

A photograph of an orca (killer whale) breaching the surface of the water in Puget Sound. The orca is dark on top and white on the bottom, with its dorsal fin visible. The background shows a hazy coastline with mountains and a small boat in the distance.

# Highlights of the 2012/2013 Action Agenda for Puget Sound

*The Puget Sound Action Agenda is the plan for cleaning up, restoring, and protecting Puget Sound by 2020*

*August 28, 2012*

**PugetSoundPartnership**

LEADING PUGET SOUND RECOVERY

To the People of Puget Sound:

It has been said about this eastern shore of the Pacific Rim and us westerners that perhaps “no other place in the Americas has the profound indigenous land ethic, the passionate environmental brain trust or the optimistic entrepreneurial depth as this region of the planet.” How lucky we are to share this ecoregion, or what’s called Cascadia or Salmon Nation or to paraphrase the author Tim Egan, any place that salmon can get to, or what Wm. Dietrich calls “a universe in a mountain cradle,” this geographers’ delight: the Salish Sea.

It has also been asserted that “If Nature is humanity’s landlord, we have been getting a rockin’ great deal on rent and utilities and business as usual might be a thing of the past.” We know that last fall the planet reached 7 billion inhabitants. Understanding that in the past 50 years, the global population has more than doubled, we ask ourselves: What are the implications for the 7 million estimated to live around the broader Salish Sea today? We believe that by 2040, the equivalent of another Portland will nestle its way into the 4 counties around Seattle alone whether we plan for them or not. How will we think about “recovery” in a world where the population is growing but the geography isn’t and then manage out 7 generations?

To this we add the twin peril devilishly linked to population growth: climate change. And we have to ask ourselves: Is it folly to labor to restore habitat, take down dams, protect eel grass beds, restore herring, and manage stormwater with hundreds of millions of dollars of tax payer money while the other climate impact, that sick sister, ocean acidification inexorably barrels down at us? Can we possibly understand the whole system in all its complexities and then make the best choices? But choices for whom, on what time frame, in what context? How will the Mobius strip of science and policy help us understand our choices as we grapple with our need to conform the economy to the limits of nature?

We at the Puget Sound Partnership, along with our regional partners, attempt to answer these questions with this updated Action Agenda, the ambitious roadmap, the science-based framework for recovering a very complex Puget Sound, ecosystem wide, across limited funding and jurisdictional silos by 2020. This improved collaboration included scientists, tribes, local governments, businesses, non-profit organizations, state and federal agencies and concerned citizens whose comments and suggestions exceeded 10,000. We garnered broad agreement about what major issues need to be tackled in what order and which crucial questions have yet to be answered by science. And we have with this update begun in earnest, with the help of

our partners, to construct a state of the art, highly functional performance management system – the Holy Grail in ecosystem based management large scale restoration projects world wide – undergirded by measurable indicators and strategies that link to our 2020 goals for recovery. Its function is to tell us whether we are on track or not, and if not, why not.

Several things been made clear to us from our work over the past four years: that as a region, we need to focus our energies and finite resources around a limited and prioritized suite of actions, a change agenda, to effect Sound wide recovery; that conservation and recovery actions happen at the local level; and that support for same comes from the people on the ground, near the cove and up in the watershed who depend on this troubled but treasured wonderland for their livelihoods, their spiritual sustenance, and as the economic powerhouse that is the engine for the region.

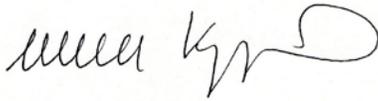
It is also clear that the region understands and this updated Action Agenda reflects the need to break with the traditional or historical distinctions between people and the environment, markets and ecological health. We risk losing the good fight because we can't keep up with the cumulative effects of the sheer volume of people who want to call this beautiful place home. Our experience tells us that our future requires an updated definition of prosperity and the incrementalism of the current restoration and preservation work probably won't assure the same. The health of the ecosystem is a cornerstone of the regions' quality of life and its vibrant economy. Considering this is central to our task and our mission.

It is also our hope that with this enormous body of coordinated work linked across the basin in a continuum through our tribal and federal partners, to the state, cities, businesses, counties, and NGO partners, we can better leverage our science-based priorities into more capacity for our local partners to do more of the good work that they are already doing in managing stormwater, protecting habitat, and keeping our beaches safe for shellfish harvest and other pursuits.

The future citizens of this *treasured but troubled water* deserve what Jane Jacobs called a durable prosperity, a resiliency that expresses equally our rights and responsibilities to each other in a world with a reduced carrying capacity. 21<sup>st</sup> century citizenry requires us to make these conscious decisions – the big and the small that add up to a public iteration of our privately held beliefs. Call that conservationism, environmentalism, just plain good citizenship, or good government. Let's make them together, these decisions, to do the big thing, the adult thing, the enduring thing, and the thing that is in the public interest, the planet's interest which finally is in our own self interest.

Join us as we come together as a region to chart our course for Puget Sound restoration through this Action Agenda, as we begin to secure our right to be considered a worthy ancestor of this regions' future.

Sincerely,



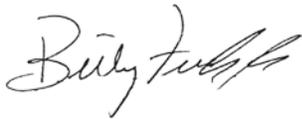
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Martha Kongsgaard  
Chair



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Ron Sims  
Vice-Chair



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Billy Frank, Jr.



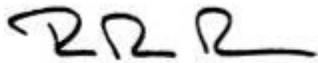
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Dan O'Neal



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Diana Gale



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David Dicks



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Steve Sakuma



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Anthony Wright  
Executive Director

# The Call to Action

The bigger the challenge, the greater the opportunity to think big, innovate, and intentionally chart a path for our future. When President Kennedy said we should go to the moon in ten years, it seemed an impossible dream to many Americans. But we did it. We used every ounce of innovation, intelligence, and collaboration we could muster, and we made it happen.

And we didn't stop when we got to the moon; we set ourselves on a very long-term course to explore our solar system and our universe. We made a commitment to keep exploring, and to keep learning and thinking about our miraculous planet and its place in the cosmos.

Restoring and protecting Puget Sound bears some important similarities to going to the moon. It is also an enormous challenge, and there are days when the threats to Puget Sound seem overwhelming. But the more important similarity is that restoring and protecting Puget Sound sets us on a long-term course to keep learning how to live on our planet in harmony with what we've been blessed with: a natural heritage that can sustain human life – and wildlife, fish, and thousands of other creatures great and small – for many generations to come.

But we must work quickly, as Puget Sound is sick. 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 are now threatened with extinction. The iconic species of Puget Sound—the southern resident killer whale—carries some of the world's highest levels of chemicals in their bodies. Tribal nations that depend on Puget Sound resources to sustain their culture, traditions and ways of life find these uses, many of which are guaranteed by treaties, increasingly imperiled.

We can turn this around because we must. We can do this because we are capable, collaborative, innovative, and committed, not just to a short-term effort, but to the long term responsibility of stewardship and genuine progress. This is the ethic that drives our efforts and ensures our ultimate success.

We have made progress over the years, but too often people were performing “random acts of restoration,” rather than creating a rational, coherent plan to restore and protect Puget Sound. We must work together effectively to ensure our success.

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## IT IS ABOUT ALL OF US: HUMAN PRESSURES ON PUGET SOUND

With the actions we take every day we affect Puget Sound. Through where we live; how we care for our homes, lawns, and gardens; what we drive; what we eat; and what we do for fun – we impact the health of Puget Sound. Some choices we make – building schools, operating businesses - put pressure on Puget Sound's health might be beneficial to us in other ways. The goal is not to eliminate human pressures on Puget Sound, but to understand and manage them towards ecosystem protection and resiliency.

## What is the Puget Sound Partnership?

In 2007, Democrats and Republicans created the Puget Sound Partnership to coordinate the regional effort to clean up Puget Sound. The Partnership is the backbone organization connecting citizens, governments, tribes, scientists and businesses together to set priorities, implement the regional recovery plan, and ensure accountability for results. More than 2,440 acres of habitat have been protected, 70 miles of streams and rivers have been restored, and game-changing restoration projects have been advanced since the creation of this regional partnership.

## A Healthy Sound Supports a Healthy Economy

Today's investment in Puget Sound will directly influence the health of Washington State's economy tomorrow. Together the ports of Seattle and Tacoma make the Sound the second largest US harbor for container traffic, including \$28 billion in state-originated exports and 34,000 jobs. There are 68 state parks and 8 national parks, wildlife refuges, forests and other public lands that border Puget Sound. These assets help drive approximately \$9.5 billion in travel spending, including 88,000 tourist-related jobs that bring \$3 billion in income to the region.



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“[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 hosts 211 fish species, 100 sea bird species and 13 types of marine mammals. The average annual commercial value for Puget Sound crab, shrimp, mussel, oyster, geoduck and other clams is \$44 million, and recreational shellfishing is valued conservatively at \$42 million per year. Recreational fishing in Puget Sound is valued conservatively at \$57 million a year and commercial fishing is valued at \$4 million a year. It provides a sense of place and history for the people who live here.

Nearly 71% of all jobs and 77% of total income in Washington State are found in the Puget Sound Basin. Puget Sound is a place where employees want to live, work and build a family. Our quality of life attracts and retains a creative, talented and skilled

workforce, which in turn attracts business to this region. The tax revenues provided within the Basin help support roads, schools, police, parks and other benefits throughout Washington. Rural communities in Washington State see jobs and services decline when tax revenues from the Puget Sound Basin fall.

## Regional Return on Investment

By investing in Puget Sound restoration we will create long-term jobs and economic benefits that go beyond the jobs associated with individual project implementation. Restoring salmon populations, for example, increases recreational, commercial, and tribal jobs, as well as wholesale and retail jobs. Restoration projects in estuaries and riparian areas create almost twice as many jobs per \$1 million spent than infrastructure projects such as roadwork. Investing in the health of Puget Sound has a higher rate of return on investment and more certain return than most built capital investments.

We already are seeing our investments in Puget Sound help to strengthen our economy and create jobs. In 2010 the investment in Puget Sound protection and restoration was in excess of \$251,312,605 in funding, which created 7476 jobs across 565 projects.

# 2011 Puget Sound Restoration and Protection

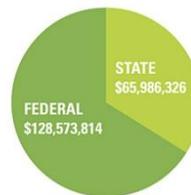
**4681**  
JOBS

**2533** DIRECT  
**2148** INDIRECT

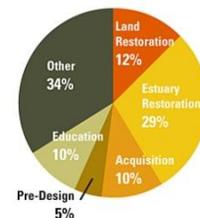
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**803** PROJECTS    **\$194,560,146** FUNDING

FUNDING SOURCES



FUNDING CATEGORIES



## Job creation by county:

**San Juan County**

**86** JOBS  
60 DIRECT  
26 INDIRECT

18 PROJECTS    \$5,683,614 FUNDING

**Island County**

**238** JOBS  
144 DIRECT  
94 INDIRECT

44 PROJECTS    \$11,899,175 FUNDING

**Whatcom County**

**375** JOBS  
197 DIRECT  
178 INDIRECT

69 PROJECTS    \$15,367,716 FUNDING

**Skagit County**

**325** JOBS  
185 DIRECT  
141 INDIRECT

80 PROJECTS    \$14,841,458 FUNDING

**Clallam County**

**480** JOBS  
244 DIRECT  
235 INDIRECT

70 PROJECTS    \$16,904,427 FUNDING



**Snohomish County**

**491** JOBS  
252 DIRECT  
239 INDIRECT

78 PROJECTS    \$17,244,796 FUNDING

**Jefferson County**

**299** JOBS  
170 DIRECT  
129 INDIRECT

59 PROJECTS    \$13,197,245 FUNDING

**King County**

**661** JOBS  
358 DIRECT  
303 INDIRECT

91 PROJECTS    \$26,698,699 FUNDING

**Kitsap County**

**360** JOBS  
192 DIRECT  
168 INDIRECT

60 PROJECTS    \$15,103,757 FUNDING

**Mason County**

**440** JOBS  
247 DIRECT  
193 INDIRECT

74 PROJECTS    \$18,023,865 FUNDING

**Thurston County**

**261** JOBS  
150 DIRECT  
111 INDIRECT

53 PROJECTS    \$13,099,606 FUNDING

**Pierce County**

**542** JOBS  
274 DIRECT  
268 INDIRECT

77 PROJECTS    \$21,864,606 FUNDING

## Making a Difference

While we know the task is daunting; we also know that we can — and are — making a difference.



At the tip of the Key Peninsula, the 94 acres and 1 mile of undeveloped shoreline of Devils Head has been, despite development pressure, permanently protected and will provide important habitat for salmon and other Puget Sound species, forever.

In Henderson Inlet, in the South Sound, 240 acres of shellfish-growing tidelands were re-opened for harvest without weather restrictions because, despite increased development, and contrary to predicted trends, the community has worked together to improve water quality in the inlet.



The City of Tacoma has reduced the pollution in stormwater runoff through a combination of controlling sources and removing the legacy of contaminated sediment from stormwater pipes and holding vaults.

Puget Sound is considered one of the nation's leaders in low impact development (or green stormwater infrastructure) – Seattle Public Utilities' Natural Drainage Systems Program has won national recognition in this area.



In Kitsap County two new high-efficiency street sweepers remove more than 2,000 tons of road dirt and debris every year -- removing pollution near its source in this way means much cleaner road runoff and improved water quality. This type of program is a proven and cost-effective approach to keeping both the roads and water clean.

In Puget Sound's most highly urbanized bay, clean up and source control efforts are improving sediment quality. Levels of toxic metals like mercury and leads in Elliott Bay sediments are lower than they were ten years ago, and levels of PCBs and PAHs are lower too. Populations of tiny bottom-dwelling life known as benthic invertebrates are healthier and liver cancer rates in English sole populations have dropped from more than 30 percent to less than 3 percent.



We can and must build on these successes in the years to come. There is still time to turn the tide towards protection and restoration of Puget Sound. The opportunity is there and the economics will support the considerable investment it will take. We know what the problems are and we know a lot about what works to fix the problems. Now is the time to act.

# The Action Agenda

The Action Agenda is the road map for cleaning up Puget Sound. It establishes recovery targets for Puget Sound and lays out a framework for how, working together as a Region, we can achieve the vision of a healthy Puget Sound and a society where we live and work in productive, vibrant harmony with our natural environment. It is important to remember that the Action Agenda is not a regulatory document.

The Puget Sound Action Agenda, first published in December 2008, is both a durable framework for action, coordination and accountability, and a living document that is intended to be updated every two years to reflect the progress we've made, what we've learned, and new challenges that arise.

The Agenda has a strong bias for action – not for holding more meetings or creating more bureaucracy. Its starting point was an assessment of the many earlier efforts to restore and protect various parts of the Sound's environment. Its aim is to guide all the participating partners to make the most effective use of resources to achieve results.

The Action Agenda is built on four key ideas:

## 1. Decisions based on sound science

Science – not emotion or expediency – is the most reliable guide to achieving success. The Partnership supports and relies on continuing scientific research to inform its decisions, and to measure what's working.

THE PARTNERSHIP USES 21 INDICATORS AND TARGETS ARRANGED INTO A VITAL SIGNS DASHBOARD TO HELP US TRACK AND COMMUNICATE OUR EFFORTS TOWARD PUGET SOUND RECOVERY.



## 2. Action

Knowing that we have no time to waste, the Agenda uses the best available science to identify the most pressing problems and to direct resources to their solution.

## 3. Accountability

A key role of the Partnership is to ensure that the investments we make achieve results, and that we are spending limited resources where they will do the most good.

## 4. Building Partners' and the Public's Capacity to Contribute

All the partners engaged in this effort – including the public – need to fully understand the challenges we face and have the resources they need to take effective action. The Partnership helps partners improve their effectiveness through public education, technical assistance, access to data and grant opportunities.

*The goals are clear, but achieving them is complex*

Puget Sound is both an enormously complex natural ecosystem and a complicated human system of tribes, counties, cities, towns, businesses, citizen organizations and state and federal agencies. Getting all the pieces of this puzzle to fit together takes patience and persistence.

The work of the Partnership started with six goals set by the state legislature:

- Healthy people are supported by a healthy Puget Sound.
- Our quality of life is sustained by a healthy Puget Sound.
- Puget Sound species and the web of life thrive.
- Puget Sound habitat is protected and restored.
- Puget Sound rivers and streams flow at levels that support people, fish and wildlife.
- Puget Sound marine and fresh waters are clean.

The Partnership measures progress towards these goals with 21 indicators, and has 70 sub-strategies, and plans for over 200 near-term actions.

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### LOCAL GOVERNMENTS

Cities and counties are at the front lines in the effort to protect and restore Puget Sound. From updates to Shoreline Master Programs, to adoption of Critical Areas Ordinances in Growth Management Act comprehensive plans, to hundreds of millions of dollars in investments in stormwater protections, to supporting salmon recovery – cities and counties are the implementers of many Puget Sound recovery strategies. They must be given adequate support and resources to accomplish the job. The financial burden must be shared by all levels of government.

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### TRIBAL GOVERNMENTS

Puget Sound has been home to populations of the Coast Salish people for thousands of years. U.S. federal courts have also established tribes as co-managers of fish and shellfish resources in Washington waters. As co-managers, tribal governments are on the front lines of implementation of protection and restoration activities. A healthy Puget Sound ecosystem is central to Tribal culture and spiritual practices, and to Tribal economic health.

## Tribal Treaty Rights

A treaty is a legally binding contract between sovereign nations. Treaties are recognized under the U.S. Constitution as the “supreme law of the land.” In 1854-55 tribes in western Washington signed treaties with the U.S. government, ceding most of the land that is now western Washington which allowed the peaceful settlement of the territory. In the treaties the tribes reserved the right to fish, hunt, and gather shellfish and other natural resources in all of their traditional places to preserve the tribal way of life. The courts have found that the treaty rights to hunt and fish in usual and accustomed areas is a property right. Those rights pre-date the property rights of all other citizens of the State of Washington. The unique legal status of tribes and presence of tribally reserved rights and cultural interests throughout the state creates a co-management relationship between tribes and the state agencies responsible for managing and protecting fish and shellfish of the state. The tribes’ treaty rights are guaranteed under the treaties and by federal law.

The tribes’ treaty rights have been affirmed by the federal courts including the U.S. Supreme Court in numerous rulings including the 1974 U.S. v. Washington case known as the Boldt decision. The ruling upheld tribal treaty-reserved rights, established the tribes as co-managers of the salmon resource with the state of Washington, and re-affirmed the tribal right to half of the harvestable number of salmon returning to Washington waters every year.

The tribes note for those rights to have meaning, however, there must be salmon for treaty tribes to harvest. Salmon populations continue to decline at an alarming rate despite massive harvest reductions, hatchery mitigation and a huge financial investment in habitat restoration during the past four decades. A primary cause of the decline is that salmon habitat is being damaged and destroyed faster than it can be restored. This trend shows no sign of improvement and has led to the loss by some tribes of basic ceremonial and subsistence fisheries, a cornerstone of tribal culture.

In the summer of 2011, the treaty Indian tribes in western Washington launched the Treaty Rights at Risk initiative that calls on the federal government to take charge of salmon recovery. The federal government has both the obligation and authority to recover salmon and protect tribal treaty rights. Tribes want the federal government to align its agencies, programs and authorities to lead a more coordinated and effective salmon recovery effort. A white paper developed for the effort cites numerous examples from across western Washington of continued loss of habitat due to shoreline armoring, timber harvesting, an increase in paved lands, and filling and diking of estuarine wetlands. The Treaty Rights at Risk initiative is a call to action, intended to galvanize and energize response by federal, state, local and tribal governments and policy makers to reverse the decline of our salmon and their habitat.

# Strategic Initiatives for 2012 and 2013

The Puget Sound Partnership has achieved consensus on three strategic initiatives that guide our priorities for 2012 and 2013. These are the areas where we intend to focus time and resources, to increase funding, to seek changes that improve policy, to report success and apply lessons learned, and to educate and engage citizens in the recovery effort.

The three strategic initiatives are:

## **Prevention of pollution from urban stormwater runoff**

This is an immense challenge, and although we have many of the tools and technologies for stormwater, we need to make much fuller use of them if we are to stop contamination from flowing into the Sound.

## **Protection and restoration of habitat**

We must stop destroying habitat, protect what we have left and substantially restore the critical habitats that we have lost;

## **Recovery of shellfish beds**

Shellfish harvesting is both a treaty right for tribes and a vital industry in our region. It is also a treasured tradition for countless northwest families. Shellfish health begins on land, by preventing and reducing pollution from a variety of sources including agricultural lands and on-site sewage systems.

The three strategic initiatives represent our immediate priorities for Puget Sound protection and recovery. Setting priorities involves balancing ecological, economic and human-well being factors so that we are focused on actions that will make the biggest difference for the time and resources spent. These three strategic initiatives encompass priority actions that address the most serious threats to Puget Sound health, will improve human well-being, and support economic development and job creation. The specific actions included within each strategic initiative were drawn from the strategies and actions developed during the Action Agenda update process. They also were informed by high-level policy efforts such as the Governor's Shellfish Initiative and the process to address shortcomings in salmon recovery indentified by tribes and NOAA in 2011.

To consider the initiatives in depth and finalize the content, the ECB formed three subcommittees, one for each Strategic Initiative. The Subcommittees met in May and June 2012 and developed the content reflected here.

The context and content of each strategic initiative is described below. In addition, all three strategic initiatives individually and collectively must be supported by:

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## **RANKING SUB-STRATEGIES**

In 2012 the Partnership, Ecosystem Coordination Board, and the Science Panel undertook an unprecedented effort to create a science-based assessment of the expected ecological impact of each sub-strategy in the Action Agenda. The results of this effort are science-based rankings of substrategies in three categories (freshwater and terrestrial, marine and nearshore, and pollution) based on expected ecological impacts. These ranked lists were used to assess and validate the content of the strategic initiatives. The results of the ranking can be found in Appendix G.

- An overarching funding strategy – we need to increase the financial capacity of our partners across Puget Sound to implement these strategic initiatives. We need a comprehensive strategy that addresses federal, state, local and private funds – both more efficient, directed use of current fund sources and generating new funds. We must identify more resources in order to implement these actions at a pace that will meet our goals.
- An overarching outreach strategy – many of the priority actions identified require greater public awareness and support for those actions. We must have a clear, effective strategy on how to reach the relevant stakeholders and the general public to ensure people are willing to take the necessary actions.
- Attention to watershed-based implementation – every watershed in Puget Sound has different needs and a different context. For us to be successful we must design actions to be effective at the watershed scale.

# We Must Prevent Pollution from Urban Stormwater Runoff

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## The Challenge

Polluted stormwater runoff carries toxic chemicals, nutrients, sediment, and bacteria and is the primary pollution threat to Puget Sound surface water. The problems from polluted stormwater runoff began generations ago and continue today; however, we now understand the problems better and we have a suite of tools that can be used at a variety of scales (individual and regional) to address problems. We must act – we cannot recover Puget Sound by 2020 or sustain areas that we restore and clean up without addressing polluted stormwater runoff.

Extensive research shows that where development is located, how much development occurs, and what practices are used greatly impacts our streams, rivers, and marine waters. Developing land can increase impervious cover, roads, and stream crossings, and can lead to harmful land-clearing practices. When stormwater is not properly managed, the result is excessive stormwater that runs off the land, before it is absorbed, scouring rivers and streams. Without a reserve of water in the ground and wetlands to feed streams, fish are left with little or no water during dry summer months.

The framework and content of this strategic initiative were developed collaboratively by a subcommittee of the Ecosystem Coordination Board that included representatives of local, state, and federal governments, Tribes, salmon recovery watershed coordinators, environmental groups, and the business community. The subcommittee acknowledged that these are not the only actions we need to take to protect Puget Sound from further pollution from urban stormwater. Many additional actions related to urban stormwater are included in the full Action Agenda; however, these are the actions they identified as the most critical and valuable for the next two years.

The ECB subcommittee identified five themes for the stormwater strategic initiative: take a watershed approach to management; prevent new problems, fix existing problems, control sources of pollution, and education. Each of these themes is discussed below.

**Watershed Approach:** In their stormwater policy statements, the Ecosystem Coordination Board recommended that new funding be linked to a broader context and vision for other watershed funding needs. Specifically, they recommended a study to evaluate how we can more effectively manage stormwater at the watershed scale.

Given that runoff is a major contributor of pollution to Puget Sound, without a significant increase in stormwater funding in 2012 and beyond, the statutory goal of recovery of Puget Sound by 2020 is not achievable.

*-ECB Stormwater Committee Policy Statements April, 2011*

## HOW CAN I HELP?

Use fertilizers and pesticides sparingly, or just use compost.

Take your car to a commercial car wash and have oil leaks fixed.

*For more information go to:  
[www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org)*

This was also an issue that was discussed in the ECB subcommittee that developed the content for the shellfish strategic initiative.

**Prevent New Problems:** The Clean Water Act (CWA) was adopted in 1972. At that time, point sources of pollution such as wastewater and industrial discharges were the largest component of the water pollution problem. Significant progress has been made since the 70's in controlling those sources of pollution. That success was achieved through unprecedented coordination and collaboration among all stakeholders and major investments at the federal, state and local levels.

With solutions to point sources well underway, non-point sources of pollution, such as stormwater runoff, now represent the biggest remaining threat to water quality in the Puget Sound region. These sources are more difficult and more costly to control than point sources, and will require even greater coordination and commitments to funding.

The CWA provides a specific means to control urban stormwater through the National Pollutant Discharge Elimination System (NPDES) permit program. This important program is the first line of defense to protect water quality from urban stormwater impacts and should be adequately funded and implemented according to federally-mandated schedules. Without the permit program and continual improvements to it based on knowledge gained through implementation, monitoring, and research, our efforts will not succeed.

In 2009, local governments in the Puget Sound basin spent at least \$160-170 million implementing pollution prevention programs through their NPDES permits. This investment, the majority of dollars spent on prevention of polluted runoff, removed an estimated 234,000 tons of contaminated sediment that did not reach Puget Sound or its tributary watersheds. The implementation of NPDES permits is considered one of several cost-effective ways to prevent pollution from reaching Puget Sound. With an increase in annual investment local governments could do an even better job. But they need financial help from the state and federal government to reflect the shared responsibility to recover Puget Sound.

**Fix Existing Problems:** One of the greatest barriers to securing funding for the management of polluted runoff is a lack of specifics about the cost and location of projects and programs to fix the problem. We have high level information about existing expenditures and approximate total capital cost to address existing problems. However, we need more detailed and comprehensive information about the highest priority existing problems, conceptual designs, and project-specific cost estimates. With this type of information, we can readily seek capital retrofit funds.



**Control Sources of Pollution:** One of the most cost-effective ways to prevent toxins and other pollutants from getting into Puget Sound is to prevent them from being introduced into the environment in the first place. Preventing pollution is an important part of a climate change adaptation strategy. Declining snow pack and loss of natural water storage, changes in precipitation timing and seasonal stream flow, severe winter flooding combined with more frequent and extreme storm events will strain our stormwater systems and increase the amount of polluted runoff flowing to Puget Sound. Taking proactive steps now to address stormwater runoff will help reduce risk of damage to infrastructure, as well as safeguard fish, wildlife and habitats.

The Fish Consumption Rate reflects the amount of fish eaten by Washington fish consumers and is a key part of the equation used for determining human exposure to toxins in fish. The FCR is expected to inform sediment management and water quality standards.

**Education:** People are responsible for the impacts associated with polluted stormwater runoff. We introduce toxins into the environment and we change the way stormwater flows across the land to streams and the Sound. The ECB subcommittee for stormwater agreed that we need to continue to educate individuals and communities about ways that they can become part of the solution, help stormwater managers at the local level learn to implement low impact stormwater management measures, and ensure that we have an educated workforce that has the tools to eliminate the threat to Puget Sound from polluted stormwater runoff.

Finally, like the other strategic initiatives, success in the stormwater initiative depends on an overarching strategy to address funding, outreach to Puget Sound residents to help them become part of the solution, and taking a watershed approach to implementation.

