



ANSWERING THE CALL TO ACTION

AN EXECUTIVE SUMMARY OF THE
2012 PUGET SOUND ACTION AGENDA

Answering the Call to Action

From the lush forests and lofty mountains of the Cascades and the Olympics to the dynamic, scenic waterways and coastlines, Puget Sound is a national treasure. The Sound supports a remarkable diversity of fish and wildlife species, provides us with drinking water, seafood, timber, a location for ports and marine industries, opportunities for outdoor recreation, and a buffer from Pacific storms. Residents and visitors alike are drawn to this beautiful and abundant ecosystem.

Puget Sound also faces many severe challenges. Although the Sound looks beautiful, many past and current actions have taken their toll on its health: historic industrial and municipal pollutant discharges, near-shore land converted to residential and commercial uses, rainwater runoff from the land, which often carries pollution from multiple sources, and bulkheads built along our shores. Many swimming beaches and shellfish beds are closed because of contamination. Dead zones are appearing in South Sound and Hood Canal where the lack of oxygen is killing fish and marine life. Populations of salmon once numbered in the millions have been reduced to the status of threatened or endangered. The iconic species of Puget Sound—the southern resident Killer Whale—carries the world’s highest body of PCBs and other bioaccumulative chemicals, and is now in danger of disappearing from our waters forever.

These changes in our ecosystem have also impacted the tribal nations that depend on Puget Sound resources to sustain their culture, traditions and way of life.

These challenges are not merely aesthetic. They affect our region's vitality and way of life. A healthy Puget Sound supports \$20 billion in annual economic activity and hundreds of thousands of jobs. Puget Sound is one of the most popular destinations for recreation regionally, and accounts for more than 80 percent of the state's tourism dollars. It provides a sense of place and history for the people who live here.

Puget Sound faces increasing pressures. Regional population is expected to grow from 3.5 million to 5 million by 2025 and will bring concomitant increases in pressures from habitat and land use, stormwater, toxic pollution, and transportation. Climate is changing, adding additional challenges to what has occurred in the past. We must come together to meet these challenges, and commit together to save and restore this vital resource that so defines where we live and work.

“[It is our task] to ensure that the Puget Sound forever will be a thriving natural system, with clean marine and freshwaters, healthy and abundant native species, natural shorelines and places for public enjoyment, and a vibrant economy that prospers in productive harmony with a healthy Sound.”

—Governor Christine Gregoire

Puget Sound Partnership and Action Agenda

The Puget Sound Partnership is leading the coalition to recover Puget Sound. The Partnership has three core functions, established by the Legislature:

1. **Set science-based priorities:** Define a 2020 Action Agenda that identifies work needed to protect and restore Puget Sound, based on science and with clear and measurable goals for recovery.
2. **Spur implementation of priority actions by increasing the capacity of our partners:** Increase resources, collaboration and awareness to build support and engagement in long-term recovery.
3. **Report progress and ensure accountability for action:** Determine accountability for achieving results including performance, effectiveness, and the efficient use of money spent on Puget Sound.

The Action Agenda is intended to be both a durable plan and a living document – something to build on and adapt as the region works toward achieving our shared vision for a healthy, vibrant ecosystem and economy in 2020. It holds both the long-term needs and a two-year implementation focus. It captures the priorities across Puget Sound and within local communities.

Recovery is guided by the six statutory goals established by the Legislature in 2007. We measure and communicate about progress towards recovery using the targets adopted by the Puget Sound Leadership Council in 2011. The recovery targets, and the related strategies and actions in the Action Agenda, are designed to achieve a healthy Puget Sound as described in the Legislative goals. The Action Agenda also serves as the approved National Estuary Program Comprehensive Conservation and Management Plan for Puget Sound under the federal Clean Water Act Section 320, helping to drive significant federal restoration funding to Puget Sound.

As envisioned in statute, the Action Agenda is to be updated every two years. The Partnership times the update to best influence major legislative sessions and the State biennium budget development.

The 2012 Action Agenda Update

The 2012 Action Agenda Update is presented in two sections. Section 1 is an overview of priority work for the next two years. Section 2 contains the detail about how recovery targets were set, strategies and action development, the role of science, climate change, and the strategies, ongoing programs, and near-term actions and their performance measures, plus the 11 local profiles and their related strategic priorities and actions.

Science strategies and actions to support the Action Agenda are contained in a companion document, the Biennial Science Work Plan.

Building on progress since 2008, the 2012 update to the Action Agenda contains important, strategic advances.

- **Recovery targets set:** Eighteen recovery targets have been established. This monumental achievement is the result of months of technical work and vigorous discussion and debate across the region.
- **Two-year strategic initiatives with actions identified.** To bring more focus to the near-term recovery effort, three strategic initiatives with actions have been identified.
- **Strategies and actions logically aligned with goals and targets.** Regional strategies and actions focus on goals and recovery targets and are refined to incorporate progress, new information, and lessons learned since 2009. The scientific and logic basis for actions needed to recover Puget Sound are more thoroughly illustrated.
- **Cross-cutting issues for salmon recovery and climate change adaption integrated.** The integration of the salmon recovery plan is called out and initial climate change adaptation needs are identified. The climate change adaptation work will be more fully articulated in the final.
- **Local partners engaged.** Local partners organized to provide considerable input on both regional and local priorities, which have been incorporated.
- **Ongoing programs called out.** Ongoing programs are recognized as a critical foundation for recovery and many examples are given of important on-going work. New efforts are distinguished separately.
- **Near term actions clearly identified and will be prioritized in the final document.** Near-term actions are clear, and each will have a specific responsible party or “owner.” Performance measures are provided for each NTA. A robust and scientifically-based process has been determined to establish priorities among actions, and will be deployed when near-term actions are finalized.
- **Action Agenda document simplified.** The Action Agenda has a simpler structure that better aligns with other large ecosystem restoration programs. It will transition to an on-line format.

Setting Priorities

Puget Sound is a complex ecosystem. Many actions are required to achieve the 2020 recovery goals. At the same time, there is a need to emphasize the most vital work for the next two years. A clear and compelling focus is more crucial than ever in this time of economic uncertainty and limited budgets. The final Action Agenda will contain one list of prioritized actions.

Prioritization Process

The Partnership is required to prioritize the actions required to restore Puget Sound. Prioritization will first be done for the near term actions; following that, in early 2012, the Partnership will begin to evaluate and prioritize on-going programs, starting with state programs, in a separate process. The same methodology used to rank near term actions will be used to rank on-going programs.

Prioritization of actions will rely on ecological, economic, human well-being, and project readiness criteria. Experts and partners will evaluate each action against the criteria using a relative scale. The Ecosystem Coordination Board will provide advice on how to combine and relate these factors in a synthesis framework and on the relative weights each factor should be assigned. Information on each near-term action will then be run through the weighted, synthesis framework to create a prioritized list of actions.

Once the prioritized list is created, it can be used by partners to inform decision making related to a broad range of ecosystem recovery issues including allocation of recovery funding. Subsets of the overall prioritized list relevant to specific types of decisions can be created. The prioritized list should be used to sequence actions as funding and other resources become available – not to simply justify defunding actions that are not at the top of this year. All near term actions will be needed to reach 2020 recovery goals.

Strategic Initiatives

During the Action Agenda update process, partners proposed the concept of strategic initiatives. The Partnership agrees that strategic initiatives should be established. Strategic initiatives encourage more focused attention on the specific actions that are needed to address important pressures on Puget Sound health, and achieve recovery targets. This focused attention will help the Partnership encourage, track and deliver progress at a substantial level.

Specific actions to include within each strategic initiative will be drawn from the final list of near-term actions that emerge after the review of this draft update. There should be a clear linkage between the actions within the strategic initiatives and targets for achievement of recovery goals. Actions that are included in the strategic initiatives should generally rank high in the near-term action prioritization process or otherwise be indicated through high-level policy discussions such as those on-going in response to the tribal white paper on treaty rights at risk. Strategic initiatives should focus on the ecological priority of protecting healthy components of the ecosystem first. Examples of strategic initiatives may include:

- Protection of habitat in support of salmon recovery;
- Prevention of water pollution from urban stormwater runoff; and
- Protection of water quality and nearshore habitat from rural and agricultural runoff.

Partnership staff will continue to work with partners to identify strategic initiatives and associated actions during this review period and will present strategic initiatives in the final Action Agenda.

2012 Prioritized List of Near Term Actions

A table of the potential near-term actions prepared for the draft is presented at the end of the overview. In the final updated Action Agenda, actions will be listed in priority order. Local actions will be shown with their related Soundwide action.

2012 Priority Science Actions

The purpose of Priority Science for Restoring and Protecting Puget Sound: A Biennial Science Work Plan for 2011-2013 is to provide strategic focus on the science needed to recover and protect the Puget Sound. This strategic focus can help direct the allocation of the limited resources available for science to the issues and studies where they are most needed. The Science Panel identified 48 science actions as high priority. These are listed by topics that correspond to strategy sections of the 2011-2013 Action Agenda Update and found in Table 1.

The Science Panel determined priorities based on two sets of questions. The first set focused on a scientific criterion: How much do we know? What is the level of scientific uncertainty? The second set

focused on a policy-science criterion: What are the decision-critical questions and information? Where is the lack of scientific information hindering progress in restoration and recovery?

Table 1. Proposed Priority Science Questions from 2011–2013

| | |
|--|---|
| Upland and Terrestrial Ecosystems | <ul style="list-style-type: none"> • Develop analytical tools to identify options for where to protect, where to restore, and where to develop while maintaining desired ecological goods and services. • Use social science to guide development of adaptive management structures that can effectively link restoration science to management decision-making. |
| Floodplains | <ul style="list-style-type: none"> • Estimate the value of floodplains in terms of the ecosystems services they provide. • Develop key ecological indicators and implement monitoring to assess status of floodplains. • Improve understanding of the effects of vegetation on dikes and other flood control structures. |
| Mitigation | <ul style="list-style-type: none"> • Develop ecological indicators; assess baseline conditions; and implement monitoring to measure ecosystem function relative to no net loss. • Conduct social science studies to describe the key institutional challenges to attaining no net loss and improvements from restoration. |
| Freshwater | <ul style="list-style-type: none"> • Develop robust ecological indicators and implement comprehensive monitoring for stream flows. • Validate stream flow targets in terms of their effects on abundance, productivity, distribution, and life-history diversity of salmon. |
| Species and Foodwebs | <ul style="list-style-type: none"> • Develop analytical tools to evaluate whether strategies to address factors limiting the productivity of salmon are being implemented in the most effective combinations, at the right times, and with appropriate amounts of effort to lead to recovery. • Identify the causes of apparent decline in marine survival of salmon as they leave their natal rivers and exit Puget Sound. • Assess risks imposed by terrestrial and freshwater invasive species. |
| Marine and Nearshore | <ul style="list-style-type: none"> • Develop the analytical tools to identify priority areas for protection, restoration, and stewardship. • Develop the adaptive management structures that link restoration science to management decision-making. • Identify the key stressors on eelgrass. |
| Marine Species and Foodwebs | <ul style="list-style-type: none"> • Develop analytical tools and information to understand the tradeoffs in managing foodwebs of marine species and the multiple stressors affecting those foodwebs. • Implement biological and sociological studies to understand the conservation and sociological roles of marine protected areas for habitat and species protection, ecosystem restoration, and sustaining usual and accustomed tribal fishing areas. • Implement studies to identify stressors on forage fish. • Implement studies to understand the causes of declines in marine bird abundance. • Conduct studies to identify sources of nutrients that enter Puget Sound from both groundwater and external marine waters to develop strategies for maintaining water quality for Puget Sound foodwebs. • Assess risks imposed by marine invasive species. |
| Toxics | <ul style="list-style-type: none"> • Implement studies to ensure that Washington State’s water quality standards and sediment management standards are protective for allowing human and wildlife consumption of fish and other seafood. • Describe the availability, feasibility, and safety of alternatives to products and processes that use and release toxic chemicals of concern into the Puget Sound ecosystem. • Develop integrated monitoring and assessment of toxic chemical sources, exposure, and effects. • Synthesize information on emerging contaminants of concern. |
| Runoff from the Environment | <ul style="list-style-type: none"> • Develop monitoring and assessment of benthic invertebrates in small streams to evaluate stormwater management and other efforts to protect and restore streams. • Evaluate the effectiveness of low impact development (LID) projects and stormwater management best management practices and programs. • Evaluate land uses and associated pollutants that would require treatment beyond sediment removal. • Evaluate projected environmental benefits of structural stormwater retrofits given varying levels of effort to guide the extent of structural retrofits needed to help meet 2020 ecosystem recovery targets. • Evaluate individual and combined effects of commonly used pesticides on salmonids, other fish, and their foods. |
| Wastewater | <ul style="list-style-type: none"> • Evaluate nitrogen reduction in public domain on-site system treatment technologies. • Implement studies of human-related contributions of nitrogen to dissolved oxygen impairments in sensitive Puget Sound marine waters. |

| | |
|--|---|
| Shellfish | <ul style="list-style-type: none"> Establish and sustain pollution identification and correction (PIC) programs to identify and fix nonpoint pollution problems. Research and implement monitoring to understand the specific environmental conditions that produce toxic harmful algal blooms (HABs) and pathogen events. |
| Oil Spills | <ul style="list-style-type: none"> Conduct rigorous risk analyses on higher risk industry sectors to ensure there are appropriate levels of investment in reducing risk of oil spills. Inventory and describe baseline conditions for key species at risk from oil spills that can be used in assessments of natural resource damages from oil spills. |
| Clean Up Water Pollution | <ul style="list-style-type: none"> Expand monitoring of freshwater and marine water areas to assess human exposures to pollution during water-contact recreation. |
| Emerging Issues – Ocean Acidification | <ul style="list-style-type: none"> Design and implement monitoring for ocean acidification variables across the Puget Sound to understand the status, diversity and range of conditions. Develop and implement studies to assess the risk and vulnerability of Puget Sound species to ocean acidification. Develop adaptation strategies given assessed vulnerability to ocean acidification. |
| Scientific Tools for Informing Policy | <ul style="list-style-type: none"> Conduct institutional analyses of the overall governance and management structures in which Puget Sound recovery strategies operate. Conduct integrated risk assessments of the impacts of different pressures on the Puget Sound ecosystem. Develop a systematic, transparent, and ecologically-based prioritization tool for near-term actions in the Action Agenda that will support evolutionary learning and adaptation. |
| Coordinated Ecosystem Monitoring | <ul style="list-style-type: none"> Implement and sustain a comprehensive, coordinated monitoring program to understand the status of the Puget Sound and the effectiveness of recovery actions. |
| Human Dimensions in Ecosystems | <ul style="list-style-type: none"> Develop assessments of ecosystem services to help decision makers make informed decisions about restoration and protection. Develop socioeconomic indicators to help measure and report on the human dimensions in ecosystem recovery. Conduct a baseline literature review of social science research and a survey of data to identify resources and gaps that can be readily available and used by ecosystem recovery planners and practitioners. Evaluate the most effective combinations of regulatory, incentive, and educational programs for different demographics in Puget Sound. |

2012 Funding Actions

Increased financial capacity to implement ongoing and new actions in the Action Agenda and the Biennial Science Work Plan is required to achieve recovery goals. This demands that we develop and secure stable, diverse funding sources. Increased capacity can be achieved through new sources of funding, using existing funding more strategically and efficiently, and through the development of innovative, market-based programs. The proposed 2012 funding actions are listed in Table 2. All of these actions need to be implemented.

