

**Washington State Department of Fish and Wildlife and Department of Natural Resources Proposal in Response to**

**U.S. Environmental Protection Agency, Region 10  
Puget Sound Action Agenda: Ecosystem Restoration and Protection (EPA-R10-PS-1007)**

**Area of Emphasis:** Marine and Nearshore Protection and Restoration

**Title:** Implementation of Marine and Nearshore Strategies to Protect and Restore Puget Sound

**Contact:**

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**Abstract:** The Washington Departments of Natural Resources and Fish and Wildlife will align their authorities, scientific and technical expertise, and programs to co-lead implementation of marine and nearshore protection and restoration actions consistent with the Puget Sound Action Agenda and recovery of the Sound to health by 2020. Through a competitive, transparent, and coordinated subaward process, DFW and DNR will invest in (1) an adaptive management framework of target-setting, action, evaluation, and adjustment to measure and accomplish marine and nearshore ecological improvements; (2) projects that increase the effectiveness of regulation and stewardship programs; (3) capital protection and restoration projects; (4) programs that address high priority threats; and (5) projects that are cross-cutting and address issues in two or more areas of emphasis. In all phases of implementation, DNR and DFW will work closely with the Puget Sound Partnership, Tribes, local and federal governments, non-governmental organizations, and other stakeholders.

**Amount of Federal Funds Requested:** \$48,000,000

**DUNS Number:** 80-888-3052

**Referred by:** The Puget Sound Partnership

## **WORK PLAN – MARINE AND NEARSHORE PROTECTION AND RESTORATION**

### **Introduction**

This work plan describes a six year strategy Washington Departments of Natural Resources and Fish and Wildlife propose for the marine and nearshore protection and restoration Puget Sound ecosystem recovery grant. Please refer to the attached Work Plan Summary Chart for deadlines and staff assignments and to the detailed budgets for details on funding amounts.

Implementation of the marine and nearshore will focus on supporting five areas of investment: 1) Adaptive management, 2) Effective regulation and stewardship, 3) Strategic capital investment, 4) Programs to address additional high priority threats, and 5) Cross-cutting issues (actions that cross areas of emphasis).

These strategic investments will be refined in the first quarter of grant implementation. Generally, we will fund innovative and ambitious actions that are consistent with the prioritized approaches discussed in the Technical Approach of this proposal and produce measurable outcomes tied to 2020 marine and nearshore ecosystem targets and Objective 4.3 of EPA’s Strategic Plan. Specifically, we will fund actions that:

- protect functioning elements of the ecosystem;
- prevent irreversible harm;
- prevent new pathways for existing threats to cause harm; and
- improve ecosystem resilience by restoring key processes in order to achieve both no net loss, and net gain, of ecological function.

The work plan for the management aspects of the strategy focuses on six Components, captured in this narrative and in the summary chart and detailed budgets as:

- 1 – Strategic Coordination, Partnership and Advice
- 2 – Strategic Investments
- 3 – Adaptive Management
- 4 – Project Management
- 5 – Matching Activities
- 6 – Rounds 3 Through 6

### **COMPONENT 1 – STRATEGIC COORDINATION, PARTNERSHIP AND ADVICE**

Coordination with the Puget Sound Partnership Management Conference, lead organizations, lead entities, and other strategic partners is essential to achieving the outcomes of the six-year strategy. We propose three areas of coordination. First, the state agency lead organizations (which term includes agencies that are “co-leads”) will immediately establish a lead-staff coordinating team, including PSP and EPA staff, which will carry forward the highly collaborative

and transparent process employed to develop the four implementation strategies. Potential state agency lead organizations have agreed to a common, coordinated leadership strategy to develop, implement and adaptively manage the six-year strategies across the four areas of emphasis in a collaborative fashion with governmental and non-governmental entities. It will be critical that this group establish a common approach for integrating and aligning the work. For example, one of the first tasks will be to review the final work plans negotiated with EPA to identify cross-cutting actions that meet multiple objectives beyond just one area of emphasis. These actions would likely be prioritized for early support. This step will also ensure that there is no overlap or duplication of efforts with activities already funded by the federal government.

Second, we recognize an ongoing need to seek strategic advice from a broad diversity of partners across the Puget Sound Management Conference including, but not limited to, other Lead Organizations; the Puget Sound Partnership, Ecosystem Coordination Board, Science Panel, caucus forums and local implementing entities.

Third, we will establish a core group to help guide and oversee implementation of the respective strategies. Likely advisory functions from partners include, but are not limited to,

- Providing ongoing feedback on implementation strategies, including near-term priorities; (ECB and entire Management Conference)
- Consulting on criteria for direct and competitive sub awards; (Management Conference)
- Providing review of proposed annual investments designed to implement strategy;
- Playing central role in integrating and implementing the public awareness and engagement efforts of the LOs and PSP;
- Assessing progress in achieving outcomes as they align with Action Agenda benchmarks/indicators across the Lead Organizations; and
- Participating in adaptive management analysis.

### **Public Coordination with PSP on Public and Stakeholder Involvement and Stewardship**

This element has two basic components: (1) public and stakeholder involvement (i.e., transparency) process around the Action Agenda and respective lead organization work areas; and (2) coordination with the Partnership's awareness and stewardship programs focused on citizen best management practices. We will closely coordinate with the Partnership as they implement both the public and stakeholder involvement and stewardship programs. We will contribute information and expertise for marine and nearshore ecosystem components.

### **Coordination with Local Governments**

Local governments are a key strategic partner in protecting and restoring Puget Sound. Many have devoted enormous energy and resources to overcoming barriers to progress. They are indispensable partners and must be supported in their work to enforce local land use, health, and water quality regulatory programs, many of which are key to protecting and restoring Puget Sound. Their education, outreach and public engagement programs have advanced work in many areas of Puget Sound recovery. We will engage local governments through many avenues to gain the benefit of the knowledge and work to protect and restore Puget Sound.