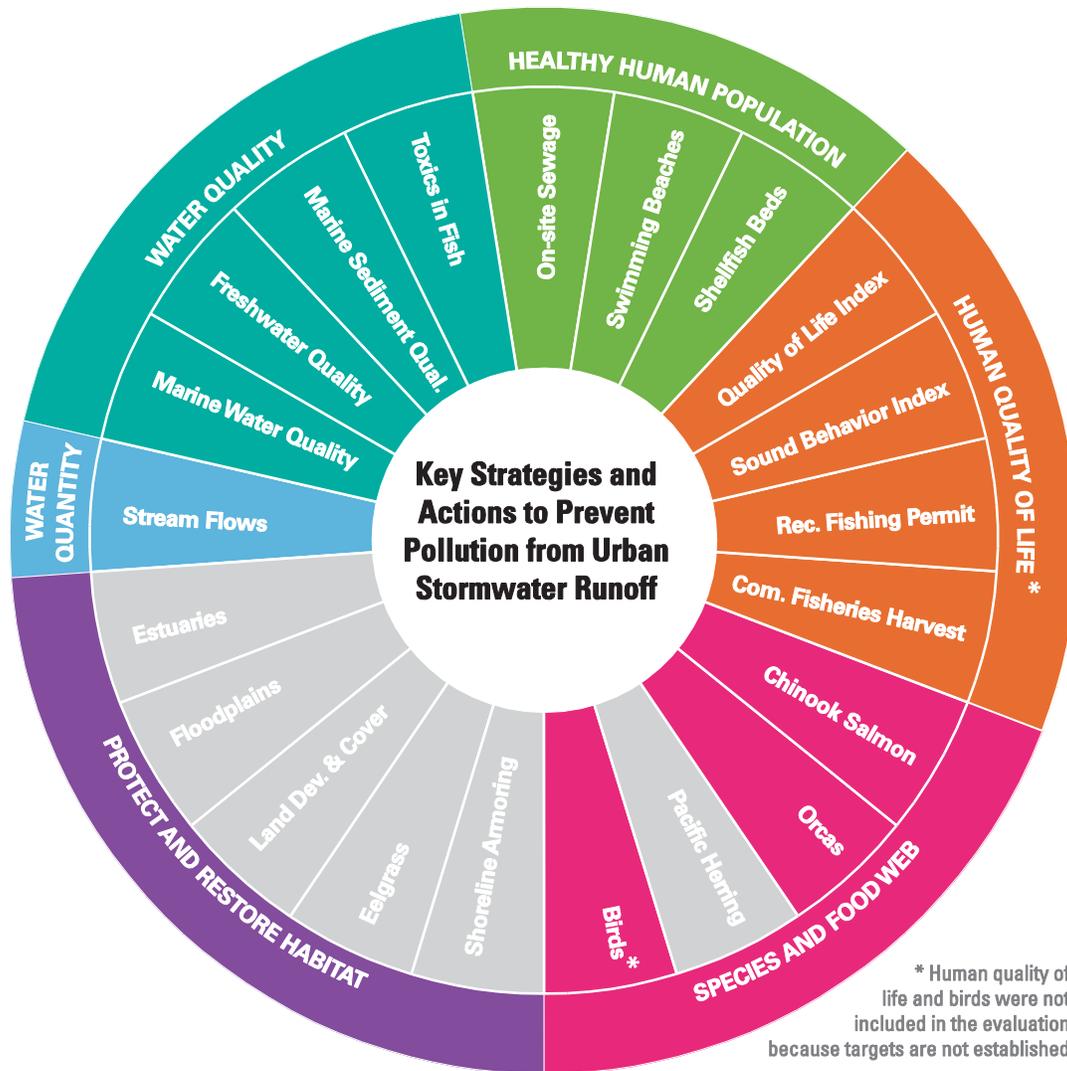
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## WHAT REALLY WORKS FOR STORMWATER

A substantial load of sediment has accumulated over the years in our stormwater management system, much of it deposited before current controls on stormwater and it therefore often contains high levels of pollution – a “legacy load.” The best and most recent local data on legacy loads is from the City of Tacoma for the Thea Foss and Wheeler-Osgood Waterways (City of Tacoma 2010). Contaminated bottom sediments in these waterways were cleaned up under the EPA Superfund Program at a cost of \$105 million. After the cleanup, the City engaged in a source control and stormwater monitoring strategy to provide long-term protection of sediment quality in the waterways; however, these source controls did not do the job. Tacoma then undertook an intensive basin-wide cleaning program of the storm sewer lines discharging to the waterways to remove legacy loads. In 2007 over a 2-month period, the city cleaned 80,000 feet of 8-inch to 56-inch lines and removed 220 cubic yards of storm sediments from the conveyance lines, laterals, and catch basins, at a cost of \$300,000. This achieved a 30 percent reduction in lead in some areas and a 40 to 60 percent reduction in polycyclic aromatic hydrocarbons (PAHs). In the parts of the system that were cleaned, levels continue to decline for twenty chemicals of concern.

### Link to Relevant Recovery Targets

The initiative to prevent pollution from urban stormwater runoff will contribute to progress toward the Partnership’s 2020 ecosystem recovery targets for stream flow, marine water quality, freshwater quality, marine sediment quality, toxics in fish, swimming beaches, shellfish beds, Chinook salmon, orcas and birds.



## Key Strategies and Actions to Prevent Pollution from Urban Stormwater Runoff

### Take a Watershed Based Approach

- Watershed Based Stormwater Management.** To ensure all funds (existing and new) are used efficiently and effectively, Puget Sound Partnership (PSP) will work with the ECB to commission an evaluation of the feasibility, cost, and effectiveness of transitioning the existing municipal stormwater jurisdiction by jurisdiction permit approach using “general permits,” to watershed-based municipal stormwater management. PSP will work with interested parties, particularly Ecology and local governments, to ensure their perspectives and concerns are addressed and accounted for when developing the scope of work for their evaluation. (C2.1 NTA 1)

## Prevent New Problems

- **NPDES Municipal Permits.** Ecology will issue municipal permits for western Washington and provide financial assistance to permittees for implementation, particularly for code changes, stormwater system mapping, operations and maintenance, inspections and enforcement. This will require additional resources to Ecology for permit oversight, technical assistance, and enforcement. Ecology will provide incentives to NPDES permittees who, by interlocal agreement, lead or carry out regional or watershed scale NPDES implementation. (C2.2 NTA 1)
- **Stormwater Management Outside Permitted Areas.** Ecology, in coordination with the state Department of Health, will identify two high priority shellfish growing areas degraded by urban stormwater discharges and work with local governments and other key parties to reduce these impacts to the areas. (C2.2 NTA 3)

## Fix Existing Problems

- **Stormwater Retrofit Projects.** Ecology will lead a process to identify high priority retrofit projects that will contribute to the recovery of Puget Sound and complete conceptual design to a stage sufficient to seek project implementation funding. The work will build on retrofit prioritization work by WSDOT, King County and others, and will be replicable in other urban and suburban areas around the Sound. (C2.3 NTA 1)

## Control Sources of Pollution

- **Fish Consumption Rates and Sediment Management Standards.** Ecology will, as soon as possible, establish accurate default fish consumption rates that are reflective of actual consumption rates of vulnerable populations who consume fish and shellfish from the Sound at a subsistence level and children who, by virtue of lower body mass may be disproportionately affected by toxins in their food supply. Ecology will complete the rulemaking processes for Sediment Management Standards, incorporating the revised and accurate fish consumption rate, no later than the end of 2013; the water quality rule shall be guided by Ecology's September 2011 draft Fish Consumption Rates – Technical Support Document and other appropriate relevant information as it becomes available. Ecology will report to the Leadership Council at least quarterly, beginning in October 2012, on the plan and progress towards adoption of a fish consumption rate. (C1.1 NTA 3)
- **Compliance Assurance Program.** Ecology and local governments will increase inspection, technical assistance, and enforcement programs for high-priority businesses and at construction sites. (C2.4 NTA 1)

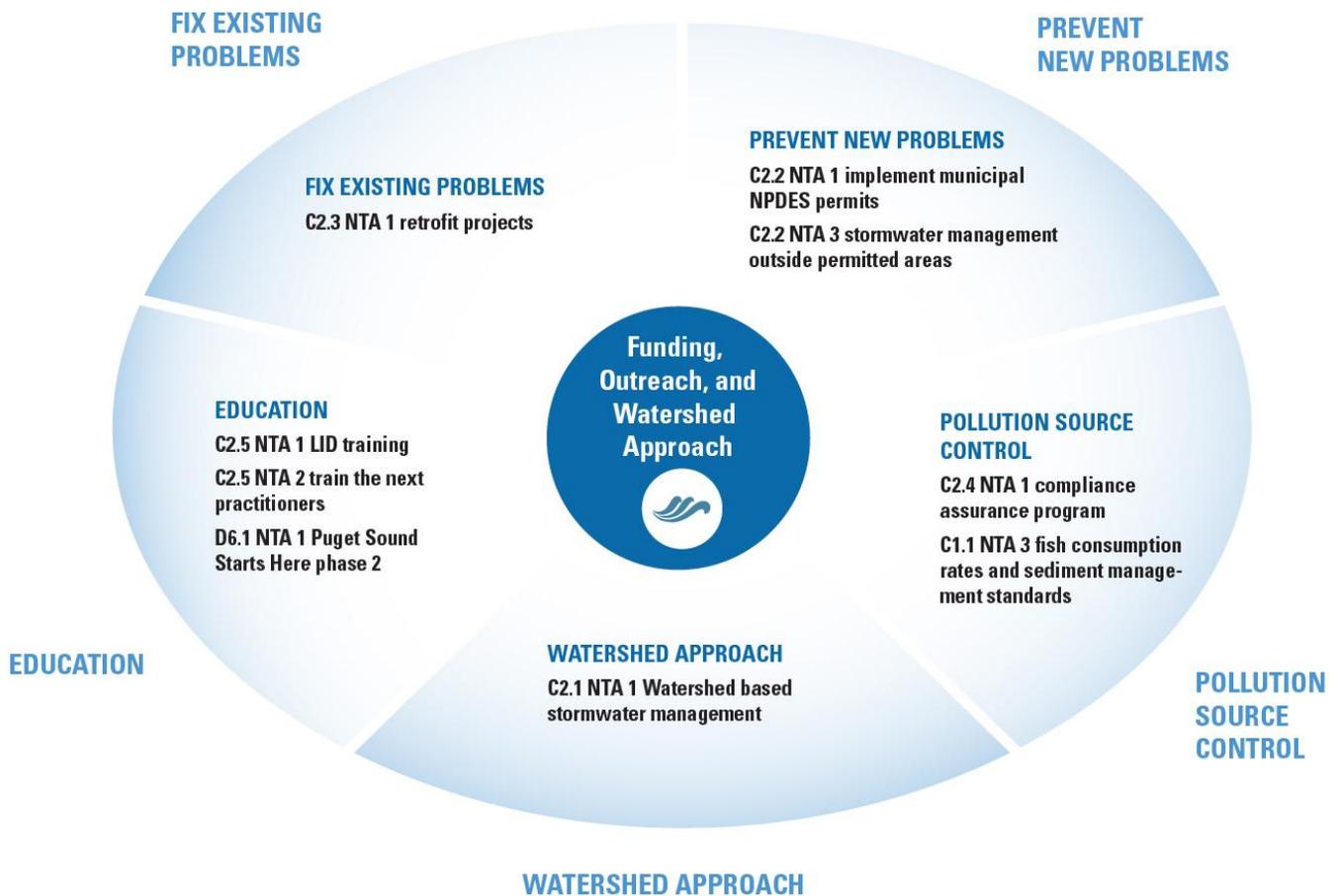
## Education

- **Training and Certification.** A) Ecology will 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. B) 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. (C2.5 NTA 1)
- **Phase 2 of Puget Sound Starts Here.** PSP and partners implement Phase 2 of *Puget Sound Starts Here* campaign. PSP, STORM and Ecology ensure that messages reflect the demography, regional identity and issues facing the Puget Sound. (D6.1 NTA 1)

- Education for the next Generation of Stormwater Professionals.** The Tulalip Tribes will develop a near-term plan to provide a sustainable water resource management academic curriculum in all Puget Sound counties for future stormwater professionals that is inclusive of tribal treaty rights, history and civics, and emphasizes continuing improvements in stormwater management in the context of the larger issues of sustainable water resource management and climate change (C2.5 NTA 2)

Actions identified for inclusion in this strategic initiative are generally consistent with the substrategies that were ranked the highest based on ecological criteria (See Appendix G of the Action Agenda for these ranked lists). C2.5 ranked lower according to ecological criteria because it would not result in immediate environmental benefit. However, the substrategy is still ranked in the top half out of all sub strategies and unanimously supported by committee members for inclusion in the strategic initiative. Strategic initiative content is summarized in Figure 1, and details of the priority actions for the strategic initiative are listed in Table 1. In addition, as discussed earlier, each strategic initiative individually and the initiatives collectively must be supported by an overarching funding strategy, and overarching outreach strategy, and keen attention to ensuring that implementation takes a watershed-based approach.

**Figure 1: Stormwater Strategic Initiative**



**Table 1: Prevention of Pollution from Urban Stormwater Runoff - Strategies and Actions**

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	3	<u>Fish Consumption Rates.</u> Ecology will, as soon as possible, establish accurate default fish consumption rates that are reflective of actual consumption rates of vulnerable populations who consume fish and shellfish from the Sound at a subsistence level and children who, by virtue of lower body mass may be disproportionately affected by toxins in their food supply. Ecology will complete the rulemaking processes for Sediment Management Standards, incorporating the revised and accurate fish consumption rate, no later than the end of 2013; the water quality rule shall be guided by Ecology’s September 2011 draft Fish Consumption Rates – Technical Support Document and other appropriate relevant information as it becomes available. Ecology will report to the Leadership Council at least quarterly, beginning in October 2012, on the plan and progress towards adoption of a fish consumption rate.	Ecology establishes accurate default fish consumption rates as soon as possible; rulemaking process for Sediment Management Standards complete by the end of 2013; reports to the Leadership Council at least quarterly, beginning in October 2012.	Ecology	
C	2.1	Manage urban runoff at the basin and watershed scale.	1	<u>Watershed Based Stormwater Management.</u> To ensure all funds (existing and new) are used efficiently and effectively, Puget Sound Partnership (PSP) will work with the ECB to commission an evaluation of the feasibility, cost, and effectiveness of transitioning the existing municipal stormwater jurisdiction by jurisdiction permit approach using “general permits,” to watershed-based municipal stormwater management. PSP will work with interested parties, particularly Ecology and local governments, to ensure their perspectives and concerns are addressed and accounted for when developing the scope of work for their evaluation.	To be determined.	PSP	
C	2.2	Prevent problems from new development at the site and subdivision scale.	1	<u>NPDES Municipal Permits.</u> Ecology will issue municipal permits for western Washington and provide financial assistance to permittees for implementation, particularly for code changes, stormwater system mapping, operations and maintenance, inspections and enforcement. This will require additional resources to Ecology for permit oversight, technical assistance, and enforcement. Ecology will provide incentives to NPDES permittees who, by interlocal agreement, lead or carry out regional or watershed scale NPDES implementation.	Reissued, improved municipal permits by July 2012; 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.	Ecology	
C	2.2	Prevent problems from new development at the site and subdivision scale.	3	<u>Stormwater Management Outside Permitted Areas.</u> Ecology, in coordination with the state Department of Health, will identify two high priority shellfish growing areas degraded by urban stormwater discharges and work with local governments and other key parties to reduce these impacts to the areas.	Areas identified by September 2012; assistance provided to non-permitted local governments by December 2012; documentation of reduced impacts by March 2014 and at conclusion of projects.	Ecology	DOH

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
C	2.3	Fix problems caused by existing development.	1	<u>Stormwater Retrofit Projects</u> . Ecology will lead a process to identify high priority retrofit projects that will contribute to the recovery of Puget Sound and complete conceptual design to a stage sufficient to seek project implementation funding. The work will build on retrofit prioritization work by WSDOT, King County and others, and will be replicable in other urban and suburban areas around the Sound.	RFP issued by August 2012; new regional stormwater retrofit prioritization process and list of projects by December 2013.	Ecology	
C	2.4	Control sources of pollutants.	1	<u>Compliance Assurance Program</u> . Ecology and local governments will increase inspection, technical assistance, and enforcement programs for high-priority businesses and at construction sites.	Increased number of inspections, technical assistance, and enforcement activities by December 2012	Ecology	
C	2.5	Provide focused stormwater-related education, training, and assistance.	1	<u>LID Training and Certification</u> . (A) Ecology will 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. (B) 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.	Provide stormwater-related training by June 30, 2013 and follow-up training opportunities by June 30 2014.	Ecology	
C	2.5	Provide focused stormwater-related education, training, and assistance.	2	<u>Education for the Next Generation of Stormwater Professionals</u> . The Tulalip Tribes will develop a near-term plan to provide sustainable water resource management academic curriculum in all Puget Sound counties for future stormwater professionals that is inclusive of tribal treaty rights, history, civics, and emphasizes continuing improvements in stormwater management in the context of the larger issues of sustainable water resource management and climate change.	To be determined	To be determined	
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	<u>Phase 2 of Puget Sound Starts Here</u> . PSP and partners implement Phase 2 of <i>Puget Sound Starts Here</i> campaign. PSP, STORM and Ecology ensure that messages reflect the demography, regional identity and issues facing the Puget Sound.	Mass media content developed by November 2012; Web and social media developed and launched by October 2012; Television media launched by May 2013. Campaign achieves 50% brand awareness among Puget Sound's 4.5 million residents by July 2015.	PSP	

# We Must Protect Habitat

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## The Challenge

Puget Sound is home to more than 200 species of fish, 100 species of seabirds, 26 species of marine mammals, hundreds of plants, and thousands of invertebrates. Puget Sound is also home to over 4 million people and the population is expected to grow to 7 million by 2020. As more people continue to arrive in Puget Sound our challenge is to help our communities live on the land and enjoy the waters in a way that will not only accommodate people but will allow the continued survival of Puget Sound native species.

As people live on the land we make changes to it - remove trees, construct buildings, add pavement, build dikes and levees to control where rivers and streams flow, and use concrete or rocks to harden the shorelines. Each of these changes degrades native habitat and makes it more difficult for native species to find places to feed, rest, hide from predators, reproduce, and survive.

The signs are everywhere that these changes to Puget Sound are having a negative impact. Four Puget Sound salmonid populations are federally listed as threatened with extinction. Every major river in Puget Sound has at least one ESA listed stock; many have multiple stocks and species that are threatened with extinction. Over half of the 19 stocks of Puget Sound herring are currently classified as depressed, critical, disappeared or unknown. Fourteen out of seventeen species of rockfish in the North Sound and eleven out of fifteen species in the South Sound are at risk. Three of these Puget Sound rockfish species are listed as either threatened or endangered by the Federal government. Many marine bird species in Puget Sound have declined in population by 50 to 95 percent during the past 20 years. Marine bird populations that feed on fish that live near the surface or in open water have declined anywhere from 80 to 95 percent in numbers. And in 2005, Puget Sound orcas were added to the list of endangered species by the federal government.

It is clear from these trends that Puget Sound and its species are at serious risk.

**Shorelines have been hardened and altered.** Loss of habitat is a primary contributor to species declines. More than 700 miles of

“Key indicators tell us that important habitat for Chinook salmon is still declining.”

—National Marine Fisheries Service, Puget Sound Chinook Salmon Recovery Plan – 2011 Implementation Status Assessment Final Report, 2011

“Our considerable investment in habitat restoration has not been able to turn the powerful tide of loss and degradation...If salmon are to survive, we must begin to achieve real gains in habitat protection and restoration. The path we are on leads to the extinction of the salmon resource and our treaty-reserved rights.”

—Treaty Rights At Risk—A Report from the Treaty Indian Tribes in Western Washington, July 2011

## HOW CAN I HELP?

Shoreline property landowners can remove aging bulkheads—evaluate whether replacement is really necessary—and when appropriate, replace armoring with more natural, soft shore alternatives.

For more information go to:  
[www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org)

Puget Sound's 2500 miles of shorelines have been hardened by the construction of concrete or rock bulkheads and that mileage is increasing by one to two new miles each year. This shoreline hardening interrupts the natural process of erosion that creates and maintains beaches. One example of how this can affect Puget Sound species is the impact on forage fish – small species of fish that are an important source of food for marine mammals, birds and larger species of fish. Some types of forage fish, including surf smelt and sand lance need sandy beaches to lay their eggs. The loss of forage fish numbers affects the whole food web of Puget Sound since they are such an important food source for so many other species.

**Estuaries have been filled and lost.** There are 16 major rivers that flow into Puget Sound, and many other smaller streams. Where each river or stream enters the Sound and the salt water and freshwater mix it creates a unique place called an estuary. Estuaries are a critical habitat for many species. Salmon need estuaries to feed, rest and grow strong in as they make the physiological change from a freshwater fish to a saltwater fish. Scientists have found that Puget Sound salmon that leave the estuary before they reach a certain size have a much higher risk of dying. As the amount of estuary habitat is reduced, more salmon leave at a smaller size because there is not enough room or food for them to stay. Across Puget Sound we have lost almost sixty percent of our historic estuarine wetland habitat.

**Rivers have been channelized and floodplains altered.** Upstream of Puget Sound many of the floodplains of our rivers and streams have been significantly altered. In many places levees have been constructed to narrow channels, prevent movement of the rivers in their floodplains, and to control flooding. Homes and businesses were built in the historic floodplain or the land was drained and converted for agriculture. Native trees were removed from the riverbanks and large fallen trees removed from the rivers. All of these changes significantly alter the natural processes that create instream habitat for fish and other aquatic life. Rivers that move back and forth naturally in their floodplain have a diversity of habitats. Slow water side channels that provide refuge and rest stops for fish, sorted gravel beds for salmon to spawn, large trees that fall naturally into the river and cause the formation of deep pools, and overhanging vegetation that keeps the water cool and provides insects for fish to eat when they fall in the stream are all important elements of a healthy habitat for instream aquatic life. When vegetation is removed and rivers are narrowed and straightened, the rivers become fast moving highways of water with no place for fish to rest or feed.

**There is increasing competition for water and sometimes not enough to go around.** Natural processes of stream flow and water retention have been disrupted. One of the most fundamental and obvious things that aquatic life needs to survive is water – cool, clean water in the right amounts and the right times. Sometimes, there is not enough water to go around. Other times, stream habitat is impacted with too much water flowing too quickly. In many rivers and streams across Puget Sound - where people divert surface flows or extract groundwater, and where land uses have damaged natural water storage capacity – fish and aquatic life are threatened.

**We are threatened by oil spills.** Significant threats to habitat include the possibility of a major oil spill in Puget Sound. Memories of the impacts of the Exxon Valdez spill in Alaska or the more recent Deepwater Horizon spill in the Gulf are illustrations of how one event can cause major long-lasting impacts to habitat and the economic productivity of a region. There are over 20 billion gallons of oil and other hazardous chemicals that are being transported through Washington State every year. With this much volume the threat of a major spill is very real if prevention measures are not implemented.

**Habitat loss is a major threat to salmon and other species.** The cumulative effect of the changes we have made to our floodplains, estuaries, marine shorelines, and stream flows has been a significant loss of habitat and declines in populations of the species that depend on those habitats and on one another for their survival. If we

are to stop these declines and begin to recover these populations we must immediately stop further habitat loss and significantly restore habitat that has already been lost.

Two papers released in 2011 pointed out that we are still losing critical habitat in Puget Sound. The first was a report released by the National Marine Fisheries Service that assessed Puget Sound Chinook Salmon Recovery Plan implementation progress since it was federally approved in 2007. Among other things it concluded that in the first five years of implementation of the recovery plan, important habitat for salmon was still being lost and that habitat protection efforts needed substantial improvement.

Closely following the NMFS report, the Treaty Tribes of Puget Sound and the Coast released a paper titled “Treaty Rights at Risk – Ongoing habitat loss, the decline of the salmon resource, and recommendations for change.” In the paper the Tribes point out that the right to fish that was reserved to them in the treaties is meaningless if there are no fish left to catch. They cite numerous examples from across the Sound of continued loss of habitat due to shoreline armoring, loss of forest, increase in paved lands, and filling and diking of estuarine wetlands. Their paper is a call to action, intended to galvanize and energize response by federal, state, local and tribal governments and policy makers to reverse the downward slide of our salmon and their habitat.



*Jerry Pearson and his grandson Dylan Pearson, 5, release salmon fry into Issaquah Creek March 21 under the Northwest Sammamish Road crossover with other Issaquah School District classroom students, teachers and parents*

Much of the discussion around loss of habitat in Puget Sound has focused on the impacts on salmon.

This is for a number of reasons. The loss of salmon in Puget Sound has significant social, cultural, and economic impacts. In terms of basic dollars - the value of the Puget Sound salmon fishery is estimated at over \$60 million a year. However, salmon recovery is not just important to those who benefit economically from salmon harvest. Salmon are central to Pacific Northwest Tribal cultural and spiritual practices. In addition, many non-tribal residents of Puget Sound also view salmon as an important part of our area’s heritage and way of life – being able to see salmon spawning in the streams, go fishing for salmon, or buy local salmon at their favorite restaurant or store. Salmon also play a unique role in the nutrient cycle of the ecosystem - as adult salmon return from their ocean journey, they bring back marine nutrients to the rivers and streams in the Puget Sound Basin. Research has shown these salmon nutrients are a critical part of the cycle that results in healthier wildlife and fish populations and even contributes to the growth of streamside forests. Salmon are also a key indicator of the health of Puget Sound as they travel from the freshwater to the saltwater and back again, using all the different types of aquatic habitats that are important to other aquatic species as well. Salmon are our canary in the coal mine – and their declines signal a loss of the Sound’s ability to support all life, not just salmon.

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## WE KNOW WHAT WORKS TO PROTECT SALMON HABITAT

At the tip of Key Peninsula in South Puget Sound are 94 acres of forests, wetlands and a mile of undeveloped shoreline. Eroding bluffs feed the beaches with sand and gravel, creating habitat for shellfish, forage fish, and migrating juvenile salmon. This beautiful property, known as Devil's Head, with views of the Olympic mountains, Mount Rainier, the Nisqually delta, and nearby Puget Sound islands had been slated to be Puget Sound's next resort. This area was under real development pressure; however, a broad coalition of folks including Pierce County Council members, county employees, Forterra, the Nisqually Tribe, the Greater Peninsula Conservancy, the Key Peninsula Parks District and the Washington Water Trails Association, came together to help purchase the property for permanent protection.

Elected officials from Pierce County worked with Forterra to contribute local funds towards the project through the Pierce County Conservation Futures program. Funding from the state's Puget Sound Acquisition and Restoration fund also played a major role. The five different watershed citizen committees that received the PSAR funds all agreed to pool some of their funds and give up other projects in their local area to ensure this property could be protected. One more grant from the state's Wildlife and Recreation Program managed by the Washington State Recreation and Conservation Office, put the final piece in place.

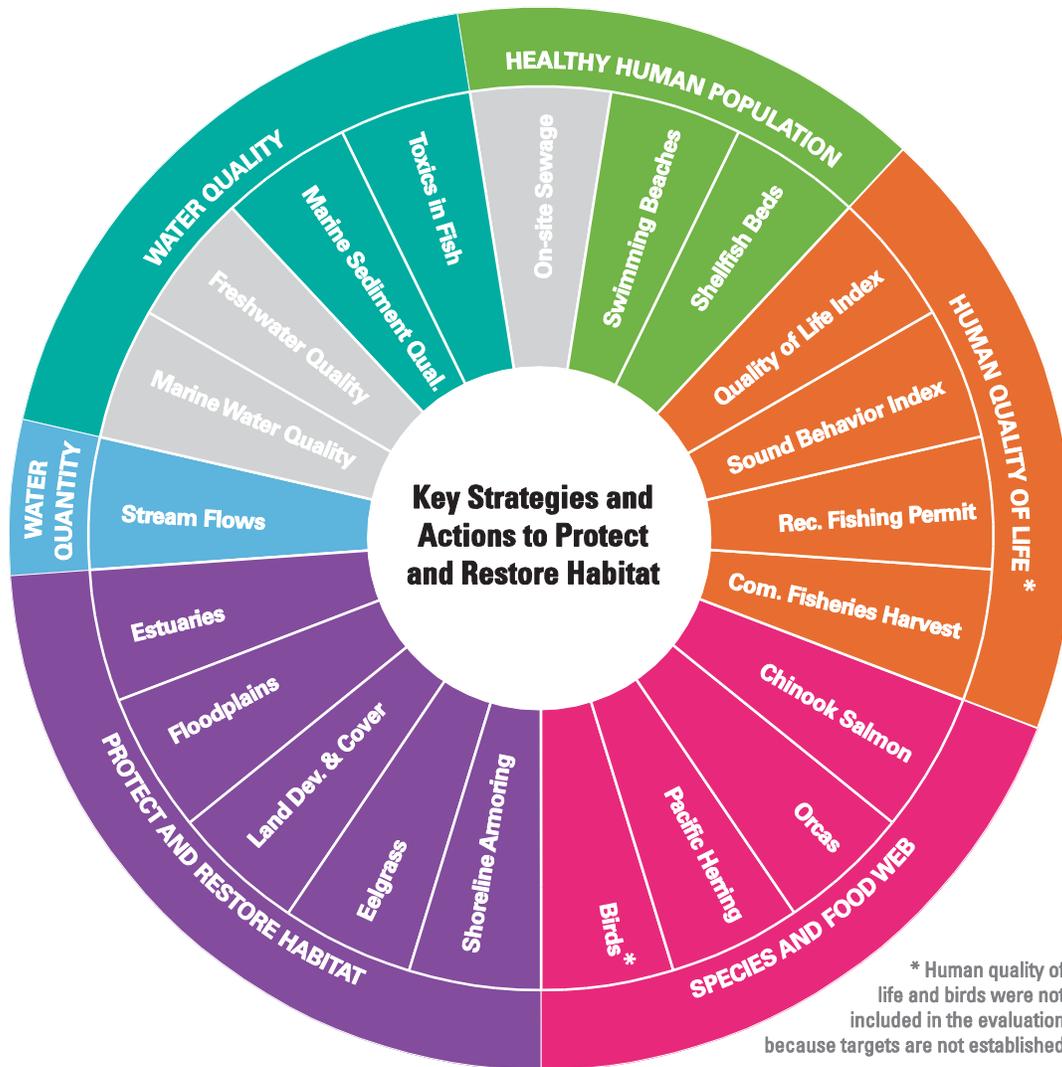
The Devil's Head project is a great example of how people and organizations can come together to find a way to protect valuable Puget Sound habitat now and for future generations.

