

Agenda Item 3b – Stimulus Package addendum on Salmon Recovery Council

American Recovery and Reinvestment Act. NOAA Coastal and Marine Habitat Restoration Project Grants Puget Sound Partnership Process to Endorse Projects

March 26, 2009

By memo dated March 25, 2009, you were updated on the process for developing a list of habitat restoration projects for the Partnership and the Governor to endorse. This memo offers a brief update on the March 26 meeting of the Puget Sound Salmon Recovery Council on this topic.

Puget Sound Salmon Recovery Council. The Puget Sound Salmon Recovery Council met at its regularly scheduled meeting on Thursday, March 26, 2009. The Recovery Council was invited to comment on the process that has been proposed for finalizing this list. The Recovery Council asked for no revisions to the draft list. The Recovery Council affirmed the process used to develop the list and affirmed the proposed subsequent steps for evaluating the projects.

Projects on the proposed list implement aspects of the Action Agenda, beyond salmon recovery. The Recovery Council declined to opine on the projects that are not on the Salmon Recovery three-year work plans. This does not mean that the Recovery Council has any concerns with these projects. Rather, it means that the Recovery Council felt that its existing charge is to implement the Salmon Recovery Plan.

Revised Project List. A copy of the proposed Puget Sound NOAA habitat restoration project list, as revised March 24 based on public comment and submitted to the Recovery Council, is attached.

DRAFT Priority Projects for Puget Sound Restoration through NOAA Economic Stimulus Funding

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Listed species and shellfish habitat protection and restoration implementation	Washington State Conservation Commission in partnership with all 12 Puget Sound Conservation Districts	Puget Sound (WRIAs 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18)	Work with rural landowners to implement stream corridor fencing and solar pump watering fixtures to eliminate animal access; plant native plant material hedgerows and filter strips adjacent to waterways to protect and improve riparian processes and reduce fecal coliform and toxin inputs to waters throughout Puget Sound Action Area. Provide post-implementation monitoring. Provide landowners with educational packets on additional programs, resources, and ways they can help Puget Sound.	\$2,466,000	B.3(1); C.2(8)
Derelict Gear	Northwest Straits Commission	Puget Sound	Restore benthic habitat; eliminate a direct source of mortality to salmon and other marine species by removing derelict fishing nets from marine waters	\$4,646,250	B.1(1); B.1(6)
On-the-ground Recovery of Pinto abalone, Olympia oysters and Bull kelp in Puget Sound	Puget Sound Restoration Fund	Puget Sound (WRIAs 2,11,13,14,15,18)	Produce healthy, genetically diverse animals and plants for outplanting, and increase densities in the wild to stabilize and then build viable populations for the future.	\$1,533,839	C.1(7)
South Fork Landingstrip Creek restoration	Nooksack Salmon Enhancement Association	Nooksack Watershed	Barrier removal / Provide passage to 1.4 miles, Channel modification / LWD placement / Riparian planting 2900 linear feet / 127.5 acres	\$580,000	B.1(1); B.1(3); B.1(4)
Bundled LWD Projects: Middle Fork LWD (\$320,000) / North Fork LWD (\$210,000)	Nooksack Salmon Enhancement Association	Nooksack Watershed	Middle Fork: Install 20 woody debris structures along 1.5 miles of Middle Fork in vicinity of Porter Creek; North Fork: Augment 16 LWD structures on 5 channel islands between Kendall and Welcome	\$530,000	B.1(1); B.1(3)

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Bundeled Fish Passage Improvement Projects: Squalicum Creek (\$37,000) / North Fork Damifino Creek (\$160,000) / South Fork Black Slough Hollingworth (\$19,000) / South Fork Black Slough Anderson (\$36,000) / Drayton Harbor Haynie Creek, Fenton (\$6,000) / Terrell (\$4,000)/ South Fork Tinling (\$41,000) / Betrand Trib Zylstra (\$23,000) / Squalicum Trib Sanders (\$21,000) / Kinney Creek McKissick (\$31,000) / Drayton Harbor Dakota Creek Ruhl (\$15,000) / Tenmile Chalfont (\$25,000) / Dakota Trib Goodsir (\$15,000) / Dakota Trib Guss (\$45,000) / Bell (\$60,000)	Nooksack Salmon Enhancement Association	Nooksack Watershed	Barrier removal: Provide passage to 1.1 miles of upstream habitat / Barrier removal: Provide passage to 1.3 miles of upstream habitat / Barrier removal: Provide passage to 0.6 miles of upstream habitat / Daylight channel, LWD placement, riparian planting, 1000 linear feet, 1.5 acres / Barrier removal: Provide passage to 0.3 miles of upstream habitat, riparian planting / Barrier removal: retro fit culvert with baffles, Provide passage to 0.8 miles of upstream habitat / Barrier removal: Provide passage to 0.4 miles of upstream habitat / Barrier removal: Provide passage to 0.8 miles of upstream habitat / Barrier removal: Provide passage to 0.6 miles of upstream habitat / Barrier removal: Provide passage to 1.6 miles of upstream habitat / Barrier removal: Provide passage to 0.4 miles of upstream habitat / Replace dam with bridge: improve passage to 0.4 miles of upstream habitat / Barrier removal: Provide passage to 0.4 miles of upstream habitat / Barrier removal: Provide passage to 0.3 miles of upstream habitat / Barrier removal: Provide passage to 1.9 miles of upstream habitat	\$538,000	B.1(1); B.1(4)

