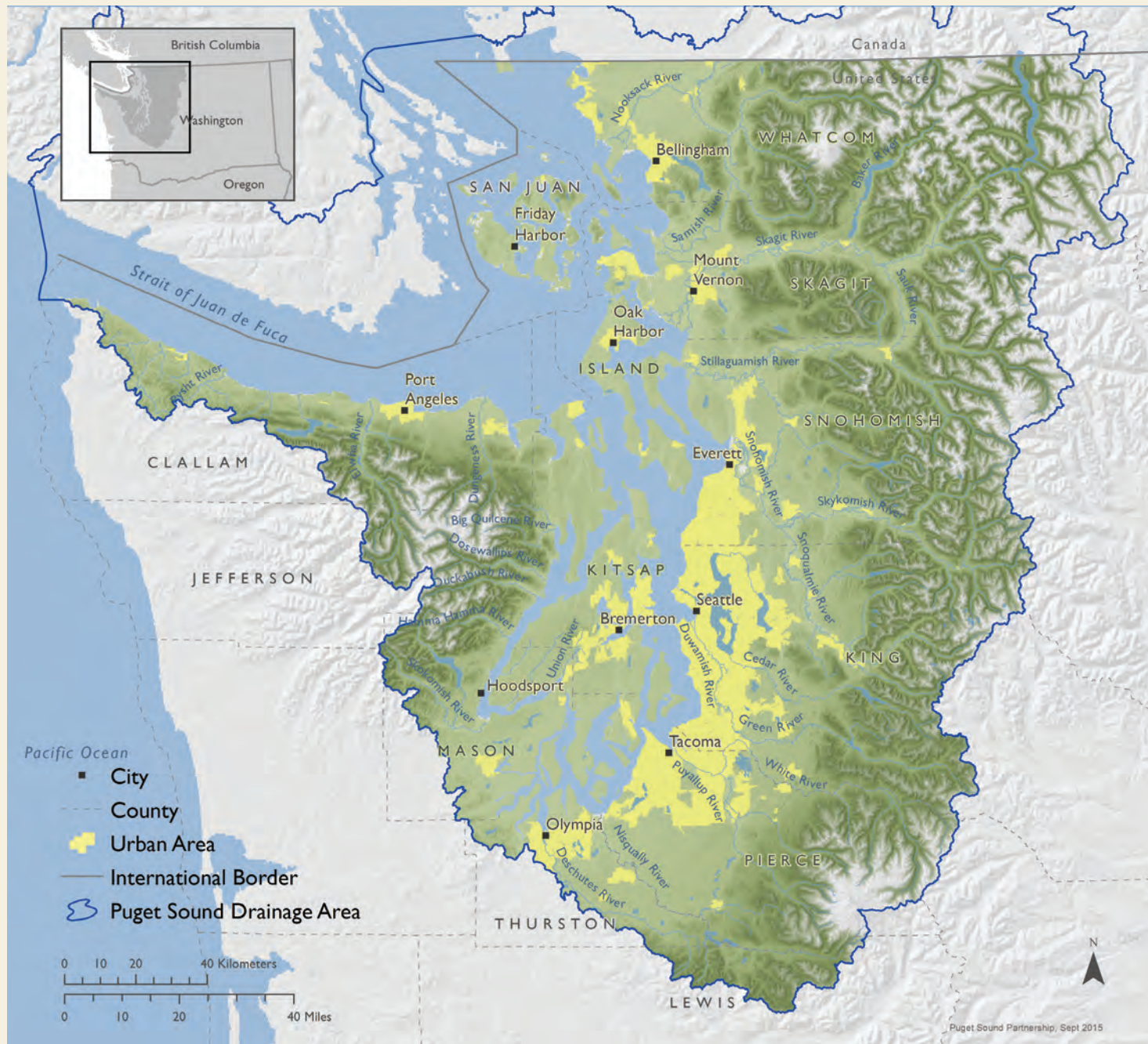


REPORT TO THE GOVERNOR AND LEGISLATURE





For the purposes of this report, Puget Sound is defined as all salt waters of the Puget Sound estuary and the adjacent drainage basin where rivers and streams flow into Puget Sound.



2015

STATE OF THE SOUND

REPORT TO THE GOVERNOR
AND LEGISLATURE

TO THE GOVERNOR, LEGISLATURE, AND PEOPLE OF PUGET SOUND:

Humans have long relied on a healthy Puget Sound ecosystem to feed us, quench our thirst, and fill our material needs. Puget Sound supports a large part of our state's economy and provides vital recreational, aesthetic, and spiritual benefits. But for more than a century, human use has sickened the Sound through pollution, habitat loss, and slow but steady degradation.

As part of the Puget Sound Partnership's work to accelerate the collective effort to recover and sustain Puget Sound, we present the *2015 State of the Sound: Report to the Governor and Legislature*. In this document, we answer the questions posed to us in our founding legislation. Chief among these is whether we are making progress in implementing the Action Agenda, our shared roadmap for Puget Sound ecosystem recovery.

In 2015, the answer to this question is yes, although not enough. A majority of the actions in the 2012 Action Agenda were completed or were on track. Halfway through the 2014 Action Agenda, owners of actions associated with our three Strategic Initiatives—preventing pollution from urban stormwater runoff, protecting and restoring habitat, and re-opening shellfish beds—are more likely to report favorable progress. However, many priority actions face serious constraints, and our partners report lack of funding as the most common barrier to carrying out recovery actions.

The *Report on the Puget Sound Vital Signs*, which informed this document, describes how the Puget Sound ecosystem is faring. While some indicators provide a glimmer of hope, many are getting worse.

Estuarine and floodplain restoration indicators are improving. Shoreline armoring rates show signs of slowing. However, despite the birth of five orca calves in recent months, the Southern Resident Killer Whale population remains near its 20-year low. Chinook salmon, on which orca depend heavily, saw slight upticks in local areas, but are suffering overall.

Protecting and restoring Puget Sound requires the coordinated effort of hundreds of partners who come together to plan, prioritize, and implement actions. Reflecting biannually on the effectiveness of our collective work creates an important opportunity for shared measurement and increased accountability. Clear and honest analysis of the region's progress can lead to greater alignment of partner actions and can direct investments to accelerate Puget Sound recovery.

We, the people of the Puget Sound region, continue the difficult work of focusing our actions ever more tightly. In 2016, we will take what we learned to build a better Action Agenda. We'll also continue working with partners to implement the recommendations in the Ecosystem Coordination Board's Strategic Initiative Funding Report.

At stake is the wellbeing of the people who call Puget Sound home, as well as the welfare of an ecosystem. We must renew and redouble our efforts to restore Puget Sound to resilience and health.

Sincerely,

MARTHA KONGSGAARD

Leadership Council Chair

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The Puget Sound Partnership would like to thank the many fiscal and program staff who provided financial and status information for the Near Term Actions tracked in this document. In addition, we would like to acknowledge the federal and state agencies, tribes, local governments, and community entities that provided valuable information on a wide range of programs and projects that they have undertaken to advance Puget Sound recovery.

All photos by Brandon Sawaya

www.psp.wa.gov/sos

The 2015 *State of the Sound: Report to the Governor and Legislature* is consistent with RCW 90.71.370(3).

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This project has been funded wholly or in part by the United States Environmental Protection Agency under Assistance Agreement PC-00J90301. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

INTRODUCTION

“The rate at which we as a community are continuing to damage Puget Sound is greater than the rate at which we are fixing it. That equation needs to change. We need to get to a point where we have the right balance and are living with a healthy economy, a healthy community, and a healthy ecosystem.”

Sheida R. Sahandy, Executive Director, Puget Sound Partnership

The Washington State Legislature established the Puget Sound Partnership and charged it with the mission of restoring the environmental health of Puget Sound. The Legislature also set the following six goals which, when reached, would signify that the Sound has beat the odds and achieved recovery:

- **Healthy Human Population:** A healthy population supported by a healthy Puget Sound that is not threatened by changes in the ecosystem.
- **Vibrant Quality of Life:** A quality of human life that is sustained by a functioning Puget Sound ecosystem.
- **Thriving Species and Food Web:** Healthy and sustaining populations of native species in Puget Sound, including a robust food web.
- **Protected and Restored Habitat:** A healthy Puget Sound where freshwater, estuary, nearshore, marine, and upland habitats are protected, restored, and sustained.
- **Abundant Water Quantity:** An ecosystem that is supported by good groundwater levels, as well as river and stream flows sufficient to sustain people, fish, wildlife, and the natural functions of the environment.
- **Healthy Water Quality:** Fresh and marine waters and sediments of a sufficient quality to support water that is safe for drinking, swimming, and other human uses and enjoyment, and which are not harmful to the native marine mammals, fish, birds, and shellfish in the region.

Meeting these goals takes the coordinated effort of hundreds of partners representing those from local, state, federal, and tribal governments, as well as science, nonprofit, business, and other members of our communities.



VISION: VIBRANT, ENDURING NATURAL SYSTEMS AND COMMUNITIES.

MISSION: ACCELERATE THE COLLECTIVE EFFORT TO RECOVER AND SUSTAIN THE PUGET SOUND.

The Partnership created and now manages the infrastructure needed to enable and encourage these partners to come together to develop and implement the priority actions needed to accelerate recovery. Our role in the system is:

- **Mobilizing partners around a shared agenda.** We steward the effort to collaboratively build the Puget Sound Action Agenda so that recovery resources can be efficiently allocated based on a science-driven, prioritized system. We ensure that decisionmakers are well-informed and have the information they need to do their part to advance these priorities.
- **Improving systems through common measures.** We advance a shared, science-based system of measurement and monitoring that allows assessment of actions for accountability, effectiveness, and progress. This information helps inform decisions about the most efficient and effective way to allocate future investments.
- **Advancing priority actions by supporting partners.** We strive to remove financial, regulatory, and resource barriers for our partners by directing outside resources toward priority actions, improving the policy and regulatory environment, and working as a catalyst within the system to get the job done.

PURPOSE OF THIS REPORT

This *Report to the Governor and Legislature* responds to RCW 90.71.370(3), which requires that a biennial report be produced to address the following:

- a) Assessment of progress by state and non-state entities in implementing the Action Agenda, including accomplishments in the use of state funds for Action Agenda implementation.
- b) Descriptions of actions conducted by implementing entities that are inconsistent with the Action Agenda and steps taken to remedy the inconsistency.
- c) Science Panel comments on progress in implementing the Action Agenda, as well as findings arising from the assessment and monitoring program.
- d) Review of citizen concerns provided to the Partnership and the disposition of those concerns.
- e) Review of the expenditures of funds to state agencies for the implementation of programs affecting the protection and recovery of Puget Sound and an assessment of whether the use of the funds is consistent with the Action Agenda.
- f) Identification of all funds provided to the Partnership and recommendations as to how future state expenditures for all entities, including the Partnership, could better match the priorities of the Action Agenda.

This report also provides recommendations for future funding of Action Agenda priorities and can thereby inform Puget Sound ecosystem recovery investments. Because this State of the Sound report assesses progress made since the 2013 State of the Sound, it refers to elements of both the 2012 and the 2014 Action Agendas. Similarly, the reporting period spans two state biennial budgets (2013-15 and 2015-17).



THIS REPORT TO THE GOVERNOR AND LEGISLATURE IS PART OF A NEW FOUR-PART FORMAT FOR CONVEYING THE STATE OF THE SOUND TO OUR MANY PARTNERS. THIS FORMAT INCLUDES THE FOLLOWING:

- This *Report to the Governor and the Legislature*, which responds to state statutory questions primarily regarding implementation of the Action Agenda.
- The *Report to the Community*, which provides a brief, high-level overview of the state of recovery in Puget Sound.
- The *Report on the Puget Sound Vital Signs*, provides a more scientific look at the progress of Puget Sound recovery. This report includes Puget Sound Ecosystem Monitoring Program findings.
- The State of the Sound website (www.psp.wa.gov/sos), which provides an online resource containing high-level findings, as well as the background, technical, and analytical work not included in the printed reports.

DEFINITIONS

The statutory requirements for reporting focus primarily on the funding and implementation of the Action Agenda. Key concepts and terms related to the Action Agenda and referred to in this report include the following:

ACTION AGENDA

A prioritized set of actions and programs for directing resources for Puget Sound recovery in an efficient and effective way. The Action Agenda development process is science-based, derived through a regionwide process that includes participation from federal, state, local, tribal, nonprofit, private, and other interests, and is managed by the Partnership through an adaptive management framework.

ADAPTIVE MANAGEMENT

The process of continuous improvement based on new data, analysis, and learning.

BIENNIAL SCIENCE WORK PLAN

An assessment of priority science for restoring and protecting Puget Sound, with research priority recommendations for the biennium. This document, which is prepared by the Science Panel to accompany biennial updates of the Action Agenda, identifies the near-term science activities and capacities needed to support ecosystem recovery and makes recommendations about how science can better support recovery.

