

2/9/2011



WDFW

ESTUARY AND SALMON RESTORATION PROGRAM: DRAFT 2011 ESRP INVESTMENT PLAN



Leadership Council Briefing Packet | prepared by B. Lyons

MEMO: February 9, 2011

FROM: Betsy Lyons, Washington Department of Fish and Wildlife

TO: Puget Sound Partnership Leadership Council

RE: Approving a Draft 2011 ESRP Investment Plan

Dear Council Members,

The Estuary and Salmon Restoration Program is pleased to present the Leadership Council with our Draft 2011 Investment Plan. The twenty-two projects contained in the Draft Investment Plan have all been recommended for funding based on a rigorous and transparent competitive process. Collectively, these projects represent the best available opportunities for investing in nearshore ecosystem restoration. Protecting and restoring coastal processes in Puget Sound is vital to ensure that both existing fish and wildlife habitats and the benefits of complementary restoration efforts (including salmon recovery) are sustained over time in the face of increasing development and a changing climate.

The **objective** of this briefing and agenda item is to request that the Leadership Council:

- Review and endorse the process used by ESRP** to generate the attached “Draft 2011 ESRP Investment Plan”
- Approve the Draft Investment Plan for presentation to the Legislature.** We request the Leadership Council ratify the entire list of projects so we can continue to fund down the project list as additional project funds become available over the biennium.

The attached briefing packet contains the following **information** for Leadership Council members:

1. Summary of process used to identify, evaluate and rank projects and recommend funding
2. Map of projects recommended for funding
3. Ranked project list with funding recommendations and recommended maximum award levels
4. Project summaries
5. ESRP Factsheet prepared for 2011 legislative session

Developing a draft 2011 ESRP Investment Plan

The table below outlines the process used to develop the Draft 2011 ESRP Investment Plan. This year’s process used in development of the draft Investment Plan is consistent with the process employed during previous competitions including the 2009 process reviewed and approved by the Leadership Council.

PROCESS STEPS		DESCRIPTION and OUTCOME
PROJECT SOLICITATION	Public Workshops	A series of public workshops were held around Puget Sound in July 2010 to announce the 2010-11 grant competition. ⇒ 4 public workshops
	Request for Proposals (RFP)	An RFP was published on September 28 th 2010. The RFP expressed specific interest in beach projects that address sediment supply which are currently under-represented in ESRP and PSNERP’s current portfolio. Evaluation criteria, program guidance and ESRP’s learning and adaptive management objectives were included. ⇒ 30 proposals received (26 new projects; 4 portfolio projects)
PROJECT EVALUATION	New Projects	Twenty-six new proposals were received and evaluated by a 21 member Technical Evaluation Team comprised of volunteers from local, state and federal government agencies, academic institutions, tribes, and NGOs. Following training and group review sessions, reviewers identified questions for project sponsors, evaluated responses and then submitted final project scores. Review teams were assembled such that comparable expertise and agency affiliation was extended across groups. ⇒ Ranked list of new projects
	Portfolio Projects¹	The 4 portfolio project proposals were ranked by core ESRP Staff ² using Portfolio Ranking Criteria published in ESRP’s 2010 Guidance document. ⇒ Ranked list of portfolio projects

¹ Projects previously evaluated, and funded by ESRP that competed well and were beyond the feasibility stage, are awarded portfolio status. Portfolio projects are eligible to apply for subsequent phases through a streamlined process.

² Betsy Lyons (WDFW), Paul Cereghino (NOAA) and Mike Ramsey (RCO)

PROJECT ENHANCEMENTS	Enhancement Objectives	<p>Project learning is central to ESRP as an adaptive management tool to reduce uncertainties that limit the program’s efficiency and effectiveness. Opportunities to invest in project learning were identified by a 7-member, multi-agency workgroup that identified and prioritized adaptive management objectives. The Nearshore Science Team (NST) provided peer review. PSP’s Science Panel was consulted and endorsed ESRP’s process including use of the NST for technical peer review.</p> <p>⇒ Ranked list of enhancement objectives (beach classification, delta landscape planning, tidal channel retrospective, dike breach vs. removal)</p>
	Enhancement Recommendations	<p>PSNERP’s Implementation Team, provided with the prioritized list of enhancement objectives, identified a small number of opportunities from the ranked project list where the top priority adaptive management objectives could be advanced with an additional project investment.</p> <p>⇒ Recommended project enhancements</p>
FUNDING RECOMMENDATIONS	Funding Recommendations	<p>An initial funding recommendation (full, partial or no funding) was made by ESRP staff and PSNERP’s Implementation Team for new and portfolio projects as well as priority project enhancements. Recommendations were made based on the ranked project lists and comments from the technical review team. Projects with issues to be resolved were presented to the Steering Committee which made the final funding recommendations.</p> <p>⇒ Lists of new, portfolio and enhancement projects recommended for funding (approved by PSNERP Steering Committee)</p>
	Award Recommendations	<p>An award level was made by ESRP staff and PSNERP’s Implementation Team based on the funding recommendations, project status and comments from the technical review team. Award recommendations were presented to PSNERP’s Steering Committee for approval. Additional award amounts were added to the small number of projects associated with a recommended enhancement.</p> <p>⇒ Maximum recommended funding awards (approved by PSNERP Steering Committee)</p>
	Draft 2011 Investment Plan	<p>Consistent with previous ESRP grant competitions, the new and portfolio project lists were merged into a single list beginning with the top ranked portfolio project, then top ranked new project, followed by 2nd ranked portfolio project, then 2nd ranked new project etc.</p> <p>⇒ Draft 2011 Investment Plan (approved by PSNERP Steering Committee)</p>