Now we have this jewel in the Sound for the people of this region to enjoy forever.

—Ryan Mello,  
Pierce County conservation director for the group, said in the news release.

### Link to Relevant Recovery Targets

The strategic initiative to protect and restore habitat to support salmon recovery will directly contribute to progress toward the 2020 ecosystem recovery targets for swimming beaches, shellfish beds, Chinook salmon, orcas, Pacific Herring, shoreline armoring, eelgrass, land development and land cover, floodplains, estuaries, stream flows, marine sediment quality, and toxics in fish.



## Taking Action – what we can do in the next two years

This strategic initiative is intended to highlight some of the most important strategies and actions we can take over the next two years to address the critical need to protect and restore habitat and reverse the trend of continued loss. The content was developed collaboratively by a subcommittee of the Puget Sound Partnership’s Ecosystem Coordination Board that included representatives of local, state, and federal governments, Tribes, salmon recovery watershed coordinators, environmental groups, and the business community. The subcommittee acknowledged that these are not the only things we need to do to protect and restore habitat. Many additional strategies and actions related to habitat are included in the full Action Agenda; however these are the strategies and actions they identified as the most critical and valuable. The group also emphasized in their discussions that the three overarching needs for the strategic initiatives were critical to this initiative’s success: funding, outreach, and keeping these initiatives in a watershed context. While the ECB subcommittees worked on strategic initiative content, the Puget Sound treaty tribes have been developing their own proposal for content related to the strategic initiatives. A draft of the tribal proposal was not available by the July 2 posting date, but will be considered by the Leadership Council in their final decision on the Action Agenda in August.

The strategies and actions in the habitat initiative are summarized in its three main themes: protect habitat through regulations, protect habitat through incentives (including acquisition), and remove barriers to restoration of habitat.

There is unanimous agreement that to be successful we must first stop the further loss of habitat. It is not effective or efficient to allow the continued loss of habitat while we try to repair the damage in other places. This initiative brings forward strategies and actions that address both increasing regulatory protections for habitat and providing greater incentives for landowners to protect valuable habitat. Our biggest challenges in habitat protection are the lack of widespread public understanding of the significance of habitat loss, the lack of strong public support for the regulatory changes necessary to protect habitat, and the need for greater incentives for landowners to voluntarily protect valuable habitat. Previous attempts to strengthen protective regulations and to work with landowners on a voluntary basis have been difficult to implement because of these challenges. We must find a way to address regulatory exemptions that allow the continued degradation of habitat. This is one of the reasons that the Habitat Strategic Initiative subcommittee emphasized that an overarching outreach strategy and an overarching funding strategy is essential to this initiative's success. Two other critical elements of habitat protection identified as a priority are the prevention of oil spills and invasive species. Although this area has not recently experienced a major oil spill at the scale seen in some other parts of the country it was recognized by the subcommittee that we must remain vigilant and make sure we have good policies and programs in place that continue to reduce our risk of such an oil spill happening. Invasive species threaten all types of ecosystems, displace native species, disrupt ecosystem function, and cause significant economic impacts.

There also was agreement that we cannot stop at only protecting what habitat still remains. Without restoring critical habitat we will not be able to reverse the declines in salmon and other Puget Sound species. The two major habitat restoration actions are implementation of the salmon recovery 3 year workplans, and the projects identified by the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP). The salmon recovery 3 year workplans are prioritized lists of the projects needed to advance salmon recovery in each of the watersheds of Puget Sound. They are updated every year by a local technical and citizen's committee and compiled by the Puget Sound Partnership.

There is recognition in these salmon recovery plans that long term salmon recovery requires projects that restore the whole Puget Sound ecosystem. As a result, implementation of these projects will restore habitat for other Puget Sound species, not just salmon. Many of the current 3 year workplan projects are large complex, expensive projects that are difficult to fund using existing fund sources that are more narrowly focused or not at the scale of the needed funding. This is another reason that the subcommittee emphasized that an overarching funding strategy is critical to success.

Another significant barrier to implementing priority restoration projects in some places is local community support or landowner willingness. Success in this initiative will require successful outreach strategies to engage landowners and local communities to develop support for priority restoration projects. Finally, protecting and restoring stream flows was identified as an important action by the subcommittee. Ensuring that instream flows are set at adequate levels to support instream habitat needs is a critical first step to making sure there is enough water in our streams.

The recommended actions in this strategic initiative are generally associated with the substrategies that were ranked the highest by technical experts using ecological criteria.

## Key Strategies and Actions for Habitat Protection and Restoration

### Protect Through Regulations

- **Protect and Restore Stream Flows.** We must finish setting in-stream flows and pay attention to enforcing in-stream flow rules in the Puget Sound Basin if we are going to protect and restore vital habitat. In particular, we must set flows in the remaining priority Puget Sound watersheds that currently do not have instream flow rules such as the Dungeness and the Elwha; we must deliver on our promise to 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; and we must establish a local compliance presences for in-stream flows protect the resource, support mitigation, reduce water use, and protect senior water rights. This set of actions is addressed in the Action Agenda in sub-strategy A7.1.
- **Floodplain protection and policy team actions.** PSP will advance floodplain protection and restoration by facilitating actions, policy changes, and program changes necessary to reduce critical barriers to habitat protection and restoration. Funding will be focused on the places that have the greatest potential to recover floodplain functions. (A5.1 NTA 1)
- **Levee vegetation.** PSP will continue to work with the Army Corps of Engineers to craft a regional variance to their vegetation on levees policy. (A5.3 NTA 4)
- **Hydraulic Code Rules Revision.** By December 2014, 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. (B1.3 NTA 2)
- **ECB address regulatory exemptions.** The ECB will address regulatory exemptions to provide effective oversight and mitigation sequencing for activities that impact the ecosystem. (A1.3 NTA 1)
- **Land Use Planning Barriers, BMPs and Example Polices.** By December 2012, Ecology and Commerce, working with local governments, will identify the primary barriers to incorporating policies consistent with implementation of the Action Agenda into local land use planning and decisions and identify best practices and assistance needed to overcome these barriers. This will address implementation of protection strategies, encouraging compact growth patterns, increased density, water quality standards, redevelopment, and rural lands protection. By December 2013, Ecology and Commerce will distribute example growth policies that include best practices that are consistent with protection and recovery targets and the Growth Management and Shoreline Management Acts. (A1.2 NTA 1)
- **Update Local Shoreline Master Programs.** Ecology will provide funding and, with WDFW, 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 and guides Puget Sound toward shoreline armoring target. (B1.2 NTA 1)
- **Evaluate Risk Assessments for Update Needs.** Ecology will evaluate existing Puget Sound marine transportation oil spill risk assessments, identify any gaps in marine safety and work with experts to develop and apply appropriate risk reduction measures. (C8.1 NTA 2)

## Protect Through Incentives

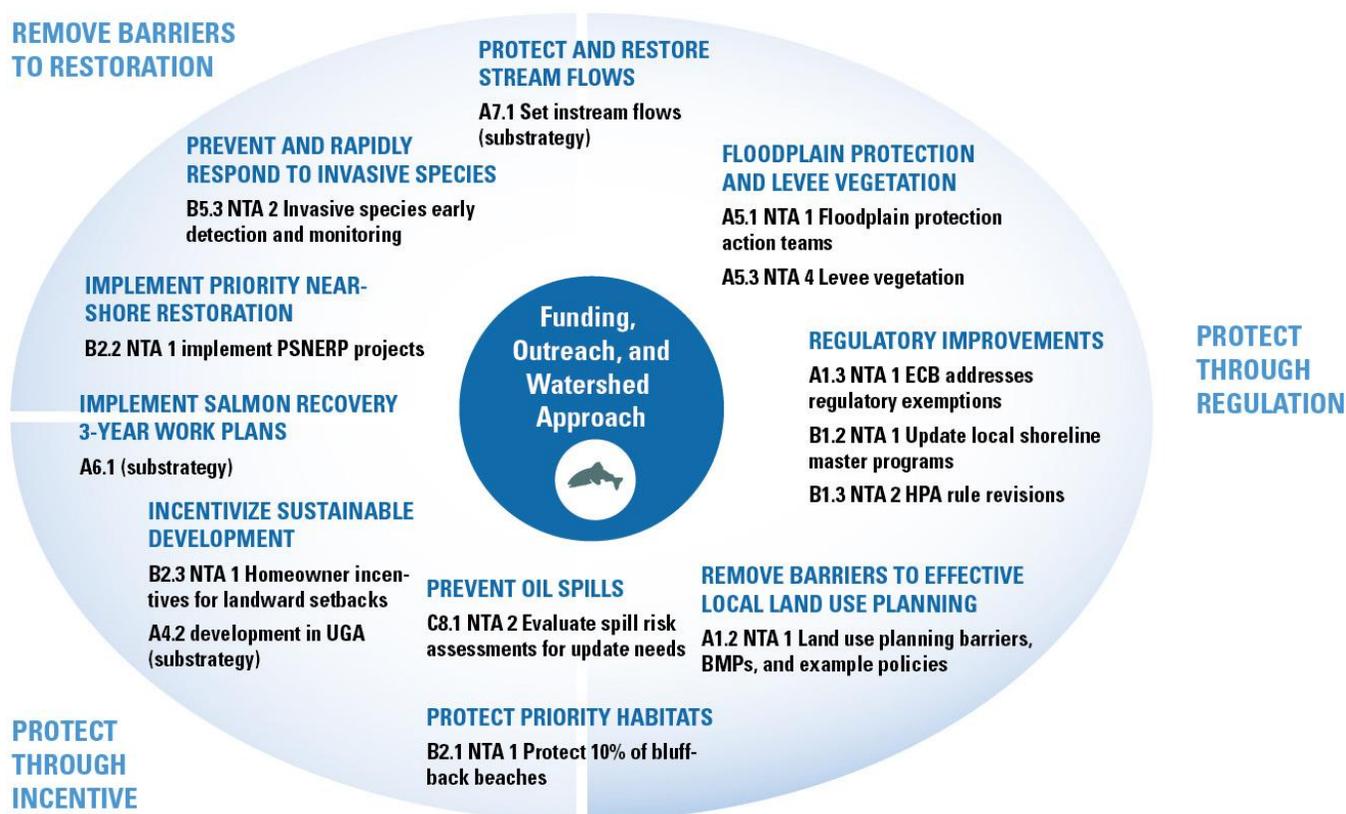
- **Protect 10% of Bluff-Backed Beaches.** PSP will promote acquisitions, easements, or other protective covenants to permanently protect at least 10% of bluff-backed beaches with high sediment supply or other priority nearshore habitats facing potential shoreline development pressure by June 2014. (B2.1 NTA 1)
- **Homeowner Incentives for Landward Setbacks.** Building on work done to date, PSP will convene a process with partners to develop and recommend incentives that help homeowners permanently remove armoring and encourage setback of houses by June 2014. Incentives could include, but would not be limited to financial, regulatory, low interest loans or grants. This work will help restore nearshore processes, promote landward retreat of homes facing sea level rise, and promote progress toward shoreline armoring target. (B2.3 NTA 1)
- **Provide for growth.** Provide infrastructure and incentives to accommodate new and re-development within urban growth areas. (A4.2)

## Remove Barriers to Restoration

- **Implement Salmon Recovery 3-year Workplans.** This was identified by the ECB Subcommittee as the most important action in the Habitat Strategic Initiative. Full implementation will involve implementation of near-term actions including: securing the annual investment as required to fully implement the approved Puget Sound Chinook Salmon Recovery Plan, and working to align that funding in support of the highest priority protection and restoration projects as identified by salmon recovery lead entities (A6.1 NTA 1); addressing barriers to faster permitting of salmon recovery restoration projects so that the majority of restoration projects can begin construction within one year of completing design and securing funding (A6.1 NTA 2); and, developing a cooperative agreement with Burlington Northern Santa Fe Railroad to enable the implementation of high priority salmon recovery projects that intersect with the railroad right of way (A6.1 NTA 3). Many of the Action Areas also have identified priority work in support of implementing the 3-year salmon recovery workplans. (A6.1)
- **Implementation of Projects Identified by PSNERP.** By December 2014, WDFW and the Corps will advance implementation of projects identified by Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), including those described in the Strategic Restoration Conceptual Engineering Final Design Report. Implementation will occur both through Corps programs as anticipated through the General Investigation process, and through other non-Corps federal, state, tribal and local programs by 2013. (B2.2 NTA 1)
- **Invasive Species Early Detection and Monitoring.** By June 2014, the Invasive Species Council, in consultation with WSDA, will develop an early detection and monitoring program plan for priority invasive species in Puget Sound. The Council will coordinate the plan and implementation efforts with the Puget Sound Coordinated Ecosystem Monitoring Program. (B5.3 NTA 2)

Strategic initiative content is summarized in Figure 2, and details of the priority actions for the habitat strategic initiative are listed in Table 2. In addition, as discussed earlier, each strategic initiative individually and the initiatives collectively must be supported by an overarching funding strategy, an overarching outreach strategy, and keen attention to ensuring that implementation takes a watershed-based approach.

Figure 2: Habitat Strategic Initiative



**Table 2: Protection and Restoration of Habitat - Strategies and Actions**

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
A	1.2	Support local governments to adopt and implement plans, regulations, and policies consistent with protection and recovery targets, and incorporate climate change forecasts.	1	<u>Land Use Planning Barriers, BMPs and Example Policies.</u> By December 2012, Ecology and Commerce, working with local governments, will identify the primary barriers to incorporating policies consistent with implementation of the Action Agenda into local land use planning and decisions and identify best practices and assistance needed to overcome these barriers. This will address implementation of protection strategies, encouraging compact growth patterns, increased density, water quality standards, redevelopment, and rural lands protection. By December 2013, Ecology and Commerce will distribute example growth policies that include best practices that are consistent with protection and recovery targets and the Growth Management and Shoreline Management Acts.	Example growth policies distributed or not; extent to which local land use planning and decision making become more consistent with the Action Agenda over time.	Ecology	Commerce
A	1.3	Improve, strengthen, and streamline implementation and enforcement of laws, plans, regulations, and permits consistent with protection and recovery targets.	1	<u>ECB Address Regulatory Exemptions.</u> The ECB will address regulatory exemptions to provide effective oversight and mitigation sequencing for activities that impact the ecosystem.	By September 9, 2012 identify any regulatory processes that are currently moving forward and require immediate attention (e.g., the HPA rulemaking, SMP updates, NRCS practice standards for nutrient management and riparian buffers, and others), By December 2012 identify the statutes, regulations, policies that need to be changed, by June 30, 2013 develop the approach necessary to make the changes identified.	ECB	
A	4.2	Provide infrastructure and incentives to accommodate new and re-development within urban growth areas.		<i>All of sub-strategy A4.2 is a priority for the habitat protection and restoration strategic initiative.</i>			
A	5.1	Improve data and information to accelerate floodplain protection, restoration, and flood hazard management.	1	<u>Floodplain Protection and Policy Team Actions.</u> PSP will advance floodplain protection and restoration by facilitating actions, policy changes, and program changes necessary to reduce critical barriers to habitat protection and restoration. Funding will be focused on the places that have the greatest potential to recover floodplain functions.	By December 2012, PSP convenes a Puget Sound Floodplain Protection and Recovery Policy Team to establish a working definition of 'floodplain' and 'floodplain function' in the context of the 2020 floodplains recovery target; By December 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, including an evaluation of changes that could be made to PL84-99 that requires damaged levees to be reconstructed in place rather	PSP	

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
					than use the funding to do a levee setback; By June 2013, identify the policy and program changes of federal, state and local flood risk management, flood mitigation and ecosystem protection and restoration programs to foster multi-objective floodplain management. By June 2013, identify floodplain areas; prioritize those most important for protection, restoration, farmland preservation or other compatible and non-compatible uses; and identify the implementation steps needed to protect functioning floodplain areas. By June 2013, 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 using the results in the July 2010 "Floodplain Management: A Synthesis of Issues Affecting Recovery of Puget Sound" report, the report developed in A5.1 NTA 2, and other relevant and timely information.		
A	5.3	Protect and maintain intact and functional floodplains.	4	<u>Levee Vegetation</u> . PSP will continue to work with the Army Corps of Engineers to craft a regional variance to their vegetation on levees policy.	By June 2013, new language for regional variance developed and adopted.	PSP	USACE
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.		<i>All of sub-strategy A6.1 is a priority for the habitat protection and restoration strategic initiative.</i>			
A	7.1	Update Puget Sound instream flow rules to encourage conservation		<i>All of sub-strategy A7.1 is a priority for the habitat protection and restoration strategic initiative.</i>			
B	1.2	Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate	1	<u>Update Local Shoreline Master Programs</u> . Ecology will provide funding and, with WDFW, 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 and guides Puget Sound toward shoreline armoring target.	To be determined	soundwide	Ecology

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
		climate change forecasts.					
B	1.3	Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries.	2	<u>Hydraulic Code Rules Revision</u> . By December 2014, 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.	Rulemaking complete	WDFW	
B	2.1	Permanently protect priority nearshore physical and ecological processes and habitat, including shorelines, migratory corridors, and vegetation particularly in sensitive areas such as eelgrass beds and bluff backed beaches.	1	<u>Protect 10% of Bluff-Backed Beaches</u> . PSP will promote acquisitions, easements, or other protective covenants to permanently protect at least 10% of bluff-backed beaches with high sediment supply or other priority nearshore habitats facing potential shoreline development pressure by June 2014.	By Sept 2012, identify location of bluff-backed beaches with high sediment supply and development pressure or other priority nearshore habitats facing development pressures; By December 2012, convey the location information to salmon recovery watershed groups and LIOs for consideration; By December 2012, convene at least one meeting with each Action Area (LIO) with bluff backed beaches; By May 2013, identify candidate locations and local projects, and incorporate into salmon recovery three year work plans if appropriate for each area. Capital projects awarded grants by March 2014. By June 2014, any new regulatory protections are in place. By August 2014, 10 % of the bluff-backed beaches with high sediment supply or priority nearshore habitats facing development pressure are protected.	PSP	
B	2.2	Implement prioritized nearshore and estuary restoration projects and accelerate projects on public lands.	1	<u>Implementation of Projects Identified by PSNERP</u> . By December 2014, WDFW and the Corps will advance implementation of projects identified by Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), including those described in the Strategic Restoration Conceptual Engineering Final Design Report. Implementation will occur both through Corps programs as anticipated through the General Investigation process, and through other non-Corps federal, state, tribal and local programs by 2013.	Number of projects funded; number implemented; amount of various nearshore habitats restored Milestone: Final Feasibility Report for the PSNERP GI is completed by August 31, 2012, advancing projects for construction authorization through the Corps process.	WDFW	USACE
B	2.3	Remove armoring, and use soft armoring replacement or landward setbacks when armoring	1	<u>Homeowner Incentives for Landward Setbacks</u> . Building on work done to date, PSP will convene a process with partners to develop and recommend incentives that help homeowners permanently remove armoring and encourage setback of houses by June 2014. Incentives could include, but would not be limited to financial, regulatory, low interest loans or grants.	By December 2012, identify the group and complete the scoping process including holding at least two meetings with partners; By June 2013, complete technical steps including identifying where to target the program for highest ecological value; By December 2013, identify draft possible incentive	PSP	

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
		fails, needs repair, is non protective, and during redevelopment.		This work will help restore nearshore processes, promote landward retreat of homes facing sea level rise, and promote progress toward shoreline armoring target.	options for discussions; By June 2014, present options and recommendations to ECB and Leadership Council including miles of bulkheads that could be replaced with soft armoring or setbacks and a homeowner outreach plan.		
B	5.3	Prevent and rapidly respond to the introduction and spread of terrestrial and aquatic invasive species.	2	<u>Invasive Species Early Detection and Monitoring.</u> By June 2014, the Invasive Species Council, in consultation with WSDA, will develop an early detection and monitoring program plan for priority invasive species in Puget Sound. The Council will coordinate the plan and implementation efforts with the Puget Sound Coordinated Ecosystem Monitoring Program.	Plans will be developed for five species. Secure funding by March 2013; Issue request for proposal. Hire contractor by June 2013; Identify existing invasive species monitoring efforts and protocols used in Puget Sound by December 2013; Develop conceptual monitoring plan that identifies targeted species and locations, and estimated costs to implement by June 2013; Seek funding opportunities to implement monitoring plan by October 2014.	ISC	WSDA
C	8.1	Prevent and reduce the risk of oil spills.	2	<u>Evaluate Risk Assessments for Update Needs.</u> Ecology will evaluate existing Puget Sound marine transportation oil spill risk assessments, identify any gaps in marine safety and work with experts to develop and apply appropriate risk reduction measures.	Gaps identified by Ecology, PSP, technical consultant and/or Cross Partnership Oil Spill Work Group.	Ecology	

## **Federal activities consistent with and supportive of the Puget Sound Action Agenda**

Federal agencies in the Puget Sound region are undertaking a coordinated effort to contribute to Puget Sound habitat protection and restoration. This work is being driven by the federal response to Western Washington treaty Tribes' concerns over declining habitat and its effect on natural resources. Appendix G of this document contains a description of that effort and a matrix of actions federal agencies are taking related to habitat. This work is captured under sub-strategy A6.2 NTA 1. Federal agencies will continue to seek opportunities to cooperate with state agencies and tribal governments to protect and restore Puget Sound habitat.

# Tribal Habitat Priorities

Puget Sound Tribes engaged in an intensive coordination process among themselves to identify priority actions that need to be taken to address the continued loss of salmon habitat. Although there is close agreement between the Tribal Habitat Priorities and the strategic initiatives in the Action Agenda, there is more work to be done to ensure that progress is made. PSP will work with Tribes through the Partnership Tribal Comanagement Council to address additional items in the Tribal Habitat Priorities listed below (D2.2 NTA 1).

- 1) The Puget Sound Management Conference under the leadership of the PSP Leadership Council, the Ecosystem Coordination Board, and Salmon Recovery Council, supported by the PSP staff, will do the following to protect the ecosystem processes required to support the habitat necessary to meet salmon recovery goals of viable, harvestable populations.**
  - a) Establish quantitative metrics for habitat at each life history phase for each population to ensure harvestable surplus and a viable salmon population.
  - b) Identify necessary changes to Federal, State, tribal and local statutes, regulations and policies that allow the continued loss of habitat including, but not limited to, eliminating the single family and agricultural activity exemptions from the Shoreline Management Act and the Growth Management Act.
  - c) Implement and fund the recovery plans for Puget Sound salmon and steelhead (all H's) including, but not limited to, Puget Sound Chinook salmon and Strait of Juan de Fuca/Hood Canal summer chum salmon to support viable, harvestable populations.
  - d) Modify Flood Control and Coastal Emergency Act (PL84-99) to provide funding for levee set-backs to enhance flood plain functions.
  - e) Require all affected agencies to clearly identify, define, implement and enforce quantitative metrics for essential habitat required under existing authorities.
  - f) Develop a comprehensive funding strategy for Puget Sound recovery with focus on new dedicated sources of funding.
  - g) Develop a comprehensive public outreach, awareness, and behavior change program to promote public stewardship of Puget Sound resources.
  - h) Prevent large oil spills and reduce the incidence of chronic oil spills through enforcement of existing rules and modify legislation where required to ensure protection.
  - i) Adequately fund and strengthen spill readiness and response capacity.
  - j) Update state water quality standards by ensuring promulgation of new human health criteria with an accurate fish consumption rate before undertaking implementation rule development and by developing numeric criteria of fine sediment.
  - k) Implement water resource management rules (establish instream flows) in critical watersheds.
- 2) Implement and improve consistency, coordination of enforcement and alignment of federal, state and local regulations for the protection of priority nearshore, estuary and floodplain habitat.**
  - a) The appropriate entities shall ensure effective coordination and enforcement of existing regulations.
    - (1) EPA will enforce CWA and ensure that delegated responsibilities to WDOE are effectively discharged.
    - (2) WDOE will enforce Water Quality Standards and the State Water Pollution Control Act.
    - (3) NOAA will ensure that the conditions of the DNR HCPs are met.
    - (4) NOAA will monitor the implementation of the FEMA BIOP to ensure compliance.
    - (5) WDOE will enforce water right permits, beneficial use requirements and illegal withdrawal regulations.
    - (6) WDFW will enforce Hydraulic Code provisions.
    - (7) WDNR will enforce Forest Fish Rules and commitments under HCPs.
    - (8) Federal and State agencies will act to ensure that habitat held in trust to guarantee reserved treaty rights supporting the tribal way of life is not degraded to the point that additional restrictions are required.
    - (9) Ensure that best management practices result in meeting water quality standards.
  - b) Where inconsistencies exist between current regulations and the desired ecosystem protection and restoration, the affected agencies will consult and align their authorities to achieve this objective.
  - c) Develop strategy to achieve zero discharge of waste water into Puget Sound, including short-term targets by Action Area identifying specific facilities for conversion.
  - d) Align Federal, State, and local agencies' resources and regulatory jurisdictions to implement large scale process restoring projects.

- e) NOAA will develop a Biological Opinion on the impact of dikes/levees on Chinook production.
  - f) NOAA OCZM will ensure that the SMA protects shoreline processes essential to the productivity and capacity for harvestable viable salmon populations.
- 3) Increase opportunity, focus and effectiveness of incentive based approaches, including non-financial incentives, for the protection and restoration of priority floodplain, wetland, estuary and nearshore habitat.**
- a) Identify and prioritize key habitat.
  - b) Protect key habitat through land purchase, conservation easements, purchase of development rights or tax incentives such as tax credits or reductions.
  - c) Develop measurable standards that must be met by those applying for or receiving incentives.
  - d) Develop regulations that allow continued land use consistent with protection and recovery targets, but make conversion to other uses prohibitive.
  - e) Develop programs that recognize good stewards of key habitat and help them identify efficiencies, new markets, etc.
- 4) Address key institutional, financial and community barriers to priority habitat restoration projects.**
- a) Establish a sound wide taxing district to support actions, monitoring and adaptive management of Puget Sound protection and restoration projects.
  - b) Implement a program to illustrate the value of a healthy Puget Sound Ecosystem to Public Health and the economic well being of the residents.
  - c) Streamline permitting requirements for ecosystem restoration projects with agreed long term beneficial results.
  - d) Overcome institutional barriers to align funding sources to implement large scale projects including implementation of projects identified by PSNERP.
  - e) ESA Listing Services will ensure that federal agencies consult on actions that impact listed species.
- 5) Hatchery production will augment harvest and supplement natural stock restoration in a manner that is compatible with habitat protection and restoration, as well as preserving and enhancing the genetic and life history diversity of natural production.**
- a) WDFW and tribal fishery resource managers will develop hatchery management plans that recognize the requirements in each watershed, take into account habitat and harvest plans, and provide for sustainable production from both hatchery and natural sources.
  - b) WDFW and Tribal fishery resource managers will complete Hatchery Genetic Management Plans (HGMPs) for NOAA review and approval.
- 6) Develop and implement monitoring programs critical to the evaluation of viable salmonid population (VSP) parameters, key indicators of freshwater and marine habitat and ecosystem response to salmon recovery efforts which will be comparable in detail to monitoring harvest and hatchery practices.**
- a) Apply the RITT Adaptive Management Framework throughout Puget Sound.
  - b) Spawning ground abundance, smolt migration abundance and total abundance for natural and hatchery origin populations will be estimated.
  - c) Monitor key habitat status and trends indicators for floodplain, channel migration zone, wetland, estuary, nearshore and Salish Sea habitat including stream flow, temperature, habitat extent and condition, prey and predator abundance and associated species complexes.
  - d) Monitor effectiveness of restoration projects, Best Management Practices and buffers.
  - e) Establish geographically appropriate measures to evaluate actions (reach, drift cell, etc).
  - f) Monitor the implementation and effectiveness of regulations intended to protect salmon habitat and make changes as necessary.
  - g) Implement a comprehensive Puget Sound marine salmonid survival study focused on management needs for associating key habitat indicators with returning abundances.

# We Must Recover Shellfish

## The Challenge

When the public goes to Puget Sound beaches, they want to dig shellfish that are safe to eat and swim in safe waters. Shellfish play a significant role in the biological, cultural, and historical context of Puget Sound. The cool, clean waters of the “Jewel of the Northwest” provide some of the finest shellfish habitat in the world, contributing to Washington’s distinction as the nation’s leading producer of farmed bivalve shellfish.

The framework and content of this strategic initiative were developed collaboratively by a subcommittee of the Ecosystem Coordination Board that included representatives of local, state, and federal governments, Tribes, salmon recovery watershed coordinators, environmental groups, and the business community. The subcommittee acknowledged that these are not the only actions we need to take to recover shellfish beds. Many additional actions related to shellfish beds are included in the full Action Agenda; however, these are the actions they identified as the most critical and valuable for the next two years.

Shellfish beds are essential to Puget Sound’s ecosystem diversity and complexity, and require excellent water quality and pollution control so they are safe to eat. Many influences affect water quality in the Sound. On-site sewage systems, wastewater treatment plants, marinas, animal-keeping activities, and wildlife can negatively impact water quality through direct discharges to Puget Sound or stormwater runoff that flows to the Sound.