Table 2. Proposed Funding Actions for 2011–2013

| Proposed Action | Proposed Performance Measure |
|---|--|
| 1. PSP to continue work with federal delegation to pass the Puget Sound Recovery Act by December 30, 2014. | <ul style="list-style-type: none"> Contact made with key staff in all delegation offices to encourage passage and to receive an update on status and prospects |
| 2. NRCS to increase funding of existing programs as a pilot project in Puget Sound to improve water pollution prevention efforts in rural areas. | |
| 3. The Nature Conservancy, building on existing programs, to investigate expanded use of the Department of Defense Readiness and Environmental Protection Initiative (REPI) in Puget Sound to protect and restore ecosystem function that is related to the ability of DOD entities to accomplish their missions. | <ul style="list-style-type: none"> Evaluate and report on potential uses of the REPI program at all installations around the Puget Sound (June 2012) Submit proposals for use of REPI funds on three top priority uses (June 2013) |

| Proposed Action | Proposed Performance Measure |
|---|--|
| 4. PSP and Ecology work with partners to build a Puget Sound Clean Water Program to implement priority stormwater retrofits through increased funding of Section 319(h) Nonpoint Source Grants, Clean Water State Revolving Fund, and Ecology Performance Partnership Grants. | |
| 5. Ecology, DNR, and DFW pursue state legislation or other mechanisms to provide adequate funding for critical water quality and habitat protection programs including NPDES permits, the DNR Forest Practices program, and the Hydraulics Permit Approval program. | <ul style="list-style-type: none"> • Proposal included in Governor’s 2013–15 Biennial Budget request • Proposal enacted by Legislature in the 2013–15 Biennial Budget |
| 6. The PSP, working with the ECB and LIO representatives, should lead the development of a legislative strategy to adopt a funding mechanism, as part of an integrated federal, state and local funding strategy, which local governments around the Sound could elect to use to address Puget Sound recovery priorities. | <ul style="list-style-type: none"> • PSP to convene a subcommittee of the ECB to form the coalition and develop a workplan (December 30, 2011) • PSP, ECB and coalition members review funding needs for an integrated package of stormwater, habitat, and other water quality investments needed to carry out the Puget Sound recovery priorities and make recommendations regarding the establishment of additional funding mechanisms (consider scale, capacity of different mechanisms). Review and recommendations should build on research and recommendations from Central Puget Sound WRIAs regarding watershed-based funding mechanisms. The Executive Director of PSP should present recommendations to the Leadership Council in June 2012. (June 30, 2012) • Build support for and introduce any legislation recommended in June 2012 in the 2013 legislative session |
| 7. PSP to conduct a rate study of local special purpose districts to determine the relative amounts being raised by local governments to address recovery priorities compared to total potential that could be raised using existing funding mechanisms. | |
| 8. PSP to develop a mission and adopt a one-year work plan for launch of the Foundation for Puget Sound by the end of 2012. | <ul style="list-style-type: none"> • Stakeholder process implemented to develop mission and feasibility assessment of Foundation (March 30, 2012) • Workplan delivered to launch Board of Directors of the Foundation (December 30, 2012) |
| 9. PSP to provide assistance and leadership on the development of in-lieu-fee compensatory mitigation programs in Hood Canal, Pierce County, and Thurston County by December 30, 2012. | <ul style="list-style-type: none"> • Hood Canal program approved by March 30, 2012. • Pierce County program approved by March 30, 2012. • Thurston County program approved by December 30, 2012. |
| 10. DNR to develop pilot marketplaces for watershed services in Snohomish and Nisqually watersheds by December 31, 2012. | |

Legislative Actions

During the update process, some partners identified potential changes to the underlying statutory framework that drives Puget Sound protection and recovery. These potential actions are consolidated here for consideration by the Legislature and will be considered by PSP in working with partners to develop future legislative strategies.

Table 3. Legislative Actions for 2011–2013

| | |
|------------------------------------|--|
| <p>At the State Level</p> | <ul style="list-style-type: none"> • Amend the Open Space Tax Program to improve incentives for small landowners and to reduce tax and administrative burden on working farm and forest landowners. • Provide authority for tax increment financing for local governments to finance infrastructure improvements within designated areas. • Authorize county treasurers to collect local board of health fees needed to implement local OSS management plans via property tax statements. The funding authority will allow inspection, monitoring, reporting, education and compliance activities, and associated technology and infrastructure. Funding authority is needed for entire county OSS management areas and should not be limited to MRAs or special study areas. • Increase state financial support to local governments for plan and regulatory implementation, enforcement, management, training, and education by 2013. • Increase WWRP funding for purchasing development rights, ensuring easement language doesn't preclude future habitat restoration and prioritizing those places without levees or hardened banks by 2013. |
| <p>At the Federal Level</p> | <ul style="list-style-type: none"> • Encourage passage of the Community Forestry Conservation Act (HR 1982 and S 1105 of the 112th Congress), which would enable non-profit conservation organizations to use bonds to purchase private working forests for long-term environmental and economic sustainable management by 2013. • Secure NRCS funding for Puget Sound flood easements in the next farm bill and identify/design a pilot. Compensation rates should be based on the level of floodplain function that is protected (i.e., different rates for those behind levees (no flooding), those behind riprap (no channel migration), and those that are fully connected). |

How We Chart Our Course and Measure Recovery

Over the past two years the Partnership has worked with the scientific community, policy makers, and the public to identify indicators for the Puget Sound recovery goals and to set targets for recovery.

Recovery Goals

The State Legislature established six goals that are the ultimate articulation of what it would mean to have a healthy Puget Sound. While we don't expect Puget Sound to return to conditions before European settlers first arrived, we do want to derive many of the same benefits offered them, from a healthy, vibrant Puget Sound in the 21st century and beyond.

STATUTORY GOALS FOR PUGET SOUND

1. A healthy human population supported by a healthy Puget Sound that is not threatened by changes in the ecosystem (Healthy Human Population)
 2. A quality of human life that is sustained by a functioning Puget Sound ecosystem (Human Quality of Life)
 3. Healthy and sustaining populations of native species in Puget Sound, including a robust food web (Healthy Native Species and Food Web)
 4. A healthy Puget Sound where freshwater, estuary, nearshore, marine, and upland habitats are protected, restored, and sustained (Protection and Restoration of Habitat)
 5. An ecosystem that is supported by ground water levels as well as river and stream flow levels sufficient to sustain people, fish, and wildlife, and the natural functions of the environment (Adequate Water Quantity)
 6. Fresh and marine waters and sediments of a sufficient quality so that the waters in the region are safe for drinking, swimming, shellfish harvest and consumption, and other human uses and enjoyment, and are not harmful to the native marine mammals, fish, birds, and shellfish of the region (Sufficient Water Quality)
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Indicators for the Goals and Recovery Targets

In 2010, the Partnership engaged regional experts and the public in identifying ecosystem indicators that would help communicate whether we were making progress toward the six recovery goals established by the Legislature. That same year, the Leadership Council adopted 20 indicators recommended by the experts covering ecosystem elements such as eelgrass, shellfish, and swimming beaches, and pressures on the ecosystem such as shoreline alteration. In 2011, the Leadership Council adopted science-based recovery targets for 18 of the chosen indicators. These targets articulate the conditions we expect to achieve by 2020. They provide more precision to the Legislature's recovery goals for a healthy Puget Sound so we can evaluate whether we're on our desired trajectory. The relationships between goals, indicators, recovery targets, and recovery strategies are summarized in Table 4.

There are two types of recovery targets for Puget Sound:

- **Ecosystem targets:** describe the desired future conditions for human health and well-being, species and food webs, habitats, water quantity, and water quality. These targets are the ultimate endpoints our effort.
- **Pressure-reduction targets:** describe desired reduction in the level amount of particular pressures or stressors on ecosystem health. Pressure-reduction targets (e.g., shoreline alteration or management of on-site sewage systems) are more closely linked to management activities. They are intended to help the Partnership, other implementing agencies, and key partners to identify and design activities that align their resources and to evaluate the effects of activities.

Over time, targets can be adapted as we learn more about what it will take to achieve a healthy Puget Sound by 2020, and what we need to pay attention to know if we are getting there.

REPORTING ON TARGET STATUS AND PROGRESS

The indicators and targets have been incorporated into a Vital Signs Dashboard to help us track and communicate our efforts toward the goals (<http://www.psp.wa.gov/vitalsigns/index.php>). The Vital Signs and biennial State of the Sound report are the Partnership's main reporting tools.



How Strategies and Actions Drive Progress Toward Targets and Statutory Goals

Table 4 illustrates the links from goals to indicators, targets, and recovery strategies. There is a many-to-many relationship between the strategies and actions needed to achieve recovery targets and ecosystem goals. For example, protecting land cover is directly related to reducing the pressures from stormwater runoff as well as providing habitat for species and food, timber and housing for human well-being.

To address the overlapping and cross-cutting nature of strategies and actions needed to achieve multiple goals, the Action Agenda Strategy and Action Detail is organized into four broad sub-sections:

1. Freshwater and Terrestrial Protection and Restoration, which includes strategies and actions related to land development, stewardship of working forest and agriculture lands, floodplains;

2. Marine and Nearshore Protection and Restoration, which includes strategies and actions related to shoreline alteration, marine protected areas, working waterfronts; Pollution Prevention and Cleanup, which includes strategies related to polluted runoff from urban and other lands, reducing toxic threats, and wastewater management; and,
3. Strategic Leadership and Collaboration, which includes much of the core work of PSP including strategies related to funding priorities, performance monitoring and management, science and monitoring, public education and stewardship, ecosystem monitoring, and maintaining and updating the Action Agenda.

In each section, strategies and sub-strategies describe the overall, long-term directions and approaches that are needed for Puget Sound protection and recovery. Cross-cutting issues such as salmon recovery and climate adaptation are discussed throughout.

Ongoing program activities and near-term actions are nested under strategies and sub-strategies. Both are critical to recovery.

- A. **Ongoing activities** provide the foundation for recovery efforts and create the regulatory, policy, and incentive-based framework upon which the near-term actions are built.
- B. **Near-term actions** are considered the “change agenda”. These are high priority steps for the next two years. They can be new activities that are needed, high profile work related to new or ongoing activities, large scale, critical next steps of long-term efforts including expansion of proven tools, and important new initiatives. These are the actions that will be tracked for implementation by the Partnership. They will have owners and reportable milestones.

Diagrams show how strategies and actions map to the recovery targets, and which strategies and actions are most important to achieving progress toward targets. Both Soundwide and local strategies and actions are included.

The Need for Funding

It is particularly important to support and adequately fund the ongoing programs that support Puget Sound recovery. These efforts form the backbone of the recovery effort. The Partnership plans to prioritize the ongoing program work after completion of the 2012 Action Agenda update.

Most of the Soundwide and local near-term actions also need funding. Owners of these actions are cautious about committing to them without an explicit understanding that funding is a requirement for successful implementation.

NEED FOR REVIEW

The ongoing activities described in this draft are not a complete list of all the ongoing work in Puget Sound. They capture the big picture work that is underway and needs to continue. Developing a full description of the ongoing work is beyond the scope of the update as this work varies greatly in topical and geographic scope, as well as influence. At the same time, we need review so we can make corrections if critical ongoing work is not captured in this draft. The near-term actions presented in the draft are potential, not final. Thoughtfully developed by the technical experts and the interdisciplinary subject matter-focused teams, these potential actions now need broader review to ensure that the content, ownership, and milestones are correct, and that there are no gaps.

Local Priorities

Many of the priorities, strategies, and actions identified in the Action Agenda must be implemented at the local level. Since 2008, local areas have been working toward both a structure and an approach to implement, as well as integrate, local community efforts to advance the Action Agenda. The Action Agenda Update local area profiles contain each area's work to-date to identify local ecosystem pressures and strategies and actions for addressing them.

Each area is at a unique point in identifying their priorities. By the time of the December 2011 draft, some areas have prioritized strategies and actions with performance measures. These presented with the relevant regional strategies and sub-strategies and included in the near-term action table. Other areas are continuing to refine their priority strategies and actions during the draft review period.

The final Action Agenda Call to Action will include a summary of the priorities in each local area.