ESRP Projects Recommended for Funding in Draft 2011 Investment Plan

 New Projects

 Portfolio Projects

Maximum Recommended Award

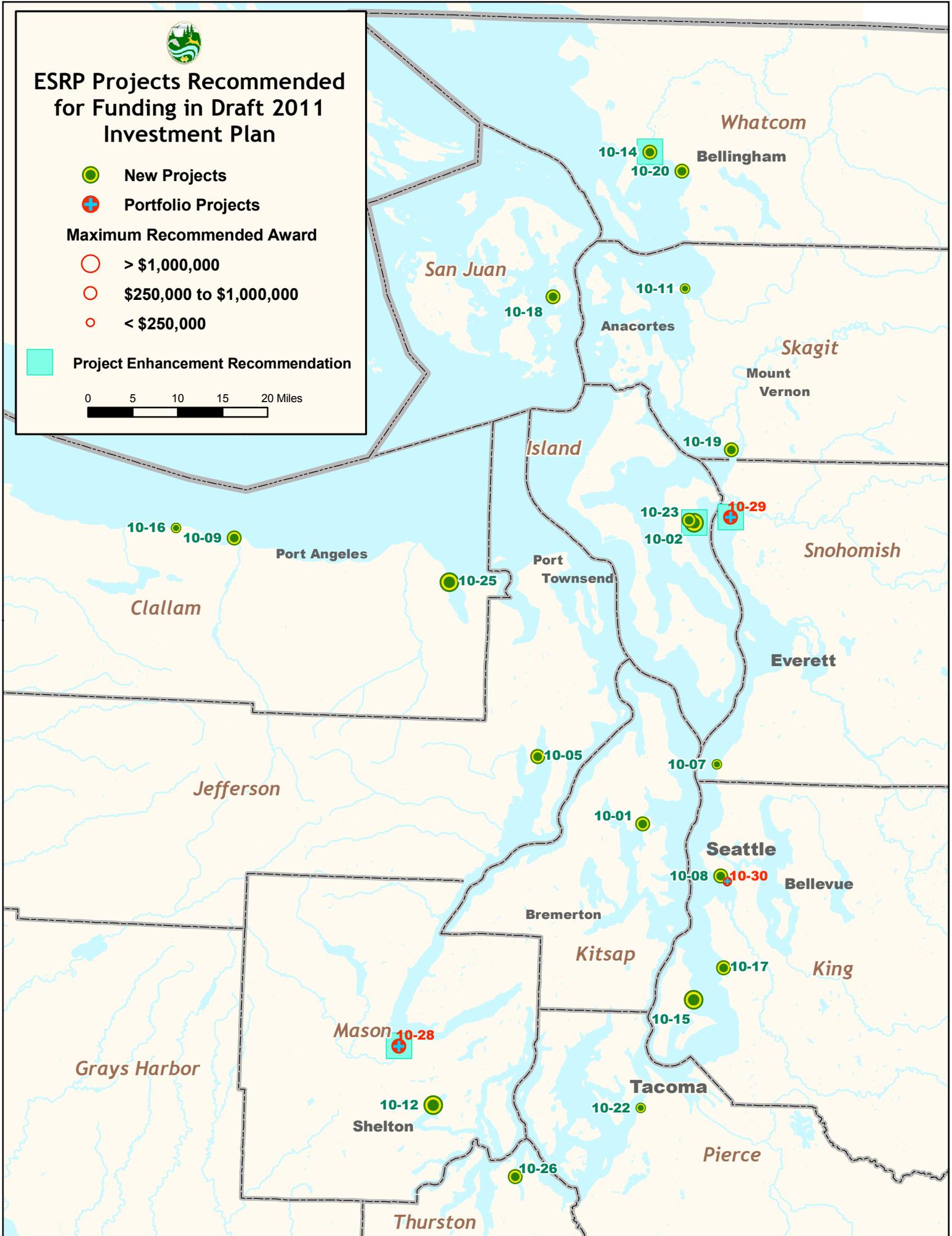
 > \$1,000,000

 \$250,000 to \$1,000,000

 < \$250,000

 Project Enhancement Recommendation

0 5 10 15 20 Miles



Draft 2011 ESRP Investment Plan (February 9, 2011): The following ranked list of projects has been recommended for funding and endorsed by the Steering Committee of the Puget Sound Nearshore Ecosystem Restoration Project. Project proposals were submitted to ESRP in response to a RFP posted on September 28, 2010 and have been evaluated by a 21 member Technical Evaluation Team. This draft plan is submitted to the Leadership Council of the Puget Sound Partnership for review and approval after which it will be forwarded to the Legislature for funding consideration. All awards are dependent upon future state appropriations (Governor's budget currently has \$5 million for ESRP) and any partnership funds that are secured. Although the project list will not be re-ranked, final awards will be negotiated with sponsors pending need, readiness and total funding availability at the time of contracting.

