



2015

STATE OF THE SOUND

REPORT TO THE COMMUNITY



PUGET SOUND
PARTNERSHIP

“I don’t believe in magic.

I believe in the sun and the stars, the water, the tides, the floods, the owls, the hawks flying, the river running, the wind talking. They’re measurements. They tell us how healthy things are. How healthy we are. Because we and they are the same. That’s what I believe in. Those who learn to listen to the world that sustains them can hear the message brought forth by salmon.”

Billy Frank Jr., tribal and treaty rights activist (1931-2014)



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Cover photo: Stand-up paddling on the Seattle Waterfront by Kiliiii Fish. Photos in this report are either owned by the Puget Sound Partnership or used with permission. Photographers include Kiliiii Fish, Brian DalBalcon, Tim Rue, Brandon Sawaya, and the Northwest Indian Fisheries Commission.

www.psp.wa.gov/sos

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LISTENING TO THE SOUND

“Puget Sound is a deceptive wonder. Its haunting beauty obscures the slow-flowing poison of urban runoff and the lowering of pH from ocean acidification. The result imperils shellfish and marine life. The Jewel of Western Washington, Puget Sound is at risk.”

The Seattle Times, October 2015

Perhaps this statement comes as a surprise—that this majestic place, the largest estuarine water body in the nation, the bounty upon which millions of people depend for our thriving economy, our life-sustaining food and water, our spiritual and recreational lives—is silently suffering.

After all, when we hear “Puget Sound,” it is easy to picture pristine sparkling waters dotted with evergreen-covered islands, or to envision friends and family gathering oysters from the beach and pulling crab pots. Maybe you think of landing a salmon, silently gliding through the water with paddles and sails, or kids splashing and laughing on the beach.

Unfortunately, despite valuable protection and recovery efforts, the rate of damage to Puget Sound still outpaces the rate of recovery. Issues such as rapid population growth, the need to clean up legacy pollution, antiquated infrastructure systems (such as stormwater and transportation), as well as emerging topics like ocean acidification, combine to challenge our ability to outpace the damage being done. Redoubled commitment, investment, and political will to sustain the Puget Sound recovery effort will be required to succeed.

The healthy and living Puget Sound we all want simply cannot be had if we do not protect it against the problems it faces. We cannot ignore the signs of trouble, even those hidden below its sparkling surface: young salmon struggling to survive polluted waters, sea stars melting from unknown ailments, shellfish dying in acidifying waters, and swimming beaches closed as a result of deteriorated water quality.

HOWEVER, OUR INVESTMENTS ARE LEADING TO GOOD NEWS FOR THE FUTURE. In recent months, we have seen an astounding five orca births. We are also seeing improvement on some of our long-term measures of progress. More importantly, however, we have learned a great deal from our early recovery efforts and are using that experience to focus the approach to achieving the region’s Puget Sound recovery goals.

We do this work with hundreds of partners, including many sovereign Puget Sound tribes, working together toward the most effective and efficient actions to address our evolving challenges. It encompasses all the peoples and livelihoods in Puget Sound—from the mountain tops through forests, farms, suburbs, cities, and ultimately down into the Sound. We are working as a region to build resilience into this natural system so that we can adapt, grow, and remain vital in the face of a rapidly changing world. Join us in building a place that will continue to sparkle for our children and theirs.

This brochure provides an introduction to the State of the Sound as well as a little about who we are and what we do. We hope you find this overview informative—more information is available on our website, which we invite you to visit: www.psp.wa.gov.

Sincerely,
SHEIDA R. SAHANDY
Executive Director
Puget Sound Partnership

MARTHA KONGSGAARD
Leadership Council Chair
Puget Sound Partnership



WHAT IS PUGET SOUND

GETTING BETTER

HABITAT

Restored estuaries, floodplains, riverbanks, and streambanks provide feeding and resting places for young salmon, migratory birds, and many other species. In some cases, habitat projects can provide multiple benefits like better flood protection and recreational opportunities.

2011-2014: 39 floodplain projects improved 14,500 acres of habitat.