The extent of approved shellfish harvesting areas in Puget Sound reflects the health of Puget Sound. Identifying “trouble spots” in shellfish growing areas helps detect and correct pollution sources. We are committed to restoring and maintaining a healthy marine system that can both feed us and sustain us.

Shellfish are also critical to the health of Washington’s economy. Washington leads the country in production of farmed clams, oysters and mussels with an annual value of over \$107 million. Washington shellfish growers directly and indirectly employ over 3,200 people and provide an estimated total economic contribution of \$270 million. Ceremonial and subsistence harvest of shellfish in Puget Sound and Coastal waters is invaluable and unquantifiable to tribes.



## HOW CAN I HELP?

Regularly inspect and maintain your onsite septic system to assure its proper operation

Pick up after your dog: scoop the poop, bag it and throw it in the trash.

For more information go to:  
[www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org)

Annually, tourists and residents purchase 160,000 licenses to harvest shellfish from Washington waters, providing more than \$1 million in state revenues. WDFW estimates that the 125,000 shellfish harvesting trips made each year to Puget Sound beaches provide a net economic value of \$5.4 million to the region.

Polluted runoff from rural and agricultural lands must stop if we are to meet shellfish recovery related targets. These targets include a net increase from 2007 to 2020 of 10,800 harvestable shellfish acres, which includes 7,000 acres where harvest is currently prohibited in Puget Sound. However, the recent shellfish downgrade in Samish Bay is a reminder of the constant vigilance needed by landowners, businesses and local, state, federal and tribal governments to protect and restore shellfish beds.

The actions included in this strategic initiative are consistent with the Washington State Shellfish Initiative (WSSI) which is a convergence of the National Oceanic and Atmospheric Administration's (NOAA) National Shellfish Initiative and the state's interest in promoting a critical clean water industry. As envisioned, the WSSI will protect and enhance a resource that is important for jobs, industry, citizens and tribes. It includes measures to reduce sources of pollution, collaborative partnerships with local governments and the public to enhance the resources and research efforts to enhance productivity of the resource and identify solutions to threats. The actions in the shellfish strategic initiative in the Action Agenda do not encompass all of the actions in the WSSI. They are a subset of actions that need to begin immediately and that need extra effort in order to move us toward our 2020 recovery goals.



*Photo courtesy USFWS Pacific (CC BY 2.0)*

Contamination in rural and agricultural areas comes from a variety of human and natural sources. Ongoing regional efforts have focused on pollution from poorly maintained or failing on-site sewage systems, runoff contaminated with animal waste, and untreated sources from recreational uses in the watershed. Strategies to address these threats have included a variety of regulatory and voluntary incentive-based approaches. These approaches include NRCS incentive programs and the Ruckelshaus Center process which focuses on incentives to encourage good riparian and ecosystem stewardship practices on agricultural lands in critical areas. It will be crucial to identify long term sustainable funding for these programs.

Like reducing pollution from urban areas, preventing pollution from rural areas is an important part of a climate change adaptation strategy. These actions help protect our vulnerable species and habitats. In addition, these actions are part of the overall state strategy to reduce shellfish vulnerability to ocean acidification.

Many of the specific actions identified by the ECB subcommittee for the shellfish strategic initiative are related to substrategies that did not rank high according to ecological criteria. However, the subcommittee determined that other factors related to overall Puget Sound recovery goals justify highlighting those actions for

implementation. The actions contribute to the economy (shellfish model permitting program), human health (regional OSS programs) or focus in limited geographic areas (priority areas for voluntary incentive and regulatory programs). The ecological ranking process also ranked substrategies lower if they did not result in immediate environmental outcomes. Many of the actions in the shellfish strategic initiative are first steps that will eventually result in long-term durable change.

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## WHAT REALLY WORKS TO RECOVER SHELLFISH BEDS: ACTIONS FOR RESTORING WATER QUALITY WITH THE GOAL OF LIFTING SHELLFISH HARVEST RESTRICTIONS

For the first time since the 1980s, in February 2010 the state Department of Health reopened 240 acres of shellfish-growing tidelands for harvest without weather restrictions in Henderson Inlet in Thurston County. In the face of increased development, and contrary to predicted trends, water quality in the inlet has improved, and these improvements have been maintained. This success was the result of concerted effort by Henderson Inlet area residents and strong coordination among stakeholders to identify and implement a series of specific actions that could be replicated elsewhere in Puget Sound. In fact, a similar cooperative model is currently being followed in Oakland Bay in Mason County and already is bearing results. These actions include:

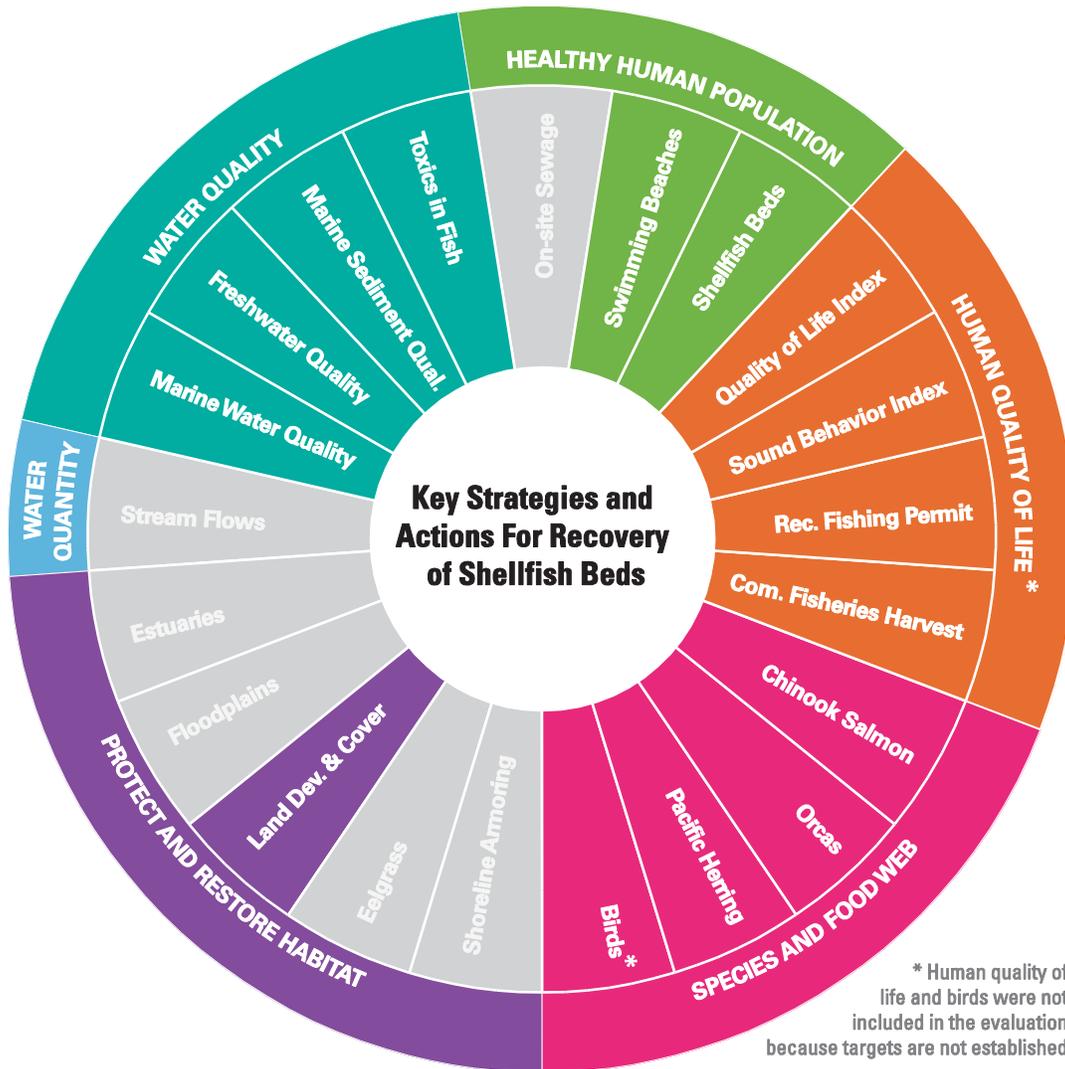
- Reach out to local opinion leaders and neighborhood groups and work locally, on the ground, to understand problems and develop solutions.
- Focus on actions that directly address local sources of water pollution such as septic systems, stormwater, agriculture, and land-use. In Henderson Inlet the County developed a septic system operation and maintenance program which reduced fecal coliform pollution from on-site sewage systems and worked to reduce runoff locally and to Woodard Creek.
- Engage and educate the homeowners in the watershed with a dedicated outreach strategy and multiple venues for involvement including public meetings, newsletters, and hands-on opportunities that invest people in taking action to maintain success, in Henderson Inlet; among other things, they formed a community shellfish farm.
- Set goals and monitor progress. Thurston County Develop an action plan specifically targeted at reducing water pollution which includes performance measures to evaluate implementation success and provides clear reporting requirements and schedule (e.g., annually) for transparency.
- Involve a multi-stakeholder advisory group/committee in action plan development and implementation. Representatives should include local businesses and associations of varied interests, local citizens, and city, county, state, and tribal government.
- Secure multiple viable funding sources including conservation district, grants, county and city resources, and public taxes.
- Establish and implement enforcement mechanisms.

County staff worked with many agencies including the state Departments of Health and Ecology on this effort and put in many, many hours of their own. But a lot of credit also goes to Henderson Inlet area residents for their individual efforts to reduce the impacts of poorly operating septic systems, and to the citizen members of the Shellfish Protection District Committee.

—*Thurston County Commission Chair  
Sandra Romero*

## Link to Relevant Recovery Targets

The initiative to recover shellfish beds will contribute to progress toward the Partnership’s 2020 ecosystem recovery targets for shellfish beds, land development and land cover, marine water quality, freshwater quality, marine sediment quality, toxics in fish, on-site sewage, swimming beaches, Chinook salmon, orcas, and Pacific Herring.



## Key Strategies and Actions for Recovery of Shellfish Beds

The shellfish strategic initiative has three themes: prevent pollution through existing regulations and programs; prevent pollution through incentives; and encourage beneficial use of shellfish. Actions are included in this strategic initiative that help citizens connect the impact of individual actions on Puget Sound Health. Establishing no discharge zones will educate recreational boaters about the importance of clean water to shell fish and human health. On-site sewage system (OSS) programs help to educate homeowners about the importance of maintaining their systems to Puget Sound health and provide an opportunity to develop a public

private partnership to repair polluting systems. Proper management of systems helps protect personal investments, property values, and Puget Sound.

## Prevent Pollution through Existing Regulations and Programs

- **Pollution Control Action Team.** Ecology, working with DOH, WSDA, EPA and the Tribes will form a Pollution Control Action Team (PCAT) to respond quickly when areas are identified where water quality problems threaten shellfish areas. They will initiate community outreach and education, pollution identification, inspection, technical assistance to local agencies and landowners and finally, enforcement. The team will focus its work in priority areas and support PIC programs where they are established. The first effort will be in Drayton Harbor and Portage Bay. (C7.1 NTA 3)
- **Pollution Identification and Correction Programs.** DOH and Ecology will administer EPA grants to help counties and tribes set up sustainable programs to identify and correct nonpoint pollution sources to improve and protect water quality in shellfish growing areas and at marine swimming beaches. These sustainable programs will have ongoing monitoring to identify pollution sources and assess effectiveness of efforts, a local sustainable funding source, and a compliance assurance component. (C9.4 NTA 1)
- **No Discharge Zone Evaluation and Petition.** Ecology, in collaboration with State Parks and EPA, will administer grants to fund the development of a petition to EPA to establish a No Discharge Zone to prohibit recreational and commercial vessels from discharging sewage in all or parts of Puget Sound. (C1.5 NTA 1)
- **Water Quality Enforcement.** Ecology, working with DOH, will increase the capacity for enforcement, and enforce all regulations pertaining to pathogens and contaminants that pollute waters of the state to ensure achievement of approved shellfish growing water certification. (C1.6 NTA 3)
- **Outfall Strategy on State-Owned Aquatic Lands.** 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. (B3.1 NTA 2)
- **Priority Areas for Voluntary Incentive and Regulatory Programs.** The State Conservation Commission and the Washington State Departments of Agriculture, Ecology, and Health will identify priority areas to better target and coordinate implementation of voluntary incentive and regulatory programs for rural landowners, small-acreage landowners, and working farms. (C3.2 NTA 1)

## Prevent Pollution through Incentives

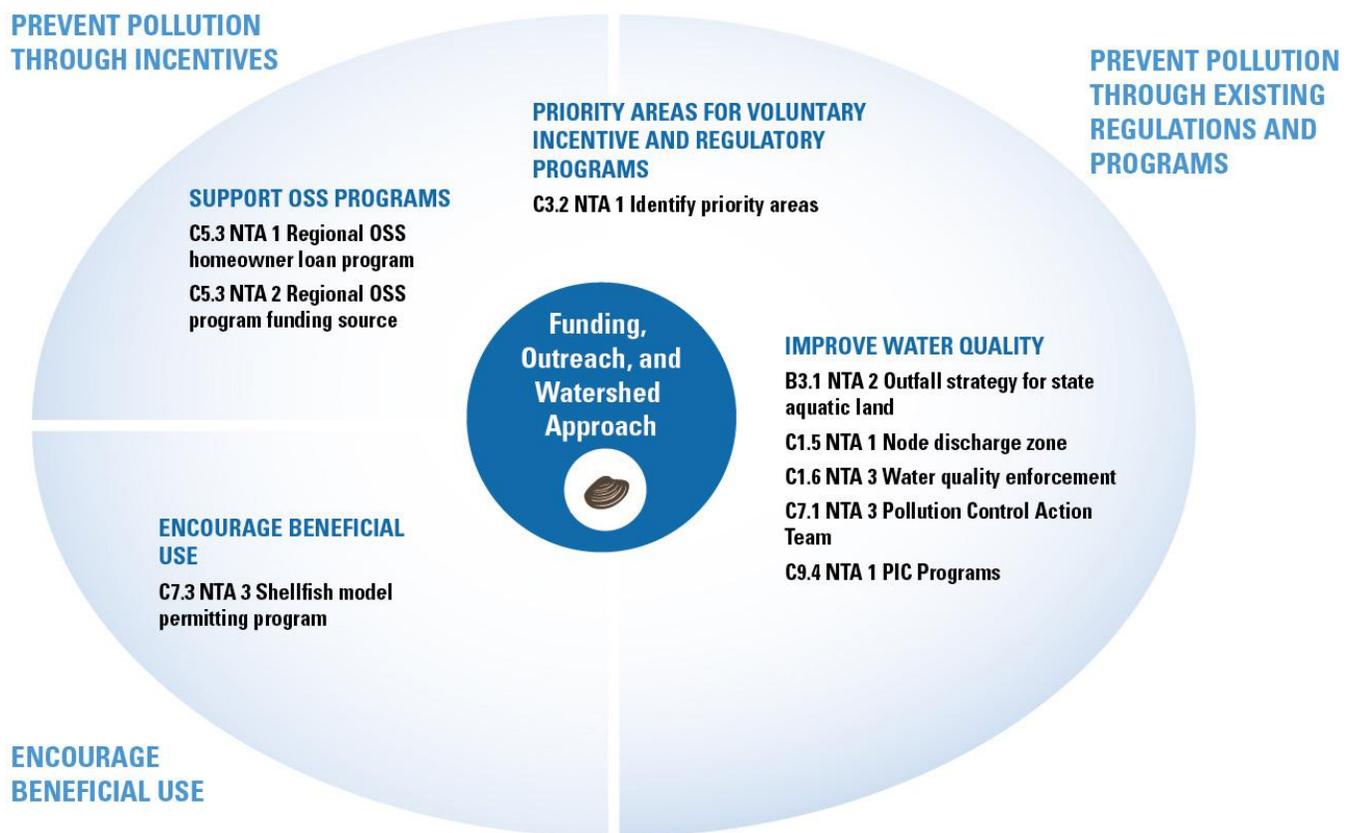
- **Regional OSS Homeowner Loan Program.** DOH, Ecology, and PSP will help evaluate options and support proposals to fund a unified, self-sustaining, low-interest loan program in the Puget Sound region to help OSS owners repair and replace their systems by June 2014. (C5.3 NTA 1)
- **Regional OSS Program Funding Source.** DOH will evaluate approaches and mechanisms (e.g., a regional flush tax or sewer surcharge) to generate and distribute funds to Puget Sound counties to implement their OSS management plans and programs by June 2014. (C5.3 NTA 2)

## Encourage Beneficial Use of Shellfish

- Shellfish Model Permitting Program.** The Department of Ecology will work with the Governor’s Office of Regulatory Assistance (ORA) to lead and facilitate a state team to develop and implement a Model Permitting Program that ensures early and continued coordination among state and federal agencies, tribes and local governments for permitting and licensing of shellfish aquaculture. (C7.3 NTA 3)

Strategic initiative content is summarized in Figure 3, and details of the priority actions for the strategic initiative are listed in Table 3. In addition, as discussed earlier, each strategic initiative individually and the initiatives collectively must be supported by an overarching funding strategy, and overarching outreach strategy, and keen attention to ensuring that implementation takes a watershed-based approach.

Figure 3: Shellfish Strategic Initiative



**Table 3: Recovery of Shellfish Beds - Strategies and Actions**

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
B	3.1	Protect intact marine ecosystems particularly in sensitive areas and for sensitive species.	2	<u>Outfall Strategy on State-Owned Aquatic Lands</u> . 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 December 2013	DNR	Ecology
C	1.5	Control wastewater and other sources of pollution such as oil and toxics from boats and vessels.	1	<u>No Discharge Zone Evaluation and Petition</u> . Ecology, in collaboration with State Parks and EPA, will administer grants to fund the development of a petition to EPA to establish a No Discharge Zone to prohibit recreational and commercial vessels from discharging sewage in all or parts of Puget Sound	Completion of draft elements of an evaluation by July 2012 (Phase I). Completion of stakeholder outreach, surveys, geographical locations by July 2013 (Phase II).  Completion of draft petition to EPA by September 2013.	Ecology	
C	1.6	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	3	<u>Water Quality Enforcement</u> . Ecology, working with DOH, will increase the capacity for enforcement, and enforce all regulations pertaining to pathogens and contaminants that pollute the waters of the state to ensure achievement of approved shellfish growing water certification.	By 2014 increase the number of inspections	Ecology	DOH
C	3.2	Ensure compliance with regulatory programs designed to reduce, control, or eliminate pollution from working farms.	1	<u>Priority Areas for Voluntary Incentive and Regulatory Programs</u> . The State Conservation Commission and the Washington State Departments of Agriculture, Ecology, and Health will identify priority areas to better target and coordinate implementation of voluntary incentive and regulatory programs for rural landowners, small-acreage landowners, and working farms.	By Dec. 31, 2012, the WSCC will convene at least two meetings to identify priority areas. By June 30, 2013, WSCC will implement voluntary incentive programs in 5 target areas.	Conservation Commission	WSDA
C	5.3	Improve and expand funding for on-site sewage systems and local OSS programs.	1	<u>Regional OSS Homeowner Loan Program</u> . 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 by June 2014.	Project design completed by August 2012, draft analysis of issues and proposed actions completed by March 2014, and final analysis completed by June 2014.	DOH	PSP
C	5.3	Improve and expand funding for on-site sewage systems and local OSS programs.	2	<u>Regional OSS Program Funding Source</u> . DOH will evaluate approaches and mechanisms (e.g., a regional flush tax or sewer surcharge) to generate and distribute funds to Puget Sound counties to implement their OSS management plans and programs by June 2014.	Project design completed by August 2012, draft analysis of issues and proposed actions completed by March 2014, and final analysis completed by June 2014.	DOH	

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	OWNER	SECONDARY OWNER
C	7.1	Improve water quality to prevent downgrade and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas.	3	<u>Pollution Control Action Team.</u> Ecology, working with DOH, WSDA, EPA and the Tribes will form a Pollution Control Action Team (PCAT) to respond quickly when areas are identified where water quality problems threaten shellfish areas. They will initiate community outreach and education, pollution identification, inspection, technical assistance to local agencies and landowners and finally, enforcement. The team will focus its work in priority areas and support PIC programs where they are established. The first effort will be in Drayton Harbor and Portage Bay.	Reduce fecal coliform loading in each priority area to upgrade the status of closed areas and prevent further degradation for those with a negative trend	Ecology	DOH
C	7.3	Ensure environmentally responsible shellfish aquaculture based on sound science.	3	<u>Shellfish Model Permitting Program.</u> The Department of Ecology will work with the Governor's Office of Regulatory Assistance (ORA) to lead and facilitate a state team to develop and implement a Model Permitting Program that ensures early and continued coordination among state and federal agencies, tribes and local governments for permitting and licensing of shellfish aquaculture.	By June 2012, sign operation agreement; by September 2012, identify pilots; by November 2012, establish pilot project timelines	Ecology	ORA
C	9.4	Develop and implement local and tribal pollution identification and correction programs.	1	<u>Pollution Identification and Correction Programs.</u> DOH and Ecology will administer EPA grants to help counties and tribes set up sustainable programs to identify and correct nonpoint pollution sources to improve and protect water quality in shellfish growing areas and at marine swimming beaches. These sustainable programs will have ongoing monitoring to identify pollution sources and assess effectiveness of efforts, a local sustainable funding source, and a compliance assurance component	Award PIC funds and distribute Agricultural BMP funds to at least six(6) Puget Sound counties by July 2012. Metric for each program will be individually set to reflect targets for numbers of BMPs implemented and maintained and systems repaired to address water quality	DOH	Ecology

# Inside the Full Action Agenda

The full Action Agenda is a 654 page document that describes Puget Sound recovery targets and the work needed to achieve them in detail. It is divided into four sections:

1. **Freshwater and Terrestrial Protection and Restoration**, which includes strategies and actions related to land development and restoration, stewardship of working forest and agriculture lands, floodplains, salmon recovery, and freshwater flows;
2. **Marine and Nearshore Protection and Restoration**, which includes strategies and actions related to shoreline protection, alteration, and restoration; marine area protection and restoration; working waterfronts and public access; and biodiversity and invasive species;
3. **Pollution Prevention and Cleanup**, which includes strategies related to reducing toxic threats, polluted runoff from urban and rural lands, wastewater management, shellfish bed restoration, oil spill preparedness, and clean up;
4. **Strategic Leadership and Collaboration**, which includes much of the core work of the Puget Sound Partnership agency, as well as some partners, including strategies related to setting priorities, performance management, science and ecosystem monitoring, and promoting stewardship;
5. **Funding Strategy**, which describes how increased financial capacity to implement priority ongoing and new actions in the Action Agenda can be achieved through identifying new sources of funding, using existing funding more strategically and efficiently, and developing innovative, market-based programs.

**Strategies, sub-strategies, and actions.** In each section of the Action Agenda, strategies and sub-strategies identify the overall, long-term directions and approaches that are needed for Puget Sound protection and recovery. Descriptions of key activities of ongoing programs and near-term actions are nested under strategies and sub-strategies. Both are critical to recovery. **Ongoing program activities** are the foundation for recovery efforts and create the regulatory, policy, and incentive-based framework upon which the near-term actions are built. **Near-term actions** are considered the “change agenda.” These are important new initiatives, critical next steps in ongoing work, and targeted efforts to improve implementation of ongoing programs or ensure these programs have adequate resources to deliver on their objectives.

**Target views and linkages.** There is a many-to-many relationship between the strategies and actions needed to achieve recovery targets and ecosystem goals. That is, individual strategies and actions contribute towards multiple goals and individual goals drive multiple strategies and actions. For that reason, throughout the Action Agenda, “Target Views” describe the eighteen specific Puget Sound recovery targets and show how strategies and actions map to the recovery targets and which strategies and actions are most important to achieving progress toward targets. Table 4, below, reiterates this information by showing the key sub-strategies in the Action Agenda and illustrating the links between goals, indicators, targets, and recovery strategies.

**Local contributions.** Many of the priorities, strategies, and actions in the Action Agenda will be implemented at the local level. Since 2008, local areas have been working toward to develop structures and approaches to implement and integrate local community efforts to advance the Action Agenda. Local area profiles describe 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. Some areas have prioritized strategies and actions with performance measures which are 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. Where identified, local priority strategies and actions are integrated into the Action Agenda.

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

GOAL	INDICATOR FOR GOAL	2020 TARGET SUMMARY	KEY STRATEGIES
1. Healthy human population	Shellfish beds reopened	Increase harvestable shellfish acres	<ul style="list-style-type: none"> <li>☛ Abundant, healthy shellfish for commercial, subsistence, recreational harvest (C7.1, C7.2, C7.3, C7.4, C7.5)</li> <li>☛ Prevent, reduce, eliminate pollution from decentralized wastewater treatment systems (C5.1, C5.2, C5.3)</li> <li>☛ Focus development away from ecologically important &amp; sensitive nearshore areas &amp; estuaries (B1.1, B1.2)</li> </ul>
	Swimming beaches	All monitored Puget Sound beaches meet enterococcus standard	<ul style="list-style-type: none"> <li>☛ Address and clean up cumulative water pollution impacts in Puget Sound (C9.1, C9.3, C9.4)</li> <li>☛ Agricultural runoff strategies (C3.1, C3.2)</li> <li>☛ Prevent, reduce, eliminate pollution from decentralized wastewater treatment systems (C5.1, C5.2, C5.3)</li> </ul>
	On-site sewage	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"> <li>☛ Prevent, reduce, eliminate pollution from decentralized wastewater treatment systems (C5.1, C5.2, C5.3)</li> <li>☛ Abundant, healthy shellfish for commercial, subsistence, recreational harvest (C7.1, C7.2, C7.3, C7.4)</li> <li>☛ Address and clean up cumulative water pollution impacts in Puget Sound (C9.3, C9.4)</li> </ul>
2. Human quality of life	Puget Sound quality of life index	Adoption of index and target anticipated in 2013	<ul style="list-style-type: none"> <li>☛ Protect and steward ecologically sensitive rural and resource lands (A3.1, A3.2)</li> <li>☛ Protect and steward working waterfronts and improve public access to Puget Sound (B4.1, B4.2)</li> <li>☛ Achieve abundant, healthy shellfish for ecosystem health and harvest (C7.1, C7.3, C7.4)</li> </ul>
	Puget Sound behavior index	Adoption of index anticipated later in 2012; no target anticipated until next Action Agenda revision	<ul style="list-style-type: none"> <li>☛ Cultivate broad-scale stewardship practices and behaviors among Puget Sound residents (D5.1 – D5.7)</li> <li>☛ Build issue awareness and understanding to increase public support and engagement (D6.1 – D6.5)</li> <li>☛ Build social and institutional infrastructure that supports stewardship behaviors (D7.1 – D7.6)</li> </ul>
	Recreational fishing permit sales	No target adopted; desired future condition to be expressed as part of quality of life index	<ul style="list-style-type: none"> <li>☛ Protect and recover salmon (A6.1, A6.2, A6.3, A6.4, A6.5)</li> <li>☛ Protect and restore the native diversity and abundance of species (B5.1, B5.2)</li> </ul>
	Commercial fisheries harvest	No target adopted; desired future condition to be expressed as part of quality of life index	<ul style="list-style-type: none"> <li>☛ Protect and recover salmon (A6.1, A6.2, A6.3, A6.4, A6.5)</li> <li>☛ Protect and restore the native diversity and abundance of species (B5.1, B5.2)</li> </ul>
3. Species and food web	Chinook salmon	Stop the decline and see improvements in wild Chinook abundance	<ul style="list-style-type: none"> <li>☛ Implement high priority projects in salmon recovery 3 year work plans (A6.1)</li> <li>☛ Implement high priority salmon recovery actions throughout the Action Agenda (A6.2)</li> <li>☛ Maintain &amp; enhance the community infrastructure that supports salmon recovery (A6.5)</li> </ul>
	Orcas	Increase end-of-year census of southern residents to 95 whales	<ul style="list-style-type: none"> <li>☛ Implement species recovery plans in a coordinated way (B5.1)</li> <li>☛ Effectively prevent, plan for and respond to oil spills (C8.1, C8.2, C8.3)</li> <li>☛ Provide education and technical assistance to prevent and reduce releases of pollution (C1.4)</li> </ul>
	Pacific herring	Increase spawning biomass	<ul style="list-style-type: none"> <li>☛ Implement species recovery plans in a coordinated way (B5.1)</li> <li>☛ Protect intact marine ecosystems particularly in sensitive areas and for sensitive species (B3.1)</li> <li>☛ Effectively prevent, plan for and respond to oil spills (C8.1, C8.2, C8.3)</li> </ul>
	Birds	Target not yet set	<ul style="list-style-type: none"> <li>☛ Implement species recovery plans in a coordinated way (B5.1)</li> </ul>
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"> <li>☛ Enhance and expand the benefits of living in compact communities (A4.3)</li> <li>☛ Protect &amp; conserve ecologically important lands at risk of conversion (A2.1)</li> <li>☛ Adopt &amp; implement local plans, regulations, policies that protect nearshore &amp; estuaries (B1.2)</li> </ul>

