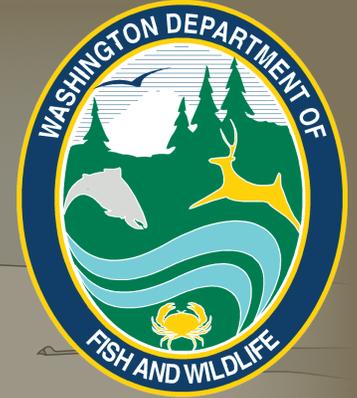


PUGET SOUND  
NEARSHORE  
PARTNERSHIP



RESTORING OUR  
ECOSYSTEM HEALTH

# 2006 Estuary and Salmon Restoration Program

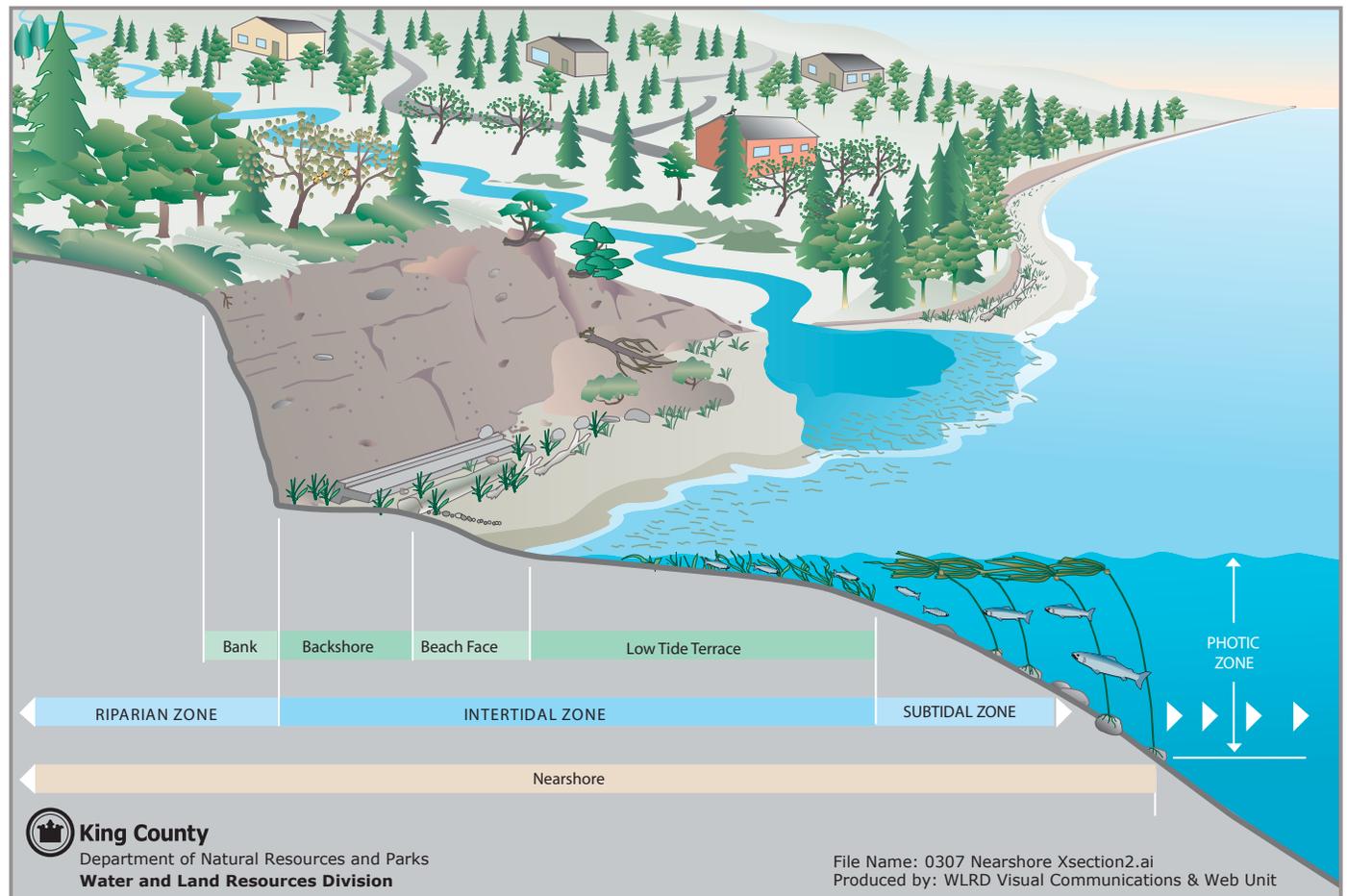


An Overview  
of the Program  
and its  
Accomplishments

The **Nearshore** areas extend from the tops of coastal bluffs and banks through the intertidal zone seaward to the depth of the marine photic zone where sunlight penetrates sufficiently to support submerged aquatic vegetation such as kelp and eelgrass.

The **Nearshore** areas extend upstream into coastal watersheds to the head of tide, and encompass both marine shoreline and estuaries.

### THE NEARSHORE... Vital Connection Between Land and Water



“The ESRP is an excellent example of a diverse partnership working together... The Nearshore Partnership recognizes that a grassroots effort is needed to accomplish the goals that we have for restoration and protection of the nearshore ecosystem.”

PAULA J. DEL GIUDICE, DIRECTOR  
WESTERN NATURAL RESOURCE CENTER,  
NATIONAL WILDLIFE FEDERATION

“The Nearshore Partnership is a long term effort that has produced results, and is in an excellent position to bring together strong statewide commitments to improving the Sound with local and regional partnerships.”

KATHY FLETCHER, EXECUTIVE DIRECTOR  
PEOPLE FOR PUGET SOUND

### *A Message from Director Koenings*

The Puget Sound is an integral part of our Pacific Northwest way of life. We enjoy sweeping views of the Sound and its estuaries, but beneath those views lies an ecosystem at risk. Despite our growing concern, we know precious little about the causes of, and solutions to, the Sound's troubles.

The Estuary and Salmon Restoration Program (ESRP) is a critical tool in our efforts to restore the health of Puget Sound. The ESRP uses the most current scientific understanding and local planning to identify projects that are 'ready to go'. It allows us to leverage other funding sources to implement larger projects with a greater restoration return. In addition, each of the projects funded in 2006 represents not just a step towards restoring Puget Sound, but also an opportunity to advance our knowledge of the Sound through strong monitoring plans that track project performance and will inform future decisions. This work by local governments, tribes, citizens and NGOs is an example of the public/private partnership the Governor has identified as essential to Puget Sound restoration.

In future rounds of the ESRP, we have opportunities to build on these partnerships, coordinate with new funding sources, and utilize our growing scientific understanding of the role nearshore environments play in a healthy Puget Sound.