Rank	Project No.	ProjectName	Proposed phase	PrimarySponsor	Lead Entity	LegDistrict	Max. Funding Recommendation	Running Total
1	10-29	Port Susan Dike Setback^*	Construct/Eval	The Nature Conservancy	Stillaguamish	10	\$ 520,000	\$ 520,000
2	10-02	Barnum Point Acquisition^	Acquisition	The Nature Conservancy	Island County WRIA 6	10	\$ 1,280,000	\$ 1,800,000
3	10-30	Olympic Sculpture Park Monitoring*	Evaluation	Seattle Public Utilities	Green/Duwamish WRIA 9	36	\$ 100,000	\$ 1,900,000
4	10-05	Dabob Natural Area Acquisition	Acquisition	The Nature Conservancy	Hood Canal Coordinating Council	24	\$ 750,000	\$ 2,650,000
5	10-28	Skokomish Estuary Phase III^*	Adaptive Mgmt	Mason Conservation District	Hood Canal Coordinating Council	35	\$ 481,204	\$ 3,131,204
6	10-25	Washington Harbor Restoration	Construct/Eval	Jamestown S' Klallam Tribe	North Olympic Peninsula	24	\$ 1,091,622	\$ 4,222,826
7	10-14	Lower Nooksack Alternatives Analysis & Acq^	Feas/Acq	Whatcom County Flood Control	WRIA 1 Salmon Recovery Board	42	\$ 425,000	\$ 4,647,826
8	10-19	Milltown Island/S. Fork Restoration & Assess.	Construct/Eval	Skagit River System Cooperative	Skagit Watershed Council	10	\$ 251,745	\$ 4,899,571
9	10-18	Thatcher Bay Nearshore Restoration	Construct/Eval	Skagit Fisheries Enhancement	San Juan County	40	\$ 833,447	\$ 5,733,018
10	10-26	Woodard-Chapman Bay Fill Removal	Construct/Eval	Department of Natural Resources	Thurston Conservation District	22	\$ 672,254	\$ 6,405,272
11	10-15	Point Heyer Drift Cell Preservation Phase II	Acquisition	King County	Green/Duwamish WRIA 9	34	\$ 1,800,000	\$ 8,205,272
12	10-11	Freestad Lake Barrier Lagoon Restoration Phase II	Design	Skagit County Public Works	Skagit Watershed Council	40	\$ 184,000	\$ 8,389,272
13	10-23	Triangle Cove Acquisition	Acquisition	Stillaguamish Tribe	Stillaguamish	10	\$ 314,900	\$ 8,704,172
14	10-17	Seahurst Park North Shoreline Restoration	Construct/Eval	City of Burien	Green/Duwamish WRIA 9	34	\$ 498,000	\$ 9,202,172
15	10-22	Titlow Estuary Restoration	Design	South Puget Sound Salmon	Pierce County	28	\$ 137,515	\$ 9,339,687
16	10-01	West Bainbridge Shoreline Acquisition	Acquisition	Bainbridge Island Land Trust	West Sound Watersheds Council	23	\$ 410,000	\$ 9,749,687
17	10-16	Salt Creek Marsh Reconnection	Feas/Design	North Olympic Salmon Coalition	North Olympic Peninsula	24	\$ 235,585	\$ 9,985,272
18	10-07	Edmonds Marsh Restoration Feasibility Study	Feasibility	People for Puget Sound	WRIA 8 Lake WA/Cedar/Sammamish	21	\$ 214,160	\$ 10,199,432
19	10-20	Squalicum Creek Estuary Restoration	Construct/Eval	Port of Bellingham	WRIA 1 Salmon Recovery Board	42	\$ 703,068	\$ 10,902,500
20	10-12	Johns Creek Estuary- Acquisition & Restoration	Acq/Feas-Design	Cascade Land Conservancy	Mason Conservation District	35	\$ 1,874,250	\$ 12,776,750
21	10-09	Elwha Nearshore	Feas/Monitor	Coastal Watershed Institute	North Olympic Peninsula	24	\$ 400,000	\$ 13,176,750
22	10-08	Elliott Bay Park Nearshore Restore/Enhance	Feas/Design	Port of Seattle	Green/Duwamish WRIA 9	36	\$ 260,000	\$ 13,436,750
Total ESRP Funding Recommendation							\$	13,436,750

^ PROJECT ENHANCEMENT: Project identified as having potential to advance ESRP's Adaptive Management objectives to reduce programmatic and project level risk and uncertainty. Total award includes nominal enhancement funding to be negotiated pending final awards.

* PORTFOLIO PROJECT

DRAFT 2011 ESRP Investment Plan: Project Descriptions

Port Susan Dike Setback 10-29

ESRP Request: \$395,000

Match: \$130,350

Rank: 1
Sponsor: The Nature Conservancy

Total Cost[^]: \$3,136,261

Shoreform: river delta
Proposed phases: **Construct/Eval**

Area: 150
Units: acres

Description: Under an existing ESRP grant contract, The Nature Conservancy is completing the design and permitting phase of the Port Susan Bay Dike Setback project. This proposal requests ESRP funds to complete the implementation phase and initiate the evaluation phase. Proposed tasks include: 1) document contractor selection process (construction contractor and other outside consultants); 2) complete construction and provide as-built documentation for the dike setback and restoration of 150 acres of estuarine habitat; and 3) deliver project evaluation report including pre-construction and one year of post-construction monitoring.

