be to protect the integrity, function, value and resource of the subject critical area for shoreline ecological function, and/or to protect life, property and resources from risks associated with development on unstable or critical lands. The buffer shall consist of an undisturbed area of native vegetation. Buffers shall be protected during construction by placement of a temporary barricade if determined necessary by the City, on-site notice for construction crews of the presence of the critical area, and implementation of appropriate erosion and sedimentation controls. Restrictive covenants or conservation easements may be required to preserve and protect buffer areas.

20.240.100 Notice to title.

A critical area notice to title is required, as a condition of permit issuance or project approval, when a permit or development application is submitted for development on any property containing a critical area or buffer within the shoreline jurisdiction. The purpose is to inform subsequent purchasers of real property of the existence of critical areas. The notice to title applicable to the property shall be approved by the Director and City Attorney for compliance with this provision and be filed by the property owner, at their expense, with the King County Recorder's Office. This requirement can be met through recording of a notice to title prepared by the City, establishment of a critical area tract, or recording of native growth protection area easement consistent with the following provisions:

A. **Notice to Title.** A notice to title is required when a permit is required for development on any property containing a critical area or buffer within the shoreline jurisdiction. The notice shall state that critical areas or buffers have been identified on the property within the shoreline jurisdiction and that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the land. The title holder will have the right to challenge this notice and to have it extinguished if the critical area designation no longer applies. However, the titleholder shall be responsible for completing a critical area report, subject to approval by the Director, before the notice on title can be extinguished.

B. **Critical Area Tract.** Subdivisions, short subdivisions, and binding site plans shall establish a separate critical areas tract as a permanent protective measure for wetlands, fish and wildlife habitat conservation areas, and landslide hazard areas and their buffers located within the shoreline jurisdiction. The plat or binding site plan for the project shall clearly depict the critical areas tract, and shall include all of the subject critical area, any required buffer, and any additional lands included voluntarily by the developer. Restrictions to development within the

critical area tract shall be clearly noted on the plat or plan. Restrictions shall be consistent with the SMA, this Master Program, and this chapter for the entire critical area tract. Should the critical area tract include several types of critical areas, the developer may establish separate critical areas tracts.

C. Native Growth Protection Area. Native growth protection area (NGPA) easements shall be required on a property where no subdivision, short subdivision, or binding site plan is proposed or required. Unless otherwise required in this chapter, NGPA easements shall be recorded on title for all affected parcels prior to approval of a development agreement, issuance of a master development plan permit, or issuance of a site development or building permit, when two or more dwelling units and/or nonresidential development are proposed on one parcel, to delineate and protect those contiguous wetlands, fish and wildlife habitat conservation, and landslide hazard critical areas and their buffers located within the shoreline jurisdiction. The easement to be recorded shall clearly depict the critical area and the limits of the NGPA easement and shall include all of the subject critical area(s) and any required buffer(s). Restrictions to development within the NGPA easement shall be clearly noted in the easement and shall include the following:

1. That native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, limiting chemical applications of hazardous substances (pesticides, herbicides, fertilizers), maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
2. The right of the City to enforce the terms of the restriction.

D. Proof of Notice. The applicant shall submit proof that the notice has been recorded on title before the City approves any development permit, including master development plan permits, for the property or, in the case of subdivisions, short subdivisions, binding site plans, or development agreements, at or before recording.

20.240.110 Permanent field marking.

A. All critical areas tracts, easements, and dedications, or as recommended by a qualified professional, shall be clearly marked on the site using permanent markings, placed at least every 50 feet, which include the following text:

City of Shoreline Designated Critical Area. Activities, including clearing and grading, removal of vegetation, pruning, cutting of trees or shrubs, planting of nonnative species, and other alterations may be prohibited. Help protect and care for this area. Please contact the City of Shoreline with questions or concerns.

B. It is the responsibility of the landowner to maintain in perpetuity and replace if necessary all permanent field markings.

20.240.120 Financial guarantee requirements.

Bonds, and other financial guarantees, and associated performance agreements or maintenance/defect/monitoring agreements shall be required for projects with required mitigation or restoration of impacts to critical areas or critical area buffers consistent with the following:

A. A performance agreement and bond, or other acceptable financial guarantee, are required from the applicant when mitigation required pursuant to a development proposal is not completed prior to final permit approval, such as final plat approval or final building inspection. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

B. A performance agreement and bond, or other acceptable financial guarantee, are required from the applicant when restoration is required for remediation of a critical area violation. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

C. A maintenance/defect/monitoring agreement and bond, or other acceptable financial guarantee, are required to ensure the applicant's compliance with the conditions of the approved mitigation plan pursuant to a development proposal or restoration plan for remediation of a violation. The amount of the maintenance bond(s) shall equal 25 percent of the cost of the mitigation project (after City mobilization is calculated) in addition to the cost for monitoring for a minimum of five years. The monitoring portion of the financial guarantee may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period.

20.240.130 Unauthorized critical area alterations.

A. When a critical area or its buffer located within the shoreline jurisdiction has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The City shall have the authority to issue a stop work order to cease all development, and order restoration measures at the owner's or other responsible party's expense to remediate the impacts of the violation of the provisions of this chapter.

B. Requirement for Restoration Plan. All development shall remain stopped until a restoration plan is prepared by the responsible party and an approved permit is issued by the City. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in subsection C of this section. The Director may, at the responsible party's expense, seek expert advice, including but not limited to third party review by a qualified professional under contract with or employed by the City, in determining if the plan meets the minimum performance standards for restoration. Submittal, review, and approval of required restoration plans for remediation of violations of this chapter, Critical Areas, shall be completed through a site development permit application process.

C. Minimum Performance Standards for Restoration.

1. For alterations to aquifer recharge areas, wetlands, and fish and wildlife habitat conservation areas, the following minimum performance standards shall be met for the restoration; provided, that if the violator can demonstrate that greater shoreline ecological functions provided through the functions and values provided by these critical areas can be obtained, these standards may be modified:

a. The pre-violation function and values of the affected critical areas and buffers shall be restored, including water quality and habitat functions;

b. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically, or pre-violation, found on the site in species types, sizes, and densities. The pre-violation functions and values should be replicated at the location of the alteration; and

c. Information demonstrating compliance with the requirements in SMC 20.240.082, Mitigation plan requirements, and the applicable mitigation sections for the affected

type(s) of critical area(s) and their buffer(s) shall be submitted to the Director with a complete site development permit application.

2. For alterations to flood hazard and geologic hazard areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

a. The hazard shall be reduced to a level equal to, or less than, the pre-violation hazard;

b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

D. **Site Investigation.** The Director is authorized to take such actions as are necessary to enforce this chapter. The Director shall present proper credentials and obtain permission before entering onto private property.

E. **Penalties.** Any responsible party violating of any of the provisions of this chapter may be subject to any applicable penalties per SMC 20.30.770, WAC 173-27-240, and RCW 90.58.200 and 90.58.210, as amended from time to time.

Subchapter 2.

Geologic Hazard Areas

20.240.210 Geologic hazards – Designation and purpose.

A. Geologic hazard areas are those lands that are susceptible to erosion, landsliding, seismic, or other geological events as identified by WAC 365-190-120, as amended from time to time. These areas may not be suited for development activities because these areas may pose a threat to public health and safety. These areas also provide important shoreline ecological functions. Eroding coastal bluffs, called feeder bluffs, are the primary source of sediment for Puget Sound beaches and contribute to vital coastal processes. However, since most of the

city's coastline consists of BNSF railroad right-of-way, opportunity for the natural erosion and sediment transport process is limited.

Areas susceptible to one or more of the following types of hazards shall be designated as geologic hazard areas:

1. Landslide hazard;
2. Seismic hazard;
3. Erosion hazard.

B. The primary purposes of geologic hazard area regulations are to avoid and minimize potential impacts to life and property from geologic hazards, conserve soil resources, protect shoreline ecological functions, and minimize structural damage relating to seismic hazards. This purpose shall be accomplished through appropriate levels of study and analysis, application of sound engineering principles, and regulation or limitation of land uses, including maintenance of existing vegetation, regulation of clearing and grading activities, and control of stormwater.

20.240.220 Geologic hazards – Classification.

Geologic hazard areas shall be classified according to the criteria in this section as follows:

A. **Landslide Hazard Areas.** Landslide hazard areas are those areas potentially subject to landslide activity based on a combination of geologic, topographic and hydrogeologic factors as classified in subsection B of this section with slopes 15 percent or steeper within a vertical elevation change of at least 10 feet or all areas of prior landslide activity regardless of slope. A slope is delineated by establishing its toe and top, and measuring the inclination over 10 feet of vertical relief (see Figure 20.240.220(A)). The edges of the geologic hazard are identified where the characteristics of the slope cross-section change from one landslide hazard classification to another, or no longer meet any classification. Additionally:

1. The toe of a slope is a distinct topographic break which separates slopes inclined at less than 15 percent from slopes above that are 15 percent or steeper when measured over 10 feet of vertical relief; and

2. The top of a slope is a distinct topographic break which separates slopes inclined at less than 15 percent from slopes below that are 15 percent or steeper when measured over 10 feet of vertical relief.

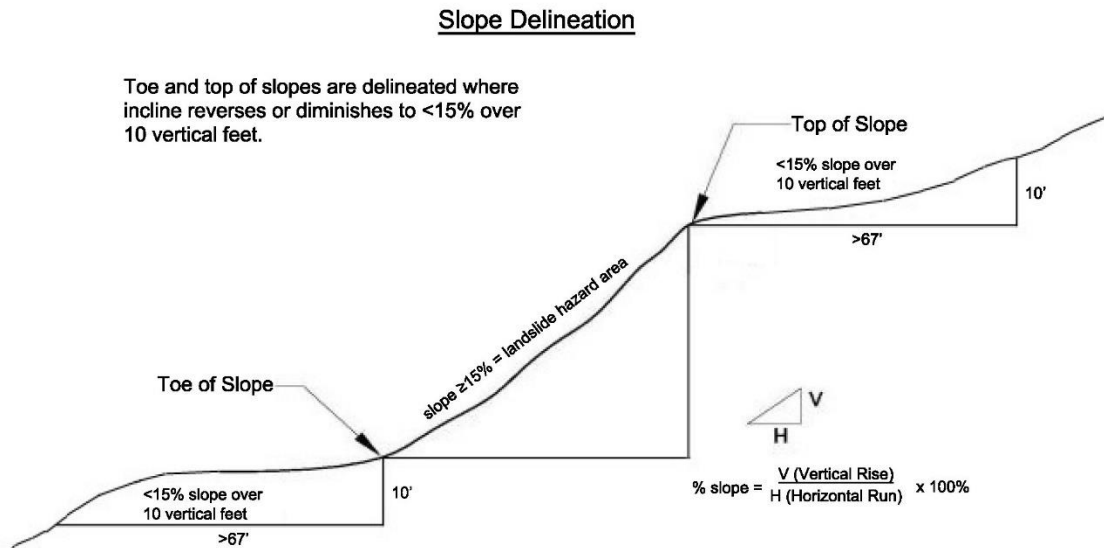


Figure 20.240.220(A): Illustration of slope calculation for determination of top and toe of landslide hazard area.

B. Landslide Hazard Area Classification. Landslide hazard areas are classified as follows:

1. Moderate to High Risk.

- a. Areas with slopes between 15 percent and 40 percent and that are underlain by soils that consist largely of sand, gravel or glacial till that do not meet the criteria for very high risk areas in subsection (B)(2) of this section;
- b. Areas with slopes between 15 percent and 40 percent that are underlain by soils consisting largely of silt and clay and do not meet the criteria for very high risk areas in subsection (B)(2) of this section; or
- c. All slopes of 10 to 20 feet in height that are 40 percent slope or steeper and do not meet the criteria for very high risk in subsection (B)(2)(a) or (b) of this section.

2. Very High Risk.

- a. Areas with slopes steeper than 15 percent with zones of emergent water (e.g., springs or ground water seepage);
- b. Areas of landslide activity (scarps, movement, or accumulated debris) regardless of slope; or
- c. All slopes that are 40 percent or steeper and more than 20 feet in height when slope is averaged over 10 vertical feet of relief.

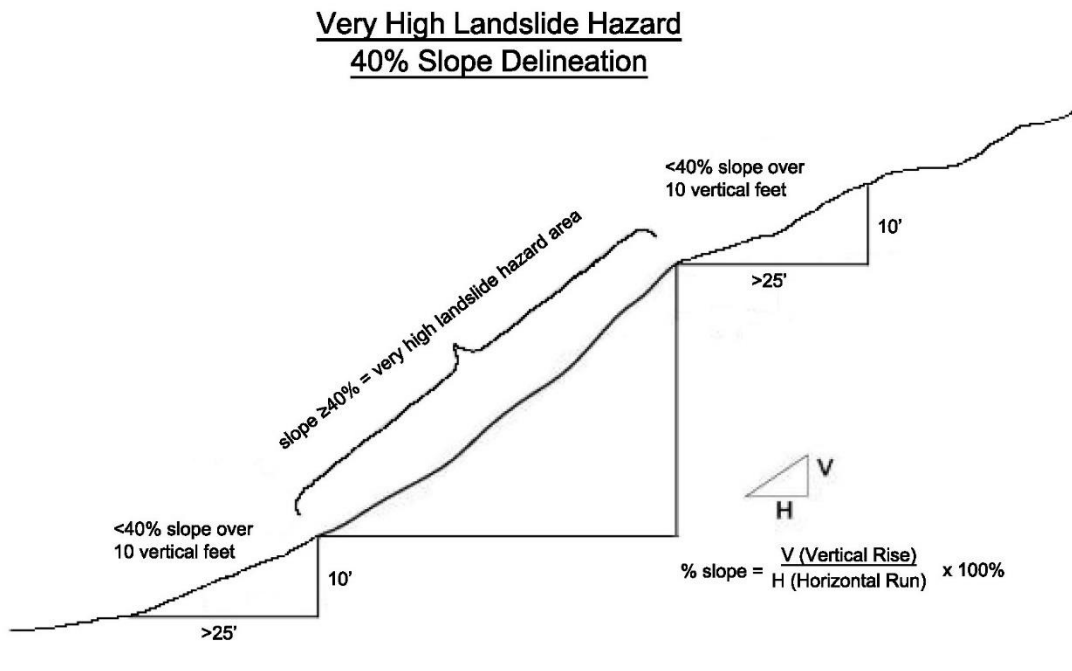


Figure 20.240.220(B): Illustration of very high risk landslide hazard area delineation (no midslope bench).

C. Seismic Hazard Areas. Seismic hazard areas are lands that, due to a combination of soil and ground water conditions, are subject to risk of ground shaking, lateral spreading, subsidence or liquefaction of soils during earthquakes. These areas are typically underlain by soft or loose saturated soils (such as alluvium) or peat deposits and have a shallow ground water table. These areas are designated as having “high” and “moderate to high” risk of liquefaction as mapped on the Liquefaction Susceptibility and Site Class Maps of Western Washington State by County by DNR.

D. Erosion Hazard Areas. Erosion hazard areas are lands or areas underlain by soils identified by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (formerly the Soil Conservation Service) as having “severe” or “very severe” erosion hazards. This includes, but is not limited to, the following group of soils when such soils occur on slopes of 15 percent or greater: Alderwood-Kitsap (AkF), Alderwood gravelly sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD) and Indianola (InD).

20.240.222 Geologic hazards – Mapping.

A. The approximate location and extent of geologic hazard areas are shown on City of Shoreline geologic hazard data layers maintained in the City geographic information system (GIS) and shown in Figure 20.230.080. In addition, the following maps and resources providing information on the location and extent of geologic hazard areas are hereby adopted by reference as amended:

1. Department of Ecology coastal zone atlas (for marine bluffs);
2. U.S. Geological Survey geologic maps, landslide hazard maps, and seismic hazard maps;
3. DNR seismic hazard maps for Western Washington, including, but not limited to, the Liquefaction Susceptibility and Site Class Maps of Western Washington State by County;
4. DNR slope stability maps; and
5. Soils maps produced by the USDA National Resources Conservation Service.

B. The critical areas maps and the resources cited above are to be used as a guide for the City of Shoreline Planning and Community Development Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. These maps and resources are a reference and do not provide a final critical area designation.

20.240.224 Geologic hazards – Development standards.

A. Development, activities, and uses shall be allowed in geologic hazard areas and their required buffers only as provided for in this chapter.

B. Activities Allowed in All Geologic Hazard Areas and Buffers. The activities listed below are allowed in the identified geologic hazard areas types pursuant to SMC 20.240.040, Allowed

activities, and subject to applicable permit approvals. These activities do not require submission of a critical area report.

1. All allowed activities per SMC 20.240.040;
2. Installation of fences as allowed without a building permit in Chapter 20.50 SMC, General Development Standards;
3. Nonstructural interior remodel, maintenance, or repair of structures which do not meet the standards of this chapter, if the maintenance or repair does not increase the footprint or height of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair; and

C. **Alteration.** The City may approve, condition, or deny proposals in a geologic hazard area based upon the effective mitigation of risks posed to property, health and safety and compensation of the loss of shoreline ecological functions. The objective of mitigation measures shall be to render a site containing a geologic hazard as safe as one not containing such hazard. Conditions may include applicable stormwater management practices, limitations of proposed uses, modification of density, alteration of site layout, and other appropriate changes to the proposal.

Where potential impacts cannot be effectively mitigated to ensure no net loss of the shoreline ecological functions provided by the critical area, and to eliminate a significant risk to public health and safety and property or other critical area, the proposal shall be denied, except as granted by a shoreline variance consistent with 20.220.040.

D. **Alteration of Moderate to High Risk Landslide Hazards.** Development activities and uses that result in unavoidable alterations may be permitted in moderate to high risk landslide hazard areas or their buffers in accordance with an approved geologic hazard critical area report. The recommendations contained within the critical area report shall be incorporated into the proposed alteration of the landslide hazard area or its buffers.

The critical area report shall certify that:

1. The risk of damage from the proposal, both on site, and off site, are minimal subject to the conditions set forth in the report;

2. The proposal will not increase the risk of occurrence of the potential landslide hazard; and

3. Measures to eliminate or reduce risks have been incorporated into the report's recommendations and project development plans.

E. Alteration of Very High Risk Landslide Hazard Areas. Alterations of a very high risk landslide hazard area and/or buffer may only occur for activities for which a critical area report with a hazards analysis is submitted and certifies that:

1. The development will not increase surface water discharge or sedimentation on site or to adjacent properties beyond pre-development conditions;

2. The development will not decrease slope stability on the site or on adjacent properties;

3. Such alterations will meet other critical areas regulations; and

4. The design criteria in subsection F of this section are met.

F. Design Criteria for Alteration of Very High Risk Landslide Hazard Areas. Development within a very high risk landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative project design provides greater short- and long-term slope stability while meeting all other provisions of this chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design criteria are:

1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Proposed alteration of natural slopes, that does not include structures, shall not decrease the factor of safety for landslide occurrences below the limits of 1.3 for static conditions and 1.0 for seismic. Where the existing conditions are below these limits, the proposed development shall increase the factor of safety to these limits or will not be permitted. Analysis of dynamic conditions shall be based on the seismic event as established by the current version of the International Building Code;

2. New structures and improvements shall be clustered to avoid geologic hazard areas and other critical areas;
3. New structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;
4. New structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
5. The proposed development shall not result in greater risk of the hazard or a need for increased buffers on neighboring properties;
6. Where the existing natural slope area cannot be retained undisturbed with native vegetation, the use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
7. Development shall be designed to minimize impervious lot coverage and preserve native vegetation and trees to the maximum extent practicable.

G. Additional Requirements for Alteration of Very High Risk Hazard Landslide Areas.

1. Prior to application, the applicant shall meet the requirements of and conduct a neighborhood meeting consistent with SMC 20.30.090. The notification area shall be limited to:
 - a. All property owners whose properties adjoin the subject property; and
 - b. Properties that include part of the subject property's very high risk landslide hazard area and the standard 50-foot buffer, but not to exceed a maximum of 200 feet from the project clearing limits.
2. Prior to permit issuance, the property owner shall sign and record on title, at the owner's sole expense, a covenant in a form acceptable to the City, which:
 - a. Acknowledges and accepts the risks of development in the landslide hazard area;
 - b. Waives any rights to claims against the City;
 - c. Indemnifies and holds harmless the City against claims, losses, and damages;

d. Informs subsequent owners of the property of the risks and the covenant; and

e. Advisability of obtaining added insurance.

3. Prior to permit issuance, the piling and excavation contractors shall submit insurance bonding documentation that includes coverage for subsidence and underground property damage, listing the City as an additional insured. The Director may require adequate bonds and/or insurance to cover potential claims for property damage that may arise from or be related to the following:

a. Excavation or fill within a landslide-prone area when the depth of the proposed excavation exceeds four feet and the bottom of the proposed excavation is below the 100 percent slope line (45 degrees from a horizontal line) from the property line; or

b. In other circumstances where the Director determines that there is a potential for significant harm to any type of critical area or a critical area buffer during the construction process.

4. If the Building Official has reasonable grounds to believe that an emergency exists because significant changes in geologic conditions at a project site or in the surrounding area may have occurred since a permit was issued, increasing the risk of damage to the proposed development, to neighboring properties, or to nearby surface waters, the building official may, by letter or other reasonable means of notification, suspend the permit until the applicant has submitted a letter of certification. The letter of certification shall be based on such factors as the presence of known slides, indications of changed conditions at the site or the surrounding area, or other indications of unstable soils and meet the following requirements:

a. The letter of certification shall be from the current project qualified professional geotechnical engineer of record stating that a qualified professional geotechnical engineer has inspected the site and area surrounding the proposed development within the 60 days preceding submittal of the letter; and that:

i. In the project geotechnical engineer's professional opinion no significant changes in conditions at the site or surrounding area have occurred that render invalid or out-of-date the analysis and recommendations contained in the technical reports and

other application materials previously submitted to the City as part of the application for the permit; or that

ii. In the project geotechnical engineer's professional opinion, changes in conditions at the site or surrounding area have occurred that require revision to project criteria and that all technical reports and any necessary revised drawings that account for the changed conditions have been prepared and submitted.

5. The letter of certification and any required revisions shall be reviewed and approved by the City's third party qualified professional, at the applicant's expense, before the Building Official may allow work to continue under the permit.

H. Alteration of Seismic Hazard Areas. Development activities and uses in seismic hazard areas may be permitted, based on review of a critical area report demonstrating that the project is consistent with SMC 20.240.053(A)(2) through (6). The report shall certify that the risks of damage from the proposal, both on site and off site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations. The report shall include the following:

1. For one-story and two-story detached residential structures, a qualified professional shall conduct an evaluation of site response and liquefaction potential based on current mapping, site reconnaissance, research of nearby studies.

2. For all other proposals, the qualified professional shall conduct an evaluation of site response and liquefaction potential including sufficient subsurface exploration to determine the site coefficient for use in the static lateral force procedure described in the International Building Code.

I. Alteration of Erosion Hazard Areas. Development activities and uses in erosion hazard areas may be permitted, based on review of a critical area report demonstrating that the project is consistent with SMC 20.240.053(A)(2) through (6) and the following provisions:

1. All development proposals on sites containing erosion hazard areas shall include a stormwater pollution prevention plan consistent with the requirements of the adopted stormwater manual and a mitigation plan to ensure revegetation and permanent stabilization of the site. Specific requirements for revegetation in mitigation plans shall be consistent with

the mitigation plan requirements in SMC 20.240.082 and the mitigation performance standards for geologic hazard areas in SMC 20.240.250. Revegetation for site stabilization may be combined with required landscape, tree retention, and/or other critical area mitigation plans as appropriate.

2. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:

a. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;

b. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to implement the revegetation plan in those areas that have been impacted prior to final inspection of the site development permit or the issuance of any building permit for the subject property;

c. Clearing of vegetation on individual lots may be allowed prior to building permit approval if the City determines that:

i. Such clearing is a necessary part of a large-scale grading plan,

ii. It is not feasible to perform such grading on an individual lot basis, and

iii. Drainage from the graded area will meet established water quality standards.

3. Where the City determines that erosion from a development site poses a significant risk of damage to downstream receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site during the project construction or installation. If the project does not meet water quality standards, the City may suspend further development work on the site until such standards are met.

4. The City may require additional mitigation measures in erosion hazard areas, including, but not limited to, the restriction of major soil-disturbing activities associated with site development between October 1st and April 30th to meet the stated purpose contained in SMC 20.240.010 and 20.240.210.

5. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by the City.

20.240.230 Geologic hazard areas – Required buffer areas.

A. Buffers for geologic hazard areas shall be maintained as undisturbed native vegetation consistent with SMC 20.240.090. Building and other improvement setbacks will be required in addition to buffers as recommended by the qualified professional to allow for landscaping, access around structures for maintenance, and location of stormwater facilities at safe distances from geologic hazard areas where native vegetation is not necessary to reduce the risk of the hazard.

B. Required buffer widths for geologic hazard areas shall reflect the sensitivity of the hazard area and the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the area.

C. In determining the appropriate buffer width, the City shall consider the recommendations contained in a geotechnical critical area report required by these regulations.

D. For moderate to high risk landslide hazard areas, the qualified professional shall recommend whether buffers should be required and the width of those buffers, as well as recommending any additional setbacks for buildings and stormwater facilities adequate to certify no increase in the risk of the hazard.

E. For very high risk landslide hazard areas, the standard buffer shall be 50 feet from all edges of the landslide hazard area. Larger buffers may be required as needed to eliminate or minimize the risk to people and property based on a geotechnical critical area report. The standard buffer may be reduced when geotechnical studies demonstrate, and the qualified professional certifies, that the reduction will not increase the risk of hazard to people or property, on or off site; however, the minimum buffer shall be 15 feet.

F. Landslide hazard areas and associated buffers shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the critical landslide hazard and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County Recorder's Office.

20.240.240 Geologic hazards – Critical area report requirements.

A. Report Required. If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a geologic hazard area, a critical area report shall be required, at the applicant's expense. Critical area report requirements for geologic hazard areas are met through submission to the Director of one or more geologic hazard critical area reports (also referred to as geotech or geotechnical engineering reports). In addition to the general critical areas report requirements of SMC 20.240.080, critical areas reports for geologic hazard areas shall meet the requirements of this section. Critical areas reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. Preparation by a Qualified Professional. Critical areas reports for potential geologic hazard areas shall be prepared, stamped, and signed by a qualified geotechnical engineer or engineering geologist licensed in the State of Washington, with minimum required experience, per SMC 20.20.042, analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard. If mitigation measures are necessary, the report detailing the mitigation measures and design of the mitigation shall be prepared by a qualified professional with experience stabilizing geologic hazard areas with similar geotechnical properties and by a qualified vegetation ecologist, landscape architect, or arborist with experience designing and monitoring vegetative stabilization of geologic hazard areas.

C. Third Party Review Required. Critical areas studies and reports on geologically hazardous areas will be subject to third party review at the owner's sole expense as provided in SMC 20.240.080(C) and in the following circumstances:

1. A buffer reduction or alteration of the critical area or buffer is proposed for a very high risk landslide hazard areas.

D. Minimum Report Contents for Geologic Hazard Areas. A critical area report for geologic hazard areas shall include a field investigation, contain an assessment of whether or not each type of geologic hazard identified in SMC 20.240.210 is present or not present, and determine if the proposed development of the site will increase the risk of the hazard on or off site. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.240.080(E);

2. Documentation of any fieldwork performed on the site, including field data sheets for soils, test pit locations, baseline hydrologic data, site photos, etc.;

3. A description of the methodologies used to conduct the geologic hazard areas delineations, classifications, hazards assessments and/or analyses of the proposal impacts including references;

4. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal, drawn at an engineering scale, showing:

a. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, off site within 200 feet of, or that are likely to impact or be affected by the proposal;

b. Proposed development, including the location of existing and proposed structures, fill, significant trees to be removed, vegetation to be removed, storage of materials, and drainage facilities;

c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report;

d. Height of slope, slope gradient, and cross-section of the project area;

e. The location of springs, seeps, or other surface expressions of ground water on or off site within 200 feet of the project area or that have the potential to affect or be affected by the proposal;

f. The location and description of surface water on or off site within 200 feet of the project area or that has the potential to be affected by the proposal; and

g. Clearing limits, including required tree protection consistent with SMC 20.50.370.

5. **Stormwater Pollution Prevention Plan (SWPPP).** For any development proposed with land-disturbing activities on a site containing a geologic hazard area, a stormwater pollution prevention plan (also known as an erosion and sediment control plan) shall be required. The SWPPP, in compliance with the requirements of Chapter 13.10 SMC, shall be included in the critical area report or be referenced if it is prepared separately.

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

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

b. A summary of the existing site conditions, including:

i. Surface topography, existing features, and vegetation found in the project area and in all hazard areas addressed in the report;

ii. Surface and subsurface geology and soils to sufficient depth based on data from site-specific explorations;

iii. Geologic cross-section(s) displaying the critical design conditions;

iv. Surface and ground water conditions; and

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

7. Analysis of Proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the identified hazard area(s), the subject property, and affected adjacent properties. The hazards analysis component of the critical areas report shall include the following based on the type(s) of geologic hazard areas identified:

a. Recommendations for the minimum buffer consistent with SMC 20.240.230 and recommended minimum drainage and building setbacks from any geologic hazard based upon the geotechnical analysis. Buffers shall be maintained consistent with SMC 20.240.090; however, the qualified professional may recommend additional setbacks for

drainage facilities or structures which do not have to be maintained as undisturbed native vegetation; and

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

E. Additional Technical Information Requirements for Landslide Hazard Areas. The technical information required in a critical area report for a project within a landslide hazard area shall also include the following:

1. An estimate of the present stability of the subject property, the stability of the subject property during construction, the stability of the subject property after all development activities are completed, and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development, including the effect construction and placement of structures, clearing, grading, and removal of vegetation will have on the slope over the estimated life of the structure;

2. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;

3. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties;

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

5. Compliance with the requirements of SMC 20.240.224(D) for alterations proposed in moderate to high risk landslide hazard areas;

6. Compliance with the requirements of SMC 20.240.224(E) through (G) for alterations proposed in very high risk landslide hazard areas;

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

8. Recommendations for drainage and subdrainage improvements;

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

10. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.

F. Additional Technical Information Requirements for Seismic Hazard Areas. The technical information required in a critical area report for a project within a seismic hazard area shall also include the following:

1. A complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement);

2. Additionally, a geotechnical engineering report for a seismic hazard area shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented; and

3. Any additional information or analysis necessary to demonstrate compliance with the standards for alteration in seismic hazard areas in SMC 20.240.224(H).

G. Limited Report Requirements for Stable Erosion Hazard Areas. When recommended by the qualified professional for sites only overlain by erosion hazard areas with suitable slope stability, and no other type of critical area or buffer, detailed critical areas report requirements may be waived. Report requirements for stable erosion hazard areas may be met through construction documents that shall include at a minimum a stormwater pollution plan prepared in compliance with requirements set forth in Chapter 13.10 SMC.

H. Mitigation of Long-Term Impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the preexisting level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if such techniques do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the preexisting conditions following abandonment of the activity.

I. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.240.082 and the geologic hazards mitigation performance standards and requirements of SMC 20.240.250;
2. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes, or other appropriate agency; and
3. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.240.250 Geologic hazards – Mitigation performance standards and requirements.

A. Requirements for Mitigation. Mitigation is required for proposed adverse impacts and increased risks due to alteration of geologic hazard areas and shall be sufficient to result in no increased risk of the hazard consistent with the development standards in SMC 20.240.224. Mitigation plans shall be submitted as part of the required critical area report, consistent with the requirements of SMC 20.240.080, 20.240.082, and 20.240.240, and this section. When revegetation is required as part of the mitigation, then the mitigation plan shall meet the standards of SMC 20.240.350(H), excluding those standards that are wetland specific.

B. Preference of Mitigation Actions. Methods to achieve mitigation for alterations of geologic hazard areas shall be approached in the following order of preference:

1. **Protection.** Mitigation measures that increase the protection of the identified geologic hazard areas include, but are not limited to:
 - a. Increased or enhanced buffers;
 - b. Setbacks for permanent and temporary structures;
 - c. Reduced project scope; and
 - d. Retention of existing vegetation.
2. **Restoration.** Restoration of native vegetation.

3. **Engineered Stabilization.** Engineered design of geologic hazard stabilization to ensure no increased risk of the hazard due to the proposal with preference for bioengineering over structural engineered solutions.

C. **Performance Standards.** The following performance standards shall apply to any mitigation for development proposed within geologic hazard areas:

1. Geotechnical studies shall be prepared by a qualified professional to identify and evaluate potential hazards and to formulate mitigation measures;

2. Construction methods will reduce or not adversely affect geologic hazards;

3. Site planning to minimize disruption of existing topography and natural vegetation;

4. Significant trees shall be preserved, unless removal is unavoidable or otherwise allowed under the provisions of this chapter;

5. Minimize impervious surface coverage;

6. Replant disturbed areas as soon as feasible pursuant to an approved landscape plan.

When planting is required, the following standards shall apply:

a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;

b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;

c. Plants should be commercially available or available from local sources;

d. Plant species high in food and cover value for fish and wildlife shall be used;

e. Mostly perennial species should be planted;

f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;

g. Plant selection, densities, and placement of plants shall be determined by a qualified professional and shown on the design plans;

h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;

i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process;

k. An irrigation system shall be installed, if necessary, for the initial establishment period; and

l. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping;

7. Clearing and grading regulations as set forth by the City, in SMC 20.50.290 through 20.50.370, shall be followed;

8. The use of retaining walls that allow maintenance of existing natural slope areas are preferred over graded slopes;

9. All construction specifications and methods shall be approved by a qualified professional and the City;

10. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City;

11. Site drainage design and temporary erosion and sedimentation controls, pursuant to an approved stormwater pollution prevention plan consistent with the adopted stormwater manual, shall be implemented during and after construction;

12. Undevelopable geologic hazard areas larger than one-half acre shall be placed in a separate tract, provided this requirement does not make the lot nonconforming;

13. A monitoring program shall be prepared for construction activities permitted in geologic hazard areas; and

14. Development shall not increase instability, create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion and adequate mitigation shall be incorporated into the project design to comply with the requirements of SMC 20.240.224 and 20.240.230.

Subchapter 3.

Fish and Wildlife Habitat Conservation Areas

20.240.260 Fish and wildlife habitat – Description and purpose.

A. Fish and wildlife habitat conservation areas (or habitat conservation areas) are lands managed for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. Fish and wildlife habitat conservation areas include areas with which State and Federal designated threatened, endangered, and sensitive species have a primary association as well as priority species and habitats listed by WDFW, including corridors which connect priority habitat, and those areas which provide habitat for species of local significance, which have been or may be identified in the City of Shoreline Comprehensive Plan. Fish and wildlife habitat conservation areas also include stream areas and buffers which provide important habitat corridors; help maintain water quality; store and convey stormwater and floodwater; recharge ground water; and serve as areas for recreation, education, scientific study, and aesthetic appreciation.

B. The purpose of fish and wildlife habitat conservation areas shall be to protect and conserve the habitat of fish and wildlife species and thereby maintain or increase their populations. The primary purpose of this section is to minimize development impacts to fish and wildlife habitat conservation areas and to:

1. Protect Federal and State listed habitats and species and give special attention to protection and enhancement of anadromous fish populations; and
2. Maintain a diversity of species and habitat within the City; and
3. Coordinate habitat protection to maintain and provide habitat connections; and
4. Help maintain air and water quality and control erosion.

20.240.270 Fish and wildlife habitat – Classification and designation.

A. The City designates the following fish and wildlife habitat conservation areas that meet one or more of the criteria in subsection B of this section, regardless of any formal identification, as critical area, and, as such, these areas are subject to the provisions of this chapter. These areas shall be managed consistent with best available science; including WDFW’s Management Recommendations for Priority Habitat and Species. The following fish and wildlife habitat conservation areas are specifically designated, and this designation does not preclude designation of additional areas as consistent with the criteria in subsection B of this section:

1. All regulated streams and wetlands and their associated buffers as determined by a qualified specialist.
2. The waters, bed and shoreline of Puget Sound up to the OHWM.

B. Fish and wildlife habitat conservation areas are those areas designated by the City based on review of the best available science; input from WDFW, the Department of Ecology, USACE, and other agencies; and any of the following criteria:

1. Areas Where State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.

a. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status. Federally designated endangered and threatened species known to be identified and mapped by the Washington State Department of Wildlife in Shoreline include, but may not be limited to, the following:

- i. Chinook (Oncorhynchus tshawytscha):
- ii. Southern resident orca or killer whales (Orcinus orca).

b. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the State of Washington that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the State without

cooperative management or removal of threats as identified by WDFW. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (State endangered species) and WAC 232-12-011 (State threatened and sensitive species), as amended from time to time. WDFW maintains the most current listing and should be consulted for current listing status. State designated endangered, threatened, and sensitive species known to be identified and mapped by WDFW in Shoreline include, but may not be limited to, the following:

- i. Northern goshawk (Accipiter gentilis);
- ii. Purple martin (Progne subis).

2. State Priority Habitats and Species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by WDFW in the Priority Habitats and Species List. Priority habitats and species known to be identified and mapped by WDFW in Shoreline include, but may not be limited to, the following:

- a. Biodiversity areas and corridors identified and mapped along Boeing Creek and in and around Innis Arden Reserve Park;
- b. Chinook/fall chinook (Oncorhynchus tshawytscha);
- c. Coho (Oncorhynchus kisutch);
- d. Dungeness crab (Cancer magister);
- e. Estuarine intertidal aquatic habitat;
- f. Geoduck (Panopea abrupta);
- g. Northern goshawk (Accipiter gentilis);

h. Pacific sand lance (Ammodytes hexapterus);

i. Purple martin (Progne subis);

j. Resident coastal cutthroat (Oncorhynchus clarki);

k. Surf smelt (Hypomesus pretiosus); and

l. Winter steelhead (Oncorhynchus mykiss).

3. **Commercial and Recreational Shellfish Areas.** These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW, as amended from time to time.

4. Kelp and eelgrass beds and herring and smelt spawning areas.

5. **Waters of the State.** Waters of the State include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington, as classified in WAC 222-16-030, as amended from time to time. Streams are those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless such watercourses are used by fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided, that there is evidence of at least intermittent flow during years of normal rainfall. Streams shall be classified in accordance with the DNR water typing system (WAC 222-16-030) hereby adopted in its entirety by reference and summarized as follows:

a. Type S: streams inventoried as "shorelines of the State" under the SMA and the rules promulgated pursuant to the SMA, as amended from time to time;

b. Type F: streams which contain fish habitat. Not all streams that are known to exist with fish habitat support anadromous fish populations, or have the potential for anadromous fish occurrence because of obstructions, blockages or access restrictions resulting from existing conditions. Therefore, in order to provide special consideration of and increased protection for anadromous fish in the application of development standards, shoreline streams shall be further classified as follows:

i. **Anadromous Fish-Bearing Streams (Type F-Anadromous).** These streams include:

(A) Fish-bearing streams where naturally recurring use by anadromous fish populations has been documented by a government agency;

(B) Streams that are fish passable or have the potential to be fish passable by anadromous populations, including those from Lake Washington or Puget Sound, as determined by a qualified professional based on review of stream flow, gradient and natural barriers (i.e., natural features that exceed jumping height for salmonids), and criteria for fish passability established by WDFW; and

(C) Streams that are planned for restoration in a six-year capital improvement plan adopted by a government agency or planned for removal of the private dams that will result in a fish-passable connection to Lake Washington or Puget Sound; and

ii. **Nonanadromous Fish-Bearing Streams (Type F-Nonanadromous).** These include streams which contain existing or potential fish habitat, but do not have the potential for anadromous fish use due to natural barriers to fish passage, including streams that contain resident or isolated fish populations.

The general areas and stream reaches with access for anadromous fish are indicated in the City of Shoreline Stream and Wetland Inventory and Assessment (2004) and basin plans. The potential for anadromous fish access shall be confirmed in the field by a qualified professional as part of a critical area report;

c. Type Np: perennial nonfish habitat streams;

d. Type Ns: seasonal nonfish habitat streams; and

e. Piped stream segments: those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert.

20.240.272 Fish and wildlife habitat – Mapping.

A. **Mapping.** The approximate location and extent of fish and wildlife habitat areas are shown in the data layers maintained in the City geographic information system (GIS) and shown in

Figure 20.230.080. In addition, the following maps and inventories are hereby adopted by reference as amended:

1. WDFW Priority Habitat and Species maps;
2. DNR Official Water Type Reference maps;
3. DNR Puget Sound Intertidal Habitat Inventory maps;
4. DNR Shorezone Inventory;
5. DNR Natural Heritage Program mapping data;
6. Washington State Department of Health Annual Inventory of Shellfish Harvest Areas;
7. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington State Conservation Commission; and
8. DNR State Natural Area Preserves and Natural Resource Conservation Area maps.

B. The inventories and cited maps and resources are to be used as a guide for the City, project applicants, and/or property owners, and may be continuously updated as new fish and wildlife habitat conservation areas are identified or critical area reports are submitted for known fish and wildlife habitat conservation areas. The inventories, maps, and resources are a reference and do not provide a final critical area designation.

20.240.274 Fish and wildlife habitat – General development standards.

A. Development activities and uses shall be prohibited in fish and wildlife habitat conservation areas and associated buffers, except as provided for in this subchapter. Unless allowed under SMC 20.240.040, subsection C of this section, or SMC 20.240.276, development activities and uses that result in alteration of fish and wildlife habitat conservation areas shall be subject to the shoreline variance provisions of 20.220.040.

B. Any proposed alterations permitted, consistent with shoreline variance review, to fish and wildlife habitat conservation area shall require the preparation of a habitat conservation area mitigation plan (commonly referred to as a habitat management plan) to mitigate for the adverse impacts of the proposal, consistent with the recommendations specific to the habitat or species of the WDFW Priority Habitat Program. The habitat management plan shall be prepared by a

qualified professional and reviewed and approved by the City, consistent with the standards for mitigation plans in SMC 20.240.082 and 20.240.300.

C. Activities Allowed in Fish and Wildlife Habitat Conservation Areas. The activities listed below are allowed in fish and wildlife habitat conservation areas pursuant to SMC 20.240.040, Allowed activities, and subject to applicable permit approvals. These activities do not require the submission of a critical area report and are exempt from monitoring and financial guarantee requirements, except where such activities result in a loss of the functions and values of a fish and wildlife habitat conservation area. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing habitat conservation area.
2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the fish and wildlife habitat conservation area by changing existing topography, water conditions, or water sources.
3. Permitted alteration to a legally constructed structure existing within a fish and wildlife habitat conservation area buffer that does not increase the footprint of the development or hardscape or increase the impact to a fish and wildlife habitat conservation area, consistent with SMC 20.220.150.
4. Clearing, grading, and the construction of fences and arbors are allowed within the required 10-foot stream buffers for a piped stream segment. if no other critical area or buffer is present.

D. Nonindigenous Species. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a fish and wildlife habitat conservation area unless authorized by a State or Federal permit or approval.

E. Mitigation and Contiguous Corridors. Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

F. Approvals of Activities. The Director shall condition approvals of development activities allowed within or adjacent to a fish and wildlife habitat conservation area, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffers;
2. Preservation of important vegetation and/or habitat features such as snags and downed wood specific to the priority wildlife species in the fish and wildlife habitat conservation area;
3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
4. Seasonal restriction of construction activities;
5. Establishment of a duration and timetable for periodic review of mitigation activities; and
6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

G. Mitigation and Equivalent or Greater Shoreline Ecological Functions. Mitigation of alterations to fish and wildlife habitat conservation areas shall achieve equivalent or greater shoreline ecological, biological, and hydrologic functions and shall include mitigation for adverse impacts upstream from, downstream from, or within the same shoreline reach as the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. Mitigation shall be located on site except when demonstrated that a higher level of ecological functioning would result from an off-site location. Mitigation shall be detailed in a fish and wildlife habitat conservation area mitigation plan, consistent with the requirements of SMC 20.240.300.

H. Approvals and the Best Available Science. Any approval of alterations or impacts to a fish and wildlife habitat conservation area shall be supported by the best available science.

I. Buffers.

- 1. Establishment of Buffers.** The Director shall require the establishment of buffer areas for activities adjacent to fish and wildlife habitat conservation areas in order to protect fish and wildlife habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions,

and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the applicable management recommendations issued by WDFW.

2. **Seasonal Restrictions.** When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

3. **Habitat Buffer Averaging.** The Director may allow the recommended fish and wildlife habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the applicable management recommendations issued by WDFW, only if:

a. It will not reduce stream or habitat functions;

b. It will not adversely affect fish and wildlife habitat;

c. It will provide additional natural resource protection, such as buffer enhancement;

d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

e. The buffer width is not reduced by more than 25 percent in any location.

J. **Signs and Fencing of Fish and Wildlife Habitat Conservation Areas.**

1. **Temporary Markers.** The outer perimeter of the fish and wildlife habitat conservation area or buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Director may require the applicant to install permanent signs along the

boundary of a fish and wildlife habitat conservation area or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another material of equal durability and nonhazardous. Signs shall be posted at an interval of one per lot or every 50 feet, whichever is less, and shall be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC 20.240.110 or with alternative language approved by the Director.

b. The provisions of subsection (J)(2)(a) of this section may be modified as necessary to assure protection of sensitive features or wildlife.

3. Fencing. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts. Permanent fencing shall be required at the outer edge of the fish and wildlife habitat conservation area buffer under the following circumstances; provided, that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the shoreline ecological functions of the fish and wildlife habitat conservation area; provided, that breaks in permanent fencing may be allowed for access to allowed uses (subsection C of this section and SMC 20.240.280(D));

b. As part of development proposals for public and private parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the shoreline ecological functions of the fish and wildlife habitat conservation area;

c. When buffer averaging is part of a development proposal; or

d. At the Director's discretion, to protect the shoreline ecological functions of the fish and wildlife habitat conservation area, as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the fish

and wildlife habitat conservation area or buffer, when fencing will prevent future impacts to the fish and wildlife habitat conservation area.

e. The applicant shall be required to install a permanent fence around the fish and wildlife habitat conservation area or buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

K. Subdivisions. The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

1. Land that is located wholly within a fish and wildlife habitat conservation area or its buffer may not be subdivided;
2. Land that is located partially within a fish and wildlife habitat conservation area or its buffer may be divided; provided, that the developable portion of each new lot and its access is located outside of the fish and wildlife habitat conservation area or its buffer. The final lots shall each meet the minimum lot size requirements of SMC 20.50.020.
3. Access roads and utilities serving the proposed subdivision may be permitted within the fish and wildlife habitat conservation area and associated buffers only if the applicant's qualified professional(s) demonstrate, and the City determines, that no other feasible alternative exists, all unavoidable impacts are fully mitigated, and the use is consistent with this chapter.

20.240.276 Fish and wildlife habitat – Specific habitat development standards.

In addition to the provisions in SMC 20.240.274, the following development standards apply to the specific habitat types identified below:

A. Endangered, Threatened, and Sensitive Species.

1. No development shall be allowed within a fish and wildlife habitat conservation area or buffer with which State or Federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by WDFW or applicable State or Federal agency.
2. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which State or Federally endangered, threatened, or sensitive species have a

primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the City. Approval for alteration of the fish and wildlife habitat conservation area or its buffer shall not occur prior to consultation with WDFW for animal species, DNR for plant species, and other appropriate Federal or State agencies.

B. Anadromous Fish.

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

a. Subsection A of this section applies to anadromous fish where those populations are identified as endangered, threatened or sensitive species;

b. Activities shall be timed to occur only during the allowable work window as designated by WDFW for the applicable species;

c. An alternative alignment or location for the activity is not feasible;

d. The activity is designed so that it will not degrade the shoreline ecological function of the fish habitat or other critical areas; and

e. Any impacts to the shoreline ecological function of the fish and wildlife habitat conservation area are mitigated in accordance with an approved critical area report.

2. Structures that prevent migration shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided, consistent with RCW 77.57.030, as amended from time to time, that allow the upstream migration of adult fish and prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized by the City and all applicable joint aquatic resource permit application approvals, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

C. **Wetland Habitats.** All proposed activities within or adjacent to fish and wildlife habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in Chapter 20.240 SMC, Subchapter 4, Wetlands. If nonwetlands habitat and wetlands are present at the same location, the provisions of this subchapter or the Wetlands subchapter, whichever provides greater protection to the habitat, apply.

D. **Streams.** Activities, uses and alterations of streams shall be prohibited, subject to the shoreline variance provisions (SMC 20.220.040), unless otherwise allowed by the allowed activities provisions of this chapter. No alteration to a stream buffer shall be permitted unless consistent with the provisions of this chapter and the specific standards for development outlined below.

1. **Type S and Type F-Anadromous Streams.** Development activities and uses that result in alteration of Type S and Type F-anadromous streams and their associated buffers shall be prohibited subject to the shoreline variance provisions of SMC 20.220.040.

2. **Type F-Nonanadromous and Type Np Streams.** Development activities and uses that result in alteration of Type F-nonanadromous and Type Np streams are prohibited subject to the shoreline variance provisions of SMC 20.220.040.

3. **Type Ns Streams.** Development activities and uses that result in unavoidable impacts may be permitted in Type Ns streams and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is consistent with the purpose and intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of acreage and functions of streams and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

4. **Stream Crossing.** Crossing of streams may be permitted based on the findings in a critical area report, subject to the limitations in subsections (D)(1), (2), and (3) of this section, and consistent with the following:

a. **Bridges.** Bridges shall be used to cross Type S and Type F-anadromous streams. Culverted crossings and other obstructive means of crossing Type S and Type F-anadromous streams shall be prohibited; and

b. **Culverts.** Culverts are allowed for crossing of Type F-nonanadromous, Np, and Ns streams when fish passage will not be impaired and when the following design criteria and conditions are met:

i. Oversized culverts, that allow for fish passage and floodplain or wetland connectivity, will be installed;

ii. Culverts for Type F streams shall be designed for fish passage that will allow natural stream functions and processes to occur (i.e., sediment, wood, and debris transport) where appropriate;

iii. Gravel substrate will be placed in the bottom of the culvert to a minimum depth of one foot for Type F streams;

iv. A maintenance covenant shall be recorded on title with King County that requires the property owner to, at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish; and

v. The City may require that a culvert be removed from a stream as a condition of approval, unless it is demonstrated conclusively that the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality.

5. **Relocation.** Relocation of a Type S, F, or Np stream may be allowed, subject to the limitations in subsections (D)(1) and (2) of this section, and only when the proposed relocation is part of an approved mitigation or rehabilitation plan, will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream. Relocation of a Type Ns stream may be allowed, subject to the limitation in subsection (D)(3) of this section, and only when the proposed relocation will result in equal or better habitat and water quality and will not diminish the flow capacity of the stream.

6. **Restoring Piped Watercourses.** The City allows the voluntary opening of previously channelized/culverted streams and the rehabilitation and restoration of streams. Restoring piped watercourses may be approved, consistent with the following:

a. When piped watercourse sections are restored, a protective buffer shall be required of the stream section. The buffer distance shall be consistent with the buffer relief that

may be granted consistent with SMC 20.240.056, Voluntary critical area restoration projects. The stream and buffer area shall include habitat improvements and measures to prevent erosion, landslide, and water quality impacts. Opened channels shall be designed to support fish and wildlife habitat and uninhibited fish access, unless determined to be unfeasible as demonstrated in a restoration plan reviewed and approved by the City;

b. Removal of pipes conveying streams shall only occur when the City determines that the proposal will result in an improvement of water quality and ecological functions and will not significantly increase the threat of erosion, flooding, slope stability, or other hazards; and

c. Where the buffer of the restored stream would extend onto an adjacent property, the applicant shall obtain a written agreement from the affected neighboring property owner prior to the City approving the restoration of the piped watercourse.

E. Priority Species. Fish and wildlife habitat conservation areas or buffers with Priority Species shall be subject to the following:

1. Development activities and uses that result in unavoidable impacts may be permitted in priority species habitat areas and associated buffers in accordance with an approved critical area(s) report and habitat management plan, only if the proposed activity is consistent with the purpose and intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of acreage and functions of habitat and buffer areas shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

20.240.280 Fish and wildlife habitat – Required buffer areas.

A. Buffer widths for fish and wildlife habitat areas shall be based on consideration of the following factors: species-specific recommendations of WDFW; recommendations contained in a habitat management plan submitted by a qualified professional; and the nature and intensity of land uses and activities occurring on the land adjacent to the site.

B. Low-impact uses and activities which are consistent with the purpose and function of the habitat buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the habitat area. Examples of uses and activities which may be permitted in

appropriate cases include trails that are pervious, viewing platforms, low-impact stormwater management facilities such as bioswales and other similar uses and activities; provided, that any impacts to the buffer resulting from such permitted facilities shall be fully mitigated.

C. Standard Required Stream Buffer Widths. Buffer widths shall reflect the sensitivity of the stream type, the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the stream area. Stream buffers shall be measured from the OHWM or the top of the bank, if the OHWM cannot be determined. Buffers shall be measured with rounded ends where streams enter or exit piped segments.

1. The following buffers are established for streams based upon the DNR water typing system and further classification based on anadromous or nonanadromous fish presence for the Type F streams:

Table 20.240.280(1)

<u>Stream Type</u>	<u>Standard Buffer Width (ft)</u>
<u>Type S</u>	<u>150</u>
<u>Type F-anadromous</u>	<u>115</u>
<u>Type F-nonanadromous</u>	<u>75</u>
<u>Type Np</u>	<u>65</u>
<u>Type Ns</u>	<u>45</u>
<u>Piped Stream Segments</u>	<u>10</u>

2. **Increased Stream Buffer Widths.** The recommended stream buffer widths shall be increased, as follows:

a. When the qualified professional determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area:

b. When the flood hazard area exceeds the recommended stream buffer width, the stream buffer area shall extend to the outer edge of the flood hazard area;

c. When a channel migration zone is present, the stream buffer width shall be measured from the outer edge of the channel migration zone;

d. When the habitat area is in an area of high blowdown potential, the stream buffer width shall be expanded an additional 50 feet on the windward side; or

e. When the habitat area is within an erosion or landslide hazard area, or buffer, the stream buffer width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

3. Stream Buffer Width Averaging with Enhancement. The Director may allow the recommended stream buffer width to be reduced in accordance with an approved critical area report and the best available science, on a case-by-case basis, by averaging buffer widths. Any allowance for averaging buffer widths shall only be granted based on the development and implementation of a buffer enhancement plan for areas of buffer degradation, consistent with the provisions in subsection (C)(4) of this section. Only those portions of the stream buffer existing within the project area or subject parcel shall be considered in the total buffer area for buffer averaging. Averaging of buffer widths may only be allowed where a qualified professional demonstrates that:

a. The width reduction and buffer enhancement plan provides evidence that the stream or habitat functions, including those of nonfish habitat and riparian wildlife, will be:

i. Increased or maintained through plan implementation for those streams where existing buffer vegetation is generally intact native vegetation; or

ii. Increased through plan implementation for those streams where existing buffer vegetation is inadequate to protect the functions and values of the stream;

b. The total area contained in the buffer area of each stream on the development proposal site is not decreased after averaging;

c. The recommended riparian habitat area width is not reduced by more than 25 percent in any one location; and

d. The width reduction will not be located within another critical area or associated buffer.

4. Stream Buffer Enhancement Measures. The measures determined most applicable and/or appropriate will be considered in buffer averaging requirements. These include but are not limited to:

a. Removal of fish barriers to restore accessibility to fish.

b. Enhancement of fish habitat using log structures incorporated as part of a fish habitat enhancement plan.

c. Enhancement of fish and wildlife habitat structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.

d. Additional enhancement measures may include:

i. Planting native vegetation within the buffer area, especially vegetation that would increase value for fish and wildlife, increase stream bank or slope stability, improve water quality, or provide aesthetic/recreational value; or

ii. Creation of a surface channel where a stream was previously underground, in a culvert or pipe. Surface channels which are “daylighted” shall be located within a buffer area and shall be designed with energy dissipating functions or channel roughness features such as meanders and rootwads to reduce future bank failures or nearby flooding;

iii. Removal or modification of existing stream culverts (such as at road crossings) to improve fish passage, stream habitat, and flow capabilities; or

iv. Upgrading of retention/detention facilities or other drainage facilities beyond required levels.

D. Stream Buffer Allowed Uses and Alteration. Activities and uses shall be prohibited in stream buffers, except as provided for in this chapter. Stream buffers shall be maintained as undisturbed or restored natural vegetation. No clearing or grading activities are allowed within required stream buffers except as allowed under SMC 20.240.040, 20.240.274, and WAC 173-

27-040, as amended from time to time; or consistent with an approved buffer enhancement plan consistent with the provisions of this subchapter. No structures or improvements shall be permitted within the stream buffer area, including buildings, decks, docks, except as otherwise permitted or required under the SMA, this Master Program, and this chapter, or under one of the following circumstances:

1. **Approved Mitigation.** When the improvements are part of an approved rehabilitation or mitigation plan; or

2. **Trails.** Construction of trails over and in the buffer of piped stream segments, and the construction of trails near other stream segments, consistent with the following criteria:

a. Trails should be constructed of pervious surface, with preference for natural materials. Raised boardwalks utilizing nontreated pilings may be acceptable;

b. Trails shall be designed in a manner that minimizes impact on the stream system;

c. Trails shall have a maximum trail corridor width of five feet; and

d. Trails should be located within the outer 25 percent of the buffer, i.e., that portion of the buffer that is farther away from the stream and located to avoid removal of significant trees; or

3. **Footbridges.** Construction of footbridges that minimize the impact to the stream system; or

4. **Informational Signs.** Construction and placement of informational signs or educational demonstration facilities limited to no more than one square yard surface area and four feet high, provided there is no permanent infringement on stream flow; or

5. **Stormwater Management Facilities.** Establishment of low-impact stormwater management facilities, such as stormwater dispersion outfalls and bioswales, may be allowed within stream buffers consistent with the adopted stormwater manual; provided, that:

a. No other location is feasible;

b. Pipes and conveyance facilities only in the outer 25 percent of the standard buffer area as set forth in Table 20.240.280(1);

c. Stormwater dispersion outfalls, bioswales, bioretention facilities, and other low-impact facilities consistent with the adopted stormwater manual may be allowed anywhere within stream buffers when determined by a qualified professional that the location of the facility will enhance the buffer area and protect the stream; and

d. Such facilities are designed consistent with the requirements of SMC 20.70.330.