## Coordination with Tribal Governments

Puget Sound is part of a larger transboundary ecosystem which includes Puget Sound, Georgia Basin, and the Strait of Juan de Fuca, referred to together as the *Salish Sea* and which is the ancestral home of numerous Indian Tribes and First Nations, most of whom share the Coast Salish culture extant in this region for thousands of years. Tribes' critical role in the stewardship of the *Salish Sea* region spans distant as well as recent history. The economic and cultural well-being of tribes is directly linked to the health of their homelands and the natural systems supporting their resource base. Tribes in the Puget Sound Basin have knowledge, data and on-the-ground experience of their watersheds which could enrich the Lead Organizations ability to develop and implement the six-year strategy. They have the experience and capability to implement protection and restoration projects in their watersheds. The goal is to integrate tribal knowledge and resources effectively into the six-year strategies. In 1974, the Boldt Decision reaffirmed specific Tribes' treaty-protected fishing rights and more recent federal court rulings upholding treaty-reserved shellfish harvest rights confirmed these Tribes as natural resource managers. The unique legal status of Tribes and presence of tribally reserved rights and cultural interests throughout the state creates a special relationship between Tribes and the state agencies responsible for managing and protecting the natural resources of the state. The foundation of the tribal co-management, government to government practice has substantial precedence and is the outcome from implementation of treaties, the U.S. v. Washington court decisions, and numerous subsequent decisions. The 1989 Centennial Accord between the federally recognized Indian Tribes in Washington State and the State of Washington commits the parties to a government to government approach to address issues of mutual concern. Tribes have consistently demonstrated their commitment and ability to be competent and professional natural resource managers. Tribal homelands are the rivers and shorelines of this state and so tribes have an inextricable link with its water resources. EPA, Washington State, Tribes and Tribal consortia, local governments, and nonprofit organizations have partnered for over 20 years to protect and restore Puget Sound through the Clean Water Act (CWA) National Estuary Program. Effective coordination of state/tribal expertise will clearly help develop programs that will be far more appropriate and efficient than either could develop alone. The Lead Organizations commit to work within a cooperative management process with tribes to develop and implement the six-year strategies.

## Coordination with Federal Partners

Federal Partners represented on the Puget Sound Federal Caucus have been participating in many Puget Sound protection and restoration programs for many years, and our strategy seeks to leverage and increase their important contributions. Relationships with EPA (National Estuary Program, among others), the US Army Corps of Engineers (PSNERP), NOAA (Community Restoration, among others), as well as the US Fish and Wildlife Service, Federal Emergency Management Agency, NRCS, and many others will be essential for progress. Aligning many federal programs with the goals of the Action Agenda has been an important piece of work by the Federal Caucus. We anticipate working with the Caucus to achieve improved alignment in programs that touch the health of the Puget Sound nearshore and marine environments.

## Coordination with Canada

Puget Sound is part of the Salish Sea that encompasses the Puget Sound of the United States and Georgia Basin of Canada. The international forums mentioned immediately below provide Puget Sound Management Conference partners access to Canadian environmental management agencies and planning processes on topics and issues of mutual interest and concern.

Among these international forums, the Partnership and Washington Department of Ecology work cooperatively with Environment Canada and the British Columbia Ministry of the Environment. The Partnership participates in and convenes the Coastal and Oceans Task Force with representatives from the State of Washington and the British Columbia Ministry of the Environment. This task force is empowered by the Washington State-British Columbia Environmental Cooperation Council to address coastal issues of mutual interest, and includes collaboration with the U.S. Environmental Protection Agency. Current agreements include short-, medium- and long-term priorities for governance and information sharing; science and policy; shared indicators of ecosystem health; and issue areas for habitat restoration, climate, and water quality. The Environment Canada- U.S. Environmental Protection Agency Statement of Cooperation Working Group is another venue for collaboration.

- Task 1.1            Establish LO Coordinating Team (“Team”)
- Task 1.1.1        Team reviews competitive sub-awards for duplication or reasons for coordination in contracting/sub-awards
- Task 1.2            Establish Marine/Nearshore Core Group (“Group”)
- Task 1.3            Gather strategic advice from various parts of the management conference
- Task 1.4            Coordinate with PSP on Public and Stakeholder Involvement and Stewardship

## COMPONENT 2 – STRATEGIC INVESTMENTS

The subaward process is intended to efficiently provide funding to projects that most effectively and/or efficiently implement the priorities articulated in this proposal and demonstrate progress, in an adaptive management framework, toward 2020 ecosystem targets and interim benchmarks. The subaward process will include a process to competitively solicit proposals in each of the strategic areas of investment described in the Technical Approach section of this proposal. The overall process will include tracking and measuring progress toward achieving the expected outputs and outcomes. Although we would expect to formulate the specific steps of the review process during the post-award conversations with EPA, the competitive process will:

- Solicit proposals for innovative and ambitious actions that are consistent with the strategies and priorities described in our technical approach. Regardless of the type of action (programmatic or policy improvements, on-the-ground work, or scientific and technical studies), proposals will be judged on their ability to resolve long-standing barriers to implementation and to produce outputs and outcomes that advance achievement of 2020 ecosystem targets and interim benchmarks. Proposals will be expected to demonstrate these features through a logic model. We will coordinate with both the Science Panel and