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Milltown Island Estuarine Restoration	Skagit River System Cooperative/WDFW	Skagit Watershed	Restoration of 75 acres of estuarine habitat on the Skagit River delta.	\$682,201	B.1(1); B.1(2)
Turner's Bay Design Implementation	Skagit River System Cooperative	Skagit Watershed	Restoration of processes of tidal inundation and fish access to isolated marsh surfaces within a 59-acre pocket estuary near the Skagit River delta.	\$860,000	B.1(1); B.1(2); B.1(4)
Boundary Bridge Extension	SRSC	Skagit Watershed	Extend existing bridge 265' across channel and floodplain	\$650,000	B.1(1); B.1(3)
Hansen Creek Floodplain Reconnection	Upper Skagit Tribe	Skagit Watershed	Restore 53 acres of historic alluvial fan and 87 acres of riparian, flow-through forested wetland habitat, restore self-sustaining hydrologic and sediment transport processes through reconnection to the mainstem channel with the historic floodplain site reaches 3 & 4 as the cornerstone of restoration for salmon habitat and productivity in the watershed	\$988,915	B.1(1); B.1(3)
1) Leque Island Estuary and North Meander Floodplain Restoration (\$896,100); 2) Stilly Big Trees (\$229,300); 3) Spartina Control (\$175,000)	Snohomish County	Stillaguamish Watershed	1) Use excavated soil from North Meander side channel reconnection project to build set back dike at Leque Island estuary restoration project. The Leque Island part of the project will restore 85 acres of estuary habitat. Partnership between Snohomish County and Ducks Unlimited leveraging state and federal salmon recovery grants; 2) Plant native riparian vegetation along the Mainstem, North Fork and South Fork Stillaguamish River.; 3) Remove 25 acres invasive spartina from the marine nearshore in Port Susan Bay	\$1,300,400	B.1(1); B.1(2); B.1(3); A.5(4)
Snohomish River Estuary; 1) Snohomish Estuary Sitka Spruce Supplementation ; 2) Qwuloot Estuary Restoration Project	Tullalip Tribes	Snohomish Watershed	1) Plant 2000 5g Sitka spruce on remnant dikes on Otter, Spencer, Mid Spencer, Smith, and North Ebey islands (\$50,000); 2) Restore 340 acres of estuarine tidal marsh. Specific project elements to be paid for from this source include ditch fill, tidal channel excavation, and other topographic relief (berms), culvert removal and road demolition, other site preparation activities, erosion controls and riparian planting. (\$5,400,000)	\$5,450,000	B.1(1); B.1(2); B.1(3)
Greenwater LWD Placement	SPSSEG	Puyallup/ White Watershed	Decommission 4500-linear feet of Forest Road, remove 750-linear feet of bank armor and install 16 Engineered Log Jams on the Greenwater River	\$650,000	B.1(1); B.1(2); B.1(3); A.5(4)
Puyallup River Silt bench Restoration	Pierce County Surface Water Management	Puyallup River near RM 5.2 (WRIA 10)	The project involves placement of logs and concrete dolos along the right bank of the Puyallup River to provide stream bank roughness, prevent erosion and enhance fish habitat. Existing trees will be protected and native vegetation will be planted to provide additional bank protection.	\$500,000	B.1(1); B.1(3)
Nisqually Estuary Restoration	Duck's Unlimited	Nisqually Watershed	Restore 762 acres of salt marsh habitat. This is the highest priority restoration action in the Nisqually Basin, the largest marsh restoration project in Puget Sound, and will increase South Puget Sound salt marsh area by 50%.	\$6,400,000	B.1(1); B.1(2); B.1(3)
Ellis Creek Fish Passage Project	City of Olympia	Deschutes Watershed (WRIA 13)	Total replacement of a fish-barrier culvert at the mouth of a productive salmon stream with intact and protected upstream riparian areas. The project has been prioritized by State WRIA 13 with partial funding from the Salmon Recovery Funding Board and City of Olympia.	\$1,500,000	B.1(1); B.1(3); B.1(4)
Carpenter Creek Estuary Restoration	Kitsap County	West Sound Watershed	Remove blocking culvert, restore tidal function	\$2,163,000	B.1(1); B.1(3); B.1(4)
Chico Creek Instream Restoration and Estuary	Kitsap County	West Sound Watershed	1) Chico Estuary Road Removal and Final Driveway: Construct driveway in prep for removal of culvert (\$480,000) 2) Chico Creek In-stream Restoration Phase II Construction: Second phase of creek restoration critical for overall project (\$1,135,000)	\$1,615,000	B.1(1); B.1(3); B.1(4)
Skokomish Estuary	Skokomish Tribe	Hood Canal	Restore estuary: obliterate levees, borrow ditches, and tidegates on Skokomish Estuary Island	\$1,750,000	B.1(1); B.1(3); B.1(4)