Table 4: Relationships between Goals, Indicators, Recovery Targets, and Recovery Strategies

| GOAL | INDICATOR FOR GOAL | 2020 INDICATOR TARGET SUMMARY | KEY STRATEGIES |
|--|--------------------------|---|---|
| 1. Healthy Human population | Safe seafood | Increase harvestable shellfish acres | <ul style="list-style-type: none"> Identify and prioritize areas to protect, restore, and develop (A1.1) Incentives & market-based programs for stewardship & conservation of forest & agricultural lands (A3.1) Infrastructure & incentives to accommodate development within UGAs (A4.2) |
| | Swimming beaches | All monitored Puget Sound beaches meet enterococcus standard | <ul style="list-style-type: none"> Restore and protect water quality at swimming beaches and recreational areas (C11.3) Develop and implement local and tribal pollution identification and correction (PIC) programs. (C11.4) Fix stormwater problems caused by existing development (C2.3) |
| | On-site sewage systems | Systems are current with inspections, failed systems are fixed, and marine shorelines not served by sewers are covered by marine recovery areas | <ul style="list-style-type: none"> Effectively manage and control pollution from small on-site sewerage systems (C5.1) Improve and expand funding for on-site sewage system maintenance, repair, replacement (C5.3) Effectively manage & control pollution from large on-site sewage systems (C5.2) |
| 2. Human quality of life | Commercial harvest | Under consideration for the Quality of Life Index with anticipated adoption in 2012 | <ul style="list-style-type: none"> Protect and recover salmon (A9) Implement marine and nearshore species recovery plans (B7.2) |
| | Recreation | Under consideration for the Quality of Life Index with anticipated adoption in 2012 | <ul style="list-style-type: none"> Protect and recover salmon (A9) Implement marine and nearshore species recovery plans (B7.2) Improve public access to Puget Sound (B5) |
| | Working waterfronts | Under consideration for the Quality of Life Index with anticipated adoption in 2012 | <ul style="list-style-type: none"> Best practices at ports (B4.1) |
| | Rural and resource lands | Under consideration for the Quality of Life Index with anticipated adoption in 2012 | <ul style="list-style-type: none"> Integrated suite of incentives for voluntary stewardship of agricultural and forest lands (A3.1) Comprehensive conservation and ecosystem services markets (A3.2) Strategy to retain working forest lands (A3.3) |
| 3. Healthy native species and food web | Wild Chinook salmon | Stop the decline and see improvements in wild Chinook abundance | <ul style="list-style-type: none"> Accelerate restoration on public lands (B3.4) Expand funding for restoration projects (B3.5) Implement regional salmon recovery plans (A9) |
| | Orcas | Increase end-of-year census of southern residents to 95 whales | <ul style="list-style-type: none"> Implement marine and nearshore species recovery plans (B7.2) |
| | Pacific herring | Increase spawning biomass | <ul style="list-style-type: none"> Implement marine and nearshore species recovery plans (B7.2) Protect priority nearshore processes (B2.1) Implement priority marine restoration actions (B3.3) |
| | Terrestrial birds | Target not yet set | <ul style="list-style-type: none"> Implement terrestrial and freshwater species recovery plans in a coordinated way (A10.1) |
| 4. Protect and restore habitat | Land development | Minimize basin-wide loss of vegetation cover and focus growth within urban growth areas | <ul style="list-style-type: none"> Identify and prioritize areas to protect, restore, develop (A1.1) Incentives & market-based programs for stewardship & conservation of forest & agricultural lands (A3.1) Infrastructure and incentives to accommodate development within UGAs (A4.2) |

| GOAL | INDICATOR FOR GOAL | 2020 INDICATOR TARGET SUMMARY | KEY STRATEGIES |
|---|--|--|--|
| | Land cover | Minimize loss of forested land cover and restore riparian vegetation | <ul style="list-style-type: none"> 🟡 Incentives and market-based programs for stewardship and conservation of forest and agricultural lands (A3.1) 🟡 Ecosystem services market for resource lands (A3.2) 🟡 Strategy for retaining working forestlands (A3.3) |
| | River mouth estuaries | Meet 10-year salmon recovery goals and an increase quality acres restored basin-wide | <ul style="list-style-type: none"> 🟡 Accelerate restoration on public lands (B3.4) 🟡 Expand funding for restoration projects (B3.5) 🟡 Implement regional salmon recovery plans (A9) |
| | Floodplains | No additional loss of floodplain function and progress in restoring degraded floodplains | <ul style="list-style-type: none"> 🟡 Protect & maintain functional floodplains (A5.4) 🟡 Implement & maintain priority floodplain restoration (A5.3) 🟡 Long-term protection, stewardship of ag lands, working farms, forests (A3.1) |
| | Shoreline armoring | The total amount of armoring removed is greater than the total amount of new armoring | <ul style="list-style-type: none"> 🟡 Prevent new shoreline armoring except where it is required (B2.2) 🟡 Ensure soft armoring techniques are used wherever they can be applied (B2.3) 🟡 Encourage removal of shoreline armoring and associated fill and use soft armoring techniques (B3.2) |
| | Eelgrass | Increase extent of eelgrass | <ul style="list-style-type: none"> 🟡 Improve data and information to protect eelgrass in sensitive areas. (B6.1) 🟡 Use a variety of mechanisms to advance priority eelgrass restoration projects. (B6.2) 🟡 Protect nearshore migratory corridors and vegetation (B2.4) 🟡 Fix stormwater problems caused by existing development (C2.3) |
| 5. Enough water for humans and the environment | Summer stream flows | Maintain flows were stable and restore flows in decreasing trend rivers | <ul style="list-style-type: none"> 🟡 Regulation, monitoring, enforcement to protect & enhance streamflow (A8.1) 🟡 Water demand and water user conservation (A8.2) 🟡 Implement effective management programs for groundwater (A8.3) |
| 6. Sufficient water quality for human and ecosystem health | Insects in small streams | Retain excellent B-IBI scores and improve fair scores to good in lowland streams | <ul style="list-style-type: none"> 🟡 Manage urban runoff at the basin and watershed scale (C2.1) 🟡 Fix stormwater problems caused by existing development (C2.3) 🟡 Prevent stormwater problems from new development at the site & subdivision scale (C2.2) |
| | Freshwater quality | Freshwater Water Quality Index scores improve and a decrease in impaired waters | <ul style="list-style-type: none"> 🟡 Develop and implement local pollution identification and control (PIC) programs (C11.4) 🟡 Develop and implement TMDL studies and water cleanup plans to address impairments (C11.1) 🟡 Fix stormwater problems caused by existing development (C2.3) |
| | Dissolved oxygen in marine waters | Human-related contributions do not significantly reduce dissolved oxygen | <ul style="list-style-type: none"> 🟡 Develop and implement TMDL studies and water cleanup plans to address impairments (C11.1) 🟡 Implement priority upgrades of municipal and industrial wastewater facilities (C4.4) 🟡 Voluntary and incentive-based programs to address agricultural runoff (C3.1) |
| | Marine sediment quality | Achieve “unimpacted” conditions and Sediment Quality Standards chemical criteria | <ul style="list-style-type: none"> 🟡 Implement, strengthen authorities & programs to prevent chemicals from entering the Puget Sound environment (C1.1) 🟡 Clean up contaminated sites (C11.2) 🟡 Fix stormwater problems caused by existing development (C2.3) |
| | Toxics in fish | Toxics in fish are below effects threshold levels for PCBs, PBDEs and PAHs. | <ul style="list-style-type: none"> 🟡 Implement, strengthen authorities & programs to prevent chemicals from entering the Puget Sound (C1.1) 🟡 Clean up contaminated sites (C11.2) 🟡 Fix stormwater problems caused by existing development (C2.3) |

Considerations for future Action Agenda Updates

The strategic initiatives, or two-year focus of each update cycle will be refined based on the status of the ecosystem, implementation performance, emerging issues, lessons learned, and other factors not yet foreseen. Future updates likely will reflect:

- Results of a risk analysis for Puget Sound that will identify the highest risks in geographic areas.
- Continued and increased specificity on local priorities and actions.
- Continued integration and increased emphasis on climate change adaptations since taking action now reduces the costs of current and future climate impacts.
- Continued innovation in developing market-based solutions and funding beyond government sources.
- Quantitative links between actions and recovery targets, including a better understanding of the strengths of the relationships between individual actions, predicted results, and anticipated changes in the ecosystem, and better identification of quantitative milestones
- More rigorous analysis of strategy effectiveness, ongoing programs, new actions. Eventually including the ability to discuss investment priorities that span ongoing programs and new work.