- Be coordinated with other Lead Organizations across ecosystem categories to provide an efficient, coordinated process for making and managing competitive subawards and to ensure no duplication. Lead Organizations will administer the competitive subaward processes collectively to assure such efficiency and coordination, as well as a single application point.
- Identify important criteria by which subaward decisions will be made in the five areas of strategic investment, noting especially criteria that are applicable across the ecosystem categories. These criteria will be developed and vetted through coordination with the Management Conference, including Local Integrating Organizations (LIOs) where they have been established.
- Understand both regional and local priorities and create meaningful involvement for LIOs. The nature of LIO involvement may change throughout the six-year strategy as they become established and develop detailed work plans and priorities, as local priorities for implementing the Action Agenda are refined and identified as part of the work to be completed by LIOs through the EPA grant awarded to the Puget Sound Partnership to manage the Action Agenda.
- Involve technical and policy review to ensure that actions proposed for funding are consistent with the Action Agenda, Open Standards, and achieving 2020 targets and benchmarks.
- Where possible and consistent with our priorities and areas of investment, use and/or enhance existing contracting mechanisms. Lead Organizations will attempt to set deadlines to avoid conflicts with existing, major grant processes such as those related to the Salmon Recovery Funding Board, Washington Wildlife and Recreation Program, Centennial Clean Water Fund, Estuary and Salmon Restoration Program, or Aquatic Lands Enhancement Account.

Lead organizations are committed to creating a seamless process that facilitates the ability of applicants to apply for funds easily and develop crosscutting proposals. A seamless process will also reduce duplication of work in contract administration, monitoring, and reporting requirements for both applicants and the lead organizations. DFW and DNR will use existing contracting systems and procedures to make and manage subawards. However, we will coordinate with other lead organizations and the Puget Sound Partnership to jointly create a single application point. This single application point will assure that potential applicants can easily access and monitor funding opportunities. Lead organizations will also jointly create a coordinated and unified timeline to facilitate the ability to package proposals that fund crosscutting activities.

The subaward process may also include direct (non-competitive) contracts with other entities where we have indicated so within a given area of emphasis in this proposal, particularly as is consistent with the “Lead Agency” and “Partners” that are specified in the “Near-term action implementation responsibilities” table of the Action Agenda. State agencies have committed to

providing a transparent rationale for any decisions that result in direct contracts with other entities that explains why the work should be performed by the entity named.

- Task 2.1 Establish Round 1 Priority Approaches
  - Task 2.1.1 Identify Cross-cutting Priorities
  - Task 2.1.2 Refine areas of investment (working from Round 1 focus described in technical approach of proposal)
  - Task 2.1.3 Develop proposed process & decision-making criteria for each area of investment described in technical approach of proposal
  - Task 2.1.4 Revise budget to reflect any actions identified to be implemented directly by primary LO (recipient of EPA award).
- Task 2.2 Conduct Year 1 Sub-award Process
  - Task 2.2.1 Develop/launch single point of access
  - Task 2.2.2 Solicit targeted proposals for Round 1 to advance priorities identified in task 2.1
  - Task 2.2.3 Select Round 1 Projects and sign contracts
  - Task 2.2.4 Manage active Round 1 contracts
  - Task 2.2.5 Sub-award process review
- Task 2.3 Establish Round 2 Priority Approaches
  - Task 2.3.1 Identify Cross-cutting Priorities
  - Task 2.3.2 Refine areas of investment described in technical approach of proposal
  - Task 2.3.3 Develop proposed process & decision-making criteria for each area of investment described in technical approach of proposal
- Task 2.4 Conduct Round 2 Subaward Process
  - Task 2.4.1 Solicit targeted proposals for Round 2 to advance priorities identified in task 2.3
  - Task 2.4.2 Select Round 2 Projects and sign contracts
  - Task 2.4.3 Manage active Round 2 contracts
  - Task 2.4.4 Sub-award process review
- Task 2.5 Develop schedule for additional rounds of sub-award process and revision to strategic investments

### **COMPONENT 3 – ADAPTIVE MANAGEMENT**

Adaptive management is the cycle of exploration, action, evaluation, and adjustment that links science and policy. It is a vital element of the Puget Sound Partnerships *Strategic Science Plan (2010)* and to ongoing revisions of the Action Agenda and the Puget Sound Partnership's performance management system. It will be a key feedback mechanism for helping to ensure that new information and facts are used to inform the refinement of strategies and actions necessary for the recovery of Puget Sound. Draft guidance and references for applying an adaptive management framework for improving ecosystem protection efforts will be provided by PSP and the Science Panel to the other Management Conference participants and Lead Organizations by July 1, 2011.

## Target Setting

Lead Organizations will actively participate in ecosystem and pressure reduction target setting processes coordinated by the Puget Sound Partnership.

## Open Standards

Lead Organizations will actively participate in ongoing and increasingly more robust development and use of the Open Standards framework coordinated by the Puget Sound Partnership at the Basin and local scales to logically align strategies and actions that will result in the reduction of pressures and the achievement of ecosystem goals, and help to develop clear, specific measurable outcomes.

We must invest in a strategic adaptive management system that fosters a common understanding of the role of adaptive management, evaluates progress toward ecosystem recovery by 2020, and that informs necessary changes to our strategies. The Puget Sound Partnership has begun to establish this system, and we will help complete this process for the nearshore and marine areas.

### Year One:

- In coordination with the Puget Sound Partnership, help refine the Dashboard Indicators and help develop marine and nearshore targets and benchmarks for inclusion in the 2011 Action Agenda. Once marine and nearshore related Dashboard Indicators, targets, and benchmarks are set, we will refine our priorities for addressing threats and evaluate the effectiveness of actions for the remaining years of the six-year strategy.
- In 2011, revise Action Agenda strategies and actions necessary to achieve targets and interim benchmarks for marine and nearshore ecosystems

**Example Near Term Actions:** E.3.1, E.3.2, E.3.3

**Threats Addressed:** All marine and nearshore related threats

**Outputs:** Marine and nearshore related targets and benchmarks; proposed revisions to marine and nearshore related strategies and actions in the Action Agenda.