IMPLEMENTATION STRATEGIES

These are discrete, sequenced schematic plans for achieving the Puget Sound 2020 ecosystem recovery targets. Each target is associated with at least one indicator. (See the Puget Sound Vital Sign Indicators on page 9.) The plans are designed to inform the Puget Sound Action Agenda, the Biennial Science Work Plan, and salmon recovery planning. Each Implementation Strategy accomplishes the following:

- Identifies priority approaches for achieving a specific recovery target.
- Assesses and combines elements of local and regional recovery efforts, ongoing programs, Near Term Actions from the Puget Sound Action Agenda, and ecosystem pressures from the Puget Sound Pressure Assessment (sites.google.com/site/pressureassessment/home).
- Identifies monitoring activities, research priorities, and adaptive management components.
- Identifies key geographic areas associated with the recovery target.
- Estimates costs of achieving the recovery target.

NEAR TERM ACTIONS (NTAs)

Discrete, measurable actions that clearly contribute to achieving the recovery targets and which can reasonably be accomplished within 2 years. The status of NTAs can be found on the interactive Action Agenda Report Card website (<http://gismanager.rco.wa.gov/ntaportal>) and reported in the State of the Sound: *Report to the Governor and Legislature*.

ONGOING PROGRAMS

Continuing efforts—including regulatory, oversight, technical support, guidance, or other efforts—are distinguished from Near Term Actions because they are not discrete recovery actions.

PERFORMANCE MANAGEMENT

Systems for continuous learning and aligning of management actions for the greatest beneficial outcome for the resources expended. The Partnership uses multiple tracking, learning, and implementation systems to manage performance. Tools include the Report Card, the State of the Sound, the Vital Signs, and recently initiated effectiveness work. The 2020 and interim targets provide long- and medium-range targets.

STRATEGIC INITIATIVE

Three Strategic Initiatives have been used historically to prioritize actions in the Action Agenda around the following three recovery areas:



Moving forward, the prioritization process is transitioning to a more refined approach that will rely more heavily on the Implementation Strategies.

STRATEGY

As used in the Action Agenda, this is a categorizing device to refer to a set of actions with a common approach to achieve similar goals and objectives.

SUBSTRATEGY

Like a Strategy, a Substrategy is also a categorizing device, but one layer more specific than the Strategy, providing a finer level of detail based upon which Near Term Actions can be developed.

TARGET

A quantitative milestone for recovering a specific component of the Puget Sound ecosystem. The Action Agenda specifies targets for 16 Vital Signs to be met by the year 2020, as well as interim targets for 12 Vital Signs to be met by 2014, 2016, and 2018.

- **2020 ecosystem recovery target:** The desired future condition of human health and wellbeing, species and food webs, habitats, water quantity, and water quality. The 2020 targets are policy statements that were adopted by the Leadership Council as aspirational goals to motivate and reflect the region's commitment to ecosystem recovery. They are not regulatory in nature.
- **Interim targets.** These provide shorter-term milestones for measuring progress toward the 2020 ecosystem recovery targets and inform adaptive management actions. They are aligned with the goals, indicators, and recovery targets of Vital Signs. This State of the Sound Report assesses achievement of the 2014 interim targets.

VITAL SIGNS

The Partnership tracks 21 Vital Signs to report on progress toward the six Puget Sound recovery goals established by the Legislature: healthy human population, vibrant quality of life, thriving species and food webs, protected and restored habitat, healthy water quality, and abundant water quantity. The Vital Signs represent overarching measures for determining the health of Puget Sound.

VITAL SIGN INDICATORS

This set of measures was chosen as a general gauge of Puget Sound health. These specific and measurable metrics represent associated Vital Signs. Examples of indicators include eelgrass acreage under the Eelgrass Vital Sign, Chinook salmon abundance under the Chinook Vital Sign, and the number of Southern Resident Killer Whales under the Orca Vital Sign. Each Vital Sign is represented by one or more indicators. Because many indicators are assigned quantitative targets, they provide a mechanism for measuring progress toward a specific goal. The Vital Sign indicators are used to inform policy makers and the public about the condition of the Puget Sound ecosystem at different points in time and to give us indications of trends and connections in the system.

DEPICTION OF HOW THE PUGET SOUND PARTNERSHIP RECOVERY GOALS RELATE TO VITAL SIGNS INDICATORS AND TARGETS



PROGRESS IN IMPLEMENTING THE ACTION AGENDA

“An assessment of progress by state and non-state entities in implementing the Action Agenda, including accomplishments in the use of state funds for Action Agenda implementation.” *RCW 90.71.370(3)(a)*

The ecosystem recovery strategies detailed in the Action Agenda are achieved through the implementation of hundreds of Near Term Actions (NTAs) and ongoing programs identified as necessary to drive Puget Sound toward recovery. Near Term Actions comprise the core of the Action Agenda and help bring together a wide range of regional partners to find and advance critical solutions to some of the major factors affecting Puget Sound recovery. Although NTAs alone will not deliver recovery, they complement ongoing work by focusing

efforts within a framework of agreed-upon priorities. Assessment of NTA implementation, as reported by parties responsible for the actions, thus becomes one way the Partnership monitors Action Agenda progress.

For a review of accomplishments in the use of state funds for Action Agenda implementation please refer to the section *Expenditures to affect recovery*, page 20.



PARTNERSHIP STAFF REVIEWED THE PROGRESS OF EACH NTA IN THE 2012 AND 2014 ACTION AGENDAS BY GATHERING INFORMATION FROM THE ACTION AGENDA REPORT CARD. EACH QUARTER, NTA OWNERS USE THE REPORT CARD TO DOCUMENT THE STATUS OF THEIR NTAS AS ONE OF THE FOLLOWING CATEGORIES:

- **Completed.** The action was accomplished as planned.
- **On Plan.** The action is underway, funded, and meeting milestones; it is on track to be accomplished per schedule.
- **Off Plan.** The action is underway and funded, but is missing milestones or facing minor obstacles.
- **Serious Constraints.** The action is underway, but is facing serious obstacles from one or more of the following:
 - » Lack of funding, or staff, or both
 - » Competing legislative or policy priorities (federal, state, local, or tribal governments have other priorities that are preventing this action from moving forward)
 - » Technical or regulatory constraints
 - » Other constraints
- **Not Started.** The action has not yet started because it is not yet scheduled to start or it has not received any funding.

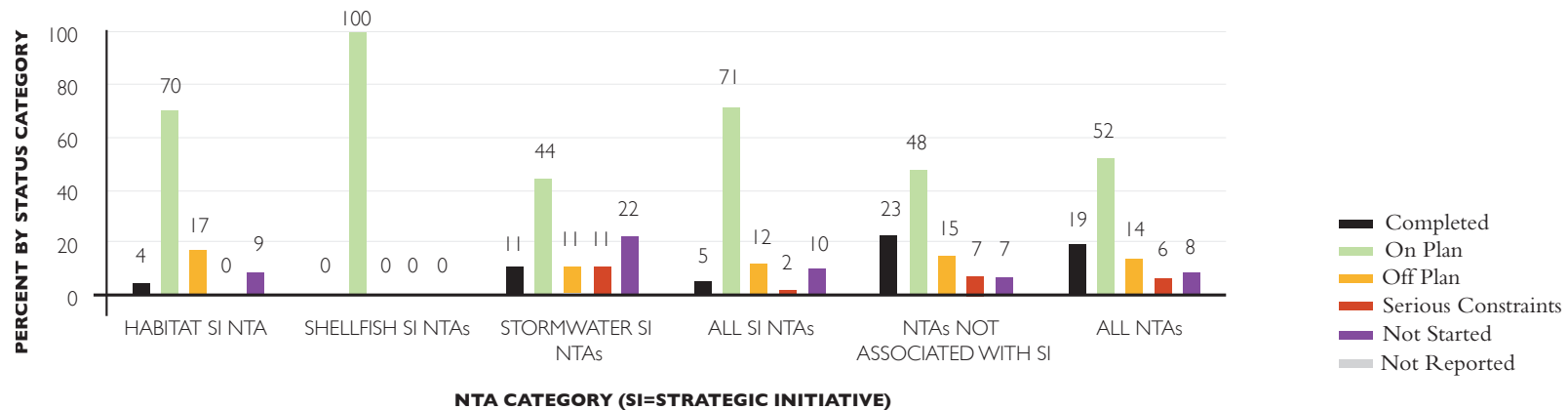
FOCUSING PRIORITY RECOVERY EFFORTS WITH STRATEGIC INITIATIVE NTAs

Strategic Initiatives were introduced in the 2012 Action Agenda to focus the region's efforts on the most significant categories of ecosystem recovery actions. Three Strategic Initiatives—preventing stormwater pollution, restoring and protecting habitat, and recovering shellfish beds—continued into the 2014 Action Agenda, which identifies work through June 2016. The charts below show 2012

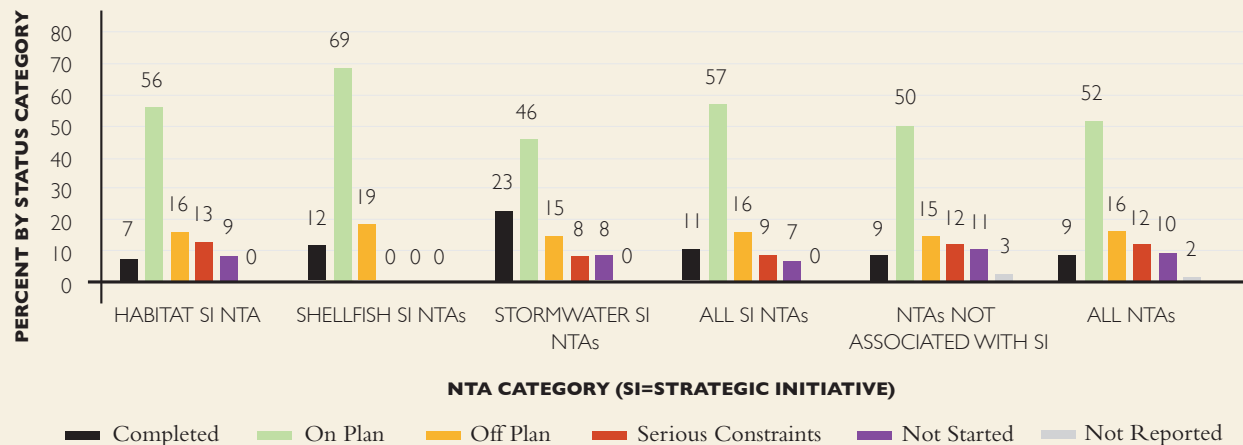
and 2014 Action Agenda NTAs and their implementation status sorted by all NTAs, Strategic Initiatives, and NTAs not related to Strategic Initiatives. The overview of 2014 NTAs is a midpoint progress check; these actions are not expected to be complete until June 2016.

For 2012, 71 percent of NTAs were in favorable status (Completed or On Plan). The actions for the 2014 Action Agenda are currently 61 percent favorable. A full analysis for 2014 NTAs will be completed in summer of 2016.

2012 ACTION AGENDA: PERCENT OF NTAs BY STATUS CATEGORY AND BY STRATEGIC INITIATIVE



**IN PROGRESS: 2014 ACTION AGENDA
PERCENT OF NTAs BY STATUS CATEGORY AND BY STRATEGIC INITIATIVE**



While the 2012 Action Agenda NTAs reflect a complete cycle, the 2014 Action Agenda NTAs are still in progress. Completion rates for these actions are expected to increase by the end of the 2-year cycle. The 2012 and 2014 results cannot be directly compared. Both charts show that a significant proportion of actions are making little or no progress.

As shown in the table below, NTAs associated with Strategic Initiatives are more likely to be either Completed or On Plan than NTAs not associated with Strategic Initiatives in both the 2012 and 2014 Action Agendas.

STATUS OF NTAs ASSOCIATED WITH STRATEGIC INITIATIVES COMPARED TO NTAs THAT ARE NOT

	STRATEGIC INITIATIVE NTAs	NTAs NOT ASSOCIATED WITH STRATEGIC INITIATIVES
2012 ACTION AGENDA JUNE 2012 – JUNE 2014	31 of 41 are Completed or On Plan	130 of 185 are Completed or On Plan
2014 ACTION AGENDA (IN PROGRESS) JUNE 2014 – JUNE 2016	50 of 74 are Completed or On Plan*	127 of 216 are Completed or On Plan*

*The time period for Near Term Actions included in the 2014 Action Agenda runs through June 2016. A complete evaluation of progress related to 2014 NTAs will be included in the 2017 State of the Sound.



ACTION AGENDA NEAR TERM ACTION EXAMPLES

NTA C9.4.1 – POLLUTION IDENTIFICATION AND CORRECTION PROGRAMS

The Washington State Departments of Health and Ecology administered U.S. Environmental Protection Agency (EPA) grants to help 12 counties and tribes set up sustainable programs to identify and correct nonpoint pollution sources to improve and protect water quality in shellfish growing areas and at marine swimming beaches. When fully developed these sustainable programs will have ongoing monitoring to identify pollution sources, assess effectiveness of efforts, secure/find/identify a sustainable local funding source, and a compliance assurance component.

