

# WRIA 8 Salmon Habitat Project List

## Lake Washington

Wednesday, August 30, 2017

### APPLICABLE STRATEGIES LEGEND:



Protect and restore floodplain connectivity



Protect and restore cold water sources and reduce thermal barriers to migration



Protect and restore forest cover and headwater areas



Protect and restore marine water and sediment quality, especially near commercial and industrial areas



Protect and restore functional riparian vegetation



Improve juvenile and adult survival at the Ballard Locks



Provide adequate stream flow



Improve water quality



Protect and restore channel complexity



Reduce predation on juvenile migrants and lake-rearing fry



Restore sediment processes necessary for key life stages



Integrate salmon recovery priorities into local and regional planning, regulations, and permitting (SMP, CAO, NPDES, etc.)



Restore shallow water rearing and refuge habitat



Remove (or reduce impacts of) overwater structures



Restore natural marine shoreline



Continue existing and conduct new research, monitoring, and adaptive management on key issues



Reconnect and enhance creek mouths




Remove fish passage barriers





Reconnect backshore areas and pocket estuaries






Increase awareness and support for salmon recovery


Lower John's Creek Enhancement			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S1-1		Enhance lower channel to reduce predator habitat, restore riparian vegetation, and protect water quality and quantity from stormwater flows. Located in Gene Coulon Park.	Enhancement should aim to reduce predator habitat. Extensive planting was done when Park was created. Park is heavily used and any restoration project will need to allow continued recreational use of the site.	 Creek Mouths
Four-Year Work Plan?	Project Location				
No	Renton				
Estimated Project Costs					
Acquisition	Restoration	Total			


Gene Coulon Park Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S1-2		Investigate feasibility of shoreline restoration actions along shoreline in Gene Coulon Park.	Park is heavily used and any restoration project will need to allow continued recreational use of the site.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Renton				
Estimated Project Costs					
Acquisition	Restoration	Total			


Bird Island Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Restore 19,000 square foot island near Gene Coulon Park by removing concrete debris from the shoreline and creating shallow water habitat, removing invasive plants, and planting native vegetation.	Project scheduled for 2017/2018 construction.	 <p>Rearing &amp; Refuge Habitat</p>
LW-S1-3					
Four-Year Work Plan?					
Project Location					
Yes					
Renton					
Estimated Project Costs					
Acquisition	Restoration	Total			


Shoreline Restoration between Mouth of Cedar and Gene Coulon Park			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Work with private property owners to remove bulkheads and restore shallow water habitat and riparian vegetation.	Refers to small area on Boeing property not already enhanced and the Seco property. Seco property is undergoing redevelopment as of 2017 and opportunity for restoration here is essentially lost.	 <p>Rearing &amp; Refuge Habitat</p>
LW-S1-4					
Four-Year Work Plan?					
Project Location					
Yes					
Renton					
Estimated Project Costs					
Acquisition	Restoration	Total			


Lower Taylor Creek Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S1-5		Restore, reconnect, and revegetate floodplain along lower 1000 feet of Taylor Creek, including the mouth, 125 feet of lake shoreline, and 350 square feet of delta.	Project is in design (2017) and is anticipated for construction beginning in 2019.	 Creek Mouths
Four-Year Work Plan?	Project Location				
Yes	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			
Henderson 49 CSO Reduction and Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S1-6		Restore approximately 100' of the shoreline on Lake Washington in south Seattle, north of the Taylor Creek mouth. Project includes removing 3-4 feet of fill and old wood shoring and adding appropriately sized gravels at a gradual slope to re-establish the shoreline and support salmon.	Design is expected to start in 2019 and construction in 2020. This is part of a larger project to upgrade a 300,000 gallon in-line storage pipe to improve water quality by reducing combined sewer over-flows in the area.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			


<b>Kennydale Creek Mouth Enhancement</b>			<b>Description</b> Located in Gene Coulon Park. Enhance mouth, remove silt, and facilitate recruitment of sand and gravel. Should also protect shallow water delta.	<b>Opportunities, Constraints, and other Considerations</b> The mouth has a good delta and there is a favorable gradient. Juvenile Chinook have been observed at the mouth in the past, but not in the stream. Extensive planting was done when Gene Coulon Park was created. Any restoration project will need to allow continued recreational use of the Park.	<b>Applicable Strategies</b>  Creek Mouths
<b>Project Number</b>	LW-S2-1				
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
No	Renton				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


<b>Atlantic City Boat Ramp Shoreline Restoration</b>			<b>Description</b> Remove shoreline armoring, regrade shoreline, and plant native vegetation along shoreline between Mapes Creek project site and boat ramp.	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>  Rearing & Refuge Habitat
<b>Project Number</b>	LW-S2-2				
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
No	Seattle				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


Pritchard Island Beach Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S2-3		<p>In northern reach, remove concrete bulkhead and regrade shoreline to gentle slope. Add fine substrate where needed. Remove invasive vegetation and plant native vegetation. Swim beach would be left intact. From Seattle Shoreline Park Inventory and Habitat Assessment.</p>		 <p>Rearing &amp; Refuge Habitat</p>
Four-Year Work Plan?	Project Location				
No	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			