6. Development Proposals within Physically Separated and Functionally Isolated Stream Buffers. Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from stream due to existing, legally established roadways and railroads or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the stream shall be considered physically isolated and functionally separated stream buffers. Once determined by the Director, based on a submitted critical area report to be a physically separated and functionally isolated stream buffer, development proposals shall be allowed in these areas.

20.240.290 Fish and wildlife habitat – Critical area report requirements.

A. Report Required. If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a fish and wildlife habitat conservation area, a critical area report shall be required. Critical area report requirements for fish and wildlife habitat conservation areas are generally met through submission to the Director of one or more fish and wildlife habitat critical area reports. In addition to the general critical area report requirements of SMC 20.240.080, critical area reports for fish and wildlife habitat conservation areas shall meet the requirements of this section. Critical area reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. Preparation by a Qualified Professional. Critical areas reports for a habitat conservation area shall be prepared and signed by a qualified professional who is a biologist, ecologist, or other scientist with the minimum required experience, per SMC 20.20.042, related to the specific type(s) of fish and wildlife habitats identified.

C. Third Party Review Required. Critical areas studies and reports on fish and wildlife habitat conservation areas shall be, at the applicant’s sole expense, subject to third party

review, consistent with SMC 20.240.080(C), and in any of the additional following circumstances:

1. Mitigation is required for impacts to Type S, Type F, or Type Np streams and/or buffers;
or
2. Mitigation is required for impacts to Type Ns streams.

D. Minimum Report Contents for Fish and Wildlife Habitat Conservation Areas. The critical area written report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.240.080(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, water typing and other habitat conservation area classification, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the delineations, classifications, or impact analyses, including reference;
4. **Site Plans.** A copy of the site plan sheet(s) for the project shall be included with the written report and shall include, at a minimum:
 - a. Maps (to scale) depicting delineated and surveyed fish and wildlife habitat conservation areas and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to fish and wildlife habitat conservation areas and/or buffers (include square footage estimates); and
 - b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the fish and wildlife habitat conservation areas associated with anticipated hydroperiod alterations from the project;
5. **Habitat Assessment.** A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or

habitat. A critical area report for a fish and wildlife habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

a. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

b. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

c. A discussion of any Federal, State, or local special management recommendations, including WDFW habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

d. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMC 20.240.053;

f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs; and

6. Additional Technical Information Requirements for Streams. Critical area reports for streams shall be consistent with the specific development standards for streams in SMC 20.240.276 and 20.240.280 and may be met through submission of one or more specific report types. If stream buffer enhancement is proposed to average stream buffer width, a stream buffer enhancement plan shall be submitted in addition to other critical area report requirements of this section. If no project impacts are anticipated and standard stream buffer widths are retained, a stream delineation report, general critical areas report or other reports, alone or in combination, may be submitted as consistent with the specific requirements of this section. In addition to the basic critical area report requirements for fish

and wildlife habitat conservation areas provided in subsections A through C of this section, technical information on streams shall include the following information at a minimum:

a. A written assessment and accompanying maps of the stream and associated hydrologic features on and off site within 200 feet of the project area, including the following information at a minimum:

- i. Stream survey showing the field delineated OHWM(s);
- ii. Standard stream buffer boundary;
- iii. Boundary for proposed stream buffers averaging, if applicable;
- iv. Vegetative, faunal, and hydrologic characteristics;
- v. Soil and substrate conditions; and
- vi. Topographic elevations, at two-foot contours;

b. A detailed description and functional assessment of the stream buffer under existing conditions pertaining to the protection of stream functions, fish habitat and, in particular, potential anadromous fisheries;

c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and stream functions;

d. Proposed buffer enhancement, if needed, including a written assessment and accompanying maps and planting plans for buffer areas to be enhanced, including the following information at a minimum:

- i. A description of existing buffer conditions;
- ii. A description of proposed buffer conditions and how proposed conditions will increase buffer functions in terms of stream and fish habitat protection;
- iii. Performance standards for measuring enhancement success through a monitoring period of at least five years; and

- iv. Provisions for monitoring and submission of monitoring reports documenting buffer conditions, as compared to performance standards, for enhancement success;
- e. A discussion of ongoing management practices that will protect the shoreline ecological function of the stream through maintenance of vegetation density within the stream buffer.

E. Additional Information. When appropriate due to the type of habitat or species present or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.240.082 and the fish and wildlife habitat mitigation performance standards and requirements of SMC 20.240.300;
2. Third party review to include any recommendations as appropriate by a qualified professional, under contract with or employed by the City, may be required at the applicant's expense of the critical area report analysis and the effectiveness of any proposed mitigating measures or programs;
3. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes or other appropriate agency;
4. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and
5. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.240.300 Fish and wildlife habitat – Mitigation performance standards and requirements.

A. Requirements for Mitigation. Where impacts cannot be avoided, and the applicant has exhausted all feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this section. Mitigation provisions shall be applied through the shoreline variance provisions in SMC 20.220.040, unless mitigated alterations are specifically allowed by the provisions of this subchapter. In an individual case, these actions may include consideration of

alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in this section.

B. Additional Requirements for Stream Mitigation. Significant adverse impacts to the shoreline ecological function of the stream area shall be mitigated. Mitigation actions shall be implemented in the preferred sequence: avoidance, minimization, restoration and replacement. Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:

1. All feasible and reasonable measures will be taken to reduce impacts and losses to the stream, or to avoid impacts where avoidance is required by these regulations;
2. The restored, created or enhanced stream area or buffer will be available and persistent as the stream or buffer area it replaces; and
3. No overall net loss will occur in the shoreline ecological functions of the stream.

C. Compensating for Lost or Impacted Functions. Mitigation of alterations to fish and wildlife habitat shall achieve equivalent or greater shoreline ecological, biological, and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site on a per function basis. Mitigation shall be located on site except when demonstrated that a higher level of ecological functioning would result from an off-site location. A mitigation plan may include the following:

1. Native vegetation planting plan;
2. Retention, enhancement or restoration plan of specific habitat features;
3. Plans for control of nonnative invasive plant or wildlife species; and
4. Stipulations for use of innovative, sustainable building practices.

D. Preference of Mitigation Actions. Methods to achieve compensation for the shoreline ecological function of fish and wildlife habitat shall be approached in the following order of preference:

1. **Protection.** Mitigation measures that increase the protection of the identified fish and wildlife habitat conservation areas may include but are not limited to:

- a. Increased or enhanced buffers;
- b. Setbacks for permanent and temporary structures;
- c. Reduced project scope;
- d. Limitations on construction hours;
- e. Limitations on hours of operation; and/or
- f. Relocation of access;

2. **Restoration.** Restoration of degraded habitat.

3. **Creation.** Creation (establishment) of wildlife habitat on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when the site conditions are conducive to the habitat type that is anticipated in the design.

4. **Enhancement.** Enhancement of significantly degraded habitat in combination with restoration or creation. Enhancement alone will result in a loss of habitat acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

5. **Preservation.** Preservation of high-quality, at-risk fish and wildlife habitat as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk fish and wildlife habitat may be considered as the sole means of compensation for habitat impacts when the following criteria are met:

- a. Habitat impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species;
- b. There is no net loss of habitat functions and values within the watershed or basin;
- c. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system; and

d. All preservation sites shall include buffer areas adequate to protect the habitat and its functions and values from encroachment and degradation.

E. Location and Timing of Stream Mitigation.

1. Mitigation shall be provided on site, unless on-site mitigation is not scientifically feasible due to the physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on site.

2. When mitigation cannot be provided on site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant, such as an easement, provided such mitigation is beneficial to the fish and wildlife habitat conservation area and associated resources. It is the responsibility of the applicant to obtain title to off-site mitigation areas. Mitigation may be considered on City-owned property, or on similar publicly owned property for which title is not available, through a City mitigation program if programmatic mitigation areas have been identified by the City.

3. In-kind mitigation shall be provided, except when the applicant demonstrates and the City concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.

4. Only when it is determined by the City that subsections (B)(1), (2), and (3) of this section are inappropriate and impractical shall off-site, in-kind mitigation or off-site, out-of-kind mitigation be considered.

5. When stream mitigation is permitted by this chapter on site or off site, the mitigation project shall occur near an adequate water supply (stream, ground water) with a hydrologic connection to the mitigation area to ensure successful development or restoration.

6. Any agreed-upon mitigation proposal shall be completed prior to project construction, unless a phased schedule that assures completion concurrent with project construction has been approved by the City.

7. Restored or created streams, where permitted by this chapter, shall be an equivalent or higher stream value or function than the altered stream.

F. Performance Standards. The following mitigation measures shall be reflected in fish and wildlife habitat conservation area mitigation planning:

1. The maintenance and protection of habitat functions and values shall be considered a priority in site planning and design;
2. Buildings and structures shall be located in a manner that preserves and minimizes adverse impacts to important habitat areas. This may include clustering buildings and locating fences outside of habitat areas;
3. Retained habitat shall be integrated into open space and landscaping;
4. Where possible, habitat and vegetated open space shall be consolidated in contiguous blocks;
5. Habitat shall be located contiguous to other habitat areas, open space, or landscaped areas, both on and off site, to contribute to a continuous system or corridor that provides connections to adjacent habitat areas;
6. When planting is required, the following standards shall apply:
 - a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;
 - b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;
 - c. Plants should be commercially available or available from local sources;
 - d. Plant species high in food and cover value for fish and wildlife shall be used;
 - e. Mostly perennial species should be planted;
 - f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;
 - g. Plant selection, densities, and placement of plants shall be determined by a qualified professional and shown on the design plans;

h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;

i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process;

k. An irrigation system shall be installed, if necessary, for the initial establishment period;

l. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping; and

m. Significant trees shall be preserved;

7. All construction specifications and methods shall be approved by a qualified professional and the City; and

8. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City.

G. Mitigation Plan. Mitigation plans shall be submitted as part of the required critical area report consistent with the requirements of SMC 20.240.080, 20.240.082, and 20.240.290 and this section. When revegetation is required as part of the mitigation, then the mitigation plan shall meet the standards of SMC 20.240.350(H), excluding those standards that are wetland specific.

H. Monitoring Program and Contingency Plan. A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met. The monitoring program will be established consistent with the guidelines contained in SMC 20.240.082(D).

Subchapter 4.

Wetlands

20.240.310 Wetlands – Purpose.

A. Wetlands help to maintain water quality; store and convey stormwater and floodwater; recharge ground water; provide important fish and wildlife habitat; and serve as areas for recreation, education, scientific study and aesthetic appreciation.

B. The City’s overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function, value and acreage of wetlands within the City. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; protect wetland resources from harmful intrusion; and generally preserve the ecological integrity of the wetland area.

C. The primary purpose of the wetland regulations is to avoid detrimental wetland impacts and achieve a goal of no net loss of wetland function, value and acreage; and where possible enhance and restore wetlands.

20.240.320 Wetlands – Designation and rating.

A. **Designation.** All areas meeting the definition of a wetland and identification criteria as wetlands pursuant to SMC 20.240.322, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

B. **Rating.** All wetlands shall be rated by a qualified professional according to the current Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington 2014 (Department of Ecology Publication No. 014-06-029, or as revised). Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the City, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities.

1. **Category I.** Category I wetlands are those that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. The following types of wetlands are Category I:

a. Relatively undisturbed estuarine wetlands larger than one acre;

b. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;

c. Bogs;

d. Mature and old-growth forested wetlands larger than one acre;

e. Wetlands in coastal lagoons; and

f. Wetlands that perform many functions well (scoring 23 points or more based on functions).

2. **Category II.** Category II wetlands are those that are difficult, though not impossible, to replace and provide high levels of some functions. The following types of wetlands are Category II:

a. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;

b. Interdunal wetlands larger than one acre or those found in a mosaic of wetlands; and

c. Wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3. **Category III.** Category III wetlands are those with a moderate level of functions, generally have been disturbed in some ways, can often be adequately replaced with a well-planned mitigation project, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. The following types of wetlands are Category III:

a. Wetlands with a moderate level of functions (scoring between 16 and 19 points); or

b. Interdunal wetlands between 0.1 and one acre.

4. **Category IV.** Category IV wetlands are those with the lowest levels of functions (scoring below 16 points) and are often heavily disturbed. These are wetlands that should be able to replace, or in some cases to improve. However, experience has shown that replacement

cannot be guaranteed in any specific case. These wetlands may provide some important functions, and also need to be protected.

C. Illegal Modifications. Wetland rating categories shall not change due to illegal modifications or alterations. A wetland's category shall be based on the pre-modification/alteration analysis of the wetland.

D. At the time of adoption of the critical area amendments to this Master Program, Ordinance 856, there were no identified Category I wetlands identified within the City. If this category of wetland is subsequently identified, any applicable standards may temporarily be used on an interim basis by the Director based on Washington State guidance on protection of the identified type of resource until such time as permanent shoreline regulations can be established.

20.240.322 Wetlands – Mapping and delineation.

A. Mapping. The approximate location and extent of wetlands are shown in the wetland data layer maintained in the City geographic information system (GIS) and shown in Figure 20.230.080. In addition, the following maps and inventories are hereby adopted by reference as amended:

1. City of Shoreline, Basin Characterization Reports and Stream and Wetland Inventory and Assessment, Tetra Tech (May 2004);
2. City stormwater basin plans as completed and updated;
3. Soils maps produced by the USDA National Resources Conservation Service; and
4. The National Wetlands Inventory, produced by the U.S. Fish and Wildlife Service.

B. Reference Only. The inventories and cited resources are to be used as a guide for the City, project applicants, and/or property owners, and may be continuously updated as new wetlands are identified or critical area reports are submitted for known wetlands. These inventories and cited resources are a reference and do not provide a final critical area designation.

C. Identification and Delineation. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements per WAC 173-22-035, as

amended from time to time. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional. Wetland delineations are valid for five years; after such date the Director shall determine whether a revision or additional assessment is necessary.

D. **Pre-assessment.** To facilitate long-range planning using a landscape approach, the Director may identify and pre-assess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The Director will prepare maps of wetlands that have been pre-assessed in this manner.

20.240.324 Wetlands – Development standards.

A. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.

B. **Activities Allowed in Wetlands.** The activities listed below are allowed in wetlands pursuant to SMC 20.240.040, Allowed activities, and subject to applicable permit approvals. These activities do not require submission of a critical area report, except where such activities result in a net loss of the shoreline ecological function provided by a wetland or wetland buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
3. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.
4. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and handheld

equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 500 square feet of area may be cleared, as calculated cumulatively over one year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List shall be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

5. Permitted alteration to a legally constructed structure existing within a wetland or wetland buffer that does not increase the footprint of the development or hardscape or increase the impact to a wetland or wetland buffer, consistent with SMC 20.220.150.

C. Category I Wetlands. Development activities and uses that result in alteration of Category I wetlands and their associated buffers shall be prohibited subject to the shoreline variance provisions of SMC 20.220.040.

D. Category II and III Wetlands. Development activities and uses that result in alteration of Category II and III wetlands shall be prohibited subject to the shoreline variance provisions of SMC 20.220.040 and the following criteria:

1. The basic project proposed cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland;

2. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction to the size, scope, configuration, or density of the project are not feasible; and

3. Full compensation for the loss of acreage and functions and values of wetland and buffers due to unavoidable impacts shall be provided in compliance with the mitigation performance standards and requirements of this chapter.

E. Category IV Wetlands, Except Small Hydrologically Isolated Wetlands. Development activities and uses that result in unavoidable impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area(s) report and compensatory

mitigation plan, and only if the proposed activity is consistent with the purpose and intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of acreage and functions and values of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

F. Small, Hydrologically Isolated Category IV Wetlands. The Director may allow small, hydrologically isolated Category IV wetlands to be exempt from the avoidance sequencing provisions of SMC 20.240.053 and subsection D of this section and allow alteration of such wetlands; provided, that a submitted critical area report and mitigation plan provides evidence that all of the following conditions are met:

1. The wetland is less than 1,000 square feet in area;
2. The wetland is a low quality Category IV wetland with a habitat score of less than three points in the adopted rating system;
3. The wetland does not contain habitat identified as essential for local populations of priority species identified by WDFW or species of local importance which are regulated as fish and wildlife habitat conservation areas in Chapter 20.240, Subchapter 3;
4. The wetland is not associated with riparian areas or buffers;
5. The wetland is not part of a wetland mosaic; and
6. A mitigation plan to replace lost wetland functions and values is developed, approved, and implemented consistent with SMC 20.240.350.

G. Subdivisions. The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:

1. Land that is located wholly within a wetland and/or its buffer may not be subdivided; and
2. Land that is located partially within a wetland and/or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:
 - a. Located outside of the wetland and its buffer; and
 - b. Meets the minimum lot size requirements of SMC 20.50.020.

20.240.330 Wetlands – Required buffer areas.

A. Buffer Requirements. The standard buffer widths in Table 20.240.330(A)(1) have been established in accordance with the best available science. The buffer widths shall be determined based on the category of wetland and the habitat score as assigned by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.

1. The use of the standard buffer widths requires the implementation of the mitigation measures in Table 20.240.330(A)(2), where applicable to the development type, to minimize the impacts of the adjacent land uses.

2. If an applicant chooses not to apply the appropriate mitigation measures in Table 20.240.330(A)(2), then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.

3. The standard buffer widths assume that the buffer is a relatively intact native plant community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the existing buffer is bare ground, sparsely vegetated, or vegetated with nonnative or invasive species that do not perform needed functions, then the applicant shall either develop and implement a wetland buffer restoration or enhancement plan to maintain the standard width to create the appropriate plant community or the buffer shall be widened to ensure that adequate functions of the buffer are provided.

Table 20.240.330(A)(1) Wetland Buffer Requirements

<u>Wetland Category</u>	<u>Buffer Width According to Habitat Score</u>			
	<u>Habitat Score</u>	<u>Habitat Score</u>	<u>Habitat Score</u>	<u>Habitat Score</u>
	<u>of 3 – 4</u>	<u>of 5</u>	<u>of 6 – 7</u>	<u>of 8 – 9</u>
<u>Category I: Based on total score or Forested</u>	<u>75 ft</u>	<u>105 ft</u>	<u>165 ft</u>	<u>225 ft</u>
<u>Category I: Estuarine</u>	<u>150 ft (no change based on habitat scores)</u>			
<u>Category II: Based on total score</u>	<u>75 ft</u>	<u>105 ft</u>	<u>165 ft</u>	<u>225 ft</u>

Table 20.240.330(A)(1) Wetland Buffer Requirements

<u>Wetland Category</u>	<u>Buffer Width According to Habitat Score</u>			
	<u>Habitat Score</u>	<u>Habitat Score</u>	<u>Habitat Score</u>	<u>Habitat Score</u>
	<u>of 3 – 4</u>	<u>of 5</u>	<u>of 6 – 7</u>	<u>of 8 – 9</u>
<u>Category III (all)</u>	<u>60 ft</u>	<u>105 ft</u>	<u>165 ft</u>	<u>225 ft</u>
<u>Category IV (all)</u>	<u>40 ft (no change based on habitat scores)</u>			

Table 20.240.330(A)(2) Required Measures to Minimize Impacts to Wetlands
(Measures are required, where applicable to a specific proposal)

<u>Disturbance</u>	<u>Activities and Uses That Cause Disturbances</u>	<u>Required Measures to Minimize Impacts</u>
<u>Lights</u>	<ul style="list-style-type: none"> • <u>Parking lots</u> • <u>Warehouses</u> • <u>Manufacturing</u> • <u>Residential</u> 	<ul style="list-style-type: none"> • <u>Direct lights away from wetland.</u>
<u>Noise</u>	<ul style="list-style-type: none"> • <u>Manufacturing</u> • <u>Residential</u> 	<ul style="list-style-type: none"> • <u>Locate activity that generates noise away from wetland.</u> • <u>If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source.</u> • <u>For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10 ft heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.</u>
<u>Toxic runoff*</u>	<ul style="list-style-type: none"> • <u>Parking lots</u> • <u>Roads</u> • <u>Manufacturing</u> • <u>Residential areas</u> 	<ul style="list-style-type: none"> • <u>Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered.</u> • <u>Establish covenants limiting use of pesticides and fertilizers within 150 ft of wetland.</u> • <u>Apply integrated pest management.</u>

Table 20.240.330(A)(2) Required Measures to Minimize Impacts to Wetlands
(Measures are required, where applicable to a specific proposal)

<u>Disturbance</u>	<u>Activities and Uses That Cause Disturbances</u>	<u>Required Measures to Minimize Impacts</u>
	<ul style="list-style-type: none"> • <u>Application of agricultural pesticides</u> • <u>Landscaping</u> 	
<u>Stormwater runoff</u>	<ul style="list-style-type: none"> • <u>Parking lots</u> • <u>Roads</u> • <u>Manufacturing</u> • <u>Residential areas</u> • <u>Commercial</u> • <u>Landscaping</u> 	<ul style="list-style-type: none"> • <u>Retrofit stormwater detention and treatment for roads and existing adjacent development.</u> • <u>Prevent channelized flow from lawns that directly enters the buffer.</u> • <u>Use low intensity development techniques (per PSAT publication on LID techniques).</u>
<u>Change in water regime</u>	<ul style="list-style-type: none"> • <u>Impermeable surfaces</u> • <u>Lawns</u> • <u>Tilling</u> 	<ul style="list-style-type: none"> • <u>Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns.</u>
<u>Pets and human disturbance</u>	<ul style="list-style-type: none"> • <u>Residential areas</u> 	<ul style="list-style-type: none"> • <u>Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion.</u> • <u>Place wetland and its buffer in a separate tract or protect with a conservation easement.</u>
<u>Dust</u>	<ul style="list-style-type: none"> • <u>Tilled fields</u> 	<ul style="list-style-type: none"> • <u>Use best management practices to control dust.</u>
<u>Disruption of corridors or connections</u>	-	<ul style="list-style-type: none"> • <u>Maintain connections to off-site areas that are undisturbed.</u> • <u>Restore corridors.</u>
<p>* <u>These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site. Additional mitigation measures may be required</u></p>		

Table 20.240.330(A)(2) Required Measures to Minimize Impacts to Wetlands
(Measures are required, where applicable to a specific proposal)

<u>Disturbance</u>	<u>Activities and Uses That Cause Disturbances</u>	<u>Required Measures to Minimize Impacts</u>
<u>based on recommendation of a qualified professional, third party review, or State agency recommendations.</u>		

4. Increased Wetland Buffer Area Width. Buffer widths shall be increased, on a case-by-case basis as determined by the Director, when a larger buffer is necessary to protect the shoreline ecological functions provided by the wetland's functions and values. This determination shall be supported by a critical area report, prepared by a qualified professional at the applicant's expense, showing that it is reasonably related to protection of the functions and values of the wetland and the shoreline. The critical area report shall include, but not be limited to, the following criteria:

a. The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored, or documented priority species or habitats, or the wetland is essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

b. The adjacent land has slopes greater than 15 percent and is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or

c. The adjacent land has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer restoration/enhancement plan in accordance with SMC 20.240.350 may be substituted.

5. Buffer averaging to improve wetland functions and values may be permitted when all of the following conditions are met:

a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or is a “dual-rated” wetland with a Category I area adjacent to a lower rated area;

b. The buffer is increased adjacent to the higher functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion as demonstrated by a critical areas report from a qualified wetland professional;

c. The total area of the buffer after averaging is equal to the area required without averaging; and

d. The buffer width is not reduced by more than 25 percent in any location.

6. Buffer averaging, through a shoreline variance consistent with 20.220.040, may be permitted when all of the following are met:

a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

b. The averaged buffer will not result in degradation of the wetland’s functions and values as demonstrated by a critical areas report from a qualified wetland professional;

c. The total buffer area after averaging is equal to the area required without averaging; and

d. The buffer at its narrowest point is never less than either three-fourths of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

B. Measurement of Wetland Buffers. All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

C. **Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

D. **Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the required monitoring period.

E. **Impacts to Buffers.** Requirements for the compensation for impacts to buffers are outlined in SMC 20.240.350.

F. **Overlapping Critical Area Buffers.** If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

G. **Allowed Wetland Buffer Uses.** The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter; provided such uses are not prohibited by any other applicable law and such uses are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

1. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

2. **Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

a. Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. Pathways should be generally parallel to the perimeter of the wetland, located only in the outer 25 percent of the wetland buffer area, and located to avoid removal of significant trees. Pathways should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable;

b. Wildlife viewing structures.

3. Educational and scientific research activities.

4. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

5. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

6. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.

7. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and handheld equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 1,500 square feet of area may be cleared, as calculated cumulatively over one year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List shall be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

8. **Stormwater Management Facilities.** Stormwater management facilities are limited to stormwater dispersion outfalls, bioswales, and other low-impact facilities consistent with the adopted stormwater manual. Stormwater management facilities are not allowed in buffers of Category I or II wetlands. Facilities may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

a. No other location is feasible; and

b. The location of such facilities will not degrade the functions or values of the wetland.

9. **Nonconforming Uses or Structures.** Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided such uses or structures do not increase the degree of nonconformity, consistent with SMC 20.220.150.

10. **Development Proposals within Physically Separated and Functionally Isolated Wetland Buffers.** Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from wetland due to existing, legally established roadways, paved trails eight feet or more in width, or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the wetland shall be considered physically isolated and functionally separated wetland buffers. Once determined by the Director, based on a submitted critical area report to be a physically separated and functionally isolated wetland buffer, development proposals shall be allowed in these areas.

H. **Signs and Fencing of Wetlands and Buffers.**

1. **Temporary Markers.** The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Director may require the applicant to install permanent signs along the boundary of a wetland or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs shall be posted at an interval of one per lot or every 50 feet, whichever is less, and shall be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC 20.240.110 or with alternative language approved by the Director.

b. The provisions of subsection (H)(2)(a) of this section may be modified as necessary to assure protection of sensitive features.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances; provided, that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the functions of the critical area; provided, that breaks in permanent fencing may be allowed for access to permitted buffer uses (subsection G of this section);

b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

c. When buffer averaging is part of a development proposal; or

d. At the Director's discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area;

e. The applicant shall be required to install a permanent fence around the wetland buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

20.240.340 Wetlands – Critical area report requirements.

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to, a wetland, a wetland critical area report shall be required. Critical area report requirements for wetland areas are generally met through submission to the Director of one or more wetland critical area reports. In addition to the general

critical area report requirements of SMC 20.240.080, critical area reports for wetlands shall meet the requirements of this section. Critical area reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. Preparation by a Qualified Professional. Critical area reports for wetlands shall be prepared and signed by a qualified professional who is a certified wetland scientist or a noncertified wetland scientist with the minimum required experience, per SMC 20.20.042, in the field of wetland science and with experience preparing wetland delineation, impact assessments, and mitigation plans.

C. Third Party Review Required. Critical areas studies and reports on wetland areas shall be subject to third party review consistent with SMC 20.240.080(C) and in any of the additional following circumstances:

1. Compensatory mitigation is required for impacts to Category I, II, or III wetlands and or buffers; or
2. Compensatory mitigation is required for impacts to Category IV wetlands.

D. Minimum Report Contents for Wetlands. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information, at a minimum:

1. The minimum report contents required per SMC 20.240.080(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the wetland delineations, ratings, or impact analyses including references;
4. **Site Plans.** A copy of the site plan sheet(s) for the project shall be included with the written report and shall include, at a minimum:
 - a. Maps (to scale) depicting delineated and surveyed wetland(s) and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and

b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project;

5. For each wetland identified on site and off site within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (SMC 20.240.320(B)); required buffers (SMC 20.240.330); hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if inlets/outlets can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site;

6. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative;

7. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development;

8. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.240.053(A) to avoid, minimize, and mitigate impacts to critical areas and a discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity;

9. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions; and

10. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.

E. Additional Information. When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.240.082 and the wetland mitigation performance standards and requirements of SMC 20.240.350;
2. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes, and/or other appropriate agency;
3. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and
4. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.240.350 Wetlands – Compensatory mitigation performance standards and requirements.

A. Requirements for Compensatory Mitigation.

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater shoreline ecological and biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1), (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised).
2. Mitigation ratios shall be consistent with subsection E of this section.
3. Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft” (Department of Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with subsection E of this section.

B. Compensating for Lost or Impacted Functions. Compensatory mitigation shall address the shoreline ecological functions and the wetland or wetland buffer functions and values affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions and values. The goal shall be for the compensatory mitigation to

provide similar shoreline ecological functions and wetland functions and values as those lost, except when either:

1. The lost wetland provides minimal functions and values, and the proposed compensatory mitigation action(s) will provide equal or greater functions and values or will provide functions and values shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or
2. Out-of-kind replacement of wetland type or functions and values will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

C. Preference of Mitigation Actions. Methods to achieve compensation for wetland functions and values shall be approached in the following order of preference:

1. **Restoration.** Restoration of wetlands.
2. **Creation.** Creation (establishment) of wetlands on disturbed upland sites, such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.
3. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions and values lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.
4. **Preservation.** Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:
 - a. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species;

b. There is no net loss of habitat functions within the watershed or basin;

c. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost;

d. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland); and

e. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

D. Type and Location of Compensatory Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration, except when all of the following apply:

1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include:

a. Anticipated replacement ratios for wetland mitigation;

b. Buffer conditions and proposed widths;

c. Available water to maintain anticipated hydrogeomorphic classes of wetlands when restored; and

d. Proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland;

3. Off-site locations shall be in the same sub-drainage basin, unless watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; and

4. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing, seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

E. Wetland Mitigation Ratios¹.

Table 20.240.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.

<u>Category and Type of Wetland²</u>	<u>Creation or Reestablishment (Area – in square feet)</u>	<u>Rehabilitation (Area – in square feet)</u>	<u>Enhancement (Area – in square feet)</u>	<u>Preservation (Area – in square feet)</u>
<u>Category I: Based on total score for functions</u>	<u>4:1</u>	<u>8:1</u>	<u>16:1</u>	<u>20:1</u>
<u>Category I: Mature forested</u>	<u>6:1</u>	<u>12:1</u>	<u>24:1</u>	<u>24:1</u>
<u>Category I: Estuarine</u>	<u>Case-by-case</u>	<u>6:1</u>	<u>Case-by-case</u>	<u>Case-by-case</u>

Table 20.240.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.

<u>Category and Type of Wetland²</u>	<u>Creation or Reestablishment (Area – in square feet)</u>	<u>Rehabilitation (Area – in square feet)</u>	<u>Enhancement (Area – in square feet)</u>	<u>Preservation (Area – in square feet)</u>
<u>Category II: Based on total score for functions</u>	<u>3:1</u>	<u>6:1</u>	<u>12:1</u>	<u>20:1</u>
<u>Category III (all)</u>	<u>2:1</u>	<u>4:1</u>	<u>8:1</u>	<u>15:1</u>
<u>Category IV (all)</u>	<u>1.5:1</u>	<u>3:1</u>	<u>6:1</u>	<u>10:1</u>

¹ Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance – Version 1 (Department of Ecology Publication No. 06-06-011a, March 2006, or as revised).

² Category and rating of wetland as determined consistent with SMC 20.240.320(B).

F. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a 1:1 ratio.

Compensatory buffer mitigation shall replace those buffer functions lost from development.

G. Mitigation Performance Standards. The performance standards in this section shall be incorporated into mitigation plans submitted to the City for impacts to wetlands. The following performance standards shall apply to any mitigations proposed within Category I, II, III and IV wetlands and their buffers. Modifications to these performance standards consistent with the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised) may be considered for approval by the Director as alternatives to the following standards:

1. Plants indigenous to the region (not introduced or foreign species) shall be used.

2. Plant selection shall be consistent with the existing or projected hydrologic regime, including base water levels and stormwater event fluctuations.
3. Plants should be commercially available or available from local sources.
4. Plant species high in food and cover value for fish and wildlife shall be used.
5. Mostly perennial species should be planted.
6. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided.
7. Plant selection shall be approved by a qualified professional.
8. The following standards shall apply to wetland design and construction:
 - a. Water depth shall not exceed six and one-half feet (two meters).
 - b. The grade or slope that water flows through the wetland shall not exceed six percent.
 - c. Slopes within the wetland basin and the buffer zone shall not be steeper than 3:1 (horizontal to vertical).
 - d. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark.
9. Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials.
10. Planting densities and placement of plants should be determined by a qualified professional and shown on the design plans.
11. The planting plan shall be approved by the City.
12. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City.

13. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock.
14. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process.
15. An irrigation system shall be installed, if necessary, for the initial establishment period.
16. All construction specifications and methods shall be approved by a qualified professional and the City.
17. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City.

H. **Compensatory Mitigation Plan.** When a project involves wetland and/or buffer impacts, a compensatory mitigation plan shall be included as part of the required critical area report. Compensatory wetland mitigation plans shall meet the minimum requirements SMC 20.240.082 and demonstrate compliance with SMC 20.240.053. Full guidance can be found in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised). The mitigation plan shall meet the following additional standards:

1. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (SMC 20.240.320(B));
2. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site progress through natural succession);
3. A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a

description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;

4. A description of the proposed mitigation construction activities, construction/installation notes, and timing of activities;

5. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);

6. Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas; and

7. The scaled plan sheets for the compensatory mitigation shall contain, at a minimum:

a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;

b. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;

c. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;

d. Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;

e. Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter;

f. A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, typical plant installation details and notes, total number of each species by community type, timing of installation; and

g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring plan, contingency plan, and maintenance schedule, and actions. Standards for success shall be established based on the performance standards identified and the functions and values being mitigated based on the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised).

Subchapter 5.

Flood Hazard Areas

20.240.360 Flood hazard – Description and purpose.

A. A flood hazard area consists of the special flood hazard areas and protected areas as defined in Chapter 13.12 SMC Floodplain Management, which comprise the regulatory floodplain.

B. It is the purpose of these regulations to ensure that the City meets the requirements of the National Flood Insurance Program and maintains the City as an eligible community for Federal flood insurance benefits.

20.240.370 Flood hazard – Designation and classification.

Flood hazard areas shall be designated and classified pursuant to the requirements of the floodplain management regulations, Chapter 13.12 SMC, which include, at a minimum, all lands identified on the 100-year floodplain designations of the current Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) for King County as identified in SMC 13.12.300.

20.240.380 Flood hazard – Development limitations.

All development within designated flood hazard areas shall comply with Chapter 13.12 SMC, Floodplain Management, as now or hereafter amended, and is not further subject to the regulations of this chapter.

Subchapter 6.

Aquifer Recharge Areas

20.240.420 Aquifer recharge – Description and purpose.

A. Aquifer recharge areas consist of areas that provide a source of potable water and contribute to stream discharge during periods of low flow, as defined in Chapter 20.20 SMC.

B. The primary purpose of aquifer recharge area regulations is to protect aquifer recharge areas by providing for regulation of land use activities that pose a risk of potential aquifer contamination and to minimize impacts through the application of strict performance standards.

20.240.430 Aquifer recharge – Designation and classification.

A. Aquifer recharge areas shall be designated and classified based on the soil and ground water conditions and risks to surface water during periods of low hydrology. Classification depends on the combined effects of hydrogeological susceptibility to contamination and contaminant loading potential, and includes upland areas underlain by soils consisting largely of silt, clay or glacial till, upland areas underlain by soils consisting largely of sand and gravel, and wellhead protection areas and areas underlain by soils consisting largely of sand and gravel in which there is a predominantly downward or lateral component to ground water flow.

B. At the time of adoption of the amendments to the critical areas of this Master Program, Ordinance 856, there were no identified critical aquifer recharge areas within the City.

20.80.440 Aquifer recharge – Alteration.

Subject to the required permits, the following land uses and activities shall require implementation of best management practices (BMPs) as established by the Department of Ecology:

A. Land uses and activities that involve the use, storage, transport or disposal of significant quantities of chemicals, substances or materials that are toxic, dangerous or hazardous, as those terms are defined by State and Federal regulations.

- B. On-site community sewage disposal systems.
- C. Underground storage of chemicals.
- D. Petroleum pipelines.
- E. Solid waste landfills.
- F. Stormwater management, including infiltration, and ground water recharge.

20.80.450 Aquifer recharge – Performance standards and requirements.

Any uses or activities that seek to be located in an aquifer recharge area, as defined within this subchapter, that involve the use, storage, transport or disposal of significant quantities of chemicals, substances, or materials that are toxic, dangerous or hazardous, as those terms are defined by State and Federal regulations, shall comply with the following additional standards:

- A. Underground storage of chemicals, substances or materials that are toxic, hazardous or dangerous is discouraged.
- B. Any chemicals, substances or materials that are toxic, hazardous or dangerous shall be segregated and stored in receptacles or containers that meet State and Federal standards.
- C. Storage containers shall be located in a designated, secured area that is paved and able to contain leaks and spills, and shall be surrounded by a containment dike.
- D. Secondary containment devices shall be constructed around storage areas to retard the spread of any spills and a monitoring system should be implemented.
- E. A written operations plan shall be developed, including procedures for loading/unloading liquids and for training of employees in proper materials handling.
- F. An emergency response/spill clean-up plan shall be prepared and employees properly trained to react to accidental spills.
- G. Any aboveground storage tanks shall be located within a diked containment area on an impervious surface. The tanks shall include overfill protection systems and positive controls on outlets to prevent uncontrolled discharges.

H. Development should be clustered and impervious surfaces limited where possible.

I. No waste liquids or chemicals of any kind shall be discharged to storm sewers.

J. All development shall implement best management practices (BMPs) for water quality, as approved by the City, including the standards contained within the adopted stormwater manual, such as biofiltration swales and use of oil-water separators, and BMPs appropriate to the particular use proposed.

Attachment A, Exhibit C

Proposed revisions to Shoreline Municipal Code (SMC) language in legislative format - Chapter 20.80 and Chapter 13.12, in relevant part

Chapter 13.12 Floodplain Management

13.12.105 Definitions.

Unless specifically defined below, terms or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

...

“Director” means the ~~public works~~Planning and Community Development ~~d~~Director or designee.

...

13.12.200 Floodplain administrator.

A. Administrator Designation. The ~~public works~~Planning and Community Development ~~d~~Director is hereby appointed as the floodplain administrator, to administer and implement this chapter by granting or denying floodplain development permit applications in accordance with its provisions.

...

Critical Areas – General Provisions

20.80.010 Purpose.

A. The purpose of this chapter is to establish supplemental standards for the protection of critical areas, as defined in SMC 20.20.014, in compliance with the provisions of the Washington Growth Management Act of 1990 (Chapter 36.70A RCW) and consistent with the goals and policies of the Shoreline Comprehensive Plan in accordance with the procedures of Chapter 20.30 SMC. The standards of this chapter, as incorporated into the Shoreline Master Program, in SMC ~~20.230.030(A) General Regulations (1)~~20.240, shall apply within the shoreline jurisdiction, where critical areas are present. If there are any conflicts or unclear distinctions between the Master Program and the City’s critical areas regulations, the most restrictive requirements apply as determined by the City.

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Note: Italicized terms in policies are explained in sidebars.

SHORELINE MASTER PROGRAM

Goals, Policies, and Analysis



Shoreline Master Program Element Goals, Policies, and Analysis

INTRODUCTION

Washington’s Shoreline Management Act (SMA) was passed by the Legislature in 1971 and adopted by the public in a 1972 referendum. The goal of the SMA is “to prevent the inherent harm in an uncoordinated and piecemeal development of the state’s shorelines.” The SMA establishes a balance of authority between local and state government. Cities and counties are the primary regulators, but the State has authority to review local shoreline management programs and permit decisions.

The SMA has three broad policies:

- Encourage water-dependent and water-oriented uses: “uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the states’ shorelines....”
- Promote public access: “the public’s opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally.”
- Protect shoreline natural resources, including “...the land and its vegetation and wildlife, and the water of the state and their aquatic life....”

Shoreline Jurisdiction

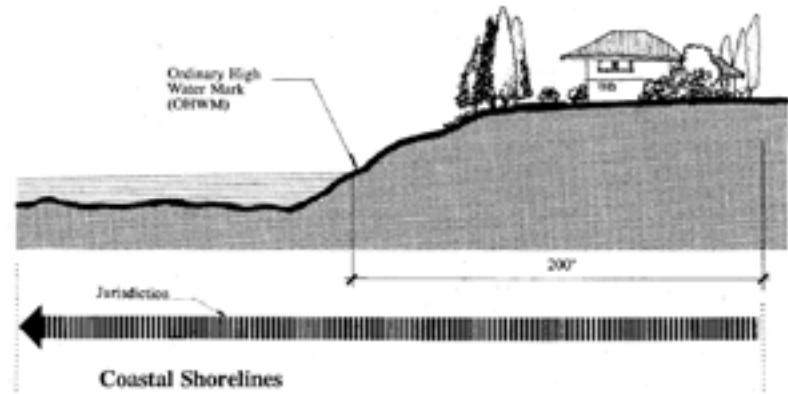
Under the SMA, the shoreline jurisdiction includes areas that are 200 feet landward of the ordinary high water mark (OHWM) of waters that have been designated as “shorelines of statewide significance”. The City of Shoreline’s shoreline area includes approximately 3.5 miles of Puget Sound coastline. There are no shorelines of statewide significance associated with rivers, streams, or freshwater lakes in the city or its Future Service Annexation Area (FSAA) of Point Wells.

The SMA, and this Master Program, apply to all “shorelines of the state.” Shorelines of the state include all “shorelines” and “shorelines of statewide significance” within Washington. Shorelines, as defined by the SMA, are all water areas together with the lands underlying them, which meet certain flow or acreage criteria. Shorelines of statewide significance are certain water areas that the Legislature has determined to have a unique character warranting special status and protection. Within the City of Shoreline there are only shorelines of statewide significance- the approximately 3.5 miles of Puget Sound coastline. No other water areas within Shoreline meet the criteria set forth in the SMA.

SHORELINE MASTER PROGRAM

Goals, Policies, and Analysis

In addition to the actual water areas, the SMA and this Master Program apply to shorelands. Shorelands are the area 200 feet landward of the ordinary high water mark (OHWM) of all waters subject to the SMA's provisions.



Shoreline Master Programs

Under the SMA, each city and county adopts a Shoreline Master Program (SMP) that is based on State guidelines, but tailored to the specific needs of the community. Local SMPs combine both policies and regulations to guide and control development within the shoreline area. The plans are a comprehensive vision of how shoreline areas will be used and developed over time. Regulations are the standards that shoreline projects and uses must meet.

The City of Shoreline incorporated on August 31, 1995, and subsequently adopted the King County Shoreline Master Program (Ord. 23, 1995). With the adoption of the Comprehensive Plan in 1998, the City adopted a Shoreline Master Program Element that contained goals, policies and maps of shoreline environments. While largely consistent with the King County SMP, this newer SMP Element was not reviewed by Ecology, and therefore it did not qualify as part of the City's recognized SMP. The 2005 Comprehensive Plan contained an SMP Update Strategy, and in 2007 the City received a grant from the Department of Ecology to develop its own SMP, which was adopted by City Council on May 29, 2012. Because the SMP contains Goals and Policies, and Analysis, as well as regulations and other information, rather than recreate these elements within this Comprehensive Plan, the City of Shoreline's Shoreline Master Program is referenced at the following link in its entirety: <http://shorelinewa.gov/Modules/ShowDocument.aspx?documentid=11043>

The Shoreline Management Act (SMA), chapter 90.58 RCW requires the City to have a shoreline master program setting forth goals, policies, and use regulations for those areas within the jurisdictional boundaries of the SMA. After incorporation, the City relied on King County's 1996 Shoreline Management Master Program for compliance with the SMA.

This changed in 2013 when the City's current Shoreline Master Program (SMP) was adopted on August 5, 2013 via Ordinance No. 668 and became effective.



Driftwood

SHORELINE MASTER PROGRAM

Goals and Policy

on September 2, 2013. The City Council adopted updates to the SMP on June 17, 2019 via Ordinance No. 856. The SMP is codified at Division II of SMC Title 20, Chapters SMC 20.200, 20.210, 20.220, and 20.230, and 20.240. Title 20 can be accessed at the following link: <https://www.codepublishing.com/WA/Shoreline/#!/html/Shoreline20/Shoreline20.html>

The link to the 2019 SMP will live on the Comprehensive Plan web page: <http://www.shorelinewa.gov/government/departments/planning-communitydevelopment/city-plans/comprehensive-plan-and-master-plans/comprehensive-plan>.

ECONOMIC DEVELOPMENT ELEMENT

Goal Provide for economically productive uses that are particularly dependent on their shoreline location or use.

Objective Plan for economic activity that is water-dependent, water-related, or that provides an opportunity for a substantial number of people to enjoy the shoreline and water.

PUBLIC ACCESS ELEMENT

Goal Increase public access to publicly-owned areas of the shoreline.

Objective Provide for public access to publicly owned shoreline areas, except where deemed inappropriate due to safety hazards, inherent security problems, environmental impacts, or conflicts with adjacent uses.

RECREATIONAL ELEMENT

Goal Develop public and private recreation opportunities that are compatible with adjacent uses and that protect the shoreline environments.

Objective Provide for the preservation and enlargement of public and private recreational opportunities and recreational facilities along the shoreline, including but not limited to, parks and recreational areas, wherever appropriate.

CIRCULATION ELEMENT

Goal Provide inter-connected, efficient, and safe transportation networks to and around the shoreline to accommodate vehicles, transit, pedestrians, and cyclists.

Objective Provide for a safe and adequate circulation system, including existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities within the shoreline jurisdiction that benefit permitted uses without degrading the environment or aesthetic values of the area.

SHORELINE MASTER PROGRAM

Goals, Policies, and Analysis

SHORELINE USE ELEMENT

Goal Regulate land use patterns to locate activity and development in areas of the shoreline that will be compatible with adjacent uses and will be sensitive to existing shoreline environments, habitat, and ecological systems.

Objective Include protections for the natural environment and adjacent uses in the Shoreline Development Code, Point Wells Subarea Plan, Saltwater Park master planning efforts, and other regulatory framework for development along the shoreline.

CONSERVATION ELEMENT

Goal Conserve and protect the natural resources of the shoreline including, but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection.

Objective Through the use of best available science, develop and implement siting criteria, design standards, and best management practices that promote the long term enhancement of unique shoreline features, natural resources, and fish and wildlife habitat.

HISTORICAL/CULTURAL ELEMENT

Goal Identify, preserve, protect, and restore shoreline areas, buildings, and sites having historical, cultural, educational, or scientific values.

Objective Educate citizens on historical, cultural, and scientific significance of shoreline structures, amenities, and functions.

FLOOD HAZARD MANAGEMENT

Goal Protect the City of Shoreline and other property owners from losses and damage created by flooding along the coast and sea-level rise.

Objective Seek regional solutions to flooding problems through coordinated planning with state and federal agencies, other appropriate interests, and the public.

Objective Develop a plan to mitigate and adapt to potentially altered environmental conditions along the coastline resulting from climate change.

RESTORATION ELEMENT

Goal Improve water quality, reduce the impacts of flooding events; and restore natural areas, vegetation, and habitat functions.

Objective Seek funding for restoration projects within the shoreline jurisdiction and require development proposals to address habitat restoration and water quality.

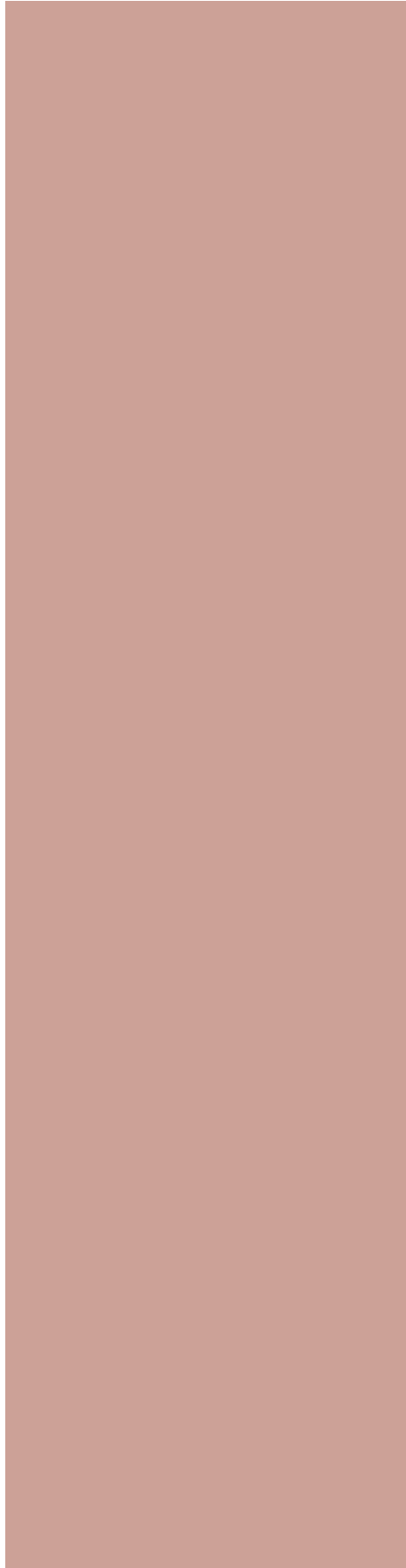
Objective Engage in discussions with other municipalities that border the Puget Sound and BNSF railroad regarding efforts to benefit fish passage and nutrient transfer

SHORELINE MASTER PROGRAM

Goals and Policy

Environment Designations

Part of the process of drafting regulations involved classifying areas of the coastline according to their historic and existing conditions, and ecological function. This map is included as Figure SMP1.





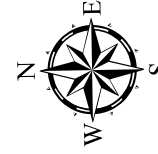
City of Shoreline COMPREHENSIVE PLAN

2012 City of Shoreline SMP Update Map

Proposed Shoreline Environment Designations

Environmental Designation

Type	Color
Aquatic	Blue
Point Wells Urban	Light Green
Point Wells Urban Conservancy	Medium Green
Shoreline Residential	Dark Green
Urban Conservancy	Olive Green
Waterfront Residential	Pink
Wetland	Blue with tree pattern



Data Source: City of Shoreline GIS
 Projection: NAD_1983_HARN_StatePlane_Washington_North_FIPS_4601
 Date: 12/26/2012

Shoreline Master Plan

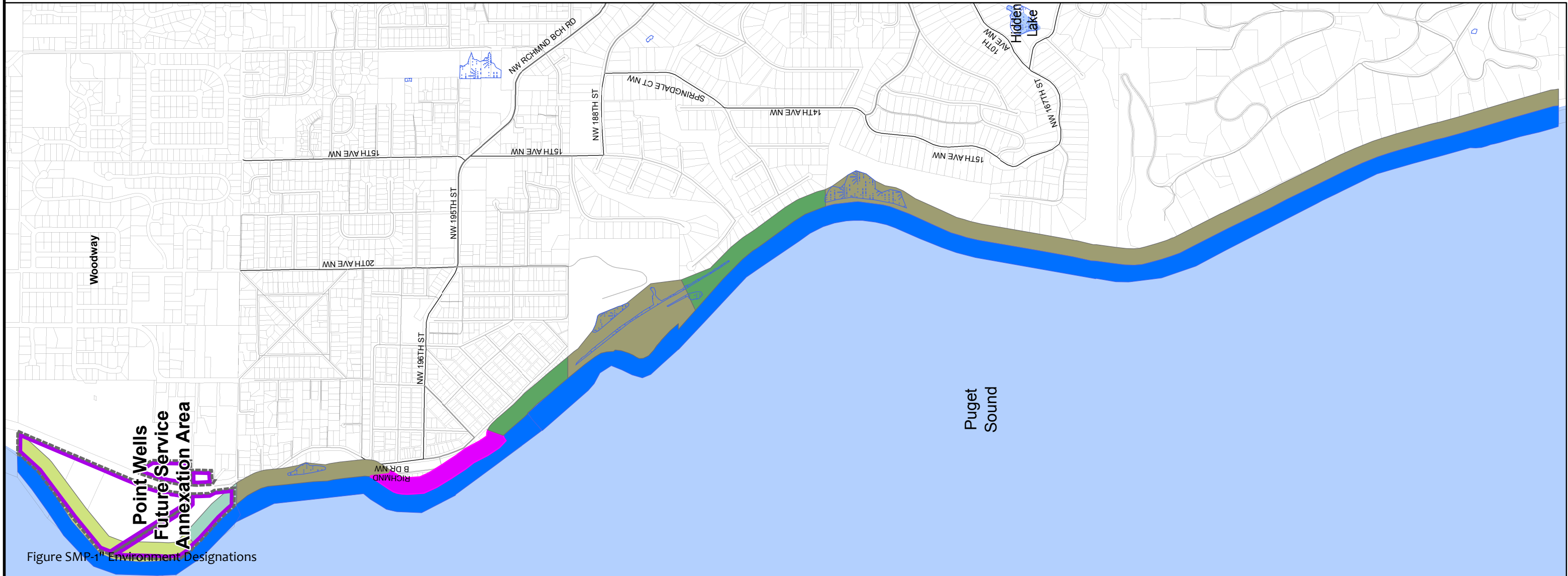
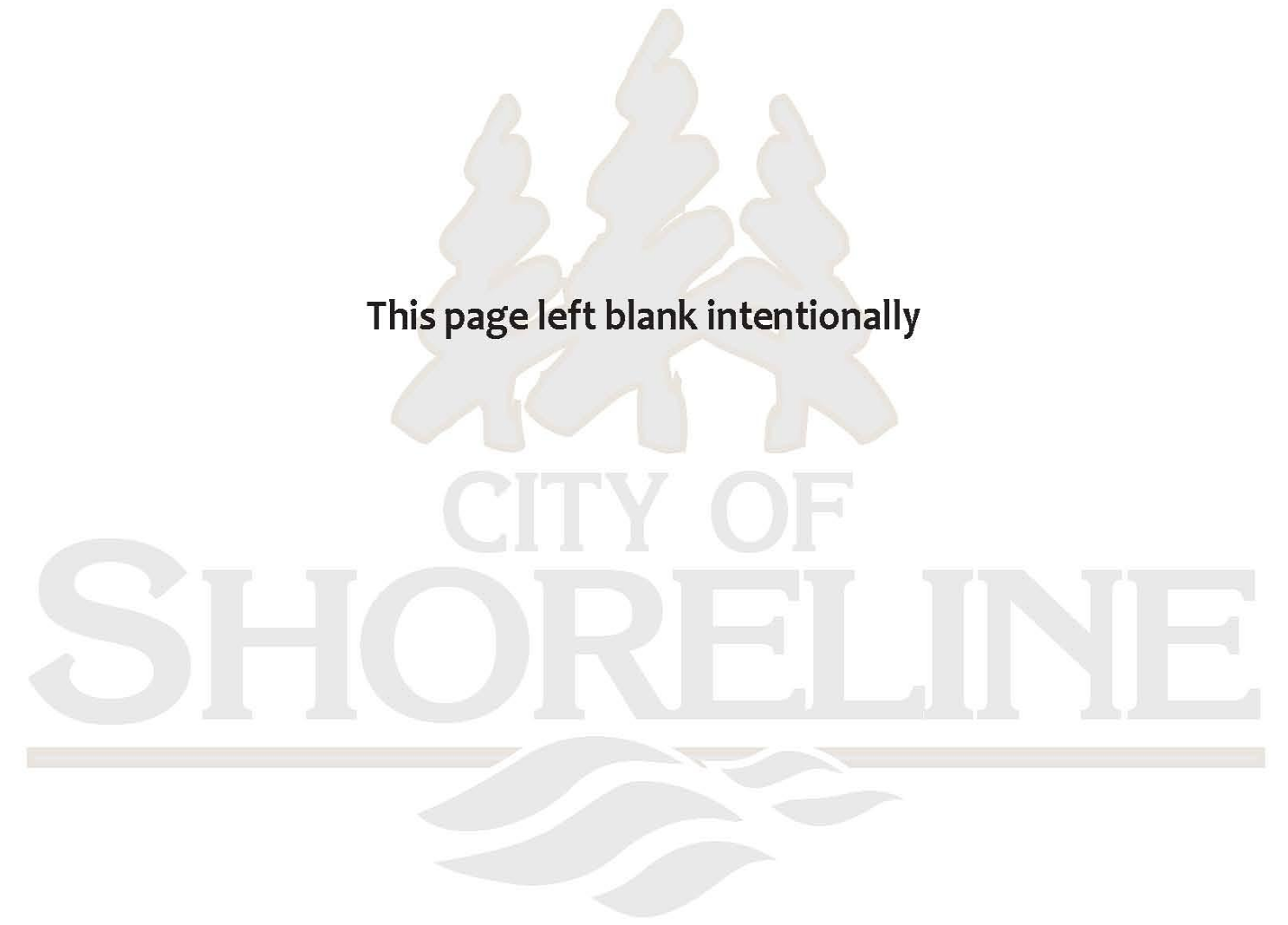


Figure SMP-1" Environment Designations

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CITY OF SHORELINE

Shoreline Inventory and Characterization



Prepared for:
City of Shoreline
17544 Midvale Avenue N., Shoreline, WA 98133

December 2008, Revised November 2009 and April 2010

H City of Shoreline – Shoreline Inventory and
Characterization

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INTRODUCTION

Background and Purpose

The City of Shoreline (City), Washington is undertaking a comprehensive update to its Shoreline Master Program (SMP) as required by the implementing guidelines in the Washington Administrative Code (WAC). To support this effort, the City applied for and received a grant issued by the Washington State Department of Ecology (Ecology) (G0800171). This shoreline inventory and characterization study supports the SMP update process by providing a baseline inventory of existing conditions within the shoreline jurisdiction of the City.