2006-2014: 24 projects restored estuaries to tidal inundation, impacting 2,260 acres.

GETTING WORSE

CHINOOK SALMON

Salmon are an integral part of the food web, highly prized by recreational and commercial fishers, and an important cultural and economic resource for Puget Sound tribes.

2011-2013: While 6 of 22 Puget Sound Chinook salmon populations saw slight upticks, the total number of wild spawning Chinook salmon declined as compared to 2006-2010.

SHORELINE ARMORING

Shoreline armoring, commonly referred to as seawalls or bulkheads, causes once sandy beaches to become rocky and sediment starved, making them inhospitable to many of our native species.

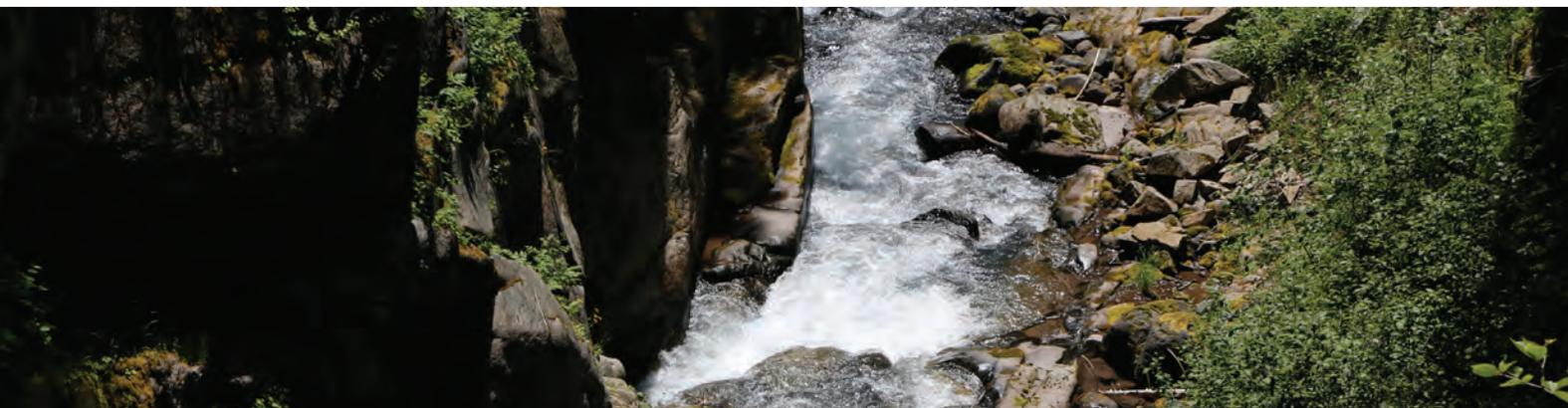
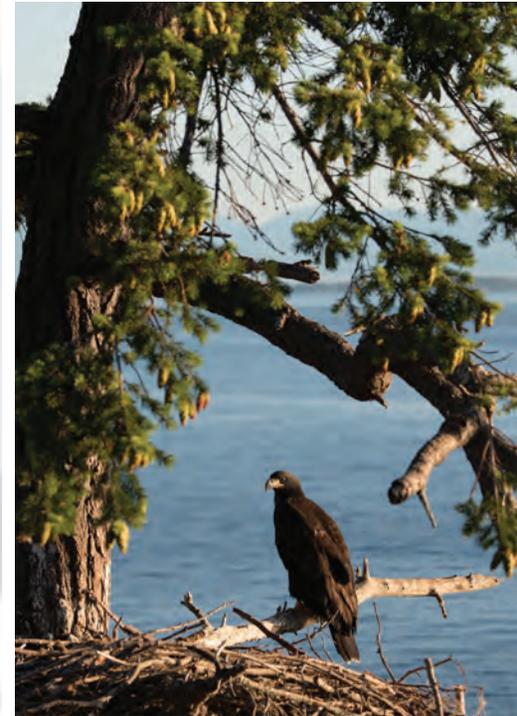
2014: Data suggest a positive rate of shoreline armoring removal versus construction of new armoring.