Table 5: Near-Term Actions

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|--|-----------|----------|-----------------|--|
| A | 1.1 | Identify and prioritize areas that should be protected or restored and those that are best suitable for (low impact) development. | 1 | PSP will convene an interagency workgroup by 2012 that, by 2013, will prepare regional ecosystem protection standards with a decision-making framework. | soundwide | PSP | | Status of standard development and status of decision making framework |
| A | 1.1 | Identify and prioritize areas that should be protected or restored and those that are best suitable for (low impact) development. | 2 | By 2012, The Puget Sound Institute will work Ecology, Commerce, WDFW and other partners to develop a tool to improve and support spatial landscape data collection, sharing, and analysis to improve the ability of agencies to make land use decisions based on watershed assessments. | soundwide | PSI | | Status of data sharing tool development |
| A | 1.2 | Local plans, regulations and policies are consistent with protection and recovery targets for Puget Sound. | 1 | By 2012, Ecology and Commerce will support local and regional entities use of the PSBC results by creating easy web access to the information and an interagency Watershed Technical Assistance Team. | soundwide | Ecology | Commerce | By 2012 PSBC data is available to all local governments and team established |
| A | 1.2 | Local plans, regulations and policies are consistent with protection and recovery targets for Puget Sound. | 2 | By 2013, Ecology and Commerce will develop and distribute a set of local model planning land development and growth policies and goals that are consistent with protection and recovery targets and the Growth Management and Shoreline Management Acts, and DNR's Aquatic Lands Habitat Conservation Plan when approved by NMFS. | soundwide | Ecology | Commerce | By 2013 Model growth policies are distributed to local governments |
| A | 1.2 | Local plans, regulations and policies are consistent with protection and recovery targets for Puget Sound. | 3 | By 2012, Ecology and Commerce will work with local governments to identify the primary barriers to incorporating policies consistent with implementation of the Action Agenda and identify assistance needed to overcome these barriers; including understanding how ecosystem characterization information and methods, and related protection strategies, and encouraging compact growth patterns, increased density, redevelopment and rural lands protection can be better incorporated into land use decisions. | soundwide | Ecology | Commerce | By 2012, five barriers & assistance needed are identified for all jurisdictions |
| A | 1.3 | Improve local governments' ability to implement, monitor and enforce plans, regulations and permits that are consistent with protection and recovery targets for Puget Sound. | 1 | By 2013, Commerce will coordinate broad partner discussion of ways to promote state financial support for local governments for GMA comprehensive plan implementation, enforcement, management, training, and education. | soundwide | Commerce | | State financial support to local governments for plan and regulatory implementation, enforcement, management, training, and education will have increased by 2013 |
| A | 1.4 | Strengthen and streamline existing local, state, federal permitting programs. | 1 | [Who?] will convene a workgroup, by 2012, that will, by 2013, conduct a cumulative effects assessment of the 'no net loss policy' in producing net gain toward the recovery targets and articulate how cumulative effects assessment could be integrated into existing programs. | soundwide | | | Workgroup convened by 2012, assessment complete by 2013 |
| A | 2.1 | Obtain Full or Partial Property Interests for Lands at Risk of Conversion or Impacts From Human Activities. | 1 | To protect areas of ecological importance to Puget Sound Recovery, by 2014, RCO and PSP will revise as necessary the Recreation and Conservation Funding Board and Salmon Recovery Funding Board policies so that, for acquisitions within the Puget Sound Basin, the Aquatic Lands Enhancement Account, Washington Wildlife and Recreation Program Habitat Conservation Account, and Salmon Recovery Funding Board grant programs include 1) a clear method for identifying whether a project is in conflict with the Action Agenda and 2) a clear method, within selection criteria, for identifying whether a project is referenced in the Action Agenda. | soundwide | RCO | PSP | PSP and RCO will revise the Recreation and Conservation Funding Board and Salmon Recovery Funding Board policies as needed to ensure that projects in the Puget sound areas are not in conflict with the Action Agenda |
| A | 2.1 | Obtain Full or Partial Property Interests for Lands at Risk of Conversion or Impacts From Human Activities. | 2 | PSP will convene a task force to develop a funding mechanism to rapidly acquire properties with high ecological value and imminent risk of conversion by 2012. | soundwide | PSP | | PSP convenes a task force by 2012 |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|---|-----------|----------|-----------------|--|
| A | 2.1 | Obtain Full or Partial Property Interests for Lands at Risk of Conversion or Impacts From Human Activities. | 3 | DNR will work with Congress to encourage passage of the Community Forestry Conservation Act (HR 1982 and S 1105 of the 112th Congress), which would enable non-profit conservation organizations to use bonds to purchase private working forests for long-term environmental and economic sustainable management by 2013. | soundwide | DNR | | The Community Forestry Conservation Act is passed by 2013 |
| A | 2.1 | Obtain Full or Partial Property Interests for Lands at Risk of Conversion or Impacts From Human Activities. | 4 | American Farmland Trust will identify farmlands with high ecological value and at imminent risk of conversion by 2013. | soundwide | AFT | | Farmlands with high ecological value and at imminent risk of conversion are identified by 2013. |
| A | 2.1 | Obtain Full or Partial Property Interests for Lands at Risk of Conversion or Impacts From Human Activities. | 5 | Forterra, working on behalf of Kitsap County, the Port Gamble S'Klallam Tribe and the Suquamish Tribe, will coordinate funding and agency participation to secure the conservation of ~7,000 acres of land near Port Gamble, including ~2 miles of shoreline, within the next 30 months. | soundwide | Forterra | | acres and miles of shoreline protected. |
| A | 2.1 | Obtain Full or Partial Property Interests for Lands at Risk of Conversion or Impacts From Human Activities. | 6 | PSP, working with Forterra, Kitsap County, the Port Gamble S'Klallam Tribe and the Suquamish Tribe will convene the State agencies, federal agencies and federal delegation to seek their engagement in leveraging available resources – from funding to programmatic involvement, as possible – to conserve and restore the ~7,000 property near Port Gamble | soundwide | PSP | Forterra | acres and miles of shoreline protected. |
| A | 2.2 | Use Special designations to protect intact areas | 1 | No near term actions identified | | | | |
| A | 3.1 | Create and offer an expanded, integrated suite of incentives and market-based programs that make voluntary stewardship and conservation of private forest and agricultural lands practical and economically rewarding | 1 | By 2012, the Conservation Commission will work to enhance use of all USDA conservation and habitat restoration program funding, i.e., CREP and EQUIP, which are currently underused by and not tailored for western Washington growers. | soundwide | SCC | | Amount of enhancement to habitat restoration program funding |
| A | 3.2 | Create a Comprehensive Conservation and Ecosystem Services Market focused on resource lands for the Puget Sound Region | 1 | DNR will support pilot market transactions for delivery of watershed services from private forest landowners to downstream water beneficiaries in at least the Snohomish and Nisqually watersheds. | soundwide | DNR | | A pilot market for delivery of watershed services from private forest landowners will exist in Snohomish and Nisqually watersheds. |
| A | 3.3 | Develop a comprehensive strategy for retaining economically viable and long-term successful, working agricultural and forest lands through a collaborative process. | 1 | By Q3 2013, DNR will identify and lead a collaborative process to develop a comprehensive strategy for retaining economically viable and long-term successful working forestlands. | soundwide | DNR | | By Q3 2013 DNR will have initiated a collaborative process |
| A | 3.3 | Develop a comprehensive strategy for retaining economically viable and long-term successful, working agricultural and forest lands through a collaborative process. | 2 | PSP, in collaboration with Agriculture, Ecology, and the Conservation Commission, will convene a series of workshops to engage agricultural stakeholders to identify needs for maintaining the health of the industry, and identify key areas where the agricultural industry can assist in the protection and restoration of Puget Sound | soundwide | PSP | | Done or not |
| A | 4.1 | Provide the necessary infrastructure and incentives within urban growth areas to accommodate new and re-development. | 1 | Commerce will launch a regional program similar to the federal sustainable communities program by 2013. | soundwide | Commerce | | to be determined |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|--|-------|--|-----------|-------|-----------------|---|
| A | 4.2 | Enhance and expand the benefits of living in compact communities to increase consumer demand for them. | 1 | No near-term actions identified | | | | |
| A | 4.3 | Enhance and expand the benefits of living in compact communities to increase consumer demand for them | 1 | No near-term action identified. | | | | |
| A | 5.1 | Improve data and information to accelerate floodplain protection, restoration and flood hazard management | 1 | The PSP will convene a Puget Sound Floodplain Protection and Recovery Policy Team that will: › By 2012, identify the policy and program changes of federal, state and local flood risk reduction, flood mitigation and ecosystem protection and restoration programs to foster multi-objective floodplain management . › By 2012, work with local levee owners to identify the barriers to implementing levee setbacks and habitat friendly levee management practices and work with key parties to address barriers. › By 2012, identify a new Floodplain Indicator Champion. › By 2012, use the definition of floodplain function to identify priority opportunities for floodplain compatible agricultural practices. The Ruckelshaus process will be used to create incentive programs to incentivize these practices. › By 2013, identify floodplain areas; prioritize those most important for protection, restoration, farmland preservation or other compatible and non-compatible; and identify the implementation steps needed to protect functioning floodplain areas by 2013. › By 2013, develop a decision making framework that enables agencies to identify cross-agency floodplain project priorities based on their ability to meet multiple goals and delineates a coordinated funding approach, including cost-share mechanisms, for floodplain-friendly modifications to flood protection infrastructure in a cost-effective manner. › By 2013, identify federal, state, local, and private funding to develop 3 case studies that are illustrative of the benefits of a multi-objective approach to floodplain restoration and implement a pilot program to fund projects that leverage the work of the case studies. › By 2013, assess the disincentives for reestablishing habitat land on agricultural lands by 2013 | soundwide | PSP | | |
| A | 5.1 | Improve data and information to accelerate floodplain protection, restoration and flood hazard management | 2 | PSP will gather data on public perception of flood risks, floodplain function, and the relationship between the two and will include the risks and costs of developing in floodplains and the economic and social benefits/services of preserving and restoring floodplain functions as a top messaging priority in its outreach efforts by 2012. | soundwide | PSP | | (status of inclusion of floodplain risks, services and benefits in SP outreach materials) By 2012, all PSP outreach materials related to development includes messaging about floodplain risks and benefits and about services of intact, functional floodplains. |
| A | 5.1 | Improve data and information to accelerate floodplain protection, restoration and flood hazard management | 3 | By the fourth quarter of 2012, synthesizing the results in the July 2010 "Floodplain Management: A Synthesis of Issues Affecting Recovery of Puget Sound" report and other relevant and timely information, the PSP will identify and work with relevant state and federal agencies to draft an action plan to address the programs and target programmatic recommendations for legislative change, rule amendments, and administrative changes, needed to achieve the floodplains pressure reduction target. | soundwide | PSP | | (status of action plan development) By Q4 2012, an action plan addressing programmatic, legislative, administrative, and regulatory changes needed to achieve the floodplain recovery target is drafted. |
| A | 5.2 | Align policies, regulations, planning, and agency coordination to support multi-benefit floodplain management. | 1 | None. <i>Many of the actions that support this sub-strategy are located in A5.1. Specifically, work that occurs in A5.1 NTA 1 is the fundamental work that needs to occur to enable alignment of policies, regulations, planning, and agency coordination for multi-benefit floodplain management.</i> | | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|--|-----------|------------------------|-----------------|---|
| A | 5.3 | Implement and maintain priority floodplain restoration projects. | 1 | By 2013, PSP will work with Tribes, state and federal resource agencies, local governments, WSDOT, and the environmental community to identify and prioritize the most important existing roadways and bridges that have the biggest impacts on floodplain function and floodplain connectivity. The prioritization criteria will include cost/benefit of repair or replacement of the infrastructure. PSP will work with the owners of public infrastructure (local governments and WSDOT) to crosswalk this prioritized list with their repair and replacement plans and schedules for the next 10-20 years. | soundwide | PSP | | (Status of project list) Completion identification of priority projects. |
| A | 5.3 | Implement and maintain priority floodplain restoration projects. | 2 | Salmon Recovery Lead Entities implement highest priority salmon recovery habitat protection and restoration recommendations from WRIA 8, 9, and 10 three-year work plans. For Floodplain Restoration: › Develop concept and preliminary strategy › Conduct economic analysis, including ecosystem goods and services › Ensure integration with floodplain acquisition and restoration plans. (Note: this action is also relevant to Strategy A9.1) | local | | | Regional salmon recovery metrics (possible examples include: acres restored, linear feet of stream or shoreline restored, fish passage barriers removed, etc.) To what extent are WRIA plan recommendations being implemented? Monitoring and adaptive management strategies: floodplain acres restored linear feet of levee setback, fish use. |
| A | 5.4 | Protect and maintain intact and functional floodplains. | 1 | By 2012, FEMA completes augmented annual reporting requirements relative to the obligations of the 122 communities in Puget Sound to abide by the NMFS NFIP BiOp. | soundwide | FEMA | | (status of FEMA reporting requirements) By 2012, FEMA reporting requirements are complete. |
| A | 5.4 | Protect and maintain intact and functional floodplains. | 2 | Ecology, Commerce, and other interested state agencies will develop a strategy for and lead effective state engagement with local governments in the next round of CAO updates on frequently flooded areas | soundwide | Ecology | Commerce | TBD |
| A | 5.4 | Protect and maintain intact and functional floodplains. | 3 | [Placeholder for an NTA on effectiveness monitoring related to status & trends of floodplains] | soundwide | | | TBD |
| A | 5.5 | Protect, enhance, and restore floodplain function on forest and agricultural lands. | 1 | By 2013, Conservation Districts and Watershed Groups implement three pilot projects that demonstrate ecosystem services markets associated with flood hazard prevention and agricultural lands in floodplains. | soundwide | Conservation Districts | | (status of three pilot projects) By 2013, three pilot projects demonstrating ecosystem service markets for floodplains are in place. |
| A | 5.5 | Protect, enhance, and restore floodplain function on forest and agricultural lands. | 2 | The conservation districts, agricultural community, watershed planning groups, and local jurisdictions will use the outputs from the characterization work (A5.1 NTA 1) to identify potential land swaps (i.e., county land use and conservation districts) and identify candidate areas available to expand for agriculture outside of priority floodplain areas by 2012. | soundwide | Conservation Districts | | (Status of list) By 2012, potential land swaps and candidate areas available to expand for agriculture are identified |
| A | 5.5 | Protect, enhance, and restore floodplain function on forest and agricultural lands. | 3 | PSP, DFW, NOAA, NRCS and others will work with farming communities to implement the Skagit Tidegate Fish Initiative, the Snohomish Sustainable Lands Strategy and other multi-benefit approaches that enable agricultural infrastructure improvements and/or provide regulatory certainty in exchange for restoration actions. | soundwide | PSP | DFW | Acres of restoration projects for which there is farm community support. |
| A | 5.6 | Incorporate climate change forecasts into floodplain protection and restoration strategies. | 1 | By 2012, a representative from Climate Impacts Group will be a member of the PSP Science Panel. | soundwide | PSP | | (Status of appointment of representative) By 2012, a member of the Climate Impacts Group serves on the PSP Science Panel |
| A | 5.6 | Incorporate climate change forecasts into floodplain protection and restoration strategies. | 2 | EPA with collaboration from the PSP will work with research study authors, floodplain managers, and other affected parties to distill the current state of knowledge of climate change impacts pertinent to floodplains; identify, assess and prioritize risk factors, and develop adaptations strategies by 2013. Findings will be documented in a published report. | soundwide | EPA | PSP | (Status of published report) By 2013, findings are documented in published report. |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|--|-------|---|-----------|-------|-----------------|---|
| A | 5.6 | Incorporate climate change forecasts into floodplain protection and restoration strategies. | 3 | PSP and Ecology will work with EMD, and other interested agencies, to change state comprehensive flood management planning and project funding policies to ensure that plans and projects supported with state funding fully incorporate projected changes to sea level rise, flood frequency and volumes, sediment regimes and other issues that could be a major threat to human safety and floodplain ecosystem health. | soundwide | EMD | Ecology | TBD |
| A | 6.1 | Implement and maintain priority terrestrial restoration projects | 1 | Elwha River Ecosystem Recovery - Stock preservation and weir operation - Monitoring (adults, juveniles, smolts) - Habitat restoration projects | local | | | Continuous weir operation and monitoring of salmonids (adults, juveniles, and smolts) on the Elwha River |
| A | 6.1 | Implement and maintain priority terrestrial restoration projects | 2 | Implement the Puget Sound Salmon Recovery Plans (Puget Sound Salmon Recovery Plan and Hood Canal/ Eastern Strait of Juan de Fuca Summer Chum Recovery Plan) through the tool of the 3-year Work Plans › North Olympic Peninsula Lead Entity (NOPLE) 3-year Work Plan › NOPLE Elwha revegetation project › NOPLE Dungeness River floodplain restoration, Phase II › NOPLE Elwha Engineered Log Jams › Hood Canal Coordinating Council (HCCC) LE 3-year Work Plan › HCCC LE Snow Creek and Salmon Creek estuary restoration | local | | | Initiate or significantly advance all of the four specific Priority Actions identified by the Strait ERN for the Strait Action Area |
| A | 6.2 | Implement and maintain priority terrestrial restoration projects | 1 | No near-term action identified. | | | | |
| A | 6.3 | Implement restoration actions in urban and suburban areas while balancing the need for these areas to accommodate growth, density and infill development. | 1 | No near-term action identified. | | | | |
| A | 6.4 | Implement stewardship incentive programs to increase the ability of private landowners to undertake and maintain restoration projects. | 1 | No near-term action identified. | | | | |
| A | 7.1 | Reinforce the importance of avoiding and minimizing impacts to resources, particularly those with high ecological value and that are difficult to replace. Develop and implement updated avoidance and minimization guidance consistent with the ecosystem protection decision-making framework described in A1.2. | 1 | No near-term action identified. | | | | |
| A | 7.2 | Establish and implement a watershed-based approach to mitigation. | 1 | No near-term action identified. | | | | |
| A | 7.3 | Support the development and piloting of innovative compensatory mitigation tools including market-based techniques and other approaches | | No near-term action identified | | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|---|-----------|------------------|-----------------|---|
| A | 7.4 | Improve effectiveness monitoring programs for mitigation sites | 1 | No near-term action identified. | | | | |
| A | 8.1 | Update Puget Sound instream flow rules and to encourage conservation | 1 | Ecology, with support from WDFW, will set flow rules in three remaining Puget Sound watersheds (WRIA's 16, 18, and 19) that currently do not have instream flow rules within 6 years. Two additional watersheds – San Juan (WRIA 2) and Island (WRIA 6) are not near-term candidates for instream flow rules due to naturally limited freshwater habitat. Priority will be given to critical basins or those with known significant problems meeting instream or out-of-stream demands. By 2013 Ecology will have adopted an instream flow rule for the Dungeness River portion of WRIA 18. | soundwide | Ecology | DFW | Done or not |
| A | 8.1 | Update Puget Sound instream flow rules and to encourage conservation | 2 | Ecology will develop and implement the comprehensive basin flow protection and enhancement programs called for in the recovery plans for Puget Sound Chinook and Hood Canal/Strait of Juan de Fuca summer Chum by [date]. By 2013 Ecology will [increment of anticipated progress.] | soundwide | Ecology | | Done or not |
| A | 8.1 | Update Puget Sound instream flow rules and to encourage conservation | 3 | Ecology will establish local water masters in each Puget Sound watershed to increase water code compliance and enforcement by [date]. By 2013, Ecology will establish at least one water master in a selected high priority watershed to increase water code compliance and enforcement, this will include providing funding for the water master to be a local contact to water users, provide a local compliance presence, protect the resource, reduce water use, and protect senior water rights, including instream flows. | soundwide | Ecology | | Done or not |
| A | 8.2 | Water Demand and Water User Conservation: Decrease the amount of water withdrawn or diverted and per capita water use. | 1 | Building on existing public-private models, public utilities will adopt demand management strategies (such as tiered pricing structures) to discourage inefficient and unnecessary use of municipal water, particularly in flow-limited areas or low flow periods. By 2013, [x] number of utilities will have adopted demand management strategies. | soundwide | Public Utilities | | number of demand management strategies adopted; reduction in demand |
| A | 8.3 | Implement effective management programs for groundwater. | 1 | Ecology will work with Tribal Nations, local governments, and other Partners to develop and support a consistent approach to making decisions about exempt wells, and to ensure that both the physical and legal availability of water is considered in decisions this will include workshops on exempt well issues to be complete by [date]. | soundwide | Ecology | | Done or not |
| A | 9.1 | Implement the high priority salmon recovery actions identified in other parts of the Action Agenda and the Biennial Science Work Plan | 1 | No near-term action identified. | | | | |
| A | 9.2 | Implement salmon recovery strategies and actions not listed elsewhere in the Action Agenda. | 1 | The Puget Sound Steelhead Technical Recovery Team will finalize a population identification report and viability criteria for steelhead populations within the Puget Sound Steelhead Distinct Population Segment | soundwide | | | to be determined |
| A | 9.2 | Implement salmon recovery strategies and actions not listed elsewhere in the Action Agenda. | 2 | Working through an interdisciplinary team, WDFW will establish (number that will be established by the end of 2013) Wild Steelhead Reserves where no juvenile hatchery steelhead would be released, no recreational fisheries for steelhead would occur, and habitat protection and restoration actions would be accelerated. | soundwide | DFW | | to be determined |
| A | 9.3 | Maintain the community infrastructure that supports salmon recovery | 1 | No near-term action identified. | | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|---|-----------|---------|-----------------|---|
| A | 10.1 | Implement species recovery plans in a coordinated way | 1 | WDFW will complete a Fish and Wildlife Action Plan for Puget Sound by June 30, 2013. This action will carry out the agency's Comprehensive Wildlife Conservation Strategy in the Puget Trough, Cascades and Northwest Coast ecoregions to integrate terrestrial and aquatic species specific recovery plans, existing management tools, and interagency conservation plans into a unified ecosystem approach to set priorities, improve biodiversity protection and restoration efforts and better coordinate them. | soundwide | DFW | | A completed Fish and Wildlife Action Plan for Puget Sound by June 30, 2013 |
| A | 10.1 | Implement species recovery plans in a coordinated way | 2 | Appropriate state agencies will prioritize implementation of retraction projects identified within existing species recovery plans. | soundwide | | | |
| A | 10.1 | Implement species recovery plans in a coordinated way | 3 | WDFW will use an augmet existing species plans to create actional work plans for imperiled terrestrial and freshwater species without existing or specific plans. | soundwide | DFW | | |
| A | 10.2 | Create a more integrated planning approach to protect and enhance biodiversity in the Puget Sound basin | 1 | No near-term actions identified | | | | |
| A | 11.1 | Prevent and rapidly respond to the introduction and spread of invasive species. | 1 | The Invasive Species Council will expand its baseline assessment to include an additional 15 of the Council's priority invasive species. | soundwide | ISC | | Complete assessment by June 30, 2015. |
| A | 11.1 | Prevent and rapidly respond to the introduction and spread of invasive species. | 2 | The Invasive Species Council, in collaboration with PSP, will begin developing an early detection and monitoring program plan for priority invasive species in Puget Sound. The Council and PSP will coordinate the plan and implementation efforts with the Puget Sound Coordinated Ecosystem Monitoring and Assessment Program. | soundwide | ISC | PSP | Develop work plan and cost estimates by June 30, 2015. |
| A | 11.1 | Prevent and rapidly respond to the introduction and spread of invasive species. | 3 | DFW will prepare to respond to a potential zebra/quagga mussel invasion in the Puget Sound Basin. | soundwide | DFW | | Complete a management plan by June 30, 2015. |
| A | 11.1 | Prevent and rapidly respond to the introduction and spread of invasive species. | 4 | DFW will develop a plan with the objective of limiting the spread of New Zealand mud snails in the Puget Sound basin. | soundwide | DFW | | Change in the number of known areas or acreage infested with New Zealand or change in the number of known locations containing mudsnails. |
| A | 11.2 | Answer key invasive species research questions and fill information gaps. | 1 | The Washington Invasive Species Council and PSP will initiate a risk assessment to evaluate the environmental and economic impacts of invasive species in the Puget Sound Basin and incorporate short-term climate change considerations. | soundwide | ISC | PSP | Complete risk assessment by June 2015. |
| B | 1.1 | Ensure complete, accurate and recent information directly assists shoreline planning and decision making at the site-specific and regional levels | 1 | PSP will develop workplan for implementing a network of marine protected areas in Puget Sound. | soundwide | PSP | DFW | Puget Sound Partnership's Hershman Fellow creates detailed workplan by September 30, 2012. |
| B | 1.1 | Ensure complete, accurate and recent information directly assists shoreline planning and decision making at the site-specific and regional levels | 2 | Identify human use patterns for marine areas in Puget Sound by 2013, to support marine spatial planning and the development of a network of marine protected areas. | soundwide | Ecology | | Analysis done or not; NOAA applies its mapping methodology to Puget Sound and/or UW studies prerequisites for social acceptance and success. Number of workshops held or surveys conducted. |
| B | 1.2 | Monitor projects to effectively evaluate results and implement adaptive management. | 1 | No near-term actions identified | | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|--|-----------|---------|-----------------|--|
| B | 1.3 | Use outreach and education to encourage actions to protect and restore nearshore and marine habitats. | 1 | San Juan County Community Development and Planning Department (CDPD) and the Town of Friday Harbor will make ongoing technical assistance (best management practices) available on-site to 100% of permit applicants, with a goal of 75% of customers avoiding hard armoring or otherwise implementing soft armoring techniques by 2014. This work will leverage the effort underway via EPA grant funding and shoreline workshops coordinated by Friends of the San Juans, San Juan Islands Conservation District, and Washington Sea Grant. | local | SJC | | to be determined |
| B | 2.1 | Take actions that protect priority nearshore physical and ecological processes consistent with the Soundwide restoration priorities identified in B1.1. | 1 | [WHO] will use acquisition and regulatory protections to permanently protect at least 10% of bluff-backed beaches with high sediment supply potential facing shoreline development pressure. | soundwide | | | PSNERP Strategies document (and targeted analysis by Cereghino) points to added protection of 2 of 18 such beaches to satisfy benchmark; consistency with Soundwide restoration priorities identified in B1.1 |
| B | 2.1 | Take actions that protect priority nearshore physical and ecological processes consistent with the Soundwide restoration priorities identified in B1.1. | 2 | Ecology will provide funding and technical assistance to local jurisdictions to update local shoreline master programs by current deadlines, with all updates complete by 2014. A key deliverable for Ecology and local governments is to implement SMPs in a manner that validates achievement of no net loss of ecological function. | soundwide | Ecology | | to be determined |
| B | 2.1 | Take actions that protect priority nearshore physical and ecological processes consistent with the Soundwide restoration priorities identified in B1.1. | 3 | Shoreline Master Program Updates, Implementation, and Intergovernmental Coordination (Jefferson County, Clallam County and cities of Port Townsend, Sequim, and Port Angeles) - City of Port Townsend SMP – stormwater education - City of Port Townsend SMP – bulkhead removal - City of Port Townsend SMP – restore native marine riparian vegetation - City of Port Angeles SMP Update - City of Sequim SPM Update - Jefferson County SMP – Annual Restoration Planning Summit - Jefferson County SMP – Assess shoreline restoration progress - Jefferson County SMP – Identify and implement shoreline armoring, riparian enhancement, fill removal and culvert replacement projects - Jefferson County SMP update - Clallam County SMP implementation - Clallam County SMP adaptive management - Clallam County SMP update - Ecosystem valuation - Enhanced shoreline protection - Finfish aquaculture speaker forum | local | | | Develop the economic baseline (Ecosystem Valuation) for the ecosystem functions that will be monitored by the No Net Loss indicators for all 5 local jurisdictions within the Strait Action Area Alternative Option: Initiate or complete 30% of the new Priority Actions identified by the Strait ERN for the Strait Action Area |
| B | 2.2 | Prevent new shoreline armoring except where it is required to protect existing infrastructure from imminent risk. | 1 | WDFW will use best available science to revise Hydraulic Code Rules (chapter 220-110 WAC) and clarify conditions under which hydraulic projects must be conducted to prevent or mitigate the impacts to fish life and habitat. | soundwide | DFW | | Rulemaking complete or not |
| B | 2.3 | Where armoring is aging or non-protective, seek opportunities for permanent removal or the use of soft armoring replacement or landward setback techniques. | 1 | No near-term action identified. <i>Near-term actions associated with soft armoring and green shorelines are described in B3.2</i> | | | | |
| B | 2.4 | Take actions to protect migratory corridors and vegetation particularly in sensitive areas such as eelgrass beds. | 1 | Through revision of WAC 220-110, WDFW will limit construction of new overwater structures in ecologically sensitive areas and improve the design of new structures (for example, dock grating to allow light penetration). | soundwide | DFW | | Done or not. |