Director Jeff Koenings, Ph.D.  
Washington Department of Fish and Wildlife

# 2006 Estuary and Salmon Restoration Program

## Summary Table of 2006 ESRP Projects

Project Name	Cooperator	Expected Habitat Results	Approved Enhancements	ESRP Basic Project Amount	ESRP Enhancement Amount	Total ESRP Amount	Match for Current Phase
Qwuloolt Marsh Restoration	Tulalip Indian Tribe	Restore 360 acres intertidal marsh and access to 16 miles of stream habitat	Monitoring plan development and implementation	\$385,140	\$48,166	\$433,306	\$383,000
Wiley Slough Restoration	Skagit River Systems Cooperative	Restore 175 acres of intertidal habitat	Programmatic Monitoring Plan Development	\$241,589	\$65,438	\$307,027	\$1,912,383
South Smith Island - Union Slough Dike Breach	City of Everett Public Works	Restore 43 acres of intertidal riverine habitat	Interpretive material development	\$200,000	\$15,000	\$215,000	\$1,536,300
Olympic Sculpture Park - juvenile salmonid utilization	Seattle Public Utility	Create 0.64 acre tidal embayment and 0.70 acre shallow water bench and kelp forest		\$77,712	\$0	\$77,712	\$102,436
Olympic Sculpture Park - interpretive material dev't	Seattle Art Museum		Expanded outreach program	\$18,538	\$16,962	\$35,500	\$73,500
Belfair State Park Estuary Restoration	Hood Canal Salmon Enhancement Group	Restore 6 acres of salt marsh, 927 feet of restored beach, and 700 feet of stream restoration		\$200,000	\$0	\$200,000	\$456,996
Smuggler's Slough Restoration Design	Lummi Indian Business Council	Reestablish access to 6 miles of tidally influenced slough habitat and 1080 acres adjacent wetlands	Baseline fish sampling, engineering alternatives	\$66,000	\$15,000	\$81,000	\$161,000
Leque Island Feasibility	Ducks Unlimited	Restore 115 acres of estuarine habitat		\$76,500	\$0	\$76,500	\$10,000
Skokomish West Bank Dike Removal	Mason Conservation District	Restore 108 acres of intertidal habitat		\$940,380	\$0	\$940,380	\$527,329
Skokomish Estuary Restoration Study	Washington Dept. of Natural Resources/ Univ. of Washington		Study of effects of dike removal on carbon and nitrogen fluxes	\$0	\$68,575	\$68,575	\$0
Normandy Park Acquisition	Cascade Land Conservancy	Protect 3 acres of unmodified forested bluff and 300 feet of unarmored Puget Sound shoreline		\$65,000	\$0	\$65,000	\$153,050
<b>TOTALS</b>				<b>\$2,270,859</b>	<b>\$229,141</b>	<b>\$2,500,000</b>	<b>\$5,315,993</b>

“The Puget Sound Nearshore Partnership has helped the restoration community improve results and has made important contributions in upgrading habitats for salmon and marine fish.”

LEW MOORE

NORTHWEST STRAITS COMMISSION

## Background

The nearshore ecosystem is a lynchpin of Puget Sound health. Nutrients, sediment, fresh water, and plant matter cycle through the nearshore, sustaining habitat for such broadly valued species as shellfish, shorebirds, juvenile salmon, and orcas. Despite this importance, we have historically under-invested in nearshore restoration, data, and research. The Estuary and Salmon Restoration Program (ESRP) provides a mechanism for building partnerships and leveraging funding to address priority habitat restoration needs in the Sound.

The ESRP was established in the Washington Department of Fish and Wildlife (WDFW) by the Legislature in early 2006 as part of Governor Gregoire’s Puget Sound Initiative. WDFW worked with the Puget Sound Nearshore Partnership (Nearshore Partnership) to create and implement the \$2.5 million ESRP. By working collaboratively to develop evaluation criteria and solicit projects from local sponsors, the Nearshore Partnership was able to fund nine high priority, scientifically-sound nearshore salmon restoration and protection projects.

## 2006 Program

### *Program Goals and Objectives*

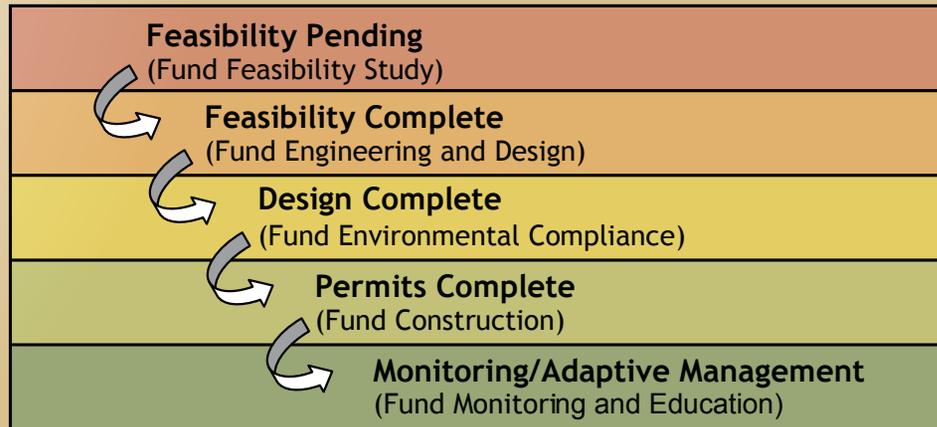
In fiscal year 2006, the Legislature authorized the ESRP to:

- Fund nearshore estuary and shoreline projects that support Puget Sound salmon recovery,
- Submit project and funding recommendations to the Puget Sound Nearshore Partnership,
- Match ESRP funds with non-state or in-kind contributions,
- Dedicate the entire appropriation directly to projects, and
- Fund projects that are identified in a current salmon recovery plan.