**Outcomes:** Improved ability to evaluate effectiveness of particular threat reduction strategies and actions to protect and restore marine and nearshore environments.

**Leverage Existing Programs<sup>1</sup>:** Puget Sound Partnership Science Panel and Coordinated Ecosystem Monitoring Program, Estuary and Salmon Restoration Program Monitoring Strategies, Puget Sound Institute, PSNERP Nearshore Science Team, HCP landscape prioritization/priority habitat protection, baseline assessments and monitoring of aquatic reserves, eelgrass stressor assessment project, and existing marine and nearshore related monitoring

**Years Two Through Six:**

- In coordination with the Puget Sound Partnership coordinated ecosystem monitoring program, support monitoring that is critical to tracking the Dashboard Indicators and key threat reduction indicators related to marine and nearshore environments.
- In coordination with the Puget Sound Partnership coordinated ecosystem monitoring program, recommend revisions to indicators, targets, and Action Agenda strategies based on new information gathered via the subaward process.
- In year six of the strategy, conduct a programmatic evaluation of the six-year strategy and performance audits for actions implemented using these funds.

- Task 3.1      Participate in target development process
- Task 3.2      Participate in refinement of Dashboard Indicators
- Task 3.3      Participate in revisions to the Action Agenda
- Task 3.4      Participate in PSP coordinated ecosystem monitoring program

**COMPONENT 4 – PROJECT MANAGEMENT**

We will structure subaward contracts as “deliverables based” contracts that link financial reimbursement to a demonstration of meeting major project milestones and deliverables. This method has been used extensively by several agencies, including as a fundamental component of the administration of the Estuary and Salmon Restoration Program (ESRP). This contracting method engages lead organizations and subawardees in up-front thinking to define the milestones and deliverables that the contract will result in, creates clear points of consultation between Lead Organizations and subawardees, and assures that dollars spent achieve project milestones and outputs. It provides an opportunity to coordinate among and leverage results of relevant subaward projects. In addition, all subaward contracts will include provisions to ensure implementation is monitored and that lessons learned can be disseminated among subawardees, the Management Conference, and other interested parties, as well as be used to adaptively manage the Action Agenda. Some or all contracts will be the subject of effectiveness monitoring, as well, according to the needs identified by the adaptive management component of this proposal. Subaward contracts will also embody any of the other requirements of subawards, including, for example, any monitoring, education, or outreach activities.

DFW enters and manages all contractual agreements for any kind of funding, both payables and receivables into the Contracts and Project Management System (CAPS). This system is used to track all financial information and documentation on grants, obligations, contracts, sub grantee awards, personal services contracts and interagency agreements. It maintains electronic records of approvals, funding amounts and sources, amendments, contacts, assurances, required reports and any other information required by federal and state law. The system is used for tracking all fund sources, state, local, private and federal and tracking of milestones and performance measures. Some of the practices and processes include standard controls of contracts approvals, identification and tracking of indirect costs, controls over pre-approval spending, linking of contracts ledgers to the financial system AFRS, reports of contracts spending and balances. The system was developed within DFW and currently maintained by

the DFW technology division. It is operated and owned by the DFW Contracts Office who are responsible for enhancements, ensuring it meets all legal requirements and the daily business operations which include ongoing staff training. The State Auditor reviews the system as part of the agency's yearly statutory audits and as a part of the A-133 single audit for Washington State. This system manages all DFW Grants and Cooperative agreements, including agency pass through and contracted funding and is well suited to provide the required information and management tools that will help DFW manage the proposed EPA grant. Development of the CAPS system began in 2000 and has been the sole DFW contracts system since 2004.

The State of Washington requires that all state agencies enter their financial information into the Agency Financial Reporting System (AFRS), the authorized central state accounting system, which is managed by the Washington State Office of Financial Management (OFM).

Washington law charges OFM to develop all state accounting and administrative policies and publish these in the State's Administrative and Accounting Manual (SAAM). AFRS is compliant with all GAAP and GASB rules and provides detailed ledgers and organizational, object, and revenue codes in a comprehensive and flexible chart of accounts. All DFW reporting and financial statement information is supplied by one of the statewide reporting systems that are based on AFRS data. DFW follows all State Accounting Policies and is audited annually by the Washington State Auditor. DFW has also adopted policies and procedures related to contracts, travel and purchasing that align with the State Administrative and Accounting Manual governing the appropriate use and rules for managing state funds

(<http://www.ofm.wa.gov/policy/default.asp>). An indirect rate cost plan agreement is submitted each year to the Department of Interior business negotiators for review and approval. The current rate of 23.32% on allowable costs is approved through June 30th 2011, and the 2012 proposal was submitted in November of 2010 and is expected to be approved by May 30, 2011.

- Task 4.1      Develop a six-year strategy with key tasks needed to reach relevant PSP ecosystem targets and revise annually
- Task 4.2      Conduct monitoring activities
- Task 4.3      Manage Data
- Task 4.4      Report results
- Task 4.5      Conduct performance audits at the end of the six-year strategy to determine whether funded activities are achieving direct outputs, and whether these direct outputs are resulting in measurable progress toward 2020 targets.

