

# WRIA 8 Salmon Habitat Project List

## Kelsey Creek

Monday, October 02, 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



Enhance Mercer Slough Cool Water Refugia			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Restore mouth of seeps and springs at Mercer Slough to provide cool refugia areas.	Two spring fed streams are known on East side of Mercer Slough, about mid-way to fish ladder.	 Thermal Stress
KC-R1-1-INS					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			


Wetland Reconnection Near SE 8th			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Investigate opportunities to connect wetlands on north side of SE 8th near fire station with Kelsey creek for off-channel habitat.		 Channel Complexity
KC-R1-2-RB					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			


Woodridge Hill Cold Water Refugia			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			<p>Improve connections with cold water seeps/springs off Woodridge Hill for refugia in Kelsey Creek.</p>		 Thermal Stress
KC-R1-3-LB					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			


Lower Kelsey Instream and Riparian Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies	
Project Number			<p>Improve channel conditions, install large wood in the floodplain, and revegetate the riparian corridor.</p>	<p>Cannot install wood in channel at this location due to sedimentation issues. On Bellevue's CIP and will start design in probably 2018 or 2019.</p>	 Channel Complexity	 Riparian Vegetation
KC-R1-4-BB						
Four-Year Work Plan?						
Project Location						
No						
Bellevue						
Estimated Project Costs						
Acquisition	Restoration	Total				


SE 7th Wetland Buffer Protection			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Acquire parcels just south of SE 7th along wetland buffer to protect Kelsey and West Tributary.	Implement in large disturbed areas and work with Bellefields Office Park to create and increase buffers. Include large trees where not safety hazard to buildings or other structures.	 Riparian Vegetation
KC-R2-1-RB					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			


Reach 2 Stream Channel Improvements			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies	
Project Number			Restore stream channel through Kelsey Creek segments 76-03 through 76-05 (Kelsey Creek Farm) and remove invasive weeds.	Bellevue Parks and Utilities are actively working on this project.	 Channel Complexity	
KC-R2-2-INS						 Riparian Vegetation
Four-Year Work Plan?						
Project Location						
No						
Bellevue						
Estimated Project Costs						
Acquisition	Restoration	Total				



Reach 2 Berm Removal and Floodplain Restoration			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Explore opportunities to set back or remove berm at Kelsey Creek Farm and expand buffer and channel migration zone.	Feasibility of implementing this project is very low presently. The farm has a highly-supported program of using horses with disabled youth.	 <p>Floodplain Connectivity</p>
KC-R2-3-RB					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			


Fish Passage at NE 8th			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Replace NE 8th St. culvert with bridge.	Construction to occur in 2018.	 <p>Passage Barriers</p>
KC-R3-1-INS					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			


Restoration Upstream of NE 8th			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
			Restore stream channel and use wildlife pond for off-channel habitat upstream of NE 8th.		 <p>Channel Complexity</p>
Project Number	KC-R3-2-INS				
Four-Year Work Plan?	Project Location				
No	Bellevue				
Estimated Project Costs					
Acquisition	Restoration	Total			

Fish Passage at Olympic Pipeline			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
			Improve fish passage at Olympic Pipeline weirs.		 <p>Passage Barriers</p>
Project Number	KC-R4-1-INS				
Four-Year Work Plan?	Project Location				
No	Bellevue				
Estimated Project Costs					
Acquisition	Restoration	Total			


Bel-Red Channel Improvements			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Re-establish more natural channel through Bel-Red area, use weirs for grade control at sheet pile wall until stream can be restored.		 Channel Complexity
KC-R4-2-INS					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			

Reach 5 Channel Enhancements and Floodplain Reconnection			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Enlarge channel cross-section, reconnect floodplain, and install large wood through apartment complex.	Located at river mile 2.2-3.5	  Floodplain Connectivity      Channel Complexity
KC-R5-1-INS					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			



Reach 5 Riparian Forest Cover Protection			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Protect existing coniferous riparian habitat along Kelsey Creek upstream of Valley Creek confluence to 148th Ave NE through acquisition or easement.	Located at river mile 3.5-4.0	 Riparian Vegetation
KC-R5-2-BB					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			

Wetland Protection along 148th Avenue NE			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
Project Number			Protect wetlands along 148th Avenue NE (upstream and downstream of NE 8th St) using acquisition or easement.		 Riparian Vegetation
KC-R5-3-BB					
Four-Year Work Plan?					
Project Location					
No					
Bellevue					
Estimated Project Costs					
Acquisition	Restoration	Total			



<b>Restoration Upstream of Main Street</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
			Remove culvert and restore stream channel upstream of Main St.		 Channel Complexity
<b>Project Number</b>	KC-R6-1-INS				
<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>			

<b>Kelsey Headwaters Wetland Protection</b>			<b>Description</b>	<b>Opportunities, Constraints, and other Considerations</b>	<b>Applicable Strategies</b>
			Maintain headwater wetlands to protect summer base flows and aquatic ecosystem health.		 Forest Cover
<b>Project Number</b>	KC-R6-2-BB				
<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>			

Valley Creek Daylighting			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
			Daylight Valley Creek through Bellevue Golf Course.		 Channel Complexity
Project Number	KC-1-INS				
Four-Year Work Plan?	Project Location				
No	Bellevue				
Estimated Project Costs					
Acquisition	Restoration	Total			
Fish Passage at NE 1st Street - West Tributary			Description	Opportunities, Constraints, and other Considerations	Applicable Strategies
			Construct new fish passable culvert at NE 1st Street on West Tributary.	Design anticipated to begin in near-term	 Passage Barriers
Project Number	KC-2-INS				
Four-Year Work Plan?	Project Location				
No	Bellevue				
Estimated Project Costs					
Acquisition	Restoration	Total			