GOAL	INDICATOR FOR GOAL	2020 TARGET SUMMARY	KEY STRATEGIES
	<b>Land cover</b>	Minimize loss of forested land cover and restore riparian vegetation	<ul style="list-style-type: none"> <li>☛ Improve, strengthen, streamline implementation &amp; enforcement of laws, plans, regulations, permits (A1.3)</li> <li>☛ Protect &amp; conserve ecologically important lands at risk of conversion (A2.1)</li> <li>☛ Compact regional growth; dense, attractive mixed-use &amp; transit-oriented communities (A4.2, A4.3, A4.1)</li> </ul>
	<b>Estuaries</b>	Meet 10-year salmon recovery goals for restoration of river mouth estuaries and increase quality acres basin-wide	<ul style="list-style-type: none"> <li>☛ Adopt &amp; implement local plans, regulations, policies that protect nearshore &amp; estuaries (B1.2)</li> <li>☛ Implement priority nearshore &amp; estuary restoration projects (B2.2)</li> <li>☛ Prevent &amp; respond to the introduction of terrestrial &amp; aquatic invasive species (B5.3, B5.4)</li> </ul>
	<b>Floodplains</b>	No additional loss of floodplain function and progress in restoring degraded floodplains	<ul style="list-style-type: none"> <li>☛ Protect &amp; restore floodplain function (A5.1, A5.2, A5.3, A5.4)</li> <li>☛ Infrastructure &amp; incentives to accommodate new &amp; re-development within urban growth areas (A4.2)</li> <li>☛ Adopt &amp; implement local plans, regulations, policies (A1.2)</li> </ul>
	<b>Shoreline armoring</b>	The total amount of armoring removed is greater than the total amount of new armoring; focus on feeder bluffs and soft armoring	<ul style="list-style-type: none"> <li>☛ Removal armoring and use soft armoring replacement or landward setbacks (B2.3)</li> <li>☛ Implement priority nearshore &amp; estuary restoration projects (B2.2)</li> <li>☛ Improve, strengthen and streamline implementation and enforcement of laws, regulations, permits (B1.3)</li> </ul>
	<b>Eelgrass</b>	Increase extent of eelgrass	<ul style="list-style-type: none"> <li>☛ Permanently protect priority nearshore physical and ecological processes and habitat (B2.1)</li> <li>☛ Coordinated strategy for eelgrass recovery (B2.4)</li> <li>☛ Effectively prevent, plan for and respond to oil spills (C8.1, C8.2, C8.3)</li> </ul>
<b>5. Water quantity</b>	<b>Summer stream flows</b>	Maintain flows where stable and restore flows in decreasing trend rivers	<ul style="list-style-type: none"> <li>☛ Update Puget Sound instream flow rules to encourage conservation (A7.1)</li> <li>☛ Implement effective management programs for groundwater (A7.3)</li> <li>☛ Identify and prioritize areas for protection, restoration, and best suitable for (low impact) development (A1.1)</li> </ul>
<b>6. Water quality</b>	<b>Insects in small streams</b>	Retain excellent B-IBI scores and improve fair scores to good in lowland streams	<ul style="list-style-type: none"> <li>☛ Comprehensive approach to manage urban stormwater runoff at the site &amp; landscape scales (C2.1, C2.2, C2.3)</li> <li>☛ Agricultural runoff (C3.1, C3.2)</li> <li>☛ Infrastructure &amp; incentives to accommodate new &amp; re-development within urban growth areas (A4.2)</li> </ul>
	<b>Freshwater quality</b>	Freshwater Water Quality Index scores improve and a decrease in impaired waters	<ul style="list-style-type: none"> <li>☛ Comprehensive approach to manage urban stormwater runoff at the site &amp; landscape scales (C2.1, C2.5)</li> <li>☛ Manage surface runoff from forest lands (C4.1 C4.2)</li> <li>☛ Prevent, reduce and/or eliminate pollution from centralized wastewater systems (C6.1, C6.2, C6.3, C6.4)</li> </ul>
	<b>Marine water quality</b>	Human-related contributions do not significantly reduce dissolved oxygen	<ul style="list-style-type: none"> <li>☛ Prevent, reduce and/or eliminate pollution from centralized wastewater systems (C6.1, C6.2, C6.4)</li> <li>☛ Comprehensive approach to manage urban stormwater runoff at the site &amp; landscape scales (C2.1, C2.5)</li> <li>☛ Adopt and implement plans and control strategies to reduce air emissions (C1.3)</li> </ul>
	<b>Marine sediment quality</b>	Achieve “unimpacted” conditions and Sediment Quality Standards chemical criteria	<ul style="list-style-type: none"> <li>☛ Prevent, reduce and/or eliminate pollution from centralized wastewater systems (C6.1, C6.2, C6.3, C6.4)</li> <li>☛ Comprehensive approach to manage urban stormwater runoff at the site &amp; landscape scales (C2.1, C2.5)</li> <li>☛ Clean up contaminated sites (C9.2)</li> </ul>
	<b>Toxics in fish</b>	Toxics in fish are below effects threshold levels for PCBs, PBDEs and PAHs.	<ul style="list-style-type: none"> <li>☛ Prevent, reduce and/or eliminate pollution from centralized wastewater systems (C6.1, C6.2, C6.3, C6.4)</li> <li>☛ Comprehensive approach to manage urban stormwater runoff at the site &amp; landscape scales (C2.1, C2.5)</li> <li>☛ Clean up contaminated sites (C9.2)</li> </ul>

# Using the Action Agenda to Drive Investment and Progress

The Action Agenda was created to drive investment and action. All of the work it describes is important and needed to protect and recover Puget Sound. At the same time, the Partnership recognizes the need to think practically about how work might be sequenced, both for maximum efficiency and because resources are scarce and declining. The Action Agenda should be used to guide decision making related to allocation of funding or other resources in the following way.

**Focus on the Strategic Initiatives:** Strategic initiatives are the highest priorities for 2012 and 2013. First consider whether the new or discretionary funding source can support an unfunded or partially funded priority regional or related local action in one or more of the strategic initiatives. Strategic initiatives are the top priority for funding and the allocation of other resources. Strategic initiatives should also guide the development of policy agendas.

**Maintain Effective Ongoing Programs:** The Action Agenda builds on the ongoing work of partners to protect and restore Puget Sound. Funding should not be reallocated away from those programs at this time. Following this Action Agenda Update, the Partnership will conduct an evaluation of ongoing programs in accordance with RCW 90.71.370, which may result in ongoing program funding recommendations.

**Prioritize the Science Needed to Better Understand a Complex System:** Ensure that the science needed to successfully implement priority actions is funded and implemented. First fund and implement the biennial science work plan.

**Use the Lists of Sub-strategies Ranked Based On Ecological Criteria and Local Priorities As One Piece of Information for Decision Making:** If the funding source or other resource cannot be used to support implementation of a strategic initiative, refer to the ranked list of sub-strategies and related implementation information. Extract the sub-strategies eligible for funding by the source in question and generally fund near term actions or local actions related to the highest ranked sub-strategies first except where implementation information or local priorities may be used to justify funding actions related to lower-ranked sub-strategies. A final list of sub strategies ranked based on ecological criteria will be available in August 2012.

## The Future of the Action Agenda

The Action Agenda is a living document. Future updates will build on lessons learned and strengthen our shared resolve to protect and recover Puget Sound. Our ongoing work to strengthen the Action Agenda and the Partnership includes:

- Completion of a risk analysis for Puget Sound that will identify the highest risks in geographic areas.
- Refine the ecological ranking process and develop a process to integrate ecological, community and economic criteria into a prioritization method.
- Continue and increase specificity on local priorities and actions.
- Continue integration and increase emphasis on climate change adaptations since taking action now reduces the costs of current and future climate impacts.
- Continue innovation in developing market-based solutions and funding beyond government sources.

- Establish 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 identify interim milestones towards achievement of targets.
- Complete a more rigorous evaluation of strategy effectiveness, ongoing programs, new actions. Eventually including the ability to discuss investment priorities that span ongoing programs and new work.

# Appendix A:

## *NTA Table*

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
A	1.1	Identify and prioritize areas for protection, restoration, and best suitable for (low impact) development.	1	<u>Apply Watershed Characterization Results.</u> By 2012, Ecology, in collaboration with 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 and by 2013, The Watershed Technical Assistance Team, managed by Ecology, will develop draft solution templates and a decision-support framework which will guide watershed planning and land use decisions by local governments. Development will occur in coordination with Commerce, DFW, DNR, and local government representatives.	By 2012 PSBC data is available to all local governments and team established. By 2013, status of standard development and status of decision making framework. (Measure dates to be confirmed)	soundwide	Ecology	Commerce		
A	1.1	Identify and prioritize areas for protection, restoration, and best suitable for (low impact) development.	2	<u>Web-Based Data Tool to Support Land Use Decisions.</u> By December 2012, the Puget Sound Institute will work with the Puget Sound Partnership and other state, federal, Tribes, local, and academic partners to develop a web-based 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 and other local characterizations.	Web-based tool completed by Dec 2012	soundwide	PSI			
A	1.1	Identify and prioritize areas for protection, restoration, and best suitable for (low impact) development.	WS 1	<u>West Sound Inventory of Transportation Infrastructure Projects.</u> By January 2013, the West Sound Watersheds Council and West Sound LIO will develop a process for the review of transportation infrastructure projects that addresses environmental impacts and key fish passage barriers.	Identify process for the review of transportation infrastructure projects that addresses environmental impacts and key fish passage barriers by January 2013.	local	West Sound Watersheds Council	West Sound LIO		
A	1.2	Support local governments to adopt and implement plans, regulations, and policies consistent with protection and recovery targets, and incorporate climate change forecasts.	1	<u>Land Use Planning Barriers, BMPs and Example Policies.</u> By December 2012, Ecology and Commerce, working with local governments, will identify the primary barriers to incorporating policies consistent with implementation of the Action Agenda into local land use planning and decisions and identify best practices and assistance needed to overcome these barriers. This will address implementation of protection strategies, encouraging compact growth patterns, increased density, water quality standards, redevelopment, and rural lands protection. By December 2013, Ecology and Commerce will distribute example growth policies that include best practices that are consistent with protection and recovery targets and the Growth Management and Shoreline Management Acts.	Example growth policies distributed or not; extent to which local land use planning and decision making become more consistent with the Action Agenda over time.	soundwide	Ecology	Commerce		
A	1.2	Support local governments to adopt and implement plans, regulations, and policies consistent with protection and recovery targets, and incorporate climate change forecasts.	2	<u>Financial Support for GMA updates.</u> Commerce will coordinate broad partner discussion of ways to promote state financial support for local governments for GMA comprehensive plan updates, implementation, training, and education. A proposal for financial support will be developed by December 2012 for discussion by the 2013 legislature.	A proposal for financial support for local governments for plan and regulatory updates, implementation, training, and education will be completed by December 2012 with a goal of adoption by June 2013.	soundwide	Commerce			
A	1.3	Improve, strengthen, and streamline implementation and enforcement of laws, plans, regulations, and permits consistent with protection and recovery	1	<u>ECB Address Regulatory Exemptions.</u> The ECB will address regulatory exemptions to provide effective oversight and mitigation sequencing for activities that impact the ecosystem.	By September 9, 2012 identify any regulatory processes that are currently moving forward and require immediate attention (e.g., the HPA rulemaking, SMP updates, NRCS practice standards for nutrient management and riparian buffers, and others), By December 2012 identify the statutes, regulations, policies that	soundwide	ECB			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		targets.			need to be changed, by June 30, 2013 develop the approach necessary to make the changes identified.					
A	1.4	Ensure full, effective compensatory mitigation for impacts that cannot be avoided.	HC 2	<u>HCCC In Lieu Fee Mitigation</u> . HCCC, in coordination with the US Navy and other partners, will implement the In Lieu Fee (ILF) Mitigation Program. HCCC, working with its partners in this process will be in position to implement high priority actions from the ILF for 2013 and beyond.	Complete ILF Mitigation Program by June 2012. HCCC, working with its partners in this process will be in position to implement high priority actions from the ILF for 2013 and beyond.	local	HCCC	US Navy		
A	2.1	Protect and conserve ecologically important lands at risk of conversion.	1	<u>Community Forestry Conservation Act</u> . 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.	DNR seeks passage by December 2013	soundwide	DNR			
A	2.1	Protect and conserve ecologically important lands at risk of conversion.	2	<u>Updated Avoidance and Minimization Guidance</u> . Ecology will reinforce the importance of avoiding and minimizing impacts to wetlands, particularly those with high ecological value and that are difficult to replace, by developing and implementing updated avoidance and minimization guidance.	Guidance complete or not	soundwide	Ecology			
A	2.1	Protect and conserve ecologically important lands at risk of conversion.	3	<u>Port Gamble Land Conservation</u> : Fonterra, working in collaboration with Kitsap County, the Port Gamble S'Klallam Tribe, and the Suquamish Tribe, will coordinate funding and participation to secure the conservation of ~7,000 acres of land near Port Gamble, including ~2 miles of shoreline by March 2013.	By August 2012, apply for state and federal funding. By March 2013, exercise option agreement.	soundwide	Fonterra			
A	2.1	Protect and conserve ecologically important lands at risk of conversion.	4	<u>Funding Mechanism for Properties at Imminent Risk of Conversion</u> . PSP will work with the ECB funding committee to consider the development of a funding mechanism to rapidly acquire properties with high ecological value and imminent risk of conversion by 2013	Discuss the issue with the ECB funding subcommittee by December 2012 and determine if a proposal should be developed. If a proposal is to be developed, new measures would be developed by February 2014	soundwide	PSP	ECB		
A	2.2	Implement and maintain priority freshwater and terrestrial restoration projects.	1	<u>Prairie and Oak Woodland Restoration</u> . WDFW in consultation with DNR, USFWS and Joint Base Lewis McCord, will implement priority prairie and oak woodlands restoration projects.	Number of priority projects implemented Milestones: Maintain a prioritized list of restoration activities. Work with South Sound partners to fund the restoration activities. Update list with completed action items.	soundwide	WDFW	DNR	USFWS	
A	2.2	Implement and maintain priority freshwater and terrestrial restoration projects.	WS 12	<u>West Sound Priority Watersheds for Protection and Restoration</u> . By February 2013, the Suquamish Tribe will develop a detailed protection and restoration plan for the upper Chico Creek watershed. By December 2013, the Tribe will seek funding to undertake similar work for the high priority, refugia Curley and Blackjack Creek watersheds.	By February 2013, protection and restoration plan for the Upper Chico Creek watershed, By December 2013, funding in place for plans for Curley and Blackjack Creek watersheds.	local	Suquamish Tribe			
A	2.3	Implement restoration projects in urban and developed areas while accommodating growth, density, and infill development.		No near-term actions. Work is focused on implementation of ongoing programs.						
A	3.1	Use integrated market-based programs, incentives, and ecosystem markets to	1	<u>Use of Agriculture Conservation Program Funds</u> . By December 2013, the Conservation Commission will enhance use of conservation and habitat restoration program funding from a variety of sources, (i.e., CREP and EQUIP) that are currently	By August 15, 2012, the Commission will work with conservation districts to enhance the use of the Commission's Conservation Practice Data System (CDPS) for project identification. By	soundwide	WSCC			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		steward and conserve private forest and agricultural lands.		underused by and not tailored for western Washington growers.	Sept 30, 2012, 12 Puget Sound districts will enter data into the CPDS system (increase of 5 from present) and identify projects that, when implemented, will address threats to Puget Sound. By December 2013, there will be a 50 percent increase in the use of the CPDS to link projects to funding sources. By June 2013, the Commission will work with conservation districts, Ecology, federal agencies and others to identify opportunities for improvements to agriculture conservation program funding.					
A	3.1	Use integrated market-based programs, incentives, and ecosystem markets to steward and conserve private forest and agricultural lands.	2	<u>Landowner Incentives for TDRs and Ecosystem Markets</u> . Ecology and Commerce, in coordination with DNR and the State Conservation Commission, will provide technical support and fund local projects to identify and implement landowner incentives, including TDRs and ecosystem services markets.	Amount of technical support and local funding provided.	soundwide	Ecology	Commerce	DNR	WSSC
A	3.1	Use integrated market-based programs, incentives, and ecosystem markets to steward and conserve private forest and agricultural lands.	3	<u>Forest Watershed Services</u> . 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.	Two pilot transactions completed by December 2012	soundwide	DNR			
A	3.2	Retain economically viable working forests and farms.	1	<u>Working Forest Strategy</u> : DNR will lead a collaborative process to develop a comprehensive strategy for retaining economically viable, long-term working forestlands.	Initiate collaborative strategy by October 2013	soundwide	DNR			
A	3.2	Retain economically viable working forests and farms.	2	<u>Agriculture Strategy</u> . PSP, in collaboration with WSDA, Ecology, the Conservation Commission, and agricultural partners will develop a Puget Sound agricultural strategy by December 2013. This strategy will identify needs for maintaining the health of the industry, and key areas where the agricultural industry can contribute to the protection and restoration of Puget Sound. It will be included in the 2013 Action Agenda.	Convene an advisory committee and agree on scope and approach by September 2012; convene at least 3 workshops to solicit information from agricultural partners by March 2013 (north Puget Sound, south Puget Sound, peninsula), produce a draft strategy by July 2013 for inclusion in the 2013 draft Action Agenda; review the strategy with the Action Agenda and in at least three additional workshops with agricultural partners in October 2013. Include the final agriculture strategy in the 2013 Action Agenda update.	soundwide	PSP	WSDA	Ecology	WSSC
A	4.1	Integrate growth, infrastructure, transportation, and conservation planning at sub-regional levels and across jurisdictions.	1	<u>Regional Sustainable Communities Program</u> : Commerce will develop a Soundwide program to undertake integrated regional planning that will guide state and local investments in ecosystem protection, land use, transportation and housing, similar to the federal sustainable communities program. Draft scoping document will be completed by January 2013 for discussion with the Leadership Council to advance for decision making.	Commerce will deliver a proposed program scope to Puget Sound Partnership by January 2013. Based on the scoping document and discussions with the Leadership Council, Commerce will develop additional milestones to advance the program by February 2013.	soundwide	Commerce			
A	4.2	Provide infrastructure and incentives to accommodate new and re-development within		No near-term actions identified.						

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		urban growth areas.								
A	4.3	Enhance and expand the benefits of living in compact communities.		No near-term actions identified.						
A	5.1	Improve data and information to accelerate floodplain protection, restoration, and flood hazard management.	1	<u>Floodplain Protection and Policy Team Actions</u> . PSP will advance floodplain protection and restoration by facilitating actions, policy changes, and program changes necessary to reduce critical barriers to habitat protection and restoration. Funding will be focused on the places that have the greatest potential to recover floodplain functions.	By December 2012, PSP convenes a Puget Sound Floodplain Protection and Recovery Policy Team to establish a working definition of 'floodplain' and 'floodplain function' in the context of the 2020 floodplains recovery target; By December 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, including an evaluation of changes that could be made to PL84-99 that requires damaged levees to be reconstructed in place rather than use the funding to do a levee setback; By June 2013, identify the policy and program changes of federal, state and local flood risk management, flood mitigation and ecosystem protection and restoration programs to foster multi-objective floodplain management. By June 2013, identify floodplain areas; prioritize those most important for protection, restoration, farmland preservation or other compatible and non-compatible uses; and identify the implementation steps needed to protect functioning floodplain areas. By June 2013, 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 using the results in the July 2010 "Floodplain Management: A Synthesis of Issues Affecting Recovery of Puget Sound" report and other relevant and timely information.	soundwide	PSP			
A	5.2	Align policies, regulations, planning, and agency coordination to support multi-benefit floodplain management, incorporating climate change forecasts.		No near-term actions. Work is focused on implementation of ongoing programs.						
A	5.3	Protect and maintain intact and functional floodplains.	1	<u>FEMA Annual Reporting for NFIP BiOp</u> . By 2012, FEMA will complete augmented annual reporting requirements relative to the obligations of the 122 communities in Puget Sound to abide by the NMFS NFIP BiOp, including policy sufficiency, implementation effectiveness, and on-the-ground implementation effectiveness.	(Status of FEMA reporting requirements) By 2012, FEMA reporting requirements are complete.	soundwide	FEMA			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
A	5.3	Protect and maintain intact and functional floodplains.	2	<u>CAO Updates on Frequently Flooded Areas</u> . By 2013, 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.	By 2013, strategy is complete.	soundwide	Ecology	Commerce		
A	5.3	Protect and maintain intact and functional floodplains.	3	<u>BiOp Compliance and Floodplain Target</u> . By 2013, PSP will evaluate how BiOp compliance contributes to achieving the Floodplains target by December 2013. This includes policy analysis of jurisdictional compliance, development that has occurred since the BiOp, and recommendations for next steps.	By 2013, evaluation is complete.	soundwide	PSP			
A	5.3	Protect and maintain intact and functional floodplains.	4	<u>Levee Vegetation</u> . PSP will continue to work with the Army Corps of Engineers to craft a regional variance to their vegetation on levees policy.	By June 2013, new language for regional variance developed and adopted.	soundwide	PSP	USACE		
A	5.4	Implement and maintain priority floodplain restoration projects.	1	<u>Prioritization of State Highways with Floodplain Impacts</u> . WSDOT will identify and prioritize the state highway facilities (approximately 500 structures and 185 miles of highway) that have the biggest impacts on floodplain function and connectivity, including consideration of WSDOT's 2011 Climate Impacts Vulnerability Assessment Report, by December 2014 (or 18 months after funding is obtained)	By June 2013, obtain funding for the analysis. Complete the analysis and present the results to the Ecosystem Coordination Board and Leadership Council by December 2014. By February 2015, identify future actions and performance measures for integrating the prioritization work into the WSDOT decision-making process for repair and replacement projects.	soundwide	WDSOT			
A	5.4	Implement and maintain priority floodplain restoration projects.	2	<u>Ag Land Ecosystem Services Markets</u> . By December 2013, the State Conservation Commission, working with Conservation Districts and Watershed Groups and counties will have three pilot projects underway that demonstrate ecosystem services markets associated with flood hazard prevention and agricultural lands in floodplains	By November 2012, WSCC will have convened discussions and identified candidate areas; By December 2013, three pilot projects demonstrating ecosystem service markets for floodplains are in place.	soundwide	WSCC			
A	5.4	Implement and maintain priority floodplain restoration projects.	3	<u>Candidate Areas for Land Swaps</u> . The State Conservation Commission will work with conservation districts, agricultural community, watershed planning groups, and local jurisdictions to 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 June 2013.	By December 2012, the Commission will convene interested parties in at least two organizing meetings to identify candidate areas. By June 2013, potential land swaps will be identified in five candidate areas available to expand for agriculture.	soundwide	WSCC			
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	1	<u>Secure Annual Chinook Investment</u> . PSP, in collaboration with the Salmon Recovery Council, will secure the annual investment as required to fully implement the approved Puget Sound Chinook Salmon Recovery Plan, and work to align that funding in support of the highest priority protection and restoration projects as identified by salmon recovery lead entities. This investment strategy will be developed as part of the overall Puget Sound recovery funding strategy.	By December 2013, the \$120 million as estimated in 2005 is in place from a variety of federal, state, local and private sources. By January 2014, update the estimate needed to implement the plan and make the related administrative changes to the NOAA approved recovery plan, and adjust the performance measure to reflect the estimate. Obtain the new annual investment by December 2014.	soundwide	PSP			
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	2	<u>Restoration Permit Barriers</u> . By June 2014 identify and address barriers to faster permitting of salmon recovery restoration projects so that the majority of restoration projects can begin construction within one year of completing design and securing funding. By September of 2012 PSP will initiate this process and identify a lead and next steps.	By September 2012, PSP identifies a lead and by December 2012, works with that lead to complete a scope of work; By June 2013, at least three major barriers and ways to address them have been identified. By December 2013, steps to address the barriers are in place.	soundwide	PSP			
A	6.1	Implement high priority	3	<u>BNSF Railroad Cooperative Agreement</u> . By December 2013, PSP, in	Convene a workshop with salmon recovery,	soundwide	PSP			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		projects identified in each salmon recovery watershed's three-year work plan.		collaboration with the Salmon Recovery Council, will develop a cooperative agreement with Burlington Northern Santa Fe Railroad to enable the implementation of high priority salmon recovery projects that intersect with the railroad right of way.	other ecosystem recovery project implementers, and PSNERP to document progress to date with BNSF and identify next steps to develop an agreement by December 2012. Initial agreement framework with BNSF completed by June 2013. Cooperative agreement in place by December 2013.					
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	SJI 9	<u>San Juan County Lead Entity</u> . 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	To be determined	local	SJC Lead Entity for Salmon Recovery			
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	STRT 1	<u>Elwha River Ecosystem Recovery</u> . Implement Elwha River Ecosystem Recovery Efforts and associated projects a. Stock preservation and weir operation b. Monitoring (adults, juveniles, smolts) c. Habitat restoration projects	Continuous weir operation and monitoring of salmonids (adults, juveniles, and smolts) on the Elwha River.	local	Elwha Fish Committee			
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	STRT 2	<u>Straits Salmon Recovery Plans</u> : Implement N. Olympic Peninsula Lead Entity (NOPLE) for Salmon and Hood Canal Coordinating Councils Lead Entity (HCCC-LE) 3-year Work Plans a. North Olympic Peninsula Lead Entity (NOPLE) 3-year Work Plan b. NOPLE Elwha revegetation project c. NOPLE Dungeness River floodplain restoration, Phase II d. NOPLE Elwha Engineered Log Jams e. Hood Canal Coordinating Council (HCCC) LE 3-year Work Plan f. HCCC LE Snow Creek and Salmon Creek estuary restoration	Initiate or significantly advance all of the four specific Priority Actions identified by the Strait ERN for the Strait Action Area.	local	North Olympic Peninsula Lead Entity, Hood Canal Lead Entity			
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	HC 6	<u>Hood Canal Salmon Recovery</u> . Hood Canal Coordinating Council Lead Entity for salmon recovery will continue to target funding to highest Tier I salmon recovery projects, as listed in the Hood Canal Three Year Work Plan. Projects include acquisition, protection, and restoration actions.	To be determined	local	HCCC Lead Entity			
A	6.1	Implement high priority projects identified in each salmon recovery watershed's three-year work plan.	WS 9	<u>West Sound SR3 Chico Creek culvert replacement</u> . By December 2013, the West Sound LIO, in coordination with Washington Department of Transportation, will develop a funding strategy and schedule for replacing the SR3 culvert with a bridge on Chico Creek.	By December 2013, funding strategy and schedule completed.	local	West Sound LIO	WSDOT		
A	6.2	Implement the high priority salmon recovery actions identified in other parts of the Action Agenda and the Biennial Science Work Plan.	1	<u>Implement the Puget Sound Federal Agency Action Plan</u> . Federal agencies with authorities in Puget Sound will work to implement and account for actions listed in the federal agency action plan and matrix to protect and restore habitat and respond to the concerns raised by treaty tribes in western Washington.	By December 2012, EPA will work with Puget Sound Federal Caucus agencies to identify priority activities from the federal action plan and matrix which can be achieved in the near term and develop a tool for tracking and reporting on the progress of these actions. Work will also continue on all activities identified in the matrix.	soundwide	EPA			
A	6.2	Implement the high priority salmon recovery actions identified in other parts of the Action Agenda and the Biennial Science	2	<u>Develop a State Authorities Matrix</u> . PSP will lead a collaborative process with State Agencies to develop an authorities matrix in response to the Tribal Treaty Rights at Risk paper.	PSP will complete the matrix by March 2013.	soundwide	PSP			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		Work Plan.								
A	6.3	Implement harvest, hatchery, and adaptive management elements of salmon recovery.	1	<u>Implementation of Hatchery Actions</u> . WDFW and the tribes, in coordination with NOAA Fisheries, will advance implementation of hatchery actions by completing and approving Hatchery Genetic Management Plans by December 2013.	By August 2012, co-managers (Tribes and WDFW) complete Hatchery Genetic Management plans (HGMPs) for at least the first ten key Puget Sound hatchery programs and submit them to NOAA Fisheries; By April 2013, NOAA-Fisheries issues permits for at least the first ten key HGMPs; By December 2012, Co-managers complete and submit the balance of the HGMPs to NOAA-Fisheries; By December 2013, NOAA issues hatchery permits for updated Hatchery Genetic Management Plans	soundwide	WDFW and Tribes as co-managers	Tribes		
A	6.3	Implement harvest, hatchery, and adaptive management elements of salmon recovery.	2	<u>Salmon Recovery Monitoring and Adaptive Management Plans</u> . PSP, in coordination with the Puget Sound Recovery Council and the Puget Sound Regional Implementation Technical Team (RITT), will facilitate and support salmon recovery watershed groups to complete and implement monitoring and adaptive management plans for each Puget Sound Salmon Recovery watershed chapters by June 2014. This is a condition of the approved Chinook Recovery Plan to improve the quality and success of plan implementation.	Monitoring and adaptive management plans for three watersheds by March 2013; implementation performance measures for these three watersheds by June 2013; Monitoring and adaptive management plans for remaining eleven watersheds by July 2014; Implementation performance measures for these eleven watersheds by September 2014. All fourteen watersheds will be complete with steps 1 and 2 of the RITT Framework (Step 1: Modify the generic portfolio of elements (common framework) based on individual watershed chapter; Step 2: Develop conceptual model for watershed chapter by Dec 2012	soundwide	PSP			
A	6.4	Protect and recover steelhead and other imperiled salmonid species.	1	<u>Steelhead Population Identify Report and Viability Criteria</u> . By July 2012, NOAA via 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.	Steelhead population and identification report and viability criteria completed by July 2012.	soundwide	NOAA			
A	6.4	Protect and recover steelhead and other imperiled salmonid species.	2	<u>Steelhead Recovery Plan</u> . Complete development process for a Puget Sound steelhead recovery plan by 2015. PSP will assist and facilitate the Puget Sound Salmon Recovery Council in the initial steps needed in order to submit a draft Puget Sound steelhead recovery plan to NOAA for federal review by December 2014. These plans will be inclusive and integrated and will look at various implementation actions to achieve recovery, including actions like the designation of Wild Steelhead Management Zones where consistent with the objectives identified in the watershed specific recovery plans. WDFW and the tribes, by agreement of the co-managers, will work to establish 3 streams (one in each Technical Recovery Team identified Major Population Group) where no juvenile hatchery steelhead would be released, no recreational fisheries for steelhead would occur, and habitat protection and restoration actions would be accelerated. This early steelhead recovery action would consider information already compiled for the Steelhead Recovery Plan that is under development.	PSP to convene meetings to identify steelhead recovery plan lead, plan costs and funding by October 2012, RFP out to draft chapters for populations by December 2012, Chapters for 2-5 populations completed by July 2013, and remaining chapters drafted by July 2014 with Plan submitted to NOAA by December 2014.	soundwide	PSP	SRC		
A	6.4	Protect and recover steelhead and other imperiled salmonid	WS 11	<u>West Sound Steelhead Recovery Chapter</u> . By July 2013, the West Sound Watersheds Council will develop a local chapter of a Steelhead Recovery Plan. The Council will propose a budget and	Local chapter developed by July 2013, budget and implementation strategy for local chapter by December 2013.	local	West Sound Watersheds Council			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		species.		implementation strategy for its local chapter of the Recovery Plan by December 2013.						
A	6.5	Maintain and enhance the community infrastructure that supports salmon recovery.	1	<u>Lead Entity and Partner Funding Strategy.</u> By December 2013, PSP in collaboration with the Salmon Recovery Council and RCO, will identify a funding strategy and approach to support salmon recovery lead entities and the associated partner programs essential to implementing the salmon and steelhead recovery.	Strategy and approach completed by December 2013	soundwide	PSP			
A	7.1	Update Puget Sound instream flow rules to encourage conservation	1	<u>Set Instream Flows in Priority Watersheds.</u> Ecology, with support from DFW, will by 2020 set flow rules in the remaining priority Puget Sound watersheds that currently do not have instream flow rules: 1) Dungeness River portion of WRIA 18 (currently in progress – to be completed by 2013); 2) WRIA 16; 3) The western portion of WRIA 17 (Sequim Bay watershed); and 4) The western portion of WRIA 18 (Elwha-Morse watershed planning area). Priority will be given to critical basins or those with known significant problems meeting instream or out-of-stream demands. Note that including the Elwha River in an instream flow rule may be delayed because of the need to develop a method to determine and set instream flows in the Elwha after dam removal and river stabilization.	Done or not	soundwide	Ecology	WDFW		
A	7.1	Update Puget Sound instream flow rules to encourage conservation.	2	<u>PEP Development and Implementation.</u> Ecology will develop and implement the comprehensive basin flow protection and enhancement programs (PEP) called for in the recovery plans for Puget Sound Chinook and Hood Canal/Strait of Juan de Fuca summer Chum. By 2014 Ecology will identify near-term flow recovery targets and initiate a PEP program for a high priority watershed.	Done or not	soundwide	Ecology			
A	7.1	Update Puget Sound instream flow rules to encourage conservation.	3	<u>Water Code Compliance and Enforcement.</u> Ecology will establish a strong program for Puget Sound watersheds to increase water code compliance and enforcement. This program will include the creation of Ecology “compliance officer” staff positions. These positions would be similar to “water masters” used in other parts of the state, but also different because of the absence of adjudication and increased focus on mitigation strategies. By 2013, Ecology will develop a program plan to meet this goal. This plan will include identifying funding sources, a schedule, duties, and geographic jurisdiction for compliance officers, who will be local contacts to water users, provide a local compliance presence, protect the resource, support mitigation, reduce water use, and protect senior water rights, including instream flows.	Done or not	soundwide	Ecology			
A	7.1	Update Puget Sound instream flow rules to encourage conservation.	STRT 6	<u>Strait Instream Flow Rules.</u> Adopt and/or implement Instream Flow Rules for Water Resource Inventory Areas (WRIAs) 17, 18 East, 18 West, and 19 a. Adopt and implement Dungeness Instream Flow and Water Management Rule b. WRIA 18 East stream flow improvements c. Implement WRIA 17 Instream Flow and Water Management Rule d. Adopt Instream Flow Rules for WRIA 18 West e. Adopt Instream Flow Rules for WRIA 19	Initiate or complete 66% of the Priority Actions identified by the Strait ERN for the Strait Action Area	local	Ecology			
A	7.2	Decrease the amount of water withdrawn or diverted and per capita		No near-term actions. Work is focused on implementation of ongoing programs.						