## **COMPONENT 5 – MATCHING ACTIVITIES**

The funding for a great number of DFW and DNR programs directly supports recovery of the marine and nearshore components of the Puget Sound ecosystem. DFW programs include the Hydraulic Project Approval (HPA) permit program, technical assistance in Puget Sound in support of local jurisdictions updating SMPs and GMA provisions, oil spill preparedness and response, aquatic invasive species prevention and management, management of selective fisheries, and a variety of science and monitoring programs. DNR programs include conducting

aquatic land management, land use planning, stewardship science, aquatic reserves and information technology, as well as policy staff in the Commissioner’s Office. During the first year, DFW and DNR will provide approximately \$3 million in nonfederal match that is committed to these or other applicable activities, and is not used as nonfederal match for any other federal financial assistance (see also Tasks 5.1 to 5.7 below). As additional EPA funds are awarded under this agreement through year six, DFW and DNR will identify funds from these areas of work that are equivalent to the amount of funding provided by EPA, which is anticipated to be up to \$9 million per year, for a total of up to \$48 million over the six years. All matching funds will be committed and not used as nonfederal match for any other federal financial assistance.

- Task 5.1      Technical Assistance. Provide science-based guidance to local, state, and federal governments to improve protections for Puget Sound fish, wildlife, and their habitats in natural resource regulatory and management decisions (e.g., shoreline master program updates, critical areas ordinances, aquatic habitat guidelines).
- Task 5.2      Hydraulic Project Approvals. Manage and implement the HPA program to deliver permit decisions that protect Puget Sound fish and their habitats. Continue to improve HPA effectiveness, compliance, and enforcement.
- Task 5.3      Oil Spill Prevention, Preparedness, and Response. Protect and restore essential fish, wildlife and habitats from the impacts of oil spills by planning, preparing for, and responding to oil spills in Puget Sound.
- Task 5.4      Invasive Species. Manage and implement the Aquatic Invasive Species program to prevent, control, or eradicate populations of invasive species in Puget Sound in partnership with the Invasive Species Council.
- Task 5.5      Science and Monitoring. Collect and provide essential, sound scientific information and monitoring data in order to manage and protect Puget Sound fish, wildlife, and habitats to achieve recovery goals.
- Task 5.6      Puget Sound Partnership Support. Support implementation of the Action Agenda by providing scientific support through the PSP Science Panel and policy support through the Ecosystem Coordination Board and State Caucus.
- Task 5.7      Partner Matching Activities. The Department of Natural Resources will provide \$6 million of match through implementation of key marine and nearshore protection and restoration activities, including the Aquatic Reserves and Derelict Vessel Removal Programs, implementing improved stewardship measures for Puget Sound Aquatic Lands, and monitoring of critical nearshore intertidal biotic communities (e.g., eelgrass and kelp).

## **COMPONENT 6 – ROUNDS 3 THROUGH 6**

The approaches and associated work described in Components 1 through 5, above, will be repeated in rounds 3 through 6 of the 6-year strategy. Each round will be implemented in an adaptive management context to ensure that new information and facts are used to inform the refinement of strategies and actions necessary for the recovery of Puget Sound.

- Task 6.1 Strategic Coordination Partnership and Advice: Repeat tasks 1.1.1, 1.3, and 1.4 for rounds 3 through 6.
- Task 6.2 Strategic Investments: Repeat tasks 2.1 through 2.2.5 for rounds 3 through 6.
- Task 6.3 Adaptive Management: Repeat tasks 3.1 through 3.4 for rounds 3 through 6.
- Task 6.4 Project Management: Repeat tasks 4.1 through 4.5 for rounds 3 through 6.
- Task 6.5 Matching Activities: In each round, we will identify funds from the areas of work identified in Component 5 above that are equivalent to the amount of funding provided by EPA. As the strategic investments and associated priority approaches evolve through adaptive management of the 6-year strategy, we may identify additional matching activities to best reflect those priority approaches.

## **TECHNICAL APPROACH, INCLUDING OUTPUTS AND OUTCOMES**

The technical approach (like the Puget Sound Partnership (PSP) approach) is based upon an adaptive management framework, using the Open Standards method and other adaptive management principles to set goals, plan and implement, monitor and assess, and change as necessary. To accomplish nearshore and marine protection and restoration using this approach, we recommend supporting five areas of investment: 1) Adaptive management, 2) Effective regulation and stewardship, 3) Strategic capital investment, 4) Programs to address additional high priority threats, and 5) Cross-cutting issues (actions that cross areas of emphasis). This technical approach prioritizes and sequences approaches based on a clear rationale that integrates scientific and technical products and the knowledge and expertise of our partners in Puget Sound recovery. We will fund innovative and ambitious actions that are consistent with the prioritized approaches and produce measurable outcomes tied to 2020 marine and nearshore ecosystem targets and Objective 4.3 of EPA's Strategic Plan. To ensure that we are addressing the highest priorities across the entire ecosystem, potential state agency lead organizations have agreed to a common, coordinated leadership strategy to develop, implement, and adaptively manage the six-year strategies across the four areas of emphasis with government and non-governmental agencies.

The rationale that resulted in this technical approach includes:

- Identifying, refining, and gathering information on the marine and nearshore ecosystem components that we are trying to recover and by which we will measure this proposal's contribution to recovery (*from the PSP Dashboard Indicators, Washington State Governor's Government Management Accountability and Performance (GMAP) Process, the revision of the Action Agenda, and the targets and benchmarks the Puget Sound Partnership anticipates setting in 2011*). These will include indicator species (such as Pacific Herring and eelgrass), as well as land use indicators (such as acres of habitat restored and miles of shoreline armored).
- Identifying and prioritizing threats that pose the greatest risk (*currently from the Puget Sound Partnership's Technical Memorandum regarding the Identification, Definition and Rating of Threats to the Recovery of Puget Sound*). Threats to the Puget Sound marine and

nearshore that are rated very high or high include shoreline development, armoring, marine invasive species, and climate change.