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| B | 2.4 | Take actions to protect migratory corridors and vegetation particularly in sensitive areas such as eelgrass beds. | 2 | For state-owned aquatic lands, DNR, in consultation with WDFW and Ecology, will identify potential permit, economic, and social incentives for community use docks. | soundwide | DNR | | Done or not; number of community use docks (increase). |
| B | 2.4 | Take actions to protect migratory corridors and vegetation particularly in sensitive areas such as eelgrass beds. | 3 | DNR, in consultation with WDFW, Ecology, RCO, and State Parks will publish design guidance on construction, repair and rebuilding of overwater structures to increase light by 2012. | soundwide | DNR | | Done or not. |
| B | 2.5 | Take actions that protect intact marine environments and priority marine physical and ecological processes consistent with the Soundwide restoration priorities identified in B1.1. | 1 | TNC, PSP, WDFW, and DNR will evaluate the effectiveness of Puget Sound MPAs to increase protections for rockfish, forage fish habitat and/or species in existing | soundwide | TNC | PSP | Gap analysis by TNC by Spring 2012; PSP, DNR, and WDFW identify protection gaps provided by current MPAs by September 2012 |
| B | 2.5 | Take actions that protect intact marine environments and priority marine physical and ecological processes consistent with the Soundwide restoration priorities identified in B1.1. | 2 | San Juan County Lead Entity for Salmon Recovery will target funding to highest Tier I salmon recovery projects between 2012-2014, as listed in the San Juan Salmon Recovery three-year work plan for WRIA 2. Projects include acquisition and conservation easements, protection and restoration actions. | local | SJC | | to be determined |
| B | 2.5 | Take actions that protect intact marine environments and priority marine physical and ecological processes consistent with the Soundwide restoration priorities identified in B1.1. | 3 | San Juan County Lead Entity for Salmon Recovery will identify priority habitats for acquisition by 2013 in updates to the Salmon Recovery strategy, and will lead acquisition of, or establishment of conversation easements for 25% of priority habitat acreage with willing sellers/owners by 2014. | local | SJC | | to be determined |
| B | 2.6 | Give permitting agencies and local governments the tools and resources they need to ensure protection of nearshore and marine environments. | 1 | [Who], in coordination with DNR, will create a coordinated permit review and decision making process for shoreline substantial development permits [other types of permits?] to provide additional efficiency and predictability for applicants and promote permitting agencies working together to ensure nearshore protection | soundwide | | DNR | Done or not; how coordinated instead of sequential permits are and/or how quickly permit decisions are made |
| B | 2.6 | Give permitting agencies and local governments the tools and resources they need to ensure protection of nearshore and marine environments. | 2 | San Juan Community Development and Planning Department (CDPD) and the Town of Friday Harbor will provide capacity for technical assistance related to compliance with environmental regulations by 2013. | local | SJC | | to be determined |
| B | 3.1 | Use a variety of mechanisms to advance priority restoration projects. | 1 | [Who] will ensure implementation of restoration projects identified in the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) Strategic Restoration Conceptual Engineering – Final Design Report with an emphasis on projects for which 10% design exists by [date]. [Add increment of progress on this anticipated by 2013.] | soundwide | PSP | | Number of projects funded; number implemented; amount of various nearshore habitats restored |
| B | 3.1 | Use a variety of mechanisms to advance priority restoration projects. | 2 | DNR will increase the beneficial re-use of clean dredged material, by creating a regional system that can link material supply to demand before dredging occurs. | soundwide | DNR | | Increase in the amount of clean dredged material reused |
| B | 3.1 | Use a variety of mechanisms to advance priority restoration projects. | 3 | DNR, in collaboration with Tribal Governments, Ecology, DFW, and DOH, will develop and implement a strategy to reduce impacts from outfalls on state-owned aquatic lands in Puget Sound. Strategy development, including an implementation work plan, will be complete by 4Q 2013. | soundwide | DNR | | Strategy complete or not; impact reduction. |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
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| B | 3.2 | Provide incentives to encourage removal of armoring and associated fill and use of soft armoring techniques when bulkheads fail, need repair, and during redevelopment. | 1 | [Who] will capitalize a low interest loan program to help homeowners remove armoring and restore nearshore processes and to replace hard armoring with soft shore or similar techniques [by when]. | soundwide | | | Number of loans; Miles of bulkhead replaced w/ soft armoring |
| B | 3.2 | Provide incentives to encourage removal of armoring and associated fill and use of soft armoring techniques when bulkheads fail, need repair, and during redevelopment. | 2 | [Who] will create a recognition program to highlight retrofits, redevelopments, bulkhead removals, and soft shoreline projects that demonstrate key techniques and restore nearshore processes by [when]. | soundwide | DFW | PSP | Program in place or not; number of awards. |
| B | 3.3 | Implement priority marine restoration actions consistent with the Soundwide restoration priorities identified in B1.1. | 1 | The Northwest Straits Commission will complete development of a new methodology for deep-water net removal. | soundwide | NSC | | Done or not |
| B | 3.4 | Accelerate restoration projects on public lands where government can lead by example. | 1 | State Parks will identify opportunities to provide nearshore restoration including removing hard armoring at Parks and will implement at least [number] feet of nearshore restoration including armoring removal by [date]. | soundwide | Parks | | Done or not; miles removed |
| B | 3.4 | Accelerate restoration projects on public lands where government can lead by example. | 2 | DNR will convene appropriate state agencies such as WDFW and State Parks to prioritize restoration projects within protected landscapes such as Aquatic Reserves and State parks to ensure maximum long-term benefit from habitat restoration. | soundwide | DNR | | Done or not |
| B | 4.1 | Ports/Marine Industry: Use, coordinate, expand and promote financial incentives and programs for best practices at ports and in the marine industry that are protective of ecosystem health. | 1 | [Who] will explore options for expanding the phase-out of copper bottom paint to include ships over 65 feet in length and/or commercial vessels of various sizes. | soundwide | | | Working group formation and development of recommendations toward reaching the goal of expanded copper bottom paint phase-out. |
| B | 5.1 | Increase access to publically owned Puget Sound shorelines | 1 | No near-term action identified. | | | | |
| B | 5.2 | Increase public access to the marine ecosystem. | 1 | No near-term action identified. | | | | |
| B | 6.1 | Improve data and information to protect eelgrass in sensitive areas | 1 | No near-term action identified. | | | | |
| B | 6.2 | Use a variety of mechanisms to advance priority eelgrass restoration projects | 1 | DNR will identify and recommend sites that are suitable for eelgrass restoration in Puget Sound. Sites will be selected using habitat suitability analysis, hydrodynamic modeling, and their resilience to stressors. This will include identification of sites on state-owned aquatic lands with a focus on areas with long-term protections already in place. | soundwide | DNR | | Maps defining potential eelgrass restoration sites; site evaluations; final recommendations – completed by Dec 2013 (done or not); state aquatic land work complete by January 2013. |
| B | 7.1 | Implement existing biodiversity plans in a coordinated way while a more integrated planning approach is created. | 1 | No near-term action identified. | | | | |
| B | 7.2 | Implement existing marine and nearshore species recovery plans in a coordinated way. | 1 | Appropriate state agencies will prioritize the implementation of their restoration projects identified within existing marine & nearshore species recovery plans. | soundwide | | | |