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Little Quilcene Delta Cone Removal	Hood Canal Salmon Enhancement Group	Hood Canal	Remove accumulated sediment deposits at mouth of Little Quilcene River to restore functional linkages between freshwater and saltwater physical processes + place wood enhancements in 1 mile of stream	\$1,000,000	B.1(1); B.1(3); B.1(4)
Critical Areas: Riparian Invasive Species Control	Mason County Conservation District	Hood Canal	Inventory and remove invasive species along anadromous streams in four counties: Clallam, Jefferson, Mason, and Kitsap	\$1,200,000	A.5(4); B.1(1)
Floodplain Restoration: LWD in Olympics	Hood Canal Salmon Enhancement Group	Hood Canal	Place LWD in 4 streams in the Olympics: 1) Hamma Hamma; 2) Big Quilcene; 3) Skokomish; 4) Little Anderson	\$950,000	B.1(1); B.1(3)
Lower Hoko River Riparian Revegetation	Makah & NOSC	North Olympic Peninsula Watersheds	Restoring the riparian zone along Hoko Mainstem, RM 0 to 7.	\$500,000	B.1(1); B.1(3)
Elwha Floodplain Bundled Package Submittal	Lower Elwha Klallam Tribe	North Olympic Peninsula Watersheds	Lower Elwha hatchery outfall & berm removal, Griff Creek culvert replacement, revegetation, exotic species removal, Elwha ELJ's	\$2,250,000	B.1(1); B.1(3); B.1(4); A.5(4)
TOTAL FUNDING REQUEST				\$40,703,605	

Additional Strong Candidates

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Snoqualmie River Mainstem; Lower Tolt Levee Setback	City of Seattle	Snohomish Watershed	Restore 40 acres of floodplain at the mouth of the Tolt River. Plant native riparian plants on other Tolt River Seattle-owned properties.	\$1,000,000	B.1(1); B.1(3)
Blue Heron Slough Conservation Bank (Habitat Work Site No. 07 ER-013)	Port of Everett	Snohomish Basin/WRIA 07	The proposed project is the restoration of 354 acres of former tidally-influenced habitat. The proposed project will reconnect the former estuary to two Snohomish River sloughs (Steamboat and Union) in order to restore tidal marsh, riparian, mudflat, and slough habitats to provide highly productive habitat for and assist in the recovery of Puget Sound Chinook salmon, steelhead, and bull trout, as well as many other native species.	\$2,700,000	B.1(2); B.1(3)
Issaquah Integrated Fish Passage	City of Issaquah	Lake Washington/ Cedar/ Sammamish Watersheds	Dam removal to restore unhindered adult fish passage of Chinook, coho, and other salmon to 10 miles of high quality upstream habitat and provide channel connectivity for other aquatic species. Remove Issaquah Fish Hatchery Intake Dam and replace with series of boulder weir structures and a new screened water intake structure located in a fish-passable channel constriction. The current 1930's-era, 11-foot high dam was constructed to provide water supply to the Issaquah Salmon Hatchery but blocks passage to a majority of adult salmon due to a poorly designed and functioning fish ladder. Concrete slab at base of dam also contributes to salmon mortality.	\$2,425,000	B.1(1); B.1(4)

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Big Spring Creek Restoration Project	King County	Green/ Duwamish Watershed (Newaukum Ck. Sub Basin)	Relocate 2800 lineal feet of Big Spring Creek from agricultural and roadside ditches to historic floodplain location. Restore floodplain functions and habitat in 80 acres of surrounding wetland that's currently dominated by Reed Canarygrass. Project is located on public land and existing conservation easements.	\$2,300,000	B.1(1); B.1(3)
Mashel Eatonville Restoration Phase 2	Nisqually Indian Tribe	Nisqually Watershed	This 2nd Phase of the project will continue the effort and built upon the very successful Phase 1 restoration project which was completed within the same reach of the river in 2007. The main focus of this project will be the construction of 11 additional log structures to the 13 already built in Phase 1 to provide salmon habitat. These structures have shown to increase pool habitat, increase stable and high quality spawning habitat, increase floodplain connections and decrease bank erosion and mass wasting. This project will also continue the protection of riparian habitat, through purchases of easements and fee simple acquisitions in addition to reforestation of several acres. This phase will also capitalize on bank protection project that is underway by the WA DOT and the Tribe which includes the installation of 6 log structures to stop bank erosion and provide fish habitat. Combining the two efforts will expedite the permit process, bring cost savings, and result in a total of 17 new structures for 2009.	\$1,100,000	B.1(1); B.1(3)
Pritchard Park Shoreline Restoration (Combined Project)	City of Bainbridge Island	West Sound Watershed (East WRIA 15)	This combined project will restore historic feeder bluff function by removing armoring; relocate an essential access driveway at risk of landslides from on top of the bluff to an inland location (instead of armoring feeder bluff to protect road); remove armoring and landfill to restore forage fish spawning habitat and restore backshore habitat; and restore riparian marine habitat. Phase I is expected to be completed in 2009 and phase II will be completed by September 2010.	\$1,005,975	B.1(1)
McLane Cove Estuary Reconnection	Mason County	Kennedy/ Goldsborough Watersheds	Remove existing blocking culvert restoring natural tidal flow into a small 1.5 acres pocket estuary. Fish use includes: Coho; resident and coastal cutthroat trout. When reconnection occurs, forage and refuge provided for ESA-listed Puget Sound Chiook and winter Steelhead. Partners include: local WRIA 14 salmon habitat recovery Lead Entity Committee; Washington State Salmon Recovery Funding Board. Potential revegetation of the site by Mason County jail trustees. Project designs 100%, construction bid documents being prepared, all permits have been received.	\$525,000	B.1(1); B.1(4)
Dungeness River Streamflow Improvement	Clallam Conservation District	Dungeness (east WRIA 18)	Approximately 13 miles of open irrigation canals will be replaced with buried pipelines to save an estimated 6 cubic feet per second (1,850 ac-ft/yr) of Dungeness River flows.	\$2,940,000	B.1(1); A.3(3)
TOTAL FUNDING REQUEST				\$13,995,975	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
--------------	-----------------	----------------------	-------------	-----------------	-------------------------