- Through the subaward process, aim the region’s most innovative and effective tools at the most critical threats identified by the Open Standards or other tools (*gathered from regional analyses and the best professional knowledge and expertise of DFW and DNR staff and stakeholders from around the region*). We will focus on tools and approaches that result in a net gain in ecological function. Specifically, we will fund actions that
  - protect functioning elements of the ecosystem;
  - prevent irreversible harm;
  - prevent new pathways for existing threats to cause harm; and
  - improve ecosystem resilience by restoring key processes in order to achieve both no net loss, and net gain, of ecological function.
- Identifying solutions to “cross-cutting issues” that achieve results across two or more of the four areas of emphasis defined by the EPA RFP (EPA-R10-PS-1007).
- Offering a six-year strategy that integrates and sequences approaches across scales, threats, authorities, and partners, which links strategies, actions (subawards), outputs, and outcomes to ecosystem targets.

The content of this proposal that applies to the nearshore is based in part on the scientific analyses of the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP). PSNERP data and analysis provide a holistic way of thinking about the Puget Sound landscape that support the building of cohesive strategies and tracking progress. PSNERP data describe historic and ongoing degradation across Puget Sound shorelines suitable for either protection or restoration actions. Finally, PSNERP’s method of organizing the nearshore into large river delta, coastal inlet, and drift cell (bluff, beach, and spit matrix of most Puget Sound shorelines) systems provides a framework for project development and tracking progress.

This proposal will also incorporate the results of DNR’s Aquatic Landscape Prioritization Decision Tool Project, part of the Aquatic Lands Habitat Conservation Plan. The goal of Landscape Prioritization is to identify aquatic lands that are of greatest importance to HCP-covered species and habitats and develop Aquatic Landscape Plans for those priority areas. These Plans will be developed with stakeholder and public involvement; will incorporate Ecology’s watershed characterization, PSNERP, and county shoreline mater program analyses; and will identify an ecologically optimal mix of use and protections, and used to inform DNR business decisions and lease requirements. In addition, we have provided species/habitat data in support of the development of NOAA Fisheries Science Center food web model. We anticipate that the final model (Atlantis) will be an important decision support tool that can help inform fisheries management.

### **Strategic Areas of Investment**

We recommend a subaward process that supports 1) Adaptive Management (*discussed as Component 3 above*), 2) Effective Regulation and Stewardship, 3) Strategic Capital Investment, 4) Programs to Address Additional High Priority Threats, and 5) Cross-cutting Issues. The focus of these investments may change, or investments in additional programs may emerge in years

the two through six based on our evolving understanding of priority threats or adaptive management to improve the effectiveness of these approaches.

### 1. Adaptive Management

This area of investment is discussed above as “Component 3 – Adaptive Management.”

### 2. Effective Regulation and Stewardship

Some of the greatest threats to the marine and nearshore components of the Puget Sound ecosystem are related to human development in the nearshore (e.g., armoring; dams, levees, tidegates; roads and other infrastructure). Existing regulations (e.g., Shoreline Management Act, Shoreline Master Programs, and Hydraulic Project Approvals), need to be part of a strategy for addressing land impacts, particularly regulations based on ecological standards such as “no net loss of ecological function.” Another critical part of that strategy is to promote effective stewardship on public and private lands. (*Capital protection and restoration mechanisms to achieve net gain in ecological function are discussed in the next section.*) Despite this, we currently lack an effective regulatory enforcement system to define and enforce the current no-net-loss standard on shorelines. Any resulting lack of protection of existing marine and nearshore resources will systematically undermine restoration gains that we achieve via other strategies. This proposal will focus first on improving the effectiveness of environmental protection provided by regulation and stewardship mechanisms.

#### Year One:

- Encourage innovative SMP updates through a competitive process where jurisdictions that develop regulatory protections that demonstrate progress toward 2020 nearshore ecosystem targets and interim benchmarks receive resources and additional state technical support. Incorporate recommendations from EPA-funded studies for implementing and measuring “no net loss of ecological function”.
- Support implementation of SMP updates and protections at the local level to assure ordinances and permit decisions are consistent with SMP updates.
- Develop and test model compliance and enforcement programs/techniques at the local and regional levels.
- Assemble stewardship and regulatory assessments that make recommendations to improve effectiveness so that these recommendations can be pursued in a coordinated way in subsequent years of the strategy.
- Increase the pace of establishing new marine aquatic reserves in order to create a network of protected marine areas Sound wide.

**Example Near Term Actions:** A.1.3, A.2.5, A.2.6, A.2.7, A.2.8, A.4.6, D.4.7, D.5.4, D.5.5

**Threats Addressed:** Residential, Commercial, Port, and Shipyard Development; Shoreline Armoring; Dams, Levees, Tidegates; Roads, Transportation, and Utility Infrastructure; Climate change; governmental arrangements

**Outputs:** Updated SMPs and associated ordinances that reflect coordinated and improved protections, as well as innovative restoration opportunities; hydraulic project approvals or other permits issued; percent compliance of existing permits; literature

review that synthesizes published regulatory and stewardship recommendations; designation of a new marine aquatic reserve(s).

**Outcomes:** Improved compliance with existing regulations, steady or increasing vegetated land cover in shoreline/nearshore, acres of nearshore and marine habitat protected

**Leverage Existing Programs:** Ecology, DFW, local jurisdictions, HPAs, SMPs, DNR Aquatic Lands Management (habitat stewardship measures), Coastal Zone Management program

#### **Years Two Through Six:**

- Continue to support SMP updates and the implementation of those updates.
- Continue to support compliance and enforcement programs/techniques at the local and regional levels.
- Continue to support the establishment of new aquatic reserves.
- Develop and test methods to improve stewardship on private lands, including model incentive mechanisms, such as creative applications of the Public Benefit Rating System or revolving small-loan or -grant fund to assist landowners in removing armoring or other stressors.
- Increasingly condition capital project funding on effective regulatory protections and substantive local stewardship.
- Strengthen technical and decision tools to improve local regulatory protections and stewardship of publicly owned marine and nearshore lands.
- Support regulatory and stewardship efforts that are consistent with and/or support protection and restoration opportunities at sites of regional significance identified in PSNERP analyses.