This NTA is aligned with the Washington Shellfish Initiative, an agreement among federal and state governments, tribes, and the shellfish industry to restore and expand Washington's shellfish resources, to promote clean-water industries, and to create family-wage jobs. The NTA also accords with the Puget Sound Vital Sign goal for a net increase of 10,800 harvestable shellfish acres by 2020. Priority areas include Skagit County (Samish Bay) and Whatcom County (Portage Bay and Drayton Harbor), where there are a significant number of acres to recover, and where pollution correction efforts have been challenging.

NTA C2.3.1 – STORMWATER RETROFIT PROJECTS

The Washington State Department of Ecology led a process to identify high-priority projects for the retrofit of stormwater management infrastructure in the urbanized areas of King, Pierce, Snohomish, and Kitsap counties. Conceptual designs have been completed to a stage that is sufficient to seek project implementation funding. The work built on retrofit prioritization by the Washington State Department of Transportation, King County, and others, and will be replicable in other urban and suburban areas around the Sound. A Puget Sound Watershed Characterization study was used to help identify the 13 target watersheds for siting stormwater retrofit projects.

Polluted runoff has many serious effects on the ecosystem. For instance, researchers have shown that contamination in road runoff is killing salmon before they can spawn. Stormwater retrofit programs are designed to improve stormwater in target areas where stormwater is currently untreated or inadequately treated. These programs benefit a number of Puget Sound Vital Signs: Fresh and Marine Water Quality, Marine Sediment Quality, Toxics in Fish, Chinook Salmon, Shellfish, and Swimming Beaches.

KEY OBSERVATIONS AND LESSONS LEARNED FROM IMPLEMENTING THE ACTION AGENDA

Near Term Actions in the 2012 and 2014 Action Agendas were expected to be implemented in a 2- to 3-year time frame. However, most of the 2012 Action Agenda NTAs were not completed in 2 years, and more than 25 percent made insufficient or no progress at all. Analyzing progress and debriefing with partners have helped us identify important lessons.

ABOUT NTA DEVELOPMENT

- NTAs need to be narrowly tailored and well-defined in scope to clearly be able to be accomplished in a 2-year implementation period.
- Efforts to increase engagement with local communities succeeded, resulting in a 28 percent increase in NTAs between the 2012 and 2014 Action Agendas. This has increased the need for more planning, tracking, accountability, and management resources to properly support the system.

ABOUT NTA IMPLEMENTATION

- Lack of funding and resources is the most commonly cited barrier to progress.
- Factors observed or cited for enabling success:
 - » Increased attention for the NTA due to its inclusion in the Action Agenda
 - » Development of systems to make information easily accessible
 - » Establishing a manageable scope
 - » Presence of collaborative partners
 - » Alignment of diverse groups to share knowledge
 - » Finding mutually beneficial solutions
 - » Support from elected officials and boards
 - » Being willing and able to pursue opportunities as they arise
 - » Presence of individual champions for each project
 - » Use of neutral convener(s)
 - » Presence of a dedicated team to implement and support actions
- NTAs categorized as Strategic Initiatives were more often categorized as On Plan but were not completed at a higher rate.
- Some local NTAs involved partners working at different speeds and levels of funding, making it difficult to fully implement the NTA.
- The need for broad consultation in decisionmaking slowed implementation of NTAs.

ABOUT NTA EVALUATION

- Existing NTA performance measures were not always adequate for measuring progress.
- Levels of detail on quarterly reporting of NTA status data were not consistent across different owners.
- Scope and direction of NTAs often evolved from how they were originally written.

RECOMMENDATIONS FOR IMPROVING THE 2016 ACTION AGENDA

Partnership staff are using the lessons learned, as noted above, to improve the strategic planning of recovery efforts, especially in the development of the 2016 revision of the Action Agenda. Specific recommendations being carried forward into the Action Agenda planning include the following:

NTA DEVELOPMENT

- Produce better-designed, discrete, and achievable actions that satisfy specific criteria for NTA adoption.
 - » Encourage identifying phases for activities or projects expected to take longer than 2 years.
 - » Request a provisional cost estimate during the action development phase to aid evaluation as to whether an NTA will be achievable in the 2-year timeframe. This also provides a preliminary indication of the cost of the Action Agenda, which helps with the alignment of resources.
 - » Anticipate the capacity of partners and consultation needs when planning NTAs that can be realistically accomplished within 2 years.
- Ensure NTA reporting and evaluation resources are commensurate with the number of NTAs.
- Focus the Action Agenda more closely around the Strategic Initiatives and better align funding with them.
- Support NTA owners in using models and best practices from other successful projects, to the extent possible.



EFFECTIVENESS OF ACTION AGENDA IMPLEMENTATION

Assessment of effectiveness of specific actions or projects is another way the Partnership is able to measure Action Agenda implementation. This work answers a deeper question about how effective actions are and what the successes, challenges, or barriers are rather than simply whether they have been implemented or not.

To date, the Partnership has evaluated several restoration projects for each of the three Strategic Initiatives: Shellfish Restoration in the Samish Basin; Estuary Restoration in the Nisqually, Snohomish, Skagit, and Skokomish river deltas; and Stormwater Pollution Reduction in the City of Seattle.

Results of effectiveness studies are being communicated to decisionmakers as they plan the next round of recovery actions. The lessons emerging from these effectiveness studies will make future investments more effective, both in terms of cost and outcomes.

LESSONS LEARNED ABOUT EFFECTIVE HABITAT RESTORATION

For all estuary restoration projects, investigators documented the immediate use of newly created habitat by salmon and other species. For example, Skagit River restoration efforts added habitat to support an estimated 106,000 young Chinook every year. Lessons learned about effective habitat restoration are:

- To support habitat formation, ensure a source of sediment and the channel structure to retain it.
- Test new drainage infrastructure before removing old dikes.
- Control invasive plants so native plants can take hold.

More information about the Partnership's effectiveness monitoring program is available on our website: www.psp.wa.gov

NTA IMPLEMENTATION

- The larger role of the Partnership (see page 6) is designed to support partners by creating the conditions associated with their success, including the following:
 - » Procuring and aligning resources
 - » Bringing attention to their high priority needs
 - » Defining mutually beneficial solutions with other partners
 - » Getting support from elected officials and boards
 - » Mobilizing collaborative partners and workgroups and being a neutral convener
 - » Helping partners be nimble and responsive as conditions for success arise

NTA EVALUATION

- Continue to improve performance measures that provide meaningful and actionable information.
- Enable rigorous oversight of reporting through more focused NTAs and reduce the probability of significant divergence from the original scope.

ACTIONS INCONSISTENT WITH THE ACTION AGENDA

“ A description of actions by implementing entities that are inconsistent with the Action Agenda and steps taken to remedy the inconsistency.”
RCW 90.71.370(3)(b)

To ensure the regional consensus on the priorities for recovery, the Puget Sound Partnership uses extensive partner engagement in the development of the Action Agenda. Engaging partners early reduces the need for corrective action due to noncompliance with the Action Agenda. In addition, the Partnership supports multiple avenues for checks and balances, such as the state budget ranking exercise detailed in the expenditures section (see page 20 and Appendix 3).

As a science-based organization, the process of inquiry, learning, and adaptively managing to ensure better results is infused throughout the Partnership's practices. One such practice involves the Report Card forums held periodically at Leadership Council meetings. These forums are designed with an emphasis on the oversight roles envisioned in RCW 90.71.350(2), focusing on providing the support for any necessary course adjustments rather than assessments of noncompliance. To date, neither the forums, nor the performance evaluations leading up to them, have resulted in any determination of substantial inconsistency with the Action Agenda.

REPORT CARD FORUMS

The Partnership's Leadership Council invites partners to participate in Report Card forums based on information about successes and challenges in implementing ecosystem recovery actions. These forums engage partners who are responsible for implementing recovery actions in discussions about successes, barriers to progress, potentially inconsistent actions, and assistance needed to advance their work.

Since late 2013, the Leadership Council has convened Report Card forums addressing a variety of issues: water resources and habitat, salmon recovery, pollution identification and correction programs, and shoreline armoring. The discussions at the forums have identified successes that might be replicated elsewhere, such as overseeing hard armoring of shorelines through permitting as a conditional use. The forums have also highlighted key implementation challenges, such as motivating homeowners to remove or forego shoreline armoring.

As a direct result of these forums, the Partnership focused attention—and funding—on a selection of Near Term Actions in the 2012 Action Agenda that were behind schedule and in need of extra support. This additional support led to the completion of actions that would have remained unaddressed without the emphasis provided by the forums. Examples include the following:

- A review of common constraints and opportunities in county-level strategies provided the basis for recommendations for keeping agricultural lands in production and benefiting ecosystem recovery.
- Legal exemptions related to shoreline and habitat effects on salmon have been identified and are being considered by the Salmon Recovery Council and Northwest Indian Fisheries Commission.
- A new geographic information system tool was developed so partners can identify priority shoreline areas for protection.

SCIENCE PANEL COMMENTS ON IMPLEMENTATION AND FINDINGS FROM MONITORING

“Comments by the Science Panel on progress in implementing the plan, as well as findings arising from the assessment and monitoring program.”
RCW 90.71.370(3)(c)

The Science Panel is charged with advising the Partnership on the selection of performance indicators, providing input on implementation strategies, addressing information needs, and recommending scientific research priorities. In this capacity, the Science Panel supports the 2015 State of the Sound report as the best available information on progress toward implementing the Action Agenda and status of Vital Sign indicators.

Science Panel comments are summarized below. The full text of the panel's comments can be found starting on page 34. A table with the status of Vital Sign indicators can be found on page 38.

SUMMARY OF THE SCIENCE PANEL COMMENTS FOR THE 2015 STATE OF THE SOUND

These Science Panel comments address three key objectives:

- How the ecosystem is doing in the context of progress toward the 2020 goals.
- How the Partnership is doing in advancing the Action Agenda and tracking expenditures and accomplishments.
- How well recovery efforts are linked to ecosystem status.

Overall, the Science Panel is encouraged by the following:

- The progress in recovery of the Puget Sound ecosystem in key areas.
- That more than 70 percent of the Near Term Actions are complete or moving forward.
- The progress in linking ecosystem status to recovery efforts.

However, many Vital Signs have not changed or are even deteriorating relative to the goals. Given these findings, the Science Panel notes additional actions are needed to maintain and increase the rate of recovery.

The Science Panel also notes that future NTAs can be improved by matching their scale to the 2-year implementation period, and by ensuring that the number of NTAs does not expand beyond the region's capacity to fund and complete within the 2-year implementation window.

Adaptive management, the process of continuous improvement based on new data and analysis, is the approach the Science Panel strongly endorses for ecosystem recovery and recommends that it be supported accordingly. To date, the Partnership's adaptive management approach has been inconsistently applied, partly due to inadequate resources. As a key step in implementing adaptive management, the completion of Implementation Strategies for each target should be a high priority, while recognizing a phased approach to developing the strategies. The deployment of conceptual models that describe the mechanisms, cause and effect pathways, and actions by which recovery targets are to be met can aid the effectiveness of an adaptive management approach.

It is worth noting that in many ways the Puget Sound region is leading the country in ecosystem recovery, especially in incorporating human wellbeing explicitly into the science and implementation of recovery actions. As we look beyond 2020, the region can expect to have a stronger scientific foundation for recovery and a rich set of information to chart the course for the next phase of restoring the Sound and building the ecosystem resilience to adapt to climate change.



KEY MESSAGES FROM THE 2015 STATE OF THE SOUND: REPORT ON THE PUGET SOUND VITAL SIGNS

The evaluation of change over time for Vital Sign indicators reveals varied results:

- 10 indicators are getting better
- 6 indicators are not changing
- 4 indicators have mixed results
- 5 indicators are getting worse
- 12 indicators have no data available to evaluate progress

Four indicators are already meeting or nearly meeting 2020 targets:

- Rate of septic systems inventory
- Rate of forest loss
- Marine Sediment Triad Index
- Marine Sediment Chemistry Index

The majority of Vital Sign indicators are, at best, only slowly changing. Few are at—or even within reach of—their 2014 interim targets. Therefore, there is little evidence they are on a trajectory to reach the 2020 targets. However, there has been some progress in some indicators and at more local scales.

- Evaluation of progress for each Puget Sound ecosystem recovery goal shows that indicators of the Protecting and Restore Habitat goal are making the most advances. None of the indicators for the Thriving Species and Food Webs are getting better.
- The two Vital Sign indicators that report on pressures in Puget Sound—land development and shoreline armoring—also show varied results. The conversion of ecologically important lands to human development has increased in recent years. Shoreline armoring continues to occur in Puget Sound, potentially damaging shoreline habitat. However, for the first time, results from permit data suggest that shoreline armoring is slowing down and that more armoring was removed than added in 2014.
- Abundant Water Quantity is measured by the summer low flow indicator, which shows improvement for this report. However, the data for this year's report do not include the flows for the summer of 2015, a year with unusually warm weather and record low snowpack. The unusual conditions in 2015 may change the outlook of this indicator in the future and may offer insights into challenges the Puget Sound ecosystem will face related to climate change.