Funding Recommendation: **full fund**

Project Scope: Tasks include: 1) contractor selection, 2) construction and as-built documentation for the removal of dikes around 150 acres and installation of a flood control structure benefitting, 3) pre- and post-construction monitoring. Includes project enhancement to complete a delta landscape planning element focused on identifying and evaluating the ecosystem services provided by river deltas.

Barnum Point Acquisition 10-02

ESRP Request: \$1,050,000

Match: \$1,050,000

Rank: 2
Sponsor: The Nature Conservancy

Total Cost[^]: \$6,242,670

Shoreform: bluff back beach
Proposed phases: **Acquisition**

Area: 2640
Units: ft shoreline

Description: This project will permanently protect Barnum Point—123 acres of important feeder bluffs, tidelands and marine riparian habitat including 4,780 feet of natural shoreline. Island County will be the ultimate landowner and will manage the site as a passive-use County Park designed to preserve the ecological values of the site while allowing compatible opportunities for human uses. Phase 1 (proposed for funding): Fee acquisition of 31 acres of riparian and upland habitat, 18 acres of tidelands and 0.5 miles of shoreline on the eastern portion of Barnum Point. Phase 2 (future phase): Fee acquisition of 56 acres of riparian and upland habitat, 18 acres of tidelands and 0.4 miles of shoreline on the south and west portion of Barnum Point. Phase 3 (outside scope of this proposal): Low-impact park development to improve public access.

Funding Recommendation: **full fund**

Project Scope: The complete project footprint covers the 123 acres site. The current award is intended to fund Phase I which would permanently protect 31 acres of riparian and upland habitat, 18 acres of tidelands and 0.5 miles of shoreline on the eastern portion of Barnum Point. Long-term management and ownership may be transferred to Island County for use as county park, pending transfer approval by ESRP and RCO. Includes project enhancement to develop a physical and biological beach classification system.

Olympic Sculpture Park Monitoring 10-30

ESRP Request: \$150,000

Match: \$60,000

Rank: **3**
Sponsor: Seattle Public Utilities

Total Cost[^]: \$718,901

Shoreform: river delta
Proposed phases: **Evaluation**

Area:
Units:

Description: This award request is for year 5 monitoring at the Olympic Sculpture Park using the same methods employed in years 1 and 3 (2007 and 2009). Following year 5, the next planned monitoring will be in year 10 (2016). The monitoring at OSP examines a number of biological indicators, including fish species diversity and abundance, invertebrate taxa richness, terrestrial insect species richness and abundance and aquatic and terrestrial vegetative cover.

Funding Recommendation: **partial fund - reduced scope**

Project Scope: A maximum \$100,000 award to be negotiated with sponsor and based on delivery of a subset of the proposed monitoring elements. A final scope to be negotiated with sponsor and based on additional consultation with additional experts to identify the most significant monitoring elements for these limited funds.

Dabob Natural Area Acquisition 10-05

ESRP Request: \$750,000

Match: \$600,000

Rank: **4**
Sponsor: The Nature Conservancy

Total Cost[^]: \$3,976,690

Shoreform: bluff back beach
Proposed phases: **Acquisition**

Area: 20
Units: acres

Description: This project will permanently protect 20.3 acres of coastal and marine riparian forest and 750 ft. of shoreline along the western shore of the DNR Dabob Bay Natural Area (Hopkins property). The proposed acquisition is part of a larger effort to protect the high habitat and functional value of the DNR Dabob Bay Natural Area. In early 2010, DNR, The Nature Conservancy (TNC), Northwest Watershed Institute (NWI) and Jefferson Land Trust (JLT) identified an initial protection strategy to direct limited resources toward the most strategic acquisitions within the Natural Area: 1) parcels at most risk of conversion to incompatible uses; 2) parcels of greatest ecological value and 3) parcels that will ensure connectivity among ecosystems.

Funding Recommendation: **full fund**

Project Scope: The current scope and ESRP request is focused on the Hopkins parcels. However, the sponsor has requested portfolio consideration. Pending additional discussion of and approval by the PSNERP Steering Committee, the scope may be expanded for subsequent requests to encompass the larger "project area" as defined in the proposal. Long-term ownership may be transferred to the State of Washington as the properties lies within the Dabob Natural Area.

Washington Harbor Restoration: Construction Phase 10-25

ESRP Request: \$1,091,622

Match: \$537,666

Rank: **6**
Sponsor: Jamestown S'Klallam Tribe

Total Cost^: \$1,745,288

Shoreform: barrier estuary

Area: 37

Proposed phases: **Construct/Eval**

Units: acres

Description: Currently, a 1,300-foot long roadway, equipped with just two 6-foot culverts, crosses the estuary and disrupts habitat connectivity, tidal hydrology and habitat forming processes in Washington Harbor's northern 37 acres. The project will remove the 6-foot culverts and roadway fill and replace them with a 600-foot bridge allowing unrestricted fish access and tidal flow.

Funding Recommendation: **full fund**

Project Scope: The scope of this project is the 37 acres in the northern half of Washington Harbor which is currently cut-off from natural tidal flow by a 1,300-foot long roadway. Approved activities include contractor selection, replacement of the road with a 600 ft. bridge, development of a monitoring and stewardship plan and year of pre- and post-construction monitoring.