The Nearshore Partnership used their own strategic goals to provide scientific and institutional context for these specific objectives. In addition, the Nearshore Partnership sought to provide funding for specific phases of projects.

Each phase - feasibility pending, feasibility complete, design complete, permits complete, and monitoring/adaptive management - represents an important and discrete milestone in the life of a project. Funding discrete project phases builds future rounds of the ESRP by assuring nearshore projects are progressing through the project life cycle, bringing new project phases forward as they become ready for funding.

### The Project Life Cycle



### Science

The overarching scientific strategy for directing ESRP funds is an extension of the Puget Sound-wide nearshore restoration strategy being developed by the Nearshore Partnership. This strategy suggests two projects types that should be pursued during early phases of ecosystem restoration:

1. Consensus actions where there is clear scientific consensus that there will be substantial ecological benefits, and
2. Demonstration actions where systematic observation of restoration treatment outcomes will increase the effectiveness of future actions.

The ESRP evaluation criteria created and used by the Nearshore Partnership's Implementation Team (IT) reflect this strategy and integrate Nearshore Science Team (NST) technical guidance and direction from the National Oceanic and Atmospheric Administration (NOAA) Community-based Restoration Program. Fundamental to the Nearshore Partnership are the NST's efforts to understand underlying nearshore ecosystem processes that form and maintain habitat structure and function and, ultimately, support living marine resources. The NST technical guidance documents describe how best to apply this understanding to develop, implement, and evaluate nearshore restoration projects<sup>1</sup>.

*The mission of the Puget Sound Nearshore Partnership is to protect and restore the functions and natural processes of the Puget Sound nearshore ecosystem in support of the natural resources and beneficial uses of Puget Sound and the Puget Sound basin.*

*“The Nearshore Partnership has demonstrated the kind of comprehensive, science based and inclusive approach to conservation that we support in our own work and try to foster and advance in the communities where we are active.”*

DAVID WEEKES, EXECUTIVE DIRECTOR  
THE NATURE CONSERVANCY OF WASHINGTON

<sup>1</sup> Please see the Nearshore Partnership's website, visit [www.pugetsoundnearshore.org](http://www.pugetsoundnearshore.org) to access copies of the Nearshore Science Team technical guidance documents.

## 2006 Actions on the Ground:

- Restore 808 acres of estuary
- Re-establish access to 22 miles of stream
- Protect 300 feet of shoreline
- Protect 3 acres of riparian buffer
- Remove 56,250 feet of levee and dikes

## Collaboration

The components of the ESRP were created and implemented using the foundation of collaboration established by the Nearshore Partnership. Federal, state, tribal, and local government agencies come together with businesses, citizens, and a variety of non-governmental organizations to accomplish the work of the Nearshore Partnership, including the ESRP.

The Nearshore Partnership's Projects Database, with nearly 600 projects, provided a starting point to request proposals. The database is comprised of nearshore projects solicited from diverse organizations throughout the Puget Sound region that are involved in restoration and protection: salmon recovery groups, marine resource committees, regional fishery enhancement groups, land trusts, tribal natural resource departments, and others.

The review of project proposals was also undertaken in a cooperative manner. Members of the IT evaluated each proposal using the ESRP evaluation criteria, the inter-disciplinary NST provided an independent review of projects and identified opportunities to advance our knowledge of nearshore ecosystem restoration, and the Steering Committee reviewed the project rankings before they were forwarded to the Executive Committee as a funding package. This multi-faceted review process involved a broad range of stakeholders at a variety of levels, from on-the-ground restoration practitioners to senior executives.

## Strategic

It is a priority of the Nearshore Partnership to assure that nearshore restoration and protection projects are strategic and consistent with a comprehensive plan. Accordingly, the ESRP project proposals themselves were identified in a current, locally created salmon recovery plan. These watershed-based salmon recovery plans are founded on the latest scientific knowledge including limiting factors analysis, Ecosystem Diagnostics and Treatment, and Salmon and Steelhead Habitat Inventory and Assessment Program data. They also incorporate the best professional knowledge of local and regional experts. The local salmon recovery plans provide a scientifically strategic and locally supported context for each ESRP project.