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		water use.								
A	7.3	Implement effective management programs for groundwater.	1	<u>Exempt Wells</u> . 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 completed by 2013.	Done or not	soundwide	Ecology			
B	1.1	Use complete, accurate, and recent information in shoreline planning and decision making at the site-specific and regional levels.	1	<u>Integrated Nearshore Priorities</u> . PSP will lead the integration of existing science-based, geographic priorities for nearshore protection, restoration, enhancement and managed growth by July 2014. This includes identifying areas where local inventories and sediment supply priorities overlap with high-value areas for salmon, shellfish, and other natural resources at the drift-cell scale. The outcome of this effort will be agreed upon maps or other documents showing the science-based priorities for protection, restoration, enhancement, and managed growth at a drift cell (or below) scale, as well as outreach to implementers to consider this information as part of prioritization efforts including capital projects.	By December 2012, PSP will convene an interagency workgroup and complete scoping for the technical work of integration; Data integration work complete by August 2013 and quality control checks and revisions by December 2013. The integrated product, including data and maps, are presented to all salmon recovery watersheds, LIOs and local governments by June 2014.	soundwide	PSP			
B	1.1	Use complete, accurate, and recent information in shoreline planning and decision making at the site-specific and regional levels.	2	<u>Human Use Patterns in Marine Areas</u> . Ecology will identify human use patterns for marine areas in Puget Sound by 2013, to support marine spatial planning.	Human-use mapping completed by June 30, 2013.	soundwide	Ecology			
B	1.1	Use complete, accurate, and recent information in shoreline planning and decision making at the site-specific and regional levels.	WS 3	<u>West Sound Eelgrass and Forage Fish Surveys</u> . By 2013, The West Sound Watersheds Council, in coordination with the Suquamish Tribe, DNR, and others, will develop and implement periodic surveys of eelgrass and forage fish spawning habitat under a scientifically rigorous methodology, and update spawning habitat maps	To be determined	local	West Sound Watersheds Council	Suquamish Tribe		
B	1.2	Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts.	1	<u>Update Local Shoreline Master Programs</u> . Ecology will provide funding and, with WDFW, 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 and guides Puget Sound toward shoreline armoring target.	To be determined	soundwide	Ecology	WDFW		
B	1.2	Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts.	STRT 4	<u>Straits Shoreline Master Programs</u> . Shoreline Master Program Updates, Implementation, and Intergovernmental Coordination (Jefferson County, Clallam County and cities of Port Townsend, Sequim, and Port Angeles) a. City of Port Townsend SMP – stormwater education b. City of Port Townsend SMP – bulkhead removal c. City of Port Townsend SMP – restore native marine riparian vegetation d. City of Port Angeles SMP Update e. City of Sequim SPM Update f. Jefferson County SMP – Annual Restoration Planning Summit	Recommended Option: 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	local	Strait ERN			

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
				<p>g. Jefferson County SMP – Assess shoreline restoration progress</p> <p>h. Jefferson County SMP – Identify and implement shoreline armoring, riparian enhancement, fill removal and culvert replacement projects</p> <p>i. Jefferson County SMP update</p> <p>j. Clallam County SMP implementation</p> <p>k. Clallam County SMP adaptive management</p> <p>l. Clallam County SMP update</p> <p>m. Ecosystem valuation</p> <p>n. Enhanced shoreline protection</p> <p>o. Finfish aquaculture speaker forum</p>						
B	1.2	Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts.	WS 2	<u>West Sound SMP update alternatives to shoreline armoring.</u> During the Shoreline Master Program (SMP) update process for all North Central / West Sound jurisdictions in 2012-13, the West Sound Watersheds Council will ensure that restoration plans for every SMP include alternatives to traditional shoreline armoring, and incentives for the removal of existing armoring.	The goal is for no net gain in shoreline armoring within any West Sound jurisdiction over the next two years.	local	West Sound Watersheds Council			
B	1.3	Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries.	1	<u>HPA Capacity Effectiveness.</u> By December 2012, WDFW will use the results of a LEAN analysis to apply existing and new HPA capacity to more effectively protect fish life.	Complete LEAN process and begin to implement recommendations by December 2012.	soundwide	WDFW			
B	1.3	Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries.	2	<u>Hydraulic Code Rules Revision.</u> By December 2014, 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.	Rulemaking complete	soundwide	WDFW			
B	1.3	Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries.	SJI 7	<u>SJI Technical Assistance.</u> 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.	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	local	SJC			
B	1.3	Improve, strengthen, and streamline implementation and enforcement of laws,	SJI 8	<u>SJI Technical Assistance Capacity.</u> 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.	To be determined	local	SJC			

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		regulations, and permits that protect the marine and nearshore ecosystems and estuaries.								
B	2.1	Permanently protect priority nearshore physical and ecological processes and habitat, including shorelines, migratory corridors, and vegetation particularly in sensitive areas such as eelgrass beds and bluff backed beaches.	1	<u>Protect 10% of Bluff-Backed Beaches.</u> PSP will promote acquisitions, easements, or other protective covenants to permanently protect at least 10% of bluff-backed beaches with high sediment supply or other priority nearshore habitats facing potential shoreline development pressure by June 2014.	By Sept 2012, identify location of bluff-backed beaches with high sediment supply and development pressure or other priority nearshore habitats facing development pressures; By December 2012, convey the location information to salmon recovery watershed groups and LIOs for consideration; By December 2012, convene at least one meeting with each Action Area (LIO) with bluff backed beaches; By May 2013, identify candidate locations and local projects, and incorporate into salmon recovery three year work plans if appropriate for each area. Capital projects awarded grants by March 2014. By June 2014, any new regulatory protections are in place. By August 2014, 10 % of the bluff-backed beaches with high sediment supply or priority nearshore habitats facing development pressure are protected.	soundwide	PSP			
B	2.1	Permanently protect priority nearshore physical and ecological processes and habitat, including shorelines, migratory corridors, and vegetation particularly in sensitive areas such as eelgrass beds and bluff backed beaches.	2	<u>Community Use Dock Incentives.</u> For state-owned aquatic lands, DNR, in consultation with WDFW and Ecology, will identify potential permit, economic, and social incentives for encouraging community use docks as an alternative to single family docks by July 2013.	Incentives identified by July 2013.	soundwide	DNR	WDFW	Ecology	
B	2.1	Permanently protect priority nearshore physical and ecological processes and habitat, including shorelines, migratory corridors, and vegetation particularly in sensitive areas such as eelgrass beds and bluff backed beaches.	3	<u>Overwater Structures Design Guidance.</u> DNR, in consultation with the Aquatic Habitat Guidelines Interagency Group, will publish design guidance on construction, repair and rebuilding of overwater structures to increase light by 2013.	Guidance adopted by 2013.	soundwide	DNR			
B	2.1	Permanently protect priority nearshore physical and ecological processes and habitat, including shorelines, migratory corridors, and vegetation particularly in sensitive areas such	SJI 10	<u>San Juan Lead Entity Shoreline Protection.</u> 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 shoreline miles with willing sellers/owners by 2014.	Identify priority habitats for acquisition by 2013 in updates to the Salmon Recovery strategy, lead acquisition of, or establishment of conversation easements for 25% of priority habitat shoreline miles with willing sellers/owners by 2014.	local	SJC Lead Entity for Salmon Recovery			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		as eelgrass beds and bluff backed beaches.								
B	2.2	Implement prioritized nearshore and estuary restoration projects and accelerate projects on public lands.	1	<u>Implementation of Projects Identified by PSNERP</u> . By December 2014, DFW and the Corps will advance implementation of projects identified by Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), including those described in the Strategic Restoration Conceptual Engineering Final Design Report. Implementation will occur both through Corps programs as anticipated through the General Investigation process, and through other non-Corps federal, state, tribal and local programs by 2013.	Number of projects funded; number implemented; amount of various nearshore habitats restored Milestone: Final Feasibility Report for the PSNERP GI is completed by August 31, 2012, advancing projects for construction authorization through the Corps process.	soundwide	WDFW	USACE		
B	2.2	Implement prioritized nearshore and estuary restoration projects and accelerate projects on public lands.	2	<u>State Parks Nearshore Restoration</u> . State Parks will identify opportunities to provide nearshore restoration by December 2012. Based on this assessment, State Parks will refine its performance measures for this action including setting semi-annual estimates of the numbers of projects or linear feet to be restored by March 2013. By December 2015, State Parks will restore nearshore habitat identified, including removal of hard armoring at state parks.	By December 2012, identify opportunities; By March 2013, identify numbers of projects or linear feet target; By December 2015, complete projects.	soundwide	Parks			
B	2.2	Implement prioritized nearshore and estuary restoration projects and accelerate projects on public lands.	3	<u>Prioritizing Restoration on State-Owned Aquatic Lands</u> . DNR will develop a strategy to prioritize restoration projects on state-owned aquatic lands including those within protected landscapes such as Aquatic Reserves to ensure maximum long-term benefit from habitat restoration.	DNR restoration project prioritization criteria developed by 2013 (done or not), List of near and long-term projects developed by 2014 (done or not).	soundwide	DNR			
B	2.2	Implement prioritized nearshore and estuary restoration projects and accelerate projects on public lands.	4	<u>Creosote Piling Inventory and Removal</u> . DNR will complete a derelict creosote piling inventory of Puget Sound. DNR has removed 10,000 pilings since 2007 and will remove an additional 3,000 pilings by 2017, prioritizing removals near important herring spawning beds.	Inventory completed by 2013 (done or not); 3,000 piling removed by 2017 (done or not).	soundwide	DNR			
B	2.3	Remove armoring, and use soft armoring replacement or landward setbacks when armoring fails, needs repair, is non protective, and during redevelopment.	1	<u>Homeowner Incentives for Landward Setbacks</u> . Building on work done to date, PSP will convene a process with partners to develop and recommend incentives that help homeowners permanently remove armoring and encourage setback of houses by June 2014. Incentives could include, but would not be limited to financial, regulatory, low interest loans or grants. This work will help restore nearshore processes, promote landward retreat of homes facing sea level rise, and promote progress toward shoreline armoring target.	By December 2012, identify the group and complete the scoping process including holding at least two meetings with partners; By June 2013, complete technical steps including identifying where to target the program for highest ecological value; By December 2013, identify draft possible incentive options for discussions; By June 2014, present options and recommendations to ECB and Leadership Council including miles of bulkheads that could be replaced with soft armoring or setbacks and a homeowner outreach plan.	soundwide	PSP			
B	2.4	Implement a coordinated strategy to achieve the 2020 eelgrass recovery target.	1	<u>Eelgrass Recovery Target Strategy</u> . DNR, working in collaboration with PSP, will convene partners in state and local government, Tribes, the federal agencies, BC Canada, and non-governmental and business groups to develop a broad-based strategy to achieve the 2020 eelgrass recovery target and track progress.	Strategy options identified by Dec 2012, Strategy developed by September 2014 (done or not).	soundwide	DNR	PSP		
B	2.4	Implement a coordinated strategy to achieve the 2020 eelgrass recovery target.	2	<u>Identification of Eelgrass Restoration Sites</u> . 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 eelgrass resilience to local stressors. This will include identification of sites on state-owned aquatic lands with a focus on areas with long-term protections already in place.	Maps defining potential eelgrass restoration sites; site evaluations; final recommendations – completed by May 2014 (done or not); state aquatic land work complete by July 2014 (done or not).	soundwide	DNR			

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B	3.1	Protect intact marine ecosystems particularly in sensitive areas and for sensitive species.	1	<u>Marine Protected Area Effectiveness</u> . By June 2014, PSP, in collaboration with WDFW, and DNR will identify the threats, coverage gaps, and conservation concerns addressed by existing Puget Sound marine protected areas and assess the potential effectiveness of these MPAs to protect threatened species and habitats, including rockfish and forage fish.	Produce a written summary of threats and conservation concerns addressed by current MPAs by September 2012; Complete an assessment of effectiveness and coverage gaps by September 2013. PSP delivers recommendations to managing agencies to improve overall coordination and design of MPA network by June 2014.	soundwide	PSP	WDFW	DNR	
B	3.1	Protect intact marine ecosystems particularly in sensitive areas and for sensitive species.	2	<u>Outfall Strategy on State-Owned Aquatic Lands</u> . 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 December 2013	soundwide	DNR	Ecology	DFW	DOH
B	3.2	Implement and maintain priority marine restoration projects.	1	<u>Legacy Net Removal</u> : The Northwest Straits Foundation will work with WDFW, DNR, tribes, fishers and others to remove approximately 500 known remaining legacy nets in shallow sub-tidal waters by December 2013.	By December 2012, approximately 250 nets will be removed from waters of Island, San Juan, and Kitsap Counties.  By August, 2013, approximately 170 nets in Whatcom County will be removed.  By December 2013, remaining nets in Hood Canal and other counties will be removed.	soundwide	NWS Fdn	WDFW	DNR	
B	3.2	Implement and maintain priority marine restoration projects.	2	<u>Deep Water Net Removal</u> : The Northwest Straits Foundation will complete development and at least one pilot implementation of a new methodology for deep-water net removal by December 2013. To date, approximately 130 nets are known to exist in Puget Sound in waters deeper than 105'. These nets may be degrading important habitat for listed rockfish species. Pilot removal operations will focus on concentrations of known deepwater nets in documented rockfish habitat in the San Juan Islands.	By December 2012, identify known deepwater nets for pilot removal operations.  By September 2013, develop up to three possible removal options in partnership with WDFW, DNR, NOAA, tribes, fishers, and others.  By December 2013, pilot chosen removal option on identified nets.	soundwide	FWS Fdn			
B	4.1	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.		No near-term actions. Work is focused on implementation of ongoing programs.						
B	4.2	Increase access to and knowledge of publically owned Puget Sound shorelines and the marine ecosystem.	1	<u>State Parks Interpretive Experiences</u> . Increase passive, active and virtual interpretive experiences on Puget Sound ecology, threats, vital signs, and recovery actions at State Parks and other publically owned lands that provide access to Puget Sound. Maximize opportunities to connect Park visitors with the regional ecosystem recovery effort.	By December 2012, review existing interpretive plans for Puget Sound interpretive experience opportunities. By June 2013, identify potential funding sources for implementation of unfunded elements identified through interpretive plan review. Future metrics will depend on acquisition of funding.	soundwide	Parks			
B	5.1	Implement species recovery plans in a coordinated way.	1	<u>Develop and Implement Species Plans</u> . Develop (where necessary) and implement actionable plans for imperiled Puget Sound species	Number of actionable plans for imperiled species currently lacking such plans	soundwide	DFW			
B	5.1	Implement species recovery plans in a coordinated way.	2	<u>Fish and Wildlife Action Plan</u> . WDFW, in coordination with the US Fish and Wildlife Service and the National Oceanic and Atmospheric Administration, will complete a Fish and Wildlife Action Plan for	A completed Fish and Wildlife Action Plan for Puget Trough by June 30, 2013	soundwide	WDFW	USFWS	NOAA	

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				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 eco-regions to integrate terrestrial and aquatic species specific recovery plans, existing management tools, and interagency conservation plans into a unified ecosystem approach to set priorities focused on conserving and restoring critical habitat, improve biodiversity protection and restoration efforts and better coordinate them.						
B	5.2	Create a more integrated planning approach to protect and enhance biodiversity in the Puget Sound basin.		No near-term actions. Work is focused on implementation of ongoing programs.						
B	5.3	Prevent and rapidly respond to the introduction and spread of terrestrial and aquatic invasive species.	1	<u>Invasive Species Baseline Assessment</u> . By December 2014, the Invasive Species Council, in consultation with WSDA, 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.	25% complete (Sep 30, 2012); 31% complete (Dec 31, 2012); 38% complete (Mar 31, 2013); 44% complete (Jun 30, 2013); 44% complete (Sep 30, 2013); 56% complete (Dec 31, 2013); 69% complete (Mar 31, 2014); 88% complete (Jun 30, 2014); 88% complete (Sep 30, 2014); 100% complete (Dec 31, 2014)	soundwide	ISC	WSDA		
B	5.3	Prevent and rapidly respond to the introduction and spread of terrestrial and aquatic invasive species.	2	<u>Invasive Species Early Detection and Monitoring</u> . By June 2014, the Invasive Species Council, in consultation with WSDA, will develop an early detection and monitoring program plan for priority invasive species in Puget Sound. The Council will coordinate the plan and implementation efforts with the Puget Sound Coordinated Ecosystem Monitoring Program.	Plans will be developed for five species. Secure funding by March 2013; Issue request for proposal. Hire contractor by June 2013; Identify existing invasive species monitoring efforts and protocols used in Puget Sound by December 2013; Develop conceptual monitoring plan that identifies targeted species and locations, and estimated costs to implement by June 2013; Seek funding opportunities to implement monitoring plan by October 2014	soundwide	ISC	WSDA		
B	5.3	Prevent and rapidly respond to the introduction and spread of terrestrial and aquatic invasive species.	3	<u>Managing Invasive Species On/In Boats and Ships</u> . DFW will prepare implementable recommendations for managing invasive species transported on and in the hulls of recreational watercraft and commercial ships.	Complete a management plan with recommendations by June 30, 2015  Milestones: Issue request for proposals and select contractor: June 2012, complete assessment of non-indigenous marine species in Puget Sound: December 2012; Develop/identify standard methods for designating high-risk watercraft in Puget Sound: June 2013; identify BMPs for in-water watercraft cleaning: December 2013; Identify other non-watercraft biofouling vectors for future research: 6/30/2014; Draft management plan reviewed by stakeholder group and Washington Invasive Species Council: December 2014	soundwide	DFW			
B	5.3	Prevent and rapidly respond to the introduction and spread of terrestrial and aquatic invasive species.	4	<u>Ballast Water Treatment effectiveness</u> . By June 2015, DFW will complete an assessment of and make recommendations to improve the effectiveness of open sea exchange and treatment in meeting state ballast water standards.	Complete report and make available to resource managers and the public by June 30, 2015.  Milestones: - Issue sub-award to University of Washington to analyses samples and conduct data analysis:	soundwide	DFW			

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					12/31/2012 - University completes analysis of archived samples and identifies research gaps: 6/30/2013 - WDFW collects new samples to fill research gaps: 12/31/2013 - Draft report reviewed by state Ballast Water Work Group: 12/31/2014					
B	5.3	Prevent and rapidly respond to the introduction and spread of terrestrial and aquatic invasive species.	5	<u>Zebra/Quagga and New Zealand Mud Snail Plans</u> . By June 2015, DFW will develop plans to respond to 1) a potential zebra/quagga mussel invasion in the Puget Sound Basin and 2) limit the spread of New Zealand mud snails.	Complete zebra/quagga mussel invasion management plan by June 30, 2015; Complete plan to limit spread of New Zealand mud snails by June 30, 2015. Milestones: - Assess EPA grant opportunities and/or department legislation request for project funding: 6/30/2013 - Secure project funding; and issue contract to prepare management plans; 6/30/2014 - Draft management plans reviewed by Puget Sound Science Panel and Washington Invasive Species Council: 12/31/2014	soundwide	DFW			
B	5.4	Answer key invasive species research questions and fill information gaps.	1	<u>Environmental and Economic Impact of Invasive Species</u> . The Washington Invasive Species Council, in consultation with WSDA, will complete 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.	Workgroups will be convened by December 2012. WISC will revise performance measures to denote the number of pathways that will be considered by September 2013. Draft pathway analysis will be submitted to the Science Panel by August 2014. Final study will be completed by June 2015.	soundwide	ISC	WSDA		
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	1	<u>PAH and PFOS Chemical Action Plans</u> . Ecology, working with its partners, will complete a PAH CAP by 2012 and a CAP for PFOS or all perfluorinated compounds (PFCs) by 2014, 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 to reduce PAHs from incomplete combustion and/or other sources. The PFOS/ PFC CAP will include an evaluation of safer alternatives and recommendations for reducing use of PFOS and/or PFCs.)	PAH and PFOS or PFC chemical action plans completed or not; pounds/year of PAH reduced	soundwide	Ecology			
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	2	<u>Mercury Lamp Product Stewardship</u> . Ecology will establish a mercury lamp product stewardship program by 2013.	Program established or not; pounds per year of mercury collected	soundwide	Ecology			
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	3	<u>Fish Consumption Rates</u> . Ecology will, as soon as possible, establish accurate default fish consumption rates that are reflective of actual consumption rates of vulnerable populations who consume fish and shellfish from the Sound at a subsistence level and children who, by virtue of lower body mass may be disproportionately affected by toxins in their food supply. Ecology will complete the rulemaking processes for Sediment Management Standards, incorporating the revised and accurate fish consumption rate, no later than the end	Ecology establishes accurate default fish consumption rates as soon as possible; rulemaking process for Sediment Management Standards complete by the end of 2013; reports to the Leadership Council at least quarterly, beginning in October 2012.	soundwide	Ecology			

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				of 2013; the water quality rule shall be guided by Ecology's September 2011 draft Fish Consumption Rates – Technical Support Document and other appropriate relevant information as it becomes available. Ecology will report to the Leadership Council at least quarterly, beginning in October 2012, on the plan and progress towards adoption of a fish consumption rate.						
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	4	<u>Estimates of Copper in Pesticides.</u> The Washington Department of Agriculture will work with Ecology to review and refine estimates of the agricultural and non-agricultural release of copper from pesticide use in the Puget Sound basin and publish a summary report by December 2012. This report is one element as part of a process to evaluate copper loading in Puget Sound.	By December 2012, WSDA publishes a report describing opportunities to refine estimates of agricultural and non-agricultural release of copper from pesticide use in the Puget Sound basin. This will involve evaluating the 2004 report completed for the San Francisco Bay estuary, reviewing the assumptions used in the Puget Sound loading study, assessing changes in registration status of copper containing pesticides, and comparing and contrasting use patterns in Washington and California. Copper release information is used to evaluate surface water monitoring data collected in 2012.	soundwide	WSDA	Ecology		
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	5	<u>Pesticide Use Survey.</u> By December, 2013, Washington Department of Agriculture, in partnership with the USDA National Agricultural Statistics Service and coordination with PSP, will complete survey work and publish a report of refined estimates of primary releases of copper from non-agricultural pesticide use in the Puget Sound basin. This includes conducting a pesticide use survey of homeowners within the Puget Sound basin. In addition, WSDA will survey commercial and public applicators to provide a more complete profile of urban pesticide use. The results will be used to further refine the estimates for urban pesticide use (including copper compounds) as a source of toxic chemicals released to the Puget Sound environment This work is one element as part of a process to evaluate copper loading in Puget Sound.	By November 2012, survey drafted and distributed to 9500 homeowners. Report produced by December 2013. Discuss findings and next steps with the Leadership Council by March 2013. Copper use information is used to evaluate surface water monitoring data collected in 2012.	soundwide	WSDA	Ecology		
C	1.1	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	6	<u>Emerging Contaminants.</u> Ecology and PSP will assemble information on chemicals of emerging concern, beyond the 17 chemicals of concern in the Puget Sound Toxics Loading Studies, including PBTs, endocrine disruptors, other chemicals, and nanotechnology and nanomaterials, and will recommend actions to (1) better understand the threats to Puget Sound and (2) address the highest priority problems.	By December 2013, Ecology will publish recommendations for actions to understand and address emerging contaminants.	soundwide	Ecology	PSP		
C	1.2	Promote the development and use of safer alternatives to toxic chemicals.	1	<u>Chemical Alternatives Assessments.</u> By 2013, Ecology will work with the Interstate Chemicals Clearinghouse (IC2) to develop a guidance document on chemical alternatives assessment and, depending on funding availability, will complete assessments of five chemicals to identify safer alternatives.	Draft guidance document issued in September 2012	soundwide	Ecology			
C	1.2	Promote the development and use of safer alternatives to toxic chemicals.	2	<u>Toxics in Roofing Materials.</u> By 2013, 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 or ways to use materials that minimize releases of toxic materials to receiving waters. To support the task force's work, Ecology will solicit information from manufacturers on the presence of toxic	Ecology will have a draft report of study findings by June 2013. The Task Force will have recommendations on strategies to promote safer roofing alternatives by December 2013.	soundwide	Ecology			