Skokomish Estuary Phase III 10-28

ESRP Request: \$555,357

Match: \$170,040

Rank: **5**
Sponsor: Skokomish Tribe

Total Cost^: \$5,218,657

Shoreform: river delta

Area: 108

Proposed phases: **AdaptMgmt/Eval**

Units: acres

Description: Proposed Phase III work will reconnect 300 acres of wetland complex to the Skokomish Estuary. The goal is to restore the total hydrologic connection (saltwater/freshwater wetland connection) between wetlands in and around the Phase I estuary site. Juvenile salmon and other fish migrating out of the Skokomish River will naturally enter this complex through the Phase 1 footprint. By restoring the remaining connections through Skokomish Flats Road the quality and amount of useable habitat to this single wetland complex would be vastly improved in the near term.

Funding Recommendation: **full fund**

Project Scope: Tasks are focused on restoration of tidal-freshwater connections within and adjacent to the 108 acre Phase I dike removal site. Actions include approximately 5 culvert replacements or bridge crossings and construction of 11 notches to facilitate channel formation. Funding is available for design, permitting, and construction. Includes project enhancement to complete a retrospective analysis of tidal channel development.

Lower Nooksack Alternatives Analysis and Acquisition 10-14

ESRP Request: **\$350,000**

Match: \$175,000

Rank: **7**
Sponsor: Whatcom County Flood Control Zone District

Total Cost[^]: \$525,000

Shoreform: river delta

Area: 500

Proposed phases: **Feas/Acq**

Units: acres

Description: The primary objective of the project is to maximize restoration of physical and biological processes that support properly functioning habitat in the lower river and delta while reducing flood hazards to roads, public infrastructure and residential structures. ESRP funds will be used to acquire several properties that limit upstream restoration and to complete detailed hydraulic modeling, alternatives analysis and preliminary design of several options for reconfiguring the levees in the project reach, and to do public outreach to build community and landowner support. A strategic sequencing of project elements to accomplish the long term goals of enhancing and restoring ecological function will be a project outcome.

Funding

Recommendation: **full fund**

Project Scope:

The project area is defined as the Lower Nooksack River Delta. The scope of the project includes both acquisition and analysis elements. Acquisition includes protection of 5-8 flood prone properties in the town of Marietta that currently constrain restoration opportunities. The project scope also includes a feasibility and restoration alternatives analysis of: 1) Slater Rd. elevation; 2) WDFW Nooksack Unit (Marietta Slough) Levee Modification; 3) Reconfiguration of Marine Drive from Rural Avenue to Lummi Shore Road and 4) Ferndale Road Levee Setback. Additional technical oversight will be required to ensure restoration objectives fully supported. Includes a project enhancement to evaluate the cost/benefits associated with dike breaching versus dike removal.

Milltown Island/South Fork Estuarine Habitat Restoration & Assessment 10-19

ESRP Request: **\$251,745**

Match: \$84,000

Rank: **8**
Sponsor: Skagit River System Cooperative

Total Cost[^]: \$444,010

Shoreform: river delta

Area: 2648

Proposed phases: **Construct/Eval**

Units: ft tidal channel created

Description: ESRP funds will be used to 1) demolish 1/2 mile of relic dikes on Milltown Island and 2) continue to evaluate conditions at the Deepwater & Wiley Slough project sites to inform adaptive management recommendations targeted toward future implementation actions in the South Fork delta.

Funding

Recommendation: **full fund-special provisions**

Project Scope:

The project scope includes over 1/2 mile of relic dike breaching on Milltown Island as well as monitoring, in support of adaptive management, in the areas of Deepwater and Wiley Sloughs. Additional technical oversight to be required; possibly by technical committee of Tidegate Fish Initiative.

Thatcher Bay Nearshore Restoration 10-18

ESRP Request: \$833,447

Match: \$420,000

Rank: 9
Sponsor: Skagit Fisheries Enhancement Group

Total Cost[^]: \$1,253,447

Shoreform: pocket beach
Proposed phases: **Construct/Eval**

Area: 2
Units: acres

Description: The Thatcher Bay Restoration project will remove wood waste from the 1.8 acre ecologically sensitive intertidal habitat of southwest Blakely Island in the San Juan Islands. The wood waste contaminated sediment will be replaced with clean sediment suitable for forage fish spawning. A Feasibility Study and 30% design is completed for the preferred alternative to remove 12,900 cubic yards of wood debris. Permits and funding are largely in place and construction is anticipated to occur during the 2011-12 permitted work window.

Funding Recommendation: **full fund**

Project Scope: Project scope assumes all required permitting and approved wood waste disposal permits to be obtained. Project site defined as 2-acre area of Thatcher Bay extending from upper intertidal to shallow subtidal areas where wood waste is present.

Woodard-Chapman Bay Fill Removal 10-26

ESRP Request: \$672,254

Match: \$222,500

Rank: 10
Sponsor: Department of Natural Resources

Total Cost[^]: \$894,754

Shoreform: open coastal inlet
Proposed phases: **Construct/Eval**

Area: 28024
Units: cubic yards fill

Description: ESRP funds are sought to complete Phase 2 of a larger effort to restore 500 acres of nearshore habitat within the Woodard Bay NRCA boundary, including removal of 28,000 cubic yards of fill and 24 cubic yards of concrete from the base of the Chapman Bay Pier and acquisition of important properties within the Chapman Bay watershed. This is a unique opportunity to restore and conserve one of the largest, intact complexes of nearshore habitats permanently protected in southern Puget Sound. Phase 1, already started and to be completed in Spring 2011, includes removal of roughly 1,000 tons of creosoted materials from Henderson Inlet (Figure 5) and is funded by Ecology.