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| B | 7.2 | Implement existing marine and nearshore species recovery plans in a coordinated way. | 2 | Use and augment existing species plans to create actionable work plans for imperiled species without existing or specified plans. Such species include: Geoduck Clam, Pinto Abalone, Olympia Oyster, Dungeness Crab, Pacific Hake, Pacific Cod, Walleye Pollock, and Rockfish | soundwide | DFW | PSP | Number of actionable work plans for imperiled species currently lacking such plans |
| B | 8.1 | Prevent and rapidly respond to the introduction and spread of marine invasive species. | 1 | The Invasive Species Council will expand its baseline assessment to include an additional 15 of the Council's priority invasive species. The assessment provides locations of species, details about management programs, and identifies gaps that exist. | soundwide | ISC | | Assessment completed by June 30, 2015 |
| B | 8.1 | Prevent and rapidly respond to the introduction and spread of marine invasive species. | 2 | The Invasive Species Council, in collaboration with PSP, will begin developing an early detection and monitoring program plan for priority invasive species in Puget Sound. The Council and PSP will coordinate the plan and implementation efforts with the Puget Sound Coordinated Ecosystem Monitoring and Assessment Program. | soundwide | ISC | PSP | Develop work plan and cost estimates by June 30, 2015. |
| B | 8.1 | Prevent and rapidly respond to the introduction and spread of marine invasive species. | 3 | DFW will evaluate options for managing invasive species transported on and in the hulls of commercial ships. | soundwide | DFW | | Complete literature survey and draft recommendations by June 30, 2015. |
| B | 8.1 | Prevent and rapidly respond to the introduction and spread of marine invasive species. | 4 | DFW will complete an assessment of the effectiveness of open sea exchange and treatment in meeting state ballast water standards. | soundwide | DFW | | Complete report and make available to resource managers and the public by June 30, 2015. |
| B | 8.2 | Answer key invasive species research questions and fill information gaps. | 1 | The Washington Invasive Species Council and PSP will initiate a risk assessment to evaluate the environmental and economic impacts of invasive species in the Puget Sound marine and nearshore ecosystems and incorporate short-term climate change considerations. | soundwide | ISC | PSP | Complete risk assessment by June 2015. |
| C | 1.1 | Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment | 1 | Ecology, working with its partners, will complete a PAH CAP by 2012 and a CAP for PFOS or all PFCs by 2013, and begin to implement the recommendations from the Plans. (Wood smoke actions in the PAH CAP will build from the control strategies outlined in the Tacoma SIP for fine particulates. The PAH CAP may also include recommendations such as diesel fleet retrofit activities and/or electrical shore power for ships at Port facilities. The PFOS/ PFC CAP will include an evaluation of safer alternatives and recommendations for reducing use of PFOS and/or PFCs.) | soundwide | Ecology | | PAH chemical action plan completed or not, pounds/year of PAH reduced |
| C | 1.1 | Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment | 2 | Ecology will establish a mercury lamp product stewardship program by 2013. | soundwide | Ecology | | Program established or not, pounds/year of mercury reduced |
| C | 1.1 | Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment | 3 | Water Quality and Sediment Standards Updates: The Northwest Indian Fisheries Commission and several tribes in the Puget Sound region (and other areas of the state) are examining existing information on fish consumption and in 2012 will provide recommendations to Ecology on tribal consumption rates to support the revisions to the standards. In 2012, Ecology plans to revise the state's sediment quality standards and begin the process to revise the water quality standards to reflect up-to-date information about rates of fish and shellfish consumption in Washington. | soundwide | NWIFC | Ecology | Standards revised and tribal consumption rates addressed or not |
| C | 1.1 | Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment | 4 | The Washington Department of Agriculture will assemble data on non-agricultural use of copper-based pesticides in Washington based on changes in registration status on copper containing pesticides and comparing and contrasting use patterns in Washington and California. This work will begin with estimates of urban landscape/homeowner use and will expand to commercial applicators if funding is available. | soundwide | AGR | | report by Dec. 2012 providing refined estimates of urban landscape/homeowner uses of copper in Puget Sound. |

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| C | 1.1 | Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment | 5 | Alternatives to Copper in Pesticides: Ecology and the Washington Department of Agriculture will evaluate alternatives to copper in pesticides to identify whether safer alternatives are available and commercially viable. Based on the alternatives analysis results, the agencies will explore options to limit the use of copper-based pesticides, if better alternatives are available. | soundwide | AGR | Ecology | identification of alternatives to copper in pesticides; identification of options to limit the use of copper-based pesticides for residential use |
| C | 1.1 | Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment | 6 | Monitoring and Assessment: PSP and the agencies involved in toxics source-reduction programs in the Puget Sound region—including air, stormwater, wastewater, and toxics reduction programs at Ecology, DNR, DOH, and local jurisdictions—will develop a long-term Puget Sound toxics monitoring and assessment program that will cover (1) status and trends monitoring of toxics in and released to Puget Sound; (2) effectiveness of strategies and actions to reduce and prevent toxic chemicals from entering the Puget Sound environment; and (3) annual progress reports that compile information on results and effectiveness from multiple programs. To avoid redundancy and improve program design, this toxics-focused effort will be coordinated with and through the Puget Sound Assessment and Monitoring Program. Provided that funding is obtained, the agencies would seek to make recommendations for monitoring in 2012, and develop a monitoring plan in 2013. | soundwide | PSP | | Monitoring and assessment plan developed or not |
| C | 1.2 | Promote the development and use of safer alternatives to toxic chemicals. | 1 | By 2013, Ecology will work with the Interstate Chemicals Clearinghouse (IC2) to develop a guidance document on chemical alternatives assessment and will complete assessments of five chemicals to identify safer alternatives. In the same timeframe, Ecology will establish a task force that will oversee a study evaluating toxic materials (including toxic metals and, possibly, phthalates) in roofing materials and recommend strategies for promoting less-toxic alternatives. To support the task force's work, Ecology will solicit information from manufacturers on the presence of toxic chemicals in roofing materials. Using any data from manufacturers or previously published studies, Ecology will create and implement a sampling strategy to assess the release of contaminants from different roofing materials. The task force will use this information to develop its recommendations. | soundwide | Ecology | | Guidance document developed or not; alternatives assessments complete or not; study of toxic materials in roofing materials completed or not; task force recommendations developed or not |
| C | 1.2 | Promote the development and use of safer alternatives to toxic chemicals. | 2 | Ecology and key stakeholders in business, government, and academia will develop a green chemistry road map for Washington by 2012 outlining ways to promote the adoption of green chemistry practices. Ecology will begin implementation of the recommendations in the roadmap and advance green chemistry practices through the Green Chemistry Roundtable, which includes government, business, and non-governmental partners. By 2013, Ecology will host a green chemistry conference in the region. | soundwide | Ecology | | Green chemistry road map developed or not, green chemistry conference held or not |
| C | 1.3 | Adopt and implement plans and control strategies to reduce toxic releases into the Puget Sound from air emissions. | 1 | None. | | | | |
| C | 1.4 | Provide education and technical assistance to prevent and reduce toxic releases. | 1 | Landscaper Certification: By 2013, Ecology will work with the Washington Department of Agriculture, business associations, and other stakeholders to establish a landscaper certification program to promote environmentally friendly landscape development and maintenance practices. The program would be designed to improve habitat and water quality by reducing the use of pesticides containing toxic chemicals, reducing the use of fertilizers, reducing use of water for irrigation, reducing runoff from landscaped properties, and reducing emissions from landscape equipment. | soundwide | Ecology | AGR | Program established or not, number of accredited professionals or certified sites (or other participation measure) |

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| C | 1.4 | Provide education and technical assistance to prevent and reduce toxic releases. | 2 | By 2013, Ecology will work with the new Washington Department of Enterprise Services to develop environmental opportunity assessments for 6–10 contracts; these assessments will identify environmentally preferable purchases that could help reduce toxic pollution while seeking best value for the state. Best value includes looking at price, performance, availability and environmental considerations when developing and awarding contracts. | soundwide | Ecology | | Number of completed “environmental opportunity assessments” for Department of Enterprise Services contracts, number of environmentally preferable purchases completed based on the assessments, pounds of hazardous wastes reduced per year |
| C | 1.5 | Increase compliance with and enforcement of environmental laws, regulations, and permits. | 1 | Increase Ecology’s hazardous waste, wastewater, and air quality compliance inspection and enforcement programs in the Puget Sound. | soundwide | Ecology | | Number of compliance inspections completed per year, pounds of hazardous wastes and air pollutants reduced per year, volume of wastewater discharges reduced per year |
| C | 2.1 | Manage urban runoff at the basin and watershed scale | 1 | Protect best remaining streams: King County, in cooperation with agencies populating the Puget Sound Stream Benthos database, identifies and maps remaining streams with B-IBI scores of at least 42–46 and develops an overall strategy and tailored actions to protect these areas. | soundwide | King Cty | | Map of targeted streams delivered six months after receiving funding; strategies and actions to protect targeted stream drainages delivered 12 months after receiving funding. |
| C | 2.1 | Manage urban runoff at the basin and watershed scale | 2 | System mapping: A lead, to be determined, in cooperation with local governments, WSDOT, and Department of Natural Resources, helps improve understanding and management of the region’s stormwater infrastructure by developing protocols, methodology and definitions for stormwater system mapping, and developing geo-referenced databases that can be compiled into a regional geo-referenced database of the Sound’s regulated, municipal stormwater system. | soundwide | Ecology | PSP | Protocols, methodology and definitions to guide mapping and documentation efforts by March 2013; completed geo-referenced database by December 2013 |
| C | 2.2 | Prevent problems from new development at the site & subdivision scale | 1 | Within NPDES municipal permitted areas: Ecology provides financial assistance to permittees for implementation, particularly for code changes, stormwater system mapping, operations and maintenance, inspections and enforcement. Provide additional resources to Ecology for permit oversight, technical assistance, and enforcement. Provide incentives to NPDES permittees who, by interlocal agreement, lead or carry out regional or watershed scale NPDES implementation. | soundwide | Ecology | | Additional resources to Ecology by July 2013; financial assistance provided to permittees by December 2013; incentives provided to permittees for regional implementation by December 2013. |
| C | 2.2 | Prevent problems from new development at the site & subdivision scale | 2 | Treatment standards: Ecology evaluates under which circumstances (i.e., for which pollutants, from which land uses) discharges to Puget Sound should be required to provide treatment beyond sediment removal (i.e., TSS removal) to help meet 2020 recovery targets. | soundwide | Ecology | | Evaluation with supporting documentation by March 2014 |
| C | 2.2 | Prevent problems from new development at the site & subdivision scale | 3 | Outside permitted areas: Ecology, in coordination with the state Department of Health, identifies two high priority shellfish growing areas degraded by urban stormwater discharges and works with local governments and other key parties to reduce these impacts to the areas. | soundwide | Ecology | | Assistance provided to non-permitted local governments by September 2012; documentation of reduced impacts. |
| C | 2.2 | Prevent problems from new development at the site & subdivision scale | 4 | Vesting: Washington Stormwater Center or Puget Sound Institute assesses projected implications and impacts of current state vesting laws on aquatic resources and beneficial uses. Prepare report for the Science Panel, ECB and LC. | soundwide | Stormwater Center | PSI | Report on projected implications and impacts of current vesting laws developed and shared by December 2012. |
| C | 2.2 | Prevent problems from new development at the site & subdivision scale | 5 | San Juan County Community Development and Planning Department (CDPD) and the Town of Friday Harbor will improve the stormwater permit review process with pre-disturbance site review and follow-up site visits at 50% of properties permitted between 2012-2013 and 50% of properties permitted between 2013-2014. | local | SJC | | |

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| C | 2.2 | Manage urban runoff at the basin and watershed scale | 6 | Stormwater Management Program Updates and Implementation (Clallam, Jefferson, Port Angeles, Sequim, and Port Townsend) › City of Port Townsend stormwater management plan › City of Sequim stormwater management plan › City of Port Angeles CSO reduction › City of Port Angeles NPDES stormwater management program implementation › Jefferson County public education plan implementation › Jefferson County low impact development and BMP staff training › Jefferson County low impact development and BMP training for development community › Clallam County stormwater technical assistance › Clallam County outreach and education › Clallam County stormwater monitoring a data analysis › Clallam County stormwater management staff training › Clallam County land use analysis › Clallam County stormwater management plan › Speaker forum on reducing stormwater impacts from roads (Note: this action is also relevant to Strategies C2.2, C2.3, C2.4, C2.5, and C2.6) | local | | | Adoption of LID incentives and ordinances by all 5 Strait Action Area local jurisdictions Alternative Option: Initiate or complete 25% of the new Priority Actions identified by the Strait ERN for the Strait Action Area |
| C | 2.3 | Fix problems caused by existing development (structural upgrades; regular & enhanced maintenance) | 1 | Retrofits: The Puget Sound Regional Council, building on retrofit prioritization work funded by the EPA in King County and elsewhere, identifies the top priority retrofit projects associated with the transportation infrastructure in the urbanized portions of King, Pierce, Kitsap and Snohomish counties and completes conceptual design to a stage sufficient to seek project implementation funding. The project should be replicable in other urban and suburban areas around the Sound. | soundwide | Ecology | PSP | New regional stormwater retrofit prioritization process and list of projects by December 2012. |
| C | 2.3 | Fix problems caused by existing development (structural upgrades; regular & enhanced maintenance) | 2 | Restore degraded streams: King County, in cooperation with agencies populating the Puget Sound Stream Benthos database, identifies and maps stream drainages with “fair” B-IBI scores, and develops prioritized list, strategies and actions to improve scores of 30 of these streams. | soundwide | King Cty | | Map of targeted drainages six months after providing funding; prioritized list for restoration and strategies, actions, and budgets 12 months afterwards. |
| C | 2.3 | Fix problems caused by existing development (structural upgrades; regular & enhanced maintenance) | 3 | Legacy pollutants: Ecology, in cooperation with local governments, provides guidance and financial assistance to local governments to help them remove legacy pollutant loads from their stormwater systems. | soundwide | Ecology | | Shared guidance; financial assistance to permittees by December 2013. |
| C | 2.4 | Control sources of pollutants | 1 | Ecology and local governments increase inspection, technical assistance, and enforcement programs for high-priority businesses and at construction sites. | soundwide | Ecology | | Increased number of inspections, technical assistance, and enforcement activities by December 2012 |
| C | 2.4 | Control sources of pollutants | 2 | PSP, in cooperation with WSDOT and an advisory committee, convenes a group to discuss options for developing a new program to inspect and eliminate privately-owned vehicle drips and leaks. | soundwide | PSP | WSDOT | Report on options, benefits, costs, feasibility by June 2013 |
| C | 2.4 | Control sources of pollutants | 3 | San Juan County Public Works will convene Community Development and Planning Department (CDPD), Department of Health and Community Services (DHCS), and the San Juan Islands Conservation District (CD) to identify and coordinate best management practices for stormwater, on-site septic systems, and animal wastes with community participation by 2013. CDPD, DHCS, CD, and the Town of Friday Harbor will publicize information by the second quarter of 2014 at the DHCS, CDPD, and Town permit counters and associated websites, with a goal to target 100% of applicants by the end of 2014. San Juan County will provide for identified best management practices in County Code by 2014. | local | SJC | | |