ORCA

Our local community of orcas depend heavily on the Chinook salmon population. As a result of trouble with the overall food web, the orca population struggles.

2014: Population of 78 whales was the lowest in 20 years.

2015: Current count is 82 (as of October). Despite births of 5 orcas the past year, population status is still lagging behind the 2010 baseline of 86 whales.



TELLING US?



CAUTION

SUMMER LOW FLOWS

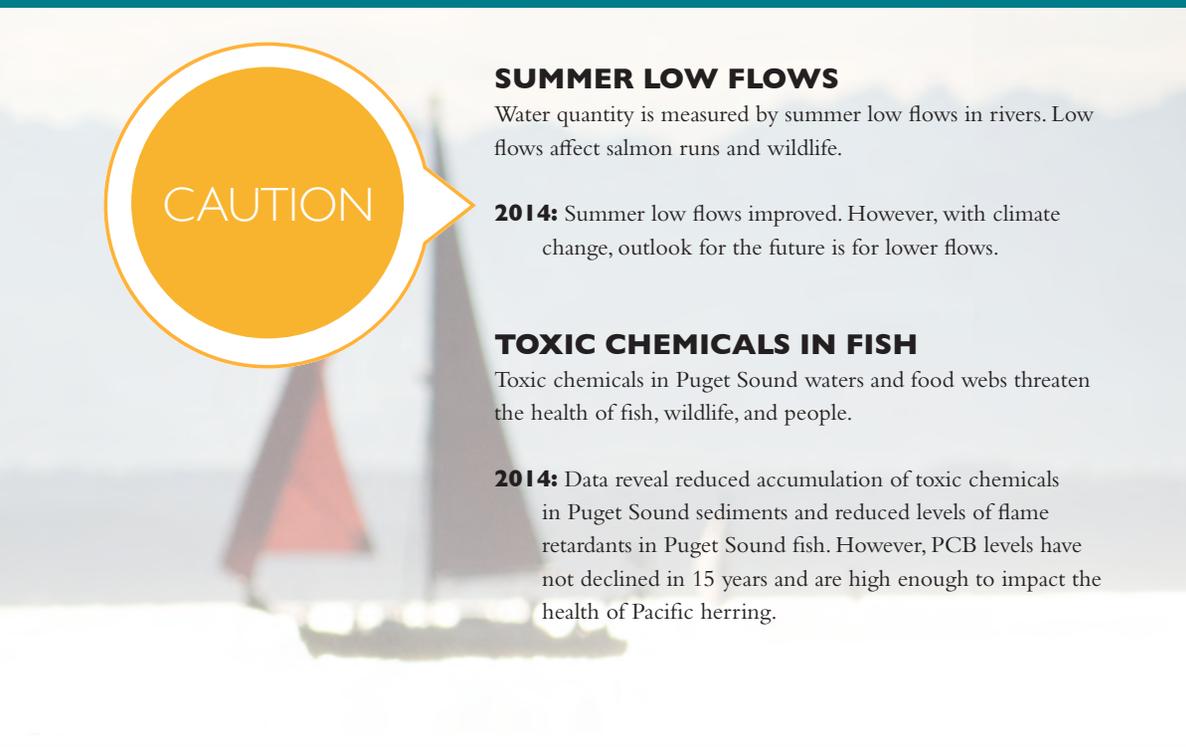
Water quantity is measured by summer low flows in rivers. Low flows affect salmon runs and wildlife.

2014: Summer low flows improved. However, with climate change, outlook for the future is for lower flows.

TOXIC CHEMICALS IN FISH

Toxic chemicals in Puget Sound waters and food webs threaten the health of fish, wildlife, and people.

2014: Data reveal reduced accumulation of toxic chemicals in Puget Sound sediments and reduced levels of flame retardants in Puget Sound fish. However, PCB levels have not declined in 15 years and are high enough to impact the health of Pacific herring.