Funding Recommendation: **full fund**

Project Scope: The project footprint for this award is defined as the Chapman Bay portion of the larger 500 acre Woodard Bay Natural Resource Conservation Area. The approved scope includes removal of 28,000cy fill and 24 cy concrete, site prep, well decommissioning and relocation of an interpretive building and display and revegetation as necessary.

**Point Heyer Drift Cell Preservation Phase II
10-15**

ESRP Request: \$1,800,000

Match: \$609,383

Rank: 11
Sponsor: King County

Total Cost^: \$2,400,000

Shoreform: bluff back beach

Area: 10500

Proposed phases: Acquisition

Units: ft shoreline

Description: The goal of this project is to preserve roughly 90% of the 11,600 ft. Pt. Heyer Draft cell shoreline (PHDC), one of the few highly functioning drift cells in Central Puget Sound. ESRP funds would be used to protect sediment supply, transport and depositional process, a mostly intact riparian area, upper shore and intertidal habitats and the largest salt marsh in King County. All 50 parcels are prioritized: Tier 1- feeder bluff with no house or bulkhead; Tier 2- feeder bluff with house or bulkhead; Tier 3- transport zone or accretion shoreform/no house or bulkhead; Tier 4- accretion shoreforms with houses. All 27 of the Tier 1 and 2 parcels are included as targets for this proposal.

Funding Recommendation: full fund-special provisions

Project Scope: The scope defined for this award includes acquisition of any of the Tier 1 parcels within the 11,600 ft. Point Heyer Drift Cell as funding permits. This project has requested portfolio status. Pending additional discussion of and approval by the PSNERP Steering Committee, subsequent requests may be eligible for the streamlined portfolio process. Due to limited availability of funds, the scope to be limited to acquisitions that can be completed within 2 years of contracting.

**Freestad Lake Barrier Lagoon Restoration Phase II
10-11**

ESRP Request: \$184,000

Match: \$72,000

Rank: 12
Sponsor: Skagit County Public Works

Total Cost^: \$724,000

Shoreform: barrier lagoon

Area: 29

Proposed phases: Feas/Design

Units: acres

Description: The objective of this project is to restore nearshore processes within a (historic) barrier lagoon located on the southeast shore of Samish Island. ESRP funds are requested to develop a final design that will restore 18 to 25 acres of tidal wetland, approximately 2,500 lineal feet of tide channel habitat and 4 acres of mud flat. Design elements will include removal of the exterior dike in the northern portion of the barrier lagoon and construction of a setback dike as well as a cross dike in the middle of the barrier lagoon allowing tidal flow and channel development in the northern half of the lagoon.

Funding Recommendation: full fund

Project Scope: The project site is centered on the historic barrier lagoon located on the southeast shore of Samish Island. The approved scope for final design includes dike modification, channel rehabilitation, hydraulic modification and topographic restoration. Cumulatively these actions will restore 18 to 25 acres of tidal wetland, approximately 2500 lineal feet of tide channel habitat and 4 acres of mud flat. Should the landowner be amenable to expanded restoration, the scope will allow expanded work within the lagoon.

Triangle Cove Acquisition 10-23

ESRP Request: \$314,900

Match: \$168,400

Rank: 13
Sponsor: Stillaguamish Tribe

Total Cost[^]: \$480,977

Shoreform: barrier estuary

Area: 219

Proposed phases: Acquisition

Units: acres

Description: The Stillaguamish Tribe proposes to purchase and protect Triangle Cove, 219 acres of estuary lagoon, or pocket estuary, in Port Susan Bay. Triangle Cove is the largest, most functional and fully intact pocket estuary in this part of the Stillaguamish River Delta and is actively used by ESA Threatened Chinook juvenile salmon, as well as pink and chum salmon and forage fish. Triangle Cove is currently for sale and consequently under potential threat of development impacts on the tidelands.

Funding Recommendation: full fund-special provisions

Project Scope: The project scope is confined to acquisition of the 219 acre pocket estuary. A special clause or restriction should be put in place to prohibit commercial or otherwise extensive aquaculture production at the site.

Seahurst Park North Shoreline Restoration 10-17

ESRP Request: \$498,000

Match: \$175,000

Rank: 14
Sponsor: City of Burien

Total Cost[^]: \$8,073,400

Shoreform: bluff back beach

Area: 2800

Proposed phases: Construct/Eval

Units: ft shoreline

Description: ESRP funds are requested for removal of armoring along approximately 2,800 feet of shoreline, restoration of natural beach slopes and beach nourishment, creation of a freshwater wetland, planting of riparian vegetation, and connecting riparian vegetation and sediment supply to the aquatic portion of nearshore. This Project is the second phase of nearshore restoration at Seahurst Park and covers the northern two thirds of Seahurst Park's shoreline.

Funding Recommendation: full fund

Project Scope: This project centers on the northern 2/3 of the shoreline at Seahurst Park. The scope includes removal of 2,800 feet of shoreline, restoration of natural beach slopes and beach nourishment, creation of a freshwater wetland, re-vegetation, and connection of riparian vegetation and sediment supply to the aquatic portion of nearshore.