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				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.						
C	1.2	Promote the development and use of safer alternatives to toxic chemicals.	3	<u>Green Chemistry Road Map</u> . In 2012, Ecology and business, government, and academic stakeholders will finalize and begin implementing a green chemistry road map for Washington, including efforts to establish a Washington State green chemistry center. By 2013, Ecology will host a green chemistry conference in the region	Green chemistry road map developed or not; green chemistry center established or not; green chemistry conference held or not	soundwide	Ecology			
C	1.3	Adopt and implement plans and control strategies to reduce pollutant releases into Puget Sound from air emissions.		No near-term actions. Work is focused on implementation of ongoing programs.						
C	1.4	Provide education and technical assistance to prevent and reduce releases of pollution.	1	<u>Landscaper Accreditation</u> . The landscape industry, in cooperation with other stakeholders, will establish a sustainable landscaper accreditation program to promote environmentally friendly landscape development and maintenance practices. Ecology will support this effort by providing start-up funding. The industry-led program will 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, increasing natural stormwater filtration, reducing emissions from landscape equipment, and encouraging the use of native or other plants that provide riparian shade, support native pollinators, and require less pesticide, fertilizer, and water.	By December 2013, the organization identified to administer the accreditation program shall industry representatives will publish a report describing the program and/or next steps in establishing such a program.	soundwide	Ecology			
C	1.4	Provide education and technical assistance to prevent and reduce releases of pollution.	2	<u>Environmentally Preferable Purchasing</u> . 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.	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.	soundwide	Ecology			
C	1.4	Provide education and technical assistance to prevent and reduce releases of pollution.	3	<u>Conduct Local Source Control Business Assistance Visits</u> . By July 2013, local governments, under contract with Ecology, will conduct at least 5,000 local source control visits to help small businesses reduce stormwater pollution and improve hazardous waste management.	Number of local source control visits completed per year	soundwide	Ecology			
C	1.5	Control wastewater and other sources of pollution such as oil and toxics from boats and vessels.	1	<u>No Discharge Zone Evaluation and Petition</u> . Ecology, in collaboration with State Parks and EPA, will administer grants to fund the development of a petition to EPA to establish a No Discharge Zone to prohibit recreational and commercial vessels from discharging sewage in all or parts of Puget Sound.	Completion of draft elements of an evaluation by July 2012 (Phase I). Completion of stakeholder outreach, surveys, geographical locations by July 2013 (Phase II).  Completion of draft petition to EPA by September 2013.	soundwide	Ecology	Parks	EPA	
C	1.5	Control wastewater and	2	<u>Pump-Out Station Improvements</u> . Ecology and DOH, with National	Number of pump-out stations added or	soundwide	Ecology	DOH		

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		other sources of pollution such as oil and toxics from boats and vessels.		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.	improved. Amount of sewage pumped out. Pump out capacity is able to support a NDZ designation.					
C	1.5	Control wastewater and other sources of pollution such as oil and toxics from boats and vessels.	WS 9	<u>West Sound Pump Out Stations</u> . By January 2013, Kitsap Public Health will identify potential pump out stations and develop needs assessment to address marine vessel sewage	To be determined	local	Kitsap County			
C	1.6	Increase compliance with and enforcement of environmental laws, regulations, and permits.	1	<u>Hazardous Waste, Wastewater, and Air Quality Compliance and Enforcement</u> . Increase Ecology's hazardous waste, and wastewater compliance inspection and enforcement programs in the Puget Sound.	Number of compliance inspections completed per year, pounds of hazardous wastes and air pollutants reduced per year, volume of wastewater discharges reduced per year	soundwide	Ecology			
C	1.6	Increase compliance with and enforcement of environmental laws, regulations, and permits.	2	<u>Compliance for Use of Toxics in Products</u> . Ecology will conduct compliance activities for state laws banning the use of toxic materials (e.g., PBDEs) in products, including taking appropriate enforcement actions against noncompliant products.	By June 30, 2013, Ecology will publish a report on product sampling and follow up actions taken.	soundwide	Ecology			
C	1.6	Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound environment.	3	<u>Water Quality Enforcement</u> . Ecology, working with DOH, will increase the capacity for enforcement, and enforce all regulations pertaining to pathogens and contaminants that pollute waters of the state to ensure achievement of approved shellfish growing water certification.	By 2014 increase the number of inspections.	soundwide	Ecology	DOH		
C	2.1	Manage urban runoff at the basin and watershed scale.	1	<u>Watershed Based Stormwater Management</u> . To ensure all funds (existing and new) are used efficiently and effectively, Puget Sound Partnership (PSP) will work with the ECB to commission an evaluation of the feasibility, cost, and effectiveness of transitioning the existing municipal stormwater jurisdiction by jurisdiction permit approach using "general permits," to watershed-based municipal stormwater management. PSP will work with interested parties, particularly Ecology and local governments, to ensure their perspectives and concerns are addressed and accounted for when developing the scope of work for their evaluation.	To be determined.	soundwide	PSP			
C	2.1	Manage urban runoff at the basin and watershed scale.	2	<u>Protect Best Remaining Streams</u> . King County, in cooperation with agencies populating the Puget Sound Stream Benthos database, will identify and map remaining streams with B-IBI scores of at least 42-46 and develop an overall strategy and tailored actions to protect these areas by September 2013.	Map of targeted streams by March 2013; strategies and actions to protect targeted stream drainages by September 2013.	soundwide	King County			
C	2.1	Manage urban runoff at the basin and watershed scale.	3	<u>Stormwater System Mapping</u> . King County in cooperation with Ecology, local governments, WSDOT, and Department of Natural Resources, will help improve understanding and management of the region's stormwater infrastructure by developing protocols, methodology and definitions for stormwater system mapping. Following completion of this work, seek funding to develop a geo-referenced database of the Sound's regulated, municipal stormwater system.	Protocols, methodology and definitions to guide mapping and documentation efforts by May 2013. Seek funding to develop geo-referenced database by December 2013.	soundwide	King County	Ecology	WSDOT	DNR
C	2.2	Prevent problems from new development at	1	<u>NPDES Municipal Permits</u> . Ecology will issue municipal permits for western Washington and provide financial assistance to permittees	Reissued, improved municipal permits by July 2012; additional resources to Ecology by July	soundwide	Ecology			

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		the site and subdivision scale.		for implementation, particularly for code changes, stormwater system mapping, operations and maintenance, inspections and enforcement. This will require additional resources to Ecology for permit oversight, technical assistance, and enforcement. Ecology will provide incentives to NPDES permittees who, by interlocal agreement, lead or carry out regional or watershed scale NPDES implementation.	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 and subdivision scale.	2	<u>Stormwater Treatment Standards.</u> Ecology will evaluate 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.	Evaluation with supporting documentation by March 2014	soundwide	Ecology			
C	2.2	Prevent problems from new development at the site and subdivision scale.	3	<u>Stormwater Management Outside Permitted Areas.</u> Ecology, in coordination with the state Department of Health, will identify two high priority shellfish growing areas degraded by urban stormwater discharges and work with local governments and other key parties to reduce these impacts to the areas.	Areas identified by September 2012; assistance provided to non-permitted local governments by December 2012; documentation of reduced impacts by March 2014 and at conclusion of projects.	soundwide	Ecology	DOH		
C	2.2	Prevent problems from new development at the site and subdivision scale.	4	<u>New Development Under Earlier Stormwater Programs.</u> Ecology will initiate a process to assess projected implications and impacts of current state law concerning the level of stormwater control from new development approved under earlier stormwater programs.	RFP issued by August 2012; project lead awarded and project lead to develop new milestones to deliver a report on projected implications and impacts by at least December 2012.	soundwide	Ecology			
C	2.2	Prevent problems from new development at the site and subdivision scale.	SJI 3	<u>SJ Improve Stormwater Permit Review.</u> 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 percent of properties permitted between 2012-2015.	Pre-disturbance site review and follow-up site visits at 50 percent of properties permitted between 2012-2015	local	SJC			
C	2.2	Prevent problems from new development at the site and subdivision scale.	STRT 5	<u>Straits Stormwater Management Programs.</u> Stormwater Management Program Updates and Implementation (Clallam, Jefferson, Port Angeles, Sequim, and Port Townsend) a. City of Port Townsend Stormwater Management Plan b. City of Sequim Stormwater Management Plan c. City of Port Angeles CSO reduction d. City of Port Angeles NPDES Stormwater Management Program implementation e. Jefferson County Public Education Plan implementation f. Jefferson County low impact development and BMP staff training g. Jefferson County low impact development and BMP training for development community h. Clallam County stormwater technical assistance i. Clallam County outreach and education j. Clallam County stormwater monitoring and data analysis k. Clallam County stormwater management staff training l. Clallam County land use analysis m. Clallam County Stormwater Management Plan n. Speaker forum on reducing stormwater impacts from roads	Recommended option: 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	local				
C	2.3	Fix problems caused by existing development.	1	<u>Stormwater Retrofit Projects.</u> Ecology will lead a process to identify high priority retrofit projects that will contribute to the recovery of Puget Sound and complete conceptual design to a stage sufficient to seek project implementation funding. The work will build on	RFP issued by August 2012; new regional stormwater retrofit prioritization process and list of projects by December 2013.	soundwide	Ecology			

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				retrofit prioritization work by WSDOT, King County and others, and will be replicable in other urban and suburban areas around the Sound.						
C	2.3	Fix problems caused by existing development.	2	<u>Map, Prioritize, and Restore Degraded Streams</u> . King County, in cooperation with agencies populating the Puget Sound Stream Benthos database, will identify and map stream drainages with “fair” B-IBI scores, and develops a prioritized list, strategies and actions to improve scores of 30 of these streams.	Map of targeted drainages by March 2013; prioritized list for restoration and strategies, actions, and budgets by September 2013.	soundwide	King County			
C	2.3	Fix problems caused by existing development.	3	<u>Legacy Pollutant Removal</u> . Ecology, in cooperation with local governments, will provide guidance and financial assistance to local governments to help them remove legacy pollutant loads from their stormwater systems.	Shared guidance; financial assistance to permittees by December 2013.	soundwide	Ecology			
C	2.3	Fix problems caused by existing development.	HC 4	<u>HCCC Stormwater Retrofit Program</u> . HCCC will develop the Hood Canal Regional Stormwater Retrofit Plan to coordinate stormwater and low impact development retrofit efforts on a regional scale. Stormwater retrofit and LID practices improve water quality, help protect shellfish beds, decrease flooding risks and increase aquifer recharge.	By the end of 2014 a list of prioritized stormwater retrofit projects will be available to determine feasibility for implementation	local	HCCC			
C	2.3	Fix problems caused by existing development.	WS 5	<u>West Sound Stormwater Retrofit Projects</u> . By December 2015, Kitsap County Surface and Stormwater Management Program, in coordination with jurisdictions and other partners, will design and construct high priority retrofit projects treating 10 acres of pollution generating impervious surfaces.	By December 2015 treat 10 acres of impervious surface	local	Kitsap County			
C	2.4	Control sources of pollutants.	1	<u>Compliance Assurance Program</u> . Ecology and local governments will increase inspection, technical assistance, and enforcement programs for high-priority businesses and at construction sites.	Increased number of inspections, technical assistance, and enforcement activities by December 2012	soundwide	Ecology			
C	2.4	Control sources of pollutants.	2	<u>Vehicle Leak Detection Program</u> . King County, in cooperation with Seattle, WSDOT, the STORM advisory committee, and PSP will lead a regional discussion to develop options and recommendations for a new program to inspect and eliminate privately owned vehicle drips and leaks by June 2014. This work builds on the related work of existing grants to STORM and Seattle on vehicle leaks and drips.	By September 2012 convene first forum. By December 2013, convene up to three additional forums and use information from the STORM and Seattle grant-funded efforts to identify opportunities, challenges, options and recommendations. By June 2014, complete a recommendation report for policy changes, public education and behavior change campaigns, and funding needs, and present recommendation report to the ECB, Science Panel, and Leadership Council for consideration. By September 2014, based on feedback from the ECB and Leadership Council, PSP will work with regional partners to identify a lead for next steps and measures.	soundwide	King County			
C	2.4	Control sources of pollutants.	SJI 5	<u>SJI Coordinated Best Management Practices</u> . 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			
C	2.4	Control sources of pollutants.	SJI 6	<u>SJI Stormwater Monitoring</u> . San Juan County Public Works Stormwater Utility will lead and work jointly with the Stormwater	In the first year post-implementation, monitor 100% of priority basins, with monitoring actions	local	SJC			

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				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 fecals, heavy metals, POPs, and PAHs in priority basins.	ongoing after 2014.					
C	2.5	Provide focused stormwater-related education, training, and assistance.	1	<u>LID Training and Certification</u> . Ecology will 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.	Provide stormwater-related training by June 30, 2013 and follow-up training opportunities by June 30 2014.	soundwide	Ecology			
C	2.5	Provide focused stormwater-related education, training, and assistance.	2	<u>Education for the Next Generation of Stormwater Professionals</u> . The Tulalip Tribes will develop a near-term plan to provide sustainable water resource management academic curriculum in all Puget Sound counties for future stormwater professionals that is inclusive of tribal treaty rights, history, civics, and emphasizes continuing improvements in stormwater management in the context of the larger issues of sustainable water resource management and climate change.	To be determined	soundwide	To be determined			
C	2.5	Provide focused stormwater-related education, training, and assistance.	WS 4	<u>West Sound LID Training</u> . By December 2014, Kitsap County Surface and Stormwater Management Program – with direct assistance from and close coordination with other stormwater utilities and agencies in the County – will provide training for 80% of LID professionals in Kitsap County, including plan review staff, designers, installers, inspection, and maintenance staff.	Training for 80% of LID professionals in Kitsap County by December 2014	local	Kitsap County			
C	3.1	Target voluntary and incentive-based programs that help working farms contribute to Puget Sound recovery.	1	<u>Water Quality Best Management Practices</u> . By December 2012, the Department of Ecology, Department of Agriculture and State Conservation Commission, after conferring with federal, tribal, and local partners will work on a solution to improved implementation of best management practices that protect water quality.	By December 2012 develop a plan to improve BMP implementation.	soundwide	Ecology	WSSC	WSDA	
C	3.1	Target voluntary and incentive-based programs that help working farms contribute to Puget Sound recovery.	2	<u>Effectiveness of Incentive Programs</u> . By December 2013, the State Conservation Commission, in consultation with Ecology and the Washington State Departments of Agriculture and Health, Conservation Districts, Federal agencies and Tribes, will report to the Governor and the Legislature on the effectiveness of incentive programs to achieve resource objectives. The report will include a section from Ecology on compliance with water quality standards.	By December 2012, hold two coordinating meetings to evaluate the effectiveness of the ag incentive programs. By June 2013, produce a draft report with recommendations on necessary changes. Between June 2013 and November 2013, present the draft report to the agencies, Tribes, and stakeholder groups for comment. By November 2013 present the report to the ECB and Leadership Council. Following presentation of the final report to the legislature and governor, the WSSC will work with the other entities on strategies to implement the recommendations in the report.	soundwide	WSSC	Ecology	WSDA	DOH
C	3.1	Target voluntary and incentive-based programs that help working farms contribute to Puget Sound recovery.	3	<u>Voluntary Stewardship Program</u> . The Conservation Commission, Ecology, and WSDA should support implementation, funding, and assistance to those Counties participating in the Voluntary Stewardship program, as well as new capacity for enforcement of state and federal water quality regulations.	By December 2012, the WSSC will identify potential funding sources. By June 2013, funding will be made available to the four counties in the Program.	soundwide	WSSC			
C	3.2	Ensure compliance with	1	<u>Priority Areas for Voluntary Incentive and Regulatory Programs</u> . The	By Dec. 31, 2012, the WSSC will convene at	soundwide	WSSC	WSDA	Ecology	DOH

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		regulatory programs designed to reduce, control, or eliminate pollution from working farms.		State Conservation Commission and the Washington State Departments of Agriculture, Ecology, and Health will identify priority areas to better target and coordinate implementation of voluntary incentive and regulatory programs for rural landowners, small-acreage landowners, and working farms.	least two meetings to identify priority areas. By June 30, 2013, WSCC will implement voluntary incentive programs in 5 target areas.					
C	3.2	Ensure compliance with regulatory programs designed to reduce, control, or eliminate pollution from working farms.	2	<u>Dairy Lagoon Assessment</u> . By July 2013, WSDA will complete the current NRCS-funded lagoon assessment of all known dairy waste storage ponds, finalize risk based evaluations and prioritize lagoons based on the findings. The assessment ranks lagoons on potential risk to water resources. Lagoons identified as high risk will be provided technical assistance to address the problem.	Field assessment and risk evaluation of up to 500 lagoons completed by July 2013; Number of lagoons with identified risks are identified and operators made aware of available technical assistance by September 2013.	soundwide	WSDA			
C	3.2	Ensure compliance with regulatory programs designed to reduce, control, or eliminate pollution from working farms.	3	<u>Dairy Rule Final Agronomic Applications</u> . By December 2012, WSDA will adopt a final rule defining records required by dairies to show agronomic applications (Chapter 90.64.010(17)) and create a penalty matrix for both discharge and records violations. Rule adoption supports efficient program implementation by clarifying for dairies and stakeholders the expectations for recordkeeping as well as the basis for penalties.	Final rule adopted or not	soundwide	WSDA			
C	3.2	Ensure compliance with regulatory programs designed to reduce, control, or eliminate pollution from working farms.	4	<u>CAFO Permit</u> . By December 2012, Ecology will issue an updated CAFO permit.	Estimated Public Comment Draft Date: July 2012 Estimated Permit Issuance Date: November 2012 Estimated Permit Effective Date: December 2012	soundwide	Ecology			
C	4.1	Achieve water quality standards on state and privately owned working forests through implementation of the Forest and Fish Report.	1	<u>Forest Practices Adaptive Management Program Review</u> . DNR and Ecology will obtain an independent performance review of the Forest Practices Adaptive Management Program (AMP).	DNR identifies date for the review by December 2013	soundwide	DNR	Ecology		
C	4.1	Achieve water quality standards on state and privately owned working forests through implementation of the Forest and Fish Report.	2	<u>Forest Practices Adaptive Management Program</u> . DNR will work to secure long-term and dependable funding for the Forest Practices Adaptive Management Program (AMP), training, compliance monitoring, and enforcement.	DNR identifies date for securing a stable base by December 2013	soundwide	DNR			
C	4.2	Maintain forest roads and implement road abandonment plans for working forest lands subject to the Forest Practices Rules on schedule, and ensure federal forest managers meet or exceed state standards for road maintenance and abandonment on federal lands.	1	<u>Risk Assessment of Small Forest Landowner Roads</u> . DNR, in consultation with Ecology, will design and complete a resource risk assessment of small forest landowner roads for the delivery of sediment to waters of the state. Work with stakeholders to propose an approach to solving identified problems, and focus restoration efforts on small forest landowner lands in the Puget Sound Basin.	Design resource risk assessment and implementation plan by June 2014	soundwide	DNR	Ecology		
C	4.2	Maintain forest roads and implement road	2	<u>Accelerate Family Forest Fish Passage Program Implementation</u> . DNR, in collaboration with other agencies, will seek increased	Additional funding secured by July 2013; Initiate cleaning of backlog and remove 75 fish passage	soundwide	DNR			

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		abandonment plans for working forest lands subject to the Forest Practices Rules on schedule, and ensure federal forest managers meet or exceed state standards for road maintenance and abandonment on federal lands.		support for the Family Forest and Fish Passage Program (FFFPP) based on the resource risk assessment and prioritization and will clear the current backlog of FFFPP projects within the Puget Sound Basin. This should build on strong existing partnerships with federal agencies, such as USDA NRCS, US FWS, NOAA Fisheries, EPA, and Bonneville Power Administration, as well as outreach to private sector and nonprofit sector funding sources.	barriers per year beginning July 2013					
C	4.2	Maintain forest roads and implement road abandonment plans for working forest lands subject to the Forest Practices Rules on schedule, and ensure federal forest managers meet or exceed state standards for road maintenance and abandonment on federal lands.	3	<u>Fish Passage Barriers</u> . WDFW will assess and prioritize fish passage barriers by watershed within the Puget Sound.	Number of watershed habitat assessments and prioritization analyses conducted.	soundwide	WDFW	DNR	RCO	
C	4.2	Maintain forest roads and implement road abandonment plans for working forest lands subject to the Forest Practices Rules on schedule, and ensure federal forest managers meet or exceed state standards for road maintenance and abandonment on federal lands.	4	<u>Enhance RMAP Database</u> : DNR will continue to update the Large Landowner RMAP database to ensure tracking of progress in bringing roads up to current standards by 2016 (or 2021 with approved extension).	RMAP data base updated quarterly with reports from landowners	soundwide	DNR			
C	4.2	Maintain forest roads and implement road abandonment plans for working forest lands subject to the Forest Practices Rules on schedule, and ensure federal forest managers meet or exceed state standards for road maintenance and abandonment on federal lands.	5	<u>RMAP Coordination with Federal Partners</u> . DNR will work to secure executive-level participation from U.S. Forest Service in annual RMAP coordination meetings with landowners, WDFW, Ecology, affected tribes, NOAA-Fisheries, USFWS, affected counties, watershed councils and other interested parties within each watershed (per WAC 222-24-051(11)). Participants will discuss opportunities to provide a coordinated approach within each watershed resource inventory area by (1) prioritizing road maintenance and abandonment planning and (2) exchanging information on road maintenance and stream restoration projects.	By December 2013, DNR convenes 19 WRIA meetings annually and includes USFS in the meetings for WRIsAs where USFS owns land	soundwide	DNR			
C	5.1	Effectively manage and control pollution from	1	<u>Effectiveness of OSS Rule</u> . DOH, in consultation with local health jurisdictions (LHJs) and other interests, will evaluate the	Project design completed by December 2012, draft results compiled by September 2013, and	soundwide	DOH	LHJs		

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		on-site sewage systems.		effectiveness of the state OSS rule, identify potential changes, and outline recommendations to the State Board of Health by December 2013.	recommendations completed by December 2013.					
C	5.1	Effectively manage and control pollution from on-site sewage systems.	2	<u>OSS O&amp;M Program Best Practices</u> . DOH will work with LHJs to identify successes and best practices, develop common performance standards, and recommend approaches to improve core functions of local O&M programs.	Project design completed by December 2012, draft analysis completed by March 2014, and final analysis completed by June 2014. OSS inspection levels at 60 percent by December 2014 in designated areas.	soundwide	DOH	LHJs		
C	5.1	Effectively manage and control pollution from on-site sewage systems.	3	<u>OSS Nitrogen Treatment Technologies</u> . 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 completed by December 2014 and work on standards and guidance, if needed, will begin after that.	OSS installed and testing initiated by August 2012, evaluation of OSS technologies completed by June 2014, and plans for standards and guidance by December 2014.	soundwide	DOH			
C	5.1	Effectively manage and control pollution from on-site sewage systems.	4	<u>Centralized Treatment Outside UGAs</u> . Commerce, in partnership 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 design of the at a least one pilot project by 2014 and construction of a least one pilot project by 2016.	By June 2013, Commerce, in consultation with Ecology and DOH, will produce draft criteria to identify shoreline areas outside urban growth areas that may be appropriate to extend centralized wastewater collection systems. By Nov. 2013, areas meeting those criteria will be mapped and analyzed for suitability pilot projects. By July, 2014 design for at least one pilot project will be completed. Construction for at least one pilot project will be completed by September 2016.	soundwide	Commerce	Ecology	DOH	
C	5.1	Effectively manage and control pollution from on-site sewage systems.	SJI 4	<u>San Juan County OSS Program</u> . San Juan County Health and Community Services will fully implement the On-site Sewage System (OSS) Operation and Maintenance Program Plan.	100% of systems in sensitive areas in compliance and current with inspections by 2014 and 60% of alternative systems county-wide to have inspections between 2010-2014.	local	SJC			
C	5.1	Effectively manage and control pollution from on-site sewage systems.	WS 7	<u>West Sound OSS repairs</u> . Kitsap Public Health will report on the number of OSS failures repaired using funds from the Craft3 septic loan program by December 2013	Number of OSS failures repaired using funds from the Craft3 septic loan program by December 2013	local	Kitsap County			
C	5.2	Effectively manage and control pollution from large on-site sewage systems.	WS 6	<u>West Sound Sewer Feasibility</u> . Kitsap Public Health together with the municipality will conduct sewer infrastructure feasibility study for sewers in areas such as Ostrich and Phinney Bay by December 2013.	Sewer infrastructure feasibility study conducted by December 2013.	local	Kitsap County			
C	5.3	Improve and expand funding for on-site sewage systems and local OSS programs.	1	<u>Regional OSS Homeowner Loan Program</u> . 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 by June 2014.	Project design completed by August 2012, draft analysis of issues and proposed actions completed by March 2014, and final analysis completed by June 2014.	soundwide	DOH	PSP	Ecology	
C	5.3	Improve and expand funding for on-site sewage systems and local OSS programs.	2	<u>Regional OSS Program Funding Source</u> . DOH will evaluate approaches and mechanisms (e.g., a regional flush tax or sewer surcharge) to generate and distribute funds to Puget Sound counties to implement their OSS management plans and programs by June 2014.	Project design completed by August 2012, draft analysis of issues and proposed actions completed by March 2014, and final analysis completed by June 2014.	soundwide	DOH			
C	5.3	Improve and expand funding for on-site sewage systems and local OSS programs.	3	<u>Funding Mechanism for Local OSS Programs</u> . DOH will work to authorize local boards of health to contract with county treasurers to collect fees via property tax statements to implement local OSS plans and programs by June 2012.	Bill introduced and legislation passed and signed by June 2012.	soundwide	DOH			

STRATEGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
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.		No near-term actions. Work is focused on implementation of ongoing programs.						
C	6.2	Reduce pollution loading to Puget Sound by preventing and reducing combined sewer overflows.	1	<u>Integrated Municipal Stormwater and Wastewater Plans</u> . PSP, in collaboration with Ecology, will convene a group to make recommendations about use of integrated municipal stormwater and wastewater plans to meet Clean Water Act water quality objectives. This effort will recognize the use of integrated approaches as a way to prioritize allocation of resources to achieve the greatest environmental benefit, at the earliest time, consistent with meeting Clean Water Act obligations and applicable state laws, through appropriate sequencing of work.	By December 2012, conduct at least one initial meeting to scope work plan; By March 2013, a work Plan approved by key partners; By December 2013, recommendations for integrated stormwater and wastewater planning and implementation made to the Leadership Council. These dates are dependent on conclusions of current 2012 negotiations. If those negotiations are still in progress by September 2012, PSP will work with the Leadership Council to set new performance milestone dates.	soundwide	PSP	Ecology		
C	6.3	Implement priority upgrades of municipal and industrial wastewater facilities.		No near-term actions. Work is focused on implementation of ongoing programs.						
C	6.4	Ensure all centralized wastewater treatment plants meet discharge permit limits through compliance monitoring, technical assistance, and enforcement where needed.	1	<u>Water Quality Standards Update</u> . Ecology has initiated rule making to amend the Water Quality Standards to update and develop predictable regulatory compliance tools that address short and long-term source control programs. The proposed changes will provide predictable regulatory tools to help entities comply with existing and new source control requirements or discharge limits. The changes will allow compliance with requirements while they effectively work toward meeting permit limits and control sources of pollutants.	Rule Initiation: October 25, 2011  Rule Adopted: June 30, 2013	soundwide	Ecology			
C	6.5	Promote appropriate reclaimed water projects to reduce pollutant loading to Puget Sound.		No near-term actions. Work is focused on implementation of ongoing programs.						
C	7.1	Improve water quality to prevent downgrade and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas.	1	<u>Shellfish Best Practices Library</u> . DOH will work with the Partnership, Ecology, the Conservation Commission, and Conservation Districts and local governments to create a best practices library or menu highlighting successful locally-driven efforts to assist in the development of shellfish protection districts, shellfish protection programs, and shellfish growing area restoration activities, such as the Henderson Inlet, Oakland Bay, and Samish Bay efforts.	By June 2013, complete survey of partners to identify practices used to identify and correct nonpoint pollution problems that impact shellfish growing areas (subject areas include on-site sewage systems, agricultural practices, stormwater, outreach and education monitoring). Develop best practices library by December 2013.	soundwide	DOH	PSP	Ecology	WSSC
C	7.1	Improve water quality to prevent downgrade	2	<u>Annual evaluation of shellfish restoration efforts</u> . The Partnership will convene an annual meeting of the Departments of Health,	Net increase of 2,700 acres of harvestable shellfish beds, of which 1,750 should be from	soundwide	PSP	DOH	WSDA	EPA