### **3. Strategic Capital Investment**

As mentioned above, some of the greatest threats to the marine and nearshore components of the Puget Sound ecosystem are related to human development in the nearshore (e.g., armoring; dams, levees, tidegates; roads and other infrastructure). In addition to improving regulatory and stewardship tools, we must make capital investments to further protect and restore habitats. Regional, process-based analyses such as PSNERP and habitat-species based tools such as DNR's Aquatic Landscape Prioritization allow us to target our capital investments. The state owns all submerged lands (except oyster tract lands) of Puget Sound, more than one-third of the nearshore, and all the beds of navigable rivers and streams. Thus a restoration and acquisition strategy can be anchored on these public lands. We will incorporate other tools, such as the marine spatial planning component of the 2011 Action Agenda, into the capital investment strategy as they become available.

#### **Year One:**

- Target capital investments consistent with the PSNERP process-based analysis and other supporting information such as salmon recovery plans, Aquatic Landscape Prioritization, and Watershed Characterization. Encourage subaward proposals to

- fund local efforts that seek to integrate agricultural preservation, flood protection, and ecosystem protection and restoration in large river deltas;
- pair capital protection and restoration awards with effective regulations that provide ecosystem protection; and
- utilize cost-effective approaches to completing restoration projects, such as Puget SoundCorps crews within the Washington Conservation Corps.

**Example Near Term Actions:** A.1.2, A.4.6, A.2.1, B.1.2, B.1.3, B.1.4, B.1.5, B.2.1, B.2.2, D.1.2, D.3.1

**Threats Addressed:** Residential, Commercial, Port, and Shipyard Development; Shoreline Armoring; Dams, Levees, Tidegates; Roads, Transportation, and Utility Infrastructure; Climate change

**Outputs:** Nearshore capital protection and restoration projects implemented

**Outcomes:** Acres of nearshore and marine habitat protected and/or restored; improved habitat conditions for species, such as wild Chinook, eelgrass, or rockfish

**Leverage Existing Programs:** ESRP, NOAA Restoration Center, SRFB, PSAR, USFWS, DNR, Conservation Commission

#### **Years Two Through Six:**

- Continue to target capital investments consistent with the PSNERP analysis, as described in year one.
- Increasingly condition capital project funding on effective regulatory protections and substantive local stewardship (also mentioned in Effective Regulation and Stewardship above).
- Fund restoration actions in the marine environment, such as derelict vessel and gear removal, based on an improved understanding of threats to the marine environment that emerges from the Open Standards process.

#### **4. Programs to Address Additional High Priority Threats**

Investment areas two and three primarily address the threat of human development in the nearshore. In some cases, we have developed programs that are narrowly focused on additional high priority threats to the marine and nearshore habitats of Puget Sound. We recommend investments in protection from invasive species and oil spill prevention. We may invest in additional high priority threats to marine and nearshore ecosystems in years two through six based on the results of the Open Standards process. For example, in year two we anticipate beginning to support innovative approaches to reduce the threat posed by unsustainable fishing, such as methods to improve selective fisheries.

##### **a. Invasive Species**

Preventing invasive species from establishing and spreading is the most cost effective and least environmentally damaging method of protecting the Puget Sound and local economies from the impacts of invasive species.

**Year One:** Focus on preventing or eliminating pathways of invasive species movement and spread.

**Example Near Term Actions:** A.5.1, A.5.2, A.5.3, A.5.4

**Threats Addressed:** Marine invasive species

**Outputs:** Expanded and enhanced ballast water and hull fouling invasive species pathway management, establish baseline of invasive species currently established in Puget Sound

**Outcomes:** No new priority invasive species introduced, rapid response to the risk of new invasions

**Leverage Existing Programs:** DFW, RCO, WSDA, DNR, Puget Sound Partnership, USFWS,

**Years Two Through Six:** Continue preventing or eliminating pathways of invasive species movement and spread. Control or eradicate existing populations of high priority invasive species. The focus in years two through six should be informed by the emerging priorities defined by the Invasive Species Council.

#### **b. Oil Spills**

Although oil spills were not rated a high threat in the Puget Sound Partnership's 2008 technical memorandum on threats, recent national and global events highlight the threat posed by oil spills. Oil spills have the potential to overwhelm gains we make in the recovery of Puget Sound. Prevention is the most cost effective and least environmentally damaging method of protecting the Puget Sound and local communities and economies from the impacts of oil spills.

**Year One:** Focus on preventing spills through compliance with, and enforcement of existing standards and regulations. Improve the state's "spill drill" program to ensure timely and effective response to spills that do occur.

**Example Near Term Actions:** C.1.4

**Threats Addressed:** Oil and hazardous spills

**Outputs:** Expanded and enhanced prevention, preparedness and response programs

**Outcomes:** Reduced gallons of spilled oil, representing substantial progress toward the state goal of zero spills. Increased protection of Puget Sound from the impacts of oil and hazardous materials spills. Increased restoration of public and natural resources impacted by spills

**Leverage Existing Programs:** Ecology, DFW, DNR, DOH, Puget Sound Partnership, USFWS, NOAA, USCG

**Years Two Through Six:** Continue efforts to prevent spills and improve state's ability to provide timely and effective response to spills that do occur. Improve understanding of spill impacts to state's natural resources and develop effective and efficient means of measuring impacts to ensure restoration of affected resources. The focus in subsequent years of the six-year strategy should be informed by the priorities and recommendations that emerge from the Cross-Partnership Workgroup on Oil Spills, lessons learned from other major spills (e.g., Deepwater Horizon disaster in the Gulf and the Cosco Busan spill in San Francisco Bay), and other multi-agency forums.