Projects with New Information or Received Public Comment, but Not Identified on the List of State Priority Projects

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request
Bellingham Technical College Restoration Bundle	Bellingham Technical College (for: 1 3) Bellingham Technical College; 4) City of Bellingham; and 5) Nooksack Salmon Enhancement Association)	Nooksack Watershed	<p>1) Bellingham Bay debris removal: Beach debris removal, 12 linear miles of shoreline habitat (total = \$4,000 / request = \$4,000)</p> <p>2) Whatcom Creek debris removal: Stream debris removal, 4 linear miles of stream (total = \$4,000 / request = \$4,000)</p> <p>3) Environmental workforce training and public information center: In BTC's Fisheries program, faculty and students work closely with a variety of state, community and tribal organizations, including the Department of Fish and Wildlife, Lummi, Nooksack and Upper Skagit tribes, Nooksack and Skagit Fisheries Enhancement Groups and the Stilly-Snohomish Fisheries Task Force. Graduates of BTC's program often fill key positions at state, federal, tribal and private fisheries and aquaculture entities. The program, as an official state salmon hatchery, has been critical in bringing dead creeks back to life, reestablishing wild salmon runs, helping the local fishing industry survive, and educating youth regarding fish species and habitat. However, our current facility can no longer operate as a location for our public education and training efforts. Constructing the Environmental Workforce Training & Public Information Center will assist the college in building a state-of-art environmental training facility for students and the public, add educational programs in Water Quality and Environmental Design, more than double the number of students served by the Fisheries Technology Program, and support efforts to restore, expand and sustain the wild salmon runs of Puget Sound. (total = \$6,357,000 / request = \$4,207,000 / match = \$2,150,000)</p> <p>4) Padden 24- 30th st: Project involves moving approximately 1,300 ft of stream into a newly created channel. Project will: increase buffer area and function; increase instream habitat function and value; reduce bank erosion and water turbidity; and create new habitat for fish and wildlife speices. (total = \$1,000,000 / request = \$520,000 / match = \$480,000)</p> <p>5) Squalicum Creek Fish Passage and Estuary Restoration: Project involves modifying a concrete box culvert bridge which has been identified as a fish passage barrier and removing a 325 foot concrete lined channel to restore upstream fish passage and natural stream condions at the mouth of Squalicum Creek enhancing access to approximately 12 miles of rearing and spawning habitat. (total = \$1,350,000 / request = \$900,000 / match = \$450,000)</p>	\$5,635,000
Fisher Slough Freshwater Tidal Marsh Restoration	The Nature Conservancy	Skagit Watershed	Install self-regulating floodgate, re-route a drainage canal, build setback levee, remove existing levee and restore marsh habitat features to restore stream and tidal processes and fish access to 60 acre site on the S. Fork Skagit River. Benefits will also include improved drainage and decreased flooding on surrounding farmland.	\$6,500,000
Salmon Projects At Work NOW!! (SPAWN)	King County	WRIAs 7, 8, 9	<p>King County is partnering with the National Fish and Wildlife Foundation, EarthCorps, Snohomish County, and other entities to implement multiple restoration projects that improve fish passage, remove bulkheads, control invasive weeds, and plant riparian vegetation to improve salmon habitat in WRIAs 7, 8, & 9. Significant numbers of jobs will be created in the public and private sector as the work involves a great deal of hand labor rather than heavy machinery. These actions will improve water quality conditions, restore natural sediment processes, and enhance salmon habitat by providing connectivity between large restoration projects to avoid habitat islands. While each individual project may be small, together they are critical for Chinook salmon recovery. The salmon habitat restoration effort will likely include the following projects:</p> <ul style="list-style-type: none"> • Knotweed control and riparian planting in the Cedar River, Bear and Issaquah Creeks (WRIA 8) • Knotweed control and riparian planting in the Raging River (WRIA 7) • East Fork of Weiss Creek Culvert Replacement (WRIA 7) • Patterson Creek Natural Area Riparian Planting (WRIA 7) • Green River Kanaskat Reach Road Reclamation and Riparian Planting (WRIA 9) • Piner Point Natural Area Bulkhead Removal (WRIA 9) 	\$4,000,000