In 2003, the Washington State Legislature passed Substitute Senate Bill (SSB) 6012, which established timelines for all cities and counties to amend their local shoreline master programs (SMPs) consistent with the Shoreline Management Act (SMA), RCW 90.58 and its updated implementing guidelines, Washington Administrative Code (WAC) 173-26. The City of Shoreline is required to prepare an update to its SMP by the end of 2009. The City prepared the first draft of this shoreline inventory and characterization report in 2004; however, the report was not formally adopted or finalized. The City's first step towards a comprehensive SMP update involves revising the 2004 draft report to update technical information that has changed or been made available since 2004, and to be consistent with the current state shoreline guidelines. This report provides:

- Analysis and characterization of ecosystem-wide processes that affect the City's shoreline;
- Analysis and characterization of shoreline functions; and
- Opportunities for protection, restoration, public access and shoreline use.

The inventory and characterization documents current shoreline conditions and provides a basis for updating the City's SMP goals, policies and regulations. This report will help the City establish a baseline of conditions, evaluate functions and values of resources in its shoreline jurisdiction, and explore opportunities for conservation and restoration of ecological functions.

This inventory and characterization report also includes a map folio, located at the end of the document. All figures referenced in the document are found in the map folio.

Shoreline Jurisdiction and Study Area Boundary

Under the SMA, the shoreline jurisdiction includes all submerged lands waterward of the ordinary high water mark (OHWM) of waters that have been designated as "shorelines of statewide significance" or "shorelines of the state," as well as those areas that are 200 feet landward of the OHWM of these same waters. The shoreline jurisdiction criteria were established in 1972, and are described in Washington Administrative Code (WAC) 183-Generally, "shorelines of statewide significance" include portions of Puget Sound and other marine water bodies, rivers west of the Cascade Range that have a mean annual flow of 1,000 cubic feet per second (cfs) or greater, rivers east of the Cascade Range that have a mean annual flow of 200 cfs or greater, and freshwater lakes with a surface area of 1,000

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acres or more. “Shorelines of the state” are generally described as all marine shorelines and shorelines of all other streams or rivers having a mean annual flow of 20 cfs or greater and lakes with a surface area greater than 20 acres.

The City’s shoreline jurisdiction includes the Puget Sound shore within both the city limits and its potential annexation area (PAA). The portion of Puget Sound seaward from the line of extreme low tide is considered a “shoreline of statewide significance” per RCW 90.58.030(2)(e). The remainder of the Puget Sound landward of the extreme low tide mark is considered a “shoreline of the state.” The City therefore includes approximately four miles of Puget Sound coastline. There are no rivers, streams or lakes in the City meeting the definition of “shorelines of the state.”

Under the SMA, the shoreline area to be regulated by the City’s Shoreline Master Program must include all shorelines of statewide significance, shorelines of the state, and their adjacent shorelands, which are defined as the upland area within 200 feet of the OHWM, as well as any associated wetlands (RCW 90.58.030) within its municipal jurisdiction. Since the SMP is in part a long-range planning document, this characterization report includes those marine shorelines within the city limits as well as the PAA. One-half mile of the Puget Sound is located in the City’s PAA. The City’s PAA is known as Point Wells, located directly north of the city in unincorporated Snohomish County (Maps 1 and 1-A).

The City’s shoreline jurisdiction extends to the landward edge of associated wetlands. “Associated wetlands” means those wetlands that are in proximity to and either influence or are influenced by tidal waters or a lake or stream subject to the SMA (WAC 173-22-030 [1]). These are typically identified as wetlands that physically extend into the shoreline jurisdiction, or wetlands that are functionally related to the shoreline jurisdiction through surface water connection and/or other factors. The specific language from the RCW describes the limits of shoreline jurisdiction as follows:

“those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all associated wetlands and river deltas” (RCW 90.58.030[2][f]).

Wetlands associated with SMA regulated waters are limited to intertidal wetlands, mapped throughout the city limits along Puget Sound, and smaller wetlands associated with the lower reaches and mouths of Barnacle and Coyote (also known as Innis Arden South) Creeks.

Shoreline Planning Segments

For the purposes of this study, the City’s shoreline jurisdiction was organized into five distinct segments (A through E) based broadly on the physical distinction along the shoreline, the level of ecological functions provided by each segment, as well as existing land uses and zoning designations. Shoreline Planning Segments are described in Table 1 and depicted on Map 1.

A City of Shoreline – Shoreline Inventory and
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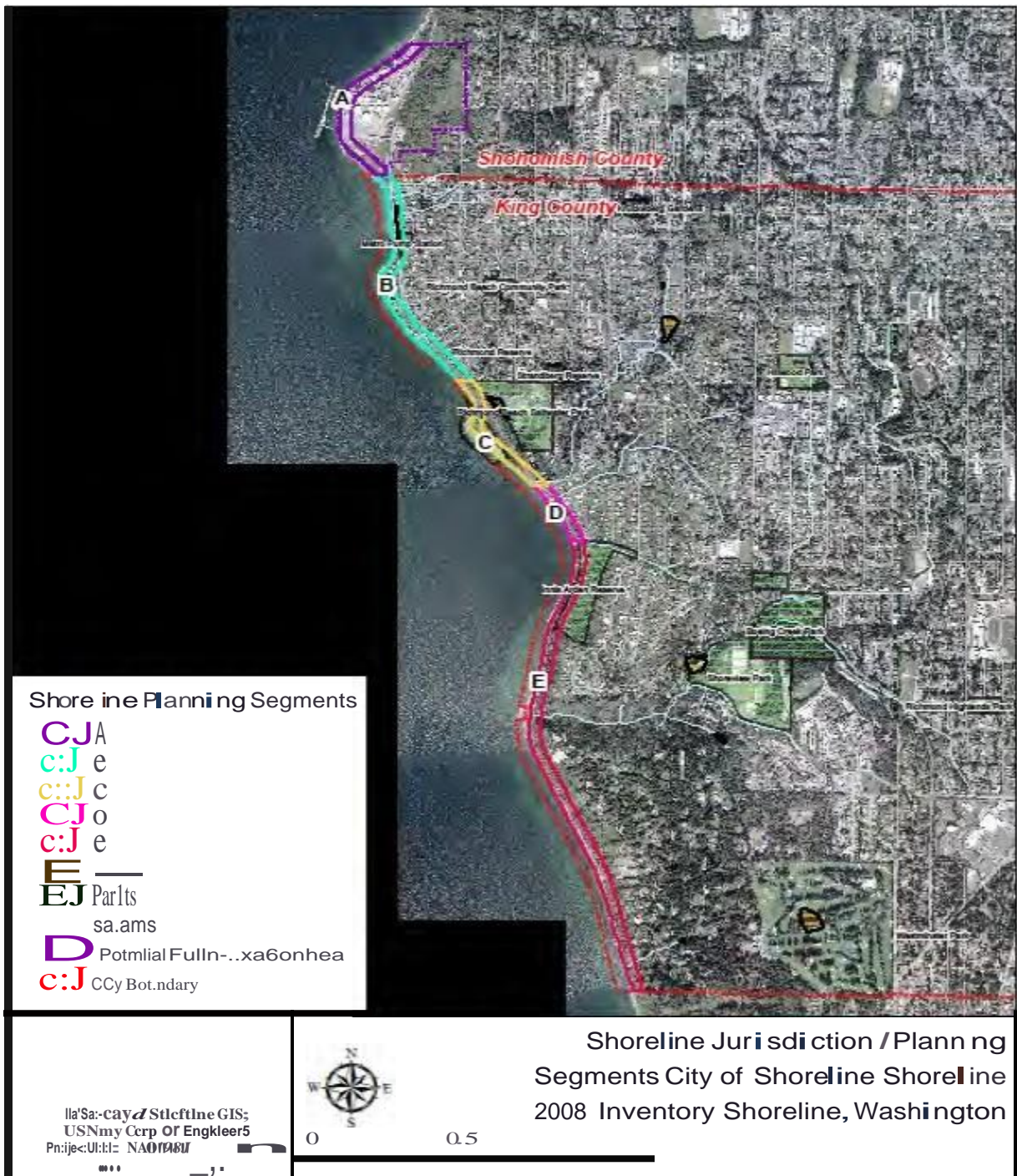
Table 1. Shoreline Planning Segments

<u>Shoreline Segment</u>	<u>Approximate Length (feet)</u>	<u>Approximate Segment Acreage</u>	<u>General Boundaries</u>
<u>A</u>	<u>3,411</u>	<u>15.6</u>	<u>Potential Annexation Area / Point Wells: located directly north of the city limits in unincorporated Snohomish County.</u>
<u>B</u>	<u>4,724</u>	<u>21.7</u>	<u>Richmond Beach residential area: the Snohomish County line south to Richmond Beach Saltwater Park.</u>
<u>C</u>	<u>2,801</u>	<u>11.0</u>	<u>Richmond Beach Saltwater Park south to Storm Creek culvert.</u>
<u>D</u>	<u>1,295</u>	<u>5.7</u>	<u>Innis Arden residential area: south of Richmond Beach Saltwater Park to Innis Arden Reserve Park.</u>
<u>E</u>	<u>9,424</u>	<u>41.6</u>	<u>Innis Arden Reserve / Highlands: Innis Arden Reserve Park south to city limits.</u>

Source: City of Shoreline, 2002

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Map 1: Shoreline Planning Segments



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CURRENT REGULATORY FRAMEWORK SUMMARY¹

City of Shoreline Regulations

Current Shoreline Management Act Compliance

The Shoreline Management Act is implemented through the development of local Shoreline Master Programs (SMPs). Local SMPs establish a system to classify shoreline areas into specific “environment designations.” The purpose of shoreline environment designations is to provide a uniform basis for applying policies and use regulations within distinctly different shoreline areas. In a regulatory context, shoreline environment designations provide the governing policy and regulations that apply to land within the SMP jurisdiction. Portions of individual parcels that are outside SMP jurisdiction are governed by zoning and other applicable land use regulations. Generally, environment designations should be based on existing and planned development patterns, biological and physical capabilities and limitations of the shoreline, and a community’s vision or objectives for its future development.

When the City of Shoreline incorporated in 1995, it adopted regulations outlined in Title 25 (Shoreline Management Plan) of the King County Code as the interim shoreline management code (Shoreline Municipal Code [SMC] 16.10). Shoreline properties within the City’s PAA are regulated under the Snohomish County SMP, until such properties are annexed and the City’s SMP is amended. During development of the City of Shoreline’s first comprehensive plan in 1998, the City evaluated the natural and built characteristics of its shoreline jurisdiction and developed five preliminary shoreline environment designations:

Urban Railroad (for developed portions of the Burlington Northern Santa Fe [BNSF]

Railway throughout the City’s shoreline jurisdiction),

• Urban - High Intensity,

Suburban - High Residential,

• Suburban - Low Residential, and

Conservation.

These preliminary shoreline environment designations have not been approved by Ecology, since they were not part of a comprehensive update to the City’s SMP. Therefore, they are not being implemented as part of Shoreline’s interim shoreline management code.

¹ The discussion of regulatory requirements included herein is not intended to be a complete list of all permits or approvals necessary for work within the City’s shoreline jurisdiction or other areas within the city or PAA. Other portions of local code and state and federal regulations may apply to development projects within the city. The permits and approvals necessary for construction may vary from parcel to parcel regardless of shoreline jurisdiction and may vary depending on the type and intensity of the work proposed. Prior to any construction within city limits, an applicant should contact the City and the applicable state and federal agencies to determine actual permit requirements. For development of parcels in the PAA outside of the city limits, an applicant should contact Snohomish County and the applicable state and federal agencies to determine actual permit requirements.

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Comprehensive Plan, Zoning and Other City Regulations

- City of Shoreline *Comprehensive Plan* – The City’s existing *Comprehensive Plan* was adopted in 2001. The *Comprehensive Plan* establishes goals and policies that define the community’s vision for the physical, economic, and social development of the City for the next 20 years. The *Comprehensive Plan* land use designations in the Puget Sound shoreline planning area include Mixed Use (Point Wells), Low Density Residential, Public Facilities (e.g., the BNSF Railway right-of-way), Public Open Space, and Private Open Space (City of Shoreline, 2001). City land use designations are relevant to this shoreline inventory and characterization report as they establish the general land use patterns and vision of growth the City has adopted for areas both inside and outside the shoreline jurisdiction. The City’s SMP goals and policies are one element of the *Comprehensive Plan* (included as an appendix). During this update process, the City will update its SMP element goals and policies and integrate them with the GMA comprehensive plan requirements for administrative and regulatory reform.
- City of Shoreline Municipal Code, Chapter 20.40: Zoning – Chapter 20.40 of the SMC (Zoning and Use Provisions) establishes zoning designations. Zoning designations in the Puget Sound shoreline planning area include: Residential 4 units/acre (R-4) and Residential 6 units/acre (R-6) (City of Shoreline, 2006). Point Wells, located in the City’s PAA, is zoned Heavy Industrial (HI) by the Snohomish County Zoning Code (Snohomish County website, 2008).
- City of Shoreline Municipal Code, Chapter 20.80: Critical Areas – Chapter 20.80 of the SMC (Critical Areas) establishes development standards, construction techniques, and permitted uses in critical areas and their buffers (i.e., geologic hazard areas, fish and wildlife habitat conservation areas, wetlands, flood hazard areas, aquifer recharge areas, and stream areas) to protect these areas from adverse impacts. Designated critical areas are found throughout the City’s shoreline planning area, particularly wetlands and streams, flood hazard areas, and geologic hazard areas (City of Shoreline, 2007a).
- City of Shoreline *Surface Water Master Plan* – The City’s Surface Water Master Plan was adopted in 2005. The plan identifies surface water problems, prioritizes needs, and provides long-term solutions that reflect the community’s priorities and can be funded by the City. The Plan includes an analysis of vegetation and wildlife habitat and water resources in relation to the control and treatment of stormwater (City of Shoreline, 2005b).

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State and Federal Regulations

A number of state and federal agencies may have jurisdiction over land or natural elements in the City’s shoreline jurisdiction. Local development proposals most commonly trigger requirements for state or federal permits when they impact wetlands or streams; potentially affect fish and wildlife listed under the federal Endangered Species Act (ESA); result in over one acre of clearing and grading; or affect the floodplain or floodway. As with local requirements, state and federal regulations may apply throughout the City, but regulated resources are common within the City’s shoreline jurisdiction. The state and federal regulations affecting shoreline-related resources include, but are not limited to:

- Endangered Species Act: The federal ESA addresses the protection and recovery of federally listed species. The ESA is jointly administered by the National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly referred to as the National Marine Fisheries Service), and the United States Fish and Wildlife Service (USFWS).
- Clean Water Act (CWA): The federal CWA requires states to set standards for the protection of water quality for various parameters, and it regulates excavation and dredging in waters of the U.S., including wetlands. Certain activities affecting wetlands in the City’s shoreline jurisdiction or work in the adjacent rivers may require a permit from the U.S. Army Corps of Engineers and/or Washington State Department of Ecology under Section 404 and Section 401 of the CWA, respectively.
- Hydraulic Project Approval (HPA): The Washington Department of Fish and Wildlife (WDFW) regulates activities that use, divert, obstruct, or change the natural flow of the beds or banks of waters of the state and may affect fish habitat. Projects in the shoreline jurisdiction requiring construction below the OHWM of Puget Sound or streams in the city could require an HPA from WDFW. Projects creating new impervious surface that could substantially increase stormwater runoff to waters of the state may also require approval.
- National Pollutant Discharge Elimination System (NPDES): Ecology regulates activities that result in wastewater discharges to surface water from industrial facilities or municipal wastewater treatment plants. NPDES permits are also required for stormwater discharges from industrial facilities, construction sites of one or more acres, and municipal stormwater systems that serve populations of 100,000 or more.

WATERSHED AND DRAINAGE BASINS

Water flow drives many ecological processes; therefore a useful characterization study area is the watershed. In Washington State, watersheds at a large scale are organized into Water Resource Inventory Areas (WRIAs). The City of Shoreline is located within the

A City of Shoreline – Shoreline Inventory and
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Lake Washington/ Cedar/ Sammamish Watershed (WRIA 8). The City is located the northwest portion of the watershed and includes two subareas: the Nearshore Subarea, which includes the 4 miles of shoreline in the City of Shoreline and another twenty miles north and south of the City, and the Lake Washington Subarea.

Surface water drainage basins in the City include portions of the McAleer Creek, Lyons Creek, West Lake Washington, Thornton Creek, Seattle Golf Course, Bitter Lake and two Middle Puget Sound drainage basins, and most of the Boeing Creek drainage basin (see Map 2 in Appendix C). McAleer, Lyons, West Lake Washington, and Thornton Creek to Lake Washington. Boeing Creek, Seattle Golf Course, Bitter Lake and the Middle Puget Sound basins drain to Puget Sound (City of Shoreline, 2005b). The features of the basins that drain to Puget Sound are discussed in more detail below:

Boeing Creek Basin: Boeing Creek is partially piped from its origin and discharges into Puget Sound, passing through the City's shoreline planning area.

Seattle Golf Course Basin: This 138 acre basin is located in the southwest portion of the city, with a small portion located in the City of Seattle. The runoff from the Seattle Golf Course Basin used to be collected in a wetland and infiltrated into the groundwater. The basin now discharges into Highlands Creek which then discharges into Puget Sound.

Bitter Lake Basin: Only 54 acres of this basin is located in the city, in its southwest portion. None of the basin's major watercourses are located within the city.

Middle Puget Sound Basins: The North and South basins enter Puget Sound through dozens of small creeks and storm drainage systems. The seven major drainage courses include: Highlands Creek, Blue Heron Creek (also known as Innis Arden North Creek), Coyote Creek (also known as Innis Arden South Creek), Storm Creek, Upper Barnacle Creek (also known as Upper Puget Sound North) and Lower Barnacle Creek (also known as South), Barnacle Creek, and Lost Creek. All the creeks originate from wetlands, urban runoff or hillside seeps, except that the headwaters of Upper and Lower Barnacle Creeks and Lost Creek are located to the north in Snohomish County.

Just two drainage basins drain to the shoreline planning area: Boeing Creek Basin and Middle Puget Sound Basin (see Map 4 in Appendix C). There are numerous surface water features conveyed through culverts into Puget Sound in addition to the creeks mentioned above. Drainages and streams are discussed in more detail in Section 5.8 *Streams* and include Lost Creek, Upper and Lower Barnacle Creeks, Barnacle Creek, Storm Creek, Blue Heron Creek, Coyote Creek, Boeing Creek, and Highlands Creek.

LAND USE PATTERNS

Land use in the City of Shoreline is largely influenced by the city's central geographical location and proximity to Puget Sound. The City is generally bounded by the City of Lake Forest Park to the east, the City of Seattle to the south, the Puget Sound shoreline to the west, and Snohomish County to the north, which includes the Cities of Edmonds and Mountlake Terrace, and the Town of Woodway. The City's shoreline jurisdiction is composed of a variety of natural and man-made characteristics that include natural

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beaches, wooded slopes, single-family homes, the BNSF Railway, and in the annexation area of Point Wells, an industrial port. Point Wells, a 100-acre industrial site located directly north of the City along Puget Sound, is currently under Snohomish County jurisdiction and is a potential annexation area for the City of Shoreline (City of Shoreline, 2005a).

Historical Land Use

The first major development along the Puget Sound coastline in the City occurred when the Great Northern Railroad was built along the water in 1891 (HistoryLink.org website, 1999). The railroad line provided a direct transportation link to downtown Seattle. In 1901, the Portland Ship Building Company built a shipyard at what is now the Point Wells site. Another historical landscape alteration that occurred along the coastline was the processing of sand and gravel at the current location of Richmond Beach Saltwater Park (see background of the photograph below, ca 1910). Over time, continued logging and residential development resulted in the landscape as seen today (Shoreline Historical Museum website, 1999).



Source: Shoreline Historical Museum

Existing Land Use

Residential Land Use

The City of Shoreline is predominately occupied by residential land uses, which support commercial and retail uses, various institutional uses, and a few industrial uses. Residential single-family development occupies approximately 51 percent of the land use

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in the community. Multi-family residential development occupies 4 percent and is primarily located near commercial areas along State Route 99 (also known as Aurora Avenue North) and in neighborhood centers (i.e., Richmond Beach, Echo Lake, North City, and Ballinger) (City of Shoreline, 2005a).

Several neighborhoods are located near the Puget Sound shoreline within the City. Neighborhoods include Richmond Beach (a portion of which is located immediately adjacent to the Puget Sound), Innis Arden, and the Highlands (City of Shoreline, 2005a). Residential development in the Puget Sound shoreline planning area is characterized by single-family properties, which occupy approximately 19 percent of the total shoreline planning area. Single-family residential uses which are located immediately adjacent to the Puget Sound about the City's shoreline for a length of 1,886 linear feet. That is approximately 9 percent of the total linear length of the City's Puget Sound shoreline, including the PAA (King County, 2007). With the exception of residential properties in Segment B, the extensive bluff system along Puget Sound (Photo E-3 in Appendix B) precludes extensive development within the City's shoreline jurisdiction.

Commercial and Industrial Land Uses

Commercial and industrial developments occupy approximately 4 percent of the land use within the City (City of Shoreline, 2005a). Point Wells is the only industrial property located along the Puget Sound shoreline and occupies approximately 20 percent of the total shoreline planning area (Photo A-1 in Appendix B). The Point Wells industrial facility abuts the City's Puget Sound shoreline for a length of 3,411 linear feet. That is approximately 16 percent of the total linear length of the City's Puget Sound shoreline (Snohomish County, 2007b). The City's 1998 *Comprehensive Plan*, adopted prior to the current 2005 *Comprehensive Plan*, indicated that the Point Wells property served as a petroleum product (gasoline and diesel fuel) marketing and distribution center for approximately 60 years or more (City of Shoreline, 1998b). The petroleum distribution center discontinued operation in 1994. An asphalt plant was operated at the site on a seasonal basis by the Chevron Corporation (Sound Transit, 1999b). The property was sold to Paramount of Washington in 2005 and is now used for petroleum products storage, processing and distribution. Soil and groundwater contamination are documented at the Point Wells facility (Snohomish County, 2007a).

Private and Public Utility Land Uses

Public facilities, institutions and right-of-way uses occupy approximately 29 percent of the City (City of Shoreline, 2005a). The BNSF Railway right-of-way extends in a north-south direction along the entire length of the city's shoreline planning area. It is the most dominant land use in the shoreline, occupying 48 percent of the total shoreline planning area. The BNSF Railway right-of-way abuts the City's Puget Sound shoreline (including the PAA) for a length of 15,398 linear feet. That is approximately 70 percent of the total linear length of the City's Puget Sound shoreline, including the PAA (King County, 2007).

There are two public facilities in the City's shoreline planning area, both of which are owned by King County. The first is right-of-way property located at the Point Wells site in Segment A. A conveyance system and marine outfall will be constructed on the

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property to serve the regional King County Brightwater Treatment Plant currently being constructed. The second property is located in Segment B which houses a King County wastewater pump station, known as the Richmond Beach Pump Station. A recreation easement has been obtained by the City to develop a park on this property, as described in more detail in Section 7.3.2 *Richmond Beach Pump Station Park Project* (City of Shoreline website, 2008).

Parks, Open Space and Vacant Land Uses

Only 1 percent of the City of Shoreline is undeveloped land. Parks, recreation, and open space (including lakes) occupy approximately 10 percent of the City (City of Shoreline, 2005a). Within the Puget Sound shoreline planning area, 8 percent of the land is occupied by parks and open space including the Richmond Beach Saltwater Park in Segment C and the Innis Arden Reserve in Segment E (Photos C-2 and E-1 in Appendix B; Map 11 in Appendix C). Four percent (960 lineal feet) of the properties that abut the City's Puget Sound shoreline (including the PAA) are occupied by park and reserve. Vacant properties occupy 2 percent of the total shoreline planning area and are located in Segments B and E. (King County, 2007).

Comprehensive Plan / Zoning Designations

Comprehensive Plan

According to the City of Shoreline Comprehensive Plan Map (2001), the City's shoreline planning area is largely comprised of properties designated as Low Density Residential and Public Facilities (i.e., the BNSF Railway right-of-way). Public Open Space and Private Open Space designations occupy the remainder of the shoreline planning area. In addition, the annexation area currently occupied by the Paramount of Washington facility in unincorporated Snohomish County is discussed in the *Comprehensive Plan* (2005a) and is currently designated as Mixed Use (see Map 9a in Appendix C) (City of Shoreline, 2001). Snohomish County designates Point Wells as Urban Industrial (Snohomish County website, 2008). The property owner has petitioned the County to change the Comprehensive Plan designation to Urban Center (Snohomish County, 2007a).

General goals and policies established in the 2005 *Comprehensive Plan* related to the protection of natural features encourage the protection and improvement of the natural environment and environmentally critical areas, construction of surface water facilities that promote water quality and enhance and preserve natural habitat, identification and protection of wildlife corridors, and preservation of wetlands, aquatic and riparian habitats and Puget Sound buffers (City of Shoreline, 2005a).

The general goals and policies of the City's 1998 Shoreline Master Program are included in the 2005 *Comprehensive Plan* as an appendix. Water-oriented uses are encouraged but must be balanced with the protection of Puget Sound shoreline's natural resources (City of Shoreline, 2005a).

Zoning Designations

Zoning designations in the City of Shoreline generally follow land use designations as discussed above. There are only two zones within the City's Puget Sound shoreline

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planning area; Residential 4 units/acre (R-4) and Residential 6 units/acre (R-6). The zones encompass the BNSF Railway right-of-way, parks, open space, and public facilities (see Map 8 in Appendix C) (City of Shoreline, 2002). Point Wells is zoned as Heavy Industrial (HI) in the Snohomish County Permit, Planning, and Zoning Map (Snohomish County website, 2008). The property owner has petitioned the County to change the zoning to Planned Community Business (Snohomish County, 2007a).

Table 2 identifies the relative percentage of existing land uses in each planning segment based on 2007 King County and Snohomish County Assessor land use records. Table 2 also includes the *Comprehensive Plan* land use and zoning designations for each segment.

Impervious Surface

Impervious areas in the City were analyzed based on the King County Impervious/Impacted Surface Interpretation dataset (see Map 14 in Appendix C) (King County, 2004). The dataset is based on high-resolution multispectral imagery from 2000. It includes mostly surfaces with high to complete impermeability, such as concrete, asphalt, roofing materials and other sealed surfaces that prevent the natural penetration of water into soil. Examples of impervious surfaces identified in this imagery include: building roof tops regardless of composition or construction; roadways, highways and parking lots constructed of concrete or asphalt; parking areas with a high density of parked vehicles as represented by the imagery; sidewalks, pedestrian walkways and malls constructed of concrete, asphalt or brick; and, other prepared surfaces such as bicycle paths, tennis courts and running paths.

Impervious surfaces reduce the potential for stormwater infiltration and increase stormwater runoff, including the rate of runoff and timing of peak flows. In general, higher percentages of impervious area are an indicator of development density and intensity which is tied to an increase in stormwater runoff. Impervious surfaces may contain pollutants that are harmful to water quality. Pollutants originating in the shoreline planning area likely originate from landscaped areas (e.g., parks and residential yards), BNSF Railway (e.g., creosote railroad ties and railroad cars), industrial facilities (e.g., overwater structures), and, to a lesser extent, vehicles and roadways. The approximate impervious area has been determined based on a qualitative assessment of the 2004 King County dataset and 2002 aerial photography, and from coordination with City staff in 2003. Impervious surface at the Point Wells facility in Segment A was estimated visually based on 2002 aerial photography of the site. Table 2 includes the approximate amount of impervious area within each shoreline planning segment. Overall, approximately 20 percent of the City's shoreline planning area is impervious due to concrete, asphalt, roofing surfaces or other sealed surfaces. The PAA contains the highest impervious area due to historic heavy industrial uses. Segment B contains 25 to 30 percent impervious area due to residential development near the shoreline. Segment E, which comprises nearly half of the shoreline planning area (43.5%) has fairly low impervious surface (approximately 5 to 15 percent). Thus, stormwater runoff and infiltration rates are not as altered in Segment E in comparison to Segments B and D.

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Table 2. Percentages of Existing, Allowed and Planned Land Use and Impervious Surfaces by Segment in Puget Sound Shoreline Planning Area

<u>Shoreline Segment</u>	<u>Existing Land Use (Includes approximate percentage within each segment)</u>		<u>Comprehensive Plan Land Use Designations</u>	<u>Existing Zoning (Includes approximate percentage of each zoned area within each segment)</u>		<u>Approximate Impervious Area²</u>
<u>A</u>	<u>Petroleum Facility</u> <u>King County Right-of-Way (ROW)</u>	<u>95%</u> <u>5%</u>	<u>Mixed Use (City of Shoreline Comprehensive Plan)</u>	<u>Heavy Industrial (Snohomish County Zoning)</u>	<u>100%</u>	<u>60-70%³</u>
<u>B</u>	<u>Single Family Residential BNSF Railway ROW</u> <u>Utility Vacant</u>	<u>42%</u> <u>42%</u> <u>10%</u> <u>5%</u>	<u>Public Facilities Low Density Residential Public Open Space</u>	<u>Residential, 6 units/acre (R-6)</u> <u>Residential, 4 units/acre (R-4)</u>	<u>98%</u> <u>2%</u>	<u>50-60%</u>
<u>C</u>	<u>BNSF Railway ROW Park</u> <u>Single-Family Residential</u>	<u>61%</u> <u>34%</u> <u>4%</u>	<u>Public Facilities Public Open Space Low Density Residential</u>	<u>Residential, 4 units/acre (R-4)</u>	<u>100%</u>	<u>5-10%</u>
<u>D</u>	<u>Single-Family Residential BNSF Railway ROW</u>	<u>52%</u> <u>48%</u>	<u>Low Density Residential Public Facilities</u>	<u>Residential, 4 units/acre (R-4)</u>	<u>100%</u>	<u>15-25%</u>
<u>E</u>	<u>BNSF Railway ROW Single-Family Residential Open Space Vacant</u>	<u>72%</u> <u>17%</u> <u>10%</u> <u>1%</u>	<u>Public Facilities Private Open Space Low Density Residential</u>	<u>Residential, 4 units/acre (R-4)</u>	<u>100%</u>	<u>5-15%</u>

Sources: City of Shoreline, 2002; Snohomish County 2007; King County, 2004 and 2007.

² Approximate impervious area is based on King County data (2004), aerial photo interpretation and coordination with City staff in 2003.

³ Impervious surface at the Point Wells facility in Segment A was estimated in 2003 based on aerial photography of the site showing the presence of a barge dock, rail line, and tanks within the shoreline environment.

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Existing and Planned Public Access Sites

Public access to the Puget Sound shoreline in the City of Shoreline is restricted to existing parks. Rugged terrain characterized by steep bluffs occurs throughout most of the shoreline planning area, which limit physical access to the water. Further, the BNSF railroad tracks parallel the entire shoreline within city limits. Public access to the railroad right-of-way is prohibited. Waterward public access is restricted in some areas by privately owned tidelands (including BNSF, residential and industrial property owners). Existing parks and open space areas in the City's shoreline planning area include (see Map 11 in Appendix C) (City of Shoreline, 2005c):

Richmond Beach Saltwater Park (Public) – This regional 40-acre park located in Segment C provides active and passive uses including picnic areas, shelter buildings, a playground area, observation areas, trails, and Puget Sound shoreline beach access (Photos C-2 and C-3 in Appendix B). Park users occasionally use the shoreline access for swimming in Puget Sound during favorable weather conditions.

Blue Heron Reserve (Private) – This private tract is preserved as a natural area and is associated with Blue Heron Creek. It is located in the southern portion of Segment C. No public shoreline access is permitted along the tract.

Coyote Reserve (Private) – This private tract is preserved as a natural area and is associated with Coyote Creek. It is located in the northern portion of Segment D. No public shoreline access is permitted along the tract.

Innis Arden Reserve (Public) – This 23-acre natural open space area/greenway passive-use park is located in the northern area of Segment E along the bluffs overlooking Puget Sound. Hiking/walking trails represent the main activity of this passive-use reserve.

Although trails eventually lead to the shoreline, the public has to cross the BNSF railroad tracks and riprap to reach the Puget Sound shoreline beach (Photo E-1 in Appendix B).

Boeing Creek Reserve (Private) – Four acres of natural area associated with Boeing Creek along the Puget Sound shoreline in the center portion of Segment E is preserved as private open space. No public shoreline access is permitted from this reserve along the bluff (Photo E-2 in Appendix B).

Improvements and enhancements to existing park and open space resources along Puget Sound identified in the City's Parks, Recreation and Open Space Plan (2005c) include:

Richmond Beach Saltwater Park - As outlined in the Plan, a Community Attitude and Interest Survey was conducted to establish priorities for the future development of parks and recreation facilities, programs and services within the city. The City surveyed 575 residents in the community. Thirty-one percent of the respondents selected upgrading Richmond Beach Saltwater Park as one of the four most important actions the City should take⁴. Largely in response to the survey, the City is currently in the process of adding viewpoints and interpretive signage, and improving trails (see Section 7.3.3 *Richmond Beach Saltwater Park Project* for more details). Additional improvements and enhancements identified by the Plan that would be implemented at a later date include developing an underwater marine park, a pier, and a trail along Puget Sound to connect the park to Innis Arden Reserve.

⁴ The other three actions were to upgrade existing neighborhood parks and play grounds (38%), upgrade natural areas and nature trails (30%), and improve shoreline and beach access (29%).

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Innis Arden Reserve - Improving trail system, developing overlook viewpoints and interpretive signage, stabilizing slopes, enhancing vegetation and developing safe access to Puget Sound across the BNSF Railway right-of-way.

As part of King County mitigation for impacts from the Brightwater Treatment Plant project, a new park will be installed at the King County Richmond Beach Pump Station. Improvements to the site will include construction of a small parking area, restroom, interpretive watchtower overlooking the BNSF railroad and Puget Sound, and play areas. No shoreline access west of the BNSF railroad is proposed (see Section 7.3.2 *Richmond Beach Pump Station Park Project* for more details) (City of Shoreline website, 2008).

The City of Shoreline's *Comprehensive Plan* provides a list of funded and unfunded parks, recreation, open space and city facility capital improvements. Opportunities for enhancing public access to the shoreline under consideration include development of a trail system along Puget Sound between Richmond Beach Saltwater Park and Innis Arden Reserve, amenity enhancements and development of overlooks, viewpoints, and interpretive signage, and habitat and native plant restoration at Innis Arden Reserve, construction of a pedestrian crossing from Richmond Beach Pump Station park site to the beach, and providing beach access at the Boeing Creek Reserve (City of Shoreline, 2004; City of Shoreline, 2005a).

Roads and Transportation Facilities

The BNSF railroad runs the length of the Puget Sound shoreline in the city abutting the shoreline for a length of 15,398 linear feet. That is approximately 70 percent of the total linear length of the City's Puget Sound shoreline, including the PAA (King County, 2007). The developed and undeveloped portions of the BNSF Railway right-of-way occupy approximately 48 percent of the City's shoreline planning area (King County, 2007), varying in width from 100 feet to greater than 300 feet. The rail line provides freight movement and intercity passenger rail. The rail line serves as the region's primary rail freight connection to the north, as well as a major connection to the east, and is an important link in the multimodal system supporting the Ports of Everett, Seattle, and Tacoma. An average of 36 freight trains, six Amtrak passenger trains and six Sound Transit Sounder passenger trains use the railway each day (Herrera Environmental Consultants, 2005). Unattached engines also traverse between cities along the rail line. The Sounder is operated by Sound Transit, the Central Puget Sound Regional Transit Authority. It is a commuter rail service located along a 35-mile corridor between Everett and Seattle that uses the existing BNSF Railway right-of-way. Amtrak trains use the existing right-of-way between Vancouver, BC and Portland, Oregon. (Sound Transit, 1999a; Sound Transit website, 2008; Amtrak website, 2008).

BNSF Railway is proposing to install a train traffic signal, utility bungalow, and retaining wall south of Richmond Beach Saltwater Park in Segment C. This would involve filling a minimal amount (less than ½ an acre) of freshwater wetland. BNSF Railway is also proposing to install train traffic signals, a utility bungalow, a train-switching mechanism, retaining wall, and a new access road north of Boeing Creek in Segment E. The improvements will involve filling 0.25 acres of freshwater wetland. BNSF Railway will

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also be installing improvements in other locations along the BNSF rail line between Everett and Seattle outside of Shoreline city limits. Sound Transit will pay for the improvements in order to meet conditions established in a joint agreement between BNSF and Sound Transit. These conditions are required of Sound Transit in order to run a third daily Sounder commuter train between Everett and Seattle. Mitigation for the wetland fill and impacts from these improvements will occur off-site at the Qwuloot restoration site in Marysville and Meadowdale Marina in Edmonds. Construction is expected to begin in 2009 (Herrera, 2005).

Due to the topography of the Puget Sound shoreline and the private ownership of the BNSF Railway along the extent of the shoreline, the only major roadway that falls within the City's shoreline planning area is Richmond Beach Drive NW (see Map 10 in Appendix C). Richmond Beach Drive NW is the primary roadway that allows access to thirty-two residences along the shoreline in the northwestern portion of the city. The residences span a total of 1,886 linear feet along the shoreline (King County, 2007). The homes are accessed from Richmond Beach Drive NW via the Richmond Beach Overcrossing Bridge which passes over the BNSF railroad tracks. The Bridge connects to 27th Avenue NW, a local road located behind the residences that runs parallel to the Puget Sound shoreline. 27th Avenue NW is also the only motor vehicle access west of the BNSF Railway right-of-way in the city via the Bridge (see Map 1B in Appendix C). The timber bridge was originally built in 1923 and rebuilt in 1956. The City is planning to replace it with a reinforced concrete bridge. Once the City finalizes negotiations with BNSF Railway on a temporary construction easement, project cost sharing and construction issues, construction will begin (City of Shoreline website, 2008).

Wastewater and Stormwater Utilities

The Ronald Wastewater District (RWD), formerly known as the Shoreline Wastewater Management District (SWMD), provides wastewater service to a majority of the City of Shoreline and includes the Point Wells property. Highlands Sewer District serves the Highlands Neighborhood in the southwest portion of the City. Wastewater collected from RWD is treated at two facilities under contract arrangements: King County Wastewater Treatment Division's (WTD) West Point Treatment Plant in Discovery Park, Seattle, and the City of Edmonds Wastewater Treatment Plant. Wastewater from the Highlands Sewer District is conveyed to RWD facilities (City of Shoreline, 2005b). Two RWD customers currently operate septic systems in the Richmond Beach Neighborhood; however, none of the properties fall within the City's shoreline planning area (Newman, personal communication, 2003).

Four RWD lift stations are located within the Puget Sound shoreline planning area. The King County Richmond Beach Pump Station is located in Segment B (King County, 2007). King County maintains a 30-inch diameter emergency overflow outfall pipe associated with the pump station. The outfall pipe is located in Segment B. King County also maintains an emergency overflow outfall pipe in Segment E. The pipe is associated with the Hidden Lake Pump Station located outside of shoreline planning area near Boeing Creek Shoreline Park (see Map 10 in Appendix C).

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Upon the City's incorporation in 1995, the City of Shoreline inherited and assumed jurisdiction over the storm and surface water management system located in the roadways within the city limits. As of 1998, facilities located outside the roadways are under the City of Shoreline jurisdiction as well. Stormwater utilities generally consist of a mix of open ditches and channels, pipes, vaults and open retention/detention facilities.

Historical/Cultural Resources

Historic and cultural resources are documented through a variety of sources. Official registers include the National Register of Historic Places and the Washington State Heritage Register. In 1995, the City of Shoreline adopted Chapter 15.20 of the municipal code (Landmark Preservation) to provide for the designation, preservation, protection, enhancement, and perpetuation of designated historic resources within the boundaries of the City. The Landmark Preservation chapter adopts by reference several sections of the King County Code Chapter 20.62 (Protection and Preservation of Landmarks, Landmark Sites and Districts). None of the properties designated as landmarks in the City of Shoreline are located within the shoreline planning area (see Map 13 in Appendix C).

The Historical/Cultural Element of the 1998 Shoreline Master Program provides general goals and policies to ensure important archaeological, historical, and cultural sites located within the shoreline jurisdiction are identified, protected, preserved, and restored for educational and scientific purposes. It also aims to adopt standards that ensure the protection and preservation of historic and cultural sites (City of Shoreline, 1998b). Historic preservation is also addressed in the Community Design Element of the 2005 Shoreline *Comprehensive Plan*.

In 1996, the King County Historic Preservation Program conducted an inventory of historic resources in the City of Shoreline. It did not include an inventory of archaeological sites, traditional cultural properties, or historic landscapes. However, an analysis of documented research revealed Native American peoples traveled along the Puget Sound shoreline and stream drainages to collect resources such as tobacco at Richmond Beach. No buildings directly associated with railroad development in Richmond Beach, lumber production, agricultural production, or the interurban railroad remain today (Copass, 1996).

In 2001, Larson Anthropological Archaeological Services (LAAS) conducted a study of six potential wastewater treatment plant sites in Snohomish County as part of King County's Brightwater Treatment Plant project. The inventory included the Point Wells site. No archaeological sites or historic structures are recorded within 0.25 miles from the Point Wells industrial site. However, LAAS determined Point Wells has a high probability for hunter-fisher-gatherer archaeological resources based on the existence of a former sandspit and lagoon buried in fill in the western half of Point Wells beneath the steep bluffs along the shoreline. Further archaeological investigation is recommended to determine if archaeological deposits associated with the former sandspit and lagoon exist beneath fill (LAAS, 2001).

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Sound Transit performed an inventory of historic, cultural, and archaeological resources along the commuter route between Seattle and Everett in a Final Environmental Impact Statement (EIS) for the Commuter Rail Project (1999). The inventory was based on existing documents, coordination, including contact with Native American tribal organizations, and the National Register of Historic Places. At the time the EIS was written, Sound Transit was considering developing a station near the City of Shoreline. Two station alternatives were considered in the EIS, Point Wells and Richmond Beach Saltwater Park. Sound Transit determined that no known historic, cultural, or archaeological resources areas were listed in, or eligible for, the National Register. While construction work at these two areas could affect undiscovered prehistoric or historic archaeological deposits, native soils have been previously disturbed; suggesting questionable integrity of any archaeological remains (Sound Transit, 1999a).

Site Contamination

According to Department of Ecology's Facility Site database, there is one known contaminated site in the shoreline planning area (Ecology website, 2008). The Point Wells site is listed on the Department of Ecology's Suspected and Confirmed Contaminated Sites List for soil, groundwater and surface water contamination associated with previous petroleum production. In 1999, documentation prepared for the King County Brightwater Treatment Plant examined potential soil and groundwater contamination at several sites under consideration at that time for a treatment facility, including Point Wells. When the Brightwater document was prepared, the long-term soil and groundwater remediation plans by Chevron, the property owner at that time, were unknown (CH2MHill and Associated Firms, 2001). However, as part of the Brightwater Treatment Plant conveyance project, a portion of Point Wells is undergoing a voluntary cleanup program with Ecology for suspected and confirmed soil and groundwater contamination.

NEARSHORE PHYSICAL CHARACTERIZATION

Nearshore Processes

The Puget Sound nearshore is defined as the area of marine and estuarine shoreline extending from the top of shoreline bluffs to the depth offshore where light penetrates the water thereby supporting plant growth (King County Department of Natural Resources and Parks [KCDNRP], 2001). The nearshore also includes estuaries and tidal rivers to the head of tidal influence. Landforms found in the Puget Sound nearshore environment include bluffs, beaches, mudflats, kelp and eelgrass beds, salt marshes, spits, and estuaries.

The processes occurring within the Puget Sound nearshore area are critical for maintaining habitats and health of the nearshore shoreline environment. Changes in the physical processes within the nearshore can negatively affect habitats by limiting food and nutrient sources for marine life, deteriorating beach sediment movement, accelerating erosion, and altering the flows of surface and groundwater. Nearshore processes are those actions which occur as a result of wind, tidal influence, waves, and surface and groundwater flow that result in sediment movement and affect habitat formation.

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The City of Shoreline beaches are typical of Puget Sound and can be characterized by two distinct foreshore components: a high-tide beach and a low-tide terrace (Downing, 1983). The high-tide beach consists of a relatively steep beachface with coarse sediment and an abrupt break in slope at its waterward extent. Low wave energy beaches, such as those along the City's shoreline, have a high-tide beach composed of poorly sorted sediment, with intermittent intertidal vegetation and a relatively narrow backshore. Extending seaward from the break in slope, the low-tide terrace typically consists of a gently sloping accumulation of poorly sorted fine-grained sediment (Komar, 1976; Keuler, 1979). Considerable amounts of sand in a mixed sand and gravel beach are typically winnowed from the high-tide beach by waves and deposited on the low-tide terrace (Chu, 1985). The amount and composition of beach sediment generally follows a seasonal cycle. Under normal seasonal weather patterns, the stronger, wind-driven waves that occur in winter remove material from the beachface, while more gentle, summer wind-driven waves move sediment back onshore (Masselink and Hughes, 2003).

Puget Sound beach morphology and composition is dependent upon three main influences; wave energy, sediment sources, and relative position of the beach within a littoral cell. Wave energy is controlled by fetch; the open water over which winds blow without any interference from land. Wind-generated wave action gradually erodes beaches and the toe of coastal bluffs, leading to landslides. These coastal bluffs are the primary source of sediment for most Puget Sound beaches. In the City, coastal bluffs are separated from the shoreline by the BNSF railroad, thus completely removing bluff sediment sources. Fluvial sources of sediment are typically of only local significance in comparison to bluff sediment sources, which reportedly account for roughly 90% of beach material (Keuler 1988, Downing, 1983). Bluff composition and wave energy influence the composition of beach sediment. Waves sort coarse and fine sediment and large waves can transport cobbles that small waves cannot.

Wind-generated waves typically approach the shore at an angle, creating beach drift and longshore currents and transporting sediment by a process called littoral drift. Net shore-drift refers to the long-term, net result of littoral drift. Net shore-drift cells represent a sediment transport sector from source to deposition along a portion of coast. Each drift cell acts as a system consisting of three components: a sediment source (erosive feature) and origin of a drift cell; a transport zone where materials are moved alongshore by wave action with minimal sediment input; and an area of deposition (accretion area) that acts as the drift cell terminus (Jacobson and Schwartz, 1981). Deposition of sediment occurs where wave energy is no longer sufficient to transport the sediment in the drift cell. Drift cells in the Puget Sound region range in length from 46 feet to just under 19 miles, with the average drift cell just under 1.5 miles long (Schwartz, 1991). The Washington Coastal Atlas (Ecology website, 2008) maps net-shore drift direction, or the prominent drift direction, including divergence zones and areas of "no appreciable drift" (which include highly modified, protected harbor shorelines). Based on the wave regime, extensive fetch, and coastal geomorphology the net drift direction of all the shoreline planning segments is south to north (Schwartz, 1991). Divergence zones are present at the north end of Point Wells and south of the City boundary in the City of Seattle, but the City's shoreline is within a single drift cell.

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The Washington Department of Natural Resources (WDNR) ShoreZone Inventory (2001) documents shoreline sediment stability as stable, erosional, or accretional, and sediment sources as fluvial, alongshore, and backshore (see Table 3). The City's shoreline is homogeneous in terms of the sediment stability and source because of the BNSF railroad. The railroad results in a stable sediment characterization throughout the shoreline, with the exception of the shoreline adjacent to Innis Arden Reserve. Construction of the railroad buried much of upper foreshore beach, thereby locking up coarse sand and gravel in the littoral system. This limits or precludes longshore transport of sediment. Sediment sources in the City are limited and are characterized by the ShoreZone data as alongshore with the exception of some fluvial sediment released from Boeing Creek. As discussed previously, the railroad interrupts historic sediment supply from eroding bluffs.

The width of intertidal beach in the City's shoreline is also relatively constant throughout the shoreline length, averaging 20 to 40 feet wide. The exception is within Segment B where some wider intertidal beaches are present near residential development along the shoreline. Additional details of ShoreZone data are contained in Appendix A. Table A-1 includes more detailed information within each of the planning segments. Map 2 in Appendix A depicts the individual ShoreZone segments.

Table 3. Shoreline Sediment Sources and Mobility

<u>Shoreline Segment</u>	<u>Approximate Intertidal Width</u>	<u>Estimated Sediment Source</u>	<u>Sediment Stability</u>	<u>Net shore Drift Direction</u>
<u>A</u>	<u>20 - 37 feet</u>	<u>Alongshore (all of segment)</u>	<u>Stable</u>	<u>North</u>
<u>B</u>	<u>30 - 105 feet</u>	<u>Alongshore (all of segment)</u>	<u>Stable</u>	<u>North</u>
<u>C</u>	<u>27 - 36 feet</u>	<u>Alongshore (all of segment)</u>	<u>Stable</u>	<u>North</u>
<u>D</u>	<u>36 feet</u>	<u>Alongshore (all of segment)</u>	<u>Stable</u>	<u>North</u>
<u>E</u>	<u>21 - 46 feet</u>	<u>Alongshore (most of segment); Fluvial in relation to Boeing Creek</u>	<u>Stable (most of segment); Erosional from north end of segment (646.7 feet to south)</u>	<u>North</u>

Source: WDNR, 2001; Schwartz, 1991.

Johannessen et al. (2005) inventoried current and historic shoreline erosion and accretion areas in the City of Shoreline. Drift cell "SN-3" generally corresponds with the shoreline within the City, beginning 1.5 miles south of Boeing Creek and extending north to Point Wells. Historically, this drift cell was comprised of 45% feeder bluff, 18% feeder bluff exceptional, and an additional 4% as potential feeder bluff. The remaining 67% of the shoreline was comprised of four scattered accretion areas. These accretion areas were characterized by delta lagoons, longshore lagoons and stream mouths. Along the Point

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Wells shoreline, before it was developed as an industrial site, there was a longshore lagoon that connected to a larger delta lagoon to the north.

The construction of the BNSF railroad separated historic coastal feeder bluffs from the shoreline, resulting in a 100% loss of sediment sources (Johannessen et al., 2005). The City's shoreline now consists of nine separate accretion shoreforms interrupted by railroad and residential modifications (Johannessen et al., 2005). No active feeder bluffs are currently present. Sixty-seven percent (67%) of the shoreline is classified as modified due to the railroad with the remainder (29%) classified as accretion shoreforms. From the north end of the City south to Richmond Beach (Segment B) there is a broad accretion shoreform, which corresponds with the slightly wider intertidal width shown earlier in Table 3. Table 4 is a summary of the information included in Johannessen et al. (2005).

Table 4. Current and Historic Beach Feeding Sources/Erosion and Accretion Areas in City of Shoreline (Drift Cell SN-3)

	<u>Feeder Bluff (%)</u>	<u>Feeder Bluff Except ional (%)</u>	<u>Potential Feeder Bluff (%)</u>	<u>Not Feeder Bluff (%)</u>	<u>Accretion Shore forms (%)</u>	<u>Modi fied (%)</u>
<u>Historic conditions</u>	<u>45%</u>	<u>18</u>	<u>4</u>	<u>5</u>	<u>18%</u>	<u>11%</u>
<u>Current Conditions</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>29%</u>	<u>71%</u>
<u>Change</u>	<u>-45%</u>	<u>-18%</u>	<u>-4%</u>	<u>-5%</u>	<u>+11%</u>	<u>+61%</u>

Source: Johannessen et al. 2005

Geologic Units

Geologic information was collected from two sources: the Tetra Tech/KCM Geology (Geographic Information Systems [GIS]) data used in basin characterization reports (2004a and 2004d) and King County/Booth Surficial Geology Mapping (2005). These two sources characterize the geology of the shoreline planning area as containing till, beach deposits, advance outwash deposits, transitional beds, recessional outwash deposits, possession drift, landslide, and Whidbey formations.

The City is located at the western edge of the Seattle drift plain, an irregular plateau that drops toward Puget Sound (TT/KCM, 2004a and 2004d). The glacial retreat left behind layers of silt/clay, till, and gravel. Steep bluffs are characteristic in shoreline planning Segment E (Highlands/Boeing Creek) and begin to diminish in a northerly direction through shoreline Segments D and C.

Soils

The Soil Survey for King County (United States Department of Agriculture, Soil Conservation Service [USDA SCS], 1973) does not include the City of Shoreline. The

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Soil Survey for Snohomish County (USDA Natural Resources Conservation Service [NRCS], 1983) maps Point Wells (Segment A) as “Urban Land.” Soil information from a 1952 survey by the US SCS was reviewed for soil type by basin (TT/KCM, 2004a and 2004d). The survey indicates that the predominant soil type in the Middle Puget Sound South Basin is Everett gravelly sandy loam (75 percent) with the remainder being Alderwood gravelly sandy loam. The majority of the Boeing Creek Basin is Alderwood gravelly sandy loam. The predominant soil type in the Middle Puget Sound North Basin is split between the two major soil types already mentioned. The rest of the soils represent less than four percent of the total area in the City, including Carbondale muck, coastal beach and Norma fine sandy loam.

The Geotechnical Assessment Report prepared for the Sound Transit Everett to Seattle Commuter Rail Project (HWA GeoSciences, Inc., 1998) describes the typical soils and slope profile found along the waterfront from Everett to Seattle. In general, the ~~drainage~~ drainage is dominated by Pleistocene aged glacial soils associated with the Vashon Drift and consisting of recessional outwash deposits, glacial till, advance outwash and glacial lacustrine. Recent soil deposits include beach and colluvial deposits, some of which are associated with landslides. Where major landscape modifications have occurred, such as Point Wells, fill soils are typically present (HWA GeoSciences, Inc., 1998).

The waterfront bluffs found along the City’s shoreline (Segments B through E) are typically composed of a cap of very dense gravelly sand with scattered cobbles and boulders in a clay/silt matrix (glacial till), overlaying dense sand and gravel (glacial advance outwash), which overlies hard clay (glacial lacustrine). The thicknesses of these layers can vary substantially. However, the till cap is generally at the top of the bluffs, sometimes overlain by deposits of medium dense sand and gravel (glacial recessional outwash). The hard clays are typically at or near sea level. Streams draining the uplands dissect bluffs and flow into Puget Sound, depositing fine sand and silt in alluvial fans. Littoral drift, which is the accumulation or movement of foreshore sediments along the shore by littoral currents and oblique waves, reworks some of this material and becomes beach deposits (HWA GeoSciences, Inc., 1998).

Seismic Hazard Areas

Seismic hazard areas are defined in Chapter 20.80.220 of the SMC as “lands that, due to a combination of soil and ground water conditions, are subject to severe risk of ground shaking, subsidence or liquefaction of soils during earthquakes. These areas are typically underlain by soft or loose saturated soils (such as alluvium) and have a shallow ground water table.”

There are mapped liquefaction susceptibility areas along Segments A, B, C, D and a portion of E. All are mapped as having high liquefaction susceptibility (City of Shoreline, 2002).

Landslide Hazard Areas

The west-facing slopes along Puget Sound within the City have experienced recent and historical landslide activity. The contact zone between the hard clay layer and the

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overlying sand layer is the source of many landslides along the coast of Puget Sound, which commonly occur after major storm events. In general, slope stability in the City's shoreline planning area is more stable in the northern portion, though containing some isolated unstable areas, and unstable in the southern portion (Segment E).

Baum et al. (2000) conducted an inventory of recent landslides that included the City of Shoreline. Significant storm events during 1996 and 1997 resulted in several major landslide episodes. The most common types of landslides were shallow earth slides and debris flows, some of which blocked culverts and overtopped the BNSF railroad track (locations are shown on Map 7). These landslides range in volume from 300 cubic yards to 40,000 cubic yards. The largest one occurred in Segment E north of Highlands Creek (Baum et al. 2000).

The seawall and stone revetments of the BNSF railroad protect the base of the bluff from wave erosion and have probably increased the stability of the bluff. Baum et al. (2000) suggests that the bluff retreat during the winters of 1995-96 and 1996-97 might have been greater had the seawall and embankment not been present.

In the City, regulated landslide hazard areas are classified in SMC Chapter 20.80.220. Hazard areas are based on percent slope, soil composition, and the presence of emergent water. Three categories are used and defined as:

Moderate Hazard: Areas with slopes between 15 percent and 40 percent and that are underlain by soils that consist largely of sand, gravel or glacial till.

High Hazard: Areas with slopes between 15 percent and 40 percent that are underlain by soils consisting largely of silt and clay.

Very High Hazard: Areas with slopes steeper than 15 percent with zones of emergent water (e.g., springs or ground water seepage), areas of landslide deposits regardless of slope, and all steep slope hazard areas sloping 40 percent or steeper.”

No landslide hazard areas are identified in Segment A (Point Wells). The extreme north and south portions of Segments B and C contain landslide hazard areas in the extreme north and south portions of both segments. Landslide hazard areas exist throughout all of Segments D and E (King County iMAP, 1991). See Map 7 in Appendix C for landslide hazard area locations.

Erosion and Sedimentation Hazard Areas

Erosion hazard areas are defined in Chapter 20.80.220 of the SMC as “lands or areas underlain by soils identified by the U.S. Department of Agriculture Natural Resources Conservation Service (formerly the Soil Conservation Service) as having ‘severe’ or ‘very severe’ erosion hazards. This includes, but is not limited to, the following group of soils when they occur on slopes of 15 percent or greater: Alderwood-Kitsap (AkF), Alderwood gravelly sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD) and Indianola (InD).”

No erosion hazards currently exist within the City's shoreline planning area; however, erosion hazard areas are identified east of Segment E primarily in the upper Boeing Creek Basin (see Map 7 in Appendix C) (City of Shoreline, 2002).

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Aquifer Recharge Areas

Within the City of Shoreline, including the Puget Sound shoreline planning area, there are no known critical aquifer recharge areas that supply potable water. Almost all the City's potable water comes from surface sources originating in the Cascade Mountains and is either operated by the Shoreline Water District or the City of Seattle. The City's lakes and wetlands may contribute to aquifer recharge (City of Shoreline, 2005a).