Habitat and water quality measures are showing improvement, but the health of salmon, orca, and other native populations will take decades of persistent effort to stabilize.

Learn more about the State of the Sound: www.psp.wa.gov/sos

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

*Sheida R. Sahandy
Executive Director, Puget Sound Partnership*



WORKING TOGETHER TO SAVE

1

ROADMAP
TO RECOVERY

3

PRIORITIES

\$875m

ESTIMATED
COST

290

PARTNER
ACTIONS

HUNDREDS OF PARTNERS COME TOGETHER TO PLAN, PRIORITIZE, AND IMPLEMENT THE ACTIONS NEEDED TO RECOVER AND SUSTAIN PUGET SOUND.



PREVENTING STORMWATER POLLUTION

IMPROVES WATER QUALITY AND REDUCES TOXICS IN FISH

PARTNERS IN ACTION: The City of Tacoma reduced the toxicity of its stormwater by removing contaminated sediments from its storm pipes between 2006 and 2011. In Eatonville, the town has used rain gardens to reduce stormwater flow to local streams.



HABITAT RESTORATION AND PROTECTION PROJECTS BENEFIT PEOPLE AND SALMON

PARTNERS IN ACTION: The Snohomish Watershed will soon meet its 10-year, 1,237-acre benchmark for restoring estuarine habitat as outlined in the 2005 Snohomish Basin Salmon Recovery Plan, thanks in part to the combined investments of tribal, federal, state, and local partners in the Qwuloolt Estuary Restoration and Smith Island Restoration projects.



REOPEN SHELLFISH BEDS BY IDENTIFYING AND FIXING POLLUTION SOURCES

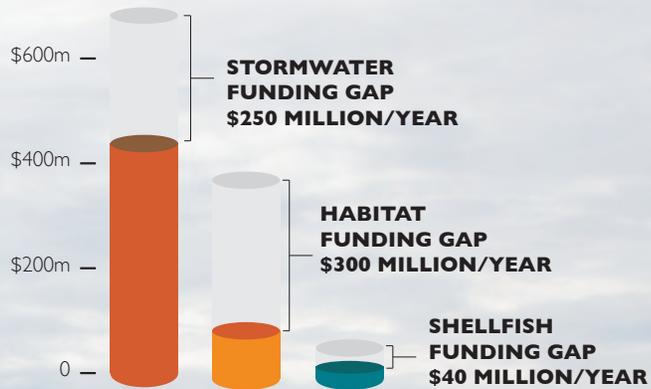
PARTNERS IN ACTION: Kitsap County is partnering with Mason and Jefferson counties, the Port Gamble S'Klallam and Skokomish tribes, and local landowners to reduce pollution flowing into shellfish beds by better managing private septic systems and water from farms.



OUR SOUND

LACK OF FUNDING IS OUR PARTNERS' LEADING BARRIER TO IMPLEMENTING PUGET SOUND RECOVERY ACTIONS.

Funding priorities, current investments, and needs were identified as part of a funding strategy commissioned in 2014 by the Ecosystem Coordination Board, the Puget Sound Partnership's policy advisory body.



PUGET SOUND PARTNERSHIP'S ROLE

ALIGN THE WORK OF PARTNERS

around a shared vision and strategy, the Puget Sound Action Agenda, so that recovery resources can be efficiently allocated based on a science-driven, prioritized plan.

ENSURE SMART INVESTMENTS

through a shared, science-based system of measurement and monitoring that promotes accountability, effectiveness, and progress.

SUPPORT PRIORITY ACTIONS

by advancing policy and mobilizing funding needed for local and regional partners to succeed in achieving Puget Sound recovery goals.

2015-17 PARTNERSHIP FUNDING



The Partnership's \$18.8 million 2-year budget includes \$600,000 for Chinook salmon recovery, \$125,000 for improving shoreline armoring data, and \$879,000 for assessing effectiveness of outcomes.



VISION:

VIBRANT, ENDURING NATURAL SYSTEMS AND COMMUNITIES.

MISSION:

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





 **PUGET SOUND**
PARTNERSHIP

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