More information is available in Appendix 2, in the *2015 State of the Sound: Report on the Puget Sound Vital Signs*, and in the Vital Signs material available at www.psp.wa.gov.

CITIZEN CONCERNS AND THEIR DISPOSITION

“A review of citizen concerns provided to the Partnership and the disposition of those concerns.” *RCW 90.71.370(3)(d)*

The Puget Sound Partnership Leadership Council and staff conduct meetings throughout the region and incorporate opportunities for public comment and interaction. In 2014 and 2015, citizen comments focused on the following:

- Preventing oil spills.
- Improving funding distribution systems and the funding of local recovery actions.
- Encouraging use of riparian buffers as approved by the National Marine Fisheries Service for projects funded through the National Estuary Program.

In prior years, the Partnership received comments about updating the regulation of toxic chemicals to reflect new information about the amount of fish eaten by Puget Sound residents, especially tribal members. Since the discussion on the regulation of toxic chemicals extended into the timeframe for this report, it is included in the issues and responses described below.

In response to these comments, the Leadership Council conducted several followup briefing sessions, worked with partners and Partnership staff to address issues raised, and took appropriate actions based on additional information and recommendations.

PREVENTING OIL SPILLS

People throughout Puget Sound are responding to proposed projects and changes in operations that would increase vessel traffic for oil transport and increase the risk of a catastrophic spill. Members of the public commented on the rail accidents that have occurred from accelerated extraction of Bakken shale oil in the mountain states, oil sands deposits in central Canada, and anticipated future increases from oil exploration off the coast of Alaska. Experts have noted that increased traffic in the Salish Sea significantly increases the risk of an accident—even a relatively minor spill of vessel fuel would impact, possibly catastrophically, already imperiled species and habitat.

The Leadership Council held a focused workshop on oil spill prevention issues in the fall of 2014. Speakers included representatives of the Makah Tribe, state

Department of Ecology, local government, U.S. Coast Guard, and public interest groups. The Leadership Council praised the work that had been completed to date and urged all participants to continue their collaboration, including continuing ongoing discussions with industry and marine terminal proponents. Based on a request from the San Juan Local Integrating Organization, the Leadership Council approved inclusion of a specific Near Term Action in the 2014 Action Agenda: “Evaluate oil spill response capability in the San Juan Islands and adjacent waters.” This Near Term Action supports efforts by the San Juan Local Integrating Organization to coordinate partners in evaluating oil spill response capability in the islands and adjacent waters and report about deficiencies, as well as recommendations for addressing any shortcomings.

In spring 2015, the Legislature passed the oil transportation safety bill (ESHB 1449, Chapter 274, Laws of 2015). The original bill as proposed by the Governor included new safety requirements for transportation of oil by rail, additional safeguards for marine transportation of oil in Puget Sound, and an increase in the barrel tax on oil. As enacted, the legislation includes new safety requirements for oil transportation by rail, but not for marine transportation of oil in Puget Sound. It extends the barrel tax to oil shipped by rail, but doesn’t increase the tax rate. It adds financial responsibility requirements for shippers of oil by rail, requires advanced notice of rail shipment of oil, and requires oil spill contingency planning for railroads carrying oil. The bill also expands requirements for the preparation of local emergency response plans and authorizes grant funding assistance to jurisdictions for this planning. As required by the 2015 – 17 State Budget, the state Department of Ecology has hired a full time Marine Risk Manager and is undertaking an effort to update the Puget Sound Vessel Traffic Risk Assessment over the next two years.

IMPROVEMENT OF FUNDING DISTRIBUTION SYSTEMS AND THE FUNDING OF LOCAL RECOVERY ACTIONS

In 2013 and 2014, the Partnership’s Leadership Council heard considerable testimony and received other communication regarding the manner of distribution of National Estuary Program funding for local actions. Several of the Local Integrating Organizations asserted, among other things, that the funding model

used by the U.S. Environmental Protection Agency (EPA) favored projects sponsored by state agencies and that the process of responding to proposals issued by Lead Organizations (primarily state agencies) was onerous for local governments.

U.S. EPA Region 10 and the Partnership initiated in-depth subsequent conversations with partners in the region to consider possible changes to the proposed funding model. The model proposed by the EPA in March 2015 changed the funding approach to align with the Action Agenda. The EPA tasked the Partnership as a neutral, non-regulatory body with a significant role in planning, synchronization, managing, and monitoring the recovery funding system. The model is designed to address the concerns raised by the public and local governments. As of fall 2015, the Partnership is working with all of the interests in the region to implement this new approach, which is supported by a major revision of the Action Agenda planning process for 2016.

USING RIPARIAN BUFFERS

Partners in the region have been working to address concerns expressed by Puget Sound tribal nations and others about grant or incentive programs that support projects on agricultural lands without requiring what they consider to be adequate riparian buffers along surface waters. Riparian areas and the lands adjacent to them are critical for filtering pollutants from stormwater runoff and providing habitat function, such as shade that keeps water temperatures cool. The tribes assert that failure to require adequate buffers is inconsistent with tribal treaty rights.

In response, the EPA, working with state agencies, proposed that funded projects would be guided by interim riparian management recommendations developed by the National Marine Fisheries Service, and recommended varying sizes of riparian buffers, depending on site-specific conditions. The buffer recommendations would apply to use of grant funds on all agricultural land regardless of the owner.

On the other hand, a variety of concerns were expressed to the Leadership Council regarding the scientific validity of the proposed wider buffers, the hardship on landowners, and the potential loss of quality projects because landowners would not be willing to accept funding with the new conditions.

The Leadership Council conducted several expert panel discussions and workshops in 2014 in response to concerns raised by members of the public, state and federal agencies, and representatives of the Northwest Indian Fisheries Commission. On July 9, 2014, the Leadership Council adopted Resolution 2014-02 on Funding

Alignment with Salmon Recovery. The resolution recommends the application of the interim riparian buffers (the wider, more water-quality protective buffers) to voluntary incentive programs. It also urged partners to continue working together to examine other approaches to implement buffers that would be scientifically supportable, mutually agreeable, and achieve all water quality standards for salmon and shellfish recovery. The resolution also supports public outreach, technical assistance, and education efforts consistent with meeting water quality goals. The resolution urges better data collection by agencies administering voluntary incentive programs to ensure program accountability.

REDUCING THREATS TO HUMAN HEALTH FROM TOXIC CHEMICALS IN PUGET SOUND FISH

Toxic chemical pollution of marine and freshwater systems is one of the Sound's most critical threats because it harms the health of fish and wildlife and limits people's ability to enjoy clean, healthful fish and shellfish harvested locally. In 2012 and 2013, Leadership Council meetings included regular opportunities for Department of Ecology staff to brief the council on the department's work to update the regulation of toxic chemicals to reflect new information about the amount of fish eaten by Puget Sound residents, especially tribal members. Reflecting significant public concern about this issue, the Council invited a presentation in July 2013 from Dr. Elaine Faustman, University of Washington School of Public Health, about public health issues related to fish consumption. In September 2014 a representative of the Governor's Office briefed the Leadership Council about Governor Inslee's initiative for improved control of toxic chemicals. In the 2015 Legislative Session the Partnership testified in support of House Bill 1472, which would have enacted key elements of the Governor's initiative. The 2015 Legislature did not pass this bill.

OTHER CONCERNS

The Leadership Council also received public comments on the following issues, but no specific responses or actions from the Leadership Council were requested:

- Loss of a newborn orca and the need to address causation.
- Proposed "No Discharge Zone" for boats in Puget Sound to address discharge of sewage.
- Impacts of the proposed Gateway Pacific Terminal in Whatcom County.
- Proposed modification of Capitol Lake in Olympia, with loss of its historic values and impacts to the community.
- Lack of progress in reducing contamination by the Clean Samish Initiative.

EXPENDITURES TO AFFECT RECOVERY

“ A review of the expenditures of funds to state agencies for the implementation of programs affecting the protection and recovery of Puget Sound, and an assessment of whether the use of the funds is consistent with the Action Agenda.” 90.71.370(3)(e)

Requests for state agency projects and programs promoting Puget Sound recovery include a budget package prioritization process led by the Partnership. The Partnership provides the Governor, the Office of Financial Management, and legislative fiscal committees with a ranked list of state agency budget proposals that impact Puget Sound recovery. This ranking provides an objective measure of the extent to which a proposal for funding to a state agency is consistent with the science-based priorities of the Action Agenda. The same process occurs in reverse for budget cuts, in which case the Partnership also ranks these projects to minimize damage to Puget Sound from potential cuts in programs and resources.

For the 2015 – 17 biennium, the Governor proposed a budget that included \$715 million of funding with positive impacts for Puget Sound recovery; the Legislature enacted \$578 million for that purpose, including funding for eight of the top ten projects, as ranked by the Partnership. Further information about the ranking of Puget Sound related budget requests can be found in Appendix 3. More State of the Sound materials related to Action Agenda funding are also available at www.psp.wa.gov/sos.

The following pages are examples of accomplishments in advancing Action Agenda priorities that are consistent with the budget prioritization process and subsequent funding.



MAJOR PROJECTS THAT HAVE ADVANCED WITH PUGET SOUND ACQUISITION AND RESTORATION FUNDING INCLUDE THE FOLLOWING:

HABITAT RESTORATION AND REMOVAL OF SHORELINE ARMORING

The Seahurst Park Shoreline Restoration (\$3.5 million PSAR funds), led by the City of Burien, was the first regional PSAR project funded through the 2013 state budget to break ground. The Seahurst Park project was identified by the Watershed Resource Inventory Area (WRIA) 9. The City and U.S. Army Corps of Engineers coordinated resources to remove 1,800 feet of hard shoreline armoring and restore 2,800 feet of shoreline habitat for salmon and trout, as well as improve many recreational features at the City of Burien park where this project was located.

SNOHOMISH WATERSHED MEETING 10-YEAR TARGET

Qwuloolt Estuary Restoration (\$1.5 million PSAR funds) led by the Tulalip Tribes and the Smith Island Restoration Project (\$6.35 million PSAR funds) led by Snohomish County are nearing conclusion and together will result in achieving the 10-year, 1,237-acre target for restoring estuarine habitat as outlined in the 2005 Snohomish Basin Salmon Recovery Plan.

PUGET SOUND ACQUISITION AND RESTORATION PROJECTS

Below are state budget allocations secured by the Puget Sound Partnership and Recreation and Conservation Office:

- 2011:** In 2011 the Partnership was not involved in the ranking of budget proposals.
Funds appropriated: \$15 million
- 2013:** Ranked 2nd of 55
Funds appropriated: \$70 million
- 2015:** Ranked 2nd of 88
Funds appropriated: \$37 million

The fund for Puget Sound Acquisition and Restoration (PSAR) projects was created to help implement the most important, science-based habitat protection and restoration priorities for Puget Sound that support ecosystem functions and processes important to salmon. Funding goes to a variety of projects, such as removing barriers to fish migration, replanting stream banks, removing dikes and levees, and protecting quality habitat. Project sponsors invest in the cost of each project by providing local matching investments to leverage state and federal investments. For examples of projects, see page 20.

FLOODPLAINS BY DESIGN

Below are state budget allocations secured by the Department of Ecology:

- 2013:** Ranked 17th of 55
Funds appropriated: \$38.8 million
- 2015:** Ranked 10th of 88
Funds appropriated: \$35.56 million

Floodplains by Design exemplifies the multi-benefit approach promoted by the Partnership. It is a program of the Department of Ecology that is supported by the Puget Sound Partnership, The Nature Conservancy, and others. This public-private partnership is working to reduce flood risks and restore habitat along Washington's major rivers. Floodplains by Design funding provides grants to tribes, local governments, and nongovernmental organizations for projects that

restore habitat conditions in floodplains and reduce flood risks for the surrounding communities.

The results of Floodplains by Design were quickly and visibly felt. During a January storm in 2009, the Puyallup River flooded significantly, and at least 26,000 people were temporarily displaced in one of the largest evacuations in history. By reconnecting the side channels, moving 1.5 miles of the levee back to more than double the width of the river, and installing log jams that added river complexity and shoreline protection, the Calistoga Reach Floodplains by Design project has helped dramatically reduce risk for the City of Orting and surrounding communities. When a similar flood level was reached in November of 2014, after project implementation, only a handful of residents had to be evacuated. The project also provided habitat for endangered salmon in the Puyallup River.

OIL TRANSPORT STUDY

Below are state budget allocations secured by the Department of Ecology:

- 2014:** Ranked 5th of 16
Funds appropriated: \$300,000

The Legislature approved an oil transport study as a way to assess public health and safety as well as the environmental effects of oil spills. This work provided data and analysis of statewide risks and gaps, identified options for increasing public safety, and improved spill prevention and response readiness.

The resulting Vessel Traffic Risk Assessment, completed in 2014, provided a snapshot of ship traffic in Puget Sound, including the jointly managed waterways between the United States and Canada. It is an important tool with which to examine the potential risks posed by proposed shipping projects, either individually or when combined.