Restoration Partners gathering data.

### Outcomes

By engaging a broad network of project sponsors and evaluating projects with a rigorous set of criteria, WDFW and the Nearshore Partnership were able to fund nine important nearshore projects with \$2.5 million in 2006 ESRP funds. In addition, these projects bring more than \$5.3 million in local and federal match to this round of the program. Further, the strategic investment of \$2.5 million in ESRP funds will leverage other funding sources to result in a total value of more than \$20 million over all phases of the nine projects. Please see Table 1 for a more complete summary of 2006 ESRP funded projects.

In addition to strategic value to salmon and other nearshore habitat-dependent species, the nine funded projects from the 2006 ESRP cycle will advance our understanding of nearshore restoration science. During project review, the Nearshore Partnership identified opportunities to enhance proposals and improve our understanding of restoration of nearshore ecosystems, and funds were added to a sponsor's original request to improve monitoring plans, enhance data collection, or expand outreach and education efforts. Thus, not only will the program convey valuable lessons that will improve future efforts, it will contribute to the restoration community's understanding of nearshore ecosystems and effective restoration.

### Looking Forward: 2007 - 2009 Program

In 2006, ESRP made important contributions to the restoration and protection of nearshore habitat in Puget Sound. However, hundreds of projects remain in the Nearshore Partnership's Projects Database, and other restoration needs are being revealed by the NST's continued investigations. Changes are planned for the 2007 - 2009 ESRP that will enable WDFW and the Nearshore Partnership to capitalize on new scientific understanding and partnerships.

### Science

The final step in the 2006 ESRP was to identify changes to the evaluation criteria that would improve project evaluation in future funding rounds. Feedback from Nearshore Partnership members involved in habitat acquisition and protection projects has led the Steering Committee to consider adopting changes to ESRP criteria that would enable evaluators to better understand the ecosystem benefits of protection projects.

“The ESRP provides a remarkable return on investment. It solves problems by leveraging funds and sharing resources and knowledge.”

JOHN W. LADENBURG  
PIERCE COUNTY EXECUTIVE



Skokomish West Bank Dike Removal:  
Army Corps of Engineers, Seattle District

*Community-scale restoration projects often provide a direct connection with local citizens, maximizing opportunities for education and outreach.*

In addition, the Nearshore Partnership is developing a Sound-wide strategic needs assessment. Specific data sets from this assessment may help refine project prioritization or evaluation criteria. When completed, this analysis will tell us what actions to take - and in which areas - in order to have the greatest effect on the health of the Puget Sound nearshore ecosystem.

### **Collaboration**

The Nearshore Partnership also intends to use its understanding of the nearshore ecosystem to improve coordination with other programs and groups that are working toward a healthy Puget Sound. The Alliance for Puget Sound Shorelines, a coalition of the non-profit organizations People For Puget Sound, The Trust for Public Land, and The Nature Conservancy, is working to restore 100 miles of shoreline over the next three years. The U.S. Army Corps of Engineers' (Corps) Puget Sound and Adjacent Waters Restoration Program<sup>2</sup> (PSAW) provides another opportunity for coordination. The program emphasizes projects that will generate immediate, critically needed restoration, and the Nearshore Partnership will continue to work with the Corps to identify projects for collaboration. Finally, The Nearshore Partnership has proposed to use NOAA Community-based Restoration Program funding with ESRP funds for community-scale projects and to engage NOAA Restoration Center staff to improve the technical merit of projects at this scale. This partnership could result in the locally sponsored restoration of 150 acres every year.



### **Strategic**

As mentioned above, it is a priority of the Nearshore Partnership to assure that nearshore restoration and protection projects are strategic and consistent with a comprehensive plan. Whereas the 2006 program emphasized consistency with the best available science from WRIA plans and regional salmon recovery efforts, future ESRP rounds will seek projects that are also consistent with the Nearshore Regional Chapter of the Puget Sound Salmon Recovery Plan<sup>3</sup> and the Georgia Basin - Puget Trough - Willamette Valley Ecoregional Assessment<sup>4</sup>.