Streams

Streams provide valuable wildlife corridors, a source of fluvial sediments to the marine shoreline (moved along the shoreline by currents), and support a range of fish species. The City of Shoreline is located in Water Resource Inventory Area (WRIA) 8, the Cedar-Sammamish Watershed. Information on stream conditions was drawn in particular from the following documents: *City of Shoreline Surface Water Master Plan* (City of Shoreline, 2005b), *Salmonid Habitat Limiting Factors, Water Resource Inventory Area 8 Final Report* (Kerwin, 2001), *Boeing Creek Basin Draft Characterization Report and Middle Puget Sound Basin Characterization Report* (TT/KCM, 2004a, 2004d), and the *City of Shoreline Stream Inventory and Assessment* (TT/KCM, 2004b). Streams are depicted on Map 4 and Map 10 in Appendix C. A total of seven streams have been identified to flow into the Puget Sound within the PAA and the City limits. In general, the western portion of the City ultimately drains to Puget Sound through the following streams: 1) Lost Creek, 2) Barnacle Creek, 3) Storm Creek, 4) Blue Heron Creek, 5) Coyote Creek, 6) Boeing Creek, and 7) Highlands Creek.

Segment A has an unnamed tributary of Barnacle Creek that is located east of the BNSF railroad and south of Point Wells. It travels south where it connects to Barnacle Creek in Segment B. Lost Creek is located north of the city limits in the Town of Woodway. It flows southwest both in piped and open water sections towards Puget Sound. It appears to connect to Barnacle Creek before discharging into Puget Sound in Segment B. Barnacle Creek is formed by the confluence of Upper Barnacle Creek and Lower Barnacle Creek and discharges to Puget Sound in Segment B. The stream includes piped and open water sections along the BNSF railroad and flows through a wetland area downstream of Richmond Beach Drive NW (see Photo B-2 in Appendix B). The creek has three outlets to Puget Sound (including one near Lost Creek) via culverts beneath the BNSF railroad. The lower section of Barnacle Creek is tidally influenced upstream for a distance of about 20 feet (Photo B-6 in Appendix B). A stream evaluation letter was submitted to the City as part of a development permit for a residential property located near the intersection of Richmond Beach Drive NW and NW 196th Street. According to the letter, the portion of Barnacle Creek from NW 196th Street south to where it discharges to the Puget Sound may not meet the City's definition of a stream per SMC 20.80 (Critical Areas) (The Watershed Company, 2008). However, the findings of the letter were not verified by WDFW. Furthermore, WDFW has indicated to the City that they will defer to the City's stream inventory (see *City of Shoreline Stream Inventory and Assessment*) even when presented with a more recent report which concludes that a stream does not qualify as a stream per the City's regulations (Nammi, 2009).

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Storm Creek, which begins upstream of NW 195th Street and includes several unnamed tributaries, is located at the very south end of Segment C. South of NW 191st Street, Storm Creek continues southwest for 3,000 feet through the privately owned Eagle Reserve in Innis Arden before entering Puget Sound. The stream is confined within a very steep ravine between the mouth and 17th Place NW. Severe erosion occurs in the lower sections of Storm Creek through the Eagle Reserve (Photo D-3 in Appendix B). Bank hardening and several weirs have been constructed to protect private property, a pump station, and a sewer line crossing Storm Creek (City of Shoreline, 2005b).

Blue Heron Creek and Coyote Creek discharge to Puget Sound (Photo D-1 in Appendix B) and are located within Segment D and E respectively. Blue Heron Creek begins as two tributaries that join near NW 185th Street. Much of the stream flows through the private Blue Heron Reserve. Coyote Creek begins as three or more branches that extend into ravines with relatively steep side slopes. These branches come together on private property near NW 175th Street. Below the confluence of these branches, the creek flows another 1,700 feet before entering Puget Sound. The lower portion of the creek flows through a private tract called the Coyote Reserve and through Innis Arden Reserve. In comparison, Blue Heron Creek drains a larger area than Coyote Creek and experiences larger flows.

Boeing Creek and Highlands Creek discharge to Puget Sound and are located within Segment E. There are also several short unnamed tributaries that occur within the Innis Arden Reserve and flow to Puget Sound (see Map 4). Boeing Creek begins as two large tributaries that are mostly contained within pipes and occur in developed commercial areas. From the confluence of the two tributaries, the main stem descends through forested ravines to Hidden Lake, a small, constructed lake that the City regulates as a storm detention facility. Downstream from Hidden Lake, the stream has steep gradients and incised channels with moderate-to severe erosion of the channel beds and banks. A steel-pile dam is present approximately 2,300 feet from the mouth, which acts as a barrier to upstream fish. Many sections below the dam have experienced slope failure, and the substrate is generally embedded having been filled in with sediment, providing poor spawning habitat for salmonids (King County 1994). Boeing Creek enters Puget Sound through a large box culvert under the BNSF railroad. The lower portion of the stream is tidally influenced at high tides.

Highlands Creek is located within the Highlands development near the southern City boundary. The stream flows west through private property and is mostly contained within a piped system. The approximate length of the watercourse is 1,200 feet, of which 850 feet is piped.

None of the streams are currently listed on the state Department of Ecology's 2004 303(d) list, which lists streams that do not meet water quality standards for one or more parameters (Ecology website, 2008). However, many small streams, such as those found within the City's shoreline planning area, may potentially be at risk for exceeding several water quality parameters.

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As stated above, many of the streams discharge directly into Puget Sound through culverts. Culverts that are undersized and/or have a steep slope may increase water velocity, which may cause downstream scouring of nearshore areas during periods of significant water runoff (Parker, 2000).

Flood Hazard Areas

Flood hazard areas are defined in the Shoreline *Comprehensive Plan* as “those areas within the floodplain subject to a one percent or greater chance of flooding in any given year” (City of Shoreline, 2005a). These areas are typically identified on the Federal Emergency Management Agency (FEMA) flood insurance rate maps (FIRM) as the 100-year floodplain. The 100-year floodplain is regulated by two chapters of the SMC: Chapter 16.12, Flood Damage Prevention, and Chapter 20.80.380-410 of the CAO.

Portions of the shoreline in Segment B, C, D, and E are mapped as a 100-year floodplain on the King County FIRM series, Panels 20, 40, 310, and 330 (FEMA, 1995). Flood hazards for Segment A (Point Wells) are mapped on Snohomish County FIRM series and include panels 1294 and 1292 (FEMA, 1999). The stream corridor of Boeing Creek (Segment E) is also mapped as a 100-year floodplain (FEMA, 1995), but the stream is not large enough itself to be a shoreline of the state and only the mouth of the stream is located within the marine shoreline. The King County Sensitive Area Map Folio (King County iMAP, 1991) shows only the Boeing Creek stream corridor within Segment E as being a potential flood hazard area (see Map 4 in Appendix C). Typically, the areas south of stream mouths and the marine shoreline below the OHWM are indicated as flood hazard areas. Following the recommendations made in the Snohomish County FIRM series, Base Flood Elevation for shoreline in all Segments (A, B, C, D, and E) will be 10 feet National Geodetic Vertical Datum (NGVD).

Several existing houses are within the shoreline of Puget Sound along 27th Avenue NE in Segment B (see Map 4 in Appendix C). Most of the homes are protected by bulkheads, with the exception of those on the south end, which, based on a conversation in March 2006 between Juniper Nammi (City of Shoreline Planner) and Chuck Steele (Ecology Floodplain Specialist), were reported to have had flooding in the past (Chuck Steele, personal communication, 2008). The existing lots within the flood hazard areas along 27th Avenue NE are fully developed, therefore flood regulations in the SMC would be applied primarily to remodel and rebuilding on these sites.

Industrial facilities and a large dock associated with Point Wells exist within the shoreline of Puget Sound in Segment A. Portions of these facilities are within the mapped flood hazard area (see Map 4 in Appendix C). Flood regulations in the SMC would be applied to replacement or rebuilding of industrial facilities and to shoreline restoration projects. If the property were to be rezoned in the future, flood regulations in the SMC would be applied to platting, subdivision, and new construction on the site.

Shoreline Modifications

Three white papers prepared in recent years summarize the current knowledge and technology pertaining to marine and estuarine shoreline modifications in the Puget

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Sound. These papers are: *Overwater Structures: Marine Issues* (Nightingale and Simenstad, 2001); *Marine and Estuarine Shoreline Modification Issues* (Williams and Thom, in King County Department of Natural Resources and Parks [KCDNRP], 2001); and *Beaches and Bluffs of Puget Sound* (Johannessen and MacLennan, 2007). These documents, along with *Reconnaissance Assessment of the State of the Nearshore Report: Including Vashon and Maury Islands (WRIAs 8 and 9)* (KCDNR, 2001) and the Washington Department of Natural Resources ShoreZone Inventory (2001) were summarized and incorporated into this section. A field visit in September 2003 verified modifications along portions of the shoreline providing public access. Table A-2, Appendix A contains additional information regarding shoreline modifications within the planning segments.

Shoreline modifications refer to structural alterations of the shoreline's natural bank, including levees, dikes, floodwalls, riprap, bulkheads, docks, piers or other in-water structures. Such modifications are typically used to stabilize the shoreline and prevent erosion. Shoreline armoring (i.e. riprap, bulkheads, and other shore parallel structures) is the most common type of shoreline modification. Shoreline armoring impedes sediment supply to nearshore habitats, and this sediment starvation can lead to changes in nearshore substrates from sand or mud to coarse sand, gravel, and finally hardpan. This may, in turn, decrease eelgrass and increase kelp abundance, as well as forage fish spawning habitats. Armoring also alters natural process dynamics by blocking or delaying the erosion of upland areas and bluffs that replenish the spawning substrate. Beach narrowing and lowering and decreased driftwood abundance also result from shoreline armoring (Johannessen and MacLennan, 2007).

Construction of shoreline armoring may cover or destroy eelgrass meadows, and overwater structures may deprive eelgrass of light. Dredging can excavate eelgrass or cause excessive turbidity and permanent filling of eelgrass meadows (KCDNR, 2001).

Bulkheads and piers may also affect fish life by diverting juvenile salmonids away from shallow shorelines into deeper water, thereby increasing their potential for predation (Nightingale and Simenstad, 2001). Piers also alter wave energy and current patterns and obstruct littoral drift and longshore sediment transport (Williams and Thom, 2001). Sewer outfalls introduce nutrients and pollutants to the nearshore area altering current cycles and food web interactions.

Shoreline Armoring

Approximately 97 percent of the City's shoreline adjacent to Puget Sound is modified with riprap and bulkheads (WDNR, 2001). The majority of this armoring is associated with the BNSF railroad bed (Map 12 in Appendix C). The WDNR ShoreZone Inventory (2001) indicates that approximately 23 percent of Segment A (approximately 796 feet; the southern portion of Point Wells) is unmodified beach. The remaining portion of Point Wells (approximately 2,694 feet) is highly modified with riprap and sheet pile, as well as a large barge dock. Segment B is entirely modified with riprap. A portion of Segment B (approximately 1,845 feet) is modified with concrete and wooden bulkheads along a residential area adjacent to Puget Sound (Photo B-2 in Appendix B). Approximately 73

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percent of Segment C is unmodified, at Richmond Beach Saltwater Park where beach extends waterward of the railroad right-of-way. The north and south ends of Segment C are modified with riprap. All of Segments D and E (along the entire length of the City's shoreline south of Richmond Beach Saltwater Park) are modified with riprap ~~WCDNR~~.

Docks, Piers, and Over-Water Structures

There are no docks, piers, or over-water structures along Puget Sound within the City limits (Segments B through E) (Map 12 in Appendix C). However, within the PAA, Point Wells (Segment A) contains a large industrial dock originally used for loading oil when the site was operated as a bulk fuel terminal (Photo A-1 in Appendix B). The dock is currently used for both import and export of materials to and from the facility.

NEARSHORE BIOLOGICAL CHARACTERIZATION

Wetlands

Wetlands near the Puget Sound shoreline typically include tidal marshes and tidally influenced estuaries. Tidal marshes may contain both salt and freshwater habitats that experience tidal inundation (KCDNR, 2001). Several wetlands have been mapped by various sources in the City's shoreline planning area. According to the 1987 National Wetlands Inventory (NWI), the entire area of the City's shoreline planning area in the City limits and UGA boundary is designated as an "estuarine intertidal aquatic bed/unconsolidated shore" (E2AB/USN) wetland (US Department of the Interior [USDI], 1987a and 1987b). The King County Sensitive Areas Map Folio (King County, 1990) also identifies intertidal wetlands encompassing all segments within the City's shoreline planning area. Although mapped as wetland at a landscape level, many of these areas in the City are unvegetated beach or mudflat and therefore would not meet the state definition of wetland as per City code requirements.

The *Stream and Wetland Inventory and Assessment* conducted by Tetra Tech/KCM in 2004 for the City documented one non-tidal wetland within Segment B within the City's shoreline planning area (Map 4 in Appendix C). This palustrine forested wetland is less than one acre in size and is associated with Barnacle Creek. Priority Habitats and Species (PHS) data indicate that a small (less than one acre) scrub/shrub wetland is located at the northernmost extent of Segment E and is associated with Coyote Creek within the shoreline planning area (WDFW, 2008).

Critical Fish and Wildlife Areas

Critical fish and wildlife habitat areas are those areas identified as being of critical importance in the maintenance and preservation of fish, wildlife and natural vegetation. Critical fish and wildlife habitat areas are defined in SMC Chapter 20.80.260 as follows: Fish and wildlife habitat conservation areas include nesting and breeding grounds for State and Federal threatened, endangered or priority species as identified by the Washington State Department of Fish and Wildlife, including corridors which connect priority habitat, and those areas which provide habitat for species of local significance which have been or may be identified in the City of Shoreline Comprehensive Plan.

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Critical fish and wildlife habitats in the City's shoreline planning area are characterized in the following sections.

Marine Riparian Zones

Marine riparian vegetation is defined as vegetation overhanging the intertidal zone (KCDNR, 2001). Marine riparian zones function by protecting water quality; providing wildlife habitat; regulating microclimate; providing shade, nutrient and prey; stabilizing banks; and providing large woody debris (Anchor Environmental and People for Puget Sound, 2002).

The existing railroad bed, land clearing, and shoreline armoring have impacted the marine riparian zones of all the City's shoreline segments. Marine riparian zones are not located within any of the shoreline planning segments (WDNR, 2001) (Table A-3 in Appendix A). The only marine riparian vegetation that occurs west of the BNSF railroad is located at Richmond Beach Saltwater Park (see Photo C-2 in Appendix B).

Banks and Bluffs

Banks and bluffs are part of the marine riparian zone and can be a source of sediment to adjacent beaches, providing habitat to bluff-dwelling animals, rooting area for riparian vegetation, and a source of groundwater seepage to marine waters (KCDNR, 2001). Shoreline development and armoring, vegetation clearing, and changes in hydrology, among others, can adversely impact the natural functions of bluffs.

The ShoreZone Inventory (WDNR, 2001) maps moderate height, inclined cliffs composed of fines/mud and sand in Segments B and C (Tables A-4 in Appendix A). These are described as erosional features, providing sediments to the beach.

Beaches and Backshore

Beaches are composed of generally loose, unconsolidated sediment that extends landward from the low water line (Johannessen and MacLennan, 2007). Backshore areas are immediately landward of beaches and are zones inundated by storm-driven tides. Beaches and backshores provide habitat for numerous organisms, including cutthroat trout, piscivorous birds (grebes, herons, and mergansers), and shorebirds (Dethier, 1990). A typical profile of an undisturbed shoreline in Central Puget Sound would include an upper backshore or storm berm area that collects logs, algae, and other debris during storms (Photo B-3 in Appendix B). The intertidal portion of the beach is typically relatively steep and composed of a mixture of cobbles and gravel in a sand matrix (KCDNR, 2001).

Sediment abundance throughout the shoreline segments is characterized predominantly as "moderate" (some mobile sediment, but not likely to rapidly move) (Table A-1 in Appendix A). Erosional areas are described in Segment E. Beach sediments in shoreline planning area are characterized in Table A-1 and A-4 in Appendix A.

The WDNR ShoreZone Inventory utilized the British Columbia ShoreZone Mapping System, which classifies the shoreline into homogeneous stretches (or units) based on key

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physical controlling factors (WDNR, 2001). Table 5 summarizes the general beach or shoreline substrate composition, based on the British Columbia classification, for each shoreline planning segment (WDNR, 2001).

Table 5. ShoreZone Classification by Segment (WDNR, 2001)

<u>Shoreline Segment</u>	<u>British Columbia Classification*</u>
<u>A</u>	<ul style="list-style-type: none"> • <u>Sand beach</u> • <u>Sand and gravel flat or fan</u>
<u>B</u>	<ul style="list-style-type: none"> • <u>Sand beach</u> • <u>Sand flat</u> • <u>Sand and gravel flat or fan</u>
<u>C</u>	<ul style="list-style-type: none"> • <u>Sand beach</u> • <u>Sand and gravel beach, narrow</u>
<u>D</u>	<ul style="list-style-type: none"> • <u>Sand beach</u>
<u>E</u>	<ul style="list-style-type: none"> • <u>Sand and gravel beach, narrow</u> • <u>Sand flat</u>

*British Columbia Physical Mapping System (Howes et al., 1994 in WDNR, 2001)

Sobocinski (2003) conducted a comparative survey of beach fauna found on natural and altered beaches (i.e. where shoreline armoring was present) located above the mean high tide level. One of the four survey sites was located at Richmond Beach Saltwater Park. The study looked at vegetative wrack and invertebrate assemblages, among several other parameters. Vegetative wrack is comprised of natural organic marine material cast on the shore deposited during an ebbing or receding tide. Not surprisingly, the percent ~~wrack~~ wrack was greater at natural beach stretches than at altered beaches at all sites. Wrack serves as important habitat for many beach-dwelling fauna. Fauna found along altered beaches were dominated by marine organisms, such as crustaceans, and ~~insects and collembolans~~ insects and collembolans (organisms that are terrestrial-dependent) than the neighboring natural beach. The study suggests that a shift to more marine organisms is the result of lowering the land/sea interface and replacing sandy sediments with hard substrate. In addition, the removal of shoreline vegetation, which often accompanies shoreline armoring, also changes the physical structure of this zone by creating hotter, drier habitats, and removing vegetation-dependent organisms, such as insects and invertebrates which inhabit the intertidal zone (Sobocinski, 2003).

Flats

Flats generally include gently sloping sandy or muddy intertidal or shallow subtidal areas (KCDNR, 2001), and are used by juvenile salmonids, shorebirds, and shellfish, among other species. Flats are generally located at the mouths of streams where sediment transported downstream is deposited, and in areas of low wave and current energy where longshore waves and currents deposit sediment (Photo B-4 in Appendix B) (KCDNR, 2001). Sand flats are mapped in Segment B and much of Segment E (in the vicinity of

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the Barnacle and Boeing Creek outlets). Sand and gravel flats are mapped in Segments A and B. No mud flats are present in the City's shoreline.

Shoreline activities that may impact tidal flats (KCDNR, 2001) include:

Unnatural erosion or deposition of sediment;

Harvesting of shellfish and other marine life;

Fecal and chemical contamination;

Physical disturbances from shoreline armoring, marina construction, and upland development practices;

Shading from overwater structures; and

Loss of emergent and riparian vegetation.

Eelgrass Meadows

Eelgrass is a perennial, marine aquatic vascular plant that is rooted in the substrate and can spread horizontally to produce new plants. Eelgrass requires fine-grained substrates and is particularly associated with low to moderate high-energy intertidal and shallow subtidal mud/sand substrates. The plants need sufficient light during summer to support growth and for nutrient storage over winter. Typically, eelgrass beds form between about two meters above mean lower low water (MLLW) to almost nine meters below MLLW depending on water quality. However, other factors such as extreme low or high nutrient levels, substrate composition, presence of other species, and toxic pollutants can affect eelgrass abundance and distribution.

The importance of eelgrass has been described in various sources, including the *Reconnaissance Assessment of the State of the Nearshore Environment* (KCDNR, 2001) and more recently in *Kelp and Eelgrass in Puget Sound* (Mumford, 2007). Eelgrass plants are important primary producers, fixing carbon that enters nearshore food webs and generating nutrients and substrate that form the base of the food chain. Eelgrass meadows provide refuge and foraging habitat for many salmonid species, other fish, invertebrates, birds and aquatic organisms.

Eelgrass beds have been documented in Puget Sound in the City's shoreline planning area including Point Wells (Woodruff et al., 2001 and WDNR, 2001). The occurrence of eelgrass is most dense in Segments D and E, north and south of the mouth of Boeing Creek (Table A-5, Appendix A).

Shoreline activities that may impact eelgrass (KCDNR, 2001) include:

Clam harvesting and other direct alteration by humans;

Propeller scour and wash;

Physical disturbances from shoreline armoring;

Shading from overwater structures; and

Physical disturbances from dredging and filling.

Kelp Forests

There are 23 species of kelp in Puget Sound, with only two species of floating kelp and 21 that are considered prostrate, or not-floating. The prostrate species are limited to shallower portions of the nearshore zone and comprise the majority of marine vegetation biomass in some areas (Mumford, 2007). Kelps are held to the substrate by holdfasts,

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which unlike roots do not penetrate the bottom or carry nutrients. Unlike eelgrass, kelps are not rooted and must obtain nutrients directly from the water and require a hard substrate. They favor areas with high ambient light and low temperatures, which result in nutrient-rich waters, and moderate wave energy to circulate the nutrients.

Kelp provides habitat for many fish species, including rockfish and salmonids, potential spawning substrate for herring, and buffers shorelines from waves and currents, among other functions (KCDNR, 2001). A change in kelp distribution may indicate the coarsening of shallow subtidal sediments (such as that caused by erosion related to a seawall) or an increase in nutrient loading (such as from sewage effluent).

Kelp is found in all shoreline planning segments with the exception of Segment D. Kelp beds are sporadic throughout and limited in their lateral extent (Table A-5 in Appendix A) (Woodruff et al., 2001; KCDNR, 2001).

Shoreline activities that may impact kelp densities (KCDNR, 2001) include: Physical disturbances from shoreline armoring, marina construction, and harvesting; Shading from overwater structures; Beach nourishment; and Nutrient loading.

Priority Habitats and Species

The Washington Department of Fish and Wildlife (WDFW) maintain priority habitat and species information for Washington State, including the status of species as threatened or endangered. The City of Shoreline occurs within the WDFW Region 4. Priority habitats within Region 4 include consolidated marine/estuarine shorelines, cliffs, caves, snags, riparian areas, old-growth/mature forests, and urban open spaces. These habitats may contain up to 13 species of invertebrates, 62 species of vertebrates, and 20 species of mammals (City of Shoreline, 1998a). The following sections discuss some of the priority species and species of local importance that occur within the City's shoreline planning area.

Shellfish

Geoduck clams are documented in subtidal areas adjacent to shoreline Segments A, B, C, and E and Dungeness crabs are also documented in subtidal areas adjacent to Segment E (WDFW, 2008). The King County 1996/1997 Beach Assessment (KCDNR Website, 2003) performed at Point Wells Beach in Segment A and Richmond Beach Park in Segment C documented shellfish use of these beach areas. Assessments of the Point Wells shoreline (Segment A) resulted in the identification of 31 species of invertebrates, including littleneck, butter, horse, and sand clams; purple shore crabs, pygmy rock crabs, red rock crabs, and graceful crabs; California green shrimp, and hairy hermit crabs (KCDNR, 2003). Littleneck and butter clams dominated the clam populations by number and biomass. Assessments of the Richmond Beach Park shoreline (Segment C) resulted in the identification of 37 species of invertebrates including cockle, softshell, horse, and bay mussels; black-clawed crab, graceful decorator crab, and red rock crab. Horse clams were the dominant species of clams at Richmond Beach Park.

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The Washington State Department of Health has closed Richmond Beach in Segment C to recreational shellfish harvesting (Washington State Department of Health Website, 2008) due to the presence of biotoxins. None of the City's shoreline is currently used for commercial shellfish harvesting.

Salmonids

The *Salmonid Habitat Limiting Factors: Water Resources Inventory Area (WRIA) 8 Final Report* (Kerwin, 2001) identifies the known presence of salmon in local streams. Boeing Creek (Segment E) has documented salmonid use including Chinook (listed as threatened under the ESA), coho (Federal species of concern), chum salmon, searun cutthroat trout, and resident cutthroat trout. It is likely that many of the fish are products of the "Fish in the Classroom" program (Daley, 2004). Coho are listed by the WRIA 8 as occurring in Boeing Creek. Highlands Creek contains no salmonids. All other streams are likely to contain resident cutthroat trout in some portions of the stream (TT/KCM 2004b, and Daley, 2003).

The City of Shoreline Stream Inventory (TT/KCM, 2004b) notes that the flume under the BNSF railroad in the lowest reach of Boeing Creek likely prevents fish passage seasonally during low flows. The primary detriment to habitat quality in this reach is the significant amount of sediment from landslides in the ravine. The sediment fills in pools within the stream, clogging gravels with sand and/or silt thus reducing spawning suitability.

Nearshore habitat is an important environment for juvenile salmonids, where the shallow water depth obstructs the presence of larger, predator species (Kerwin, 2001). Juvenile salmon rely on the nearshore and estuarine marine habitats for food, migration corridors, protection from predators, and a transitional environment that supports the physiological changes that occur as they transition from a freshwater to a marine environment (Fresh, 2006). Spawn and migration timing, and the use of different marine habitats vary widely between salmonid species as well as stocks or subpopulations of the same species.

All shoreline segments within the City's shoreline planning area are known or expected to contain juvenile salmonids including bull trout (federally listed), Chinook, chum, coho, cutthroat, pink, sockeye, based on the knowledge of species life histories (KCDNR, 2001).

Forage Fish

Forage fish are key components of the marine food web and have important commercial and recreational value. They are generally characterized as small, schooling fish that prey upon zooplankton and are in turn preyed upon by larger predatory fish, birds and marine mammals (Penttila, 2007). The five forage fish species most likely to occur in the City's shoreline planning area include surf smelt, sand lance, Pacific herring, longfin smelt, and eulachon (Kerwin, 2001 and King County DNR, 2001). Different species utilize different parts of the intertidal and subtidal zones, with sand lance and surf smelt spawning primarily in the substrate of the upper intertidal zone, and Pacific herring spawning primarily on intertidal or subtidal vegetation (Lemberg et al., 1997; Penttila,

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2007). Water quality and other conditions that affect food or predator abundance are important for all species of forage fish.

Four primary sources were referenced in compiling information on potential forage fish spawning areas within the City's shoreline planning area: Marine Resource Species (MRS) data maintained by WDFW (2008), the Water Resources Inventory Area (WRIA) 8 Final Report (Kerwin, 2001), the City of Shoreline, Fish Utilization in the City of Shoreline Streams (Daley, 2003), and the Reconnaissance Assessment of the State of the Nearshore Environment (KCDNR, 2001). Information on the five potential forage fish species within the City's planning area is summarized in Table 6.

Table 6. Forage Fish Species and Presence by Shoreline Segment

<u>Species</u>	<u>Documented Presence</u>	<u>Spawning Timing</u>	<u>Preferred Spawning Substrate</u>	<u>Spawning Location</u>
<u>Pacific herring</u>	<u>None (nearest is Quartersmaster Harbor on Vashon Island)</u>	<u>Quartersmaster Harbor stock spawn February/March</u>	<u>Eelgrass</u>	<u>Upper high tide limits to depths of 40 feet (typically between 0 and - 10 tidal elevation)</u>
<u>Sand lance</u>	<u>Segments A and B</u>	<u>November 1 to February 15</u>	<u>Fine sand, mixed sand and gravel, or gravel up to 3cm</u>	<u>From + 5 tidal elevation to higher high water line (from bays and inlets to current- swept</u>
<u>Eulachon</u>	<u>None</u>	<u>Late winter/ early spring</u>	<u>Unknown</u>	<u>Freshwater streams</u>
<u>Longfin smelt</u>	<u>None</u>	<u>Winter</u>	<u>Sand with aquatic</u>	<u>Freshwater streams</u>
<u>Surf smelt</u>	<u>Segments A and C</u>	<u>South Puget Sound stocks are fall-winter spawners (September to March)</u>	<u>Mix of coarse sand and fine gravel</u>	<u>Upper intertidal</u>

Sources: (Kerwin, 2001; O'Toole, 1995; KCDNR, 2001; Lemberg et al., 1997)

Information on documented spawning activity was available from the WDFW (2008). No Pacific herring, sand lance, surf smelt, spawning areas are currently documented in any of the shoreline inventory segments (WDFW, 2008). However, it is fair to assume

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that they all utilize the nearshore areas for feeding and migration. Both King County DNR (2001) and Kerwin (2001) document surf smelt spawning areas in Segment C, along Richmond Beach Park (Photo C-2 in Appendix B). A sand lance spawning area is mapped along the shoreline within the City of Shoreline, in the southern portion of Segment A (Photo A-1 in Appendix B) (Kerwin, 2001) and just north of Barnacle Creek in Segment B (KCDNR, 2001). Both sources cite the documented presence of surf smelt in planning Segment A (Point Wells). In addition, the mouth of Boeing Creek Segment C is identified as an important area for the feeding, migration, and spawning and rearing of all the forage fish mentioned above (Daley, 2004).

Nearshore modifications impact potential forage fish habitat in the following ways: Development impacts the shoreline, particularly marinas and boat ramps, which introduce the potential for repeated disturbance and potentially alter nearshore hydrology; Sewer outfalls introduce pollutants and nutrients to the nearshore; Overwater structures shade intertidal vegetation and may alter nearshore hydrology; and Riprap revetments and vertical bulkheads alter nearshore hydrology and may increase wave energy on intertidal areas.

The sand lance's habit of spawning in the upper intertidal zone of protected sand-gravel beaches throughout the increasingly populated Puget Sound basin makes it vulnerable to the cumulative effects of various types of shoreline development. The WAC Hydraulic Code Rules for the control and permitting of in-water construction activities in Washington State include consideration of sand lance spawning habitat protection.

Shorebirds and Upland Birds

A variety of waterfowl and shorebirds utilize the nearshore environment for wintering and breeding. Waterfowl and seaduck species include Canada goose, mallard, wigeon, shoveler, scaup, goldeneye, long-tailed duck, northern pintail, bufflehead, and mergansers. Diving birds such as loons, grebes, scoter, guilemot and cormorants use intertidal habitats for foraging. Approximately seventy-five species of birds are associated with marine nearshore environments in Washington (O'Neil et al., 2001).

Adjacent to the open waters of Puget Sound, the upland terrestrial environment provides habitat for birds, amphibians, reptiles, and insects. The WDFW PHS maps indicate the presence of purple martin nest structures on pilings at the mouth of Boeing Creek from 2000 to 2004. It is unknown whether martin are currently using the structures. Bald eagles use the shoreline and large trees for perching. No nests are currently documented within the City. Marbled murrelet (federal and state listed as threatened species) has also been documented in the shoreline vicinity, but no seabird colonies or waterfowl concentrations are documented within the City. Adolfson Associates (1999) also documented the use of interior uplands by two priority species including the pileated woodpecker and the band-tailed pigeon.

ASSESSMENT OF SHORELINE FUNCTIONS AND OPPORTUNITY AREAS

This section summarizes key findings concerning how functions of the Puget Sound shoreline have been impaired within the City of Shoreline, both by land use activities and alterations occurring at an ecosystem-wide scale, and by activities within the City, its PAA, and its shoreline planning area. This section also identifies opportunities for the protection or enhancement of areas where shoreline ecological functions are intact, and opportunities for restoration of impaired shoreline functions, at both a programmatic (i.e., City-wide) and site specific level. Opportunities for enhanced or expanded public access to the shoreline are also discussed.

Shoreline Ecological Functions

Shoreline ecological functions of the City of Shoreline planning segments are summarized in Table 7. The table is organized around Ecology's list of processes and functions for shorelines using the landscape analysis methodology. It also provides a qualitative assessment of the function performance provided by each reach as Low, Medium or High. Due to the similarity of shoreline functions provided by Segments D and E, these segments are combined in this analysis.

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Table 7. Summary of Ecological Functions

Function	Shoreline Planning Segments			
	Segment A	Segment B	Segment C	Segments D & E
<u>HYDROLOGY</u>				
<u>Transport & stabilize sediment</u>	<p><u>Low – The burial of the upper foreshore (from industrial development) locked up coarse sand and gravel in the littoral system, preventing longshore transport of sediment.</u></p> <p><u>One area of exception on Point Wells is the natural beach within the southern half of Segment A. This natural sand flat and beach area would provide Low to Moderate sediment transport functions.</u></p>	<p><u>Low – The burial of the upper foreshore (from railroad construction) locked up coarse sand and gravel in the littoral system, preventing longshore transport of sediment. In addition, small stream mouth estuaries were buried by the railroad. Box culverts and pipes alter sediment dynamics at the mouths. The presence of residential bulkheads, some of which are below the mean high tide level, also interrupts longshore transport of</u></p>	<p><u>Low to Moderate – The area of undisturbed beach west of railroad at Richmond Beach Saltwater Park provides some sediment transport function. It is limited however by its short length (alongshore) and narrow width.</u></p>	<p><u>Low (similar to Segment B) Boeing Creek provides a localized fluvial sediment source, but this is limited to a small section of shoreline.</u></p>
<u>Attenuating wave energy</u>	<p><u>Low – With the exception of the southern portion, the shoreline is armored with riprap that likely increases wave energy, thus affecting</u></p>	<p><u>Low – The rock revetment of railroad and residential</u></p>	<p><u>Moderate – The widest area of undisturbed beach west of railroad serves to attenuate</u></p>	<p><u>Low (similar to Segment</u></p>

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<u>Function</u>	<u>Shoreline Planning Segments</u>			
	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Segments D & E</u>
	<u>beach sediment composition.</u>	<u>bulkheads may result in increased wave energy along the shoreline, possibly affecting beach sediment composition.</u>	<u>wave energy more than any other portion of the shoreline.</u>	
<u>Removing excessive nutrients and toxic compounds</u>	<u>Low - Loss of wetlands has reduced shoreline potential for the filtering and cycling of pollutants. Sources of pollutants have increased as a result of urban and land uses, and increased impervious surface within the drainage basins.</u>	<u>Low to Moderate - Barnacle Creek and associated forested wetland provide some filtering of pollutants. However, the wetland is narrow and east of the railroad grade.</u>	<u>Low (similar to Segment A)</u>	<u>Low to Moderate – similar to Segment A, the loss of wetland has decreased the shoreline's ability to perform water quality improvement functions. However, the intact portions of the Boeing Creek riparian corridor do provide filtering of pollutants</u>
<u>Recruitment of LWD and other organic material</u>	<u>Low – The industrial development of Point Wells removed sources of LWD and areas where driftwood could accumulate. The small area of undisturbed beach at the southern end of the Segment A provides a Low to Moderate function for recruitment of organic material.</u>	<u>Low (similar to Segment A) The presence of the railroad has resulted in beach narrowing and lowering, and thus decreased driftwood</u>	<u>Low to Moderate – The undisturbed beach at Richmond Beach Saltwater Park allows for some recruitment of organic material, but LWD is limited due to the railroad. In addition, the beach gradient is too steep to</u>	<u>generated upstream. Low (similar to Segment B)</u>

abundance on the

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<u>Function</u>	<u>Shoreline Planning Segments</u>			
	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Segments D & E</u>
		shore. Railroad maintenance includes physical removal of LWD from upstream sources and stream culverts under the railroad are too small to allow passage of woody debris.	have meaningful interaction between LWD and hydrology.	
<u>VEGETATION</u>				
<u>Temperature regulation</u>	<u>Low – Overhanging vegetation in the nearshore environment is absent from the shoreline due to industrial development.</u>	<u>Low (Similar to Segment A) Overhanging vegetation is separated from the nearshore due to existing development on the beach and to the railroad.</u>	<u>Low (Similar to Segment B) Some vegetation is present at Richmond Beach Park but there are few trees and little to no overhang of vegetation due to the railroad.</u>	<u>Low – The railroad separates steep slopes and historic bluffs from nearshore environment.</u>
<u>Attenuating wave energy</u>	<u>Low – Lack of marine riparian vegetation and large woody debris in the nearshore results in no attenuation of wave energy.</u>	<u>Low (similar to Segment A)</u>	<u>Low – Some vegetation is present at Richmond Beach Saltwater Park, but the beach gradient is too steep to allow this function to be</u>	<u>Low (similar to Segment A)</u>
<u>Sediment removal and</u>	<u>Low – Except for the southern portion of Segment A, no large woody debris</u>	<u>Low (similar to Segment</u>	<u>Medium – Scattered and narrow vegetation</u>	<u>Low (similar to Segment</u>

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<u>Function</u>	<u>Shoreline Planning Segments</u>			
	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Segments D & E</u>
<u>bank stabilization</u>	<u>or vegetation is present to stabilize or reduce erosion.</u>	<u>A)</u>	<u>provides some bank stabilization. Bank stabilization work has been conducted by the City in the southern portion of the segment.</u>	<u>A)</u>

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<u>Function</u>	<u>Shoreline Planning Segments</u>			
	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Segments D & E</u>
<u>Recruitment of LWD and other organic material</u>	<u>Low – Industrial development has removed all sources of organic material.</u>	<u>Low – Maintenance of the railroad results in complete interruption of LWD delivery and input from coastal bluffs. The absence of a back beach also significantly reduces accumulation of large wood on the beach.</u>	<u>Moderate – Driftwood is regularly burned by Park users. A small amount of vegetation west of the railroad is a source of organic material and a small amount of back beach is also present.</u>	<u>Low (similar to Segment B)</u>
<u>HABITAT</u>				
<u>Physical space and conditions for reproduction</u>	<u>Low to Moderate – Industrial development at Point Wells resulted in loss of historic sandspit and lagoon. Existing large pier and dock also reduces intertidal habitat. However, eelgrass is mapped off-shore which provides spawning habitat for forage fish. Shellfish beds are also documented in the southern portion of the segment.</u>	<u>Low to Moderate – Marine nearshore habitat for forage fish remains intact due to lack of overwater structures (piers and docks), but the railroad construction resulted in the loss of intertidal habitat (for beach spawning forage fish), longshore lagoon and small stream mouth estuaries.</u>	<u>Low to Moderate – Marine nearshore habitat for forage fish remains intact due to lack of overwater structures (piers and docks), but the railroad construction resulted in the loss of intertidal habitat (for beach spawning forage fish), longshore lagoon and small stream mouth estuaries. Similar to Segment A, eelgrass and shellfish beds are present. However, a sewer outfall is present that likely introduces</u>	<u>Low to Moderate – The sediment supplied at the mouth of Boeing Creek provides feeding, spawning and rearing habitat for several species of forage fish.</u>

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<u>Function</u>	<u>Shoreline Planning Segments</u>			
	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Segments D & E</u>
			nutrients and pollutants to the nearshore area potentially altering current cycles and food web interactions.	
<u>Resting and Foraging</u>	<u>Low to Moderate – Large pier shades nearshore habitat and limits the growth of vegetation. Industrial uses replace beach habitats. However, area of undisturbed beach provides habitat for shorebirds and has documented forage fish use.</u>	<u>Low – Residential land uses and bulkheads limit the use of nearshore habitat for resting and foraging.</u>	<u>Moderate – The lack of overwater structures (marinas, piers, etc.) allows the growth of nearshore vegetation that provides suitable habitat for juvenile salmonids. The absence of a back beach habitat and marine riparian vegetation results in no habitat for piscivorous birds, shorebirds and numerous other organisms.</u>	<u>Moderate - Similar to Segment C with the addition of dense eelgrass present to the north and south of Boeing Creek.</u>
<u>Migration</u>	<u>Low – The large pier at Point Wells may divert juvenile salmonids away from nearshore, resulting in increased predation.</u>	<u>Low – Bulkheads along the shoreline may divert juvenile salmonids away from nearshore, resulting in increased predation.</u>	<u>Moderate to High – No impediments to salmon migration are present.</u>	<u>Moderate to High (similar to Segment C)</u>

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<u>Function</u>	<u>Shoreline Planning Segments</u>			
	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Segments D & E</u>
<u>Food production and delivery</u>	<u>Low to Moderate – The disconnection of marine riparian vegetation from the nearshore has eliminated any biotic input or food for forage fish and salmon. Eelgrass beds are present off-shore.</u>	<u>Low – Residential land uses and bulkheads may disrupt biotic inputs from marine riparian vegetation. Eelgrass beds are present.</u>	<u>Low to Moderate – The small amount of vegetation at Richmond Beach Saltwater park likely supplies some biotic input, although small because only limited vegetation is present. Eelgrass beds are present off shore.</u>	<u>Low to Moderate – Similar to Segment A with the eelgrass beds that provide important food sources for forage fish and migrating salmonids.</u>

Programmatic Restoration Opportunities

Table 8 provides a summary of shoreline ecological functions for the Coastal/Nearshore Environment. Causes of impairment and the relative scale at which impairments are occurring (e.g., watershed, shoreline segment scale, or multiple scales) are identified. General or programmatic restoration opportunities to address impairments are described. Individual residential bulkheads and railroad riprap constitute existing and necessary protection from wave energy and therefore are not included in any Programmatic Restoration Opportunities.

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Table 8. Summary of Shoreline Functions and Programmatic Restoration Opportunities

<u>Condition and Causes of Impairment</u>	<u>Scale of Alterations and Impairment</u>	<u>Shoreline Ecological Functions Affected</u>	<u>Programmatic Restoration Opportunities</u>
<u>Bulkheads on shoreline deflect wave action and disrupt natural coastal processes. Bulkheads disrupt natural delivery of sediment to the coastal areas, as well as increase beach scouring and wave deflection.</u>	<u>Watershed and Reach scale</u>	<u>Hydrologic Sediment transport and deposition</u>	<u>Potential redevelopment of Point Wells is an opportunity to replace hard armoring with soft-shore.</u>
<u>Alteration to and development on feeder bluffs reduce the potential of these areas to provide sediment delivery to coastal zones, disrupting natural coastal beach accretion.</u>	<u>Watershed scale</u>	<u>Sediment delivery</u>	<u>No active feeder bluffs in City due to BNSF railroad. Removal of bulkheads in Point Wells may reestablish some sediment delivery processes. Culverts conveying surface water flow from streams continue to be an important source of sediment delivery. Replace stream culverts with larger box culverts or other fish-friendly structures.</u>

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<u>Condition and Causes of Impairment</u>	<u>Scale of Alterations and Impairment</u>	<u>Shoreline Ecological Functions Affected</u>	<u>Programmatic Restoration Opportunities</u>
<p><u>Wetlands adjacent to the Puget Sound coast are altered due to development and land use and can no longer provide essential storage, recharge, or water quality functions.</u></p>	<p><u>Watershed and Reach scale</u></p>	<p><u>Hydrologic</u> <u>Hyporheic</u> <u>Water quality</u></p>	<p><u>Target local coastal wetland restoration and mitigation so they provide storage, detention, and water quality functions and reconnect wetlands adjacent to Puget Sound coast such as Barnacle Creek wetlands. Protect intact wetlands along the Puget Sound coast such as those associated with Coyote</u></p>
<p><u>Riparian habitat along the coast has been impaired through land development and marine riparian vegetation is generally absent due to presence of the BNSF Railroad. Input of large wood from the bluffs is largely eliminated by BNSF railroad maintenance practices. The absence of a back beach significantly reduces accumulation of large wood on the beach.</u></p>	<p><u>Watershed and Reach scale</u></p>	<p><u>Riparian habitat structure</u></p>	<p><u>Creek</u> <u>Protect and restore tributaries to the Puget Sound which provide riparian habitat and deliver woody debris and sediment, such as Boeing Creek.</u></p>

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<u>Condition and Causes of Impairment</u>	<u>Scale of Alterations and Impairment</u>	<u>Shoreline Ecological Functions Affected</u>	<u>Programmatic Restoration Opportunities</u>
<u>Man-made debris and remnant structures in the coastal areas disrupt intertidal habitats and salmonid passage. Water quality in the nearshore environment is impaired due to remaining creosote pilings, runoff from creosote railroad ties, and other toxic debris and sewer outfalls. Sediment transport and accretion processes disrupted.</u>	<u>Watershed and Reach scale</u>	<u>Intertidal habitat Water quality</u>	<u>Target removal of abandoned man-made structures and dilapidated docks in Richmond Beach and Point Wells areas. Remove creosote pilings and debris at Point Wells, which harm intertidal habitats. Encourage BNSF to replace creosote railroad ties with non-toxic materials.</u>

Site-Specific Restoration Opportunities

A number of site-specific City and non-City projects that would occur in the City's shoreline jurisdiction are in various stages of planning, as summarized in Table 9 below. The City could explore working with applicants, resource agencies, and permitting agencies to ensure that components or mitigation measures associated with these projects are consistent with the City's shoreline management goals. Opportunities and projects identified in the table are described in more detail immediately following the table.

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*Table 9. Summary of Site-Specific
Opportunities and Projects for Public Access and Restoration*

<u>Segment</u>	<u>Existing Public Access</u>	<u>Public Access Opportunities</u>	<u>Public Access Projects</u>	<u>Site-Specific Restoration Opportunities</u>	<u>Site-Specific Restoration Projects</u>
<u>A</u>	<u>Point Wells Beach (informal and limited access) at the south end of segment</u>	<u>South Point Wells Habitat Restoration</u>	<u>None</u>	<u>Point Wells Complete Site Restoration Wells Habitat Restoration Wells Lagoon Creation Creek Wetland Construction</u>	<u>King County Brightwater Treatment Plant project at Point Wells site. Project includes restoration plantings.</u>
<u>B</u>	<u>Point Wells Beach (informal and limited access) at the north end of segment</u>	<u>None identified</u>	<u>Richmond Beach Pump Station Park includes interpretive watchtower</u>	<u>None identified</u>	<u>None proposed</u>
<u>C</u>	<u>Richmond Beach Saltwater Park</u>	<u>None identified</u>	<u>Public access improvements at Richmond Beach Saltwater Park</u>	<u>Restore and protect native marine riparian vegetation at Richmond Beach Saltwater Park, west of BNSF railroad tracks.</u>	<u>Master Plan for Richmond Beach Saltwater Park. The plan includes native plant restoration and slope stability</u>
<u>D</u>	<u>None</u>	<u>None identified</u>	<u>None proposed</u>	<u>None identified</u>	<u>efforts. None proposed</u>
<u>E</u>	<u>Innis Arden Reserve (limited access)</u>	<u>None identified</u>	<u>None proposed</u>	<u>Boeing Creek Enhancement</u>	<u>Boeing Creek Park and Underground Storage Pipe project</u>

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Segment A

Point Wells Restoration Opportunities

The Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan Volume II (WRIA, 2005) identifies many potential restoration and protection projects as part of their Tier 1 Initial Habitat Project List for nearshore/estuary Reaches 8-12 and Sub-reaches. Three specific projects were identified at Point Wells, which is within Reach 10.

Point Wells Complete Site Restoration: Restore the entire Point Wells site by completely removing the sea wall, riprap dike, and fill. Regrade the site and reconnect local freshwater sources to re-create a tidal lagoon system with an opening at the north end of the point, which was probably the original mouth of the tidal lagoon system. Reestablish native riparian and backshore vegetation. Project categorized as “high” for benefits to Chinook and “low” for feasibility.

South Point Wells Habitat Restoration: Enhance the south shoreline by removing riprap dike, eliminating invasive plants, and reestablishing native riparian and backshore vegetation. The south shoreline is approximately 800 feet long, has sandy substrate, supports some beach grass and other herbaceous vegetation, and includes a fair amount of large woody debris. The south shoreline, with its proximity to nearby residential areas, has potential value for public access. Project categorized as “high/medium” for benefits to Chinook and “medium/low” for feasibility.

South Point Wells Lagoon Creation: Creation of a three acre inter-tidal lagoon at the south end of the Point Wells site that may have historically been a marsh (before it was filled). The south shoreline is approximately 800 feet long, has sandy substrate, supports some beach grass and other herbaceous vegetation, and includes a fair amount of large woody debris. Project categorized as “high/medium” for benefits to Chinook and “medium/low” for feasibility.

Barnacle Creek Wetland Construction Opportunity

The Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan Volume II (WRIA, 2005) also identifies one specific project within the Barnacle Creek drainage. The project involves creation of tidally influenced wetland habitat on the east side of the BNSF railroad tracks at Barnacle Creek. Project categorized as “low” for both benefits to Chinook and feasibility.

Brightwater Treatment Plant Project at Point Wells

The KCDNRP WTD is currently constructing a regional wastewater treatment plant called Brightwater in unincorporated Snohomish County. A conveyance line from the treatment plant to the Point Wells site is currently being built in order to convey treated wastewater to Puget Sound. A marine outfall will be installed offshore of the Point Wells site, extending approximately one mile along the sea bottom of Puget Sound. Following construction, King County will landscape a portion of the Point Wells site with Puget Sound coastal grasses and enhance the shoreline buffer. Eelgrass removed from the

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outfall construction site will be replanted and monitored until 2019 to ensure effective recovery. The project is anticipated to be complete by the year 2010 (KCDNRP, WTD website, 2008).

Segment B

Richmond Beach Pump Station Park Project

A new park site is located in the Richmond Beach neighborhood at Richmond Beach Drive NW and NW 198th Street. The City obtained a 50-year recreation easement on a 2.3-acre parcel of land from King County as mitigation for impacts from the Brightwater Treatment Plant project. In the mitigation agreement between the City of Shoreline and King County, it was agreed that the County would provide \$750,000 of mitigation funding for City of Shoreline community improvements. Most of the mitigation funding has been designated for the creation of a new City park at the pump station site. This park is currently being called Richmond Beach Pump Station Park until it receives a new name following City and County naming policies. A 2005 Master Plan for the park includes a small parking area, restroom, interpretive watchtower overlooking the BNSF railroad and Puget Sound, and play areas. No shoreline access west of the BNSF railroad is proposed (City of Shoreline website, 2008).

Segment C

Richmond Beach Saltwater Park Project

The City's Master Plan for Richmond Beach Saltwater Park (City of Shoreline, 2007b) includes improvement of the park entrance and road; pedestrian sidewalks, stairs and trails; bridge access and safety; a new beach wash-down area; a new overlook parking area across from the caretaker's residence; a new mid-level terrace area with parking, picnic area and gathering space; and new entry, way-finding and interpretive educational signage. In addition, the plan includes selective site improvements and a program of restoration ecology to control erosion and eliminate invasive plant species in the Park and nearshore areas. Phase I improvements include slope stability efforts in specific areas that showed evidence of unstable soil conditions or erosion during geotechnical investigation. Improvements include controlling public access away from steep slope areas, improving access across steep slopes by constructing raised stairs and boardwalks in selected locations, and by implementing a community participation program of removing invasive plants and replacing them with native plant species tolerant of dry, sandy and gravelly soils. Future phases of the master plan propose beach and dune restoration.

Segment D

No site-specific projects or opportunities have been identified to provide public access or restore shoreline functions and processes. Opportunities in this segment are limited because properties along the shoreline are privately owned. There are also hazards along the shoreline including unstable slopes and landslide hazards.

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Segment E

Boeing Creek Park and Underground Storage Pipe Project

In October 2007, King County completed construction of a new 500,000-gallon underground storage pipe in Boeing Creek Park to temporarily store wastewater during large storms and help reduce overflows to Puget Sound. The pipe replaced an existing 24-inch sewer in Boeing Creek Park owned by the Ronald Wastewater District. The new sewer is 12 feet in diameter and about 640 feet long. The new underground storage pipe is conveying normal wastewater flows toward the Hidden Lake Pump Station. At the request of the City of Shoreline, King County also graded the existing stormwater facility in Boeing Creek Park. The County grading increased the capacity of the facility and stabilized the area. The City then followed with their own park improvement project in 2008. Improvements to the park include new on street parking, ADA pathway improvements, new picnic areas, benches, stormwater detention pond upgrades including a cascading stone water feature, irrigation, native plant landscaping, and trail improvements including improvements to the lower log crossing. The suspension foot bridge will not be part of these improvements as the December storm caused erosion damage to the creek banks including the proposed site for the bridge (City of Shoreline website, 2008).

Boeing Creek Enhancement

The *City of Shoreline Stream Inventory* (TT/KCM, 2004b) notes that the foremost option for recovery within the City is enhancement of the lowest reach of Boeing Creek. The key habitat enhancement activity is to reduce stormwater runoff from developed areas adjacent to Boeing Creek. By reducing stormwater runoff, landslides will occur at more natural levels and sediment loading in the stream will be reduced.

DATA GAPS

This shoreline inventory and characterization report relies on data described in each technical section. In some cases, data identified as needed for the analysis and characterization were not available for incorporation in this report. The 2003 Ecology Guidelines require that data gaps or missing information be identified during the preparation of the shoreline inventory and analysis. The following are considered data gaps at this time:

Aerial photographs used in this analysis are dated 2002. More recent aerial photographs are not currently available or have not been purchased by the City.

Impervious surface information used in this report has been approximated using aerial photographs. Additional information may exist that needs to be explored.

Data related to impacts to shoreline resources from the operation and maintenance of the BNSF railroad tracks is not available. Coordination with BNSF Railway is desired to achieve cooperation between City activities in the shoreline jurisdiction and BNSF operation and maintenance activities.

Tribal information on fisheries or other marine shoreline resources is currently lacking.

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Location of archaeological resources is unknown. Coordination with Native American tribal organizations would help to identify the probability or likelihood that intact archaeological resources may be present in the shoreline planning area.

SUMMARY

The City's shoreline jurisdiction includes approximately 4 miles of Puget Sound coastline within the city limits and in its PAA. Similar to other cities along the Puget Sound, existing development and infrastructure has affected the shoreline environment within the City of Shoreline. Ecosystem-wide processes and ecological functions that have been altered in the marine shoreline include sediment processes, large woody and organic debris recruitment and transport, water quality, riparian vegetation and habitat conditions.

Shoreline armoring to protect the BNSF railroad has most severely altered sediment processes in the City. Sediment delivery is limited to several streams that deliver sediment via culverts under the railroad right-of-way. Forage fish spawning still occurs at these limited points of sediment input (e.g. Boeing Creek) (Daley, 2004). In the Richmond Beach neighborhood, sediment processes have been altered by armoring to protect residential development in several areas, but still provide important habitat and sediment functions.

Clearing of riparian vegetation along the marine shoreline for the BNSF Railway construction and maintenance, and other shoreline armoring has resulted in a lack of large woody and organic debris available for recruitment to the system. The lack of debris in turn affects the stability of the beaches as the presence of beach logs and debris can reduce erosion by dissipating wave energy and trapping sediment.

Restoration and preservation activities that could improve ecological functions and ecosystem wide processes in the marine shoreline include: reduction of stormwater runoff to landslide-prone areas; revegetation of riparian areas to provide shade to cool water temperatures, filter run-off and to provide a source of large woody debris and organic materials; limiting shoreline armoring to allow for continued sediment delivery and to protect nearshore habitat; and improvements to water quality in adjacent upland areas.

Table 10 below summarizes the shoreline characterization for each planning segment. The segments are shown on Map 1. Overall, the Puget Sound shoreline in the City of Shoreline is uniform in its development pattern and biological diversity. The BNSF railroad extends the length of the shoreline. Segment breaks were primarily associated with changes in land use. Point Wells, located in the city's PAA, is the only industrial facility along the shoreline, contrasting with the residential nature of the city's shoreline. South of Point Wells, land use breaks along segment boundaries are primarily associated with varying densities of residential development, and parks and open space resources such as Richmond Beach Saltwater Park and Innis Arden Reserve. While Richmond Beach Saltwater Park provides recreational facilities and access to the Puget Sound shoreline, access at other open space and park resources are limited. Shoreline modifications associated with the railroad and residential development are found

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throughout the majority the city's shoreline planning area, with the largest contiguous unmodified portion occurring at Richmond Beach Saltwater Park.

Biological resources and potential habitat areas along the Puget Sound shoreline are largely uniform throughout the city. Less developed areas along the shoreline such as Innis Arden Reserve and Boeing Creek Reserve offer greater habitat potential for wildlife. Areas regulated as critical areas are found throughout the shoreline planning area, primarily comprised of inter-tidal wetlands, streams discharging to Puget Sound, seismic hazards, flood hazards and landslide hazard areas associated with bluffs. Critical areas are listed in Table 10 under Hazard Areas and Habitat / Habitat Potential. Streams discharging to Puget Sound, many of which pass through culverts under the railroad, are listed under Stormwater Outfalls / Stream Discharges.