DRAFT Puget Sound Priority Projects for NOAA Stimulus Funding

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Taylor Creek Confluence Restoration	City of Seattle	Lake Washington/ Cedar/ Sammamish Watersheds	Removal of historic creosote-treated trestle material as well as other in-channel work, and would increase spawning habitat for listed species over approximately 1,500 feet of stream within the watershed. It also reduces the long-term threat of having catastrophic failure of the historic structure into the stream channel. Part of the City's Habitat Conservation Plan, provides river process restoration, and provides important access to habitat.	\$702,000	
Little Bear Creek 132nd Street Barrier Removal	Adopt A Stream Foundation	Lake Washington/ Cedar/ Sammamish Watersheds	Remove triple culverts that are a partial barrier to salmon migration, remove the overlying dirt road, restore natural stream banks and channel; the property the City of Woodinville and WDOT	\$150,000	
134th Street Fish Barrier Removal and Bridge Installation	Adopt A Stream Foundation	Lake Washington/ Cedar/ Sammamish Watersheds	Remove triple culverts and replace the overlying road with a bridge; the channel area belongs to the City of Woodinville	\$1,500,000	
Lyon Creek Dam Removal (2)	Adopt A Stream Foundation	Lake Washington/ Cedar/ Sammamish Watersheds	Remove two (2) 30-foot wide by five- feet high concrete dams that are approximately 75 feet apart on the main-stem of Lyon Creek and on private property; restore natural stream bed.	\$150,000	
Lower Mc Aleer Barrier Removal	Adopt A Stream Foundation	Lake Washington/ Cedar/ Sammamish Watersheds	Replace the 178st Street culvert on the lower mainstem with a fish passable culvert in Lake Forest Park; improves upstream salmon migration to 5 miles of spawning and rearing habitat .	\$500,000	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
North Creek Barrier Removal	Adopt A Stream Foundation	Lake Washington/ Cedar/ Sammamish Watersheds	Create 250 feet of new stream channel parallel to triple culverts that are complete barriers to salmon migration at the Lago De Plato retirement facility downstream from the 112th Street crossing of North Creek in South Everett.	\$60,000	
Perrinville Creek Barrier Removal	Adopt A Stream Foundation	Lake Washington/ Cedar/ Sammamish Watersheds	Replace a 70 long culvert that has a 6% slope with a flat gradient culvert, replace the overlying two lane road (8202 Calbot Road, Edmonds)	\$275,000	
Seahurst Park North Seawall Removal and Nearshore Restoration	City of Burien	Green/ Duwamish Watershed	Project will remove most of the seawall within a 3,000 linear foot project area to complete nearshore restoration in a 4,500 linear foot shoreline park. Restoration will include restoring natural beach slopes and substrates, reconnecting sediment supplying feeder bluffs, and enhancing riparian and marsh vegetation.	\$2,500,000	
Canyon Creek Enhancement and Flood Mitigation	Pierce County Surface Water Management	Puyallup/ White (WRIA 10)	reduction, water quality retrofitting, and riparian habitat restoration. This project will enhance Canyon Creek, increase detention and reduce flood heights, and replace culverts along the Canyon Creek stream corridor between 90th Street East and 84th Street East. Construct 42 acre-feet of detention storage on Canyon Creek, a tributary to Clear Creek and the Puyallup River. Project will improve creek conveyance by replacing several undersized culverts and reconnect creek with adjacent floodplain. At 90th St road will be raised along with replacement of culvert.	\$1,000,000	
Titlaow Beach Lagoon Restoration	People For Puget Sound	Chambers/Clover Watersheds	Widen opening of BNSF Railroad trestle to historic lagoon, excavate to historic footprint and restore riparian vegetation	\$7,678,521	
Clover Creek Floodplain Restoration Phase 3	Pierce County Surface Water Management	Chambers/ Clover Creek (WRIA 12)	This project is included in the Clover Creek Basin Plan as a high priority for riparian restoration and water quality. It would complete a multiphase restoration project of reconnection of the stream with its floodplain, stormwater retrofitting, and invasive species management. Restoration of Clover Creek from 136th St. E. to 138th St. E. Includes invasive vegetation removal and restoration/enhancement of Clover Creek.	\$850,000	
Ellis Creek Restoration/ Gull Harbor Rd	Thurston County	Deschutes Watershed	A full blocking culvert prevents fish passage a river mile 0.5 on Ellis Creek. Replacing the failing 3-foot culvert 16-foot culvert, which would open up 2.5 miles of habitat and build on the passage project at the mouth by the City of Olympia	\$1,300,000	
Tarboo-Dabob Bay Restoration - Bundeled Project: 1) TNC land; 2) NWI land (Dabob); 3) NWI land (Tarboo); 4) DNR land (culvert); 5) DNR land (re-forest), 6) DNR land (Tarboo-Dabob Bay); 7) WDFW land; 8) Shoreline debris and creosote removal	NWI, TNC, DNR, PGST	Hood Canal	1) Remove culvert and address unstable road, re-veg; 2) Remove bulkhead and unstable road, re-veg; 3) Conservation easement purchase, property cleanup and re-veg; 4) Replace culvert for fish passage; 5) remove invasive plants and re-veg, 6) remove invasives and re-veg, 7) remove invasives and re-veg; 6) Cleanup of Tarboo-Dabob Bay shoreline garbage and creosote wood	\$2,200,000	
TOTAL FUNDING REQUEST				\$35,000,521	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Additional Projects Being Submitted to NOAA, but Not Identified on the List of State Priority Projects					
Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	
South Fork Project Bundle	Lummi Nation	Nooksack Watershed	Likely to be Skookum Creek + Weir + others	\$1,500,000	
Smuggler's Slough	Lummi Nation	Nooksack Watershed	Reconnect Lummi and Nooksack River through the historic floodway of Smuggler's Slough. Project will initiate in-water work to enhance wetlands in preparation for levee and dike breaches	\$1,500,000	
Acme Confluence Reach: Active Channel Logjams	Nooksack Tribe	Noosack Watershed (Lower South Fork Nooksack, RM 0-8)	Construction of stable log jams in the South Fork Nooksack to form deep pools with complex cover to improve holding and rearing habitat [Todd Creek reach phase 2, River Farm Reach phase 1, Kalsbeek reach phase 2]	\$758,525	