<sup>2</sup> This Army Corps of Engineers program is authorized under Section 544 of the Water Resource Development Act of 2000 and first received appropriations in 2003.

<sup>3</sup> Please see [www.sharedsalmonstrategy.org/plan/index.htm](http://www.sharedsalmonstrategy.org/plan/index.htm) for more information.

<sup>4</sup> Please see [www.ecotrust.org/placematters/assessment.html](http://www.ecotrust.org/placematters/assessment.html) for more information.

The Nearshore Regional Chapter identifies priority protection and restoration areas that support salmon recovery goals. The Nature Conservancy's Ecoregional Assessment compiles data layers on shoreline and nearshore habitat conditions, existing protected areas, biological diversity, and other sources of information. These data create a conservation portfolio that includes shoreline segments and adjacent upland areas that should receive increased levels of protection.

### **Outcomes**

In 2006, the Puget Sound Nearshore Partnership and the Washington Department of Fish and Wildlife were given a unique opportunity to put nearshore restoration concepts into action. This investment has returned many important dividends:

- Improved the health of Puget Sound by advancing priority restoration and protection actions;
- Applied state of the art science to real world situations, improving on-the-ground results;
- Identified and pursued learning opportunities, improving our understanding of nearshore restoration and protection;
- Built and strengthened collaborative partnerships to leverage resources and advance shared objectives; and
- Enhanced public education opportunities to build appreciation for and awareness of the value of the nearshore ecosystem.

In order to build on this early success, the Nearshore Partnership is committed to continue evaluating and improving our program and its results. We anticipate on-the-ground benefits to increase in both quantity and effectiveness. In addition, by using ESRP dollars strategically and coordinating with other funding programs and decision-making agencies, WDFW and the Nearshore Partnership can leverage many times the value of Washington State's nearshore investment.

"...the [Corps' Puget Sound and Adjacent Waters Ecosystem Restoration Program], when linked to Washington State's new ESRP, provides powerful ecosystem restoration with dramatically better long-term effectiveness."

BERNARD HARGRAVE, JR. P.E.

PUGET SOUND AND ADJACENT WATERS

RESTORATION PROGRAM MANAGER,

CORPS OF ENGINEERS SEATTLE DISTRICT



Olympic Sculpture Park Rendering:  
Weiss/Manfredi Architects

By the year 2020, this strategic use of local, state, and federal assets could result in nearly \$1 billion in nearshore restoration and protection actions, and a Puget Sound improved in its overall health and ability to support important fish and wildlife resources, to the benefit of the region's citizens.

## PUGET SOUND NEARSHORE PARTNERSHIP



**RESTORING OUR  
ECOSYSTEM HEALTH**

### Puget Sound Nearshore Partnership Executive Committee Co-Chairs:

Colonel Michael McCormick, District Engineer  
U.S. Army Corps of Engineers

Dr. Jeff Koenings, Director  
Washington State Department of Fish and Wildlife

### Puget Sound Nearshore Partnership Executive Committee Members:

Brad Ack, Director  
Puget Sound Action Team

Jay Manning, Director  
Department of Ecology

Rick Parkin, Associate Director  
US Environmental Protection Agency

Captain Reid S. Tanaka, USN  
Commanding Officer Naval Base Kitsap

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U.S. Fish and Wildlife Service

Francea McNair, Aquatics Steward  
Department of Natural Resources

William Ruckelshaus, Chairman  
Salmon Recovery Funding Board

Mona Thomason, Branch Chief  
Seattle District Corps of Engineers

Dr. Tracy K. Collier  
NOAA - NW Fisheries Science Center

Dr. Rod Quinn, Associate Laboratory Director  
US Department of Energy

Frank Shipley, Acting Western Regional Biologist  
U.S. Geological Survey

Terry Williams, Commissioner  
Northwest Indian Fisheries Commission

Kathy Fletcher, Executive Director  
People for Puget Sound

Lew Moore, Director  
Northwest Straits Commission

Ron Sims  
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