The Vehicle Traffic Risk Assessment can be used to show the relative effects on risk to the traffic system as a whole or to focus on a particular waterway. The resulting model allows us to simulate the effects of applying possible methods of reducing risk—including lowering ship speeds or increasing the availability of assist or escort tugs—to reduce the risk of accidents or spills.

FUNDING ACTION AGENDA NTAs

By tracking Near Term Action budget appropriations and expenditures in the Puget Sound Report Card, the Partnership can demonstrate that the use of funds described above was not only consistent with the Action Agenda, but also directly implemented the Action Agenda.

Analyses of Completed and On Plan NTAs, versus Off Plan, Serious Constraints or Not Started NTAs, show funding or lack of funding to be major factors in predicting whether a Near Term Action will be successful. The table below outlines estimated costs for the 2012 and 2014 Action Agendas compared with actual expenditure for each.

PUGET SOUND RECOVERY PROJECTS, BY THE NUMBERS (\$)

	2012-13 ACTION AGENDA	2014-15 ACTION AGENDA
TOTAL OF NTA COST ESTIMATES	\$679 million	\$875 million
INDIVIDUAL NTA COST ESTIMATE RANGE	\$1,000 to \$360 million	\$2,000 to \$163 million
NTA MEDIAN COST	\$240,000	\$352,000
NTA ACTUAL EXPENDITURE	As of June 2014: \$294 million*	As of June 2015: \$67 million**
FUNDING GAP	57 percent shortfall (\$385 million)	67 percent shortfall***

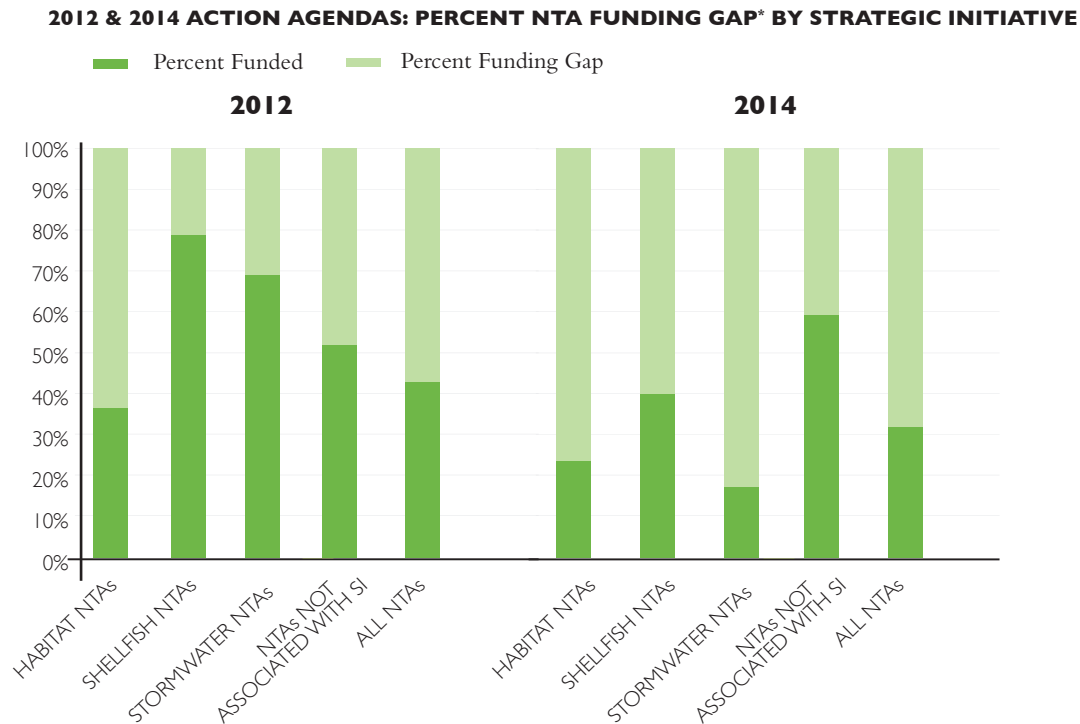
* Includes the amount budgeted for FY 2015 as a proxy for actual expenditure in FY 2015.

** FY 2015 estimate based on 190 of 290 NTAs

*** Based on FY 2015 expenditures and FY 2016 and 2017 budgeted amounts for 190 of 290 NTAs

Median costs to implement the Action Agenda's Strategic Initiatives are significantly higher than costs for NTAs not associated with the Strategic Initiatives. However, defining the three Strategic Initiatives has proved effective in driving investments toward those actions. While just 18 percent of all 2012 NTAs were associated with the Strategic Initiatives, the Strategic Initiative NTAs received 55 percent of the available funding.

The chart below shows the percentage of the different types of actions in the 2012 and 2014 Action Agenda that were funded. The chart clearly demonstrates that we continue to experience significant shortfalls in funding that limit our ability to implement important recovery actions.



*The funding gap is calculated as the difference between the estimated cost and the actual expenditure or appropriated budget. The funding gap for the 2014 Action Agenda is based on a sample of NTAs.

FUNDS PROVIDED TO THE PARTNERSHIP

“An identification of all funds provided to the Partnership.”

RCW 90.71.370(3)(f)

The Partnership’s operating budget consists of state funds from the following accounts: General Fund, Aquatic Land Enhancement Account, and the State Toxic Control Account. These funds are used primarily to meet matching obligations for federal grants. Even when available funds are leveraged for maximum advantage, the funding available to the regional recovery effort currently represents only a fraction of the total determined necessary to meet the regional recovery challenge.

2013–15 BUDGET

For the 2013–15 biennium, the state allocated \$7.4 million to the Partnership’s operating budget. This included a one-time allocation of about \$1.5 million to support the following:

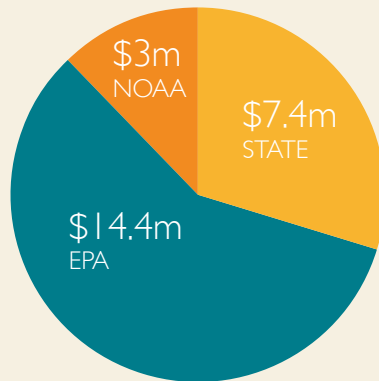
- A juvenile steelhead marine survival study conducted by the Washington State Department of Wildlife.
- System-Wide Improvement Framework pilot projects in King and Whatcom counties (related to vegetation management on levees).
- A study on the roles of local watershed and salmon recovery organizations implementing the Action Agenda.

The Legislature appropriated authority to the Partnership in the state capital budget for a one-time, \$1.6 million Community Partnership Restoration grant from the National Oceanic and Atmospheric Administration (NOAA) that began in the 2011 – 13 biennium and ended June 30, 2015. This grant funded several capital projects through an interagency agreement with the state Recreation and Conservation Office (RCO).

In addition, the EPA awarded the Partnership three grants totaling \$14.4 million. This included \$5 million to be passed through to local entities. The Federal Fiscal Year (FFY) 2015 Partnership allocation constituted the last installment of supporting a 6-year work plan initiated in 2008. The funds received by the Partnership were part of a larger allocation of \$24.9 million in FFY 2014 and \$27.9 million in FFY 2015 to the Puget Sound region.

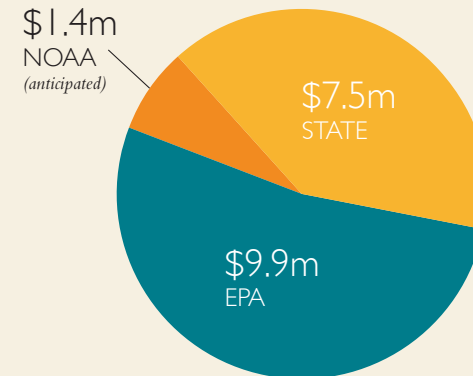
The Partnership is the federally designated Puget Sound salmon regional recovery organization and received \$1.4 million in federal funds from NOAA through an interagency agreement with the Recreation and Conservation Office. In this role, the Partnership works closely with local watersheds and the Salmon Recovery Funding Board to identify and prioritize projects for salmon recovery funding. Funding criteria are established based on salmon recovery plans approved by NOAA.

2013 – 15 BUDGET



TOTAL: \$24.8 MILLION

2015 – 17 BUDGET



TOTAL: \$18.8 MILLION

2015-17 BUDGET

In the 2015 – 17 biennium, the Legislature appropriated \$7.5 million to the Partnership’s operating budget. This includes one-time funding of \$600,000 for Chinook salmon monitoring and \$125,000 for improving shoreline armoring data. The Partnership also received \$879,000 for assessing recovery, which supports the agency’s ability to measure outcomes. The Partnership anticipates federal revenue from NOAA to remain consistent at \$1.4 million.

Federal revenue from the EPA is reduced from \$14.4 million to \$9.9 million due to two factors: less carry-forward funding available from existing EPA federal grants, and the end of a 6-year grant agreement with EPA for the Stewardship Program. The Stewardship Program funded the Partnership’s support of such activities as behavior change and awareness programs and advancement of Puget Sound-related public school curricula.

More information about federal funding at the regional level for Puget Sound recovery is available at www.psp.wa.gov.

RECOMMENDATIONS FOR FUNDING TO MATCH ACTION AGENDA PRIORITIES

“Recommendations as to how future state expenditures for all entities, including the Partnership, could better match the priorities of the Action Agenda.”
RCW 90.71.370(3)(f)

In 2014, under new leadership, the Partnership worked closely with regional and local partners and the EPA to incorporate the learning described throughout this document into a more narrowly focused, strategic approach to recovery. This approach focuses the role of the Partnership on responsibilities that are fundamental to empowering and optimizing the collective action of the region—the shared agenda, shared measurements, and the enabling and empowering of partners.

The Action Agenda is the region's shared roadmap designed to align actions, eliminate waste and redundancy, and create a science-based marketplace where funding for recovery goes to the actions that achieve the best results. This approach is intended to maximize the outcomes achieved with the limited resources available, recognizing that these resources are not adequate to meet the current challenges.

For this system to work, the Partnership depends on the engagement and support of a wide range of partners, including other state agencies, legislators, and the executive branch. Supporting and aligning all actions, including legislation and funding, with the Action Agenda will be critical for getting the job done.

2014 ECB FUNDING STRATEGY SUMMARY

The Partnership's Ecosystem Coordination Board (ECB)—the body designed to represent the broader Puget Sound community in an advisory capacity to the Partnership—commissioned a study to identify a strategy for long-term funding of the Strategic Initiatives. The board's finance subcommittee worked with economic consulting firms ECONorthwest and Evergreen Funding Consultants to create a plan that describes the funding need, priorities, current situation, and gap for each Strategic Initiative. The findings are summarized below.

	HABITAT INITIATIVE	SHELLFISH INITIATIVE	STORMWATER INITIATIVE
FUNDING PRIORITIES	Projects already prioritized via salmon recovery plans and 3-year action plans at the Water Resource Inventory Area (WRIA) level.	Repair and replace under-performing septic systems and control nonpoint source pollution from farms in the Puget Sound region.	High-efficiency street sweeping for pollutant and sediment removal, cleaning existing stormwater systems for removal of legacy loads, and high-priority retrofits.
CURRENT FUNDING SOURCE	Federal and state sources, with local and tribal matching.	Private, with some state and federal contributions via below-market loans and limited grants.	Local governments and private developers, with additional state and federal funding for high-priority projects.

	HABITAT INITIATIVE	SHELLFISH INITIATIVE	STORMWATER INITIATIVE
FUNDING NEED	<ul style="list-style-type: none"> • WRIA prioritized projects: \$196 million/year • Floodplains by Design: \$50 to \$70 million/year • Culvert retrofit program: \$150 million/year <p>TOTAL: \$400 million/year</p>	\$40 to \$55 million/year	Not well defined, but very large—greater than \$5 billion to retrofit older stormwater facilities and comply with National Pollutant Discharge Elimination System regulations
CURRENT SPENDING	\$50 to \$60 million/year average over past 10 years*	<ul style="list-style-type: none"> • \$4.5 million EPA funding • \$1.9 million shellfish food safety • \$1.4 million Washington Department of Natural Resources shellfish program • \$6.5 million in county spending 	\$425 to \$575 million spent, but total cost was \$490 to \$690 million, with utility revenues \$306 million/year
FUNDING GAP**	\$300 million/year, mostly for culvert repair and replacement	Less than \$40 million/year	\$100 to \$250 million/year (to fund street sweeping, legacy load removal, and high-priority road retrofits)

* 2013–15 increased to \$75 to \$85 million/year to fund Floodplains by Design

** Cost per year over 100 years

	HABITAT INITIATIVE	SHELLFISH INITIATIVE	STORMWATER INITIATIVE
ISSUES TO CONSIDER	<p>Funding commitments have been significantly below the funding levels proposed in the federally approved National Marine Fisheries Service 2005 Puget Sound Chinook Salmon Recovery Plan.</p> <p>A 50- to 100-year commitment to salmon recovery cannot be accomplished on an annual and biannual funding level.</p> <p>Greater dependability is needed in culvert funding to satisfy the 2013 court injunction.</p> <p>Some of the most robust salmon populations occur in areas that have low human populations and limited urban development, which means a low tax base and very limited funding for local match for state and federal sources.</p>	<p>More dependable revenues needed to fund septic improvements and county health programs.</p> <p>Heavy reliance on individual landowners to make improvements.</p>	<p>Wide disparity in revenues between jurisdictions.</p> <p>Comprehensive analysis of need and cost has not been conducted.</p>
	<p>Limited flexibility in current funding sources persists at all levels of government. The most encouraging is the idea of coordinated investment, as in the example of Floodplains by Design.</p>		

REPORT RECOMMENDATIONS TO ADDRESS THE FUNDING GAP

The funding strategy report concludes with eight overarching recommendations that address the collective funding gap. These recommendations and the efforts to implement them are briefly summarized below.