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Table 10. Shoreline Segment Summary Matrix, City of Shoreline

<u>Shoreline Segment</u>	<u>Land Use / Transportation</u>	<u>Stormwater Outfalls / Stream Discharges</u>	<u>Public Shoreline Access</u>	<u>Hazard Areas</u>	<u>Habitat / Habitat Potential</u>
<u>A</u>	<u>Petroleum Facility</u> <u>King County Right-of-Way (ROW)</u>	<u>Coyote Creek</u> <u>stormwater and groundwater remediation outfall near south end of</u>	<u>Point Wells Beach (informal and limited access) at the south end of</u>	<u>Soil, Groundwater and Surface Water Contamination</u> <u>Seismic Hazard Areas</u>	<u>Wetlands</u> <u>Fish and Wildlife Areas (Forage Fish, Salmonids, shorebirds and piscivorous birds, shellfish, eelgrass and kelp)</u>
<u>B</u>	<u>Single Family Residential</u> <u>BNSF Railway ROW Utility</u> <u>Vacant</u>	<u>Richmond Beach dock</u> <u>Wastewater Pump Station emergency overflow outfall;</u> <u>Stream Outfalls:</u>	<u>None</u>	<u>Flood Hazard Areas</u> <u>Seismic Hazard Areas</u> <u>Landslide Hazard Areas</u>	<u>Wetlands</u> <u>Fish & Wildlife Areas (Forage Fish, Salmonids, Banks/Bluffs, shorebirds and piscivorous birds, shellfish, eelgrass and kelp)</u>
<u>C</u>	<u>BNSF Railway ROW Park</u> <u>Single-Family Residential</u>	<u>Paradise Creek</u>	<u>Richmond Beach Saltwater Park</u>	<u>Flood Hazard Areas</u> <u>Seismic Hazard Areas</u> <u>Landslide Hazard Areas</u>	<u>Wetlands</u> <u>Fish & Wildlife Areas (Forage Fish, Salmonids, Banks/Bluffs, shorebirds and piscivorous birds, shellfish, eelgrass and kelp)</u>
<u>D</u>	<u>Single-Family Residential</u> <u>BNSF Railway ROW</u>	<u>Stream Outfalls: Storm and Blue Heron Creeks</u>	<u>None</u>	<u>Flood Hazard Areas</u> <u>Seismic Hazard Areas</u> <u>Landslide Hazard Areas</u>	<u>Wetlands</u> <u>Fish & Wildlife Areas (Salmonids, shorebirds and piscivorous birds, shellfish, eelgrass and kelp)</u>
<u>E</u>	<u>BNSF Railway ROW</u> <u>Single-Family Residential</u> <u>Open Space</u> <u>Vacant</u>	<u>Stream Outfalls: Coyote, Boeing, and Highlands Creeks</u>	<u>Innis Arden Reserve (limited access)</u>	<u>Flood Hazard Areas</u> <u>Seismic Hazard Areas</u> <u>Landslide Hazard Areas</u>	<u>Wetlands</u> <u>Fish & Wildlife Areas (Forage Fish: Boeing Creek Mouth, Salmonids, shorebirds and piscivorous birds, shellfish, eelgrass and kelp)</u>

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CUMULATIVE IMPACTS ASSESSMENT



5309 Shilshole Avenue
NW Suite 200
Seattle, WA 98107
206.789.9658 [phone](tel:2067899658)
206.789.9684 [fax](tel:2067899684)

www.adolfson.com

memorandum

date February 22, 2012, revised March 1, 2012

to Miranda Redinger, City of Shoreline Reema

from Shakra and Teresa Vanderburg, ESA

subject **City of Shoreline, Shoreline Master Program Update –Draft Cumulative Impacts Analysis**

The purpose of this memo is to assess the cumulative impacts of reasonably foreseeable future development in the shoreline that would result from development and activities over time under the proposed City of Shoreline SMP required by WAC 173-26-186(8)(d). This memorandum was first prepared in November 2010 based on the October 2010 Draft SMP. In February 2012, the memorandum was updated to reflect the changes since made to the SMP, and is based upon the February 2012 SMP (received by ESA on February 21, 2012). Minor revisions were made on March 1, 2012. This memorandum is intended to support the environmental review of the proposed SMP amendments under the State Environmental Policy Act (SEPA).

For the City of Shoreline, shorelines of the state in the city limits and potential annexation area (PAA) include approximately 5 miles of the Puget Sound shoreline.

The purpose of evaluating cumulative impacts is to insure that, when implemented over time, the proposed SMP goals, policies and regulations will achieve no net loss of shoreline ecological functions from current “baseline” conditions. Baseline conditions are identified and described in the City of Shoreline Inventory and Characterization Report (ESA Adolfson, 2008). The proposed Shoreline SMP provides standards and procedures to evaluate individual uses or developments for their potential to impact shoreline resources on a case-by-case basis through the permitting process. The purpose of this memorandum is to determine if impacts to shoreline ecological functions are likely to result from the aggregate of activities and developments in the shoreline that take place over time under the updated SMP.

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

- Current circumstances affecting the shorelines and relevant natural processes;
- Reasonably foreseeable future development and use of the shoreline; and
- Beneficial effects of any established regulatory programs under other local, state, and federal laws.”¹

This cumulative impacts assessment uses these three considerations as a framework for evaluating the potential long-term impacts on shoreline ecological functions and processes that may result from development or activities under the proposed SMP over time.

Current Circumstances

The City prepared the first draft of the shoreline inventory and characterization report in 2004. As part of the City’s current comprehensive SMP update process, the report and map folio were updated in the fall of 2008. The report was revised in December 2008 to address technical review comments and November 2009 and April 2010 to incorporate public review comments. The Shoreline Inventory and Characterization (ESA Adolfson, 2008) identifies existing conditions and evaluates the ecological functions and processes in the City’s shoreline jurisdiction. The inventory included all shoreline areas within the City and its Potential Annexation Area (PAA) and included a characterization of ecosystem processes functioning at a watershed scale. “Shoreline planning area” is a term used in this tech memo to refer to the approximate area within the City’s shoreline jurisdiction, or areas subject to SMP regulations.

For the purposes of the Inventory and Characterization Report, the Puget Sound shoreline was addressed in five shoreline planning segments, as shown on Map 1, and described below in Table 1. Reach breaks were assigned based upon land uses and existing shoreline conditions as described in the inventory report. The most dominant in the shoreline is the Burlington Northern Santa Fe (BNSF) right-of-way, which extends in a north-south direction along the entire length of the shoreline area within city limits. The remaining portions of the shoreline planning area are occupied by industrial uses, residential uses, and parks and open space. Approximately 97 percent of the City’s shoreline adjacent to Puget Sound is modified with riprap and bulkheads (WDNR, 2001). The majority of this armoring is associated with the BNSF railroad bed.

Table 11. Shoreline Planning Segments

<u>Shoreline Segment</u>	<u>Approximate Length (feet)</u>	<u>Approximate Segment Acreage</u>	<u>General Boundaries</u>
<u>A</u>	<u>3,411</u>	<u>15.6</u>	<u>Potential Annexation Area / Point Wells: located directly north of the city limits in unincorporated Snohomish County.</u>
<u>B</u>	<u>4,724</u>	<u>21.7</u>	<u>Richmond Beach residential area: the Snohomish County line south to Richmond Beach Saltwater Park.</u>
<u>C</u>	<u>2,801</u>	<u>11.0</u>	<u>Richmond Beach Saltwater Park south to Storm Creek culvert.</u>
<u>D</u>	<u>1,295</u>	<u>5.7</u>	<u>Innis Arden residential area: south of Richmond Beach Saltwater Park to Innis Arden Reserve Park.</u>
<u>E</u>	<u>9,424</u>	<u>41.6</u>	<u>Innis Arden Reserve / Highlands: Innis Arden Reserve Park south to city limits.</u>

Source: City of Shoreline, 2002

¹ WAC 173-26-286(8)(d)

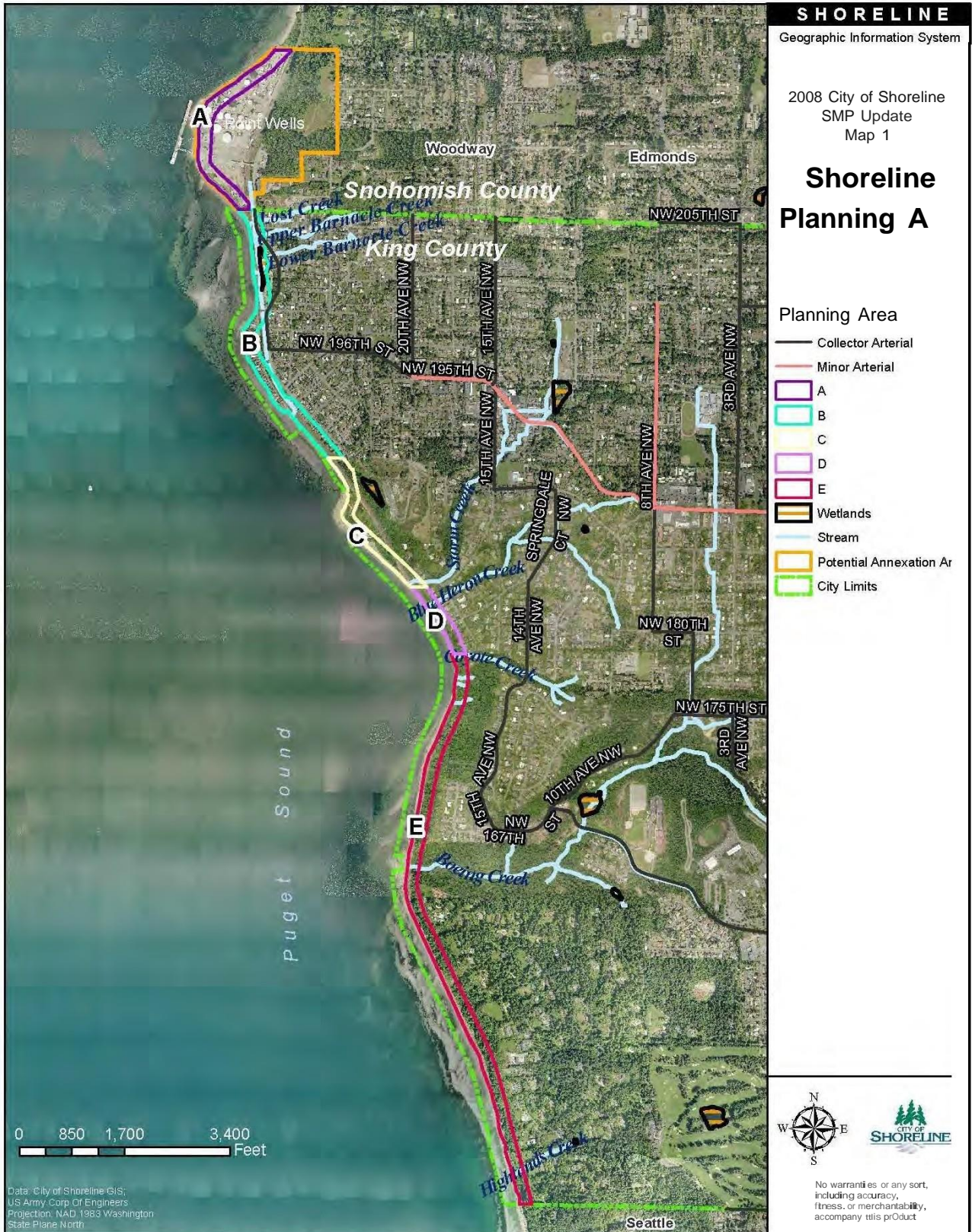
² Shoreline segments were developed in 2004 as part of the first draft inventory and characterization report. The shoreline segments were developed for the sole purpose of describing areas along the shoreline. Segments were created based on physical distinction along the shoreline, the level of ecological functions provided by each segment, as well as existing land

¹ WAC 173-26-286(8)(d)

uses and zoning. Shoreline segments should not be confused with shoreline environment designations. Shoreline environment designations were developed after the inventory and characterization report was completed. Environment designations are analogous to zoning designations and are incorporated directly into the City's Draft Shoreline Master Program. In the City's Draft Shoreline Master Program, there are 6 environment designations and each one has a distinct purpose statement and specific uses and modifications that are permitted, conditionally permitted or prohibited. Regulations specific to each environment designation are included as well.

The following sections further summarize baseline conditions, or current circumstances, with regard to the City's Puget Sound shoreline.

Map 1. Shoreline Planning Area



Physical and Coastal Processes

Puget Sound beach morphology and composition is dependent upon three main influences: wave energy, sediment sources, and relative position of the beach within a littoral cell. Wave energy is controlled by fetch, the open water over which winds blow without any interference from land. Wind-generated wave action gradually erodes beaches and the toe of coastal bluffs, leading to landslides. These coastal bluffs are the primary source of sediment for most Puget Sound beaches. In the city, coastal bluffs are separated from the shoreline by the BNSF Railway, thus completely removing bluff sediment sources. Although riparian vegetation is located along portions of the shoreline, the shore modifications associated with the BNSF Railway and BNSF maintenance activities prevent recruitment of large woody debris to the shoreline. These shore modifications also preclude net shore-drift along the Puget Sound. A small amount of sediment is delivered by fluvial sources (streams) in the city, although this process is also impaired by culvert systems and the BNSF Railway. Construction of the railroad buried much of upper foreshore beach, thereby locking up coarse sand and gravel in the littoral system. This limits or precludes longshore transport of sediment.

Shoreline Modifications

Approximately 97 percent of the City's shoreline adjacent to Puget Sound is modified with riprap and bulkheads (WDNR, 2001). The majority of this armoring is associated with the BNSF railroad bed. As a result, sediment delivery from upslope sources is limited to several streams that deliver sediment via culverts under the railroad ROW. Forage fish spawning still occurs at these limited points of sediment input.

There are no docks, piers, or over-water structures along Puget Sound within the City limits. However, within the PAA, Point Wells contains a large industrial dock used for both import and export of materials to and from the facility. Construction of the King County Wastewater Treatment Brightwater Conveyance pipeline and marine outfall project is currently underway at the Point Wells site.

Clearing of riparian vegetation along the marine shoreline for the BNSF Railway construction and maintenance, residential uses, bulkheads and other shoreline armoring has resulted in a lack of large woody and organic debris available for recruitment to the marine system. The lack of debris in turn affects the stability of the beaches as the presence of beach logs and debris can reduce erosion by dissipating wave energy and trapping sediment. Large woody debris also provides thermoregulation of sediment for spawning forage fish and detritus recruitment.

Habitat and Species

The Puget Sound nearshore environment is a highly productive zone that provides habitat for a variety of aquatic and terrestrial species. The "nearshore" is generally considered to be an area extending from a point underwater where light penetrates to the bottom (the "littoral zone"), across the intertidal zone and beach, up to the top of marine bluffs. Important documented features of the nearshore that provide habitat include:

- Banks, bluffs, beaches and backshore (sediment sources, substrate, and storm berms);
- Tidal flats (intertidal or shallow subtidal areas used by juvenile salmonids, shorebirds, and shellfish);
- Eelgrass meadows and kelp forests (feeding and rearing habitat for wide variety of marine organisms); and
- Stream mouths and pocket estuaries (fish and wildlife corridors and source of fluvial sediment to nearshore).

Within the City's shoreline planning area, there are seven streams that feed into the Puget Sound. Segment A has an unnamed tributary of Barnacle Creek that is located east of the BNSF railroad and south of Point Wells. It travels south where it connects to Barnacle Creek in Segment B. Lost Creek is located north of the city limits

in the Town of Woodway. It flows southwest both in piped and open water sections towards Puget Sound. It appears to connect to Barnacle Creek before discharging into Puget Sound in Segment B. Barnacle Creek is formed by the confluence of Upper Barnacle Creek and Lower Barnacle Creek and discharges to Puget Sound in Segment B. A palustrine forested wetland, less than one acre in size, is associated with Barnacle Creek. Storm Creek and Blue Heron Creek discharge to Puget Sound in Segment D. Coyote Creek, Boeing Creek, and Highlands Creek discharge to Puget Sound in Segment E. A scrub/shrub wetland is associated with Coyote Creek.

Aquatic and terrestrial species found in or near the City of Shoreline that utilize the nearshore or deep waters of Puget Sound include:

- Shellfish (clams, mussels, and crab);
- Salmonids (including listed species such as Chinook and bull trout);
- Forage fish (surf smelt, sand lance, and Pacific herring); and
- Shorebirds and waterbirds.

Land Use and Public Access

The BNSF Railway right-of-way (ROW) extends in a north-south direction along the entire length of the City's shoreline planning area. It is the most dominant land use in the shoreline, occupying 48 percent of the total shoreline planning area. Residential development occupies approximately 19 percent of the total shoreline planning area while Point Wells (in the PAA), the only industrial property located along the Puget Sound shoreline, occupies approximately 20 percent. The remaining land uses are parks and open space (8 percent) and vacant properties (2 percent).

Public access opportunity is provided at Richmond Beach Saltwater Park in Segment C. It is a regional 40-acre park that provides active and passive uses including picnic areas, shelter buildings, a playground area, observation areas, trails, and Puget Sound shoreline access. Kayu Kayu Ac Park, in Segment B, is a 2-acre city park recently opened near Richmond Beach Pump Station; this provides shoreline views. Innis Arden Reserve is a 23-acre natural open space area/greenway passive-use park located in Segment E along the bluffs overlooking Puget Sound. Hiking/walking trails represent the main activity of this passive-use reserve. Although trails eventually lead to the shoreline, the public has to cross the BNSF railroad tracks and riprap to reach the Puget Sound shoreline. Blue Heron Reserve (Segment C) and Coyote Reserve (Segment D) are privately owned tracts that are associated with Blue Heron Creek and Coyote Creek, respectively. No public shoreline access is permitted along these tracts. Boeing Creek Reserve is a private 4-acre natural area associated with Boeing Creek located along the Puget Sound shoreline in Segment E. It is preserved as private open space. No public shoreline access is permitted from this reserve along the bluff.

Reasonably Foreseeable Future Development and Use

Substantial development or redevelopment within the City's shoreline planning area is unlikely. However, limited development may occur on vacant parcels, residential parcels with potential for redevelopment and residential parcels that can be subdivided. Such parcels occupy 16.5 acres (17 percent) of the City's shoreline planning area. A majority of these properties is located in Segments B and E and is discussed in more detail below. Houses on existing single-family lots are also expected to grow larger through additions up to the maximum allowed building envelope under the zoning, SMP and CAO regulations and contingent upon receiving required City permit approvals. However, existing residential development along 27th Avenue NW are constrained by zoning and CAO regulations, making expansion of existing building footprints less likely.

Point Wells is the only commercial property that may have a major redevelopment. It is unknown if the redevelopment would take place under Snohomish County's, Woodway's or Shoreline's jurisdiction.

There are several factors which will inhibit major new development along the Puget Sound shoreline. One is the BNSF Railway which occupies 48 percent of the city's shoreline planning area, extending in a north-south direction along the entire length of the shoreline. This limits development potential because vehicular access across the BNSF tracks is limited. The City has received no indication that BNSF would sell their ROW property or provide new road crossings of the tracks. A second factor that contributes to limiting development is steep slopes and landslide hazard areas located throughout portions of Segments B - E.

Vacant Parcels

In order to evaluate the potential for shoreline development in the reasonably foreseeable future, King County Assessor records (2007) were examined to identify parcels classified as "vacant" that are located within the shoreline jurisdiction. While the term "vacant" may not always accurately reflect current conditions (such as protected open space, steep slopes, wetlands, or other lands with development restrictions), the classification generally indicates that no structural improvements have been made or assessed for taxes on the property. Depending on the land use and zoning designations, these areas may be subject to new development in the future.

Vacant parcels occupy only 2 percent of the City's shoreline planning area (including the PAA) and account for a total of 1.5 acres. The vacant properties are located in Segments B and E. This percentage value does not include BNSF property or City-owned right-of-way. Development of vacant lands is therefore not anticipated to cause a significant change in the existing condition of the City's shorelines.

Redevelopment Potential

In addition to the potential for development on vacant parcels, there is potential for underutilized lots along the Puget Sound to redevelop. For the purposes of this Cumulative Impacts Assessment, we based redevelopment potential on the assumption that parcels in a single-family zone (R-4 and R-6) with a land value assessed by King County at 50% or higher than building value are likely to redevelop some time in the future. Based on this assumption, 22 parcels of the City's shoreline planning area have the potential to redevelop. All 22 parcels are located in Segment B and account for a total of 3 acres or 3 percent of the City's shoreline planning area.

The only major commercial property that is likely to redevelop is Point Wells. Snohomish County, in response to a petition from the Point Wells property owner, changed the Comprehensive Plan designation and zoning designation of Point Wells from Urban Industrial to Urban Center. Urban Center allows for a mix of high-density residential, office and retail uses. The City of Shoreline has a Comprehensive Plan designation of Mixed Use, which is intended to encourage the development of pedestrian oriented places, with architectural interest,

that integrate a wide variety of retail, office and service uses with residential uses. It seems likely that the property would redevelop based on the recent changes to the County's designations. However, the property would need to be remediated to address soil and groundwater contamination. Vehicular access to the property is severely limited and poses considerable challenges to developing high-intensity land uses.

Subdivision Potential

A third approach to determining potential development along the Puget Sound was to determine whether there are residential parcels that have the potential for subdividing. We based subdivision potential on the assumption that parcels in single-family zone (R-4 and R-6) that are at least 2 times larger than the minimum lot size allowed in the zone are likely to subdivide sometime in the future. Fifty-three parcels have the potential to subdivide, 9 of which are located in Segment B, 5 in Segment C, 12 in Segment D, and 27 in Segment E. The total acreage amount within the City's shoreline planning area is 12 acres or 12 percent of the City's shoreline planning area.

Changes to Shoreline Environment Designations

SMPs establish a system of "shoreline environment designations" that provide a uniform basis for applying policies and use regulations within distinctly different shoreline areas. Shoreline environment designations function like zoning overlays. That is, they do not replace the underlying zoning regulations for density, setbacks, etc., but they may impose additional development standards or regulations for portions of property within the shoreline jurisdiction. Generally, environment designations are based on existing and planned development patterns, biological and physical capabilities and limitations of the shoreline, and a community's vision or objectives for its future development.

When the City of Shoreline incorporated in 1995, it adopted regulations outlined in Title 25 (Shoreline Management Plan) of the King County Code as the interim shoreline management code (Shoreline Municipal Code [SMC] 16.10). Three shoreline environment designations are established in the King County Shoreline Management Master Program and were applied to the City's shorelines:

1. Urban,
2. Rural, and
3. Conservancy

Since the City's Potential Annexation Area is located in Snohomish County, the shoreline environment designation that currently applies to Point Wells is Urban.

The proposed SMP environment designations per the October 2010 Draft SMP include the following:

- "Point Wells Urban" environment to accommodate higher density uses while protecting existing ecological functions and restoring ecological functions that have been degraded.
- "Point Wells Urban Conservancy" environment to provide a specific designation unique to an industrial use or mix of uses that can be developed.
- "Urban Conservancy" environment to protect and restore relatively undeveloped or unaltered shorelines to maintain open space, floodplains or habitat, while allowing a variety of compatible uses.
- "Waterfront Residential" environment to distinguish between the residential portions of the coastline where natural and manmade features preclude building within the shoreline jurisdiction and the section

along 27th Avenue NW where residential structures lie westerly of the BNSF railroad ROW and directly about the Puget Sound.

- “Shoreline Residential” environment to accommodate residential development and accessory structures that are consistent with the City’s Shoreline Master Program.
- “Aquatic” environment to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.

The proposed environment designations are consistent with both the existing land use pattern and Comprehensive Plan future land use designations.

Changes to Development Standards and Use Regulations

The proposed SMP offers several changes to the development regulations that encourage shoreline conservation and prohibit activities that would cause adverse impact to shoreline functions and processes. Many of these changes deal with shoreline modification such as bulkheads and riprap revetments along much of the City’s shoreline. These shoreline modifications have significantly altered the natural net-shore drift direction and the availability and local distribution of beach sediment. Other changes related to specific uses in the shoreline are also designed to protect shoreline ecological functions and processes, while continuing to allow legal uses, public access, and appropriate development.

This section describes in general terms how the proposed SMP protects shoreline functions and processes to achieve no net loss. Appendix A cites specific provisions in the proposed SMP (City of Shoreline, 2010) and Draft Restoration Plan (ESA Adolfson, 2009) that serve to protect and enhance shoreline ecological functions. For each proposed shoreline environment designation, Appendix A provides the current conditions, likely future changes, potentially impacted shoreline processes and functions, effects of proposed SMP provisions, existing regulatory controls, and an assessment of expected future performance.

The proposed SMP offers several changes to the development regulations that encourage shoreline conservation and prohibit activities that would cause adverse impact to shoreline functions and processes. One of the most significant changes is the application of a vegetation conservation area on the Puget Sound and accompanying requirements for vegetation enhancement. Most of the City’s Puget Sound shoreline was developed under King County development standards prior to city incorporation. Puget Sound is not considered a critical area under the City’s Critical Areas Ordinance (Shoreline Municipal Code Chapter 20.80) and did not have buffer standards or requirements. Current King County standards require a 25-foot setback from the ordinary high water mark (OHWM) for single-family development in Urban and Rural environments and a 50-foot setback from the OHWM in the Conservancy environment. The proposed SMP standards and regulations would establish a 20-150 foot vegetation conservation area. Only 9 percent of the total linear length of the City’s Puget Sound shoreline would be regulated with a 20-foot vegetation conservation area. The northern portion of the PAA would be regulated with a 50-foot vegetation conservation area (with accompanying restoration). The remainder of the City’s shoreline will be classified as Shoreline Residential and Urban Conservancy with a 115 to 150 foot vegetation conservation area. Extensive land disturbing activities that require a permit are required to implement a plan that involves revegetation (See 20.230.200.B.4 of Draft SMP).

Regulation of shoreline modifications, such as bulkheads and riprap revetments, will be updated as well. New development and land divisions would be required to be located and designed to avoid the need for shoreline stabilization measures. Further, the conservation of shoreline vegetation has been emphasized in the new shoreline regulations for the City to further stabilize shorelands and increase habitat functions. Updated policies

and development standards establish a preference for alternative “soft-shore” erosion control or stabilization designs. In most cases, project applicants would be required to demonstrate why a “soft-shore” design would not provide adequate protection of existing development. Over time these changes will likely have a net beneficial effect on shoreline ecological processes as properties are redeveloped.

The proposed changes to development standards and use regulations are, in general, more protective than the existing SMP. New development would be required to meet standards contained in the CAO and meet the policy intent and development standards of the SMP. As redevelopment occurs, the policies and regulations in the SMP require that development be located and designed in a manner that avoids impacts to ecological functions and/or enhances functions where they have been degraded. For example, the vegetation conservation measures may require that, as part of a redevelopment proposal, non-native or invasive species be replaced with native vegetation.

Changes to the Treatment of Non-conforming Uses

Much of the development in the City of Shoreline along the Puget Sound predates incorporation of the City in 1995. Several properties and developments in the City’s shoreline do not conform to current zoning or SMP regulations. The proposed SMP includes regulations that are designed to increase protection of shoreline resources over time by prohibiting redevelopment that would result in a greater degree of non-conformity for existing development.

Under the proposed SMP the following standards apply:

- Structures that were legally established and are used for a conforming use, but which now do not conform with regard to setbacks, buffers or yards, area, bulk, height, or density may continue as long as they do not increase the extent of non-conformity by further encroaching upon or extending into areas where construction or use would not be allowed for new development or uses.
- Uses and developments that were legally established and are nonconforming with regard to the use regulations of the SMP may continue as legal nonconforming uses. Such uses cannot be enlarged or expanded without an approved conditional use permit, except that nonconforming single-family residences that are located landward of the OHWM may be enlarged or expanded in conformance with applicable bulk and dimensional standards by the addition of space to the main structure or by the addition of normal appurtenances.
- Structures that are or have been used for non-conforming uses may be used for a different non-conforming use but only upon the approval of a Shoreline Conditional Use permit.
- If a non-conforming use is discontinued or abandoned for twelve (12) consecutive months the non-conforming rights expire and any subsequent use must comply with the SMP.

Restoration Planning

The draft SMP Restoration Plan (ESA Adolfson, 2009) represents the shoreline restoration element of the SMP. The plan identifies opportunities for restoration activities or efforts that include programmatic opportunities (e.g., investigate a beach nourishment program; reduce overwater structures; protect remaining riparian marine vegetation), site-specific opportunities (such as replacing Boeing Creek culvert with a larger box culvert), regional plans and policies for Puget Sound restoration, and potential funding and partnership opportunities. The SMP’s restoration planning is focused on areas where shoreline functions have been degraded by past development activities. The areas with impaired functions were identified in the City’s Shoreline Inventory and Characterization. Recognizing that much impairment to shoreline processes and functions are the result of the

railroad tracks along the coast and armoring associated with single-family residences along 27th Avenue NW (both of which are assumed to remain), the implementation of the Restoration Plan will improve shoreline ecological functions incrementally over time.

Beneficial Effects of Any Established Regulatory Programs Under Other Local, State, and Federal Laws

A variety of other regulatory programs, plans, and policies work in concert with the City's SMP to manage shoreline resources and regulate development near the shoreline. The City's Comprehensive Plan establishes the general land use pattern and vision of growth and development the City has adopted for areas both inside and outside the shoreline jurisdiction. Various sections of the Shoreline Municipal Code (SMC) are relevant to shoreline management, such as zoning (SMC Chapter 20.40), stormwater management (SMC Chapter 13.10), and flood damage prevention (SMC 16.12). The City's development standards and use regulations for environmentally critical areas (SMC Chapter 20.80) are particularly relevant to the City's SMP. Designated environmentally critical areas are found throughout the City's shoreline jurisdiction, including geologic hazard areas, wetlands, flood hazard areas, and streams areas. Standards and regulations in the critical areas regulations have been adopted by reference in the proposed SMP.

A number of state and federal agencies may have jurisdiction over land or natural elements in the City's shoreline jurisdiction. Local development proposals most commonly trigger requirements for state or federal permits when they impact wetlands or streams; potentially affect fish and wildlife listed under the federal Endangered Species Act (ESA); result in over one acre of clearing and grading; or affect the floodplain or floodway. As with local requirements, state and federal regulations may apply throughout the city, but regulated resources are common within the City's shoreline jurisdiction. The state and federal regulations affecting shoreline-related resources include, but are not limited to:

Endangered Species Act (ESA): The federal ESA addresses the protection and recovery of federally listed species. The ESA is jointly administered by the National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly referred to as the National Marine Fisheries Service), and the United States Fish and Wildlife Service (USFWS).

Clean Water Act (CWA): The federal CWA requires states to set standards for the protection of water quality for various parameters, and it regulates excavation and dredging in waters of the U.S., including wetlands. Certain activities (i.e., fill or dredge) affecting wetlands in the City's shoreline jurisdiction or work waterward of the ordinary high water mark in the Puget Sound or streams may require a permit from the U.S. Army Corps of Engineers and/or Washington State Department of Ecology under Section 404 and Section 401 of the CWA, respectively.

Hydraulic Project Approval (HPA): The Washington Department of Fish and Wildlife (WDFW) regulates activities that use, divert, obstruct, or change the natural flow of the beds or banks of waters of the state and may affect fish habitat. Projects in the shoreline jurisdiction requiring construction below the ordinary high water mark of Puget Sound or streams in the city could require an HPA from WDFW. Projects creating new impervious surface that could substantially increase stormwater runoff to waters of the state may also require approval.

National Pollutant Discharge Elimination System (NPDES): Ecology regulates activities that result in wastewater discharges to surface water from industrial facilities or municipal wastewater treatment plants. NPDES permits are also required for stormwater discharges from industrial facilities, construction sites of one or more acres, and

municipal stormwater systems that serve census-defined Urbanized Areas, which include any urbanized areas with more than 50,000 people and densities greater than 1,000 people per square mile.

Conclusion

This draft cumulative impacts analysis is based upon the Draft Shoreline SMP dated February 2012 (received by ESA on February 21, 2012). The City of Shoreline's Puget Sound coastline is largely developed. There are nearly no major opportunities for new development within the shoreline jurisdiction in the City limits. Therefore, change within the shoreline will primarily be the result of redevelopment activities with the Point Wells site expected to be the most extensive. The system of shoreline environment designations and use regulations in the proposed SMP is consistent with the established land use pattern, as well as the land use vision planned for in the City's comprehensive plan, zoning, and other long-range planning documents. Based on this consistency, it is unlikely that substantial changes in shoreline land uses will occur within the City limits in the future. However, should the Point Wells site be annexed into the City of Shoreline, substantial changes in shoreline land use could occur on this specific site.

The proposed SMP provides a new system of shoreline environment designations that establishes more uniform management of the City's shoreline. The updated development standards and regulation of shoreline modifications provides more protection for shoreline processes. The updated standards and regulations are more restrictive of activities that would result in adverse impacts to the shoreline environment. The restoration planning effort outlined in the proposed SMP provides the City with opportunities to improve or restore ecological functions that have been impaired as a result of past development activities. In addition, the proposed SMP is meant to compliment several city, state and federal efforts to protect shoreline functions and values.

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

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

Changes in subsequent drafts of the SMP may result in a need for revisions to the cumulative impact analysis.

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General Cumulative Impact Analysis

Shoreline Segment & Existing	Likely Future Development	Functions or Processes Potentially Impacted	Effects of SMP Provisions	Effect of Other Development and Restoration Activities / Programs	Net Effect
Point Wells Urban					
<p><u>Includes the northern portion of Segment A</u> <u>This area is in the City's Potential Annexation Area (PAA) and includes the Point Wells industrial port, a petroleum products storage, processing and distribution site.</u></p>	<p><u>Snohomish County, in response to a petition from the Point Wells property owner, changed the Comprehensive Plan designation and zoning designation of Point Wells from Urban Industrial to Urban Center. Urban Center allows for a mix of high-density residential, office and retail uses. The City of Shoreline has a Comprehensive Plan designation of Mixed Use, which is intended to encourage the development of pedestrian oriented places, with architectural interest, that integrate a wide variety of retail, office and service uses with residential uses. It seems likely that the property would redevelop based on the recent changes to designations.</u></p>	<p><u>Segment A: The portion of Segment A located within Point Well Urban is completely developed. All shoreline functions are considered low, except that eelgrass is mapped off-shore which provides spawning habitat for forage fish. The shoreline is modified with overwater structures and hard armoring.</u> <u>Shoreline functions would remain at low performance levels and would continue to be impaired unless redevelopment occurs. Soil and groundwater contamination would be remediated and the nearshore habitat would be restored as mitigation for the redevelopment.</u></p>	<p><u>20.230.080: The purpose of the "Point Wells Urban" environment is to accommodate higher density uses while protecting existing ecological functions and restoring ecological functions that have been degraded.</u> <u>SMP regulations and standards include:</u> <u>Table 20.230.082: A 50-foot vegetation conservation area with restoration is required for development in the Point Wells Urban environment. The term "Native Conservation Area" (NVCA) applies to areas where the shoreline is not armored, such as the PWUC environment designation, and Richmond Beach Saltwater Park. NVCA's should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term "Building Setback" applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted.</u> <u>20.230.020.A: Development must:</u></p> <ul style="list-style-type: none"> <u>• apply the mitigation sequence in WAC 173-26-201(2)(e)</u> <u>• ensure no net loss of shoreline ecological functions by being consistent with SMC 20.80 Critical Areas, avoiding or minimizing the need for shoreline stabilization, substantial land disturbance and dredging, and minimizing interference with natural shorelines processes</u> <p><u>20.230.020.B: Development that alters topography may be approved if:</u></p> <ul style="list-style-type: none"> <u>• Flood events will not increase in frequency or severity</u> <u>• Alteration would not impact natural habitat forming processes and would not reduce ecological functions</u> <p><u>20.230.020.C: Alternatives to the use of chemical fertilizers, herbicide and pesticides is the preferred BMP.</u> <u>Vehicle refueling and vehicle maintenance must occur outside of regulated shoreline areas. The bulk storage of oil, fuel, chemicals or other hazardous materials is prohibited except for uses allowed by the zoning classification.</u> <u>20.230.040.B: Public access on or over the water must be constructed as far landward as possible to avoid interference with views.</u> <u>Physical public access must be designed to prevent significant impacts to natural systems employing LID techniques.</u> <u>Table 20.230.081: Boating facilities including boat launch ramps open to the public are permitted uses. Marinas are prohibited uses. Breakwaters, jetties, groins and weirs are conditionally permitted provided they are limited to water-dependent, public access or shoreline stabilization activities. Existing piers and docks associated with industrial use and public piers and docks are permitted. Expansion of existing piers and docks associated with water-oriented industrial use is conditionally permitted.</u> <u>20.230.090B: Boating facilities are allowed only if they do not adversely impact fish or wildlife habitat areas and associated wetlands and there is adequate mitigation to ensure no net loss.</u> <u>20.230.090C: Boat launch ramps must be located on stable shorelines where water depth is adequate to eliminate/minimize need for channel maintenance activities.</u> <u>Boat launch ramps are allowed on stable non-eroding banks where need for shore stabilization structures is minimized.</u> <u>Ramp structures must be placed near flush with foreshore slope to minimize interruption of geohydraulic processes.</u> <u>20.230.090D: Dry boat storage must comply with the required setback except that water-dependent components are allowed within the setback.</u> <u>20.230.095: Groins are permitted in conjunction with a professionally designed public beach management program. Jetties and breakwaters are permitted as an integral component of a professionally designed harbor or port. Floating, portable or submerged breakwater structures, or smaller discontinuous structures are preferred where physical conditions make such alternatives with</u></p>	<p><u>City's Surface Water Management Program: Shoreline development must be designed in conformance with the current DOE Storm Water Management Manual (urban environments only) and Chapter 20.60, subchapter 3 of the SMC and the City of Shoreline</u> <u>Surface Water Design Code</u> <u>Critical Areas Regulations:</u> <u>Chapter 20.80 of the Shoreline Municipal Code (Critical Areas) establishes development standards, construction techniques, and permitted uses in critical areas and their buffers (i.e., geologic hazard areas, fish and wildlife habitat conservation areas, wetlands, flood hazard areas, aquifer recharge areas, and stream areas) to protect these areas from adverse impacts. Designated critical areas are found throughout the City's shoreline planning area, particularly wetlands and streams, flood hazard areas, and geologic hazard areas</u> <u>Clean Water Act (CWA): The federal CWA requires states to set standards for the protection of water quality for various parameters, and it regulates excavation and dredging in waters of the U.S., including wetlands. Certain activities affecting wetlands in the City's shoreline jurisdiction or work in the Puget Sound waters may require a permit from the U.S. Army Corps of Engineers and/or Washington State Department of Ecology under Section 404 and Section 401 of the CWA, respectively.</u> <u>Hydraulic Project Approval (HPA): The Washington Department of Fish and Wildlife (WDFW) regulates activities that use, divert, obstruct, or change the natural flow of the beds or banks of waters of the state and may affect fish habitat. Projects in the shoreline jurisdiction requiring construction below the ordinary high water mark of Puget Sound or stream mouths in the city could require an HPA from WDFW. Projects creating new impervious surface that could substantially increase stormwater runoff to waters of the state may also require approval.</u> <u>Over-water structures: Any in- or over-water (including wetlands) proposals would require review not only by the City, but also by the Washington Department of Fish and Wildlife (WDFW), the U.S. Army Corps of Engineers (Corps), and/or the Washington Department of Ecology. Each of these agencies is charged with regulating and/or protecting streams and wetlands, and would impose certain design or mitigation requirements on applicants. A project that includes stream or wetland fill would require Corps review and permitting.</u></p>	<p><u>No Change</u> <u>Native Vegetation Conservation Areas are limited to areas that are not currently armored.</u> <u>Therefore, Building Setback applies to most areas within the city. Given the extent of armoring associated with the railroad, most impacts to existing vegetation are expected to be limited to railroad-related activities. However, such activities must comply with policies in the SMP that conserve vegetation in a manner that ensures no net loss.</u></p>

Shoreline Segment & Existing Condition	Likely Future Development	Functions or Processes Potentially Impacted	Effects of SMP Provisions	Effect of Other Development and Restoration Activities / Programs	Net Effect
			<p><u>less impact feasible.</u></p> <p>Table 20.230.081: Nonresidential development is permitted. Existing industrial development is permitted while expansion is conditionally permitted.</p> <p>20.230.100: Over-water construction of nonresidential uses is prohibited, with the exception of boat facilities. Water-dependent, nonresidential development must maintain a shoreline setback of either 25 feet from the OHWM or 10 feet from the edge of the base flood elevation, whichever is greater. If public access is provided to the shoreline, the setback may be reduced to 10 feet from the OHWM or the edge of the base flood elevation, whichever is greater. Nonwater-dependent, nonresidential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082.</p> <p>Table 20.230.081: In-stream structures are permitted as part of fish habitat enhancement or a watershed restoration project.</p> <p>20.230.110 B: Existing natural in-stream features are to remain in place. New structures must allow for normal ground water movement and surface runoff.</p> <p>Table 20.230.081: Recreational facilities are a permitted use.</p> <p>20.230.130: No recreational buildings or structures can be built waterward of the OHWM, except water-dependent and/or water-enjoyment public structures such as bridges and viewing platforms. Such uses may be permitted as a Shoreline Conditional Use.</p> <p>Table 20.230.081: Residential development is a permitted use.</p> <p>20.230.160B: Residential development is prohibited waterward of the OHWM and within setbacks defined for each shoreline environment designation.</p> <p>Residential development must assure no net loss of shoreline ecological functions.</p> <p>Residential development will not be approved if a geotechnical analysis indicates that flood control or shoreline protection measures are necessary to create a residential lot or site area. Development must be located to avoid the need for structural shore defense and flood protection works.</p> <p>Residential units must be clustered in order to avoid impacts to wetlands or other critical areas.</p> <p>One accessory structure is allowed in the vegetation conservation area provided that structures cover no more than 200 square feet.</p> <p>Table 20.230.081: Dredging is permitted for activities associated with shoreline/aquatic restoration, remediation, and navigation. Dredge spoil disposal is permitted for shoreline habitat and natural systems enhancement, fish habitat enhancement, and watershed restoration projects.</p> <p>20.230.160.B: Dredging/disposal allowed only when actions will not result in significant damage to water quality, biological elements, circulation patterns, floodwater capacity, and properly functioning conditions for threatened / endangered species.</p> <p>Depositing dredge spoil material in the Puget Sound allowed as a CUP for wildlife habitat improvements and correcting problems of material distribution that affect fish resources.</p> <p>Table 20.230.081: Existing piers and docks associated with industrial use and public piers or docks are permitted. Expansion of existing piers or docks associated with water-oriented industrial use are conditionally permitted.</p> <p>20.230.170: Piers and docks must include mitigation to ensure no net loss to critical saltwater habitat.</p> <p>Width of docks, piers, floats and lifts must be no wider than 6 feet unless authorized by WDFW and USACE. The length of docks and piers must be the minimum necessary to prevent grounding of floats and boats on the substrate during low tide. Decking shall have a minimum open space of 40% and after installation at least 60% ambient light beneath the structure shall be maintained.</p> <p>20.230.175: Repair or replacement of 50% or more of an existing over-water deck structure must include the replacement of the entire decking with grated material to achieve a minimum open space of 40% and must result in at least 60% ambient light beneath the structure. Repair or replacement of</p>	<p>Restoration Plan (2009): The restoration plans identifies a restoration opportunity in Point Wells that would completely remove the sea wall, riprap dike, and fill, regrade the site and reconnect local freshwater sources to re-create a tidal lagoon system with an opening at the north end of the point, and reestablish native riparian and backshore vegetation. Such actions would improve sediment transport and deposition, nearshore habitat forming processes, beach erosion and accretion of sediments and mineral particulate material, and intertidal fish and wildlife habitat.</p>	

Shoreline Segment & Existing Condition	Likely Future Development	Functions or Processes Potentially Impacted	Effects of SMP Provisions	Effect of Other Development and Restoration Activities / Programs	Net Effect
			<p>less than 50% of the over-water deck structure must use grated decking in the area to be replaced.</p> <p>Table 20.230.081: New hard shoreline armoring is conditionally permitted. Soft-shore stabilization and maintenance of existing is permitted.</p> <p>20.230.180B: New bulkheads allowed when there is serious erosion threatening an established use or existing primary use or when they are necessary for the operation and location of a water-oriented use. A new bulkhead can be constructed to retain landfill in conjunction with a water-dependent use, bridge/navigational structure, or for a wildlife/fish enhancement project.</p> <p>Bulkheads must use stable, nonerodable, homogeneous materials such as concrete, wood, and rock that are consistent with the preservation and protection of ecological habitat.</p> <p>Table 20.230.081: Land Disturbing activities and landfill are permitted for activities associated with restoration or remediation, public access improvement, and allowed shoreline development. Landfilling waterward of the OHWM is conditionally permitted for activities associated with shoreline/aquatic restoration or remediation.</p> <p>20.230.200.B: Land disturbing activities limited to minimum necessary for intended development. Tree and vegetation removal in required Native Vegetation Conservation Areas is prohibited. All significant trees in the Native Vegetation Conservation Areas shall be designated as protected trees consistent with existing development code standards (SMC 20.50.340) and removal of hazard trees is regulated pursuant to SMC 20.50.310(A)(1).</p> <p>Extensive land clearing that requires a permit must revegetate, irrigate, and establish erosion and sedimentation control.</p> <p>20.230.210.B: Landfill is allowed as a CUP for:</p> <ul style="list-style-type: none"> • <u>Water-dependent use</u> • <u>Bridge/utility/navigational structure</u> <p>Landfill perimeters must be designed with silt curtains, vegetation retaining walls or other methods to prevent material movement.</p>		
Point Wells Urban Conservancy					
<p><u>Includes the southern portion of Segment A</u></p> <p>This area is in the City's <u>Potential Annexation Area (PAA)</u> and includes the Point Wells industrial port, a petroleum products storage, processing and distribution site.</p>	<p>As described under Point Wells Urban, the Point Wells property owner has indicated interest in redevelopment by petitioning a change to the Snohomish County Comprehensive Plan and zoning designations. However, this portion of segment A retains its Urban Industrial designation.</p>	<p>Similar to conditions described under Point Wells Urban, this property has been extensively modified. However, due to the lack of overwater structures, the presence of Lost Creek, and no hard armoring, some shoreline functions are present. The shoreline contains eelgrass meadows and kelp forests, forage fish spawning area, 31 species of shellfish, a sand and gravel flat, and habitat for shorebirds. Lost Creek provides for pocket estuary habitat.</p> <p>No change in shoreline functions is expected unless redevelopment occurs. Soil and groundwater contamination would be remediated and the nearshore habitat would be restored as mitigation for the redevelopment. A change to a higher land-use intensity and increased public access would likely disrupt wildlife and shore bird habitat.</p>	<p>20.230.080: The purpose of the "Point Wells Urban Conservancy" environment is to distinguish between differing levels of potential and existing ecological function within the Point Wells environment, and regulate uses and public access requirements appropriately.</p> <p style="text-align: center;">SMP regulations and standards include:</p> <p>Table 20.230.082: A 115-foot vegetation conservation area is required for development in the Point Wells Urban Conservancy environment. The term "Native Conservation Area" (NVCA) applies to areas where the shoreline is not armored, such as the PWUC environment designation, and Richmond Beach Saltwater Park. NVCA's should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term "Building Setback" applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted. The same regulations under 20.230.020, 20.230.030, and 20.230.040 for Point Wells Urban apply to Point Wells Urban Conservancy as well.</p> <p>Table 20.230.081: In addition to uses and modifications prohibited in Point Wells Urban, boating facilities, breakwaters, jetties, groins and weirs, piers and docks, and new hard shoreline armoring, are also prohibited.</p> <p>20.230.090-20.230.270:</p> <p>The regulations for nonresidential development, in-stream structures, recreational facilities, residential development, dredging, dredge material disposal, land disturbing activities, and landfilling for Point Wells Urban apply to Point Wells Urban Conservancy as well with the exception that recreational facilities are limited to low-intensity uses and passive uses and soft-shore stabilization is limited to those associated with utilities.</p>	<p>Same as items above in Point Wells Urban.</p> <p>Restoration Plan (2009): The restoration plans identifies a restoration opportunity in Point Wells that would enhance the shoreline by removing riprap dike, eliminate invasive plants, reestablish native riparian and backshore vegetation, and create a three acre intertidal lagoon. Similar to the restoration opportunity in Point Wells Urban, such actions would improve sediment transport and deposition, nearshore habitat forming processes, beach erosion and accretion of sediments and mineral particulate material, and intertidal fish and wildlife habitat.</p>	<p>No Change</p> <p>Native Vegetation Conservation Areas are limited to areas that are not currently armored. Therefore, Building Setback applies to most areas within the city. Given the extent of armoring associated with the railroad, most impacts to existing vegetation are expected to be limited to railroad-related activities. However, such activities must comply with policies in the SMP that conserve vegetation in a manner that ensures no net loss.</p>

Shoreline Segment & Existing Condition	Likely Future Development	Functions or Processes Potentially Impacted	Effects of SMP Provisions	Effect of Other Development and Restoration Activities / Programs	Net Effect
Urban Conservancy					
<p>Includes the northern portion of Segment B, portion of Segment C that is Richmond Beach Saltwater Park, and Segment E.</p> <p>This area is characterized by several parks, public and private greenways, the Highlands residential neighborhood, and the Burlington Northern Santa Fe (BNSF) railroad right-of-way (ROW).</p>	<p>Future development would likely be limited to redevelopment of existing single-family homes, few new residences, and park development. Development is inhibited by the presence of the BNSF ROW, landslide hazard areas, and streams and their associated greenways.</p>	<p>Shoreline functions within this area are low to moderate, with the following functions moderately intact:</p> <ul style="list-style-type: none"> ▪ Northern portion of Segment B has eelgrass meadows and kelp forests, a sand flat, forage fish spawning area, and a forested wetland at Barnacle Creek. The wetland provides some filtering of pollutants; however, it is narrow and east of the railroad grade. ▪ Richmond Beach Saltwater Park in Segment C provides some sediment transport function, attenuates wave energy although it is limited due to its length (alongshore) and narrow width, has some potential for large woody debris recruitment, and some vegetation, although it does not overhang the intertidal zone. Eelgrass meadows and kelp forests, forage fish spawning area, and 37 species of shellfish are present. ▪ Segment E contains eelgrass meadows and kelp forests, a sand flat, and the Boeing Creek outlet which serves as an important area for feeding, migration, spawning, and rearing of forage fish. Although the shoreline is modified by the BNSF railroad tracks, riparian vegetation is prevalent upslope of the tracks throughout the entire length of Segment E. This segment is also characterized by landslide hazard areas and has recently seen numerous slide activities. <p>Because no significant new development is anticipated, new impacts are anticipated to be limited.</p>	<p>20.230.080: The purpose of the “Urban Conservancy” environment is to protect, restore and manage relatively undeveloped or unaltered shorelines to maintain open space, floodplains or habitat, while allowing a variety of compatible uses.</p> <p style="text-align: center;">SMP regulations and standards include:</p> <p>Table 20.230.082: A 150-foot or 50-foot from the top of a landslide hazard area, whichever is greater, vegetation conservation area is required for development in the Urban Conservancy environment. The term “Native Conservation Area” (NVCA) applies to areas where the shoreline is not armored, such as the PWUC environment designation, and Richmond Beach Saltwater Park. NVCAs should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term “Building Setback” applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted.</p> <p>The same regulations under 20.230.020, 20.230.030 and 20.230.040 for Point Wells Urban apply to Urban Conservancy as well.</p> <p>In addition, 20.230.020D requires properties located in the UC designation to retain trees that are 12 inches or more in diameter. Trees determined by a certified arborist to be hazardous or diseased may be removed. When healthy or non-hazardous trees are removed, each removed tree must be replaced with at least three (3) six-foot tall trees, one (1) 18-foot tall tree, or one (1) 12-foot plus one (1) six-foot tall tree. Trees must be of the same species removed, or equivalent native tree species.</p> <p>Table 20.230.081:In addition to uses and modifications prohibited in Point Wells Urban, breakwaters, jetties, groins and weirs, nonresidential development, and industrial development are also prohibited.</p> <p>20.230.090-20.230.270:</p> <p>The regulations for boat launching ramps, in-stream structures, recreational facilities, residential development, dredging, dredge material disposal, piers and docks, bulkheads, land disturbing activities, and landfilling for Point Wells Urban apply to Urban Conservancy as well, with the exception that only public piers and docks are allowed in Urban Conservancy.</p>	<p>Same as items above in Point Wells Urban.</p> <p>Restoration Plan (2009): The restoration plan identifies a restoration opportunity that would replace all stream culverts with larger box culverts or other fish-friendly structures to allow fish access during low flows and allow opportunity for more sediment to reach the nearshore. Such actions would improve nearshore habitat forming processes and intertidal fish and wildlife habitat.</p> <p>A second restoration opportunity would be to create tidally influenced wetland or restore wetland habitat on the east side of the BNSF railroad tracks NW of the pump station. Such actions would improve nearshore habitat forming processes, intertidal fish and wildlife habitat, and hydrologic, hyporheic and water quality functions.</p> <p>A third restoration opportunity would be to implement the Richmond Beach Saltwater Park Vegetation Management Plan to remove non-native invasive plants and reestablish native plant communities within wetlands east of railroad and on beach area west of railroad. Such actions would improve freshwater wetland and intertidal wildlife habitat and stabilize beach substrates.</p> <p>A fourth restoration opportunity would be to protect intact wetlands and their associated uplands adjacent to Puget Sound and develop and implement a vegetation management plan for the Innis Arden Reserve. Such actions would improve nearshore habitat forming processes, hydrologic, hyporheic and water quality functions, riparian habitat structure and function, and fish and wildlife habitat.</p> <p>A fifth restoration opportunity would be to reduce stormwater flow down steep slopes along Boeing Creek to stabilize banks and control sediment loading of the stream and extend recommendations of Vegetation Management Plan for Boeing Creek Park to include entire stream corridor downslope to Puget Sound. Such actions would improve exchange of aquatic organisms, sediment delivery to nearshore from fluvial sources, source of detritus and particulate organic matter, riparian habitat structure and function, freshwater input, and fish and wildlife habitat.</p> <p>A sixth restoration opportunity would be to protect intact uplands and native vegetation communities adjacent to Puget Sound along Boeing Creek Reserve. Such actions would improve source of detritus and particulate organic matter, riparian habitat structure and function, and fish and wildlife habitat.</p>	<p>No Change</p> <p>Native Vegetation Conservation Areas are limited to areas that are not currently armored. Therefore, Building Setback applies to most areas within the city. Given the extent of armoring associated with the railroad, most impacts to existing vegetation are expected to be limited to railroad-related activities. However, such activities must comply with policies in the SMP that conserve vegetation in a manner that ensures no net loss.</p>

Shoreline Segment & Existing Condition	Likely Future Development	Functions or Processes Potentially Impacted	Effects of SMP Provisions	Effect of Other Development and Restoration Activities / Programs	Net Effect
Waterfront Residential					
<p>Includes the southern portion of Segment B, where the Richmond Beach residential neighborhood is located waterward of the BNSF ROW.</p>	<p>Future development would likely be limited to redevelopment of existing single-family homes and one or two new residences. Development is inhibited by shallow lots and limited vehicular access. Bulkheads likely to be maintained and replaced due to severe weather storms.</p>	<p>Shoreline functions are low in this portion of the Segment B. The bulkheads, some of which are below the mean high tide level, interrupt longshore transport of sediment, increase wave energy, and preclude the use of nearshore habitat for resting and foraging.</p> <p>Vegetation is limited to ornamental landscaping, including lawn areas.</p> <p>Because no significant new development is anticipated, new impacts are anticipated to be limited.</p>	<p>20.230.080: The purpose of the “Waterfront Residential” environment is to distinguish between the residential portions of the coastline where natural and manmade features preclude building within the shoreline jurisdiction and the section along 27th Avenue NW where residential properties directly abut the Puget Sound.</p> <p style="text-align: center;">SMP regulations and standards include:</p> <p>Table 20.230.082: A 20-foot vegetation conservation area is required for development in the Waterfront Residential environment. The term “Native Conservation Area” (NVCA) applies to areas where the shoreline is not armored, such as the PWUC environment designation, and Richmond Beach Saltwater Park. NVCAs should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term “Building Setback” applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted.</p> <p>The same regulations under 20.230.020, 20.230.030 and 20.230.040 for Point Wells Urban apply to Waterfront Residential as well.</p> <p>Table 20.230.081: In addition to uses and modifications prohibited in Point Wells Urban, nonresidential development, industrial development, and breakwaters, jetties, groins and weirs are prohibited.</p> <p>20.230.090-20.230.270:</p> <p>The regulations for boat launching ramps, in-stream structures, recreational facilities, residential development, dredging, dredge material disposal, piers and docks, bulkheads, land disturbing activities, and landfilling for Point Wells Urban apply to Waterfront Residential as well, with the following exceptions:</p> <ul style="list-style-type: none"> • only joint-use boat launching ramps and joint-use piers and docks are allowed in Waterfront Residential; and • landfill in Waterfront Residential does not have to be limited to activities associated with restoration or remediation or public access improvement, but must still be associated with allowed shoreline development per 20.230.210B. 	<p>Same as items above in Point Wells Urban.</p> <p>Restoration Plan (2009): The restoration plans identifies restoration opportunities that while residences are present, would protect intertidal area by limiting additional traditional bulkheads or overwater structures and reduce impact of shore armoring through replacement of existing traditional bulkheads with soft-shore alternatives, except where they are necessary to protect property from high energy systems. Such actions would improve sediment transport and deposition, nearshore habitat forming processes, beach erosion and accretion of sediments and mineral particulate material, and intertidal fish and wildlife habitat.</p>	<p>No Change</p> <p>Native Vegetation Conservation Areas are limited to areas that are not currently armored. Therefore, Building Setback applies to most areas within the city. Given the extent of armoring associated with the railroad, most impacts to existing vegetation are expected to be limited to railroad-related activities. However, such activities must comply with policies in the SMP that conserve vegetation in a manner that ensures no net loss.</p>
Shoreline Residential					
<p>Includes the southern portion of Segment B, where the Richmond Beach residential neighborhood is located landward of the BNSF ROW.</p>	<p>Future development would likely be limited to redevelopment of existing single-family homes and few new residences. Development is inhibited by the presence of the BNSF ROW.</p>	<p>Shoreline functions are low in this portion of the segment due to the presence of the BNSF ROW and limited upland vegetation.</p> <p>Because no significant new development is anticipated, new impacts are anticipated to be limited.</p>	<p>20.230.080: The purpose of the “Shoreline Residential” environment is to accommodate residential development and accessory structures that are consistent with this Shoreline Master Program.</p> <p style="text-align: center;">SMP regulations and standards include:</p> <p>Table 20.230.082: A 115-foot vegetation conservation area is required for development in the Shoreline Residential environment. The term “Native Conservation Area” (NVCA) applies to areas where the shoreline is not armored, such as the PWUC environment designation, and Richmond Beach Saltwater Park. NVCAs should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term “Building Setback” applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing are not permitted.</p> <p>The same regulations under 20.230.020, 20.230.030 and 20.230.040 for Point Wells Urban apply to Shoreline Residential as well.</p> <p>Table 20.230.081: In addition to uses and modifications prohibited in Point Wells Urban, nonresidential development, industrial development, and breakwaters, jetties, groins and weirs are prohibited.</p> <p>20.230.090-20.230.270:</p> <p>The regulations for boat launching ramps, in-stream structures, recreational facilities, residential development, dredging, dredge material disposal, piers and docks, bulkheads, land disturbing activities, and landfilling for Point Wells Urban apply to Shoreline Residential as well, with the following exceptions:</p> <ul style="list-style-type: none"> • only joint-use launching ramps and joint-use piers and docks are allowed in Waterfront Residential; and • landfill in Shoreline Residential does not have to be limited to activities associated with restoration or remediation or but must still be associated with allowed shoreline development 	<p>Same as items above in Point Wells Urban.</p> <p>Restoration Plan (2009): The restoration plan identifies restoration opportunities that would replace all stream culverts with larger box culverts or other fish-friendly structures to allow fish access during low flows and allow opportunity for more sediment to reach the nearshore. Such actions would improve nearshore habitat forming processes and intertidal fish and wildlife habitat.</p>	<p>No Change</p> <p>Native Vegetation Conservation Areas are limited to areas that are not currently armored. Therefore, Building Setback applies to most areas within the city. Given the extent of armoring associated with the railroad, most impacts to existing vegetation are expected to be limited to railroad-related activities. However, such activities must comply with policies in the SMP that conserve vegetation in a manner that ensures no net loss.</p>

Shoreline Segment & Existing Condition	Likely Future Development	Functions or Processes Potentially Impacted	Effects of SMP Provisions	Effect of Other Development and Restoration Activities / Programs	Net Effect
			per 20.230.210B.		
Aquatic					
<p><u>Includes all lands waterward of the marine ordinary high-water mark in the City of Shoreline.</u></p> <p><u>Areas designated Aquatic in the City of Shoreline are all areas within the tidal and open waters of the Puget Sound. The only area that has overwater structures is in Segment A, associated with the Point Wells development.</u></p>	<p><u>Hard armoring is expected to be maintained for the BNSF railroad ROW and the residential bulkheads located along Richmond Beach. New hard armoring could occur in Segment A although soft-shore stabilization methods would likely be utilized as mitigation for redevelopment.</u></p> <p><u>New overwater structures may occur at publicly owned properties, such as Richmond Beach Saltwater Park or in Segment A as part of redevelopment.</u></p> <p><u>Dredging may occur in Segment A but only as part of shoreline or aquatic restoration or remediation.</u></p>	<p><u>Existing functions and processes have been characterized above.</u></p> <p><u>Impacts are anticipated to be limited since no new significant development is anticipated. Any impacts would have to be mitigated.</u></p>	<p>20.230.080: <u>The purpose of the “Aquatic” environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.</u></p> <p style="text-align: center;">SMP regulations and standards include:</p> <p><u>The same provisions under 20.230.020, 20.230.030 and 20.230.040 for Point Wells Urban apply to Aquatic as well.</u></p> <p>Table 20.230.081: <u>Most allowed uses and modifications in this environment must meet the use and permit limitations of the upland designation. In addition to uses and modifications prohibited in Point Wells Urban, nonresidential development, industrial development, residential development, hard shoreline armoring, and land disturbing activities are prohibited.</u></p> <p>20.230.090-20.230.270:</p> <p><u>The regulations for boating facilities, breakwaters, jetties, groins and weirs, in-stream structures, recreational facilities, dredging, dredge material disposal, piers and docks and landfilling for Point Wells Urban apply to Aquatic as well, with the following exceptions:</u></p> <ul style="list-style-type: none"> <u>• recreational facilities are limited to water-dependent and water-enjoyment and are conditionally permitted;</u> <u>• landfilling is limited to activities associated with shoreline or aquatic restoration or remediation and is conditionally permitted; and</u> <u>• piers and docks are only limited to the extent of the use and permit requirements of the upland designation.</u> <p>Table 20.230.081: <u>Transportation facilities (railroads) are allowed.</u></p> <p>20.230.250: <u>Bridge abutments and necessary approach fills must be located landward of the OHWM, except bridge piers may be permitted in a water body as a Shoreline Conditional Use. Landfilling activities for transportation facilities are prohibited in wetlands and on accretion beaches, except when all structural and upland alternatives have proven infeasible. Shoreline transportation facilities shall be located and designed to avoid steep or unstable areas and fit the existing topography in order to minimize cuts and fills.</u></p> <p>Table 20.230.081: <u>Aquaculture is a conditionally permitted use.</u></p> <p>20.230.115: <u>Aquaculture is limited to geoduck harvesting within DNR tracts or for recovery of native aquatic population in accordance with a government and/or tribal approved plan.</u></p>	<p><u>Same as items above in Point Wells Urban.</u></p> <p>Restoration Plan (2009): <u>The restoration plans identifies a restoration opportunity in Point Wells (Segment A) that would remove creosote pilings and in-water debris. Such actions would improve water and sediment quality and intertidal fish and wildlife habitat.</u></p> <p><u>A second restoration opportunity would be to protect forage fish spawning, rearing, migration, and feeding areas and protect eelgrass beds and kelp beds. Such actions would improve food web support and intertidal fish and wildlife habitat.</u></p> <p><u>A third restoration opportunity would be to explore the potential to restore the connection between feeder bluffs and nearshore areas. Such actions would improve sediment delivery to the nearshore.</u></p>	<p>No Change or Potential Improvement</p> <p><u>Substantial development is currently limited to Segment A in the aquatic environment. Any future in-water work would likely be associated with the Richmond Beach Saltwater Park and Point Wells. Any of these developments would have to mitigate impacts to ecological functions and achieve project-specific no net loss.</u></p> <p><u>Redevelopment would require replacement with improved materials, and compliance with Critical Areas and Stormwater Regulations, HPA, and federal CWA. Improved stormwater management and bulkhead removal / improvement projects would also improve functions overtime.</u></p>

Appendix B

Cumulative Impacts Analysis Addendum

Final

CITY OF SHORELINE
2019 SHORELINE MASTER PROGRAM PERIODIC UPDATE
Cumulative Impacts Analysis Technical Addendum

Prepared for
City of Shoreline

March 2019



Final

CITY OF SHORELINE
2019 SHORELINE MASTER PROGRAM PERIODIC UPDATE
Cumulative Impacts Analysis Technical Addendum

Prepared for
City of Shoreline

March 2019

Prepared by
Amanda Brophy
Reema Shakra

5309 Shilshole Avenue, NW
Suite 200
Seattle, WA 98107
206.789.9658
www.esassoc.com



<u>Bend</u>	<u>Oakland</u>	<u>San Diego</u>
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Appendices

A.Excerpts of City Council Adopted Critical Areas Standards for Major Update Topics A-1

1. INTRODUCTION

In May 2013, the City of Shoreline (City) adopted an updated Shoreline Master Program (SMP) to comply with the Washington State Shoreline Management Act (SMA) and the state’s shoreline guidelines. As part of the update effort, the City was required to evaluate the cumulative impacts of “reasonably foreseeable” future development to verify that the proposed policies and regulations for shoreline management are adequate to ensure *no net loss* of shoreline ecological functions. In 2012, the City completed an assessment of cumulative impacts from the SMP, and concluded that anticipated development and use occurring under the SMP would not result in cumulative impacts and would meet the no net loss standard (ESA Adolfson, 2012). A key component of protecting shoreline ecological functions under the adopted SMP was integration of the City’s Critical Areas regulations (Shoreline Municipal Code Chapter 20.80) into the SMP documentation. The SMP incorporated the version of the critical areas regulations that was adopted in 2006.