Thatcher Bay Nearshore Restoration	Skagit Fisheries Enhancement Group	San Juan Watershed	Beach and nearshore restoration projects in Thatcher Bay, Blakely Island	\$536,650	
Snohomish Basin Riparian Enhancement Smaller scale projects	King County or Snohomish Conservation District	Snohomish Watershed	Replace fish passage barriers, plant trees	\$600,000	
Skykomish River Mainstem 1) Lower Skykomish River flood fencing and LWD placement.; 2) Skykomish River Braided Reach, Phase I and II	Snohomish County	Snohomish Watershed	1) Add flood fencing and LWD to over 1 mile of the 11.5 mile reach of Lower Skykomish River (400000); 2) River restoration on 12 miles of river. (325000)	\$725,000	
Sammamish Tributary Enhancement Project	Snohomish County	Lake Washington/ Cedar/ Sammamish Watersheds	Instream and riparian restoration including rip-rap removal, LWD placement, bank bio-engineering, invasive plant removal, and native planting at multiple Sammamish tributary locations (includes 3-year list projects; North Creek School and Paradise Valley Conservation Area)	\$500,000	
Fenster Levee Setback Phase 1b	City of Auburn	Green/ Duwamish Watershed	Second phase of a levee setback on the Green River in Auburn.	\$750,000	
Chamber Beach Restoration	SPSSEG	Chambers/ Clover	Restore approximately 1-mile of beach and riparian habitat through: removal of derelict structures, active reconstruction of the beach by re-grading/nourishing sections of beach to restore a more natural beach profile and restoration of a riparian corridor through removal of invasive species and planting of native vegetation.	\$2,295,000	
Beaver Creek phase 4	Mid Sound Fisheries Enhancement Group	West Sound Watershed	Last phase of Beaver Ck. Restoration	\$650,000	
Harper Estuary Restoration	Mid Sound Fisheries Enhancement Group	West Sound Watershed	Opens up the tidal area at historic pocket estuary. Installs 2 bottomless large culverts.	\$1,000,000	
Valley Creek Restoration	City of Port Angeles	North Olympic Peninsula Watersheds	This project on Valley Creek Restoration involves 2 projects: (1) re-meandering the current channel away from Valley Street including the creation and enhancement of a wider riparian zone; and (2) installing four "fishways" that will fully address gradient concerns within this only remaining steeply portion of the creek that has 700 feet of culvert.	\$810,000	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
East March's Point Shoreline Drift Cell Restoration Project	Skagit Marine Resources Committee	Skagit Watershed	Remove the majority of two large rock groins and plant about 0.15 acres of upper beach in native shoreline plants.	\$40,000	
Fidalgo Bay Beach Nourishment and Shoreline Stabilization Project	Skagit Conservation District	Skagit Watershed	This project will stabilize about 550 feet of eroding shoreline along Fidalgo Bay in Anacortes by reconstructing a sloping gravel beach, installing four drift sills using large wood debris and planting about 0.3 acres of shoreline in native plants.	\$140,000	
Morse Creek Remeander (WDFW Property)	NOSC	North Olympic Peninsula Watersheds	Restoration of the 1939 stream channel	\$500,000	
Ballast Water Treatment Test Facility	Pacific Northwest National Laboratory	North Olympic Peninsula Watershed	Treatment of ballast water onboard ships is essential for the protection of coastal waters from invasive biological species. The ability to ensure that commercial treatment systems are effective through rigorous testing is becoming a serious bottleneck to the installation of treatment systems on the thousands of ships that discharge ballast water into US coastal waters each year (about 4000 visits per year in Washington State). A ballast water treatment test facility is ready for construction during 2009 in Sequim, Clallam County (Marine Science Laboratory, PNNL, BMI).	\$1,400,000	
Invasive Tunicate Eradication & Control	Washington Department of Fish & Wildlife; Invasive Species Council; Tunicate Response Advisory Committee	All Puget Sound Marine Waters	Removal of all known infestations of three priority invasive tunicate species in Puget Sound including <i>Styela clava</i> , <i>Ciona savignyi</i> , and <i>Didemnum vexillum</i> . Use of cutting-edge aquatic invasive species methods and technology on an unprecedented scale with national significance for addressing these and other aquatic invasive species issues such as zebra and quagga mussels. Builds on department management efforts since 2006 and addresses Puget Sound Partnership Action Agenda Priority A.5.4 (ranked 17th out of 32 in near-term action priorities), the Washington Invasive Species Council's 2008 Strategic Plan Recommendation 5, and the state's Tunicate Response Advisory Committee's 2007 Interagency Rapid Response Action Plan element C to manage, control and eradicate invasive tunicates.	\$5,000,000	
Puget Sound Spartina Eradication	WDFW/TNC	Puget Sound [Nooksack (1), San Juan (2), Lower Skagit-Samish (3), Stilliguamish (5), Island (6), Snohomish (7), Cedar-Sammamish (8), Kitsap (15)]	Spartina is an invasive marine grass that has been reduced dramatically in recent years. This project funds five, three-person crews to thoroughly survey and eradicate widely scattered and cryptic infestations. The project will protect investments already made (~\$3 million) by eliminating the threat of reinfestation.	\$532,472	
King 09 IFLO Fish Passage	DNR	King 09	Industrial RMAP	\$1,114,000	
King 10 IFLO Fish Passage	DNR	King 10	Industrial RMAP	\$1,030,369	
Kitsap IFLO Fish Passage	DNR	Kitsap	Industrial RMAP	\$6,330	
Mason IFLO Fish Passage	DNR	Mason	Industrial RMAP	\$348,000	
Skagit IFLO Fish Passage	DNR	Skagit	Industrial RMAP	\$35,000	
Skamania IFLO Fish Passage	DNR	Skamania	Industrial RMAP	\$342,360	
Snohomish IFLO Fish Passage	DNR	Snohomish	Industrial RMAP	\$260,000	
Thurston IFLO Fish Passage	DNR	Thurston	Industrial RMAP	\$45,000	
Whatcom IFLO Fish Passage	DNR	Whatcom	Industrial RMAP	\$112,000	
Mason SFLO Fish Passage	DNR	Mason Co.	Small Landowner RMAP	\$117,000	