FUNDING RECOMMENDATIONS	PROGRESS
<p>1. Support the continuation of federal and state funding sources that currently fund the implementation of the three Strategic Initiatives and the Action Agenda, with particular emphasis on funding the Habitat Initiative. Federal sources include the Environmental Protection Agency's Geographic Programs and National Estuary Program, the National Oceanic and Atmospheric Administration's Pacific Coastal Salmon Recovery Fund.</p> <p>State funding sources include Puget Sound Acquisition and Restoration, Estuary and Salmon Restoration Program, Floodplains by Design, Salmon Recovery Funding Board grant programs, and Department of Ecology water quality grants and loan programs.</p> <p>The recommendations stress the need to fund habitat activities as the gap in that area is larger relative to shellfish and stormwater related actions.</p>	<p>In the 2015 Legislative Session, Partnership staff, and board members met with individual legislators to personally explain how adequately funding habitat restoration provides multiple benefits to people, as well as to Puget Sound health. Through one-on-one conversations, support was increased for funding habitat recovery programs such as the Puget Sound Acquisition and Restoration fund, Floodplains by Design, and the Estuary and Salmon Restoration Program. (See Appendix 3.) Notwithstanding these efforts, the amounts allocated through the State budget process are not and have not historically been adequate to make enough progress on implementation of the Action Agenda to achieve the Puget Sound recovery goals established by the Legislature.</p>
<p>2. Support legislative approval of funding for an appropriate, integrated water infrastructure package. Seek adoption of a watershed approach similar to what has been used in the salmon recovery efforts.</p>	<p>In the 2015 Legislative Session, the Partnership testified about some of the needs addressed by SB 5628, the Washington Waters Act, which would have provided a comprehensive financing package for stormwater management, floodplain management, and water storage projects. Sponsored by Sen. Honeyford, the bill failed to move out of the Senate Ways & Means Committee. However, a bipartisan House of Representatives task force was created to develop recommendations related to the intent of this bill. The bill or similar legislation may be considered again in the 2016 Legislative Session.</p>
<p>3. Support legislative approval of funding for the Department of Health's septic loan and septic management program initiatives. Funding of the loan program and the septic management program would address all of the funding needs in the Shellfish Initiative as it is currently scoped.</p>	<p>In the 2015 Legislative Session, the Partnership testified in favor of HB 1715, which would have helped to reduce fecal contamination of Puget Sound by providing financing to develop onsite sewage management plans. The bill failed to pass after an amendment removed the revenue source for the proposed program, but it may be taken up again in the 2016 Legislative Session.</p>

FUNDING RECOMMENDATIONS	PROGRESS
<p>4. Seek increased funding for stormwater and other environmental improvements related to the state highway system in a state transportation package, as well as further alignment between environmental spending for highways and watershed and regional priorities for cleanup and restoration.</p> <p>Synchronize spending on highway stormwater and environmental needs with watershed planning to ensure that investments are consistent with watershed cleanup and restoration priorities.</p>	<p>2ESHB 1299 passed the Legislature on June 11, 2015, to allocate transportation funding. The bill includes investment in Puget Sound recovery infrastructure through two crucial Department of Transportation programs:</p> <ul style="list-style-type: none"> • Retrofits to stormwater infrastructure to help reduce pollution from stormwater runoff will receive \$2.7 million. • Retrofits of fish passage barriers, such as culverts, \$88.3 million (\$75.5 million for Puget Sound).
<p>5. Advocate for additional state funding for stormwater projects and support funding for high-efficiency street sweeping, removal of legacy sediment loads, and selective highway retrofits as immediate priorities, while continuing work on a long-term strategy for stormwater investments in the Puget Sound basin.</p> <p>Focus on maintaining a dedicated funding source for stormwater grants of at least \$100 million per biennium for grants and specifically identified projects, maintaining flexibility in the types of project funding, and supporting stormwater needs in the development of the water infrastructure package. Pursue state funding for a study to identify a long-term strategy for stormwater improvements in the region, particularly for retrofitting of older developments and infrastructure.</p>	<p>The Washington Waters Act described above in relation to recommendation 2 would have provided funding for stormwater management projects.</p> <p>Ecology's request for stormwater financial assistance was the top priority among all 2015 agency budget requests ranked by the Partnership for 2015-17. Compared to the Governor's request of \$74 million, the final enacted budget was \$53 million, including almost \$32 million for Puget Sound.</p>

FUNDING RECOMMENDATIONS	PROGRESS
<p>6. Advocate for strategic prioritization of federal and state infrastructure funding based on economies of scale, advancement of the science, equity and social justice, agriculture and resource land protection, and workforce development.</p>	<p>The Partnership has been working with federal and state partners to advocate for coordinated investment to accelerate the pace and scale of ecosystem recovery. The coordinated investment model uses a collaborative, multiple-benefits approach to floodplain investments that delivers substantive flood risk reduction in conjunction with habitat restoration, water quality gains, and other community improvements. The 2015-17 biennial budget awarded \$35.5 million to the Floodplains by Design coordinated investment program. Also, the Partnership is working closely with the state's congressional delegation on a bill that would help align federal investments with the Action Agenda's goals and priorities.</p>
<p>7. Consider options for collection and distribution of funds across jurisdictional boundaries at a watershed, multi-watershed, or Sound-wide scale to address differences in funding capacity among local governments in the region.</p> <p>Consider reviving the concept of a regional funding district (initially proposed by Bill Ruckelshaus in 2008). Seek authority in the state Legislature to establish multi-jurisdictional and multi-county districts with wide-ranging revenue options to address water and habitat needs consistent with Action Agenda priorities.</p>	<p>Partnership staff participated in a workshop hosted by Sen. McCoy to consider a concept for legislation that would provide for these kinds of funding districts. The concept is still under consideration, but has not been advanced as a bill.</p>
<p>8. Review and revise the Partnership's funding strategy during the biannual updates of the Action Agenda.</p>	<p>The Partnership is working to develop an approach to updating the funding strategy for the 2016 Action Agenda.</p>

The ECB Funding Report can be found in its entirety on the Puget Sound Partnership website at www.psp.wa.gov.



CONCLUSION

The challenges to Puget Sound ecosystem recovery and protection have been and continue to be immense, and yet we have learned, over time, how to face that challenge collectively. We have created systematic ways to prioritize investments and to understand the effectiveness of actions. We have learned how to encourage divergent interests to travel together along a shared path to recovery. Although there is much work to be done, this is all progress, hard won.

Notwithstanding the foregoing, and the wisdom of the investments made, the sophistication of the systems, or the unity of effort, the rate and magnitude of success toward “recovery” will only be commensurate with the rate and magnitude of investments made. This report provides information for legislative and executive decisions toward the investments and actions that are necessary to reach the goals articulated in the state statute.

I. SCIENCE PANEL COMMENTS ON IMPLEMENTING THE ACTION AGENDA
AND FINDINGS FROM THE MONITORING PROGRAM

2. VITAL SIGNS TABLE

3. RANKING OF PUGET SOUND RELATED BUDGET REQUESTS



APPENDIX

SCIENCE PANEL COMMENTS ON IMPLEMENTING THE ACTION AGENDA AND FINDINGS FROM THE MONITORING PROGRAM

MEMORANDUM TO: Martha Kongsgaard, Chair, Leadership Council
Jay Manning, Vice-Chair, Leadership Council

FROM: John E. Stein, Chair, Science Panel
Ken Currens, Vice-Chair, Science Panel

SUBJECT: Science Panel Comments on Implementing the Action Agenda and Findings from the monitoring program.

The Science Panel is charged with advising the Puget Sound Partnership on the selection of performance indicators, providing input on implementation strategies, addressing information needs, and recommending scientific research priorities. In this capacity, the Science Panel endorses the 2015 State of the Sound report as the best available information on the status of Vital Sign indicators and progress toward implementing the Action Agenda. Further, we also endorse the framework that the Puget Sound Partnership has used to develop human wellbeing indicators. This memorandum addresses RCW 90.71.370(3) instructing that the State of the Sound report includes “comments by the (Science) Panel on progress in implementing the plan (i.e. the Action Agenda), as well as findings arising from the assessment and monitoring program.”

This Science Panel letter addresses the three key objectives of the State of the Sound report: 1) how the ecosystem is doing, in the context of progress toward the 2020 goals; 2) how the Partnership is doing in advancing the Action Agenda, and tracking expenditures and accomplishments; and 3) how well recovery efforts are linked to ecosystem status.

Overall, the Science Panel is encouraged by 1) the progress in recovery of the Puget Sound ecosystem in key areas, 2) that more than 70 percent of the Near Term Actions are complete or moving forward, and 3) the progress in linking ecosystem status to recovery efforts. However, many Vital Signs have not changed or are even deteriorating relative to the goals. Given these findings, the Science Panel notes additional actions are needed to maintain and increase the rate of recovery. The Science Panel also notes that future Near Term Actions can be improved by matching their scale to the two-year implementation period, and by ensuring that the number of Near Term Actions does not expand beyond the ability to fund and complete within the two-year implementation window.

Adaptive management, "learning by doing," is the approach the Science Panel strongly endorses for ecosystem recovery and recommends that it be supported accordingly. To date, the Partnership's adaptive management approach has been applied in a patchy and incomplete manner, partly because of inadequate resources. As a key step in implementing adaptive management, the completion of implementation strategies for each target should be a high priority, while recognizing a phased approach to developing the strategies. The deployment of conceptual models that describe the mechanisms, causal pathways, and actions by which recovery targets are to be met can aid the effectiveness of an adaptive management approach.

WHAT PROGRESS IS BEING MADE TOWARD THE ECOSYSTEM RECOVERY GOALS?

Although the Puget Sound ecosystem is improving in many aspects, there remain many Vital Sign indicators that are not moving forward—or are deteriorating—in comparison to their recovery goals. Several challenges exist with moving all indicators forward. The Science Panel recommends initiating discussions about what steps should be taken to continue the momentum toward the recovery of Puget Sound.

The overall goal of the Puget Sound Partnership is to protect and restore Puget Sound, and the State of the Sound is an integral part of the adaptive management process that is being used to meet this goal. Ecosystems are complex with multiple interactions and time lags which make it difficult to predict with high certainty the outcomes of restoration and protection measures. By coupling decision making with monitoring, we can learn from past actions, reduce uncertainties, and adapt actions accordingly.

This State of the Sound reports mixed progress in meeting the Vital Sign targets. The ecosystem is improving in some aspects, whereas other components have shown no change and others are deteriorating relative to their targets. Of the 37 Vital Sign indicators developed to track these changes in key components of the ecosystem, 25 have sufficient data to assess their trends. Of these, over half have trends that are improving (10) or not changing (6). Those indicators that are improving include shellfish beds; estuary, floodplain, and riparian restoration; forest cover; chemicals in sediment; river flows in summer; shoreline armoring; on-site sewage inventory and inspections; and commercial fisheries harvest. The remaining Vital Sign indicators have trends that are degrading or giving mixed results. Those indicators that are worsening include the conversion of ecologically important lands to developed cover, herring, Chinook salmon, orcas, the Marine Water Condition Index, and impairments.

The Science Panel believes it is important to provide context to these trends, particularly for those that are worsening. For example, the recovery targets for some Vital Sign indicators may have been set too optimistically, as a result of limited information available at the time (e.g. the absence of baseline data). Another important reason is that ecological systems inherently have time lags in their response to restoration actions. Restoration actions can improve the ecological "support system" and thereby influence the biological response, but this response may take many years, depending on the indicator. For instance, orcas integrate the effects of many ecological processes beneath them, but respond on time scales longer than 10 years, so this indicator will naturally lag behind the successful improvement of their environment. Developing Vital Sign indicators that index these ecological support systems may provide more immediate indications of changes. In contrast, many of the Vital Sign indicators that are improving are those that are most closely tied to the reduction of direct human pressures on the ecosystem. Finally, some Vital Sign indicators may be controlled by multiple limiting factors (e.g. Chinook salmon). The actions may have improved some of those factors, but until all limiting factors are removed we would not expect to see an improvement.