Titlow Estuary Restoration 10-22

ESRP Request: \$137,515

Match: \$93,549

Rank: 15
Sponsor: South Puget Sound Salmon Enhancement Group

Total Cost^: \$287,544

Shoreform: barrier estuary

Area: 6

Proposed phases: Design

Units: acres

Description: This project seeks ESRP funding for final design and construction at Titlow Lagoon. Restoration elements include: 1) enhancing fish passage, sediment transport, and tidal flow at the mouth of the lagoon through replacement of the existing tide gate/culvert structure with a larger culvert or bridge and 2) increasing the quantity and quality of habitat available to juvenile salmonids and other nearshore species through removal of fill and some park infrastructure and planting of native riparian vegetation. Due to its location within a popular community park, the project also offers a high-visibility opportunity to educate and engage the public in estuary restoration through site stewardship, interpretive signage, and "citizen science" monitoring, all of which are planned project components.

Funding

Recommendation: full fund

Project Scope: The project scope is focused on restoring the Titlow Lagoon to its historic size of approximately 5.5 acres. Project actions include replacement of the existing tide gate/culvert structure with a larger culvert or bridge and removal of fill and some park infrastructure and planting of native riparian vegetation.

West Bainbridge Shoreline Acquisition 10-01

ESRP Request: \$410,000

Match: \$1,940,501

Rank: 16
Sponsor: Bainbridge Island Land Trust

Total Cost^: \$2,350,501

Shoreform: bluff back beach

Area: 550

Proposed phases: Acquisition

Units: ft shoreline

Description: This project will permanently protect highly ranked intact functioning nearshore habitat on Bainbridge Island and specifically addresses the ecosystem priority of protection our regions beaches and sources of sediment supply and transport- projects that are currently under-represented in ESRP's portfolio. The acquisition involves two contiguous undeveloped parcels including 4.3 acres of tidelands and 550 ft. of shoreline that host eel grass beds, active feeder bluffs, sand-gravel beach, riparian vegetation and 7.57 acres of uplands with mixed mature forest, open meadow and view of Olympic Mountains.

Funding

Recommendation: full fund

Project Scope: The acquisition involves two contiguous undeveloped parcels. The project scope includes permanent acquisition of 4.3 acres of tidelands and approximately 550 feet of shoreline that host eel grass beds, active feeder bluffs, sand - gravel beach, riparian vegetation, and 7.57 acres of uplands. This 11.87 acre property is nearly contiguous with 19.5 acres and 2,500 linear feet of State of Washington (Department of Natural Resources) protected tidelands and over 7 acres of upland forested property protected through a Bainbridge Island Land Trust easement.

Salt Creek Marsh Reconnection 10-16

ESRP Request: \$235,585

Match: \$973,466

Rank: **17**
Sponsor: North Olympic Salmon Coalition

Total Cost[^]: \$2,949,898

Shoreform: barrier estuary

Area: 22

Proposed phases: **Feas/Design**

Units: acres

Description: ESRP funds are sought for feasibility and final design of Salt Creek Marsh Reconnection. The project aims to restore unobstructed tidal inundation and associated ecological processes in 22.5 acres of barrier estuary "Shipman shore type" and associated salt marsh currently isolated by a dike road. Project Objectives are to: 1) provide fish access to 22.5 acres of obstructed salt marsh, 2) improve tidal channel connectivity and decrease isolated pools in the marsh, 3) improve salt marsh vegetation communities, 4) maintain access to private property, and 5) prevent increased flooding of adjacent infrastructure.

Funding

Recommendation: **full fund-special provisions**

Project Scope: The project site includes the 22.5 acres of salt marsh isolated by an earthen dike road (Crescent Bay Lane) in the Salt Creek estuary. The scope includes development of conceptual designs and restoration alternatives for dike breaching or removal, development of designs, permit preparation and baseline data collection. Project feasibility to be evaluated prior to design phase to ensure adequate restoration objectives are met.

Edmonds Marsh Restoration Feasibility Study 10-07

ESRP Request: \$214,160

Match: \$272,644

Rank: **18**
Sponsor: People for Puget Sound

Total Cost[^]: \$622,032

Shoreform: barrier estuary

Area: 24

Proposed phases: **Feasibility**

Units: acres

Description: ESRP funds are sought to investigate feasibility of full tidal restoration of the Edmonds Marsh barrier estuary including technical and real estate considerations for a new tidal "daylighted" channel of Willow Creek with connection between the marsh and Puget Sound and for improved upstream fish passage. The project will address known uncertainties and constraints (e.g. adjacent land use land use). Social interests, such as access and recreation opportunities, address economic and social value of a restored system in terms of climate change and sea-level rise preparedness, carbon sequestration capacity, and economic value of ecosystem services will be considered and the community engaged through education and action opportunities.

Funding

Recommendation: **full fund**

Project Scope: The scope of this project is limited to feasibility of restoring tidal flow to the Edmonds Marsh barrier estuary including technical and real estate considerations for a new tidal "daylighted" channel of Willow Creek, connection between the marsh and Puget Sound, removal of an upstream fish passage barrier removal and community engagement.