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| C | 2.5 | Provide focused stormwater-related education and training | 1 | Washington Stormwater Center; Ecology and PSP provide focused training for local government staff on LID project review, and inspections and approvals, as well as to local government staff and private sector on maintenance. Develop new professional certification for stormwater maintenance specialists. Provide business staff and contractors with training on source control, spill recognition, spill response, and erosion control. | soundwide | Stormwater Center | PSP | Increased professional training with additional emphases on topics listed; new certification for maintenance specialists; new source control training for businesses. |
| C | 2.6 | Assess effectiveness of actions and effects on the environment | 1 | San Juan County Public Works Stormwater Utility will lead and work jointly with the Stormwater Committee, the Water Resources Committee, the Marine Resources Committee, and the Town of Friday Harbor to implement an annual strategic monitoring plan by 2013 to measure levels of fecal coliform bacteria, heavy metals, persistent organic pollutants, and polycyclic aromatic hydrocarbons in priority basins to test the effectiveness of BMPs. In the first year post-implementation, monitor 100% of priority basins, with monitoring actions ongoing after 2014 | local | SJC | | to be determined |
| C | 3.1 | Target voluntary and incentive-based programs in ways that will best contribute to Puget Sound recovery. | 1 | The State Conservation Commission and the departments of Agriculture, Ecology and Health should identify priority areas and resource impacts to target areas where implementation of voluntary incentive programs for rural unincorporated landowners, small-acreage landowners, working farms and nurseries can complement regulatory efforts and where they can best contribute to Puget Sound protection and recovery. | soundwide | SCC | AGR | Identification of areas and implementation of programs in these areas |
| C | 3.1 | Target voluntary and incentive-based programs in ways that will best contribute to Puget Sound recovery. | 2 | [Placeholder: The Department of Ecology, in collaboration with the Department of Agriculture and the Conservation Commission will identify an approach to ensure best management practices achieve water quality standards.] | soundwide | Ecology | AGR | complete or on |
| C | 3.1 | Target voluntary and incentive-based programs in ways that will best contribute to Puget Sound recovery. | 3 | [Placeholder: [WHO] will report on the effectiveness of incentive programs to achieve resource objectives, with a particular focus on water quality standards. Participation will be sought from: PSP, Ecology, Agriculture, Health, the Conservation Commission, Conservation Districts, Federal agencies, and Tribes.] | soundwide | | | done or not |
| C | 3.2 | Ensure compliance with regulatory programs designed to reduce, control or eliminate pollution from working farms. | 1 | Ecology will issue an updated CAFO permit in 2012. | soundwide | Ecology | | updated CAFO permit issued or not |
| C | 4.1 | Demonstrate achievement of water quality standards through implementation of the Forest and Fish Report on state and privately owned working forests. | 1 | DNR and Ecology obtain an independent performance review of the Forest Practices AMP to include an evaluation of the structure and function of the program, based on its performance, efficiency and accountability and stabilize and diversify funding for the Forest Practices AMP, training and certification, compliance monitoring, and enforcement. | soundwide | DNR | Ecology | to be determined |
| C | 4.2 | Ensure road maintenance and abandonment plans on working forestland subject to the Forest Practices Rules are completed on schedule. | 1 | No near-term actions identified. | | | | |
| C | 4.3 | Ensure road systems in Federal forests meet the same substantive standards for maintenance and abandonment under the Washington Forest Practices rules as those state and privately owned forests. | 1 | No near-term actions identified. | | | | |

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| C | 5.1 | Effectively manage and control pollution from small on-site sewage systems. | 1 | DOH, in consultation with Local Health Jurisdictions (LHJs), will evaluate the effectiveness of the state OSS rule, identify potential changes, and outline recommendations to the State Board of Health by 2013. | soundwide | DOH | LHJs | Done or not |
| C | 5.1 | Effectively manage and control pollution from large on-site sewage systems. | 2 | LHJs will work to inventory, inspect, and fix OSS and designate areas for enhanced management to make progress on the OSS ecosystem recovery target. To support this, DOH will work with LHJs to identify successes and best practices and develop common performance standards and recommend approaches to improve this work. | soundwide | DOH | LHJs | progress towards the OSS ecosystem recovery target; information sharing on best practices, etc. |
| C | 5.1 | Effectively manage and control pollution from small on-site sewage systems. | 3 | DOH will evaluate public domain OSS treatment technologies for nitrogen reduction and develop standards and guidance for their use if testing results indicate the technologies are effective and reliable. The evaluation will be complete by December 2013 and standards/guidance development, if needed, will begin after that. | soundwide | DOH | | Evaluation complete or not; standards and guidance (if appropriate) done or not; number of OSS where nitrogen reduction technologies are deployed. |
| C | 5.1 | Reduce the concentrations of contaminant sources of pollution conveyed to wastewater treatment plants through education and appropriate regulations, including improving pre-treatment requirements. | 4 | San Juan County Health and Community Services will fully implement the On-site Sewage System (OSS) Operation and Maintenance Program Plan, with a goal of 100% of systems in sensitive areas in compliance and current with inspections by 2014 and 60% of alternative systems to have inspections between 2010-2014. | local | SJC | | to be determined |
| C | 5.2 | Effectively manage and control pollution from large on-site sewage systems. | 1 | No near-term actions identified. | | | | |
| C | 5.3 | Improve and expand funding options for small on-site sewage systems and local OSS programs. | 1 | DOH, Ecology, and PSP will help evaluate options and support proposals to fund a unified, self-sustaining, low-interest loan program in the Puget Sound region to help OSS owners repair and replace their systems. | soundwide | DOH | PSP | Loan program in place or not; coverage of loan program; capitalization of loan program; number of homeowners assisted; improvements in OSS/LOSS compliance rates |
| C | 6.1 | Reduce the concentrations of contaminant sources of pollution conveyed to wastewater treatment plants through education and appropriate regulations, including improving pre-treatment requirements. | 1 | Ecology will evaluate expanded monitoring of phthalates in priority pollutant scans for all industrial users in pretreatment programs by 2013. | soundwide | Ecology | | Done or not; number of industrial users who complete phthalates scans. |
| C | 6.2 | Reduce pollution loading to Puget Sound by preventing and reducing Combined Sewer Overflows. | 1 | No near-term actions identified. | soundwide | | | |
| C | 6.3 | Improve the reliability of the wastewater collection system by reducing inflow, infiltration and exfiltration. | 1 | No near-term actions identified. | | | | |
| C | 6.4 | Implement priority upgrades of municipal and industrial wastewater facilities in urban and urbanizing areas to increase the effectiveness of treatment and reduce pollution loads to Puget Sound. | 1 | No near-term actions identified. | | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|---|-----------|----------|-----------------|---|
| C | 6.5 | Ensure all centralized wastewater treatment plants meet discharge permit limits through compliance monitoring, technical assistance, and enforcement where needed. | 1 | No near-term actions identified. | | | | |
| C | 6.6 | Promote appropriate reclaimed water projects to reduce pollutant loading to Puget Sound. | 1 | No near-term actions identified. | | | | |
| C | 7.1 | Include assessment of cumulative impacts in planning and permitting for centralized and decentralized wastewater systems in comprehensive plans. | 1 | Commerce, Ecology, and DOH will encourage communities to more comprehensively provide for wastewater treatment on a watershed basis, using water budgeting tools and striving to use all water resources available (including reclaimed water) to meet the needs of people and the environment by aligning existing plans and planning processes to more effectively meet wastewater treatment and management needs. This might take the form of a pilot program in a watershed that has or will soon have a full TMDL assessment and a water cleanup plan. | soundwide | Commerce | Ecology | Pilot project done or not |
| C | 7.1 | Include assessment of cumulative impacts in planning and permitting for centralized and decentralized wastewater systems in comprehensive plans. | 2 | Commerce, Ecology and DOH will identify shoreline areas outside urban growth boundaries where residential densities are great enough that it may be appropriate to extend centralized wastewater collection systems and that are in close enough proximity to centralized treatment that extension of infrastructure may be feasible. The goal of this effort is completion of one pilot project by 2012. | soundwide | Commerce | Ecology | Pilot program in place or not. |
| C | 8.1 | Establish No Discharge Zones for commercial and/or recreational vessels in all parts of Puget Sound that have nutrient and/or pathogen problems, have high vessel use, or are significant sources for shellfish production. | 1 | By Fall of 2013 Ecology and DOH, in coordination with the Department of Natural Resources, will conduct an evaluation and draft a petition to EPA to establish a NDZ for commercial and recreational vessels to eliminate bacteria, nutrients, and pathogens from being discharged to all or parts of Puget Sound. The evaluation will include researching petition requirements; gathering background information and pump-out station data for the petition; identifying, reaching out to, and getting input of stakeholders; identifying and prioritizing which areas of the Puget Sound are feasible for petition; and evaluating how to implement the designation. | soundwide | Ecology | DOH | Done or not. |
| C | 8.1 | Establish No Discharge Zones for commercial and/or recreational vessels in all parts of Puget Sound that have nutrient and/or pathogen problems, have high vessel use, or are significant sources for shellfish production. | 2 | Ecology and DOH, with National Estuary Program grant funding, will coordinate with Washington State Parks' Clean Vessel Program to assist in construction, repair and monitoring of pump-out stations to meet requirements of the NDZ petition. | soundwide | Ecology | DOH | Number of pump-out stations added or improved. Amount of sewage pumped out. Pump out capacity is able to support a NDZ designation. |
| C | 8.2 | Control other sources of boat and vessel pollution including oils and other toxics. | 1 | No near-term actions identified. | soundwide | | | |
| C | 9.1 | Improve water quality to prevent downgrade and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas. | 1 | Replicate model programs, such as those in Henderson Inlet and Oakland Bay, that create coordinated, locally-driven efforts to protect and improve shellfish harvest areas. Create a best practices library or menu highlighting successful strategies so that jurisdictions do not have to reinvent the wheel. | soundwide | | | Best practices library complete or not; number of replicate efforts/programs. |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|--|-------|--|-----------|---------|-----------------|------------------------------|
| C | 9.1 | Improve water quality to prevent downgrade and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas. | 2 | [Who?] will convene a forum of stakeholders and regulatory agencies involved in the restoration of water quality in shellfish growing areas to: § Assess how state and federal agencies can enhance local governments' efforts to respond to threatened and downgraded shellfish areas. § Develop an agreement between state agencies regarding roles and responsibilities. § Identify methods and tools that help identify and correct nonpoint pollution problems. § Provide incentives for local governments for the long-term protection of shellfish growing areas. | soundwide | | | Done or not |
| C | 9.2 | Restore and enhance native shellfish populations | 1 | No near-term actions identified. | | | | |
| C | 9.3 | Encourage environmentally responsible shellfish aquaculture and enhancement of the recreational harvest based on sound science. | 1 | [DNR] will work with stakeholders to create pilot projects testing the use of mussel culture or other suspended or beach culture to mitigate nitrogen pollution in sensitive areas, such as the project in Quartermaster Harbor. This aquaculture application may serve to encourage public-private opportunities to reduce nitrogen impacts that are both efficient and cost effective and provide an alternative to advanced wastewater treatment technology. | | DNR | | Number of replicate projects |
| C | 9.3 | Encourage environmentally responsible shellfish aquaculture and enhancement of the recreational harvest based on sound science. | | Ecology will revise the Shoreline Master program Guidelines or create targeted guidance handbook on aquaculture for local governments based on Sea Grant research and other vetted sound science suitable for application in Puget Sound. | | | | Done or not |
| C | 9.4 | Resolve competing priorities between aquaculture and nearshore, habitat and upland uses. | 1 | [Who] will support pre-planning and implementation of marine spatial planning and local shoreline master program updates by: gathering, compiling an ground-truthing baseline information on current aquaculture and filling data gaps and completing research to identify areas that are suitable and unsuitable for future shellfish aquaculture. | soundwide | | | to be determined |
| C | 9.5 | Implement Washington State's Shellfish Initiative | 1 | [PLACEHOLDER: Discussions are ongoing about implementation of these policies/initiatives relative to Puget Sound shellfish and near term actions will be added as they are identified. Some issues that may be addressed are: creating a communication plan for shellfish; promoting native shellfish restoration and recreational shellfish harvest; ensuring clean water to protect and enhance shellfish beds.] | soundwide | | | |
| C | 10.1 | Spill Prevention: Emphasize use of risk-based approaches to improve marine safety and protect our environment, economy and quality of life | 1 | Assess trends in ship traffic, vessel incidents and incident notifications for use in targeting inspections and setting standards. | soundwide | Ecology | | Assessment complete or not |
| C | 10.1 | Spill Prevention: Emphasize use of risk-based approaches to improve marine safety and protect our environment, economy and quality of life | 2 | Evaluate marine traffic risk assessment models that could be used to develop appropriate oil spill risk reduction measures. | soundwide | Ecology | | Evaluation complete or not |
| C | 10.1 | Spill Prevention: Emphasize use of risk-based approaches to improve marine safety and protect our environment, economy and quality of life | 3 | San Juan Marine Resources Committee will convene 20 agencies and non-governmental organizations responsible for oil spill prevention and readiness at the 2012 Marine Manager Workshop, including participation from the local, state, federal, and Canadian organizations. Workshop outcomes will include a list of agreed upon recommendations for oil spill prevention. Local jurisdictions will adopt highest priority recommendations within their authority by 2014. | local | SJMRC | | to be determined |

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|----------|---------|--|-------|---|-----------|---------|-----------------|--|
| C | 10.2 | Spill Readiness: Broaden State participation in oil spill drills and promote better integration with tribes and local government. | 1 | Oil Spill Prevention, Preparedness, and Response – Implement and promote improvements in oil spill prevention, preparedness, and response programs, policies, or capabilities for the benefit of the Strait of Juan de Fuca and adjacent waters <ul style="list-style-type: none"> - Support equipment standards rulemaking - Support trans-boundary coordination on oil spills - Makah Tribal Council Oil Pollution Initiative and Vessel of Opportunity Program - Participate on cross-partnership Oil Spill Workgroup - Geographic Response Plans (GRP) data - Participate on Northwest Area Committee (NWAC) - Work to expand drills along Strait of Juan de Fuca and coast - Organize local volunteers - Establish a liaison role during spill events for Strait Action Area - Support establishment of response to tugs along Strait of Juan de Fuca | local | | | Initiate or complete 40% of the Priority Actions identified by the Strait ERN for the Strait Action Area |
| C | 10.3 | Spill Response: Ensure the best available science and technology are used to respond to spills and improve cleanup efficiency. | 1 | Revise WAC 173-183 to conform with HB1186 from the 2011 session, requiring the best achievable protection from the impacts of oil spills. | soundwide | Ecology | | Rulemaking complete or not |
| C | 10.3 | Spill Response: Ensure the best available science and technology are used to respond to spills and improve cleanup efficiency. | 2 | Islands Oil Spill Association (IOSA) will maintain local oil spill readiness and response programs at its current level of funding and staff/volunteer capacity through 2014. Identify remaining local response needs at the 2012 Marine Managers Workshop and consider these, along with a funding and action plan, as part of the workshop recommendations. | local | IOSA | | to be determined |
| C | 10.4 | Environmental Restoration: Strengthen oil spill Natural Resource Damage Assessment and Restoration (NRDAR). | 1 | Revise WAC 173-182 to conform with HB1186 from the 2011 session, requiring Natural Resource Damage Assessment values be increased. | soundwide | Ecology | | Rulemaking complete or not |
| C | 10.4 | Environmental Restoration: Strengthen oil spill Natural Resource Damage Assessment and Restoration (NRDAR). | 2 | Support baseline scientific data collection for key species at risk in oil spills to enhance assessments. | soundwide | Ecology | | Baseline data collected or not |
| C | 11.1 | Complete Total Maximum Daily Load (TMDL) studies and other necessary water cleanup plans for Puget Sound to set pollution discharge limits and determine response strategies to address water quality impairments. | 1 | No near-term actions identified. | | | | |
| C | 11.2 | Clean up contaminated sites within and near Puget Sound. | 1 | No near-term actions identified. | | | | |
| C | 11.3 | Restore and protect water quality at swimming beaches and recreational areas. | 1 | Ecology and DOH, and the Steering Committee for the Puget Sound Assessment and Monitoring Program, will develop a program for coordinated environmental monitoring and notification of public health threats from contaminated water at freshwater swimming beaches. The Steering Committee will discuss a proposed approach for a beach monitoring program for the Puget Sound region by 2014. | soundwide | Ecology | DOH | Development and adoption of a freshwater beach assessment and monitoring program |