Restoration and protection actions may also be helping to slow or prevent the decline of Vital Sign indicators, such that the indicator would be worse in the absence of these supporting activities. However, without controlled experiments, these effects cannot be directly observed or measured. Conditions in Puget Sound are influenced by broader atmospheric and oceanographic processes originating beyond the Sound itself. Recently, many of these conditions have been highly variable and, for some, outside of the ranges experienced in the past many decades. The Science Panel notes and encourages further interactions and comparisons with similar ecosystem reporting activities that are being undertaken by Canada and by the U.S. Environmental Protection Agency (EPA). These parties jointly update a selection of core transboundary indicators on an occasional basis so that regional scale phenomenon that might be masking the benefits of protection and restoration actions can be appreciated. Therefore, the Science Panel is pleased with the inclusion in this 2015 State of the Sound report of information about climate change and ocean acidification, which are large-scale changes impacting the Puget Sound ecosystem. Forecasted trends in human population density are also important long-term drivers of change, for which local and regional bodies need to anticipate and develop appropriate plans.

The Science Panel is particularly pleased to note the new and very encouraging developments in 2014–15 to identify improved indicators of human wellbeing in relation to Puget Sound, and to add these to the Puget Sound Partnership Vital Sign indicators. As they are new, the Science Panel recognizes it is premature to include them in this report, but looks forward to their inclusion in the 2017 report.

The development and application of a science-based approach to identify key pressures, and the valued ecosystem components affected by these pressures, on a spatially explicit basis in Puget Sound, is an important achievement. It provides an objective basis for identifying the important stresses on the ecosystem with the most potential for harm, their current intensities in Puget Sound, and their potential impacts. For example, the results indicate that pressures with very high real or potential impacts in watersheds or marine basins include the conversion of land cover as a result of natural resource production, transportation and utilities, and non-point source water pollutants and persistent chemicals.

Finally, at the time of writing this memorandum, the science panel is aware of the unusual environmental conditions of the past year. The mass of warm ocean water that has persisted on the U.S. West coast, a developing El Niño condition, and a persistent atmospheric ridging over our region has made 2015 among the warmest and driest on record. These conditions will undoubtedly have wide-ranging effects on the Puget Sound ecosystem, with low flows and high temperatures a concern for spawning salmon, and extremely low dissolved oxygen in Hood Canal increasing the chances of a fish kill event. It is important that the Puget Sound Partnership and other agencies continue to monitor these conditions, as they will likely govern the future performance of Vital Sign indicators, while also providing an opportunity to learn more about how the Puget Sound ecosystem responds to these conditions.

WHAT IS THE PROGRESS ON IMPLEMENTING 2012 ACTION AGENDA?

Overall, progress in implementing the 2012 Action Agenda has been good, with over 70 percent of Near Term Actions being completed or making progress. Challenges remain, however, with Near Term Actions that were too-broadly defined and with a proliferation of new Near Term Actions.

The 2015 State of the Sound report provides highly informative analyses of the effectiveness of the costs, funding and implementation progress of Action Agenda Near Term Actions; including actions that are part of the Strategic Initiatives. The Science Panel notes that of the 226 Near Term Actions identified in the 2012 Action Agenda, 71 percent have been completed or are making progress, whereas 29 percent are behind expectations. As of June 2015, 61 percent of Near Term Actions identified in the 2014 Action Agenda were either completed or on schedule. In many cases there were valid reasons for delays among the projects that were behind expectations. The strongest predictor of success to meet expected progress of these Near Term Actions is the level of funding, with sufficient funding a strong predictor of being on-track to meet expected results.

Of the 41 Near Term Actions for the three Strategic Initiatives, over 70 percent were either completed or were making progress for the Habitat and Shellfish Initiatives, but for Stormwater the equivalent figure was only 55 percent. One reason noted in the report for the latter finding is that the Stormwater initiative involves many more stakeholders, such as individual landowners, making coordination a critical element for success. Successful implementation will come through better coordination and assistance among the many small landowners and stakeholders affected by this initiative.

The Science Panel notes that many Near Term Actions were too broadly defined and too ambitious for a 2 year implementation period. In addition, the number of Near Term Actions increased during this past biennium. This resulted in a diffuse spread of limited restoration efforts over a larger number of projects. The Science Panel concurs with the report's recommendation that aligning the Action Agenda Near Term Actions and their funding more closely with the Strategic Initiatives, supporting Near Term Action "owners" in the sharing of best practices, and splitting large projects into smaller and discrete 2-year increments should improve this situation. Ensuring resources for evaluating whether Near Term Actions are aligned with the number of actions, and developing more focused Near Term Actions with improved performance measures, should enable better oversight of activities to help identify where actions are, and are not, delivering the expected results.

HOW ARE RECOVERY EFFORTS LINKED TO ECOSYSTEM STATUS?

It is difficult to demonstrate directly how recovery efforts are linked to ecosystem status, but important progress is being made.

The Science Panel is encouraged to see the addition in the 2015 report of an evaluation of past efforts and linking these to current ecosystem recovery status. The Science Panel recognizes this is a first look at this topic, but agrees the methodology is appropriate although many data are not available or are not in the required formats. The Panel encourages this effort to continue with more details provided in the next report. This analysis separates the 226 Near Term Actions in the 2012 Action Agenda into three broad types: ecological restoration and management (12 percent of Near Term Actions), behavioral change actions (11 percent of Near Term Actions), and enabling conditions actions (77 percent of Near Term Actions). The Panel notes this latter type involves developing the processes and methods to enable the implementation of ecological restoration and management, and as such involves largely process-oriented activities. There are many additional sources of funding for on-the-ground activities, and therefore a relatively high degree of coordination and planning is justified. The Science Panel notes that those Near Term Actions with the smallest funding gaps also had the highest proportion of completed projects. The lack of a relationship between changes in Vital Sign indicators with implementation activities or funding of the Near Term Actions associated with each Vital Sign indicator was expected, at least for this first analysis. As with movement of the Vital Sign indicators themselves, the lack of a relationship between funding and changes in the Vital Sign indicators may be due to the complexity of the social-ecological system of which they are a part, to possible mismatches between assigning Near Term Actions to Vital Signs, and to the high proportion of funding going towards the Enabling Conditions actions.

The 2014–2016 Biennial Science Work Plan is an important document that assesses how well research activities address decision-critical uncertainties relating to the recovery of Puget Sound, identifies additional science needs and recommends those for priority actions, and suggests how science can better support recovery. This latest work plan notes that an adaptive management approach has been applied in a patchy and incomplete manner, partly because of inadequate resources. The Science Panel endorses the adaptive management approach and recommends that it be supported accordingly. In particular, an initial emphasis needs to be placed on the completion of Implementation Strategies for each target. These include conceptual models that describe the mechanisms, causal pathways, and actions by which recovery targets are to be met. Development of these recovery strategies are a focus of activities during the current biennium.

The progress in recovering the Puget Sound ecosystem is encouraging and the commitment to developing Implementation Strategies for each Vital Sign holds great promise for both maintaining the momentum and in further focusing our recovery actions to those with a high probability of success. The strategies will also identify critical scientific uncertainties for effective ecosystem scale restoration. Addressing these uncertainties and enhancing the collection of critical information to assess progress in recovery are absolutely essential for ensuring wise investments are being made and that the scientific information is in-hand to adaptively manage the recovery effort. The Science Panel sees the new EPA approach to funding recovery as a positive change for both the science and monitoring as well as recovery actions.


It is worth noting that in many ways the Puget Sound region is leading the country in ecosystem recovery, especially in incorporating human wellbeing explicitly into the science and implementation of recovery actions. As we look beyond 2020, the region can expect to have a stronger scientific foundation for recovery and a rich set of information to chart the course for the next phase of restoring the Sound and building the ecosystem resilience to adapt to climate change.

For more information, visit www.psp.wa.gov/sos

APPENDIX 2

VITAL SIGNS TABLE This table summarizes progress of the Puget Sound Vital Sign indicators relative to ecosystem recovery targets.






Goal	Vital Sign	Indicator	What is the progress of the indicator? ¹	Are the 2014 interim targets met? ²
HEALTHY HUMAN POPULATION 	ONSITE SEWAGE SYSTEMS	Inventory, inspection, and repair of onsite sewage systems		
		Percent of unsewered shoreline that has an inspection program		NO 2014 INTERIM TARGET
	SWIMMING BEACHES	Conditions of swimming beaches		
	SHELLFISH BEDS	Harvestable shellfish beds		
HUMAN QUALITY OF LIFE 	QUALITY OF LIFE	Quality of Life index		NO 2014 INTERIM TARGET
	SOUND BEHAVIOR	Sound Behavior Index ³		NO 2014 INTERIM TARGET
	RECREATIONAL FISHING	Recreational angling and crabbing license sales ³		NO 2014 INTERIM TARGET
	COMMERCIAL FISHERIES	Pounds of salmon caught in commercial harvest ³		NO 2014 INTERIM TARGET
SPECIES AND FOOD WEB 	CHINOOK SALMON	Chinook salmon population abundance as measured by the number of natural-origin adult fish returning to spawn		
	ORCAS	Number of Southern Resident Killer Whales		
	PACIFIC HERRING	Biomass of spawning Pacific herring		NO 2014 INTERIM TARGET
	BIRDS	Population abundance of marine birds ³		NO 2014 INTERIM TARGET
		Population abundance of terrestrial birds ³		NO 2014 INTERIM TARGET

Goal	Vital Sign	Indicator	What is the progress of the indicator? ¹	Are the 2014 interim targets met? ²
PROTECT AND RESTORE HABITAT	SHORELINE ARMORING	Amount of shoreline armoring		NO 2014 INTERIM TARGET
		Armoring on feeder bluffs		NO 2014 INTERIM TARGET
		Use of soft shore techniques		NO 2014 INTERIM TARGET
	EELGRASS	Eelgrass area		
	LAND DEVELOPMENT AND COVER	Land cover change: Forest to developed		NO 2014 INTERIM TARGET
		Land cover change: Riparian restoration		NO 2014 INTERIM TARGET
		Land development pressure: Conversion of ecologically important lands		NO 2014 INTERIM TARGET
		Land development pressure: Growth in Urban Growth Areas (UGAs)		NO 2014 INTERIM TARGET
	FLOODPLAINS	Floodplain restoration		NO 2014 INTERIM TARGET
		Floodplain function		NO 2014 INTERIM TARGET
	ESTUARIES	Area of estuarine wetlands restored to tidal flooding		
		Estuary restoration meeting salmon recovery goals		








Goal	Vital Sign	Indicator	What is the progress of the indicator? ¹	Are the 2014 interim targets met? ²
WATER QUANTITY	SUMMER STREAM FLOWS	Percent of rivers with stable, increasing, or decreasing flows	GETTING BETTER	YES
WATER QUALITY	MARINE WATER QUALITY	Marine Water Condition Index ³	GETTING WORSE	NO 2014 INTERIM TARGET
		Dissolved oxygen in marine waters	NO DATA	NO 2014 INTERIM TARGET
	FRESHWATER QUALITY	Water Quality Index	NOT CHANGING	NO 2014 INTERIM TARGET
		Freshwater impairments	NO DATA	NO 2014 INTERIM TARGET
		Benthic Index of Biotic Integrity	MIXED RESULTS	NO 2014 INTERIM TARGET
	MARINE SEDIMENT QUALITY	Sediment Quality Triad Index	MIXED RESULTS	YES
		Sediment Chemistry Index	NOT CHANGING	MIXED RESULTS
		Percent of chemical measurements exceeding Sediment Quality Standards	GETTING BETTER	NO 2014 INTERIM TARGET
	TOXICS IN FISH	English sole contaminants and disease	NO DATA	NO DATA
		Pacific herring contaminants	MIXED RESULTS	MIXED RESULTS
		Salmon contaminants	NO DATA	NO DATA

¹ Progress conclusions are summarized as one of the following categories:

-  Indicator made positive progress relative to the baseline reference.
-  Indicator had no trend or there was no change relative to the baseline reference.
-  Component parts of the indicator had different trends or changes went in different directions.
-  Indicator lost ground relative to the baseline reference.
-  No data or not enough data were available to make a conclusion about progress.

For additional detail, please refer to the Vital Sign indicator reports included in the *2015 State of the Sound: Report on the Puget Sound Vital Signs*, or the online Vital Signs website (www.psp.wa.gov/vitalsigns/).

² Interim target results are summarized for each indicator as one of the following categories:

-  All the interim targets for this indicator were met.
-  Only some of the interim targets for this indicator were met; others were not.
-  None of the 2014 interim targets for this indicator were met.
-  No data or no sufficient data available to make a conclusion about whether the 2014 interim target was met.
-  No 2014 interim target was adopted for this indicator.

³These indicators were adopted by the Puget Sound Partnership but do not have 2020 targets and interim targets.

APPENDIX 3

RANKING OF PUGET SOUND RELATED BUDGET REQUESTS

2014 STATE SUPPLEMENTAL BUDGET ALLOCATIONS

We ranked 16 supplemental budget requests from sister agencies for consideration by the Governor and Legislature. The Legislature funded four of the 16 requests ranked by the Partnership (see table below). Though not ranked by the

Partnership, the table also includes two important funded requests to address and monitor the effects of ocean acidification, and a study to increase alignment and coordination between Puget Sound watershed organizations.