The City completed a comprehensive update to critical areas regulations, with City Council adoption occurring on December 7, 2015. In an effort to maintain consistent standards and protections for critical areas throughout Shoreline, the City intends to incorporate the updated critical areas standards into the SMP. This will require an amendment to the SMP to incorporate the new critical area standards.

This document provides a planning level assessment of the potential cumulative impacts that would occur if the updated critical areas standards are incorporated into the SMP. The analysis is an addendum to the cumulative impact analysis (CIA) that was prepared in support of the SMP in 2012 (ESA Adolfson 2012). This addendum is limited in scope to focus only on the integrated critical area regulations as presented to the Planning Commission on January 17, 2019 and February 21, 2019. These critical area regulations are based on the City Council Final Critical Areas Development Code, Attachment A to Ordinance No. 723, adopted by City Council on December 7, 2015 but have been amended to apply within shoreline jurisdiction.

As with the 2012 CIA, this addendum is limited to cumulative impacts of reasonably foreseeable future development in areas subject to SMA jurisdiction. For the City of Shoreline, shorelines of the state include approximately 3.46 linear miles of the Puget Sound shoreline within the city and 0.65 linear miles of Puget Sound shoreline within the area commonly referred to as Point Wells, which is part of the City’s potential future service annexation area.

1.1 Overview of Revisions

The 2013 SMP synthesizes the City’s critical areas regulations (SMC 20.80), as adopted in 2006, with Washington State Department of Ecology (Ecology) best available science (BAS) guidance available in 2013. Critical areas standards for protection of geologic hazard areas, flood hazard areas, wetlands, fish and wildlife habitat conservation areas, stream areas, and critical aquifer recharge areas all apply within shoreline jurisdiction.

The City initiated the critical areas review process in 2015 and contracted with AMEC Foster Wheeler, who subcontracted with Wood Environment & Infrastructure Solutions, Inc. (Wood), to provide a new review of BAS for the geologic hazard areas section of the critical areas regulations. City staff relied on synthesis and guidance documents provided by Ecology to determine current BAS for the wetlands, streams, and fish and wildlife habitat sections of the critical areas regulations. The flood hazard areas and aquifer recharge areas sections of the critical areas regulations were not updated in the 2015 review process. Using Wood’s geologic hazard recommendations and City staff recommendations based on BAS, as well as input from citizens and other stakeholders, the City developed a Proposed Critical Areas Ordinance Development Code Regulations Draft (dated October 2015) for City Council review. The City Council reviewed proposed critical areas amendments, made limited additional code revisions, and on December 7, 2015 adopted the new critical areas regulations.

This CIA addendum supports the City’s 2019 SMP periodic review, which is required by Ecology. This is a minor update to address changes in state law as well as locally-identified issues. As part of the SMP periodic review, the critical areas regulations adopted by the City in 2015 will be integrated into the critical areas protections within the SMP. Some of the amendments would alter the standards for geologic hazard areas, streams, and fish and wildlife habitat areas, and wetlands – all of which play an important role in maintaining shoreline ecological functions. Revisions to the regulations that have the greatest potential effect on shoreline ecological functions are discussed in Chapter 4.

2. GENERAL SHORELINE CONDITIONS

The City's shoreline jurisdiction is composed of a variety of natural and man-made characteristics that include natural beaches, wooded slopes, single-family homes, the BNSF Railway, and in the potential future service annexation area of Point Wells, an industrial port. Point Wells, a 100-acre industrial site located directly north of the city along Puget Sound, is currently under Snohomish County jurisdiction and is a potential future service annexation area for the City of Shoreline (City of Shoreline, 2012).

Key basin-wide and reach-specific circumstances affecting the City's shoreline are documented in the 2012 CIA (ESA Adolfson, 2012) and the *Shoreline Inventory and Characterization Report* (ESA Adolfson, 2010). Based upon a review of existing information, these circumstances have not changed substantially in the last seven years. Table 1 below describes the shoreline planning segments used in the *Shoreline Inventory and Characterization Report* (Figure 1). The segments are based broadly on the physical distinction along the shoreline, the level of ecological functions provided by each segment, as well as existing land uses and zoning designations.

- The BNSF Railway right-of-way (ROW) extends in a north-south direction along the entire length of the City's shoreline planning area. It is the most dominant land use in the shoreline, occupying 48 percent of the total shoreline planning area. Residential development occupies approximately 19 percent of the total shoreline planning area while Point Wells (in the potential future service annexation area), the only industrial property located along the Puget Sound shoreline, occupies approximately 20 percent. The remaining land uses are parks and open space (8 percent) and vacant properties (2 percent).
 - Public access opportunity is provided at Richmond Beach Saltwater Park in Segment C, Kayu Kayu Ac Park, in Segment B, and Innis Arden Reserve in Segment E.
 - Blue Heron Reserve (Segment C), Coyote Reserve (Segment D) and Boeing Creek Reserve (Segment E) are privately owned. No public shoreline access is permitted from these reserves along the bluff.
- There are no existing docks, piers, or over-water structures along Puget Sound within the city limits. Point Wells contains a large industrial dock used for both import and export of materials to and from the facility.
- In the city, coastal bluffs are separated from the shoreline by the BNSF Railway, thus completely removing bluff sediment sources. These shore modifications also preclude net shore-drift along the Puget Sound. A small amount of sediment is delivered by fluvial sources (streams) in the city, although this process is also impaired by culvert systems and the BNSF Railway. Forage fish spawning still occurs at these limited points of sediment input.

- Clearing of vegetation along the marine shoreline for the BNSF Railway construction and maintenance, residential uses, bulkheads and other shoreline armoring has resulted in a lack of large woody and organic debris available for recruitment to the marine system. The lack of debris in turn affects the stability of the beaches as the presence of beach logs and debris can reduce erosion by dissipating wave energy and trapping sediment. Large woody debris also provides thermoregulation of sediment for spawning forage fish and detritus recruitment.

- The Puget Sound nearshore environment is a highly productive zone that provides habitat for a variety of aquatic and terrestrial species. Important documented features of the city’s nearshore that provide habitat include:
 - Banks, bluffs, beaches and backshore (sediment sources, substrate, and storm berms);
 - Tidal flats (intertidal or shallow subtidal areas used by juvenile salmonids, shorebirds, and shellfish);
 - Eelgrass meadows and kelp forests (feeding and rearing habitat for wide variety of marine organisms); and
 - Stream mouths and pocket estuaries (fish and wildlife corridors and source of fluvial sediment to nearshore).

- Within the City’s shoreline planning area, there are seven streams that feed into the Puget Sound: an unnamed tributary of Barnacle Creek in Segment A; Barnacle Creek and Lost Creek in Segment B; Storm Creek in Segment C; Blue Heron Creek in Segment D; and Coyote Creek, Boeing Creek, and Highlands Creek in Segment E.

Table 1. Shoreline planning segments

Shoreline Segment	Approximate Length (feet)	Approximate Segment Acreage	General Boundaries
A	<u>3,579</u>	<u>15.6</u>	<u>Potential Future Service Annexation Area / Point Wells: located directly north of the city limits in unincorporated Snohomish County.</u>
B	<u>4,551</u>	<u>21.7</u>	<u>Richmond Beach residential area: the Snohomish County line south to Richmond Beach Saltwater Park.</u>
C	<u>2,659</u>	<u>21.6</u>	<u>Richmond Beach Saltwater Park south to Storm Creek culvert.</u>
D	<u>1,128</u>	<u>5.7</u>	<u>Innis Arden residential area: south of Richmond Beach Saltwater Park to Innis Arden Reserve Park</u>
E	<u>9,286</u>	<u>44.1</u>	<u>Innis Arden Reserve / Highlands: Innis Arden Reserve Park south to city limits.</u>

The following data sources were consulted to see if ecological changes occurred since the preparation of the City’s 2010 Shoreline Inventory and Characterization.

The National Oceanic and Atmospheric Administration’s Coastal Change Analysis Program (C-CAP) Land Cover Atlas was used to find the change in impervious surface in the city’s shoreline planning area. The data is acquired from 30 meter Landsat imagery. No change in the amount of

impervious surface (high, medium, low intensity development) occurred in the shoreline planning area between 2011 and 2016 (NOAA 2011, 2016). No land use data was available for 2008.

Biodiversity corridors are documented within Innis Arden Reserve Park and Boeing Creek Reserve that were not previously identified in the Shoreline Inventory and Characterization Report (WDFW PHS, 2019). Boeing Creek Reserve is now recognized for including a large stand of old growth forest, a forested riparian corridor, shrub-savannah habitat, and marine shoreline. Innis Arden Reserve Park is now included as a biodiversity corridor for the variety of forested, wetland and riparian habitat present. Biodiversity corridors is a new Priority Habitat and Species (PHS) designation developed by WDFW to recognize large undeveloped habitat patches and open spaces as part of planning and building habitat corridors (WDFW, 2009). The updated critical areas standards include biodiversity areas and corridors in Innis Arden Reserve Park and Boeing Creek as state priority habitats (SMC 24.240.270.B.2).

In 2015, Washington Department of Fish and Wildlife mapped the presence of a great blue heron rookery within the city's shoreline just south of Richmond Beach Saltwater Park (WDFW PHS, 2019). The bald eagle nesting area and buffer present near Point Wells in 2008 is no longer mapped as a Priority Habitat and Species area (ESA Adolfson, 2008; WDFW, 2019). While bald eagle nests are still protected under the Migratory Bird Treaty Act and through US Fish and Wildlife Service guidelines, nest locations are no longer tracked or documented by state wildlife biologists.

Coho salmon and coastal cutthroat have been known to use Boeing Creek for breeding and this did not change between 2008 and 2019 (WDFW PHS, 2019). Documented presence of salmonids and forage fish using the Puget Sound nearshore did not change between 2008 and 2019 (ESA Adolfson, 2008; NOAA, 2019; WDFW, 2019). Eelgrass was sampled in 2015 which showed that native eelgrass remains stable and continuous along the shoreline (WDNR, 2015; WDNR, 2019). Kelp forests are mapped as remaining present along the shoreline (WDNR, 2019). Mapped presence of geoduck shifted slightly south between 2008 and present. Geoduck presence now begins at the top of Segment E where it occurred from Segment B to Segment C in 2008

(WDFW, 2019). No change in Dungeness crab presence occurred between 2008 and present (WDFW, 2019).

The City relies on the National Wetland Inventory data and maintains a separate wetland inventory at the local level viewed on the City's Property Information Interactive Map. Two wetlands were identified by Ecology along either side of the railway alignment in Segment C at Richmond Saltwater Beach Park between 2008 and present (City of Shoreline, 2019).

ESA Adolfson (2008) reported that the ShoreZone Inventory stated 97 percent of the City's shoreline was modified, mostly associated with the BNSF railroad bed (WDNR, 2001). The current Coastal Atlas Map uses WDNR data from 2000 to show approximately 85 percent of the City's shoreline as modified (Ecology, 2019). Although there is a discrepancy between the amount of shoreline modification in the city between 2008 and present, it is clear there has not been an increase in modification along the shoreline. It is possible that ESA Adolfson

inaccurately reported the 97 percent shoreline modification or the amount of modification along the shoreline was re-evaluated by WDNR.

3. REASONABLY FORESEEABLE FUTURE DEVELOPMENT

Reasonably foreseeable future development in the City’s shoreline jurisdiction is generally unchanged since preparation of the City’s original CIA in 2012. The only uses that presently occur within shoreline jurisdiction are transportation (including railroad), single-family residences, park or public recreation (on public and private park lands), and utility facilities. Future development is likely to maintain these uses, with no industrial, commercial or mixed uses expected within the city limits in the foreseeable future.

Minimal new shoreline residential development or significant redevelopment has occurred over the last seven years (since the 2012 CIA). There is one lot that was replatted and a new duplex was constructed on the lot (Table 2). Seven other existing residential single family homes completed additions or remodels; all seven are located in Segment B. Table 2 identifies the number of vacant properties present in the City’s shoreline jurisdiction and Future Service Annexation Area in 2012 and the number of properties that underwent remodels or additions by shoreline segment.

Table 2. General land use characteristics of shoreline properties on the Puget Sound shoreline within City of Shoreline limits and potential annexation area of Point Wells

Shoreline Segment	Total Number of Parcels	2012 Vacant Parcels		Change: 2012 - 2019			Shoreline Parks and Open Spaces
		Number	% of total	New Development (#)	Remodel/ Addition (#)	% of total	
A	7	2	0.1	0	0	0	None
B	84	9	3.4	1	7	4.5	Kayu Kayu Ac Park (public)
C	20	4	3.4	0	0	0	Richmond Beach Saltwater Park (public); Storm Creek Reserve
D	17	0	0	0	0	0	Private on Reserve (private)
E	38	9	3.7	0	0	0	Innis Arden Reserve (public); Boeing Creek Reserve (private)

Source: King County, 2019; City of Shoreline, 2019

Houses on existing single-family lots could continue to grow larger through additions; however, zoning density restrictions, the presences of steep slope and landslide hazard areas located throughout portions of Segments B-E, and covenants restricting redevelopment in the Innis Arden and Highlands neighborhoods constrain opportunities for additions, making expansion of existing building footprints less likely. Furthermore, the BNSF Railway restricts development potential because vehicular access across the BNSF tracks is limited. Therefore, general patterns of anticipated future development remain consistent with the 2012 CIA.

Point Wells is the only property that may undergo a major redevelopment. Development of the City’s existing SMP began years before its final approval in 2013. At the start of this process, Point Wells was designated and zoned by Snohomish County as Industrial. This changed in 2009/2010 when Snohomish County redesignated and rezoned Point Wells from Industrial to an

Urban Center. Under Snohomish County’s regulations, an Urban Center provides for mixed-use, dense development that could produce upwards of 2.6 million square feet of residential and commercial development. The City has included Point Wells as a Future Service Annexation Area and adopted a subarea plan to establish a less intense vision for the site.

In 2012, Snohomish County removed the Urban Center designation and zoning, reducing it to the Urban Village designation with Planned Community Business zoning. Under an Urban Village designation, the site has the potential to develop at least 1,800 residential units, 20,000 square feet of retail, and 115,000 square feet of office space. However, in 2011, prior to reducing the designation and zoning of the site, a developer submitted applications and became vested to the Urban Center designation.

Snohomish County stopped processing the developer's applications in 2018, effectively terminating an Urban Center development at Point Wells, after more than 7 years of review time. The developer appealed Snohomish County’s decision to King County Superior Court, which was recently denied. Thus, at this point it is unknown whether such an intense mixed use development could be built at Point Wells. At the minimum, development consistent with an Urban Village designation is still possible. As stated in the 2012 CIA, if Point Wells were to redevelop, soil and groundwater contamination would be remediated and the nearshore habitat would be restored as mitigation for the redevelopment

4. POTENTIAL IMPACTS OF REVISED STANDARDS

This chapter describes the substantial changes made to the 2006 critical area standards as part of the 2015 update. A discussion of the potential effect on shoreline ecological function is also provided. The critical areas regulation language as presented to the Planning Commission is attached to this addendum in strikethrough / underline format for each topic that is described (see Appendix A). Outside of these major critical areas standards revisions no other substantial changes to the SMP have been evaluated.

4.1 Combine Streams with Fish & Wildlife Habitat section

The City updated the critical areas standards to combine the stream critical areas section with the fish and wildlife critical areas section based on the state model code provisions. Streams and other “waters of the state” are a type of fish and wildlife habitat as defined by the Washington Administrative Code (WAC). This amendment is consistent with state guidance for fish and wildlife habitat protection (CTED, 2007). This change is outlined in Section 20.240.270.

See A-1 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for Fish and Wildlife Habitat.

Likely Effects on Shoreline Ecological Functions

The updated approach will have no effect on shoreline ecological functions. As long as streams and fish and wildlife habitat critical areas are regulated by local jurisdictions, there will be no particular positive or negative impacts to protections of streams or fish and wildlife habitat by integrating the two critical area types.

4.2 Adopt State Water Typing System

State agencies such as Washington Department of Fish and Wildlife (WDFW) and Ecology recommend use of the Washington State Department of Natural Resources (WDNR) stream typing system in Title 222 WAC, the forest practices regulations. The latest stream typing by WDNR classifies streams into Type S (shoreline), Type F (fish-bearing), Type Np (non-fish-bearing, perennial flow) and Type Ns (non-fish-bearing, seasonal flow). The City updated their water typing system to the State Water Typing System. This change resulted in a 10-foot buffer increase for Type Ns habitat streams. This change is outlined in Section 20.240.270(B) (5).

Likely Effects on Shoreline Ecological Functions

This update provides a consistent system that maintains a basis in key physical and ecological differences across streams. The system identifies whether or not streams are used by fish and whether or not they experience perennial or seasonal flow, which is important for protecting

ecological functions of the stream and shoreline. Although the City's previous typing system was an outdated state stream typing system, the updated approach will have no effect on shoreline ecological functions as the protections (such as buffer requirements for each stream type) were nearly the same.

See A-1 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for stream typing.

4.3 Development Allowances in Separated and Isolated Stream and/or Wetland Buffer

This update addresses sites where existing, legally established roadways, railroads, paved areas, or other structures occur between the site and the stream and/or wetland. Development proposals are allowed in buffer areas isolated by roads or constructed features, if a critical area report determines and the Director of Community Development concurs, that it is a physically separated and functionally isolated stream and/or wetland buffer. This updated language is outlined in Section 20.240.280(D)(6) and 20.240.330(G)(10).

Likely Effects on Shoreline Ecological Functions

Riparian and wetland buffers offer various ecological functions, such as providing shade to the stream in summer and serving as sources of large woody debris. These functions can only exist if the buffer abuts and lies adjacent to the stream or wetland critical area. Physical separation of a stream or wetland from its buffer by an existing road, railroad, or paved area eliminates the protective function of the buffer for the critical area. Therefore, an allowance for development in separated or functionally isolated streams or wetland buffers will have no effect on shoreline ecological functions.

See A-2 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for development in stream and wetland buffers that are separated or isolated from the development.

4.4 Updated Wetland Rating and Buffer Standards

The City updated the wetland rating standards to be consistent with the Ecology 2014 Wetland Rating System for Western Washington. The updated wetland rating standards, found in Section 20.240.320(B), include the wetland rating manual scoring range (i.e., between 9 and 27 under the updated manual versus 1 to 100 in the 2004 manual) that is based on a qualitative scale of functions from high, medium, or low. Wetland buffer widths were updated to be consistent with state guidance and offer both a combined fixed-width and variable-width approach, with a minimum buffer prescribed based on a wetland's category and an additional buffer based on increasing habitat points (Bunten et al., 2016; "Table XX.1" revised July 2018). The City also updated mitigation ratios in Table 20.240.350(G) based on the type of compensatory mitigation being performed as recommended by current BAS (Bunten et al, 2016).

The updated wetland standards simplify and standardize the mitigation and buffer requirements for projects that need approval at the local and state or federal level.

Likely Effects on Shoreline Ecological Functions

Wetlands in Washington State – Vol. 1 A Synthesis of the Science (Sheldon et al., 2005) confirmed that buffers perform an important water quality function by trapping pollutants before they reach a wetland and can serve as critical habitat for some species in uplands surrounding wetlands and streams. The updated buffer table includes habitat scores and emphasizes the requirement to provide wildlife corridors which may provide additional protection for shoreline ecological functions.

A successful mitigation project often requires the amount of mitigation to be larger than the impact being mitigated for. The updated mitigation ratios will be beneficial to the shoreline as they make up for the spatial and temporal loss of functions associated with development.

See A-3 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for wetlands.

4.5 Clarified Report Content Requirements for Assessment of Geological Characteristics

The City clarified that geotechnical reports (now referenced as hazards assessments) include an evaluation of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. The revised requirements outlined in SMC Section 20.240.240(D) encourage use of BAS when evaluating geological hazard areas.

Likely Effects on Shoreline Ecological Functions

Clarified report requirements guarantee clear and standardized implementation of regulations. The assessment of geological characteristics also requires applicants to conduct site-specific tests, evaluate historic and existing conditions, and evaluate vulnerability of the site to seismic or other geologic events based on scientifically valid methods. Ultimately, this update ensures better protection of shoreline ecological functions.

See A-4 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for hazards assessments.

4.6 Standards for Very High Risk and Moderate to High Risk Landslide Hazard Areas

According to the updated geologically hazardous areas regulations, alteration in very high risk landslide hazard areas or associated 50-foot buffers may be permitted with geotechnical analysis and recommendations, assuming consistency with code requirements and design criteria. Buffers for moderate to high risk landslide hazard areas are based on a recommendation by a qualified geotechnical professional (with potential for no buffer), rather than providing a minimum buffer. The qualified professional would also recommend any additional setbacks for buildings and stormwater facilities adequate to certify no increase in the risk of the hazard. The revision to these

standards, summarized in SMC Sections 20.240.224 (E) and 20.240.230 (D), was evaluated by AMEC Foster Wheeler and approved by Ecology during the City’s 2015 Critical Areas Ordinance update (AMEC Foster Wheeler, 2015; City of Shoreline, 2015a).

Likely Effects on Shoreline Ecological Functions

Geologic hazards standards are designed to reduce risks to human health and safety. The updated standards will continue to focus on the protection of life and property. Alteration to and development on coastal feeder bluffs may reduce the potential of these areas to provide sediment delivery to coastal zones, potentially disrupting natural coastal beach accretion. However, the bluffs within the city are somewhat isolated from the shoreline because of the presence of the BNSF railway and associated shoreline armoring, altering the natural delivery of bluff sediment sources.

To better understand the implication of these changes on coastal feeder bluffs, ESA completed a parcel analysis using the City’s GIS data for geohazards to identify potential future development in very high risk landslide hazard areas, and moderate to high risk landslide hazard areas. Based on the parcel analysis, a large portion of the parcels within the City’s shoreline jurisdiction are within mapped landslide hazard areas (Table 3). Most of the parcels are already developed with residential uses. The majority of the undeveloped parcels within landslide hazard areas are located on the upland side of the BNSF railway. Many of these undeveloped parcels are too narrow to provide sufficient area for new development.

Developed parcels within landslide hazards areas that are located on large lots could have the potential for more extensive additions or, in a few cases, subdivisions. These large parcels are mainly located in the Highlands and Innis Arden neighborhoods. The Innis Arden neighborhood maintains covenants that include a number of mechanisms that limit the potential for subdivision, including access and setback standards (Innis Arden 3, 1949). The Highlands neighborhood also maintains covenants that limit the potential for subdivision, including minimum lot size standards and minimum lot area with a slope less than 20 percent (Amended By-laws of the Highlands, 2017). Although these covenants are not administered or enforced by the City of Shoreline, they serve to constrain the development potential of large lots within landslide hazard areas.

Table 3. Parcels within landslide hazard areas in shoreline jurisdiction

<u>Mapped Landslide Hazard Areas</u>	<u>Total Parcels (#)</u>	<u>Total Area (Acres)</u>	<u>Undeveloped Parcels (#)</u>	<u>Undeveloped Parcels (% of total parcels in shoreline jurisdiction)</u>
<u>Very High Risk + 50-foot Buffer</u>	<u>97</u>	<u>71.4</u>	<u>11</u>	<u>7.6</u>
<u>Moderate to High Risk (no buffer)</u>	<u>62</u>	<u>5.1</u>	<u>4</u>	<u>2.8</u>
<u>Parcels without Landslide Hazard Areas</u>	<u>19</u>	<u>31.5</u>	<u>9</u>	<u>13.2</u>

Source: City of Shoreline, 2015; King County, 2014

Due to the requirements for a detailed geologic hazard analysis by a qualified geotechnical expert and the low potential for foreseeable future development within the very high and moderate to

high risk landslide areas, it appears that the changes to the regulations will not result in an overall net loss of shoreline ecological functions.

See A-4 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for Landslide Hazard Areas.

4.7 General Critical Areas Standards

New critical areas report standards outlined in SMC Sections 20.240.040, 20. 240.080 and 20.240.082 must address several topics including: reconnaissance, delineation, analysis, mitigation, and maintenance and monitoring. Contents should include general project information, such as names, location, and site plan, as well as critical areas characterization, impacts, and mitigation plan. Geologic hazards, fish and wildlife habitat, and wetlands each have critical areas report requirements specific to the type of assessment being conducted and mitigation plan requirements specific to the type of impact. Along with the new critical areas report standards, the City requires third-party review of critical areas reports by a qualified professional when the project requires a shoreline variance application or when it is required by the shoreline provisions or Director of Community Development.

Likely Effects on Shoreline Ecological Functions

Detailed report, allowed activities, and review process standards guarantee clear and standardized implementation of regulations. These standards also require applicants to evaluate the condition and function of each critical area based on scientifically valid methods. Ultimately, this update ensures better protection of shoreline ecological functions.

See A-5 of Appendix A for redline/strikeout versions of City adopted critical areas standards revisions for new overall critical areas standards.

5. INTEGRATED CRITICAL AREAS PROVISIONS AND NO NET LOSS

As with the 2012 CIA, this analysis was guided by the three factors identified in the Ecology guidelines for evaluating cumulative impacts and no net loss:

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

Existing shoreline conditions and relevant natural processes are consistent with those documented in the 2012 CIA with the exception of biodiversity corridors mapped within Innis Arden Reserve Park and Boeing Creek Reserve and the heron rookery south of Richmond Beach Saltwater Park that were not previously identified in the Shoreline Inventory and Characterization Report. Development proposals within State Priority Habitats and Species areas, such as biodiversity corridors and heron rookeries, are required to prepare a critical areas report and habitat management plan to assess potential impacts and propose mitigation measures. Likewise, reasonably foreseeable future shoreline development and use is generally the same. The adopted critical areas regulation changes, once integrated into the SMP, will maintain protection of shoreline ecological functions.

Several critical areas standards revisions clarify approaches to critical areas mitigation and protection—namely by revising the wetland buffer widths, wetland mitigation ratios, and critical areas report standards. The updated wetland buffer table emphasizes the requirement to provide wildlife corridors that may provide additional protection for shoreline ecological functions. A successful mitigation project often requires the amount of mitigation to be larger than the impact being mitigated for, which is beneficial to the shoreline. Detailed report standards require applicants to evaluate the condition and function of each critical area based on scientifically valid methods. These amendments would improve protection of shoreline ecological functions.

Geologic hazards standards revisions do not include a requirement to assess the functions associated with coastal bluffs which typically positively contribute towards the shoreline ecosystem. However, the bluffs where landslide hazards occur within the City’s shoreline jurisdiction are somewhat isolated from the nearshore because of the presence of the BNSF railway bed and associated armoring. Development potential is limited within these landslide hazard areas due to the limited number of vacant parcels and covenants associated with the Innis Arden and Highlands neighborhoods that limit the potential for subdividing large, developed properties. Therefore, geologic hazard standards would result in no net loss of shoreline ecological functions from development.

Conclusions on the future performance of key shoreline functions as a result of the incorporation of the revised critical area standards are summarized as follows:

Hydrology: Loss in hydrological function from baseline is not expected; anticipated change from the current adopted SMP with previous critical areas standards are neutral. In most areas along the City's shoreline, modifications and development have resulted in alterations to natural hydrological functions. The updated critical areas standards would not change major protections for remaining hydrologic functions that are provided by the SMP.

Water Quality: No loss in water quality is expected. The program and critical areas revisions include many criteria to ensure that potential impacts from any allowed development are avoided or minimized.

Habitat: No loss in habitat functions is expected. Habitat elements such as riparian vegetation, associated wetland and tributary stream connectivity, and organic contributions have been altered along the City's shoreline, while localized areas of high value, intact habitat remain (Boeing Creek Reserve and Innis Arden Reserve Park). Additionally, mitigation of any wetland impact would be improved by new buffer and mitigation provisions pursuant to the updated critical areas standards.

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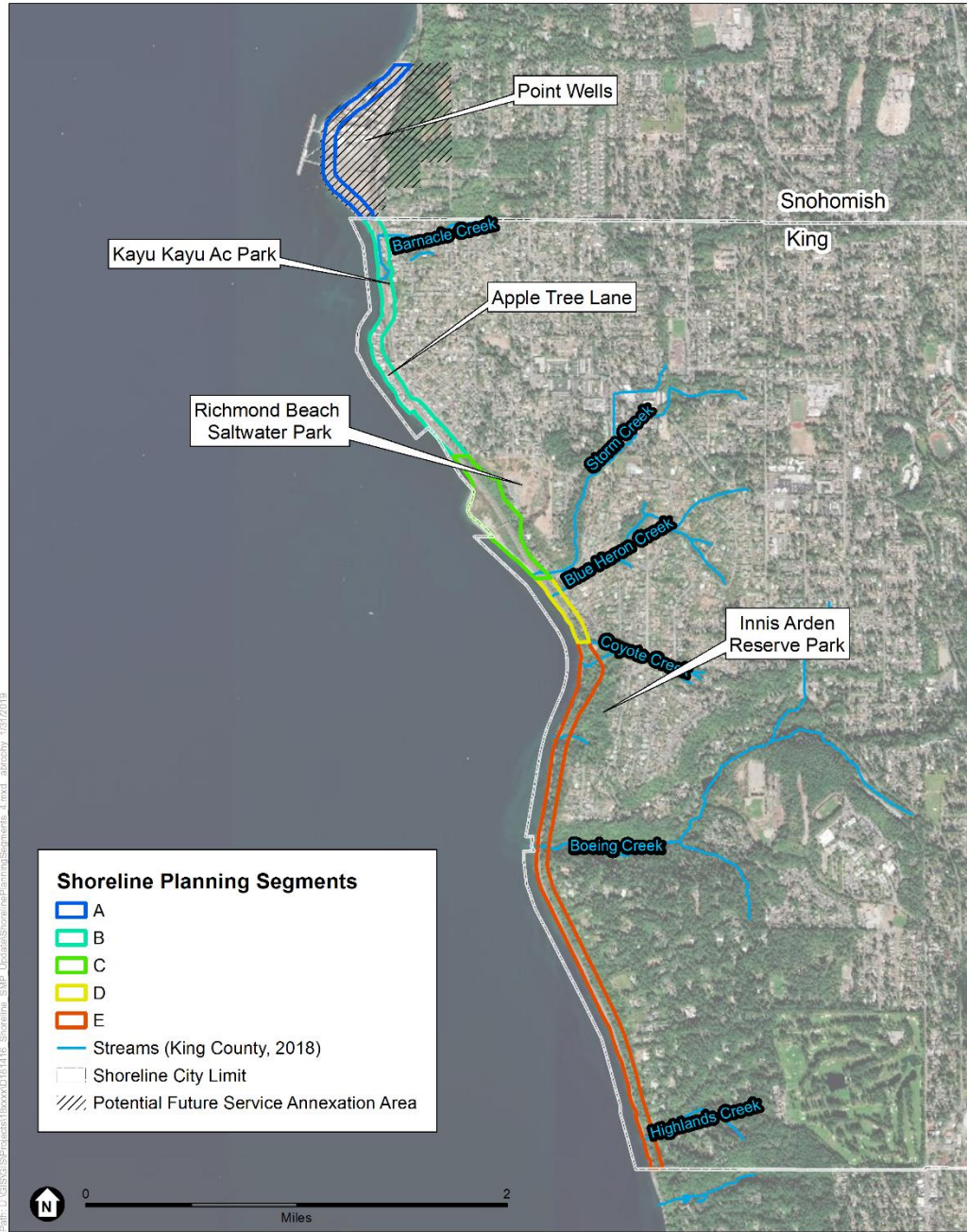
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SOURCE: City of Shoreline, 2019; ESA, 2019; King County, 2018

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Figure 1
City of Shoreline Shoreline Planning Segments
Shoreline, Washington



Appendix A

Excerpts of proposed SMC 20.240 SMP Critical Areas

A-1 Fish & Wildlife Habitat Critical Areas Section

Revised Critical Areas sections combining streams with fish and wildlife habitat and adopted State Water Typing system.

20.240.270 Fish and wildlife habitat – Classification and designation.

A. The City designates the following fish and wildlife habitat conservation areas that meet one or more of the criteria in subsection B of this section, regardless of any formal identification, as critical area, and, as such, these areas are subject to the provisions of this chapter. These areas shall be managed consistent with best available science; including WDFW’s Management Recommendations for Priority Habitat and Species. The following fish and wildlife habitat conservation areas are specifically designated, and this designation does not preclude designation of additional areas as consistent with the criteria in subsection B of this section:

1. All regulated streams and wetlands and their associated buffers as determined by a qualified specialist.
2. The waters, bed and shoreline of Puget Sound up to the OHWM.

B. Fish and wildlife habitat conservation areas are those areas designated by the City based on review of the best available science; input from WDFW, the Department of Ecology, USACE, and other agencies; and any of the following criteria:

1. Areas Where State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.

a. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status. Federally designated endangered and threatened species known to be identified and mapped by the Washington State Department of Wildlife in Shoreline include, but may not be limited to, the following:

- i. Chinook (*Oncorhynchus tshawytscha*):

ii. Southern resident orca or killer whales (*Orcinus orca*).

b. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the State of Washington that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the State without cooperative management or removal of threats as identified by WDFW. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (State endangered species) and WAC 232-12-011 (State threatened and sensitive species), as amended from time to time. WDFW maintains the most current listing and should be consulted for current listing status. State designated endangered, threatened, and sensitive species known to be identified and mapped by WDFW in Shoreline include, but may not be limited to, the following:

i. Northern goshawk (*Accipiter gentilis*);

ii. Purple martin (*Progne subis*).

2. State Priority Habitats and Species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by WDFW in the Priority Habitats and Species List. Priority habitats and species known to be identified and mapped by WDFW in Shoreline include, but may not be limited to, the following:

a. Biodiversity areas and corridors identified and mapped along Boeing Creek and in and around Innis Arden Reserve Park;

b. Chinook/fall chinook (*Oncorhynchus tshawytscha*);

c. Coho (*Oncorhynchus kisutch*);

- d. Dungeness crab (*Cancer magister*);
- e. Estuarine intertidal aquatic habitat;
- f. Geoduck (*Panopea abrupta*);
- g. Northern goshawk (*Accipiter gentilis*);
- h. Pacific sand lance (*Ammodytes hexapterus*);
- i. Purple martin (*Progne subis*);
- j. Resident coastal cutthroat (*Oncorhynchus clarki*);
- k. Surf smelt (*Hypomesus pretiosus*); and
- l. Winter steelhead (*Oncorhynchus mykiss*).

3. Commercial and Recreational Shellfish Areas. These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW, as amended from time to time.

4. Kelp and eelgrass beds and herring and smelt spawning areas.

5. Waters of the State. Waters of the State include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington, as classified in WAC 222-16-030, as amended from time to time. Streams are those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless such watercourses are used by fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided, that there is evidence of at least intermittent flow during years of normal rainfall. Streams shall be classified in accordance with the DNR water typing system (WAC 222-16-030) hereby adopted in its entirety by reference and summarized as follows:

a. Type S: streams inventoried as “shorelines of the State” under the SMA and the rules promulgated pursuant to the SMA, as amended from time to time;

b. Type F: streams which contain fish habitat. Not all streams that are known to exist with fish habitat support anadromous fish populations, or have the potential for anadromous fish occurrence because of obstructions, blockages or access restrictions resulting from existing conditions. Therefore, in order to provide special consideration of and increased protection for anadromous fish in the application of development standards, shoreline streams shall be further classified as follows:

i. **Anadromous Fish-Bearing Streams (Type F-Anadromous).** These streams include:

(A) Fish-bearing streams where naturally recurring use by anadromous fish populations has been documented by a government agency;

(B) Streams that are fish passable or have the potential to be fish passable by anadromous populations, including those from Lake Washington or Puget Sound, as determined by a qualified professional based on review of stream flow, gradient and natural barriers (i.e., natural features that exceed jumping height for salmonids), and criteria for fish passability established by WDFW; and

(C) Streams that are planned for restoration in a six-year capital improvement plan adopted by a government agency or planned for removal of the private dams that will result in a fish-passable connection to Lake Washington or Puget Sound; and

ii. **Nonanadromous Fish-Bearing Streams (Type F-Nonanadromous).** These include streams which contain existing or potential fish habitat, but do not have the potential for anadromous fish use due to natural barriers to fish passage, including streams that contain resident or isolated fish populations.

The general areas and stream reaches with access for anadromous fish are indicated in the City of Shoreline Stream and Wetland Inventory and Assessment

(2004) and basin plans. The potential for anadromous fish access shall be confirmed in the field by a qualified professional as part of a critical area report;

c. Type Np: perennial nonfish habitat streams;

d. Type Ns: seasonal nonfish habitat streams; and

e. Piped stream segments: those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert.

A-2 Physically Separated and Functionally Isolated Stream and/or Wetland Buffer

Revised Critical Areas section allowances for development in stream and wetland buffers that are separated or isolated from the development.

20.240.280 Fish and wildlife habitat – Required buffer areas.

6. Development Proposals within Physically Separated and Functionally Isolated Stream Buffers. Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from stream due to existing, legally established roadways and railroads or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the stream shall be considered physically isolated and functionally separated stream buffers. Once determined by the Director, based on a submitted critical area report to be a physically separated and functionally isolated stream buffer, development proposals shall be allowed in these areas.

20.240.330 Wetlands – Required buffer areas.

10. Development Proposals within Physically Separated and Functionally Isolated Wetland Buffers. Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from wetland due to existing, legally established roadways, paved trails eight feet or more in width, or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the wetland shall be considered physically isolated and functionally separated wetland buffers. Once determined by the Director, based on a submitted critical area report to be a physically separated and functionally isolated wetland buffer, development proposals shall be allowed in these areas.

A-3 Wetland Standards

Revised Critical Areas section allowances for development in stream and wetland buffers that are separated or isolated from the development..

20.240.320 Wetlands – Designation and rating.

A. Designation. All areas meeting the definition of a wetland and identification criteria as wetlands pursuant to SMC 20.240.322, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

B. Rating. All wetlands shall be rated by a qualified professional according to the current Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington 2014 (Department of Ecology Publication No. 014-06-029, or as revised). Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the City, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities.

1. Category I. Category I wetlands are those that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. The following types of wetlands are Category I:

- a. Relatively undisturbed estuarine wetlands larger than one acre;
- b. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
- c. Bogs;
- d. Mature and old-growth forested wetlands larger than one acre;
- e. Wetlands in coastal lagoons; and
- f. Wetlands that perform many functions well (scoring 23 points or more based on functions).

2. **Category II.** Category II wetlands are those that are difficult, though not impossible, to replace and provide high levels of some functions. The following types of wetlands are Category II:

a. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;

b. Interdunal wetlands larger than one acre or those found in a mosaic of wetlands; and

c. Wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3. **Category III.** Category III wetlands are those with a moderate level of functions, generally have been disturbed in some ways, can often be adequately replaced with a well-planned mitigation project, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. The following types of wetlands are Category III:

a. Wetlands with a moderate level of functions (scoring between 16 and 19 points); or

b. Interdunal wetlands between 0.1 and one acre.

4. **Category IV.** Category IV wetlands are those with the lowest levels of functions (scoring below 16 points) and are often heavily disturbed. These are wetlands that should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and also need to be protected.

C. **Illegal Modifications.** Wetland rating categories shall not change due to illegal modifications or alterations. A wetland's category shall be based on the pre-modification/alteration analysis of the wetland.

D. At the time of adoption of the critical area amendments to this Master Program, Ordinance 856, there were no identified Category I wetlands identified within the City. If this category of wetland is subsequently identified, any applicable standards may temporarily be used on an

interim basis by the Director based on Washington State guidance on protection of the identified type of resource until such time as permanent shoreline regulations can be established.

20.240.324 Wetlands – Development standards.

A. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.

B. Activities Allowed in Wetlands. The activities listed below are allowed in wetlands pursuant to SMC 20.240.040, Allowed activities, and subject to applicable permit approvals. These activities do not require submission of a critical area report, except where such activities result in a net loss of the shoreline ecological function provided by a wetland or wetland buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
3. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.
4. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and handheld equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 500 square feet of area may be cleared, as calculated cumulatively over one year, on private property without a permit. All

removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List shall be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

5. Permitted alteration to a legally constructed structure existing within a wetland or wetland buffer that does not increase the footprint of the development or hardscape or increase the impact to a wetland or wetland buffer, consistent with SMC 20.220.150.

C. **Category I Wetlands.** Development activities and uses that result in alteration of Category I wetlands and their associated buffers shall be prohibited subject to the shoreline variance provisions of SMC 20.220.040.

D. **Category II and III Wetlands.** Development activities and uses that result in alteration of Category II and III wetlands shall be prohibited subject to the shoreline variance provisions of SMC 20.220.040 and the following criteria:

1. The basic project proposed cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland;

2. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction to the size, scope, configuration, or density of the project are not feasible; and

3. Full compensation for the loss of acreage and functions and values of wetland and buffers due to unavoidable impacts shall be provided in compliance with the mitigation performance standards and requirements of this chapter.

E. **Category IV Wetlands, Except Small Hydrologically Isolated Wetlands.** Development activities and uses that result in unavoidable impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is consistent with the purpose and intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of

acreage and functions and values of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

F. Small, Hydrologically Isolated Category IV Wetlands. The Director may allow small, hydrologically isolated Category IV wetlands to be exempt from the avoidance sequencing provisions of SMC 20.240.053 and subsection D of this section and allow alteration of such wetlands; provided, that a submitted critical area report and mitigation plan provides evidence that all of the following conditions are met:

1. The wetland is less than 1,000 square feet in area;
2. The wetland is a low quality Category IV wetland with a habitat score of less than three points in the adopted rating system;
3. The wetland does not contain habitat identified as essential for local populations of priority species identified by WDFW or species of local importance which are regulated as fish and wildlife habitat conservation areas in Chapter 20.240, Subchapter 3;
4. The wetland is not associated with riparian areas or buffers;
5. The wetland is not part of a wetland mosaic; and
6. A mitigation plan to replace lost wetland functions and values is developed, approved, and implemented consistent with SMC 20.240.350.

G. Subdivisions. The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:

1. Land that is located wholly within a wetland and/or its buffer may not be subdivided; and
2. Land that is located partially within a wetland and/or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:
 - a. Located outside of the wetland and its buffer; and
 - b. Meets the minimum lot size requirements of SMC 20.50.020.

20.240.330 Wetlands – Required buffer areas.

A. Buffer Requirements. The standard buffer widths in Table 20.240.330(A)(1) have been established in accordance with the best available science. The buffer widths shall be determined based on the category of wetland and the habitat score as assigned by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.

1. The use of the standard buffer widths requires the implementation of the mitigation measures in Table 20.240.330(A)(2), where applicable to the development type, to minimize the impacts of the adjacent land uses.
2. If an applicant chooses not to apply the appropriate mitigation measures in Table 20.240.330(A)(2), then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.
3. The standard buffer widths assume that the buffer is a relatively intact native plant community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the existing buffer is bare ground, sparsely vegetated, or vegetated with nonnative or invasive species that do not perform needed functions, then the applicant shall either develop and implement a wetland buffer restoration or enhancement plan to maintain the standard width to create the appropriate plant community or the buffer shall be widened to ensure that adequate functions of the buffer are provided.

Table 20.240.330(A)(1) Wetland Buffer Requirements

<u>Wetland Category</u>	<u>Buffer Width According to Habitat Score</u>			
	<u>Habitat Score of 3 – 4</u>	<u>Habitat Score of 5</u>	<u>Habitat Score of 6 – 7</u>	<u>Habitat Score of 8 – 9</u>
<u>Category I: Based on total score or Forested</u>	<u>75 ft</u>	<u>105 ft</u>	<u>165 ft</u>	<u>225 ft</u>
<u>Category I: Estuarine</u>	<u>150 ft (no change based on habitat scores)</u>			
<u>Category II: Based on total score</u>	<u>75 ft</u>	<u>105 ft</u>	<u>165 ft</u>	<u>225 ft</u>

<u>Category III (all)</u>	<u>60 ft</u>	<u>105 ft</u>	<u>165 ft</u>	<u>225 ft</u>
<u>Category IV (all)</u>	<u>40 ft (no change based on habitat scores)</u>			

Table 20.240.330(A)(2) Required Measures to Minimize Impacts to Wetlands (Measures are required, where applicable to a specific proposal)

<u>Disturbance</u>	<u>Activities and Uses That Cause Disturbances</u>	<u>Required Measures to Minimize Impacts</u>
<u>Lights</u>	<ul style="list-style-type: none"> • <u>Parking lots</u> • <u>Warehouses</u> • <u>Manufacturing</u> • <u>Residential</u> 	<ul style="list-style-type: none"> • <u>Direct lights away from wetland.</u>
<u>Noise</u>	<ul style="list-style-type: none"> • <u>Manufacturing</u> • <u>Residential</u> 	<ul style="list-style-type: none"> • <u>Locate activity that generates noise away from wetland.</u> • <u>If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source.</u> • <u>For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10 ft heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.</u>
<u>Toxic runoff*</u>	<ul style="list-style-type: none"> • <u>Parking lots</u> • <u>Roads</u> • <u>Manufacturing</u> • <u>Residential areas</u> • <u>Application of agricultural pesticides</u> • <u>Landscaping</u> 	<ul style="list-style-type: none"> • <u>Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered.</u> • <u>Establish covenants limiting use of pesticides and fertilizers within 150 ft of wetland.</u> • <u>Apply integrated pest management.</u>
<u>Stormwater runoff</u>	<ul style="list-style-type: none"> • <u>Parking lots</u> • <u>Roads</u> • <u>Manufacturing</u> 	<ul style="list-style-type: none"> • <u>Retrofit stormwater detention and treatment for roads and existing adjacent development.</u>

	<ul style="list-style-type: none"> • <u>Residential areas</u> • <u>Commercial</u> • <u>Landscaping</u> 	<ul style="list-style-type: none"> • <u>Prevent channelized flow from lawns that directly enters the buffer.</u> • <u>Use low intensity development techniques (per PSAT publication on LID techniques).</u>
<u>Change in water regime</u>	<ul style="list-style-type: none"> • <u>Impermeable surfaces</u> • <u>Lawns</u> • <u>Tilling</u> 	<ul style="list-style-type: none"> • <u>Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns.</u>
<u>Pets and human disturbance</u>	<ul style="list-style-type: none"> • <u>Residential areas</u> 	<ul style="list-style-type: none"> • <u>Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion.</u> • <u>Place wetland and its buffer in a separate tract or protect with a conservation easement.</u>
<u>Dust</u>	<ul style="list-style-type: none"> • <u>Tilled fields</u> 	<ul style="list-style-type: none"> • <u>Use best management practices to control dust.</u>
<u>Disruption of corridors or connections</u>	-	<ul style="list-style-type: none"> • <u>Maintain connections to off-site areas that are undisturbed.</u> • <u>Restore corridors.</u>
<p>* <u>These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site. Additional mitigation measures may be required based on recommendation of a qualified professional, third party review, or State agency recommendations.</u></p>		

4. Increased Wetland Buffer Area Width. Buffer widths shall be increased, on a case-by-case basis as determined by the Director, when a larger buffer is necessary to protect the shoreline ecological functions provided by the wetland's functions and values. This determination shall be supported by a critical area report, prepared by a qualified professional at the applicant's expense, showing that it is reasonably related to protection of the functions and values of the wetland and the shoreline. The critical area report shall include, but not be limited to, the following criteria:

a. The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored, or documented priority species or habitats, or the wetland is essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

b. The adjacent land has slopes greater than 15 percent and is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or

c. The adjacent land has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer restoration/enhancement plan in accordance with SMC 20.240.350 may be substituted.

5. Buffer averaging to improve wetland functions and values may be permitted when all of the following conditions are met:

a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or is a “dual-rated” wetland with a Category I area adjacent to a lower rated area;

b. The buffer is increased adjacent to the higher functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion as demonstrated by a critical areas report from a qualified wetland professional;

c. The total area of the buffer after averaging is equal to the area required without averaging; and

d. The buffer width is not reduced by more than 25 percent in any location.

6. Buffer averaging, through a shoreline variance consistent with 20.220.040, may be permitted when all of the following are met:

- a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;
- b. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;
- c. The total buffer area after averaging is equal to the area required without averaging; and
- d. The buffer at its narrowest point is never less than either three-fourths of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

B. Measurement of Wetland Buffers. All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

C. Buffers on Mitigation Sites. All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

D. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the required monitoring period.

E. Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in SMC 20.240.350.

F. Overlapping Critical Area Buffers. If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

G. Allowed Wetland Buffer Uses. The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter; provided such uses are not

prohibited by any other applicable law and such uses are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

1. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

2. **Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

a. **Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. Pathways should be generally parallel to the perimeter of the wetland, located only in the outer 25 percent of the wetland buffer area, and located to avoid removal of significant trees. Pathways should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable;**

b. **Wildlife viewing structures.**

3. **Educational and scientific research activities.**

4. **Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.**

5. **The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.**

6. **Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.**

7. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and handheld equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 1,500 square feet of area may be cleared, as calculated cumulatively over one year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List shall be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

8. **Stormwater Management Facilities.** Stormwater management facilities are limited to stormwater dispersion outfalls, bioswales, and other low-impact facilities consistent with the adopted stormwater manual. Stormwater management facilities are not allowed in buffers of Category I or II wetlands. Facilities may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

a. No other location is feasible; and

b. The location of such facilities will not degrade the functions or values of the wetland.

9. **Nonconforming Uses or Structures.** Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided such uses or structures do not increase the degree of nonconformity, consistent with SMC 20.220.150.

10. **Development Proposals within Physically Separated and Functionally Isolated Wetland Buffers.** Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from wetland due to existing, legally established roadways, paved trails eight feet or more in width, or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the wetland shall be considered physically isolated and functionally separated wetland buffers. Once determined by the Director, based on a submitted critical area report

to be a physically separated and functionally isolated wetland buffer, development proposals shall be allowed in these areas.

H. Signs and Fencing of Wetlands and Buffers.

1. Temporary Markers. The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the Director may require the applicant to install permanent signs along the boundary of a wetland or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs shall be posted at an interval of one per lot or every 50 feet, whichever is less, and shall be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC 20.240.110 or with alternative language approved by the Director.

b. The provisions of subsection (H)(2)(a) of this section may be modified as necessary to assure protection of sensitive features.

3. Fencing. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances; provided, that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such

fencing is necessary to protect the functions of the critical area; provided, that breaks in permanent fencing may be allowed for access to permitted buffer uses (subsection G of this section);

b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

c. When buffer averaging is part of a development proposal; or

d. At the Director’s discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area;

e. The applicant shall be required to install a permanent fence around the wetland buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

20.240.340 Wetlands – Critical area report requirements.

A. Report Required. If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to, a wetland, a wetland critical area report shall be required. Critical area report requirements for wetland areas are generally met through submission to the Director of one or more wetland critical area reports. In addition to the general critical area report requirements of SMC 20.240.080, critical area reports for wetlands shall meet the requirements of this section. Critical area reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. Preparation by a Qualified Professional. Critical area reports for wetlands shall be prepared and signed by a qualified professional who is a certified wetland scientist or a noncertified wetland scientist with the minimum required experience, per SMC 20.20.042, in the field of wetland science and with experience preparing wetland delineation, impact assessments, and mitigation plans.