Squalicum Creek Estuary Restoration 10-20

ESRP Request: **\$703,068**

Match: \$1,850,000

Rank: **19**
Sponsor: Port of Bellingham

Total Cost[^]: \$2,749,889

Shoreform: barrier estuary
Proposed phases: **Construct/Eval**

Area: 2
Units: acres

Description: ESRP funds are sought to create 2.5 acres of Squalicum Creek estuary habitat adjacent to the existing 0.75 acre creek delta. In addition to conserving the existing creek delta, sustainable substrates will be imported to the site to create new intertidal and shallow subtidal habitats from existing degraded deeper water habitat. The project will also remove 3,300 square feet of upland from the estuary, convert this to salt marsh habitat and relocate a spring creek into the newly created salt marsh habitat.

Funding Recommendation: **full fund**

Project Scope: The scope of this project includes at a minimum, removal of 225 feet of shoreline armoring, restoration of 9,000 square feet of salt marsh, revegetation along 620 feet of shoreline and construction of nearshore habitat features to enhance the shoreline and improve shallow water-rearing habitat.

Johns Creek Estuary- Acquisition and Restoration 10-12

ESRP Request: **\$1,960,750**

Match: \$1,990,000

Rank: **20**
Sponsor: Cascade Land Conservancy

Total Cost[^]: \$3,950,750

Shoreform: barrier estuary
Proposed phases: **Acq/Feas-Design**

Area: 76
Units: acres

Description: ESRP funds are sought to acquire, protect and fully restore 76 acres of biologically sensitive and culturally significant estuary, nearshore and riparian habitat in central Oakland Bay. The site has been identified as a project of regional significance on the 2010 PSNERP Candidate Restoration Site List. This project builds upon a successful partnership between more than 20 nonprofit, agency, industry and tribal partners that has already conserved 215 acres of Oakland Bay estuarine and coastal habitat on two sites immediately north of the current project site. This project will: 1) protect 2,400 feet of marine shoreline and 27 acres of highly functional salt marsh estuary, 2) protect the lower 1,600 feet of a unique, groundwater fed salmon spawning stream and 3) restore 49 acres of adjacent riparian habitat.

Funding Recommendation: **partial fund-reduced scope**

Project Scope: The project scope includes permanent acquisition of 76 acres of at the mouth of John's Creek estuary and development of a design to decommission the existing golf course and restore a large riparian buffer. The proposed restoration itself is not part of this scope as details of the restoration design were limited. Completion of the design should position the sponsor for a future application for restoration.

Elwha Nearshore 10-09

ESRP Request: **\$799,555**

Match: \$350,961

Rank: **21**
Sponsor: Coastal Watershed Institute

Total Cost[^]: \$1,150,515

Shoreform: river delta
Proposed phases: **Feas/Monitor**

Area:
Units:

Description: ESRP funding is sought to: 1) complete baseline data collection and collect data needed to fill critical data gaps, and 2) use data to develop a nearshore action plan. This project addresses the critical nearshore restoration component of the larger Elwha dam removal project. It links riverine and watershed sediment monitoring, fills nearshore sediment data gaps, including high priority sediment and fish use monitoring data gaps that will allow us to define baseline conditions of the nearshore Elwha. These data are then used to inform a nearshore model that will define site specific shoreline restoration actions and priorities. These technical elements are the base on which we develop and implement a nearshore restoration action plan. This work is necessary to complete prior to and during dam removal, or legacy opportunity to achieve nearshore ecosystem restoration for the Elwha system will be lost.

Funding Recommendation: **partial fund-reduced scope**

Project Scope: The scope of this project encompasses three feasibility phases within the Elwha estuary for ecosystem restoration: 1. identification of key data gaps necessary to define additional nearshore restoration actions in anticipation of dam removals, and; 2. Model sediment trajectories to define additional site specific restoration action locations and; 3. Develop and begin initial implementation of a Nearshore Restoration Action Plan. Pending discussions with external collaborators, and a possible competitive sub-award process, up to \$400,000 may be awarded for elements of this scope identified as most valuable by additional expert opinion.

Elliott Bay Park Near-shore Habitat Restoration and Enhancement 10-08

ESRP Request: **\$260,000**

Match: \$1,000,000

Rank: **22**
Sponsor: Port of Seattle

Total Cost[^]: \$8,880,000

Shoreform: pocket beach
Proposed phases: **Feas/Design**

Area: 5
Units: acres

Description: ESRP assistance is requested to assess the feasibility of shoreline restoration in Elliot Bay. Tasks include detailed environmental and physical evaluations, identification of potential construction constraints, initiation of stakeholder process, and preparation of a preliminary design. The proposed project includes six objectives: 1) creation of 1.2 acres of inter-tidal near-shore habitat, including excavation of 1.5 acres of fill, 2) revegetation of 0.3 acres with native emergent and riparian vegetation, 3) enhancement of 480 feet of adjacent shoreline riprap with an inter-tidal substrate bench, 4) enhancement of 0.7 acres of adjacent shallow sub-tidal area for establishing kelp canopy growth, 5) removal of 9,100 sq. ft. fishing pier, and 6) removal of a 2.8 acre artificial sub-tidal tire reef and possible replacement with more sustainable materials.

Funding Recommendation: **full fund-special provisions**

Project Scope: The scope of this project includes feasibility and pre-design work for each of the elements described in the proposal. ESRP supports full removal of the sub-tidal tire, rather than replacement with another artificial structure (concrete debris).