## 5. Cross-Cutting Issues: Actions that Cross RFP Areas of Emphasis

There are threats and barriers to Puget Sound recovery that cross jurisdictional boundaries, disciplines, and parts of the ecosystem. As a result, lead organizations will facilitate innovative strategies and actions that resolve barriers to implementation, propose solutions, and achieve synergistic results across the ecosystem areas of emphasis defined by the EPA RFP (EPA-R10-PS-1007).

### Year One:

- Seek proposals from watersheds or jurisdictions that will implement solutions that address cross-cutting issues comprehensively. Lead Organizations will compare the six-year strategies for the four areas of emphasis to identify high priority cross-cutting issues. Examples of such issues may include
  - identifying and addressing critical connections among nearshore ecosystem processes and water and sediment quality (e.g., priority coastal inlets that may increasingly receive contaminated water from developing watersheds);
  - developing a comprehensive strategy to address the water quality and habitat impact of outfalls; or
  - funding a network of effective advocates for Puget Sound recovery.
- Leverage additional funding through partnering with sister agencies to enact a state comprehensive sustainable funding strategy and with private entities, such as the Puget Sound Foundation. Lead organizations will work others to identify the appropriate amount of funding to designate for this purpose, based on the nexus of the six-year strategies and the objectives of potential investors.

**Example Near Term Actions:** E.3.4, E.3.12, and other Near Term Actions depending on the cross-cutting issues identified by Lead Organizations

**Threats Addressed:** Depends on cross-cutting priorities identified by Lead Organizations

**Outputs:** Outputs depend on the cross-cutting priorities identified by Lead Organizations, but should include additional restoration actions, and/or additional prevention actions across the four ecosystem areas of emphasis.

**Outcomes:** Improved ability to act or make decisions that result in durable protections for marine and nearshore resources; additional outcomes depend on the cross-cutting priorities identified by Lead Organizations, but should include enhanced protections or progress toward targets across the four ecosystem areas of emphasis.

**Leverage Existing Programs:** Puget Sound Foundation

**Years Two Through Six:** Continue investments in proposals that address cross-cutting priorities. Continue to pursue opportunities to leverage public and private funding according to a sustainable funding strategy.

### **Considering Climate Change**

According to a study on Puget Sound prepared by the University of Washington's Climate Impacts Group, there is considerable evidence that regional temperatures are already rising and precipitation patterns are changing. Projections suggest that sea levels will rise, snowpack is likely to melt earlier each season, and the damage from winter storms could increase. The ongoing and anticipated future impacts of climate change will be factored into all aspects of the six-year strategy for marine and nearshore protection and restoration, including the evaluation and selection of sub-award projects.

### **JOINT PERFORMANCE EVALUATION PROCESS**

Consistent with 40 CFR§35.115, the grantee agrees to submit semi-annual performance reports. The Lead Organization will submit performance reports through EPA's Puget Sound Financial and Ecosystem Accounting Tracking System (FEATS). These reports will state accomplishments toward completion of work plan commitments, a description of work performed for all components, and description of any existing or potential problem areas which could affect project completion (See 40 CFR Part 31.40). If the EPA Project Officer, after reviewing the report, finds that the recipient has not made sufficient progress under the work plan, EPA and the recipient will negotiate a resolution that addresses the issues.

### **ROLES AND RESPONSIBILITIES OF THE RECIPIENT AND EPA IN CARRYING OUT THE WORK PLAN COMMITMENTS**

The Washington Departments of Fish and Wildlife and Natural Resources will carry out the work plan components as outlined above, oversee the management of resources and personnel, and perform the duties of the work plan. This funding is committed through a cooperative agreement because EPA anticipates participating in project activities over the 6 year project period. At a minimum, EPA will monitor progress and provide technical assistance as well as participate in the Core Group and the Lead Organization Team.

DFW-DNR Marine and Nearshore Protection and Restoration Proposal – 01/04/11

Calendar Year Timeline	2011				2012				2013				2014				2015				2016				
	Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>PROGRAM DEVELOPMENT</b>																									
Negotiate revised work plan	X				X				X				X				X				X				X
LO Coordinating Team - establish & ongoing operations	X	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
LO staff assignments and work plans	X																								
Identify crosscutting potential actions	X				X				X				X				X				X				X
Develop marine-nearshore long-term investment strategy				X																					
<b>SUBAWARD PROCESS</b>																									
Stakeholder outreach	X	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Develop and launch single point of access	X																								
Develop/refine criteria for each area of investment	X				X				X				X				X				X				X
Solicit proposals for year 1	X	X																							
Year 1 project selection		X																							
Year 1 subawards contracts active			→	→	→	X																			
Year 1 closeout, including monitoring and effectiveness review						X																			
Subaward process review				→	→	X																			
Solicit proposals for years 2- 6 (on annual basis)					X				X				X				X				X				X
Year 2 - 6 project selection					X				X				X				X				X				X
Year 2 - 6 subaward contracts active					X	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Year 2 - 6 closeout, including monitoring and effectiveness review					X				X				X				X				X				X
Monitoring, evaluation, report to EPA	X	X			X	X			X	X			X	X			X	X			X	X			X
<b>ADAPTIVE MANAGEMENT</b>																									
Revise 2008-09 Action Agenda with 2020 ecosystem targets	→	→	→	X																					
Provide PSP data from projects to adaptively manage Action Agenda					X				X				X				X				X				X
Revise 2011 Action Agenda												X									X				
Participate in PSP refinement of indicators and targets	X	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Participate in PSP performance management system	X	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Conform long-term investment strategy to Action Agenda revisions									X				X				X				X				X