Pritchard Island Wetland Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S2-4		<p>Between Rainier Beach Park and Beer Sheva, connect and restore wetland behind Pritchard Island.</p>	<p>Land in public ownership. Wetland may already be hydraulically connected--needs investigation. At a minimum, invasive plant treatment and native revegetation are possibilities.</p>	 <p>Riparian Vegetation</p>
Four-Year Work Plan?	Project Location				
No	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			


Mouth of May Creek Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Restore mouth and lower reach of May Creek. Increase beach, set back banks, plant riparian buffers, and add large wood to improve habitat for juvenile Chinook.			<p>Restore mouth and lower reach of May Creek. Increase beach, set back banks, plant riparian buffers, and add large wood to improve habitat for juvenile Chinook.</p>	<p>May Creek has been historically dredged. In the future maintenance will probably cease. Need to maximize Chinook and minimize cutthroat with development of beach and placement of large wood. Some buffer restoration was implemented in the past associated with adjacent development.</p>	 Creek Mouths
Project Number	LW-S2-5				
Four-Year Work Plan?	Project Location				
No	Renton				
Estimated Project Costs					
Acquisition	Restoration	Total			


Port Quendall Site Cleanup			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Clean up hazardous material on site.			<p>Clean up hazardous material on site.</p>		 Water Quality
Project Number	LW-S2-6				
Four-Year Work Plan?	Project Location				
No	Renton				
Estimated Project Costs					
Acquisition	Restoration	Total			



Lake Washington Boulevard South Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S3-1		Control invasive weeds at several locations and re-establish native vegetation. Remove debris along the water's edge in the north portion, from Mount Baker Park to Stan Sayres Park. Grade the shoreline, add beach gravels, and plant native riparian shrubs to return the shoreline to natural conditions.	Some work has been implemented, but more remains—additional rubble wall can be removed and shoreline restoration can occur.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			


Groveland Beach Park Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S3-2		Remove/replace docks, remove shoreline armoring and wooden bulkhead, and plant riparian vegetation along the shoreline.	City is currently working toward removing the north dock and a wooden bulkhead. In the long-term, shoreline enhancements will be carried farther south.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Mercer Island				
Estimated Project Costs					
Acquisition	Restoration	Total			





<b>Clarke Beach Park Restoration</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
<b>Project Number</b>	LW-S3-3		Remove 700 linear feet of concrete and rock bulkheads, a sheetpile wavebreak, and a fill jetty. Grade the shoreline to create a shallow beach and nourish with gravels, place large wood, and replant with native species.	On the city's capital plan to begin construction in 5 - 6 years.	 <p>Rearing &amp; Refuge Habitat</p>
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
Yes	Mercer Island				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


<b>Newcastle Beach Park Restoration</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
<b>Project Number</b>	LW-S3-4		Remove bank hardening and bulkheads, plant riparian vegetation, and protect existing riparian area.		 <p>Rearing &amp; Refuge Habitat</p>
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
Yes	Newcastle				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


Creosote Wall Removal under I-90			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Remove creosote wall under I-90, which leaches toxics into mouth of Mercer Slough.					 <p>Water Quality</p>
Project Number	LW-S3-5				
Four-Year Work Plan?	Project Location				
No	Bellevue				
Estimated Project Costs					
Acquisition	Restoration	Total			
Lake Washington Boulevard Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Remove concrete debris and blackberry bushes, regrade, and re-establish native trees and shrubs on the shoreline boulevard from East Pine Street to the Madrona Drive intersection.				Focal area is north of the bus circle in north Madrona Park.	 <p>Rearing &amp; Refuge Habitat</p>
Project Number	LW-S4-1				
Four-Year Work Plan?	Project Location				
Yes	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			


<b>North Madison Park Shoreline Restoration</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
<b>Project Number</b>	LW-S4-2		On state DNR parcel located at end of E Madison Street and in north Madison Park, remove shoreline armoring, restore natural shoreline gradient, and plant native vegetation.	Potential DNR/Seattle partnership project.	 <p>Rearing &amp; Refuge Habitat</p>
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
No	Seattle				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			



<b>Chism Beach Shoreline Restoration</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
<b>Project Number</b>	LW-S4-3		Remove bulkhead and place gravels to create a more gradual shoreline. Potential to remove up to 500 feet of armoring and improve shoreline function, while maintaining park use and access.		 <p>Rearing &amp; Refuge Habitat</p>
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
Yes	Bellevue				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


Luther Burbank Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S4-4		Remove bulkheads, nourish the shoreline, and plant native vegetation to improve lakeshore rearing and refuge habitat. Multiple phases target up to 4,000 linear feet.	Initial work completed on two sections. Future phases pending funding for implementation.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
Yes	Mercer Island				
Estimated Project Costs					
Acquisition	Restoration	Total			