C. Third Party Review Required. Critical areas studies and reports on wetland areas shall be subject to third party review consistent with SMC 20.240.080(C) and in any of the additional following circumstances:

1. Compensatory mitigation is required for impacts to Category I, II, or III wetlands and or buffers; or
2. Compensatory mitigation is required for impacts to Category IV wetlands.

D. Minimum Report Contents for Wetlands. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information, at a minimum:

1. The minimum report contents required per SMC 20.240.080(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the wetland delineations, ratings, or impact analyses including references;
4. **Site Plans.** A copy of the site plan sheet(s) for the project shall be included with the written report and shall include, at a minimum:
 - a. Maps (to scale) depicting delineated and surveyed wetland(s) and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and
 - b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project;
5. For each wetland identified on site and off site within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (SMC 20.240.320(B)); required buffers (SMC 20.240.330); hydrogeomorphic classification; wetland acreage based on a professional survey from the

field delineation (acres for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if inlets/outlets can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site;

6. A description of the proposed actions, including an estimation of acres of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative;

7. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development;

8. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.240.053(A) to avoid, minimize, and mitigate impacts to critical areas and a discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity;

9. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions; and

10. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.

E. Additional Information. When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.240.082 and the wetland mitigation performance standards and requirements of SMC 20.240.350;

2. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes, and/or other appropriate agency;
3. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and
4. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.240.350 Wetlands – Compensatory mitigation performance standards and requirements.

A. Requirements for Compensatory Mitigation.

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater shoreline ecological and biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1), (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised).
2. Mitigation ratios shall be consistent with subsection E of this section.
3. Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft” (Department of Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with subsection E of this section.

B. Compensating for Lost or Impacted Functions. Compensatory mitigation shall address the shoreline ecological functions and the wetland or wetland buffer functions and values affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions and values. The goal shall be for the compensatory mitigation to provide similar shoreline ecological functions and wetland functions and values as those lost, except when either:

1. The lost wetland provides minimal functions and values, and the proposed compensatory mitigation action(s) will provide equal or greater functions and values or

will provide functions and values shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

2. Out-of-kind replacement of wetland type or functions and values will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

C. Preference of Mitigation Actions. Methods to achieve compensation for wetland functions and values shall be approached in the following order of preference:

1. **Restoration.** Restoration of wetlands.

2. **Creation.** Creation (establishment) of wetlands on disturbed upland sites, such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

3. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions and values lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

4. **Preservation.** Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

a. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species;

b. There is no net loss of habitat functions within the watershed or basin;

- c. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost;
- d. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland); and
- e. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

D. Type and Location of Compensatory Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration, except when all of the following apply:

- 1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include:
 - a. Anticipated replacement ratios for wetland mitigation;
 - b. Buffer conditions and proposed widths;
 - c. Available water to maintain anticipated hydrogeomorphic classes of wetlands when restored; and
 - d. Proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
- 2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland;

3. Off-site locations shall be in the same sub-drainage basin, unless watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; and

4. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing, seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

E. Wetland Mitigation Ratios¹.

Table 20.240.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.

<u>Category and Type of Wetland²</u>	<u>Creation or Reestablishment (Area – in square feet)</u>	<u>Rehabilitation (Area – in square feet)</u>	<u>Enhancement (Area – in square feet)</u>	<u>Preservation (Area – in square feet)</u>
<u>Category I: Based on total score for functions</u>	<u>4:1</u>	<u>8:1</u>	<u>16:1</u>	<u>20:1</u>
<u>Category I: Mature forested</u>	<u>6:1</u>	<u>12:1</u>	<u>24:1</u>	<u>24:1</u>
<u>Category I: Estuarine</u>	<u>Case-by-case</u>	<u>6:1</u>	<u>Case-by-case</u>	<u>Case-by-case</u>

<u>Category II: Based on total score for functions</u>	<u>3:1</u>	<u>6:1</u>	<u>12:1</u>	<u>20:1</u>
<u>Category III (all)</u>	<u>2:1</u>	<u>4:1</u>	<u>8:1</u>	<u>15:1</u>
<u>Category IV (all)</u>	<u>1.5:1</u>	<u>3:1</u>	<u>6:1</u>	<u>10:1</u>

¹ Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance – Version 1 (Department of Ecology Publication No. 06-06-011a, March 2006, or as revised).

² Category and rating of wetland as determined consistent with SMC 20.240.320(B).

F. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

G. Mitigation Performance Standards. The performance standards in this section shall be incorporated into mitigation plans submitted to the City for impacts to wetlands. The following performance standards shall apply to any mitigations proposed within Category I, II, III and IV wetlands and their buffers. Modifications to these performance standards consistent with the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised) may be considered for approval by the Director as alternatives to the following standards:

1. Plants indigenous to the region (not introduced or foreign species) shall be used.
2. Plant selection shall be consistent with the existing or projected hydrologic regime, including base water levels and stormwater event fluctuations.
3. Plants should be commercially available or available from local sources.
4. Plant species high in food and cover value for fish and wildlife shall be used.

5. Mostly perennial species should be planted.
6. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided.
7. Plant selection shall be approved by a qualified professional.
8. The following standards shall apply to wetland design and construction:
 - a. Water depth shall not exceed six and one-half feet (two meters).
 - b. The grade or slope that water flows through the wetland shall not exceed six percent.
 - c. Slopes within the wetland basin and the buffer zone shall not be steeper than 3:1 (horizontal to vertical).
 - d. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark.
9. Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials.
10. Planting densities and placement of plants should be determined by a qualified professional and shown on the design plans.
11. The planting plan shall be approved by the City.
12. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City.
13. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock.
14. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process.

15. An irrigation system shall be installed, if necessary, for the initial establishment period.

16. All construction specifications and methods shall be approved by a qualified professional and the City.

17. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City.

H. Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan shall be included as part of the required critical area report. Compensatory wetland mitigation plans shall meet the minimum requirements SMC 20.240.082 and demonstrate compliance with SMC 20.240.053. Full guidance can be found in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised). The mitigation plan shall meet the following additional standards:

1. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (SMC 20.240.320(B));

2. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site progress through natural succession);

3. A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;

4. A description of the proposed mitigation construction activities, construction/installation notes, and timing of activities;
5. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);
6. Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas; and
7. The scaled plan sheets for the compensatory mitigation shall contain, at a minimum:
 - a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;
 - b. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;
 - c. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;
 - d. Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;
 - e. Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter;
 - f. A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed,

spacing of plants, typical clustering patterns, typical plant installation details and notes, total number of each species by community type, timing of installation; and

g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring plan, contingency plan, and maintenance schedule, and actions. Standards for success shall be established based on the performance standards identified and the functions and values being mitigated based on the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised).

A-4 Geologic Hazards Standards

Revised Critical Areas section allowances for development in stream and wetland buffers that are separated or isolated from the development..

20.240.224 Geologic hazards – Development standards.

E. Alteration of Very High Risk Landslide Hazard Areas. Alterations of a very high risk landslide hazard area and/or buffer may only occur for activities for which a critical area report with a hazards analysis is submitted and certifies that:

1. The development will not increase surface water discharge or sedimentation on site or to adjacent properties beyond pre-development conditions;
2. The development will not decrease slope stability on the site or on adjacent properties;
3. Such alterations will meet other critical areas regulations; and
4. The design criteria in subsection F of this section are met.

F. Design Criteria for Alteration of Very High Risk Landslide Hazard Areas.

Development within a very high risk landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative project design provides greater short- and long-term slope stability while meeting all other provisions of this chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design criteria are:

1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Proposed alteration of natural slopes, that does not include structures, shall not decrease the factor of safety for landslide occurrences below the limits of 1.3 for static conditions and 1.0 for seismic. Where the existing conditions are below these limits, the proposed development shall increase the factor of safety to these limits or will not be permitted. Analysis of dynamic conditions shall be based on the seismic event as established by the current version of the International Building Code;

2. New structures and improvements shall be clustered to avoid geologic hazard areas and other critical areas;
3. New structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;
4. New structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
5. The proposed development shall not result in greater risk of the hazard or a need for increased buffers on neighboring properties;
6. Where the existing natural slope area cannot be retained undisturbed with native vegetation, the use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
7. Development shall be designed to minimize impervious lot coverage and preserve native vegetation and trees to the maximum extent practicable.

G. Additional Requirements for Alteration of Very High Risk Hazard Landslide Areas.

1. Prior to application, the applicant shall meet the requirements of and conduct a neighborhood meeting consistent with SMC 20.30.090. The notification area shall be limited to:
 - a. All property owners whose properties adjoin the subject property; and
 - b. Properties that include part of the subject property's very high risk landslide hazard area and the standard 50-foot buffer, but not to exceed a maximum of 200 feet from the project clearing limits.
2. Prior to permit issuance, the property owner shall sign and record on title, at the owner's sole expense, a covenant in a form acceptable to the City, which:
 - a. Acknowledges and accepts the risks of development in the landslide hazard area;

b. Waives any rights to claims against the City;

c. Indemnifies and holds harmless the City against claims, losses, and damages;

d. Informs subsequent owners of the property of the risks and the covenant; and

e. Advisability of obtaining added insurance.

3. Prior to permit issuance, the piling and excavation contractors shall submit insurance bonding documentation that includes coverage for subsidence and underground property damage, listing the City as an additional insured. The Director may require adequate bonds and/or insurance to cover potential claims for property damage that may arise from or be related to the following:

a. Excavation or fill within a landslide-prone area when the depth of the proposed excavation exceeds four feet and the bottom of the proposed excavation is below the 100 percent slope line (45 degrees from a horizontal line) from the property line; or

b. In other circumstances where the Director determines that there is a potential for significant harm to any type of critical area or a critical area buffer during the construction process.

4. If the Building Official has reasonable grounds to believe that an emergency exists because significant changes in geologic conditions at a project site or in the surrounding area may have occurred since a permit was issued, increasing the risk of damage to the proposed development, to neighboring properties, or to nearby surface waters, the building official may, by letter or other reasonable means of notification, suspend the permit until the applicant has submitted a letter of certification. The letter of certification shall be based on such factors as the presence of known slides, indications of changed conditions at the site or the surrounding area, or other indications of unstable soils and meet the following requirements:

a. The letter of certification shall be from the current project qualified professional geotechnical engineer of record stating that a qualified professional geotechnical engineer has inspected the site and area surrounding the proposed development within the 60 days preceding submittal of the letter; and that:

i. In the project geotechnical engineer’s professional opinion no significant changes in conditions at the site or surrounding area have occurred that render invalid or out-of-date the analysis and recommendations contained in the technical reports and other application materials previously submitted to the City as part of the application for the permit; or that

ii. In the project geotechnical engineer’s professional opinion, changes in conditions at the site or surrounding area have occurred that require revision to project criteria and that all technical reports and any necessary revised drawings that account for the changed conditions have been prepared and submitted.

5. The letter of certification and any required revisions shall be reviewed and approved by the City’s third party qualified professional, at the applicant’s expense, before the Building Official may allow work to continue under the permit.

20.240.230 Geologic hazard areas – Required buffer areas.

A. Buffers for geologic hazard areas shall be maintained as undisturbed native vegetation consistent with SMC 20.240.090. Building and other improvement setbacks will be required in addition to buffers as recommended by the qualified professional to allow for landscaping, access around structures for maintenance, and location of stormwater facilities at safe distances from geologic hazard areas where native vegetation is not necessary to reduce the risk of the hazard.

B. Required buffer widths for geologic hazard areas shall reflect the sensitivity of the hazard area and the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the area.

C. In determining the appropriate buffer width, the City shall consider the recommendations contained in a geotechnical critical area report required by these regulations.

D. For moderate to high risk landslide hazard areas, the qualified professional shall recommend whether buffers should be required and the width of those buffers, as well as recommending any additional setbacks for buildings and stormwater facilities adequate to certify no increase in the risk of the hazard.

E. For very high risk landslide hazard areas, the standard buffer shall be 50 feet from all edges of the landslide hazard area. Larger buffers may be required as needed to eliminate or minimize the risk to people and property based on a geotechnical critical area report. The standard buffer may be reduced when geotechnical studies demonstrate, and the qualified professional certifies, that the reduction will not increase the risk of hazard to people or property, on or off site; however, the minimum buffer shall be 15 feet.

F. Landslide hazard areas and associated buffers shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the critical landslide hazard and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County Recorder's Office.

20.240.240 Geologic hazards – Critical area report requirements.

A. Report Required. If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a geologic hazard area, a critical area report shall be required, at the applicant's expense. Critical area report requirements for geologic hazard areas are met through submission to the Director of one or more geologic hazard critical area reports (also referred to as geotech or geotechnical engineering reports). In addition to the general critical areas report requirements of SMC 20.240.080, critical areas reports for geologic hazard areas shall meet the requirements of this section. Critical areas reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. Preparation by a Qualified Professional. Critical areas reports for potential geologic hazard areas shall be prepared, stamped, and signed by a qualified geotechnical engineer or engineering geologist licensed in the State of Washington, with minimum required experience, per SMC 20.20.042, analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard. If mitigation measures are necessary, the report detailing the mitigation measures and design of the mitigation shall be prepared by a qualified professional with experience stabilizing geologic hazard areas with similar geotechnical properties and by a qualified vegetation ecologist, landscape architect, or

arborist with experience designing and monitoring vegetative stabilization of geologic hazard areas.

C. Third Party Review Required. Critical areas studies and reports on geologically hazardous areas will be subject to third party review at the owner's sole expense as provided in SMC 20.240.080(C) and in the following circumstances:

1. A buffer reduction or alteration of the critical area or buffer is proposed for a very high risk landslide hazard areas.

D. Minimum Report Contents for Geologic Hazard Areas. A critical area report for geologic hazard areas shall include a field investigation, contain an assessment of whether or not each type of geologic hazard identified in SMC 20.240.210 is present or not present, and determine if the proposed development of the site will increase the risk of the hazard on or off site. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.240.080(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for soils, test pit locations, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the geologic hazard areas delineations, classifications, hazards assessments and/or analyses of the proposal impacts including references;
4. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal, drawn at an engineering scale, showing:
 - a. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, off site within 200 feet of, or that are likely to impact or be affected by the proposal;
 - b. Proposed development, including the location of existing and proposed structures, fill, significant trees to be removed, vegetation to be removed, storage of materials, and drainage facilities;

- c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report;
- d. Height of slope, slope gradient, and cross-section of the project area;
- e. The location of springs, seeps, or other surface expressions of ground water on or off site within 200 feet of the project area or that have the potential to affect or be affected by the proposal;
- f. The location and description of surface water on or off site within 200 feet of the project area or that has the potential to be affected by the proposal; and
- g. Clearing limits, including required tree protection consistent with SMC 20.50.370.

5. Stormwater Pollution Prevention Plan (SWPPP). For any development proposed with land-disturbing activities on a site containing a geologic hazard area, a stormwater pollution prevention plan (also known as an erosion and sediment control plan) shall be required. The SWPPP, in compliance with the requirements of Chapter 13.10 SMC, shall be included in the critical area report or be referenced if it is prepared separately.

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

- a. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site-specific measurements, tests, investigations, or studies that support the identification of geologically hazardous areas; and
- b. A summary of the existing site conditions, including:
 - i. Surface topography, existing features, and vegetation found in the project area and in all hazard areas addressed in the report;

ii. Surface and subsurface geology and soils to sufficient depth based on data from site-specific explorations;

iii. Geologic cross-section(s) displaying the critical design conditions;

iv. Surface and ground water conditions; and

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

7. Analysis of Proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the identified hazard area(s), the subject property, and affected adjacent properties. The hazards analysis component of the critical areas report shall include the following based on the type(s) of geologic hazard areas identified:

a. Recommendations for the minimum buffer consistent with SMC 20.240.230 and recommended minimum drainage and building setbacks from any geologic hazard based upon the geotechnical analysis. Buffers shall be maintained consistent with SMC 20.240.090; however, the qualified professional may recommend additional setbacks for drainage facilities or structures which do not have to be maintained as undisturbed native vegetation; and

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

E. Additional Technical Information Requirements for Landslide Hazard Areas. The technical information required in a critical area report for a project within a landslide hazard area shall also include the following:

1. An estimate of the present stability of the subject property, the stability of the subject property during construction, the stability of the subject property after all development activities are completed, and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development, including the effect construction and placement of structures, clearing, grading, and removal of vegetation will have on the slope over the estimated life of the structure;

2. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;
3. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties;
4. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
5. Compliance with the requirements of SMC 20.240.224(D) for alterations proposed in moderate to high risk landslide hazard areas;
6. Compliance with the requirements of SMC 20.240.224(E) through (G) for alterations proposed in very high risk landslide hazard areas;
7. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;
8. Recommendations for drainage and subdrainage improvements;
9. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
10. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.

A-5 General Critical Areas Standards

Revised Critical Areas section critical areas reports and review process.

20.240.080 Critical area report – Requirements.

A. Report Required. If uses, activities, or developments are proposed within, adjacent to, or are likely to impact critical areas or their buffers, an applicant shall provide site-specific information and analysis in the form of critical area report(s) as required in this chapter.

Critical area reports are required in order to identify the presence, extent, and classification/rating of potential critical areas, as well as to analyze, assess, and mitigate the potential adverse impact to or risk from critical areas for a development project. Critical area reports shall use standards for best available science in SMC 20.240.060. Critical area reports for two or more types of critical areas shall meet the report requirements for each type of critical area. The expense of preparing the critical area report(s) shall be borne by the applicant. This provision is not intended to expand or limit an applicant's other obligations under WAC 197-11-100, as amended from time to time.

B. Preparation by Qualified Professional. Critical area report(s) shall be prepared by qualified professional(s) as defined in SMC 20.20.042, with the required training and experience specific to the type(s) of critical area(s) present consistent with the requirements of SMC 20.240.240, 20.240.290, and 20.240.340. Proof of licensing, credentials, and resume of the qualified professional(s) preparing the report shall be submitted for review by the City to determine if the minimum qualifications are met.

C. Third Party Review of Critical Area Reports. Review of required critical area reports by a qualified professional under contract with or employed by the City will be required by the Director at the applicant's expense in any of the following circumstances:

1. The project requires a shoreline variance application or a shoreline conditional use permit; or
2. Third party review is specifically required by the provisions of this chapter for the critical area(s) or critical area buffer(s) potentially being impacted; or
3. When the Director determines such services are necessary to demonstrate compliance with the standards and guidelines of this chapter.

D. Critical Area Report Types or Sections. Critical area reports may be met in stages through multiple reports or combined in one report. A critical area report shall include one or more of the following sections or report types unless exempted by the Director based on the extent of the potential critical area impacts. The scope and location of the proposed project will determine which report(s) alone or combined are sufficient to meet the critical area report requirements for the impacted critical area type(s). The typical sequence of required sections or reports that will fulfill the requirements of this section include:

1. **Reconnaissance.** The existence, general location, and type of critical areas in the vicinity of a project site (off site within 300 feet for wetlands and fish and wildlife habitat conservation areas and off site within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas) of a project site (if allowed by the adjoining property owners). Determination of whether the project will adversely impact or be at risk from the potential critical areas based on maximum potential buffers and possible application of SMC 20.240.220(A)(3), 20.240.280(D)(7) or 20.240.330(G)(10) should be addressed;

2. **Delineation.** The extent, boundaries, rating or classification, and applicable standard buffers of critical areas where the project area could potentially impact the critical area or its buffer including an assessment of the characteristics of or functions and values of the critical area and buffers identified;

3. **Analysis.** The proposal and impact assessment report documenting the potential project impacts to the critical area and buffers including a discussion of the efforts taken to avoid, minimize, and reduce potential impacts to those areas;

4. **Mitigation.** The measures that prevent or compensate for the potential impacts of the project designed to meet the requirements of this chapter, in SMC 20.240.082, Mitigation plan requirements, and the standards for the specific critical areas impacted. Mitigation includes, but is not limited to, adjustments to required buffer sizes, best practices to minimize impacts, and critical area or buffer enhancement, restoration, or preservation plans. Mitigation plans include habitat management plans, revegetation, or replanting plans, and restoration plans;

5. **Maintenance and Monitoring.** The goals of the mitigation proposed, performance standards for success, monitoring methods and reporting schedule, maintenance methods and schedule, and contingency actions. Maintenance and monitoring plans shall be consistent with the mitigation performance standards and requirements of this chapter, including SMC 20.240.250, 20.240.300, and 20.240.350.

E. **Minimum Report Contents.** At a minimum, critical area reports shall contain the following:

1. The name and contact information of the applicant;
2. Adequate information to determine compliance with the requirements of the critical area regulations, this chapter, including critical area report, impact and hazard assessment, and mitigation requirements specific to each critical area type, as indicated in the corresponding sections of this chapter;
3. The dates, names, and qualifications of the qualified professional(s) preparing the report and documentation of any fieldwork performed on the site;
4. A description of the proposal, proposal location including address and parcel number(s), and a vicinity map for the project;
5. Identification of the development permit(s) requested and all other local, State, and/or Federal critical area-related permits required for the project;
6. A copy of the site plan for the development proposal including:
 - a. A map to standard engineering scale depicting critical areas, buffers, the development proposal, and any areas to be altered. In addition to plan size site plans, a legible, reduced (eight and one-half inches by 11 inches) copy will be required if noticing is required for the project; and
 - b. A scaled depiction and description of the proposed stormwater pollution prevention plan, consistent with the adopted stormwater manual, for the development and consideration of impacts to critical areas due to drainage alterations;

7. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, and buffers within the vicinity of the proposed project area (off site within 300 feet for wetlands and fish and wildlife habitat conservation areas and off site within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas);

8. A statement specifying the accuracy of the report and all assumptions made and relied upon;

9. A description of the methodologies used to conduct the critical areas investigation, including references;

10. An assessment of the probable impacts to the critical areas resulting from the proposed development of the site based upon identified findings;

11. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.240.053, Mitigation requirements, to avoid, minimize, and mitigate impacts to critical areas; and

12. Plans for mitigation required to offset any critical areas impacts, in accordance with SMC 20.240.082, Mitigation plan requirements, and the corresponding mitigation performance standards sections of this chapter, including a discussion of the applicable development standards and cost estimates for determination of financial guarantee requirements.

F. Existing Reports. Unless otherwise provided, a critical areas report may incorporate, be supplemented by, or composed of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director. At the discretion of the Director, reports previously compiled or submitted as part of a proposal for development may be used as a critical areas report to the extent that the requirements of this section and the report requirements for each specific critical area type are met. Critical areas reports shall be considered valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary. Supplemental critical area report(s) may be required to provide information and analysis to address changes to the project scope and potential impacts or to changes to applicable regulations that have been made subsequent to existing, valid critical area reports.

G. Modifications to Report Requirements.

1. Limitations to Study Area. The Director may limit the required geographic area of the critical areas report as appropriate if:

- a. The applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area; or
- b. The proposed activity will affect only a limited part of the subject site.

2. Modifications to Required Contents. The applicant may consult with the Director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation. In some cases, such as when it is determined that no geologic hazard area is present, a full report may not be necessary to determine compliance with the critical area regulations, this chapter, and in those cases a letter or reconnaissance only report may be required.

3. Additional Information Requirements. The Director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:

- a. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
- b. Grading and drainage plans; and
- c. Information specific to the type, location, and nature of the critical area.

20.240.082 Mitigation plan requirements.

When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical area report. Mitigation plans shall meet the minimum requirements of SMC 20.240.080 and the applicable mitigation performance standards and requirements for

the impacted type(s) of critical area(s) and buffer(s), including but not limited to SMC 20.240.250, 20.240.300, and 20.240.350. When the mitigation plan is submitted separately from other types or sections of the required critical area report(s), the mitigation plan shall meet the minimum content requirements of SMC 20.240.080(E) by inclusion or reference to other existing report(s). The mitigation plan shall include, at a minimum:

A. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the mitigation proposed and including:

1. A description of the anticipated impacts to the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of shoreline ecological functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the shoreline ecological functions provided by the impacted critical area; and
2. A review of the best available science supporting the proposed mitigation and a description of the report author’s experience to date in restoring or creating the type of critical area proposed.

B. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained at the end of the required monitoring period and whether or not the requirements of this chapter, this Master Program, and the SMA have been met.

C. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration;
2. Site plans showing grading and excavation details with minimum two-foot contour intervals;
3. Erosion and sediment control features;

4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

D. Monitoring Program and Contingency Plan.

1. A monitoring program shall be included in the mitigation plan and implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives of the mitigation plan are being met.

2. A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. Contingency plans include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. Corrective measures will be required by the City when the qualified professional indicates, in a monitoring report, that the contingency actions are needed to ensure project success by the end of the monitoring period. A performance and maintenance bond, or other acceptable financial guarantee, is required to ensure the applicant's compliance with the terms of the mitigation agreement consistent with SMC 20.240.120, Financial guarantee requirements.

3. Monitoring programs prepared to comply with this section shall include, at a minimum, the following requirements:

a. Best available scientific procedures shall be used to establish the success or failure of the mitigation project. A protocol outlining the schedule for site monitoring (for example, monitoring shall occur in years zero (as-built), one, three, and five after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met.

b. For vegetation determinations, permanent sampling points shall be established.

c. Vegetative success shall, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. Alternative standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration of recommendations provided in a critical area report or as otherwise required by the provisions of this chapter.

d. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. Monitoring reports on the current status of the mitigation project shall be submitted, consistent with subsection E of this section, to the City on the schedule identified in the monitoring plan, but not less than every other year. The reports are to be prepared by a qualified professional and reviewed by the City, or a qualified professional retained by the City, and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable.

e. Monitoring programs shall be established for a period necessary to establish that performance standards have been met, but not for less than a minimum of five years without approval from the Director.

f. If necessary, failures in the mitigation project shall be corrected.

g. Dead or undesirable vegetation shall be replaced with appropriate plantings.

h. Damage caused by erosion, settling, or other geomorphological processes shall be repaired.

i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (D)(3)(d) of this section.

j. Correction procedures shall be approved by a qualified professional and the City.

k. If the mitigation goals are not obtained within the initial monitoring period, the applicant remains responsible for restoration of the impacted shoreline ecological

functions provided by the critical areas or hazard risk reduction until the mitigation goals agreed to in the mitigation plan are achieved.

E. **Monitoring Reports.** Monitoring reports shall be submitted to the City consistent with the approved monitoring plan.

1. The as-built report, required prior to final inspection, shall, at a minimum, include documentation of the following to establish the baseline for monitoring:

a. Departures from the original approved plans;

b. Construction supervision provided by the qualified professional;

c. Approved project goals and performance standards;

d. Baseline data for monitoring per the approved monitoring methods;

e. Photos from established photo points; and

f. A site plan showing final mitigation as constructed or installed, monitoring points, and photo points.

2. Subsequent monitoring reports shall, at a minimum, include:

a. Monitoring visit observations, documentation, and analysis of monitoring data collected;

b. Photos from photo points;

c. Determination whether performance standards are being met; and

d. Maintenance and/or contingency action recommendations to ensure success of the project at the end of the monitoring period.

3. The applicant shall be responsible for the cost (at the current hourly rate) of review of monitoring reports and site inspections during the monitoring period, which are completed by the City or a qualified professional under contract with or employed by the City.

F. Cost Estimates. The mitigation plan shall include cost estimates that will be used by the City to calculate the amounts of financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the mitigation project, monitoring program, and any contingency measures shall be posted in accordance with SMC 20.240.120, Financial guarantee requirements.

G. Approved Mitigation Projects – Signature. On completion of construction, an as-built report for any approved mitigation project shall be prepared and signed off by the applicant’s qualified professional and approved by the City. Signature of the qualified professional on the required as-built report and approval by the City will indicate that the construction has been completed as planned.



17500 Midvale Avenue North
Shoreline, WA 98133-4905
(206) 801-2500 ♦ Fax (206) 801-2788

SEPA THRESHOLD DETERMINATION OF NONSIGNIFICANCE (DNS)

NONPROJECT INFORMATION

DATE OF ISSUANCE: **March 1, 2019**

PROPONENT: **City of Shoreline**

APPLICATION NO.: **N/A**

LOCATION OF PROPOSAL: **Citywide**

DESCRIPTION OF PROPOSAL: **The City of Shoreline is proposing amendments to the Shoreline Master Program to satisfy State requirements, incorporate 2015 updates to the Critical Areas Ordinance, and update the Comprehensive Plan to reflect changes.**

LEAD AGENCY: **City of Shoreline**

PUBLIC HEARING BEFORE THE PLANNING COMMISSION: **Thursday, April 4, 2019; 7:00-9:00 pm in the Council Chambers at City Hall (17500 Midvale Avenue N)**

SEPA THRESHOLD DETERMINATION OF NONSIGNIFICANCE (DNS)

The City of Shoreline, as lead agency for this proposal, has determined that the proposal, a non-project action (WAC 197-11-774), will not have a probable significant adverse impact(s) on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of the completed environmental checklist, the City of Shoreline Comprehensive Plan, the City of Shoreline Development Code, and other information on file with the Department. This information is available for public review upon request at no charge.

This Determination of Nonsignificance (DNS) is issued in accordance with WAC 197-11-340(2). The City will not act on this proposal for 14 days after issuance.

RESPONSIBLE OFFICIAL: **Rachael Markle, AICP**
Planning & Community Development, Director and SEPA Responsible Official

ADDRESS: **17500 Midvale Avenue North** PHONE: **206-801-2531**
Shoreline, WA 98133-4905

DATE: 2/27/19 SIGNATURE: *Rachael E. Markle*

PUBLIC COMMENT INFORMATION

Comments on this proposal must be submitted by 5:00 pm on April 4, 2019.

APPEAL INFORMATION

Any aggrieved person may appeal this Threshold Determination by filing within 14 days of issuance as provided in SMC 20.30 Subchapter 4 and SMC 20.30.680 no later than fourteen (14) calendar days after the date of issuance. Appeals must be submitted in writing to the City Clerk with the appropriate filing fee and received not later than 5:00 pm on the last day of the appeal period. The written appeal must contain specific factual objections related to the environmental impacts of the project.

PROJECT INFORMATION

For more information, including application, documents, plans, and all SEPA related materials, please contact Miranda Redinger, Senior Planner, at mredinger@shorelinewa.gov or by calling 206-801-2513.

SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. Name of proposed project, if applicable:

City of Shoreline Shoreline Master Program Periodic Review

2. Name of applicant:

City of Shoreline (City)

3. Address and phone number of applicant and contact person:

Contact:

Miranda Redinger, Senior Planner
17500 Midvale Ave N
Shoreline, WA 98133
(206) 801-2513

4. Date checklist prepared:

March 1, 2019

5. Agency requesting checklist:

City of Shoreline

6. Proposed timing or schedule (including phasing, if applicable):

The City's Planning Commission will review the Shoreline Master Program (SMP) revisions on April 4, 2019 during a public hearing. This public hearing will fulfill the Department of Ecology's requirements for a joint review and comment period. The City Council is scheduled to discuss the SMP at a Study Session on May 6, 2019 and adopt the Final SMP by Ordinance No. 856 on June 3, 2019.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Periodic review of the City's Shoreline Master Program is required every eight years in accordance with RCW 90.58.080.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

City of Shoreline SMP Periodic Review Checklist (see Appendix A)

City of Shoreline SMP Cumulative Impacts Analysis Addendum

City of Shoreline Critical Areas Regulations

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No pending applications or governmental approvals within the city limits would be affected by the SMP periodic review amendments. A project proponent for an area commonly referred to as Point Wells, lying just north of city limits, has submitted applications to Snohomish County to redevelop the industrial use of the site into a mixed-use residential and commercial development. The area is part of the City's Future Service Annexation Area. The proposed SMP amendments would apply to any new use or development within the City's shoreline jurisdiction once adopted by the City and approved by the Department of Ecology, and within the Future Service Annexation Area upon annexation.

10. List any government approvals or permits that will be needed for your proposal, if known.

The proposed SMP will need the following approvals:

- State Environmental Policy Act (SEPA) review and threshold determination for non-project actions;
- City Council adoption; and
- Washington State Department of Ecology approval (RCW 90.58.090).

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

In 2003, the Shoreline Management Act (SMA), chapter 90.58 RCW, was amended to require cities to regularly update their SMP. For the City of Shoreline, RCW 90.58.080(2) requires the City to review and update its SMP on or before June 30, 2019, and then once every eight years after the date of approval by the Department of Ecology, the regulatory body in charge of overseeing the periodic review.

The purpose of the statutorily-mandated periodic review is to assure that the City's SMP complies with the SMA and its implementing guidelines, WAC 173-26 to 173-27, and to assure consistency of the SMP with the City of Shoreline's comprehensive plan and development regulations adopted under the Growth Management Act (GMA), chapter 36.70A RCW, and other local requirements. Proposed changes to the City's SMP fall primarily into two categories:

those required by the Department of Ecology to incorporate changes in state guidance since the SMP was adopted in 2013, and those recommended by the City, primarily to integrate a Critical Areas Ordinance which was adopted in 2015 into the SMP.

The Department of Ecology developed a SMP Periodic Review Checklist for jurisdictions conducting their periodic review that provides guidance on amendments to state law, rules, and applicable guidance adopted between 2007 and 2017. The reviewed and completed City of Shoreline periodic review checklist is included as Appendix A to this SEPA checklist.

RCW 90.58.090(4) and RCW 36.70A.480(3) requires SMPs to provide for management of designated critical areas located within shorelines of the state. The 2013 SMP incorporates by reference the 2006 critical areas regulations adopted by Ordinance No. 398. In 2015, via Ordinance No. 723, the City did an extensive update to its critical areas regulations. Incorporation of the 2015 regulations into the City's SMP requires review and approval by the Department of Ecology which the City did not seek in 2015 due to time constraints. Therefore, the 2006 regulations have remained applicable within the shoreline jurisdiction to date. This has made pertinent regulations difficult to locate and results in an inconsistency to protecting critical areas within the city.

The updated SMP will:

- Incorporate the 2015 Critical Areas Ordinance (CAO) by embedding it within the SMP;
- Codify rather than adopt the CAO by reference;
- Make the pertinent CAO regulations easier to locate in the code, rather than as an attachment to the SMP; and
- Provide the ability to amend CAO language as necessary to fit the shoreline jurisdiction, which will increase clarity and fill gaps.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The SMP periodic review is a non-project action that affects activities, uses, and developments within shoreline jurisdiction. Shoreline jurisdiction within the city of Shoreline is along the shores of Puget Sound and on the adjacent shorelands or uplands within 200 feet of the shoreline edge (ordinary high water mark), including associated wetlands. The shoreline area is along the western edge of the city and runs from the Seattle city limits to the Snohomish County border. The City's SMP also includes policies and regulations that would affect the Point Wells area (in unincorporated Snohomish County as part of the city's Potential Future Service Annexation Area if this area were to be annexed into the city at a later date).

B. Environmental Elements

1. Earth

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

The city's shoreline is characterized by steep bluffs, low-lying areas, a coastal beach, and stream mouths. The City of Shoreline beaches are typical of Puget Sound and can be characterized by two distinct foreshore components: a high-tide beach and a low-tide terrace (Downing, 1983). The high-tide beach consists of a relatively steep beachface with coarse sediment and an abrupt break in slope at its waterward extent. Extending seaward from the break in slope, the low-tide terrace typically consists of a gently sloping accumulation of poorly sorted fine-grained sediment (Komar, 1976). In the city, coastal bluffs are separated from the Puget Sound by the BNSF railroad. In Snohomish County, the Point Wells area is a generally flat area waterward of the BNSF railroad tracks (Snohomish County PDS Map, 2019).

b. What is the steepest slope on the site (approximate percent slope)?

The city's shoreline area has terrain characterized by both low bank and steep bluffs that occur throughout most of the shoreline jurisdiction. The steepest slopes can be as much as 50% (King County iMap, 2019). Vertical bulkheads can be found on residential properties in the Apple Tree Lane community.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The Geotechnical Assessment Report prepared for the Sound Transit Everett to Seattle Commuter Rail Project (HWA GeoSciences, Inc., 1998) describes the typical soils and slope profile found along the waterfront from Everett to Seattle. In general, the area is dominated by Pleistocene aged glacial soils associated with the Vashon Drift and consisting of recessional outwash deposits, glacial till, advance outwash and glacial lacustrine. Recent soil deposits include beach and colluvial deposits, some of which are associated with landslides. Where major landscape modifications have occurred, such as Point Wells, fill soils are typically present (HWA GeoSciences, Inc., 1998).

The waterfront bluffs found along the city's shoreline (Figure 1; Segments B through E) are typically composed of a cap of very dense gravelly sand with scattered cobbles and boulders in a clay/silt matrix (glacial till), overlaying dense sand and gravel (glacial advance outwash), which overlies hard clay (glacial lacustrine). The thicknesses of these layers can vary substantially. However, the till cap is generally at the top of the bluffs, sometimes overlain by deposits of medium dense sand and gravel (glacial recessional outwash). The hard clays are typically at or near sea level. Streams draining the uplands dissect bluffs and flow into Puget Sound, depositing fine sand and silt in alluvial fans. Littoral drift, which is the accumulation or movement

of foreshore sediments along the shore by littoral currents and oblique waves, reworks some of this material and becomes beach deposits (HWA GeoSciences, Inc., 1998).

Soils at Richmond Beach Saltwater Park (Figure 1; Segment C) are characterized by loamy-sand texture and loose granular structure with little to no organic material. The soil is similar to an Indianola soil series (Scillitani et al., 2017).

Soils at Point Wells (Figure 1; Segment A) are mapped as urban land. A Woodway landslide occurred about 1 mile north of Point Wells in the winter of 1996/1997. The landslide debris uncovered advance outwash and Lawton Clay units (ICF, 2009).

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

The west-facing slopes along Puget Sound within the city have experienced relatively recent and historical landslide activity (HWA GeoSciences, Inc. 1998; Baum et al., 2000). In general, slope stability in the city's shoreline planning area is more stable in the northern portion (Figure 1; Segments A -D), though containing some isolated unstable areas, and unstable in the southern portion (Figure 1; Segment E).

Baum et al. (2000) conducted an inventory of recent landslides that included the shoreline between Everett and Seattle. Significant storm events during the winters of 1996-1997 and 2005-2006 resulted in several major landslide episodes (Baum et al., 2000; Godt et al., 2009). The most common types of landslides were shallow earth slides and debris flows, some of which blocked culverts and overtopped the BNSF railroad track. The largest one in the city occurred in Segment E north of Highlands Creek (Baum et al. 2000). The seawall and stone revetments of the BNSF railroad protect the base of the bluff from wave erosion and have probably increased the stability of the bluff. Baum et al. (2000) suggests that the bluff retreat during the winters of 1995-96 and 1996-97 might have been greater had the seawall and embankment not been present.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

No specific filling or grading is proposed. Under the SMP, clearing and grading activities within shoreline jurisdiction are permitted only as part of an allowed shoreline development, a public access improvement, or an ecological restoration or enhancement project [Shoreline Municipal Code (SMC) 20.230.080, Table 20.230.081]. Landfilling waterward of the ordinary high water mark (OHWM) is conditionally permitted for activities associated with shoreline/aquatic restoration remediation.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion hazard areas occur when lands on slopes of 15% or greater are underlain by soils such as Alderwood-Kitsap (AkF), Alderwood gravelly sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD) and Indianola (InD) (City of Shoreline, 2019). There is potential for erosion to occur along

the city's shoreline especially as a result of clearing, construction, or other use. The SMP includes provisions to limit clearing, retain existing native shoreline vegetation, manage stormwater, and provide erosion and sediment control (SMC 20.230.200.B and SMC 20.230.210.B).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

This is a non-project action with no specific construction resulting in new impervious surface.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The SMP includes provisions to limit clearing, retain existing native shoreline vegetation, manage stormwater, and provide erosion and sediment control (SMC 20.230.200.B and SMC 20.230.210.B). The SMP regulations along with other City of Shoreline regulations provide specific criteria to prevent and mitigate these impacts at the project level. These provisions are implemented on a project-by project basis.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

None

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None

3. *Water*

a. **Surface Water:**

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

In addition to the Puget Sound shoreline, the following streams discharge into Puget Sound in the shoreline jurisdiction: Boeing Creek is partially piped from its origin and discharges into Puget Sound, passing through the city's shoreline planning area. Other creeks include: Highlands Creek, Blue Heron Creek (also known as Innis Arden North Creek), Coyote Creek (also known as Innis Arden South Creek), Storm Creek, Upper Barnacle Creek (also known as Upper Puget Sound North) and Lower Barnacle Creek (also known as South Barnacle Creek), and Lost Creek. All the creeks originate from wetlands, urban runoff or hillside seeps, except that the headwaters of Upper and Lower Barnacle Creeks and Lost Creek are located to the north in Snohomish County. There are no freshwater lakes in the shoreline jurisdiction.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

Not applicable. As a non-project action, adoption of the SMP revisions would not require any in or overwater work. New development within shoreline jurisdiction would be subject to the provisions of the SMP, which includes specific standards for in and over-water structures (SMC 20.230.170).

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

Not applicable. As a non-project action, adoption of the SMP revisions would not require any fill or dredging to be placed in or removed from surface water or wetlands. New development within shoreline jurisdiction would be subject to the provisions of the SMP, which includes specific standards for dredging and filling (SMC 20.230.160 and SMC 20.230.210).

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

Not applicable. As a non-project action, adoption of the SMP revisions would not require any surface water withdrawals or diversions. New development within shoreline jurisdiction would be subject to the provisions of the SMP and *2018 Surface Water Master Plan*, which includes specific standards for water withdrawals and diversions.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

According to the King County Federal Emergency Management Agency (FEMA) flood insurance rate map (2005) for Shoreline and the Snohomish County Federal Emergency Management Agency (FEMA) flood insurance rate map for Point Wells, the 100 year floodplain is present at Boeing Creek and along the length of the city's shoreline and Point Wells. Properties along the Puget Sound may experience coastal flooding during a strong storm surge.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Not applicable. As a non-project action, no discharges of waste materials to surface waters are proposed. The City maintains a storm drainage system consisting of pipes, ponds, ditches, bioswales, and streams. The majority of the system eventually discharges into the Puget Sound via one of the city's streams, drainages or pipes consistent with the City's National Pollutant Discharge Elimination System (NPDES) Permit.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Not applicable. As a non-project action, adoption of the SMP revisions would not require any groundwater withdrawals or discharges. New development within shoreline jurisdiction would be subject to the provisions of the SMP, *2018 Surface Water Management Plan*, surface water utility regulations (SMC 13.10), and the *Department of Ecology Stormwater Management Manual*, which includes specific standards for groundwater withdrawals.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Not applicable. As a non-project action, adoption of the SMP revisions would not require any discharges of waste material into the ground. Existing and proposed developments in the shoreline are required to be connected to the sanitary sewer system (SMC 20.230.140 – Residential Development). New, replaced, or expanded docks and piers should be constructed in accordance with Washington Department of Fish and Wildlife (WDFW) and U.S. Army Corps of Engineers Best Management Practices to avoid discharge of pollutants (SMC 20.230.170 – Piers and Docks).

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

As a non-project action, adoption of the SMP revisions will not result in new runoff. The SMP does not impact existing city-wide policies addressing the preservation and improvement of water quality. New development in the shoreline is required to comply with the provisions of the SMP, the City's development and surface water utility regulations, the City's *Surface Water Management Plan*, and the *Department of Ecology Stormwater Management Manual*.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.**

As a non-project action, adoption of the SMP revisions will not result in waste materials entering ground or surface waters. The SMP requires shoreline use and development control and treatment of stormwater to protect and maintain water quality and quantity in accordance with the City's stormwater regulations.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

As a non-project action, adoption of the SMP revisions will not affect drainage patterns. Provisions exist in the SMP to assure development, such as residences, bulkheads, and revetments, does not affect surface and subsurface drainage patterns.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The SMP encourages management of stormwater throughout the city consistent with the *City of Shoreline 2018 Surface Water Master Plan* and stormwater management regulations (SMC Chapter 13.10). Low impact development techniques are encouraged where feasible.

4. Plants**a. Check the types of vegetation found on the site:**

- deciduous tree: alder, maple, aspen, other
 evergreen tree: fir, cedar, pine, other
 shrubs
 grass
 pasture
 crop or grain
 Orchards, vineyards or other permanent crops.
 wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
 water plants: water lily, eelgrass, milfoil, other
 other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

As a non-project action, adoption of the SMP revisions will not result in the removal or alteration of vegetation. Standards in the SMP regulate maintenance and restoration of native vegetation where feasible.

c. List threatened and endangered species known to be on or near the site.

According to the Washington Natural Heritage Program, no threatened or endangered plant species are known to be on or near the shoreline (Washington Department of Natural Resources, 2019).

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The SMP encourages the protection and restoration of native vegetation and control of non-native invasive plant species. The SMP includes a *Restoration Plan* describing opportunities to restore native vegetation within coastal habitats (ESA Adolfson, 2009).

e. List all noxious weeds and invasive species known to be on or near the site.

Invasive plant species are known to be present within Richmond Beach Saltwater Park and Point Wells site as stated in the City's *Shoreline Inventory and Characterization* (ESA Adolfson, 2008). Tansy ragwort and purple loosestrife, King County noxious weeds, are mapped on private property north of the Apple Tree Lane neighborhood (King County iMap, 2019).

5. Animals**a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.**

Birds: Northern goshawk, Cooper's hawk, bald eagle, great blue heron, belted kingfisher, songbirds, marbled murrelet, pileated woodpecker, band-tailed pigeon, purple martin, Barrow's goldeneye, bohemian waxwing, killdeer, black-bellied plover, dunlin, double-crested cormorant, red-necked grebe, Canada goose, mallard, long-tailed duck, northern pintail, bufflehead, mergansers, shoveler, scaup, loons, scoter, guilemot

Fish: Pacific sand lance, surf smelt, Pacific herring, longfin smelt, eulachon, Chinook, chum, coho, cutthroat, pink, sockeye

Shellfish: Dungeness crab, geoduck clam, littleneck clam, butter clam, horse clam, sand clam, purple shore crab pygmy rock crabs, red rock crab, graceful crab, black-clawed crab, California green shrimp, hairy hermit crab, cockle mussels, softshell mussel, bay mussel

Source: eBird, 2018; ESA Adolfson, 2008; Tetra Tech/KCM, 2004; WDFW PHS, 2019

b. List any threatened and endangered species known to be on or near the site.

The Water Resources Inventory Area (WRIA) 8 report identifies the known presence of salmon in local streams (WRIA 8 Steering Committee, 2005). Boeing Creek has documented salmonid use, including Chinook (listed as threatened under the Endangered Species Act) (Tetra Tech/KCM, 2004). Chinook and steelhead (federally-listed as threatened) are known or expected to be present along the city's Puget Sound shoreline based on the knowledge of species life histories (KCDNR, 2001).

Puget Sound is federally-designated critical habitat for endangered southern resident killer whale (NOAA, 2019).

Marbled murrelet (federal and state listed as threatened species) have also been documented in the shoreline vicinity (eBird, 2018; ESA Adolfson, 2008). No seabird colonies or waterfowl concentrations are documented within the city (WDFW PHS, 2019).

c. Is the site part of a migration route? If so, explain.

The City of Shoreline is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends south from Alaska to Mexico and South America.

d. Proposed measures to preserve or enhance wildlife, if any:

The SMP provides mitigation and regulations to minimize the impact of development on the shoreline environment. The *Shoreline Master Program Update Restoration Plan* identifies and plans for ways to restore or enhance coastal shoreline functions and processes, including wildlife habitat, that have been impaired (ESA Adolfson, 2009).

e. List any invasive animal species known to be on or near the site.

European starlings have been observed along the shoreline (eBird, 2018).

6. Energy and Natural Resources**a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Not Applicable.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No. The SMP retains the maximum building height limits of the underlying zoning.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

Not applicable.

7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

Not applicable. As a non-project action, adoption of the SMP revisions would not expose the public to any environmental health hazards.

- 1) Describe any known or possible contamination at the site from present or past uses.**

The Point Wells property served as a petroleum product (gasoline and diesel fuel) marketing and distribution center for approximately 60 years or more (City of Shoreline, 1998). The petroleum distribution center discontinued operation in 1994. An asphalt plant was operated at the site on a seasonal basis by the Chevron Corporation (Sound Transit, 1999). The property was sold to Paramount of Washington in 2005 and is now used for petroleum products storage, processing, and distribution. Soil and groundwater contamination are documented at the Point Wells facility (Snohomish County, 2007).

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

Point Wells is now used for petroleum products storage, processing, and distribution.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

Not applicable

- 4) Describe special emergency services that might be required.**

Not applicable.

- 5) Proposed measures to reduce or control environmental health hazards, if any:**

Not applicable.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Not applicable.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Not applicable.

3) Proposed measures to reduce or control noise impacts, if any:

Not applicable.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The city's marine shoreline extends 4.1 miles along Puget Sound. Most of the land along the shoreline is used for a BNSF railroad line, which forms a physical barrier between the shoreline and existing residential neighborhoods located landward of the railroad line. Along with the railroad, the bluff system along Puget Sound precludes extensive development. If the Future Service Annexation Area (Point Wells) is included in the total land area, about 9% of the total length of the city's Puget Sound shoreline is used for single family residential uses, mostly concentrated in the Apple Tree Lane neighborhood located in Segment B (see Figure 1) (ESA Adolfson, 2008). Other uses along the shoreline include a King County wastewater pump station, Richmond Beach Saltwater Park, Kayu Kayu Ac Park, and the Innis Arden Reserve.

Point Wells is located immediately north of the city limits but within the Urban Growth Area (UGA). It is currently used mainly for petroleum products storage and distribution, and could be redeveloped into a mixed use project with residential and commercial uses consistent with the Snohomish County Urban Village zoning district. Snohomish County and the Town of Woodway include Point Wells in their SMPs. The Point Wells site also contains the outfall for King County's Brightwater Treatment Plant marine outfall (ESA Adolfson, 2008).

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site.

The City's shoreline jurisdiction is composed of single-family homes, the BNSF Railway, and in the annexation area of Point Wells, an industrial facility containing a large dock, bulkheads, wooden structures and petroleum storage tanks.

Beginning in the north in the City's annexation area, the Point Wells industrial facility, used for petroleum product storage, processing, and distribution, abuts the Puget Sound shoreline. The site contains several industrial storage tanks used for petroleum storage, pipes for transporting petroleum, and a warehouse. Along with riprap and sheet pile shoreline modification at Point Wells, a deepwater pier over 1,000 feet in length is located at the site and a smaller dock facility is located on the site north of the main pier.

The Brightwater regional wastewater treatment system outfall is located on the property adjacent to the southeast corner of the industrial facility (ICF, 2009). The BNSF Railway enters shoreline jurisdiction in the southern corner of the property.

The BNSF Railway right-of-way is the most dominant structure in the shoreline. The railway extends in a north-south direction along the entire length of the city's shoreline planning area. As a result of the BNSF railroad bed, the entire length of the City's shoreline is armored with riprap and bulkheads (WDNR, 2001).

Single-family residences begin just south of the King County and Snohomish County line, along with the King County Richmond Beach Pump Station and Kayu Kayu Ac Park (public park). The King County Richmond Beach Pump Station contains a storage warehouse and 30-inch diameter emergent overflow outfall pipe (ESA Adolfson, 2008). With the exception of residential properties in the Apple Tree Lane neighborhood, residential properties are on the east side of the BNSF Railway. Apple Tree Lane is accessed by a bridge across the BNSF Railway. The shoreline in the Apple Tree Lane neighborhood is modified with vertical concrete and wooden bulkheads (ESA Adolfson, 2008).

Richmond Beach Saltwater Park (public park) contains a pedestrian bridge which provides access over the BNSF railroad tracks. Public parks include picnic areas, shelter buildings, and playground structures. The private and semi-private open spaces include no structures within the remaining shoreline jurisdiction to the southern city limits.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

In Shoreline, the properties are zoned low-density residential (R4 and R6) (City of Shoreline, 2012). In Snohomish County, the Point Wells site is zoned as Urban Village (Snohomish County, 2018).

f. What is the current comprehensive plan designation of the site?

The Comprehensive Plan designations within the City's shoreline jurisdiction are Mixed Use 1 at the Point Wells site, Public Facility along the BNSF railroad, Low Density Residential for the Apple Tree Lane residential area, Public Open Space for Richmond Beach Saltwater Park and Innis Arden Reserve Park, and Private Open Space at Boeing Creek Reserve, Blue Heron Reserve, and Storm Creek Reserve (City of Shoreline, 2012).

g. If applicable, what is the current shoreline master program designation of the site?

The City's SMP has 6 shoreline environments: Aquatic, Point Wells Urban, Point Wells Urban Conservancy, Shoreline Residential, Urban Conservancy, and Waterfront Residential. No changes to the shoreline environment designations will occur as a result of this periodic review and update.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Critical areas have been identified in the shoreline area, including geologic hazard areas, wetlands, and fish and wildlife habitat areas. This update includes an update to the Critical Areas regulations within the shoreline zone.

i. Approximately how many people would reside or work in the completed project?

The only area where people live within shoreline jurisdiction is in the neighborhood of Appletree Lane. This area consists of approximately 30 homes. There are no office facilities within shoreline jurisdiction.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The City's SMP has been developed as both a policy and regulatory program. As such, the SMP is a part of and was developed to be consistent with the *City of Shoreline Comprehensive Plan*.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Not applicable.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None. The proposed update would not provide housing or change the underlying Comprehensive Plan land use designations or zoning districts.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Adoption of the SMP is a non-project action and no specific structures are proposed. The maximum permitted height for the city's shoreline, based on the zoning designation and the SMP, is 35 feet.

b. What views in the immediate vicinity would be altered or obstructed?

Adoption of the SMP is a non-project action and no specific structures are proposed. Substantial development or redevelopment within the shoreline planning area within the City limits is unlikely. However, limited development may occur on vacant parcels, residential parcels with potential for redevelopment, and residential parcels that can be subdivided. These

redevelopments could result in altered or obstructed views; however, redevelopment is required to follow the City's development standards (SMC 20.50). The Highlands and Innis Arden neighborhoods maintain covenants that limit the potential for views to be altered or obstructed (Innis Arden III, 1949; Amended By-laws of the Highlands, 2017).

c. Proposed measures to reduce or control aesthetic impacts, if any:

SMP requires shoreline uses and activities to be designed and operated to avoid blocking, reducing, or adversely interfering with the public's visual access to the water and shorelines from public locations.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Not applicable.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not applicable.

c. What existing off-site sources of light or glare may affect your proposal?

Not applicable.

d. Proposed measures to reduce or control light and glare impacts, if any:

The SMP includes measures to minimize off-site glare to avoid impacts to wetlands and fisheries (SMC 20.230.020.H).

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Kayu Kayu Ac Park, Richmond Beach Saltwater Park, and Innis Arden Reserve are public recreational areas located within shoreline jurisdiction.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

One goal of the Shoreline Management Act is to provide and enhance public access and recreational opportunities in shorelines of the state. The City's SMP requires that shoreline development avoid blocking or interfering with normal public use or access to publicly owned shorelines and waterbodies.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

There are no aboveground buildings, structures, or sites in or near the shoreline planning area that are listed in a national, state, or local preservation register (Department of Archaeology and Historic Preservation, 2019; King County Historic Preservation Program, 2019; League of Snohomish County Historical Organizations, 2015a). There are 17 single family residences along 27th Avenue Northwest, an area locally referred to as "Apple Tree Lane", whose built date ranges from 1920 to 1965. The built date for these residences is greater than 45 years and would make them potentially eligible for listing in a historic register.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No archaeological sites, cemeteries, or traditional cultural places are recorded in or near the shoreline planning area (Department of Archaeology and Historic Preservation, 2019). The Statewide Predictive Model for encountering precontact-era sites classifies this location as Very High Risk – Survey Highly Advised (Department of Archaeology and Historic Preservation, 2010). This model does not take into account potential impacts from development. Seven prior cultural resources assessments have included portions of the shoreline jurisdiction; these surveys did not identify any cultural resources within the shoreline planning area (Copass, 1996; Gill and Baldwin, 2008; Gillis and Larson, 2006a, 2006b, 2006c; Gillis et al., 2006; Juell 2006).

The shoreline planning area is within the traditional territory of the Duwamish, Snohomish, Snoqualmie, and Suquamish peoples (Suttles and Lane 1990; Thrush, 2007). They are considered part of a shared Southern Coast Salish culture group which spoke common dialects of Northern and Southern Lushootseed language (Suttles and Lane 1990). Ethnographic studies and archaeological evidence clearly show heavy use of shorelines and waterways by Native Americans throughout the Puget Sound. There are no known recorded villages within the shoreline planning area, however there are four Native American placenames associated with the area and its stream drainages. The recorded placenames are: *ʔəʔəʔstubus* meaning "like a man coming" for an area south of Point Wells, *kayuʔkayuʔac* meaning "kinikinnick plant, Indian tobacco" at Richmond Beach, *kaadəb* meaning "has mouth open" for a small creek at Shoreline likely Boeing Creek, and *xʷəxʷədʔilc* meaning "sharp edge" for the high bluffs in Shoreline south

of Spring Beach (Hilbert et al. 2001). These areas would have provided seasonal resource gathering as well as campsites associated with them and indicate an established Native American presence in the general area.

The earliest survey of the shoreline planning area did not record any homesteads, trails, or other evidence of past use (US Coast Survey, 1874; US Surveyor General, 1859, 1860). The shoreline planning area passes through several 19th century land patents, filed between 1865 and 1877 (US Surveyor General, 1859, 1960). The general area began to develop with the arrival of the Great Northern Railway Company providing access to Seattle along the shoreline in 1891 (Stein, 1999). Early development included logging, mills, and marine industry. In 1904, the Richmond Beach Sand and Gravel Company was processing sand and gravel at what is today's Richmond Beach Saltwater Park (Gils and Balwin, 2008).