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|----------|---------|--|-------|--|-----------|---------|-----------------|--|
| C | 11.3 | Strategies and actions to flow from the BSWP effort | 2 | Ecology and DOH will evaluate options for focusing or prioritizing the marine BEACH program to address potential water-contamination issues faced by all recreational users of Puget Sound, including surfers, paddle boarders, kayakers, kite boarders, and scuba divers. The agencies will expand the BEACH program or take other appropriate actions to address the issues of non-swimming recreational users by 2013. | soundwide | Ecology | DOH | Program expanded or not or other control measures instituted |
| C | 11.4 | Develop and implement local and tribal PIC programs | 1 | No near-term actions identified. | | | | |
| C | 11.5 | Develop and implement a monitoring and evaluation program. | 1 | PSP will work with Ecology, DNR, DOH, other key implementation agencies, and stakeholders for the Action Agenda to develop a program for monitoring the effectiveness of activities to reduce water pollution to Puget Sound and monitoring progress towards ecosystem recovery targets for water quality. (This will be done through the activities described in the cross-cutting strategy D, Implement a Coordinated, Integrated Ecosystem Monitoring Program.) . | soundwide | PSP | Ecology | Effectiveness monitoring program established or not |
| D | 1.1 | Provide backbone support for the recovery effort and Management Conference | 1 | No near-term actions are identified | soundwide | | | |
| D | 1.2 | Maintain and update the Action Agenda as the shared recovery plan | 1 | No Soundwide near-term actions are identified | soundwide | | | |
| D | 2.1 | Advance the coordination of local recovery actions via local integrating organizations | 1 | None | | | | |
| D | 3.1 | Work collaboratively to track and report on implementation performance | 1 | PSP launches an Accountability IT Application that is accessible to the public and that tracks budgeting, attainment of milestones, and achievement of performance measures for near Term Actions in the Action Agenda (Q1 2012) - Update the Dashboard of Vital Signs web tool | soundwide | PSP | | <ul style="list-style-type: none"> • Train state agency staff responsible for reporting on the use of the application (Q2 2012) • In collaboration with the Science and Monitoring team and other partners, design and develop phase 2 of the Accountability IT Application to include data on outcomes of the regional actions (Q2 2013) • Collaborate with other partners to develop a more efficient system for reporting that minimizes redundancy within the state reporting system (Q1 2013) and between the state and federal reporting systems, and that better reports on achievement of ecosystem outcomes (Q4 2013) • Update the Dashboard of Vital signs tool to include a GIS-based reporting system that assists the public in distinguishing, to the extent feasible, attainment of ecosystem and pressure reduction targets on a sub-regional basis (Q2 2013) • 100% of the highest priority actions in the Action Agenda are "On Plan" • 90% of the near term actions that are the responsibility of PSP are "On Plan" • 80% of implementers reporting regarding ongoing and near term actions in the Action Agenda are "On Plan." |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
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| D | 3.2 | Work collaboratively to report on recovery progress | 1 | PSP leads the building of a community of performance practice that is inclusive of local jurisdictions, tribal governments and private organizations involved in the work of restoring the Sound. The goal is to assemble and share data and experiences on sound recovery strategies techniques and outcomes | soundwide | PSP | | <ul style="list-style-type: none"> • Convene a forum that meets regularly to collaborate on performance practice (Q4 2012; Q4 2013) • Convene workshops to build relationships among the people who implement projects and collect monitoring data at the local and subregional levels to share successful strategies, build a regional database, provide training for local monitoring programs and stewards, and identify data gaps. (Q3 2012; Q3 2013). |
| D | 3.2 | Work collaboratively to report on recovery progress | 2 | PSP develops an approach for collaborative analysis of data on the cost/benefit of key actions undertaken in the Action Agenda | soundwide | PSP | | <ul style="list-style-type: none"> • Convene panel to review existing data and models. Key partners include technical panel of representatives from state and federal agencies, tribal government, regional local governments and interest groups represented on the ECB. (Q1 2012) • Conduct a pilot using the agreed-upon collaborative analysis approach and tolls to provide an analysis to the Leadership Council and legislature on three Action Agenda priority actions or suites of actions that may be used to better information decision within the region on funding priorities. (Q2 2013) • Develop models and tools for data analysis that may be utilized by organizations to inform individual decisions on strategies and expenditures. (Q4 2013) |
| D | 4.1 | Oversee strategic planning for Puget Sound recovery science. | 1 | Develop the PSP adaptive management framework and technical tools to assist in the steps of the adaptive management cycle. | soundwide | PSP | | <ul style="list-style-type: none"> • Publish technical memorandum describing the PSP's adaptive management framework June 2012 • Publish technical memorandum describing methods of assessing pressures on the Puget Sound ecosystem June 2012 • Develop adaptive management frameworks for five watersheds that links watershed recovery and recovery of ESA listed species July 2013 |
| D | 4.2 | Implement a Coordinated, Integrated Ecosystem Monitoring Program | 1 | Help design and implement a Monitoring Accountability Application. | soundwide | PSP | | <ul style="list-style-type: none"> • Provide the business requirements for the Monitoring Accountability Application, including the web-based inventory of monitoring programs to help raise awareness and enhance coordination of efforts among all sectors in the region. June 2012. • Establish and maintain a publicly available web-based inventory of Puget Sound monitoring programs July 2013 |
| D | 5.1 | Prioritize targeted stewardship issues, actions and audiences based on (1) problem severity, (2) problem frequency, (3) availability of and confidence in science (natural and social) behind the problem, and (4) ability to influence change. | 1 | No near-term actions identified. | soundwide | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|--|-------|--|-----------|-------|-----------------|---|
| D | 5.2 | Enable and encourage residents to take informed stewardship actions addressing infiltration, pollution reduction, habitat improvement, forest cover, soil development, critical areas, reductions in shoreline armoring, and specific actions identified in sub-strategy D5.1. | 1 | No near-term actions identified. | soundwide | | | |
| D | 5.3 | Collaboratively develop and promote science-based targeted communications and behavior change strategies across the region. | 1 | No near-term actions identified. | soundwide | | | |
| D | 5.4 | Improve effectiveness of local and regional awareness-building and behavior change programs through vetted messages, proven strategies and outcome-based evaluation. Guide partners in use of formative research and diffusion of priority BMPs. | 1 | PSP conducts, synthesizes and disseminates formative research to identify barriers and motivators relative to the adoption of specific priority practices and behaviors. | soundwide | PSP | | Research underway on at least two BMPs by February 2012. Research on at least eight practices complete by December 2013 |
| D | 5.4 | Improve effectiveness of local and regional awareness-building and behavior change programs through vetted messages, proven strategies and outcome-based evaluation. Guide partners in use of formative research and diffusion of priority BMPs. | 2 | PSP provides uniform guidance to partners to (1) emphasize priority practices and behaviors, (2) ensure that partner programs intended to address these priority practices are based on tested, proven methods, and (3) ensure that those programs include the necessary formative research to ensure achievement of desired outcomes. | soundwide | PSP | | Grant guidance developed by July 2012. Non-grant guidance developed by December 2012 |
| D | 5.4 | Improve effectiveness of local and regional awareness-building and behavior change programs through vetted messages, proven strategies and outcome-based evaluation. Guide partners in use of formative research and diffusion of priority BMPs. | 3 | PSP and local partners implement a regional behavior change initiative promoting increased forest canopy cover, tree planting, and soil health as identified in STORM's tier-BMPs. | soundwide | PSP | STORM | Pilot program funding awarded by April 2012. Formative research complete by April 2013. Pilot program and evaluation underway by October 2013 |
| D | 5.5 | Enhance resources to sustain and expand effective behavior change and volunteer programs that support Action Agenda priorities and that have demonstrated, measurable outcomes. | 1 | No near-term actions identified. | soundwide | | | |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|--|-------|--|-----------|-------|-----------------|--|
| D | 5.6 | Create a repository of market, social, and audience research to support stewardship work. Include research and data from local, state, and federal governments, nonprofit, and private sector sources. Synthesize and disseminate to partners. | 1 | No near-term actions identified. | soundwide | | | |
| D | 5.7 | Review practices and issues that require solutions beyond the Puget Sound region such as automotive, manufacturing and distribution of toxins, and pharmaceutical waste management. Develop strategies and partnerships outside the Puget Sound region to address issues. | 1 | No near-term actions identified. | soundwide | | | |
| D | 6.1 | Implement a long-term, highly visible, coordinated public-awareness effort using the Puget Sound Starts Here brand to increase public understanding of Puget Sound's health, status, and threats. Conduct regionally-scaled communications to provide a foundation for local communications efforts. Conduct locally-scaled communications to engage residents in local issues and recovery efforts. | 1 | PSP, STORM, and the Ecology incorporate messages and content into the next phase of the Puget Sound Starts Here campaign appropriate to the demography and issues facing the Puget Sound region, including messages suited to rural audiences, that foster regional identity, and that build direct personal connections to Puget Sound's resources. | soundwide | PSP | Ecology | Step 1 mass media publicly launched by May 2012. Step 2 launched by October 2012. |
| D | 6.1 | Implement a long-term, highly visible, coordinated public-awareness effort using the Puget Sound Starts Here brand to increase public understanding of Puget Sound's health, status, and threats. Conduct regionally-scaled communications to provide a foundation for local communications efforts. Conduct locally-scaled communications to engage residents in local issues and recovery efforts. | 2 | PSP and grantees develop a portfolio of vetted outreach content and tools for use by local organizations in their programs. ECO-Net and STORM networks are used to disseminate content. | soundwide | PSP | | Initial content developed and disseminated by July 2012. Content on priority Best Management Practices developed and disseminated by January 2013. |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|---|-------|---|-----------|-------|-----------------|--|
| D | 6.2 | Incorporate and expand Puget Sound related content in diverse delivery settings (e.g., recreation, education institutions, local government, neighborhood and community groups, nonprofit organizations, businesses). Connect residents with public engagement and volunteer programs. | 1 | No near-term actions identified | soundwide | | | |
| D | 6.3 | Incorporate Puget Sound place-based content into K-12 curricula throughout the Puget Sound region. Connect schools with technical assistance, inquiry-based learning opportunities, and community resources. Implement student service projects connected to ecosystem recovery. Link schools to organizations with structured volunteer opportunities. | 1 | Pacific Education Institute integrates Puget Sound into the K-12 curricula of at least 20 school districts by working with curriculum directors and school leaders. | soundwide | PSP | PEI | Schools are connected with community resources so that over half of the school districts in Puget Sound have place-based education programs by 2014. |
| D | 6.4 | Foster a long-term sense of place among Puget Sound residents. Encourage direct experiences with Puget Sound's aquatic and terrestrial resources through recreation, informal learning, and public access sites. | 1 | No near-term actions identified | soundwide | | | |
| D | 6.5 | Build awareness of stewardship-building efforts among elected officials, executive staff, funders, resource managers, and others with resource allocation ability. Emphasize program roles, needs, relationship with other Action Agenda strategies and program outcomes. | 1 | PSP, STORM, and partner organizations develop a portfolio of materials to build awareness of stewardship-building efforts among elected officials, executive staff, and resource managers at federal, state and local levels. | soundwide | PSP | STORM | Portfolio developed by December 2012. |
| D | 7.1 | Apply appropriate social science to Puget Sound recovery to increase clarity and effectiveness of targeted actions, audiences, opportunities, strategies, and evaluation metrics. | 1 | PSP develops a map of the regional partner network to identify relationships, gaps, connection opportunities, and the roles various entities play in Puget Sound recovery. | soundwide | PSP | | Completion by June 2012. |
| D | 7.1 | Apply appropriate social science to Puget Sound recovery to increase clarity and effectiveness of targeted actions, audiences, opportunities, strategies, and evaluation metrics. | 2 | PSP develops and implements a Sound Behavior Index to assess environmental social capital and track long-term shifts in behaviors and practices across the Puget Sound region. | soundwide | PSP | | First launch by February 2012. |

| Strategy | Subtask | Sub-Strategy Text | NTA # | NTA Description | NTA Type | Owner | Secondary Owner | Performance Measure |
|----------|---------|--|-------|--|-----------|-------|-----------------|--|
| D | 7.1 | Apply appropriate social science to Puget Sound recovery to increase clarity and effectiveness of targeted actions, audiences, opportunities, strategies, and evaluation metrics. | 3 | PSP establishes protocols to monitor, measure, and evaluate the effectiveness of public awareness and stewardship efforts region-wide. | soundwide | PSP | | Draft protocols developed and launched by July 2012. Final protocols in place by December 2013. |
| D | 7.2 | Build capacity among partner organizations to advance priority stewardship actions. Provide technical support and training to advance program effectiveness, evaluation, and support of Action Agenda priorities. | 1 | No near-term actions identified | soundwide | | | |
| D | 7.3 | Maintain centralized capacity to sustain and enhance the regional Puget Sound Starts Here campaign. | 1 | No near-term actions identified | soundwide | | | |
| D | 7.4 | Provide public information conduits connecting individuals to local activities and resources—including engagement incentives such cost-share programs, technical assistance, and volunteer experiences. | 1 | PSP and grantee(s) establish a Citizen Action Training School stressing civic structures and processes to enable residents to more fully engage with their communities on issues related to Puget Sound health. | soundwide | PSP | | Program launched by July 2012. |
| D | 7.5 | Enhance strategic networks and tools that support stewardship partners and outcomes including ECO-Net, STORM, tribes, municipalities not covered by stormwater permits, public agencies, funders, universities, NGOs and others. | 1 | Municipal stormwater permittees develop and implement a strategic plan and business plan for the STORM coalition (Stormwater Outreach for Regional Municipalities) to ensure the long-term sustainability of the coalition and its activities. | soundwide | PSP | STORM | Strategic plan complete by March 2012. Business plan complete and implementation underway by September 2012. |
| D | 7.6 | Work regionally and locally to remove barriers (e.g., physical, economic, regulatory, enforcement, policy), and enable and incentivize adoption of stewardship actions. | 1 | No near-term actions identified | soundwide | | | |