Clyde Beach Park Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S4-5		Remove bulkhead and place gravels to create a more gradual shoreline. Potential to remove up to 100 feet of armoring and improve shoreline function, while maintaining park use and access.		 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
Yes	Bellevue				
Estimated Project Costs					
Acquisition	Restoration	Total			


<b>Meydenbauer Beach Shoreline Restoration</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
<b>Project Number</b>	LW-S4-6		Remove bulkhead and place gravels to create a more gradual shoreline. Potential to remove up to 350 feet of shoreline armoring and improve function while maintaining park use and access.		 Rearing & Refuge Habitat
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
Yes	Bellevue				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


<b>Enatai Park Shoreline Restoration</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
<b>Project Number</b>	LW-S4-7		Remove bulkhead and restore shallow beach habitat.	Area gets heavy boat wake influence and recreational use. Bellevue Parks may not be supportive of riprap removal here.	 Rearing & Refuge Habitat
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
No	Bellevue				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			

Medina Beach Park Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S4-8		Shoreline restoration for approximately 1/3 of park as part of park upgrade project. Will include riparian revegetation and area will be off-limits for swimmers and boats.		 <p>Rearing &amp; Refuge Habitat</p>
Four-Year Work Plan?	Project Location				
No	Medina				
Estimated Project Costs					
Acquisition	Restoration	Total			
Magnuson Park Shoreline North			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S6-1		Remove dumped material, concrete, and other shoreline armoring; regrade the shoreline, install appropriate beach gravels, and plant with native trees and shrubs in the north end of the park.	Focuses north of swim beach, including potentially the small area of shoreline NW of the NOAA shoreline.	 <p>Rearing &amp; Refuge Habitat</p>
Four-Year Work Plan?	Project Location				
No	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			


<b>NOAA Shoreline Restoration at Sand Point</b>			<b>Description</b>  Remove bank armoring, regrade the shoreline to restore a more natural shoreline profile, and plant native vegetation.	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>   Rearing & Refuge Habitat
<b>Project Number</b>	LW-S6-2				
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
No	Seattle				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


<b>Magnuson Park Shoreline South</b>			<b>Description</b>  Remove dumped material, concrete, and other shoreline armoring, regrade the shoreline, install appropriate beach gravels, and plant with native trees and shrubs in the south end of the park.	<b>Opportunities, Constraints, and other Considerations</b>  Focus on area south of boat ramp.	<b>Applicable Strategies</b>   Rearing & Refuge Habitat
<b>Project Number</b>	LW-S6-3				
<b>Four-Year Work Plan?</b>	<b>Project Location</b>				
No	Seattle				
<b>Estimated Project Costs</b>					
<b>Acquisition</b>	<b>Restoration</b>	<b>Total</b>			


Matthews Beach Creek Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S6-4		Feasibility study and analysis of options for shoreline and creek mouth restoration near Matthews Beach Park. Possible restoration elements could include replaced culvert at NE 93rd St., re-aligned creek channel, riparian revegetation, property acquisition from willing sellers, and shoreline restoration. The project area is partially within Matthews Beach Park and bordered by Burke Gilman Trail to the north, Sandpoint Way NE to the west, NE 90th Pl to the south and Lake WA to the east.	Creek mouth currently in pretty good condition, and relocating to another area of the park would involve significant acquisition and infrastructure removal.	 Creek Mouths
Four-Year Work Plan?	Project Location				
No	Seattle				
Estimated Project Costs					
Acquisition	Restoration	Total			

Sammamish River Mouth and Inglewood Golf Course Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S7-1		Restore wetlands at mouth of Sammamish River (south side of mouth), remove invasive plants, and plant native riparian vegetation.	Focus is on shoreline and wetlands along Inglewood Road NE.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Kenmore				
Estimated Project Costs					
Acquisition	Restoration	Total			



Tracy Owen Station at Log Boom Park Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S7-2		Shoreline near the mouth of the Sammamish River is degraded by the presence of invasive species, erosion, and shoreline armoring. Explore removal of wood waste and restore the shoreline by removing invasive plants, planting native vegetation, and removing existing shoreline armoring.		 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Kenmore				
Estimated Project Costs					
Acquisition	Restoration	Total			

O.O. Denny Park Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S7-3		Remove bulkhead, plant riparian vegetation. Explore restoration of Denny Creek mouth.	Seattle-owned land, leased by Kirkland. Seattle would likely support restoration measures developed by Kirkland.	 Rearing & Refuge Habitat
Four-Year Work Plan?	Project Location				
No	Kirkland				
Estimated Project Costs					
Acquisition	Restoration	Total			

St. Edwards State Park Shoreline Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number	LW-S7-4		Remove large boulders that form a bulkhead and three groins along the shoreline and fill voids and depressions with gravels and sands that match the natural lakebed substrate. Enhance shoreline vegetation by planting additional coniferous trees and shrubs.		 <p>Rearing &amp; Refuge Habitat</p>
Four-Year Work Plan?	Project Location				
Yes	Kenmore				
Estimated Project Costs					
Acquisition	Restoration	Total			