DRAFT Puget Sound Priority Projects for NOAA Stimulus Funding

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Snohomish SFLO Fish Passage	DNR	Snohomish Co.	Small Landowner RMAP	\$130,000	
Whatcom SFLO Fish Passage	DNR	Whatcom Co.	Small Landowner RMAP	\$100,000	
Thurston SFLO Fish Passage	DNR	Thurston Co.	Small Landowner RMAP	\$130,000	
King SFLO Fish Passage	DNR	King Co.	Small Landowner RMAP	\$130,000	
South Puget Sound Region DNR RMAP 09	DNR	Lewis, King,, Mason, Pierce, Snohomish	DNR RMAP	\$1,370,000	
Northwest Region DNR RMAP	DNR	Whatcom, Skagit, Snohomish	DNR RMAP	\$309,000	
South Puget Sound Region DNR RMAP 10	DNR	Lewis, King,, Mason, Pierce, Snohomish	DNR RMAP	\$1,550,000	
DNR	Olympic Experimental State Forest	<p>Historical logging practices and stream cleaning have left most fish-bearing streams crossing the OESF deficient in large woody debris (LWD). This project will actively restore instream LWD loading by:</p> <ul style="list-style-type: none"> - Placement of large LWD (key pieces) from salvaged blowdown - Directional falling of small LWD from adjacent riparian forests - Thinning stream side forests to ensure future supplies of LWD 	<ul style="list-style-type: none"> - Improve stream bank stability - Increase pool formation - Increase sediment storage - Increase gravel storage - Increase water storage - Increase velocity shelters - Increase food productivity 	\$2,000,000	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
DNR	North Puget Sound and Central sound	Historical logging practices and stream cleaning have left most fish-bearing streams crossing the OESF deficient in large woody debris (LWD). This project will actively restore instream LWD loading by: - Placement of large LWD (key pieces) from salvaged blowdown - Directional falling of small LWD from adjacent riparian forests - Thinning stream side forests to ensure future supplies of LWD	Improve stream bank stability - Increase pool formation - Increase sediment storage - Increase gravel storage - Increase water storage - Increase velocity shelters - Increase food productivity - increase the rate of stream temperature recovery (Pollock et al 2009)	\$2,000,000	
DNR	Southern Puget Sound and Southern Coast	Historical logging practices and stream cleaning have left most fish-bearing streams crossing the OESF deficient in large woody debris (LWD). This project will actively restore instream LWD loading by: - Placement of large LWD (key pieces) from salvaged blowdown - Directional falling of small LWD from adjacent riparian forests - Thinning stream side forests to ensure future supplies of LWD	Improve stream bank stability - Increase pool formation - Increase sediment storage - Increase gravel storage - Increase water storage - Increase velocity shelters - Increase food productivity - increase the rate of stream temperature recovery (Pollock et al 2009)	\$2,000,000	
Skagit County Piling Removal: Turners Bay/Similk Bay	WADNR	Whidbey Island Action Area	Remove pilings located in an area of documented herring spawn as well as a key salmon migration corridor from the Skagit River.	\$151,200	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Fidalgo Bay Causeway Removal	WADNR	Whidbey Island Action Area	The Samish Indian Tribe has recently completed a feasibility study for the removal of an old railroad causeway the bisects Fidalgo Bay. The feasibility study found that substantial habitat improvement will result from complete removal of the causeway. Extensive outreach has been conducted on this project, including to the City of Anacortes, the Skagit County Marine Resources Committee, and local citizens. The project is ready for design, permitting and construction.	\$5,000,000	
March's Point Shoreline Restoration Project	WADNR	Whidbey Island Action Area	DNR and the Skagit River Systems Cooperative (SRSC) recently received funding to design and permit the West March's Point Restoration Project. This project will result in the nourishment of sediment starved beaches and studying the feasibility of the removal of an existing boat launch that impedes sediment transport, and the restoration of the hydrology of Crandall Spit lagoon. DNR and are currently seeking funding to complete construction and monitoring for Phase 2 and 3 of the restoration project. The current funding for this project will ensure that project designs, and permitting are in place and additional funding will go directly towards construction and follow up monitoring.	\$4,000,000	
Rogue Creosote Debris Removal from Beaches (various counties)	WADNR	Whidbey Basin Action Area	Remove creosote-treated debris from at least 10 nearshore sites. Several sites include pocket estuaries and coves located on Camano Island at Livingston Bay, Elger Bay, and Triangle Cove; also Turners Bay in Skagit County. These areas all are in the vicinity of herring spawn and provide refugia for juvenile salmon. The relative low tidal flow in these areas results in accumulations of creosote compounds in the sediments and water column. Additional removal locations include Dungeness Spit National Wildlife Refuge where over 260 tons were removed in 2006; 2/3 of this area still need to be completed. Work will also continue in cooperation with WA State Parks at sites on Whidbey Island including Fort Casey, Fort Ebey, Joseph Whidbey, and Ebey's Landing State Parks. Several hundred tons have been removed at these sites and accumulations continue. Each beach clean-up project costs an average of \$600 per ton removed and employs crews of five to ten people, plus a project manager. DNR would utilize a Washington Conservation Corps crew or two to perform this work. Additional contractor services are also required including helicopter crews, heavy equipment operators and sawyers. Projects of this size generally require one to two weeks of prep work and one week of removal operations. The projects will be spaced out over the funding period to account for tidal sequences, forage fish spawning and juvenile salmonid migration timing, and public use at the sites. The project manager will be required for up to 18 months to coordinate crews, contracting, and timing.	\$534,518	
Derelict Vessel Removal - Everett Vessels	WADNR	Whidbey Basin Action Area	The derelict vessels Servant, Elusive Dream, and another unnamed vessel, (138' and two 75' vessels) and potentially others, are beached, polluting and taking up valuable habitat in Snohomish county in sloughs north of Everett. These vessels in the slough have created debris and pollution issues, habitat degradation and also have potential to impact navigation long-term.	\$1,000,000	
Neah Bay Piling Removal (Clallam County)	WADNR	Strait of Juan de Fuca Action Area	Approximately 175 creosote-treated pilings plus a 200+ piling dock.	\$400,680	
Thurston County Piling and Dock Removal	WADNR	South Puget Sound Action Area	Remove over water structure at DNR's Marine Station along with several hundred pilings located throughout Henderson, Toten, and Eld inlets. Consideration will be taken for required habitat features such as seal haul-outs that will be left in place. Many of these pilings are in areas of documented herring spawn.	\$590,760	
Woodard Bay NRCA Invasive Species Control	WADNR	South Puget Sound Action Area	Restore shoreline habitat along Chapman and Woodard Bays and Henderson Inlet by treating non-native, invasive weed species that are preventing the development of riparian habitat. Includes site prep followed by replanting. Restoration efforts will follow site Management Plans.	\$70,000	
Woodard Bay Nearshore Restoration	WADNR	South Puget Sound Action Area	This project will restore nearshore ecosystem habitat on 500 acres of state owned aquatic lands by removing portions of remnant structures from the South Bay Log Dump located at Woodard Bay NRCA. Structures include pier (3000') and fill (8500 cu yd), pilings (+500), and trestle (350') and trestle embankment (47000 cu yd). The project includes enhancement of low impact recreation and environmental education facilities and trails along the shoreline. The site protects 5 miles of undeveloped shoreline within the Henderson Inlet Watershed and as development in the area continues, Woodard Bay is becoming increasingly significant to the southern Puget Sound landscape. Status - The feasibility study is in process and will be completed by June 2009. This project will be ready for design and construction beginning in August 2009.	\$3,200,000	