FUNDED PUGET SOUND RELATED SUPPLEMENTAL BUDGET REQUESTS, BY PARTNERSHIP RANKING

PARTNERSHIP RANKING	ALLOCATION	PURPOSE	WHAT DID IT PAY FOR?	WHO RECEIVED THE FUNDS?
4	\$1.1 MILLION	Removal of fish passage barriers	<ul style="list-style-type: none"> Satisfy federal court injunction against the state mandating that fish-blocking culverts owned by state natural resource agencies be repaired within 3.5 years to remedy the loss in salmon productivity and the violation of tribal treaty rights. 	Department Fish & Wildlife
6	\$135,000	Oil spill risk assessment and transport study	<ul style="list-style-type: none"> Assess public health and safety and environmental impacts of potential oil spills. Provide data and analysis of statewide risks and gaps. Identify options for increasing public safety and improving spill prevention and response readiness. 	Department of Ecology
12	\$183,000	Enforce compliance with product laws	<ul style="list-style-type: none"> Help limit certain toxic chemicals and metals in consumer products and packaging. 	Department of Ecology

PARTNERSHIP RANKING	ALLOCATION	PURPOSE	WHAT DID IT PAY FOR?	WHO RECEIVED THE FUNDS?
16	\$635,000	Toxic sites cleanup (Model Toxics Control Act, or MTCA)	<ul style="list-style-type: none"> Expand Ecology's capacity to take cleanup action. Provide adequate financial and contract management resources to meet legal requirements. Reduce the time it takes to complete cleanup of contaminated sites. Improve the cleanup process. 	Department of Ecology
NOT RANKED	\$422,000	Address ocean acidification	<ul style="list-style-type: none"> Increase number of nearshore ocean acidification monitoring sites in Puget Sound and coastal estuaries. 	Department of Natural Resources
NOT RANKED	\$71,000	Watershed proviso	<ul style="list-style-type: none"> Review of the many Puget Sound watershed organizations created by the Legislature. Make recommendations for increasing alignment and coordination. 	Puget Sound Partnership

PRIORITIES GUIDE FUNDING REQUESTS TO GOVERNOR, LEGISLATURE 2015–17 STATE BUDGET ALLOCATIONS

We ranked 72 budget requests from sister agencies for consideration by the Governor and Legislature. The Legislature funded eight of our 10 highest-ranked requests (see table below). One of our 10 highest-ranked requests included in the Governor's recommended budget for 2015–17 was from the Department of Health for \$155,000 to implement recommendations about the management of onsite sewage systems. Unfortunately, this funding could not be included in the state budget because the authorizing legislation failed to pass. Our top funding priorities for the 2015 Legislative Session aligned with the Strategic Initiatives:

- Recovering Puget Sound's shellfish beds, with emphasis on the following:
 - » Support for the Washington Shellfish Initiative and projects and programs that work to achieve water quality standards for salmon and shellfish recovery.
 - » Support for projects and programs that address ocean acidification.
 - » Support for projects and programs that help prevent pollution from septic systems.
- Protecting and restoring habitat along the rivers, streams, and shorelines of Puget Sound, with emphasis on the Puget Sound Acquisition and Restoration (PSAR) fund and the Floodplains by Design program.
- Preventing pollution from stormwater runoff into Puget Sound, with emphasis on funding low-impact development and stormwater retrofits.

Although the enacted capital and operating budgets for the 2015-17 biennium do not fully address the funding requested, the many requests that were funded will help to ensure progress in many areas.

TOP 30 FUNDED PUGET SOUND RELATED BUDGET REQUESTS, BY PARTNERSHIP RANKING

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
1	\$31.8 MILLION	Stormwater Financial Assistance Program	<ul style="list-style-type: none"> Provide grants for local governments to implement stormwater retrofit projects that treat polluted stormwater in priority areas throughout the state. 	Department of Ecology <ul style="list-style-type: none"> Local governments
2	\$37 MILLION	Puget Sound Acquisition & Restoration Program	<ul style="list-style-type: none"> Fund the program's top-ranked, regionally significant large capital project, the Busy Wild Creek Protection Project. Provide grants for high-priority local and regionally significant capital projects identified in the Puget Sound Salmon Recovery Plan that protect or restore salmon habitat in the Puget Sound basin. 	Puget Sound Partnership / Recreation & Conservation Office <ul style="list-style-type: none"> Local habitat protection and restoration project sponsors
3*	\$29.5 MILLION	Salmon Recovery Funding Board programs	<ul style="list-style-type: none"> Provide grants for projects statewide that protect or restore salmon habitat. Implement priorities established in federally adopted salmon recovery plans for Puget Sound and elsewhere in state. 	Salmon Recovery Funding Board <ul style="list-style-type: none"> Local habitat protection and restoration project sponsors

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
3*	\$1 MILLION	Puget Sound Creosote Removal	<ul style="list-style-type: none"> Removal of derelict creosote-treated structures from a minimum of six different sites in Puget Sound. Approximately 2,500 piles will be removed on both State-Owned Aquatic Lands, and other public lands. 	Department of Natural Resources <ul style="list-style-type: none"> Department of Natural Resources and local partners
7	\$3 MILLION	Improving Shellfish Growing Areas and Related Water Quality	<ul style="list-style-type: none"> Increase the stream miles buffered to protect water quality Increase acres of invasive species treatment in shellfish growing areas, and expand practices covered to include failing septic systems and manure management systems. 	State Conservation Commission <ul style="list-style-type: none"> Conservation Districts
9	\$12 MILLION	Centennial Clean Water Program	<ul style="list-style-type: none"> Provide grants to local governments for construction of wastewater treatment facilities, elimination of failing onsite sewage systems, and stormwater control and treatment facilities. 	Department of Ecology <ul style="list-style-type: none"> Local Governments
10	\$8 MILLION	Estuary & Salmon Restoration Program	<ul style="list-style-type: none"> Provide grants for projects that protect and restore the Puget Sound near-shore habitat through science-based salmon restoration and protection projects, learning and monitoring projects, and technical assistance. 	Department of Fish & Wildlife <ul style="list-style-type: none"> Local habitat protection and restoration project sponsors

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
11*	\$24.9 MILLION	Floodplains by Design	<ul style="list-style-type: none"> Provide grants to tribes, local governments, and non-governmental organizations for projects that restore natural conditions in floodplains. 	Department of Ecology <ul style="list-style-type: none"> Local Governments, tribes and NGOs
11*	\$4.8 MILLION	Puget Sound Corps	<ul style="list-style-type: none"> Conservation crews to complete a variety of natural resource projects such as urban forest restoration, shoreline restoration, natural areas restoration, noxious weed treatments, and aquatic land invasive species eradication. 	Department of Natural Resources <ul style="list-style-type: none"> Department of Ecology Puget Sound Corps crews
13	\$4.1 MILLION	Regional Stormwater Monitoring Program	<ul style="list-style-type: none"> Program of regional monitoring, effectiveness studies, and analysis of stormwater pollution reduction efforts. 	Department of Ecology
14*	\$1 MILLION	Assess recovery for effective investments	<ul style="list-style-type: none"> Enhanced amount and usability of Vital Sign data. Coordination and support of data monitoring and analyses in association with Strategic Initiative work. 	Puget Sound Partnership <ul style="list-style-type: none"> Majority of funds passed through to Department of Fish & Wildlife
14*	\$2.3 MILLION	Transportation Budget, stormwater projects	<ul style="list-style-type: none"> Fund retrofits to stormwater infrastructure. 	Department of Transportation

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
19	\$1.5 MILLION	Puget Sound Ecosystem Monitoring Program (PSEMP)	<ul style="list-style-type: none"> Track the health of fish in Puget Sound. Implement fish contaminant assessment and monitoring efforts. 	Department of Fish & Wildlife
21*	\$3.8 MILLION	Aquatic Lands Enhancement (ALEA)	<ul style="list-style-type: none"> Provide grants for the purchase, improvement, or protection of aquatic lands for public purposes, and for providing and improving access to the water. 	Recreation & Conservation Office <ul style="list-style-type: none"> Local and state government agencies and tribes
21*	\$600,000	Revise Puget Sound salmon recovery plans	<ul style="list-style-type: none"> Update Puget Sound Chinook salmon recovery plans. Fill information gaps. Complete prioritized monitoring plans. Implement adaptive management processes. 	Puget Sound Partnership <ul style="list-style-type: none"> Puget Sound Salmon recovery organizations
21*	\$14 MILLION	Match for Federal Regional Conservation Partnership Program (RCPP)	<ul style="list-style-type: none"> Encourage coordination between the Natural Resource Conservation Service (NRCS) and local partners to deliver conservation assistance to agricultural producers and landowners. 	State Conservation Commission <ul style="list-style-type: none"> Agricultural producers and landowners

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
21*	\$280,000	Reduce Oil Spill Risk (rail and vessel)	<ul style="list-style-type: none"> Complete and maintain oil spills response tools along rail corridors and marine waterways, and retain staff expertise on spill risk assessment, mitigation, and rapid oil spill response in the transport of crude oil through Washington State. 	Department of Ecology
21*	\$691,000	Source Identification of Toxics in Stormwater	<ul style="list-style-type: none"> Studies related to the sources of toxics in stormwater, including roofing materials and tires. 	Department of Ecology
21*	\$31.8 MILLION	Washington Wildlife Recreation Grants (WWRP)	<ul style="list-style-type: none"> Grants to eligible applicants for acquisition, restoration and/or development of state lands, local and state parks, water access sites, trails, critical habitat, natural areas, urban wildlife habitat, riparian areas and farmland. 	Recreation & Conservation Office <ul style="list-style-type: none"> Local project sponsors
28*	\$180,000	Managing Aquatic Invasive Species	<ul style="list-style-type: none"> Detection, eradication, and prevention of invasive species in Washington's waters. 	Department of Fish & Wildlife
28*	\$121.8 MILLION	Water Pollution Control Revolving Program	<ul style="list-style-type: none"> Provide low interest loans to local governments, special purpose districts, and recognized tribes for high priority water quality projects statewide that help meet state and federal water pollution control requirements. 	Department of Ecology <ul style="list-style-type: none"> Local governments, special purpose districts, and recognized tribes

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
31	\$800,000	Steelhead data collection	<ul style="list-style-type: none"> Collect data on the decline of Puget Sound steelhead. Leverage existing study results. Test hypotheses. Develop a range of management actions. 	Department of Fish & Wildlife
35	\$6.5 MILLION	Coastal Wetland Federal Funds	<ul style="list-style-type: none"> Finance protection of important coastal and estuarine areas that have significant conservation, recreation, or ecological value. 	Department of Ecology <ul style="list-style-type: none"> Range of project sponsors across the region
37*	\$75.5 MILLION	Transportation Budget, fish passage barriers	<ul style="list-style-type: none"> Fund retrofits of fish passage barriers, such as culverts, in Puget Sound. 	Department of Transportation
37*	\$3 MILLION	Land Acquisition Grants	<ul style="list-style-type: none"> To acquire habitat property for protection of federal endangered species covered under DNR's Habitat Conservation Plan (HCP). 	Department of Natural Resources
37*	\$595,000	Local Government Assessments	<ul style="list-style-type: none"> Property assessments made by local governments for purposes such as emergency medical services, weed control, irrigation, diking, drainage, landscaping, roads, fire districts, and other city and county support. 	Department of Transportation <ul style="list-style-type: none"> Local governments

PARTNERSHIP RANKING	PUGET SOUND PORTION OF ENACTED BUDGET	PURPOSE	WHAT DOES IT PAY FOR?	WHO RECEIVED THE FUNDS? / WHO WILL USE THE FUNDS?
37*	\$273,000	Preventing Nonattainment	<ul style="list-style-type: none"> Conduct community-level air quality assessments working closely with elected officials, citizens, local agencies, businesses, and civic leaders in the state's highest risk areas to help them design preventive air pollution solutions. 	Department of Ecology
37*	\$670,000	Reducing Toxic Diesel Emissions	<ul style="list-style-type: none"> Grants to local entities to reduce diesel emissions in high-risk diesel pollution areas statewide. 	Department of Ecology <ul style="list-style-type: none"> Local entities
37*	\$1 MILLION	Road Maintenance and Abandonment Plan	<ul style="list-style-type: none"> Removing or replacing fish passage barriers and bringing roads to salmon recovery, forest practices, and clean water standards on state grant lands, state forest lands, community forest lands, natural area preserves, and natural resource conservation areas. 	Department of Natural Resources
47	\$22.6 MILLION	Clean Up Toxics Sites – Puget Sound **	<ul style="list-style-type: none"> Fund toxic site cleanup projects that integrate shoreline habitat restoration opportunities. 	Department of Ecology <ul style="list-style-type: none"> State government, and affected local governments, resource agencies, and tribes

*Tied in the prioritization ranking process.

** Clean Up Toxics – Puget Sound request received the highest funding of 8 requests tied at rank 47.



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