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		and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas.		Ecology, Agriculture, Conservation Commission and EPA to evaluate restoration efforts in shellfish growing areas in Puget sound and report the results to the region.	beds presently classified as prohibited					
C	7.1	Improve water quality to prevent downgrade and achieve upgrades of important current tribal, commercial and recreational shellfish harvesting areas.	3	<u>Pollution Control Action Team</u> . Ecology, working with DOH, WSDA, EPA and the Tribes will form a Pollution Control Action Team (PCAT) to respond quickly when areas are identified where water quality problems threaten shellfish areas. They will initiate community outreach and education, pollution identification, inspection, technical assistance to local agencies and landowners and finally, enforcement. The team will focus its work in priority areas and support PIC programs where they are established. The first effort will be in Drayton Harbor and Portage Bay.	Reduce fecal coliform loading in each priority area to upgrade the status of closed areas and prevent further degradation for those with a negative trend	soundwide	Ecology	DOH	WSDA	EPA
C	7.2	Restore and enhance native shellfish populations.	WS 13	<u>West Sound Shellfish Gardening</u> . By April 2013, Kitsap Public Health, in partnership with the Puget Sound Restoration Fund, will expand a pilot shoreline owner shellfish gardening program to at least one additional site, as an outreach tool for water quality and shoreline issues. By December 2013, the program will be expanded to include two additional sites. Concurrently, Kitsap Public Health will report on the results and actions from PIC shoreline monitoring affecting shellfish growing areas, e.g. number of fecal sources identified and corrected.	Shellfish gardening pilot program expanded to one additional site by April 2013. By December, expand to two additional sites.	local	Kitsap County	Puget Sound Restoration Fund		
C	7.3	Ensure environmentally responsible shellfish aquaculture based on sound science.	1	<u>Aquaculture Shoreline Master Program Handbook</u> . Ecology will publish an aquaculture Shoreline Master Program Handbook section with special emphasis on geoduck aquaculture and finfish net pen operations, update its aquaculture web resources to make them more comprehensive, and provide direct assistance and training to local governments on the aquaculture handbook. When the final findings of the Sea Grant geoduck aquaculture research are available, Ecology will review them and other appropriate, better sound science, to determine if amendments to WAC 173-26 are warranted.	Handbook complete or not; number of local governments reached through training and technical assistance	soundwide	Ecology			
C	7.3	Ensure environmentally responsible shellfish aquaculture based on sound science.	2	<u>Areas Suitable for Future Shellfish Aquaculture</u> . Ecology will coordinate with interested local governments, DNR, and stakeholders to 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. Ecology will support marine spatial planning related to aquaculture by coordinating with interested local governments, DNT, and stakeholders on gathering, compiling and ground-truthing baseline information on current aquaculture and filing data gaps.	Mapping completed	soundwide	Ecology			
C	7.3	Ensure environmentally responsible shellfish aquaculture based on sound science.	3	<u>Shellfish Model Permitting Program</u> . The Department of Ecology will work with the Governor's Office of Regulatory Assistance (ORA) to lead and facilitate a state team to develop and implement a Model Permitting Program that ensures early and continued coordination among state and federal agencies, tribes and local governments for permitting and licensing of shellfish aquaculture.	By June 2012, sign operation agreement; by September 2012, identify pilots; by November 2012, establish pilot project timelines	soundwide	Ecology	ORA		

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C	7.3	Ensure environmentally responsible shellfish aquaculture based on sound science.	4	<u>Nitrogen Control Pilots Using Shellfish</u> . Ecology will work with DNR, the shellfish industry and researchers to create pilot projects testing the use of mussel culture or other suspended or beach culture to help address nitrogen pollution in sensitive areas, such as Quartermaster Harbor.	Two pilot projects initiated by January 2015	soundwide	Ecology	DNR		
C	7.4	Enhance the publics' connection to shellfish and increase recreational harvest opportunities.	1	<u>Shellfish Interpretive Programs and Events</u> . By June 2014, State Parks, in collaboration with other public, tribal and private interests, will conduct shellfish interpretive programs and events to help forge personal connections between clean, productive Puget Sound waters, the shellfish we eat, and the iconic role shellfish occupy in Washington's cultural and culinary identify.	By December 2012, develop interpretive concepts and action plans with partners, and identify up to three pilot program locations. By October 2013, implement and evaluate pilot shellfish interpretive programs and events at selected State Parks. By June 2014, expand programs to additional Parks, incorporating evaluation results from pilot programs.	soundwide	State Parks			
C	7.4	Enhance the publics' connection to shellfish and increase recreational harvest opportunities.	2	<u>Shellfish Messages, Events, and Materials</u> . Washington Sea Grant will partner with state and federal agencies on a planning process to develop shellfish-related messages, publicize events, and develop materials.	By September 2012, planning process is convened. Additional measures will be set in the future.	soundwide	SeaGrant			
C	7.5	Answer key shellfish safety research questions and fill information gaps.	1	<u>Point Source Dilution Analyses Modeling</u> . The Departments of Ecology and Health will work cooperatively under an existing EPA grant to evaluate use of Ecology environmental models for point source dilution analyses in Health's commercial shellfish area classification program.	Complete modeling study by June 2014.	soundwide	Ecology	DOH		
C	7.5	Answer key shellfish safety research questions and fill information gaps.	2	<u>Expand Biototoxin Monitoring</u> . Expand biotoxin monitoring to address the marine toxin causing "Diarrhetic Shellfish Poisoning" (DSP). This involves including DSP into our Marine Biototoxin Monitoring Program. In addition, we must purchase and install special testing equipment to analyze shellfish extracts for this and other biotoxins. The instrument will also be used to develop alternate detection methods for Paralytic Shellfish Poisons (PSP) that eliminates the sacrifice of live test animals.	Purchase equipment and initiate monitoring by June 2012. Include DSP monitoring into the Marine Biototoxin Monitoring Program by June 2013.	soundwide	DOH			
C	7.5	Answer key shellfish safety research questions and fill information gaps.	3	<u>Water Quality and Seasonal Harvest Restrictions</u> . DOH, in cooperation with NOAA's Northwest Fisheries Science Center, will conduct water quality studies of selected shellfish "wet storage" areas in Puget Sound to better correlate environmental conditions with potential causes of illness that seasonally restricts harvest.	Complete field studies to calibrate model by December 2013. Complete final model simulation report by June 2014.	soundwide	DOH	NOAA		
	7.5	Answer key shellfish safety research questions and fill information gaps.	4	<u>Ocean Acidification Blue Ribbon Panel</u> . Ecology, as part of the Washington Shellfish Initiative, will manage the Governor appointed Blue Ribbon Panel on Ocean Acidification to develop clear, actionable recommendations on understanding, monitoring, adapting and mitigation ocean acidification in Puget sound and Washington waters.	By March 2012 convene the panel; by October 2012, submit recommendations	soundwide	Ecology			
C	8.1	Prevent and reduce the risk of oil spills.	1	<u>Traffic and Incident Trends</u> . Ecology will assess trends in ship traffic, vessel incidents and incident notifications for use in targeting inspections and setting standards.	Ecology presents concise report to the Cross PSP Oil Spill Work Group by July 2013	soundwide	Ecology			
C	8.1	Prevent and reduce the risk of oil spills.	2	<u>Evaluate Risk Assessments for Update Needs</u> . Ecology will evaluate existing Puget Sound marine transportation oil spill risk assessments, identify any gaps in marine safety and work with experts to develop and apply appropriate risk reduction measures.	Gaps identified by Ecology, PSP, technical consultant and/or Cross Partnership Oil Spill Work Group.	soundwide	Ecology			
C	8.1	Prevent and reduce the	SJI 1	<u>SJI Marine Manager Workshop</u> . San Juan Marine Resources	Local jurisdictions will consider adopting highest	local	SJMRC			

STRAT EGY	#	SUB-STRATEGY	NTA #	NTA	PERFORMANCE MEASURE	NTA TYPE	OWNER	SECONDARY OWNER	OWNER (3)	OWNER (4)
		risk of oil spills.		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.	priority recommendations within their authority by 2014.					
C	8.2	Strengthen and integrate spill response readiness of the state, tribes, and local government.	STRT 2	<u>Straits Spill Prevention, Preparedness, and Response</u> . Implement and promote improvements in oil spill prevention, preparedness, and response programs and capabilities for the benefit of the Strait of Juan de Fuca and adjacent waters  a. Improve transboundary coordination on oil spills b. Establish Vessel of Opportunity Program in Neah Bay c. Expand oil spill drills along Strait of Juan de Fuca and Coast	In sequence: (a) Ensure 1+ CANUSPAC exercise is conducted and incorporates transboundary movement of personnel and/or equipment; (b) Vessel of Opportunity established in Neah Bay by July 2014 or referenced in contingency plans approved by April 2014; (c) Strait ERN participates in worst case or deployment drill planning process	local	Strait ERN			
C	8.3	Respond to spills and seek restoration using the best available science and technology.	1	<u>WAC 173-182 Revision to Achieve Protection from Spills</u> . Revise WAC 173-182 to conform with HB1186 from the 2011 session, requiring the best achievable protection from the impacts of oil spills, and ensure implementation and enforcement of updated oil spills regulations.	Complete rulemaking by Dec 2012.	soundwide	Ecology			
C	8.3	Respond to spills and seek restoration using the best available science and technology.	SJI 2	<u>Island Oil Spill Association Spill Readiness and Response</u> . Islands Oil Spill Association (IOSA) will maintain local oil spill readiness and response programs 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	To be determined	local	IOSA			
C	8.3	Respond to spills and seek restoration using the best available science and technology.	3	<u>Increase Natural Resource Damage Assessment Values</u> . Revise WAC 173-183 to conform with HB1186 from the 2011 session, requiring Natural Resource Damage Assessment values be increased.	Complete rulemaking by Dec 2012.	soundwide	Ecology			
C	8.3	Respond to spills and seek restoration using the best available science and technology.	4	<u>Identify Species and Locations at Risk in Spills</u> . WDFW will establish planning efforts for coordinated, scientific collection of ephemeral data by local and regional entities for key species and locations at risk in oil spills to enhance response and NRDAR.	Number of ephemeral data plans developed for areas or facilities in high risk locations. Relevant training or preparation completed once the plan is in place.	soundwide	DFW	Ecology		
C	9.1	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.		No near-term actions. Work is focused on implementation of ongoing programs.						
C	9.2	Clean up contaminated sites within and near Puget Sound.		No near-term actions. Work is focused on implementation of ongoing programs.						
C	9.3	Restore and protect water quality at swimming beaches and	1	<u>Freshwater Swimming Beach Program</u> . By 2014, Ecology and DOH will develop a proposal to coordinate a monitoring and notification freshwater swimming beach program for the Puget Sound region.	To be determined	soundwide	Ecology	DOH		

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		recreational areas.								
C	9.3	Restore and protect water quality at swimming beaches and recreational areas.	2	<u>Correct Pollution Problems at Marine Beaches</u> . Ecology and DOH will develop a plan to conduct pollution source surveys and correct pollution problems at marine beaches used for swimming, surfing, diving and other recreational uses. Ecology and DOH will coordinate with local, state and tribal programs that address point source and nonpoint source pollution to assure that activities are not duplicative	A priority list will be developed and 10 shoreline surveys completed by June 30, 2013 and 10 additional shoreline surveys completed by June 30, 2014	soundwide	Ecology	DOH		
C	9.4	Develop and implement local and tribal pollution identification and correction programs.	1	<u>Pollution Identification and Correction Programs</u> . DOH and Ecology will administer EPA grants to help counties and tribes set up sustainable programs to identify and correct nonpoint pollution sources to improve and protect water quality in shellfish growing areas and at marine swimming beaches. These sustainable programs will have ongoing monitoring to identify pollution sources and assess effectiveness of efforts, a local sustainable funding source, and a compliance assurance component.	Award PIC funds and distribute Agricultural BMP funds to at least six Puget Sound counties by July 2012. Metric for each program will be individually set to reflect targets for numbers of BMPs implemented and maintained and systems repaired to address water quality	soundwide	DOH	Ecology	EPA	
C	9.4	Develop and implement local and tribal pollution identification and correction programs.	HC 3	<u>Hood Canal PIC Program</u> . By April 2014, HCCC will complete Phase I of a regional Hood Canal Pollution Identification and Correction program to determine the needs for a comprehensive regional program and advance funding proposal(s) for implementation. The program will provide information about the sources of pollution, including failing septic systems.	April 2014, complete Phase 1. Results of this Phase I approach will allow development and implement of the regional program during Phase II slated for 2014 and beyond.	local	HCCC			
C	9.4	Develop and implement local and tribal pollution identification and correction programs.	WS 8	<u>West Sound Septic System Repairs Using PIC</u> . Kitsap Public Health will report on the number of failing septic systems identified using PIC methodology, the number repaired and associated improvements in water quality by December 2013.	Number of failing septic systems identified using PIC methodology, the number repaired and associated improvements in water quality by December 2013	local	Kitsap County			
D	1.1	Provide backbone support for the recovery effort and management conference.		No near-term actions. Work is focused on implementation of ongoing programs.						
D	1.2	Maintain and update the Action Agenda as the shared recovery plan.	1	<u>Establish Interim Milestones for Targets</u> . PSP will lead a collaborative effort to establish interim milestones for all 19 ecosystem recovery targets that describe expected results for incremental progress toward the adopted targets or for key steps in the critical path. In 2012 and 2013 PSP staff and boards will engage partners to establish milestones that parties agree will inspire meaningful contributions to ecosystem recovery and can be used to evaluate progress toward the 2020 ecosystem recovery targets.	In July 2012, confer with ECB regarding design of the process and composition of workgroups. August, 2012, confer with Leadership Council regarding schedule and process. October 2012, initiate interim milestone review process. 25% complete by February 2013; 50% complete by June 2013; 75% complete by September 2013; 100% complete by November 2013.	soundwide	PSP			
D	1.2	Maintain and update the Action Agenda as the shared recovery plan.	2	<u>RCW 90.71.370(4)(b) Program Review</u> . Consistent with RCW 90.71.370 (4), the Partnership, in consultation with appropriate state and local agencies, will review programs (identified in RCW 90.71.370(4)(b)) that fund activities that contribute to Action Agenda implementation. The Partnership will make recommendations to the Governor and Legislature regarding program changes, including proposed legislation to implement the recommendation. The scope of review will include: evaluating types of projects and funding levels, contribution of the program to meeting Vital Sign targets, funding criteria that emphasizes Action Agenda priorities in decision-making, and assessment of ways to make programs and funding approaches more strategic in	Leadership Council initiates review (August 2012), ECB develops comprehensive strategy (December 2012), ECB identifies cost effectiveness pilot programs (March 2013), Leadership Council 2 <sup>nd</sup> annual review (June 2013), ECB receives draft pilot program study results (September 2013), Leadership Council receives draft report (January 2013), Report to Governor and legislature (June 2014)	soundwide	PSP			

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				implementing the Action Agenda. The report to Governor and Legislature completed by June 2014.						
D	1.2	Maintain and update the Action Agenda as the shared recovery plan.	3	<u>Alignment with Strategic Initiatives.</u> PSP will align agency resources and effort with implementation of the strategic initiatives.	In October 2012 PSP will report to the Leadership Council on progress and plans to align agency efforts and resources with strategic initiatives.	soundwide	PSP			
D	2.1	Advance the coordination of local recovery actions via local integrating organizations.	HC 1	<u>HCCC Integrated Watershed Management Plan.</u> In coordination with a number of partners, HCCC will complete its Integrated Watershed Management Plan (IWMP) by June 30, 2013. Based on critical, high priority strategies and actions identified in the IWMP, HCCC will develop Local Near Term Actions for incorporation into the Action Agenda.	Plan complete by June 30, 2013. Based on critical, high priority strategies and actions identified in the IWMP, HCCC will develop Local Near Term Actions for incorporation into the Action Agenda	local	HCCC			
D	2.1	Advance the coordination of local recovery actions via local integrating organizations.	HC 5	<u>HCCC Climate Change Symposium.</u> By June 30, 2013, HCCC will convene a climate change symposium to identify unique vulnerabilities and potential adaptation strategies for the Hood Canal Action Area. Based on results of this symposium, HCCC will identify high priority adaptation strategies.	Convene symposium by June 2013. Based on results of this symposium, HCCC will identify high priority adaptation strategies.	local	HCCC			
D	2.2	Build and maintain collaborative partnerships with tribes to identify and advance recovery actions.	1	<u>Tribal Habitat Priorities.</u> PSP will identify work plans and propose future updates to the Action Agenda to address priority work in the Tribal Habitat Priorities on page 93 of the Action Agenda.	By October 2012 convene at PTCC meeting and review a specialized report card based on the Tribal Habitat Priorities. By December 2012 present a work plan to identify and address outstanding issues of concern to the Leadership Council.	soundwide	PSP			
D	3.1	Work collaboratively to track and report on implementation performance.		No near-term actions. Work is focused on implementation of ongoing programs.						
D	3.2	Work collaboratively to report on recovery progress.	1	<u>Best Practices Forums.</u> PSP, in collaboration with Washington Sea Grant and the Local Integrating Organizations, will convene semi-annual forums involving local practitioners, stewardship groups and local project managers to share best practices on project implementation, monitoring and performance measurement. The first of the forums will begin by December 2012. Subsequent forums will provide an opportunity to share standardized monitoring techniques and protocols as well as other topics identified by participants that would assist them in implementing and evaluating projects.	<ul style="list-style-type: none"> <li>• Convene semi-annual forums (March 2013; September 2013, March 2014, September 2014)</li> <li>• Add participants to the base of practitioners by 20% year on year.</li> </ul>	soundwide	PSP			
D	4.1	Oversee strategic planning for Puget Sound recovery science.	1	<u>Adaptive Framework and Cycle.</u> Develop the PSP adaptive management framework and technical tools to assist in the steps of the adaptive management cycle.	By December 2012, publish technical memorandum describing PSP's adaptive management framework; By December 2012, publish technical memorandum describing methods of assessing pressures on the Puget Sound ecosystem	soundwide	PSP			
D	4.2	Implement a coordinated, integrated ecosystem monitoring program.		No near-term actions. Work is focused on implementation of ongoing programs.						
D	5.1	Prioritize targeted stewardship issues, actions and audiences		No near-term actions. Work is focused on implementation of ongoing programs.						

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		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.								
D	5.2	Collaboratively develop and promote science-based targeted communications and behavior change strategies across the region.	1	<u>Strategic Social Marketing Frameworks</u> . PSP works with partners to develop strategic social marketing frameworks to support soundwide behavior change initiatives by conducting, synthesizing and disseminating formative research relative to the adoption of specific priority practices.	Formative research on at least two practices is underway by June 2012; research on at least eight practices complete by December 2013. Social marketing framework guidance on two BMPs disseminated to partners by December 2012; on all eight by June 2014.	soundwide	PSP			
D	5.3	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	<u>BMPs for Stewardship and Tree Planting</u> . In 2012, PSP and partners analyze two priority BMPs as early-action initiatives: (1) residential pesticide reduction/elimination, and (2) tree planting, canopy cover and soil health, as identified in STORM's Tier 2 BMPs. If warranted, regional behavior change strategies would be developed and launched for implementation with local partners.	1) Formative research on residential pesticides is completed by August 2012. If initiative is warranted, pilot program would be launched by December 2012 and evaluation will be underway by April 2013. 2) Formative research on tree planting, canopy cover, and soil health is completed by December 2012; Program strategy developed by March 2013; Grants and contracts to fund work issued by June 2013; evaluation underway by December 2013.	soundwide	PSP			
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.		No near-term actions. Work is focused on implementation of ongoing programs.						
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.		No near-term actions. Work is focused on implementation of ongoing programs.						

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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.		No near-term actions. Work is focused on implementation of ongoing programs.						
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.		No near-term actions. Work is focused on implementation of ongoing programs.						
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	<u>Phase 2 of Puget Sound Starts Here</u> . PSP and partners implement Phase 2 of <i>Puget Sound Starts Here</i> campaign. PSP, STORM and Ecology ensure that messages reflect the demography, regional identity and issues facing the Puget Sound.	Mass media content developed by November 2012; Web and social media developed and launched by October 2012; Television media launched by May 2013. Campaign achieves 50% brand awareness among Puget Sound's 4.5 million residents by July 2015.	soundwide	PSP			
D	6.2	Incorporate and expand Puget Sound related content in diverse delivery settings (e.g., recreation, education institutions, local government, neighborhood and		No near-term actions. Work is focused on implementation of ongoing programs.						

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		community groups, nonprofit organizations, businesses). Connect residents with public engagement and volunteer programs.								
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	<u>K-12 Curricula</u> . 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.	Schools are connected with community resources so that over half of the school districts in Puget Sound have place-based education programs by 2014	soundwide	Pacific Education Institute			
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.		No near-term actions. Work is focused on implementation of ongoing programs.						
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.		No near-term actions. Work is focused on implementation of ongoing programs.						
D	7.1	Apply appropriate social science to Puget Sound recovery to increase clarity and effectiveness of targeted actions, audiences,		No near-term actions. Work is focused on implementation of ongoing programs.						

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		opportunities, strategies, and evaluation metrics.								
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	<u>Behavior Change Program Guidance</u> . PSP provides uniform guidance for partners conducting behavior change programs to (1) enhance priority practices, (2) ensure that programs intended to address these priority practices are based on proven methods, (3) incorporate the necessary formative research to help programs achieve desired outcomes, and (4) incorporate effective evaluation strategies.	Guidance and policies for Model Stewardship Program Grants developed by September 2012; Non-grant guidance for partners developed by December 2012	soundwide	PSP			
D	7.3	Maintain centralized capacity to sustain and enhance the regional Puget Sound Starts Here campaign.		No near-term actions. Work is focused on implementation of ongoing programs.						
D	7.4	Provide public information conduits connecting individuals to local activities, resources and decision-making processes—including cost-share programs, technical assistance, volunteer experiences and ways to engage in civic structures and processes.	1	<u>Citizen Action Training School</u> . PSP and grantee(s) establish a Citizen Action Training School to 1) build awareness of Puget Sound issues and related governmental structures and processes, and 2) increase citizen participation in local, state and federal decision-making processes affecting Puget Sound.	Program launched by December 2012. By July 2015, six iterations of the program completed; a minimum of 150 community leaders trained; 7,500 hours invested in resulting community projects; and written curricula on effective civic engagement disseminated for ECO Net member use.	soundwide	PSP			
D	7.5	Enhance strategic networks and tools that support stewardship partners and outcomes; including ECO-Net, STORM, The Northwest Straits Initiative and Marine Resource Committees, tribes, municipalities not covered by stormwater permits, public agencies, funders, universities, NGOs and others.		No near-term actions. Work is focused on implementation of ongoing programs.						
D	7.6	Work regionally and locally to remove implementation barriers (e.g., physical,		No near-term actions. Work is focused on implementation of ongoing programs.						

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		economic, regulatory, enforcement, policy), and enable and incentivize adoption of stewardship actions.								
E	1.1	Maintain and enhance federal funding for implementation of Action Agenda priorities.	1	<u>Puget Sound Recovery Act Passage.</u> PSP to continue work with Washington, coastal and other key delegation staff to encourage passage of the Puget Sound Recovery Act by December 30, 2014.	If not passed during 112th session of Congress: By February 2013 meet with key Washington delegation members to ensure House and Senate champions have been secured for bill in the 113th session; Meet with House and Senate champions, pertinent committee members on a quarterly or more frequent basis, as needed, to provide information and gain updates on progress for passage: By March 2014 testify and provide information to Congress for committee hearings.	soundwide	PSP			
E	1.1	Maintain and enhance federal funding for implementation of Action Agenda priorities.	2	<u>Pacific Coast Salmon Recovery Funds.</u> PSP, in collaboration with the Salmon Recovery Council, will craft and lead outreach strategy to increase Pacific Coast Salmon Recovery Funds with goal of securing federal match towards goal of fully funding the Puget Sound Chinook Salmon Recovery plan at \$120M per year by December 2014.	By October 2012, hold 4 meetings and briefings with key decision-makers within federal government to influence federal FY13 appropriations and FY14 budget formulation to increase federal share towards meeting \$120M per year funding target. By October 2013, provide 4 briefings and in-state field visits with key decision-makers within the federal government to provide status of update to the Puget Sound Chinook Recovery Plan funding estimate and ways to incorporate into federal FY15 budget process.	soundwide	PSP	SRC		
E	1.2	Focus federal agency budgets and national programs on Action Agenda priorities.	1	<u>Farm Bill and Water Quality.</u> PSP will work with NRCS and Partners to identify and increase funding to Puget Sound through the Farm Bill to improve water pollution prevention efforts and habitat protection and restoration efforts in rural areas in this biennium. Partners will also develop a system to identify and track both the need and completed requests for these programs in the NRCS PRISM database.	Meet with federal and state partners twice a year to direct partner funds to strategic areas; Follow up and facilitate if needed the efficient allocation of funds to on-the-ground efforts of the agricultural community with a target to allocate funds in each calendar year.	soundwide	PSP	NRCS		
E	1.2	Focus federal agency budgets and national programs on Action Agenda priorities.	2	<u>DOD Readiness and Environmental Protection.</u> PSP to convene at least three meetings with DOD installations by March 2013. These meetings will focus on strategic planning and outreach with public officials and local stakeholders in support of DOD (Navy base Kitsap and JBLM) and state, federal and NGO partners collaborating on habitat and funding needs with goals of expanding the Dept of Defense Readiness and Environmental Protection Initiative (REPI) within Puget Sound. The goal of this work is to protect and restore increased ecosystem function that are related to the ability of DOD entities to accomplish their missions, preserve native biodiversity and advance species recovery.	By August 2012 outreach materials will be crafted by PSP and USFWS that delineate timelines, priority actions for proactively addressing encroachment related to potential ESA listings and funding strategy for resourcing an Integrated Conservation Team to focus on species recovery while abating restrictions to JBLM and the South Sound's economic development. By July 2013 convene at least 3 meetings with Navy, agencies and NGO partners collaborating on Hood Canal to share criteria for each entity's decision-making, prioritize and align acquisition needs and document acquisition and funding strategies for REPI, matching funding and other sources.	soundwide	PSP	DOD		
E	1.3	Maintain, enhance, and	1	<u>Stormwater Priorities.</u> PSP and Ecology work with partners to	By January 2014 use data from the Stormwater	soundwide	PSP	Ecology	ECB	

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		focus state funding for implementation of Action Agenda priorities.		increase funding through Section 319(h) Nonpoint Source Grants, Clean Water State Revolving Fund, and Ecology Performance Partnership Grants to address stormwater priorities by April 2014.	Needs Assessment and the ECB Funding committee to craft funding strategy and outreach materials to inform decision-makers about the priorities, amounts and types of state and federal government investments required to help share the burden of costs so that we can adequately address the scope of stormwater problems and meet related 2020 ecosystem recovery targets.					
E	1.3	Maintain, enhance, and focus state funding for implementation of Action Agenda priorities.	2	<u>Puget Sound Acquisition and Restoration Fund</u> . PSP, in collaboration with the Salmon Recovery Council, will craft and lead an outreach strategy to renew and increase Washington state's Puget Sound Acquisition and Restoration Fund with goal of securing state match towards goal of fully funding the Puget Sound Chinook Salmon Recovery plan at \$120M per year by December 2014.	By October 2012 hold 4 meetings and briefings or field visits with key decision makers to educate them about Puget Sound acquisition and restoration opportunities and the funding levels needed to do the work.	soundwide	PSP	SRC	RCO	
E	1.3	Maintain, enhance, and focus state funding for implementation of Action Agenda priorities.	3	<u>State Funding</u> . PSP will work closely with state, local and private partners to pursue state legislation or other mechanisms to provide adequate funding for critical water quality including OSS management and habitat protection and restoration programs through June 2014.	Proposal complete by August 2012 to be included in Governor's 2013–15 Biennial Budget request; Proposal enacted by Legislature in the 2013–15 Biennial Budget	soundwide	PSP			
E	1.4	Maintain and enhance local funding for implementation of Action Agenda priorities.	1	<u>Local Funding Mechanism</u> . PSP, working with the ECB funding committee, will lead the development of a legislative strategy by October 2012 to adopt a funding mechanism, which local governments around the Sound could elect to use to address Puget Sound recovery priorities.	PSP to convene a subcommittee of the ECB to form the coalition and develop a workplan that uses data on costs for Action Agenda implementation, funding gaps and will result in new proposals to fill funding gaps and efficiently use current financial resources. (October 2012); PSP, ECB and coalition members review funding needs for an integrated package of stormwater, habitat, flooding and erosion control 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 2012); Build support for and introduce any legislation recommended in June 2012 in the 2013 legislative session by November 2012	soundwide	PSP	ECB		
E	1.4	Maintain and enhance local funding for implementation of Action Agenda priorities.	2	<u>Rate Study of Special Purpose Districts</u> . PSP will 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	Report complete and submitted to the LC with recommendations by December 2012.	soundwide	PSP			
E	1.5	Develop opportunities for private sector and philanthropic funding	1	<u>Coordination with Philanthropic Community</u> . PSP will coordinate with the philanthropic community to encourage collaboration on implementation of highest priority actions in the Action Agenda by	Hold two meetings per year with major philanthropic donors through June 2014 to provide outreach about Puget Sound priorities	soundwide	PSP			

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		for implementation of Action Agenda priorities.		June 2014	and progress, philanthropic needs and roles of partners.					
E	1.6	Develop and implement market-based mechanisms for implementation of priorities in the Action Agenda.	1	<u>Compensatory Mitigation Programs</u> . PSP to provide assistance, where necessary, on the development of in-lieu-fee (ILF) compensatory mitigation programs in Hood Canal, Pierce County and Thurston County. HCCC is working with partners in this process and will be in position to implement high priority actions from the ILF for 2013 and beyond. PSP will work with HCCC to track implementation progress and achievement of outcomes.	Complete ILF Mitigation Program by June 2012. HCCC, working with its partners in this process will be in position to implement high priority actions from the ILF for 2013 and beyond. Pierce County and Thurston County programs adopted by December 30, 2012.	soundwide	PSP	US Navy	HCCC	