Project Name	Project Sponsor	Location (watershed)	Description	Funding Request	Action Agenda Reference
Asarco Pier and Piling Removal (Pierce County)	WADNR	South Central Puget Sound Action Area	Remove three large derelict piers, improving habitat, sediment and water quality in Central Puget Sound; facilitate completion of a large superfund cleanup. Required studies are complete and a cost estimate has been developed. Permitting is anticipated to be completed in time for work in fall 2009. Pierce County. This project will enhance 1.5 to 2 acres of intertidal and sub-tidal habitat.	\$2,900,000	
Olympic View Triangle Restoration	WADNR	South Central Puget Sound Action Area	The Olympic View Triangle Restoration project is a cleanup and restoration site in its second year of monitoring and maintenance. Work includes monitoring performance and maintenance. The site is located in Commencement Bay near Tacoma. Project is located in Pierce County. This project added one acre of high intertidal marsh habitat. It is designed to act as a food source for out migrating juvenile salmon.	\$40,000	
Derelict Vessel Removal - Murph	WADNR	South Central Puget Sound Action Area	Murph - a 190' sunken (former Naval) tug in Quartermaster harbor. Located on state-owned land in a marine reserve, this vessel is a marine debris hazard and sitting on otherwise-good geoduck habitat. This is a navigation hazard to recreational boaters that requires federal navigation buoy maintenance. DNR has gone through the custody process on this vessel, has a programmatic HPA and nationwide permit that would cover the removal. Project currently stopped due to lack of funding.	\$1,000,000	
Derelict Vessel Removal - Cactus	WADNR	South Central Puget Sound Action Area	Cactus - 180' steel former US Coast Guard ship that was poorly tied to weak pilings in the Maury Island Marine Reserve until King County temporarily moved it to more secure moorage. Vessel is not operational and is stacked high with all manner of debris that would become a large source of marine debris if/when it sinks. Plan is to dispose of vessel. Project is started but currently lacks funds to complete. US Coast Guard conducted hazardous materials removal in 1999.	\$600,000	
Derelict Vessel Removal - small vessels, various	WADNR	Most P.S. Action Areas	Additional small vessels could be removed with additional funds in any amount. Many Puget Sound jurisdictions would benefit; could start within two months and could be completed within 3-4 months.	\$100,000	
Quicene Bay / Ludlow Bay Piling Removal (Jefferson County)	WADNR	Hood Canal action Area	Removal of remnant rail trestle consisting of approximately 300 pilings in Quilcene Bay and remnant log booming piles in Port Ludlow. Also in the area of salmon migration from the Quilcene River.	\$312,336	
Stavis Natural Resources Conservation Area Seawall Removal Project	WADNR	Hood Canal Action Area	Complete shoreline and stream restoration on 4 acres located along Hood Canal on Kitsap Peninsula in Kitsap County Washington by removing 550' of seawall, associated fill and restoring fish passage and 800' of stream channel.	\$150,000	
TOTAL FUNDING REQUEST				\$52,416,200	
TOTAL OF ALL REVIEWED PROJECTS				\$142,116,301	