By 1907, a shipyard was developed along the shoreline at Point Wells by the Portland Ship Building Company (Anderson Map Company, 1907; Stein, 1999). Early maps and aerial photography show structures, roads, and a wharf at Richmond Beach associated with this development (Anderson Map Company, 1910; HistoricAerials.com, 2019; King County Aerial Survey, 1936; King County Roads, 1890; Kroll Map Company, 1912, 1926; League of Snohomish County Historical Organizations, 2015b; Metsker Map Company, 1936; Pacific Aerial Survey 1937a, 1937b, 1937d, 1937e; US Geological Survey, 1895).

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

As a non-project action, adoption of the SMP should have no direct impacts on any cultural or historic resources. The Historical/Cultural Element of the SMP provides general goals and policies to ensure important archaeological, historical, and cultural sites located within the shoreline jurisdiction are identified, protected, preserved, and restored for educational and scientific purposes (SMC 20.230.020.1). It also aims to adopt standards that ensure the protection and preservation of historic and cultural sites. Historic preservation is also addressed in the Community Design Element of the 2012 Shoreline Comprehensive Plan.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

All shoreline permits issued by the City require immediate work stoppage and City, tribe, and State Department of Archaeology and Historic Preservation notification when any item of archaeological interest is uncovered during excavation. Permits issued in areas known or likely to contain archaeological artifacts and data require a site inspection and evaluation by an archaeologist in coordination with affected Tribes prior to disturbance and for monitoring of potentially disruptive activities.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Point Wells Road allows access to Segment A from Richmond Beach Drive NW, which is adjacent to the BNSF Railway from Point Wells down to the top of Richmond Beach Saltwater Park. The Apple Tree Lane neighborhood in Segment B is along 27th Avenue NW and accessed by turning off of Richmond Beach Drive NW to NW 195th Court. Richmond Beach Saltwater Park in Segment C is accessed by NW 190th Street and 20th Avenue NW. Residences between Richmond Beach Saltwater Park and Blue Heron Creek Reserve are accessed by 16th Avenue NW and 17th Place NW. Residences between Blue Heron Creek Reserve and Innis Arden Reserve Park in Segment D are accessed by Springdale Place NW and 17th Avenue NW. Access to Innis Arden Reserve Park is provided by 15th Avenue NW to the north and 16th Avenue NW to the south. A few residences along the shoreline in Segment E between Innis Arden Reserve Park and Boeing Creek Reserve are accessed by NW 167th Street and 16th Avenue NW. Beach Drive is a private road through the south side of Boeing Creek Reserve that provides direct access to the shoreline. Residences in the Highlands neighborhood are accessed by Olympic Drive, Spring Drive, and Cherry Loop NW. Figure 1 shows the shoreline planning segments used to describe the existing street system in the shoreline area.

As a non-project action, adoption of the SMP should have no direct impacts on access to the shoreline. The SMP requires shoreline uses and activities to be designed and operated to avoid blocking, reducing, or adversely interfering with the public's access to the water and shorelines.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

King County Metro runs bus route, 304, from Downtown Seattle up Interstate 5 through Shoreline. There is a stop for this route at the corner of Richmond Beach Drive and NW 196th Place located outside shoreline jurisdiction which is approximately 0.3 miles from Kayu Kayu Ac Park to the north and Richmond Beach Saltwater Park to the south. King County Metro also runs a bus route, 348, from Northgate through Shoreline that has the same stops within Shoreline as route 304.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Not applicable. The SMP revisions are a non-project action. The location of parking areas in or near shoreland areas shall be located outside of the minimum setbacks for the shoreline designation (SMC 20.230.120 – Parking Areas).

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

No.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

An existing railroad line owned and operated by BNSF is located in areas covered by the SMP.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

Not applicable. The SMP revisions are a non-project action.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

Not applicable.

- h. Proposed measures to reduce or control transportation impacts, if any:**

The SMP requires that transportation facilities be planned, located, and designed so that routes will have the least possible adverse effect on unique or fragile shoreline features, will not result in a net loss of shoreline ecological functions, minimize negative aesthetic impacts, or adversely impact existing or planned water-dependent uses.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

No.

- b. Proposed measures to reduce or control direct impacts on public services, if any.**

Not applicable.

16. Utilities**a. Circle utilities currently available at the site:**


Electricity, water, refuse service, telephone, sanitary sewer

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities are proposed. The SMP states that new utilities should be located inland from the land/water interface, preferably out of shoreline jurisdiction, unless this location is reasonably necessary for the efficient operation of the utility facility or service. Utilities are required to be located and designed to avoid negative impacts to public access area and significant natural, historic, archaeological or cultural resources (SMC 20.230.270). Utilities are also encouraged to be jointly used with other utility and transportation rights-of-way. Underground utility facilities are permitted while above ground utility facilities require a conditional use permit (SMC Table 20.230.081).

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Name of signee Miranda Redinger, AICP

Position and Agency/Organization Senior Planner, City of Shoreline

Date Submitted: March 1, 2019

D. Supplemental sheet for nonproject actions**1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

The proposal would not increase discharges to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. All development and redevelopment in the shoreline jurisdiction is subject to applicable local, state and federal regulatory requirements, in addition to the provisions of the SMP and the City's *Surface Water Master Plan*. A cumulative impacts analysis (CIA) addendum was completed by ESA as part of the SMP update to analyze the potential adverse impacts that could result from uses and developments permitted through the SMP.

Proposed measures to avoid or reduce such increases are:

The SMP includes policies and regulations for the protection of shoreline environment, addressing impacts of specific uses and shoreline modifications. The development standards and regulation of shoreline uses and modifications provide more protection for shoreline ecological processes and functions. The standards and regulations limit activities that could result in adverse impacts to the shoreline environment.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The SMP was developed, in part, to meet the goal of "no net loss" of shoreline ecological functions. Degradation of the natural environment and shoreline ecological functions due to development will be avoided, minimized, or mitigated in accordance with the SMA. Additionally, the *City of Shoreline Shoreline Master Program Update Restoration Plan* addresses the goal of improving shoreline ecological functions that have been degraded over time from past development activities. The updated SMP provides protection and enhancement of fish and wildlife habitat, natural vegetation, and management of critical areas through goals, policies, development standards, use regulations, and mitigation requirements.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

The SMP revisions would incorporate the critical areas regulations adopted in 2015. These critical area regulations are more protective of plants, animals, fish and marine life than the current SMP.

Additional protections of native vegetation and limitations on shoreline developments are also provided for in the SMP. The SMP requires that all uses and developments (even exempt activities) achieve no net loss of ecological functions. A cumulative impacts analysis addendum was completed as part of the SMP update to analyze the potential adverse impacts that could result from incorporation of the 2015 critical areas ordinance. The CIA concluded that over time reasonably foreseeable development in the shoreline would not result in a net loss of ecological function such as fish and wildlife habitat.

3. How would the proposal be likely to deplete energy or natural resources?

The SMP revisions would not result in depletion of energy or natural resources. Extractive or resource based industries, such as mining or forestry are prohibited in all shoreline environments in the SMP. This SMP update does not alter or change this prohibition.

Proposed measures to protect or conserve energy and natural resources are:

The shoreline environments and regulations were developed with the intent to preserve the city's natural resources.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Generally, The SMP establishes policies and regulations protecting and conserving critical areas (SMC Chapter 20.240 – SMP Critical Areas Regulations) including threatened or endangered species habitat and wetlands. The SMP revisions would incorporate a critical areas ordinance that is more protective of critical areas than the current SMP. Increased public access to publicly-owned areas of the shoreline is a goal of the City's SMP with regulations supporting this goal (SMC 20.230.040). Another goal of the City's SMP is the identification, preservation, protection, and restoration of shoreline areas, buildings, and sites having historical, cultural educational, and scientific values (SMC 23.230.020.1). Floodplain management policies and regulations in the SMP include limiting upland development in areas that are historically flooded and integrating public access into the design of flood management facilities (SMC 20.230.030.B). The *City of Shoreline Shoreline Master Program Update Restoration Plan* would provide the city and its residents opportunities to improve or restore ecological functions that have been impaired as a result of past development activities. In addition, the SMP would complement the existing city, state, and federal efforts to protect shoreline functions and values.

The City's shoreline jurisdiction does not contain wild and scenic rivers, wilderness areas or prime farmlands.

Proposed measures to protect such resources or to avoid or reduce impacts are:

The SMP was developed to be consistent with the state shoreline guidelines (WAC 173-26). The WAC provides a level of protection to assure no net loss of ecological functions and values. Measures include protection of critical areas by buffering and enhancement and protections of the native shoreline vegetation.

A cumulative impacts analysis addendum was completed as part of the SMP update to analyze the potential adverse impacts that could result from uses and developments permitted through the SMP. The CIA concluded that over time reasonably foreseeable development in the shoreline would not result in a net loss of ecological function.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The City of Shoreline has an established land use pattern in the shoreline area that predates current codes and regulations. The pattern includes the BNSF railroad ROW, residential development both waterward (Apple Tree Lane) and landward of the railroad ROW, established parks and the Point Wells industrial area in Snohomish County within the city's potential annexation area. There is almost no vacant land in the shoreline area within city limits.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Redevelopment that will occur over time will be subject to the SMP and other City regulations. The SMP contains shoreline environment designations consistent with both the existing land use pattern and Comprehensive Plan land use designations.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The SMP revisions do not establish new or increased density of land use patterns. Reasonable foreseeable development will likely be redeveloped property rather than new development within the city limits. The SMP revisions will likely not impact demand on transportation, public services, or utilities because it does not alter the redevelopment potential of any sites.

Proposed measures to reduce or respond to such demand(s) are:

No specific measures are proposed as increased demands are not anticipated.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The updated SMP is designed to be consistent with other local, state and federal laws. The proposal updates and integrates the critical areas regulations from 2015 that were deemed to meet the test for "best available science" and provides greater protection for critical areas such as wetlands, streams, fish and wildlife habitat conservation areas and geologically hazardous areas.

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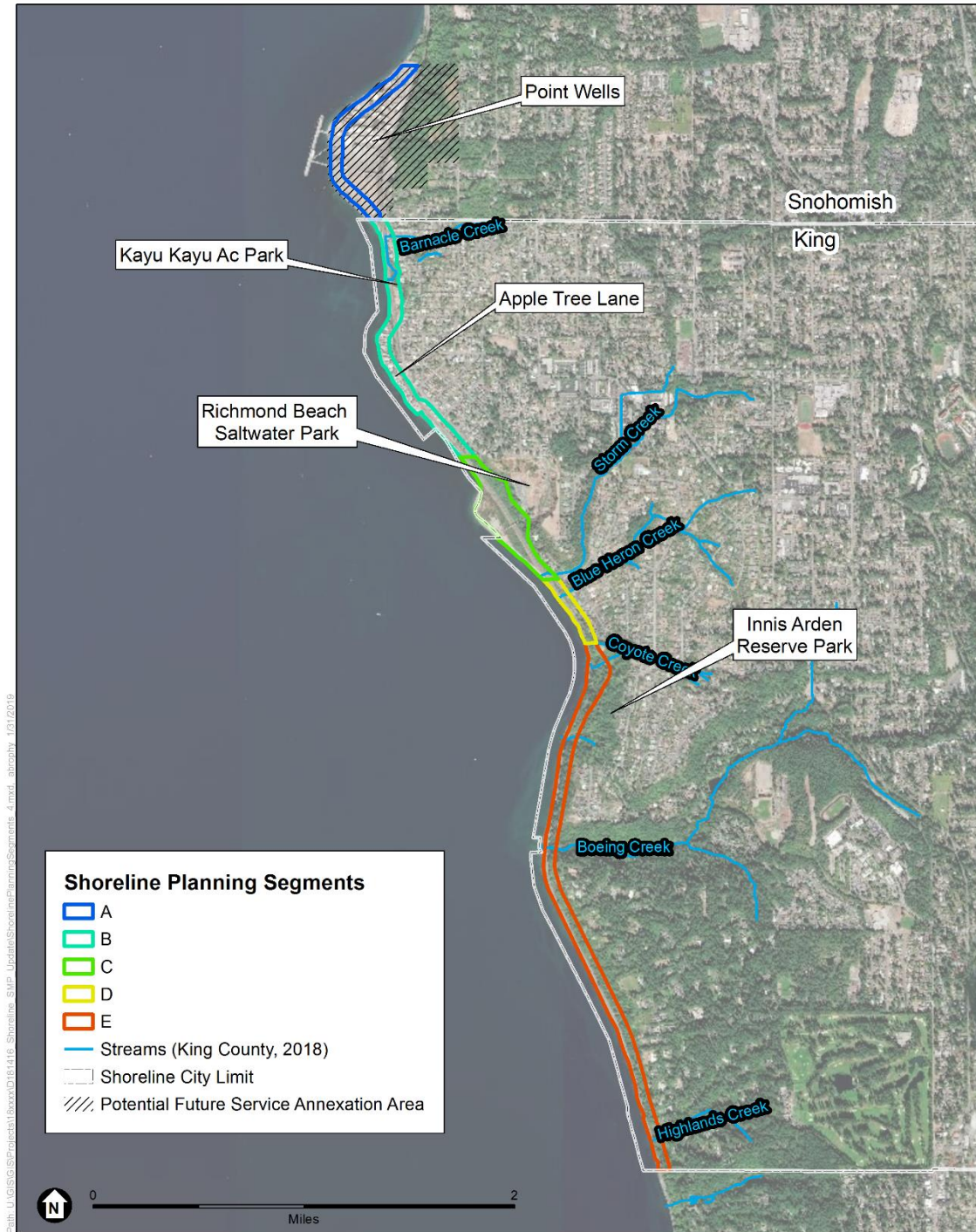
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SOURCE: City of Shoreline, 2019; ESA, 2019; King County, 2018

D181416 City of Shoreline SMP Update

Figure 1
City of Shoreline Shoreline Planning Segments
Shoreline, Washington



Appendix A

Ecology Periodic Review Checklist

SHORELINE MASTER PROGRAM PERIODIC REVIEW

Periodic Review Checklist

Introduction

This document is intended for use by counties, cities and towns conducting the “periodic review” of their Shoreline Master Programs (SMPs). This review is intended to keep SMPs current with amendments to state laws or rules, changes to local plans and regulations, and changes to address local circumstances, new information or improved data. The review is required under the Shoreline Management Act (SMA) at [RCW 90.58.080\(4\)](#). Ecology’s rule outlining procedures for conducting these reviews is at [WAC 173-26-090](#).

This checklist summarizes amendments to state law, rules and applicable updated guidance adopted between 2007 and 2017 that may trigger the need for local SMP amendments during periodic reviews.

How to use this checklist

See Section 2 of Ecology’s *Periodic Review Checklist Guidance* document for a description of each item, relevant links, review considerations, and example language.

At the beginning: Use the review column to document review considerations and determine if local amendments are needed to maintain compliance. See WAC 173-26-090(3)(b)(i).

At the end: Use the checklist as a final summary identifying your final action, indicating where the SMP addresses applicable amended laws, or indicate where no action is needed. See WAC 173-26-090(3)(d)(ii)(D), and WAC 173-26-110(9)(b).

Local governments should coordinate with their assigned [Ecology regional planner](#) for more information on how to use this checklist and conduct the periodic review.

<i>Row</i>	<i>Summary of change</i>	<i>Review</i>	<i>Action</i>
2017			
a.	OFM adjusted the cost threshold for substantial development to \$7,047.	The City’s current definition does not include updated price structure.	Update Substantial Development definition to refer to RCW for current cost threshold at the time of application submittal.
b.	Ecology amended rules to clarify that the definition of “development” does not include dismantling or removing structures.	The City’s current definition does not include this clarification.	Amend the definition of Development, Shoreline to add “Development does not include dismantling or removing structures if there is no other associated development or re-development.”
c.	Ecology adopted rules that clarify exceptions to local review under the SMA.	The exceptions to local review covered under WAC 173-27-044 and -045 apply whether or not they are included in local SMPs. However, to ensure the statutory directives are implemented consistently, Ecology recommends maintaining a section in local SMPs to address these exceptions.	Create a new section listing these exceptions under SMC 20.220.015. Do not combine these exceptions directly into the list of exemptions from the requirement for a substantial development permit under WAC 173-27-040. Projects that are listed as “permit-exempt” still need to meet substantive standards of the SMA, whereas for these projects there is no local review.
d.	Ecology amended rules that clarify permit filing procedures consistent with a 2011 statute.	The amendment to RCW 90.58.140 applied on its effective date – July 22, 2011, regardless of whether permit procedures are specifically outlined in local SMPs. However, if an SMP describes the permit filing process, Ecology recommends that it should be reviewed for consistency with the 2011 statutory amendments.	Add a new section under 20.220.080(D) Local Permit Filing Procedures.
e.	Ecology amended forestry use regulations to clarify that forest practices that only involves timber cutting are not SMA	Ecology has stated that it is not necessary to amend local SMP forestry regulations to reflect this clarification.	None.

Row	Summary of change	Review	Action
	<p>“developments” and do not require SDPs.</p>	<p>However, Ecology notes that it could be helpful for jurisdictions with extensive commercial forestry if questions about applicability of forest practices laws and rules arise frequently. The City does not have commercial forestry uses within the shoreline jurisdiction.</p>	
<p>f.</p>	<p>Ecology clarified the SMA does not apply to lands under exclusive federal jurisdiction</p>	<p>Ecology has stated that it is not necessary to amend local SMPs to reflect this clarification, although the City does have lands under exclusive federal jurisdiction within the Shoreline jurisdiction (the railroad corridor per 49 USC 10501(b)). While the federal jurisdiction preempts local regulations regardless of whether or not this is explicitly stated, federal decision-makers are encouraged to consider local regulations.</p>	<p>None.</p>
<p>g.</p>	<p>Ecology clarified “default” provisions for nonconforming uses and development.</p>	<p>Ecology has stated that for local governments that adopted their own tailored provisions for nonconforming use and development during a prior update, the WAC amendments will have no effect. Shoreline already has SMP regulations for nonconforming uses and development in SMC 20.220.150.</p>	<p>None.</p>
<p>h.</p>	<p>Ecology adopted rule amendments to clarify the scope and process for conducting periodic reviews.</p>	<p>Ecology’s new rule describes the process local governments must follow when conducting periodic reviews. Given that the statutory and regulatory process for performing periodic reviews applies regardless, it is not necessary</p>	<p>Amend 20.200.080 to add references to the appropriate RCW and WAC.</p>

Row	Summary of change	Review	Action
		to include any of these new provisions in the City's SMP. The City's SMP describes the periodic review scope but does not address procedures. Ecology recommends consistency with the periodic review rule.	
i.	Ecology adopted a new rule creating an optional SMP amendment process that allows for a shared local/state public comment period.	Ecology has stated that local governments that want to use these provisions should review their SMP amendment procedures to ensure there are no impediments to using this new option. In using this option, a key consideration is coordinating with Ecology on the public comment period, as Ecology needs to send notice to the state interested parties list at the same time as the City's notice. The optional process also requires the City to send a draft of proposed amendments to Ecology for an initial determination before final adoption by the City. Ecology stated that this has been a common practice on an informal basis for many years and can be done without amending the SMP. Shoreline does intend to utilize WAC 173-26-104's optional process for this Periodic Review.	Amend 20.200.090 to reference the appropriate RCW and WAC.
j.	Submittal to Ecology of proposed SMP amendments.	If a local SMP includes a description of the SMP submittal process, they should review the amendments for consistency. Shoreline does not include a description of the SMP submittal process, and staff believes that the existing language in 20.200.090 is sufficient.	None.

Row	Summary of change	Review	Action
2016			
a.	The Legislature created a new shoreline permit exemption for retrofitting existing structures to comply with the Americans with Disabilities Act .	This SMA amendment applied on its effective date, regardless of whether the exemption is specifically listed in the SMP. For SMPs that simply cite the RCW list of exemptions, no change is needed. For SMPs that spell out all the statutory exemptions, the new exemption should be added to the list. Shoreline spells out all statutory exemptions in 20.220.030. In so doing, this list becomes outdated when state law is amended.	Amend 20.220.030 to cite the RCW and WAC list of exemptions, and strike through the list of statutory exemptions, so that this section directly refers to state law and will remain up to date as amendments are made from time to time.
b.	Ecology updated wetlands critical areas guidance including implementation guidance for the 2014 wetlands rating system.	The 2015 Critical Areas Ordinance update applicable to areas of the city outside of the shoreline jurisdictional boundaries incorporated Ecology's 2014 Wetland Rating System (SMC 20.80.310[B]), which will also be incorporated into this Periodic Review as a new chapter – SMC 20.240.	Repeal 20.230.030(C) and replace with 20.240.
2015			
a.	The Legislature adopted a 90-day target for local review of Washington State Department of Transportation (WSDOT) projects.	Shoreline does not have any WSDOT property or state highways within the shoreline jurisdiction, but this does not mean there will never be a WSDOT project in the area.	Amend 20.220.080 to include provision regarding target time for local review and reference RCW 90.58.
2014			
a.	The Legislature raised the cost threshold for requiring a Substantial Development Permit (SDP) for replacement docks on lakes and rivers to \$20,000 (from \$10,000).	Shoreline does not have any lakes or rivers that are subject to regulation pursuant to the SMA.	None.
b.	The Legislature created a new definition and policy for floating	Shoreline does not have any floating on-water residences that were legally established	None.

Row	Summary of change	Review	Action
	on-water residences legally established before 7/1/2014.	before the deadline set by the Legislature.	
2012			
a.	The Legislature amended the SMA to clarify SMP appeal procedures .	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
2011			
a.	Ecology adopted a rule requiring that wetlands be delineated in accordance with the approved federal wetland delineation manual .	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
b.	Ecology adopted rules for new commercial geoduck aquaculture .	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
c.	The Legislature created a new definition and policy for floating homes permitted or legally established prior to January 1, 2011.	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
d.	The Legislature authorized a new option to classify existing structures as conforming .	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
2010			
a.	The Legislature adopted Growth Management Act – Shoreline Management Act clarifications .	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
2009			
a.	The Legislature created new "relief" procedures for instances	City's Comprehensive Update to the SMP was adopted by	None.

Row	Summary of change	Review	Action
	in which a shoreline restoration project within a UGA creates a shift in Ordinary High Water Mark.	Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	
b.	Ecology adopted a rule for certifying wetland mitigation banks .	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
c.	The Legislature added moratoria authority and procedures to the SMA.	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
2007			
a.	The Legislature clarified options for defining "floodway" as either the area that has been established in FEMA maps, or the floodway criteria set in the SMA.	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
b.	Ecology amended rules to clarify that comprehensively updated SMPs shall include a list and map of streams and lakes that are in shoreline jurisdiction.	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.
c.	Ecology's rule listing statutory exemptions from the requirement for an SDP was amended to include fish habitat enhancement projects that conform to the provisions of RCW 77.55.181.	City's Comprehensive Update to the SMP was adopted by Council on August 5, 2013 so State direction prior to that date was incorporated during that process.	None.

The Seattle Times

City of Shoreline Planning & Comm D
Accounts Payable
17500 Midvale Ave N

Shoreline, WA 98133-4905

RECEIVED
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PCD

Re: Advertiser Account # 100164
Ad #: 871389

Agency Account #: 0
Agency Name:

Affidavit of Publication

STATE OF WASHINGTON
Counties of King and Snohomish

The undersigned, on oath states that he/she is an authorized representative of The Seattle Times Company, publisher of The Seattle Times of general circulation published daily in King and Snohomish Counties, State of Washington. The Seattle Times has been approved as a legal newspaper by others of the Superior Court of King and Snohomish Counties.

The notice, in the exact form annexed, was published in the regular and entire issue of said paper or papers and distributed to its subscribers during all of the said period.

Newspaper and Publication Date(s)	
Seattle Times	03/01/19

Agent Sharon Seligman Signature *Sharon Seligman*



Subscribed and sworn to before me on 03/01/19

Debbie Collantes

DATE
Debbie Collantes

(Notary Signature) Notary Public in and for the State of Washington, residing at Seattle

The Seattle Times

Re: Advertiser Account # 100164

Ad #: 871389

Agency Account #: 0

Agency Name:

AD TEXT

**The City of Shoreline
Notice of Public Hearing of the Planning
Commission and SEPA Determination**

**Applicant, Application No. and Permit
Requested: City of Shoreline Periodic Re-
view of Shoreline Master Program**

**Location & Description of Project: City-
wide Non-Project Action. The City is
updating the Shoreline Master Program
(SMP) to satisfy State requirements, in-
corporate 2015 updates to the Critical Ar-
eas Ordinance, and update the Compre-
hensive Plan to reflect changes.**

Interested persons are encouraged to provide oral and/or written comments regarding the above project at an open record public hearing. The hearing is scheduled for April 4, 2019 at 7:00 pm in the Council Chamber at City Hall (17500 Midvale Avenue N, Shoreline, WA).

Any person requiring a disability accommodation should contact the City clerk at (206) 801-2230 in advance for more information. For TTY telephone service call (206) 546-0457. Each request will be considered individually, according to the type of request, the availability of resources, and the financial ability of the City to provide the requested services or equipment.

SEPA Threshold Determination

Effective Date of Notice: March 1, 2019

Threshold Determination: The City of Shoreline has issued a Determination of Nonsignificance (DNS) under the State Environmental Policy Act Rules (Chapter 197-11 WAC) for the project described above. After review of the environmental checklist and other information on file, the City has determined this proposal will not have a probable significant adverse impact on the environment.

Judicial Appeal: There is no administrative appeal available for this decision. The SEPA Threshold Determination may be appealed with the decision on the underlying action to superior court. If there is not a statutory time limit on filing a judicial appeal, the appeal must be filed within 21 calendar days following the issuance of this decision and in accordance with State law.

Copies of the notice of application, SEPA threshold determination, application materials, applicable codes and more specific information on submitting a judicial appeal are available for review at the City Hall, 17500 Midvale Avenue N.

TO: Miranda Redinger, City of Shoreline

CC: John Norris and Julie Ainsworth-Taylor, City of Shoreline

Jackie Chandler, Shoreline Administrator, WA Department of Ecology

FROM: Misty Blair, Senior Shoreline Planner, WA Department of Ecology

Date: April 26, 2019

Subject: Determination of initial concurrence

Sent via email to: mredinger@shorelinewa.gov ; jainsworth-taylor@shorelinewa.gov ;
jnorris@shorelinewa.gov; jcha461@ECY.WA.GOV

Brief Description of Proposed Amendment

The City of Shoreline (City) has submitted Shoreline Master Program (SMP) amendments to Ecology for initial determination of concurrence to comply with periodic review requirements of RCW 90.58.080(4). The City has elected to utilize the optional joint review process for SMP amendments available per WAC 173-26-104; therefore Ecology is required under WAC 173-26-104(3)(b) to make an initial determination of consistency with applicable laws and rules. The City proposes amendments to bring the SMP into compliance with requirements of the Act or State Rules that have been added or changed since the City's comprehensive SMP update,

FINDINGS OF FACT

Need for amendment

The City's comprehensive update to their SMP went into effect in 2013. The proposed amendments are needed to comply with the statutory deadline for a periodic review of the City's Shoreline Master Program pursuant to RCW 90.58.080(4). The City has identified that this periodic review will result in amendments to the SMP to address updates to the Act or implementing State Rules, changed local circumstances, new information and improved data.

SMP provisions to be changed by the amendment as proposed

The City's proposed changes fall primarily into two categories: those required to incorporate changes in State law (RCW 90.58) or State rule (WAC 173-26 & WAC 173-27) and those locally initiated changes related to critical areas provisions, implementation, and "housekeeping."

The City filled out the Ecology SMP Periodic Review checklist to address requirements of the act or state rules that have been added or changed since the last SMP amendment. Those proposed changes along with the City's locally initiated proposed changes modify the following SMP sections:

SMC Chapter 20.200 Shoreline Master Plan
SMC Chapter 20.210 Definitions
SMC Chapter 20.220 Administrative Procedures
SMC Chapter 20.230 General Policies and Regulations
SMC Chapter 20.240 SMP Critical Areas Regulations
Shoreline Comprehensive Plan

The following additional edits were made throughout the SMP:

- "as amended" was added to referenced RCWs and WACs to acknowledge future updates;
- Agency names, acronyms, and terms were adjusted for clarity and consistency

City of Shoreline
Determination of Initial Concurrence

Amendment History, Review Process

The City prepared a public participation program in accordance with WAC 173-26-090(3)(a) to inform, involve and encourage participation of interested persons and private entities, tribes, and applicable agencies having interests and responsibilities relating to shorelines. The City executed this plan by hosting an open house, creating a web page, and initiating outreach to directly to shoreline property owners, neighboring jurisdictions and tribes.

The City used Ecology's checklist of legislative and rule amendments to review amendments to chapter 90.58 RCW and department guidelines that have occurred since the master program was last amended, and determine if local amendments were needed to maintain compliance in accordance with WAC 173-26-090(3)(b)(i). The City also reviewed changes to the comprehensive plan and development regulations to determine if the shoreline master program policies and regulations remain consistent with them in accordance with WAC 173-26-090(3)(b)(ii). The City considered whether to incorporate any amendments needed to reflect changed circumstances, new information or improved data in accordance with WAC 173-26-090(3)(b)(iii). The City consulted with Ecology and solicited comments throughout the review process.

The SMP Periodic Review and associated amendments were presented to and considered by the City's Planning Commission on December 6, 2018, January 17, 2019 and February 21, 2019.

The City and Ecology held a joint local/state comment period on the proposed amendments following procedures outlined in WAC 173-26-104. The comment period began on March 1, 2019 and continued through April 4, 2019. A joint local/state public hearing was held on April 4, 2019.

The City provided notice to local parties, including a statement that the hearings were intended to address the periodic review in accordance with WAC 173-26-090(3)(c)(ii). Ecology distributed notice of the joint comment period to state interested parties on February 27, 2019.

No comments were submitted on the proposed amendments. The City Planning Commission unanimously passed the draft without changes onto City Council.

The City provided their initial submittal of the proposed SMP amendments to Ecology pursuant to WAC 173-26-104 via email on April 19, 2019. The initial submittal was determined complete on April 19, 2019. This began Ecology's review and initial determination.

Consistency with Chapter 90.58 RCW

The proposed amendments have been reviewed for consistency with the policy of RCW 90.58.020 and the approval criteria of RCW 90.58.090(3), (4) and (5). The City has also provided evidence of its compliance with SMA procedural requirements for amending their SMP contained in RCW 90.58.090(1) and (2).

Consistency with applicable guidelines (Chapter 173-26 WAC, Part III)

The proposed amendment has been reviewed for compliance with the requirements of the applicable Shoreline Master Program Guidelines (WAC 173-26-171 through 251 and 173-26-020 definitions). This included review of a SMP Periodic Review Checklist, which was completed by the City.

City of Shoreline Determination of Initial Concurrence

Consistency with SEPA Requirements

The City submitted evidence of SEPA compliance in the form of a SEPA checklist and issued a Determination of Non-Significance (DNS) for the proposed SMP amendments. Ecology did not comment on the DNS.

Other Studies or Analyses supporting the SMP update

Ecology also reviewed supporting documents prepared for the City in support of the SMP amendment. These documents include a public participation plan, a periodic review checklist, and cumulative impacts analysis addendum.

Summary of Issues Identified by Ecology as Relevant to Its Decision

Ecology is required to review all SMPs to ensure consistency with the Shoreline Management Act (SMA) and implementing rules including WAC 173-26, State Master Program Approval/Amendment Procedures and Master Program Guidelines. WAC 173-26-186(11) specifies that Ecology “shall insure that the state’s interest in shorelines is protected, including compliance with the policy and provisions of RCW 90.58.020.”

Based on review of the proposed amendments to the SMP for consistency with applicable SMP Guidelines requirements and the Shoreline Management Act, and consideration of supporting materials in the record submitted by the City, the following issues remain relevant to Ecology’s final decision on the proposed amendments to the City’s SMP, with Findings specific to each issue identifying amendments needed for compliance with the SMA and applicable guidelines:

Shoreline Restoration Projects

The SMP proposes provisions within the critical areas regulations Chapter 20.240.050, addressing review criteria for shoreline restoration projects.

Ecology has identified that a change to the SMP’s shoreline restoration project provisions is necessary to ensure the SMP is consistent with the RCW 90.58.580 and WAC 173-27-215 (Attachment 1, Item Req-1). The wording proposed aligns with the purpose and intent of the above referenced SMA and guideline provisions, to provide relief from Master Program development standards and use regulations resulting from shoreline restoration projects that shift the OHWM.

Findings. *Ecology finds that the proposed provision references RCW 90.58.580 and WAC 173-27-215 as shoreline restoration project approval criteria. Ecology finds that this is inconsistent with RCW 90.58.580 and WAC 173-27-215, which authorizes a relief mechanism and approval criteria for granting relief from the SMP se and development standards when a restoration project results in a landward shift in the OHWM that brings additional properties into the shoreline jurisdictions or add additional regulatory requirements. Ecology finds that this provision as proposed may not be implemented consistent with the SMA, and that revisions are necessary for consistency with RCW 90.58.580 and WAC 173-27-215.*

Wetland Exceptions

The City currently has wetland regulations imbedded into the SMP and other critical areas regulations from Ordinance 398 (February 27, 2006) incorporated by reference. The City is proposing to strike these provisions and create SMP Section 20.240 - SMP Critical Areas Regulations to embed the necessary critical area provisions, based on their current 2015 CAO, directly into the Master Program.

City of Shoreline
Determination of Initial Concurrence

Ecology has identified changes to the City's proposed amendment to the SMP's wetland provisions that are necessary for consistency with WAC 173-26-201(2)(a) & (c) (Attachment 1, Item Req-2). The proposed wetland exception contained within Chapter 20.240.340(E) & (F) SMP Critical Areas Regulations are not supported by the most current, accurate, and complete scientific and technical information and if implemented may lead to a net loss of shoreline ecological function.

Finding. Ecology finds that the City proposes to add provisions excepting Category IV wetlands from the avoidance requirements of mitigation sequencing. Ecology finds that this management approach is not supported by Ecology wetland guidance. Ecology also finds that these provisions are inconsistent with WAC 173-26-201(2)c) which provides that,

even in situations where uses or development that impact ecological functions are necessary to achieve other objectives of RCW 90.58.020, master programs provisions shall, to the greatest extent feasible, protect existing ecological functions and avoid new impacts to habitat and ecological functions before implementing other measures designed to achieve no net loss of ecological functions.

Ecology finds that these provision should be excluded from the SMP Critical Areas Regulations for consistency with the statute and guideline.

Wetland Mitigation Ratios

Ecology has identified changes to the City's proposed amendment to the SMP's wetland mitigation ratio table that are necessary for consistency with WAC 173-26-201(2)(a) & (c) (Attachment 1, Item Req-3). The proposed wetland mitigation ratio table includes a preservation only mitigation option. This is not supported by Ecology wetland guidance as an approach within the shoreline jurisdiction and if implemented may lead to a net loss of shoreline ecological function.

Finding. Ecology finds that the City proposes to allow wetland impacts within the shoreline jurisdiction to be mitigated via preservation. Ecology finds that this is a risky management approach that is not clearly supported by Ecology wetland guidance. Ecology also finds that these preservation only options for wetland mitigation does not compensate for lost or impaired shoreline functions and could therefore contribute to a net loss of shoreline ecological function.

Ecology finds that this provision should be excluded from the SMP Critical Areas Regulations Mitigation Ratios (Table 20.240.350(G)) for consistency with the statute and guideline.

Additional items identified as recommended changes

In addition to the issues identified above as requiring changes to ensure consistency with the SMA and its implementing guidelines, Ecology has also identified changes recommended to fix minor errors, provide clarity or improve implementation. These items can be found within Attachment 1, items Rec-1 through Rec-9. The most substantive recommended item is related to the incorporation of Flood Hazard Regulations.

Findings. Ecology finds that Attachment 1, items Rec-1 through Rec-9 recommended changes, if implemented would be consistent with the policy and standards of RCW 90.58 and the applicable guidelines, however, the inclusion of these changes are at the discretion of the City and are not necessary in order to approve this Periodic Review amendment.

**City of Shoreline
Determination of Initial Concurrence**

INITIAL DETERMINATION

After review by Ecology of the complete record submitted, Ecology has determined that the City proposed amendments, subject to and including Ecology’s required changes (itemized in Attachment 1), are consistent with the policy and standards of RCW 90.58.020 and RCW 90.58.090 and the applicable SMP guidelines (WAC 173-26-171 through 251 and .020 definitions).

INITIAL DETERMINATION

City of Shoreline SMP Periodic Review Initial Determination of Consistency - **Attachment 1****Ecology DRAFT Required Changes, April 25, 2019**

The changes in **red are required** to comply with the SMA (RCW 90.58) and the SMP Guidelines (WAC 173-26, Part III). Changes in **blue are recommended** and consistent with SMA (RCW 90.58) policy and the SMP Guidelines (WAC 173-26, Part III)

ITEM	SMP Submittal PROVISION (Cite)	BILL FORMAT CHANGES (underline = additions; strikethrough = deletions)	RATIONALE
Rec-1	Chapter 20.210 SMP Definitions	20.210.010 Definitions. Nonconforming Use. An existing shoreline use that was lawfully constructed or established prior to the effective date of the Act, or this Master Program, or amendments thereto, but which does not conform to present use regulations or standards of the program.	For internal consistency, clarification and ease of implementation. Suggested language clarifies that distinction between nonconforming uses and nonconforming structures or developments. Uses are established not constructed.
Rec-2	Chapter 20.220 SMP Administrative Procedures	20.220.050 Shoreline conditional use permit. ***** C. The Director is authorized to issue shoreline conditional use permits only when all the criteria enumerated in WAC 173-27-160 are met, as amended from time to time. 1. In granting conditional use permits, consideration shall be given to the cumulative impact of additional requires-requests for like actions in the area.	Minor typo error.
Rec-3	Chapter 20.230 General Policies and Regulations	20.230.020.A. A. General Environmental Policies and Regulations. Policies 1. The adverse impacts of shoreline developments and activities on the natural environment, critical areas and habitats for proposed, threatened, and endangered species should be minimized during all phases of development (e.g., design, construction, operation, and management). 2. Shoreline developments that protect and/or contribute to the long-term restoration of habitat for proposed, threatened, and endangered species are consistent with the fundamental goals of this Master Program. Shoreline developments that propose to enhance critical areas, other natural characteristics, resources of the shoreline, and/or provide public access and recreational opportunities to the shoreline are also consistent with the fundamental goals of this Master Program, and should be encouraged. Regulations 1. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that mitigates adverse impacts to the environment. When applying mitigation to avoid or minimize significant adverse effects and significant ecological impacts, the	Minor typo error. Recommend fixing the numbering in this section.

City of Shoreline SMP Periodic Review Initial Determination of Consistency - **Attachment 1**

Rec-4	Chapter 20.230 General Policies and Regulations	20.230.020.A.9 9. Shoreline development shall not be permitted if it substantially degrades the natural character of the shoreline, natural resources, or public recreational use of the shoreline. <u>“Significant” is defined in the State Environmental Policy Act (SEPA) Rules in WAC 197-11-794, as amended from time to time.</u>	Recommend considering deleting this language. The proposed amendment removes the term “significantly impacts” and replaces it with “substantially degrades”, so the reference to the definition of “significant” is no longer necessary.
Rec-5	Chapter 20.240 SMP Critical Areas Regulations	20.240.040.C.1 Modifications to Existing Structures within Critical Areas. Structural modification of, addition to, maintenance, or replacement of legally nonconforming structures consistent with SMC 20.220.150, which do not meet the building setback or buffer requirements for wetlands, fish and wildlife habitat conservation areas, or geologic hazard areas if modification, addition, replacement or related activities does not increase the existing building footprint of the structure or area of hardscape lying within the critical area or buffer. Within landslide hazard areas, additions that add height to a nonconforming structure may only be allowed with review of a critical area report demonstrating that no increased risk of the hazard will occur. If such modification, alteration, repair, or replacement requires <u>temporary or construction related</u> encroachment into a critical area or a critical area buffer to perform the work, then encroachment may be allowed subject to restoration of the area of encroachment to a same or better condition.	For internal consistency, clarification and ease of implementation. Suggested language clarifies that this allowance still doesn’t authorize an expansion into the critical area or buffer, but acknowledges that access or other associated construction impacts may have to occur in order to complete the work authorized by SMC 20.240.040 and that those temporary impacts must be mitigated.
Rec-6	Chapter 20.240 SMP Critical Areas Regulations	20.240.050 In general, critical areas and buffers shall be maintained in their existing state including undisturbed, native vegetation to maintain the functions, values, resources, and public health and safety for which the critical areas and buffers are protected or allowed as the current, developed legally established condition such as graded areas, structures, pavement, gardens and lawns. Alteration of critical areas, including their established buffers, may only be permitted subject to the criteria and standards of this chapter, and compliance with any Federal and/or State permits required. Unless otherwise provided in this chapter, if alteration of the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical areas report, so as to result in no overall net loss of shoreline ecological function provide by the critical area and no increased risk of hazard. <u>Alterations that exceed the allowances of or that do not meet the approval criteria of this chapter, can only be authorized through a Shoreline Variance consistent with SMC 20.220.040.</u>	For internal consistency, clarification and ease of implementation. Suggested language clarifies that this chapter provides some limited allowances for critical area and buffer alterations which must use BAS and result in no net loss of shoreline ecological function, all other alterations can only be authorized via a shoreline variance.
Req-1	Chapter 20.240 SMP Critical Areas Regulations	20.240.056 Shoreline restoration projects <u>– Relief from shoreline master program development standards and use regulations. The City may grant relief from Master Program development standards and use regulations resulting from shoreline restoration projects consistent with criteria and procedures in WAC 173-27-215.</u> Shoreline restoration projects, defined as projects designed to restore impaired	For consistency with RCW 90.58.580 and WAC 173-27-215. The SMP Periodic Review Checklist submitted by the City identifies this 2009 legislation as occurring before the City Comprehensively updated this SMP and proposed no action to address RCW 90.58.580.

City of Shoreline SMP Periodic Review Initial Determination of Consistency - **Attachment 1**

		<p>ecological functions of a shoreline, shall be reviewed and permitted or approved by the City and any other agency with jurisdiction consistent with criteria established in WAC 173-27-215 and RCW 90.58.580, as amended from time to time.</p>	<p>The above referenced State Statute and Rule do not provide criteria for approval of shoreline restoration projects; they provide a relief mechanism and approval criteria for granting relief from the SMP use and development standards when a restoration project results in a landward shift in the OHWM that brings additional properties into the shoreline jurisdiction or adds additional regulatory requirements that create a demonstrable hardship.</p>
<p>Rec-7</p>	<p>Chapter 20.240 SMP Critical Areas Regulations</p>	<p>20.240.130 Unauthorized critical area alterations. ***** C. Minimum Performance Standards for Restoration. 1. For alterations to aquifer recharge areas, wetlands, and fish and wildlife habitat conservation areas, the following minimum performance standards shall be met for the restoration; provided, that if the violator can demonstrate that greater shoreline ecological functions provided through the functions and values provided by these critical areas can be obtained, these standards may be modified: a. The pre-violation function and values of the affected critical areas and buffers shall be restored, including water quality and habitat functions; b. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically, or pre-violation, found on the site in species types, sizes, and densities. The pre-violation functions and values should be replicated at the location of the alteration; and c. Information demonstrating compliance with the requirements in SMC 20.240.082, Mitigation plan requirements, and the applicable mitigation sections for the affected type(s) of critical area(s) and their buffer(s) shall be submitted to the Director with a complete site development permit application. 2. For alterations to flood hazard and geologic hazard areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified: a. The hazard shall be reduced to a level equal to, or less than, the pre-violation hazard; b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard <u>and restore the functions and values.</u></p>	<p>Recommended for consistency with SMA no net loss of shoreline ecological function standard.</p> <p>Flood hazard and geologic hazard areas within the shoreline often contribute to the overall shoreline ecological function and value and as this is currently written only the health and safety risk is being addressed with the mitigation requirement.</p>

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<p>Req-2</p>	<p>Chapter 20.240 SMP Critical Areas Regulations</p>	<p>20.240.324 Wetlands – Development standards. *****</p> <p>E. Category IV Wetlands, Except Small Hydrologically Isolated Wetlands. Development activities and uses that result in unavoidable impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is consistent with the purpose and intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of acreage and functions and values of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.</p> <p>F. Small, Hydrologically Isolated Category IV Wetlands. The Director may allow small, hydrologically isolated Category IV wetlands to be exempt from the avoidance sequencing provisions of SMC 20.240.053 and subsection D of this section and allow alteration of such wetlands; provided, that a submitted critical area report and mitigation plan provides evidence that all of the following conditions are met:</p> <ol style="list-style-type: none"> 1. The wetland is less than 1,000 square foot in area; 2. The wetland is a low quality Category IV wetland with a habitat score of less than three points in the adopted rating system; 3. The wetland does not contain habitat identified as essential for local populations of priority species identified by WDFW or species of local importance which are regulated as fish and wildlife habitat conservation areas in Chapter 20.240, Subchapter 3; 4. The wetland is not associated with riparian areas or buffers; 5. The wetland is not part of a wetland mosaic; and 6. A mitigation plan to replace lost wetland functions and values is developed, approved, and implemented consistent with SMC 20.240.350. 	<p>For consistency with WAC 173-26-201(2)(a) Use of scientific and technical information.</p> <ul style="list-style-type: none"> • All SMP provisions must use the most current, accurate, and complete scientific and technical information available, as relevant or applicable to the issues of concern. The most recent Ecology <i>Wetland Guidance for CAO Updates – Western Washington Version, June 2016 (Publication No. 16-06-001)</i> does not support this provision. The above referenced BAS guidance provides that isolated Category IV wetlands less than 4,000 sq ft and all wetlands less than 1,000 sq ft can be exempt from the requirement to avoid impacts and can be impacted if fully mitigated. However, this allowance only applies to wetlands that are <u>not</u> associated with shorelines of the state or their buffers. <p>For consistency with WAC 173-26-201(2)(c) Protection of ecological functions of the shorelines. <i>Nearly all shoreline areas, even substantially developed or degraded areas, retain important ecological functions.</i></p> <ul style="list-style-type: none"> • This proposed exception does <u>not</u> adequately protect critical areas within the shoreline and could result in a net loss of shoreline ecological function. • Shoreline ecosystems are interconnected. For this reason the SMA policies and guideline requirements for SMP regulations are intended to provide for protection of all ecological functions and generally apply to all shoreline areas, not just those that remain relatively unaltered. • <i>Even in situations where uses or development that impact ecological functions are necessary to achieve other objectives of RCW 90.58.020, master program provisions shall, to the greatest extent feasible, protect existing ecological functions and avoid new impacts to habitat and ecological functions before implementing other measures designed to achieve no net loss of ecological functions.</i>
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<p>Rec-8</p>	<p>Chapter 20.240 SMP Critical Areas Regulations</p>	<p>20.240.330 Wetlands – Required buffer areas. A. Buffer Requirements. The standard buffer widths in Table 20.240.330(A)(1) have been established in accordance with the best available science. The buffer widths shall be determined based on the category of wetland and the habitat score as assigned by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington. ***** 6. Buffer averaging, through a shoreline variance consistent with 20.220.040, may be permitted when all of the following are met: a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging; b. The averaged buffer will not result in degradation of the wetland’s functions and values as demonstrated by a critical areas report from a qualified wetland professional; c. The total buffer area after averaging is equal to the area required without averaging; and d. The buffer at its narrowest point is never less than either three-fourths of the required width or 75 feet for Category I and II, 50 feet for Category III, and 2530 feet for Category IV, whichever is greater.</p>	<ul style="list-style-type: none"> • Buffer averaging can be permitted without a shoreline variance provided the criteria provided are met. As written, this allowance is consistent with Ecology guidance (<i>Wetland Guidance for CAO Updates – Western Washington Version, June 2016 (Publication No. 16-06-001)</i>) and can be utilized without resulting in a net loss of shoreline ecological function. • The Shoreline variance process would be the relief mechanism available to an applicant that cannot meet these bulk, dimensional, or performance standards. • Category IV wetlands are provided a 40 foot buffer. 75% of 40 feet is 30 feet. The code provision says three-fourths of the required buffer or 25 feet, whichever is greater. 30 feet is greater than 25 feet so it would always apply. For clarification, this should be modified to delete the 25 foot reference which could not be applied and replace with 30 feet. 																																			
<p>Req-3</p>	<p>Chapter 20.240 SMP Critical Areas Regulations</p>	<p>20.240.350 Wetlands – Compensatory mitigation performance standards and requirements. <u>Table 20.240.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.</u></p> <table border="1"> <thead> <tr> <th>Category and Type of Wetland?</th> <th>Creation or Reestablishment (Area – in square feet)</th> <th>Rehabilitation (Area – in square feet)</th> <th>Enhancement (Area – in square feet)</th> <th>Preservation (Area – in square feet)</th> </tr> </thead> <tbody> <tr> <td>Category I: Based on total score for functions</td> <td>4:1</td> <td>8:1</td> <td>16:1</td> <td>20:1</td> </tr> <tr> <td>Category I: Mature forested</td> <td>6:1</td> <td>12:1</td> <td>24:1</td> <td>24:1</td> </tr> <tr> <td>Category I: Estuarine</td> <td>Case-by-case</td> <td>6:1</td> <td>Case-by-case</td> <td>Case-by-case</td> </tr> <tr> <td>Category II: Based on total score for functions</td> <td>3:1</td> <td>6:1</td> <td>12:1</td> <td>20:1</td> </tr> <tr> <td>Category III (all)</td> <td>2:1</td> <td>4:1</td> <td>8:1</td> <td>15:1</td> </tr> <tr> <td>Category IV (all)</td> <td>1.5:1</td> <td>3:1</td> <td>6:1</td> <td>10:1</td> </tr> </tbody> </table>	Category and Type of Wetland?	Creation or Reestablishment (Area – in square feet)	Rehabilitation (Area – in square feet)	Enhancement (Area – in square feet)	Preservation (Area – in square feet)	Category I: Based on total score for functions	4:1	8:1	16:1	20:1	Category I: Mature forested	6:1	12:1	24:1	24:1	Category I: Estuarine	Case-by-case	6:1	Case-by-case	Case-by-case	Category II: Based on total score for functions	3:1	6:1	12:1	20:1	Category III (all)	2:1	4:1	8:1	15:1	Category IV (all)	1.5:1	3:1	6:1	10:1	<p>For consistency with WAC 173-26-201(2)(a) Use of scientific and technical information and WAC 173-26-201(2)(c) Protection of ecological functions of the shorelines.</p> <ul style="list-style-type: none"> • All SMP provisions must use the most current, accurate, and complete scientific and technical information available, as relevant or applicable to the issues of concern. The most recent Ecology <i>Wetland Guidance for CAO Updates – Western Washington Version, June 2016 (Publication No. 16-06-001)</i> provides that mitigation ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being impacted and the quality of the wetlands being preserved. Ratios for preservation as the sole means of mitigation generally start at 20:1. • This proposed preservation only option for wetland mitigation does not compensate for lost or impacted functions within the shoreline.
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<p>Rec-9</p>	<p>Chapter 20.240 SMP Critical Areas Regulations</p>	<p>Subchapter 5. <u>Shoreline</u> Flood Hazard Areas</p> <p><u>20.240.360 Floodplain Management.</u> <u>The following policies and regulations must be factored into decisions regarding all flood management planning and development within that portion of the 100-year floodplain that falls within Shoreline’s shoreline jurisdiction (within 200 feet of OHWM).</u> <u>Floodplain management involves actions taken with the primary purpose of preventing or mitigating damage due to flooding. Floodplain management can involve planning and zoning to control development, either to reduce risks to human life and property, or to prevent development from contributing to the severity of flooding. Floodplain management can also address the design of developments to reduce flood damage and the construction of flood controls, such as dikes, dams, engineered floodways, and bioengineering.</u> <u>Policy</u> <u>1. Flood management planning should be undertaken in a coordinated manner among affected property owners and public agencies and should consider the entire coastal system. This planning should consider off-site impacts such as erosion, accretion, and/or flood damage that might occur if shore protection structures are constructed.</u> <u>2. Nonstructural control solutions are preferred over structural flood control devices, and should be used wherever possible when control devices are needed. Nonstructural controls include such actions as prohibiting or limiting development in areas that are historically flooded or limiting increases in peak flow runoff from new upland development. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to reduce the damage.</u> <u>3. Substantial stream channel modification, realignment, and straightening should be discouraged as a means of flood protection.</u> <u>4. Where possible, public access should be integrated into the design of publicly financed flood management facilities.</u></p> <p><u>20.240.36070</u> Flood hazard – Description and purpose. A. A flood hazard area consists of the special flood hazard areas and protected areas as defined in Chapter 13.12 SMC Floodplain Management, which comprise the regulatory floodplain are regulated separately from this Master Program. B. It is the purpose of these <u>Chapter 13.12 SMC</u> regulations to ensure that the City meets the requirements of the National Flood Insurance Program and maintains the City as an eligible community for Federal flood insurance benefits.</p>	<p>It does not appear that the incorporation of the City’s Chapter 13.12 SMC Flood Hazard Regulations is necessary to meet the frequently flooded areas protection standards of the SMA and associated guideline of WAC 173-26. The City has also previously identified implementation issues related to the incorporation and updating of the Chapter 13.12 SMC flood hazard regulations.</p> <p>Please consider the recommended modifications as a means to provide clarity and ease of implementation that remains consistent with both the obligations under the SMA and NFIP for properties containing floodplains. We recommend not incorporating Chapter 13.12 SMC by reference into the Master Program and instead retaining the City’s current Master Program Floodplain Management provisions, noted in underline in the column to the left because this language aligns with the below noted WAC requirements and these issues are <u>not</u> similarly addressed in the City’s flood hazard provisions of Chapter 13.12 SMC.</p> <p>For consistency with WAC 173-26-221(2) & (3) and RCW 36.70A.480(3)(d). The protection of critical areas occurring within the shoreline jurisdiction shall be through the authorities of the SMA (via the SMP) and not through the GMA (via the CAO). Frequently flooded areas are defined as a critical area and subject to this requirement; therefore the City’s SMP must include provisions for the regulations of these critical areas within the SMP. However, the referenced Flood Hazard Areas regulations appear not to be critical areas protection provisions but NFIP minimum requirements and Floodplain regulations adopted pursuant to chapter <u>86.16</u> RCW.</p> <p>Pursuant to WAC 173-26-221(3) Master programs shall implement the following principles:</p> <ul style="list-style-type: none"> • <i>Where feasible, give preference to nonstructural flood hazard reduction measures over structural measures.</i>
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	<p>20.240.370 Flood hazard – Designation and classification. Flood hazard areas shall be designated and classified pursuant to the requirements of the floodplain management regulations, Chapter 13.12 SMC, which include, at a minimum, all lands identified on the 100-year floodplain designations of the current Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) for King County as identified in SMC 13.12.300.</p> <p>20.240.380 Flood hazard – Development limitations. All development within designated flood hazard areas shall comply with Chapter 13.12 SMC, Floodplain Management, as now or hereafter amended, and is not further subject to the regulations of this chapter. <u>Development occurring within the 100-year floodplain designations of the current Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) for King County as identified in SMC 13.12.300 which is also located in the shoreline jurisdiction shall be subject to the regulatory and permit authorities of both the Master Program and Chapter 13.12 SMC.</u></p>	<ul style="list-style-type: none"> • <i>Assure that flood hazard protection measures do not result in a net loss of ecological functions associated with the rivers and streams.</i> <p>Master programs shall implement the following standards:</p> <ul style="list-style-type: none"> • <i>Development in flood plains should not significantly or cumulatively increase flood hazard or be inconsistent with a comprehensive flood hazard management plan adopted pursuant to chapter 86.12 RCW</i> • <i>New development or new uses in shoreline jurisdiction, including the subdivision of land, should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway.</i> • <i>Allow new structural flood hazard reduction measures in shoreline jurisdiction only when it can be demonstrated by a scientific and engineering analysis that they are necessary to protect existing development, that nonstructural measures are not feasible, that impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss, and that appropriate vegetation conservation actions are undertaken consistent with WAC 173-26-221(5).</i> <p>The City's SMP already contains Flood Hazard Management Goals and Objectives and has regulations that prohibit Structural Flood Hazard Reduction measures such as dikes and levees, and prioritize soft shoreline stabilization over hard shore options and promotes shoreline habitat and natural systems enhancement projects within the Permitted Uses and Modifications Table 20.230.081. SMC 20.230.020(A)(4) and SMC 20.230.150 contains the majority of the City's regulations addressing frequently flooded areas.</p> <p>*We are open to other options for resolving this issue, please feel free offer other alternatives.</p>
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STATE OF WASHINGTON
DEPARTMENT OF COMMERCE
1011 Plum Street SE • PO Box 42525 • Olympia, Washington 98504-2525 • (360) 725-4000
www.commerce.wa.gov

04/15/2019

Ms. Miranda Redinger
Senior Planner
City of Shoreline
17500 Midvale Ave N
Shoreline, WA 980133

Sent Via Electronic Mail

Re: City of Shoreline--2019-S-72--60-day Notice of Intent to Adopt Amendment

Dear Ms. Redinger:

Thank you for sending the Washington State Department of Commerce (Commerce) the 60-day Notice of Intent to Adopt Amendment as required under [RCW 36.70A.106](#). We received your submittal with the following description.

Proposed amendments to the Development Code that apply within the shoreline jurisdiction and amendments to the Comprehensive Plan to reflect updates through the Periodic Review of the City's SMP). In addition to recommended updates from the Department of Ecology, the majority of the code amendments integrate the 2015 CAO into the SMP, which currently references the 2006 CAO.

We received your submittal on 04/12/2019 and processed with the Submittal ID 2019-S-72. Please keep this letter as documentation that you have met this procedural requirement. Your 60-day notice period ends on 06/14/2019.

We have forwarded a copy of this notice to other state agencies for comment.

Please remember to submit the final adopted amendment to Commerce within ten days of adoption.

If you have any questions, please contact Growth Management Services at reviewteam@commerce.wa.gov, or call Valerie Smith, (360) 725-3062.

Sincerely,

Review Team
Growth Management Services