

SAVING THE SOUTHERN RESIDENT ORCA



Gov. Inslee puts forward unprecedented funding package that will support recovery efforts

The Pacific Northwest's iconic Southern Resident orcas are struggling to survive. More than a century of development and human activity along the Puget Sound and the ravages of climate change are largely to blame. Significant efforts and investments are needed throughout the region to prevent Southern Resident orcas from falling closer to extinction.

Supporting Southern Resident orca recovery efforts is one of the top priorities of Gov. Inslee's 2019–21 budgets. His operating, capital and transportation budgets for the next biennium include a combined \$1.1 billion in investments to build toward a thriving and resilient orca population.

Besides helping orcas, these investments will have significant benefits for the region's entire ecosystem and complement efforts to recover salmon, tackle climate change, improve water quality and more. These investments are based on actions most likely to yield strong benefits for Southern Residents orcas over the short term while setting up a sustainable, data-driven path for longer-term efforts.

[For more information, see governor's policy brief.](#)



Lack of prey

Southern Resident orcas prey primarily on Chinook salmon. Productive and protected habitat is critical to support sustainable populations of both naturally spawning salmon as well as young hatchery salmon. Fully functioning salmon habitat includes uplands and riparian habitat as well as cool, clear water. To achieve these, Gov. Inslee provides nearly \$363 million in the capital budget for salmon recovery, culvert removal, water quality and water supply projects that will expand and improve salmon habitat across the state. The transportation budget includes \$296 million for the Washington State Department of Transportation to correct fish passage barriers on state highways and to meet the requirements of the U.S. District Court injunction requiring removal of fish passage barriers in most of Western Washington.

In the operating budget, Inslee includes \$6.2 million to boost enforcement and improve compliance with state and federal habitat protection laws, including the Hydraulic Permit Act, Shoreline Management Act and Clean Water Act, as well as to implement legislation improving compliance with the Hydraulics Act.

The governor's operating and capital budgets provide nearly \$19 million to create incentives that encourage voluntary actions by landowners to protect habitat through the Washington State Conservation Commission.

Meanwhile, salmon hatcheries can play an important role in increasing prey abundance for Southern Resident orcas in the near term (three to 10 years) as increasing natural Chinook stocks will take more time. Increases in hatchery production must be consistent with sustainable fisheries management principles and natural stock recovery under the Endangered Species Act. Nearly \$12 million is included in the operating budget to maximize existing capacity at Department

of Fish and Wildlife hatcheries to produce an additional 18.6 million salmon smolts, which will result in approximately 186,000 additional adult returns. Capital investments totaling \$75.7 million are provided to make improvements to keep the hatchery system operating and meet water quality standards.

The recently renegotiated Pacific Salmon Treaty between the United States and Canada will also play an important part in restoring Chinook stocks in the Puget Sound. Gov. Inslee strongly supports full funding by Congress for the habitat restoration projects, increased hatchery production and filling monitoring gaps the treaty calls for. This is likely to result in at least \$43 million in new federal funding for Washington state projects and programs.

Salmon in the Columbia and Snake River systems must travel over 14 dams as they migrate as smolts to the ocean and then return as adults. Breaching of the four Lower Snake River dams has been raised by many as a way to increase Chinook for Southern Resident orcas. The Columbia River system is undergoing a federal environmental impact statement review on the operation of the dams. Breaching of the four Lower Snake River dams is one option being evaluated as part of that federal process. The governor's Southern Resident task force recommended establishing a stakeholder process to discuss the associated economic and social impacts — as well as mitigation costs — of the potential breaching or removal of the Lower Snake River dams. The budget provides \$750,000 for the task force to lead this stakeholder process.

While that process is underway, the governor is directing the Department of Ecology to take the steps necessary to allow for increasing spill of water over the dams. Increased spill will speed travel of smolts out to the ocean and help cool the water. To increase spill, the Department of Ecology needs to raise the allowable amount of dissolved oxygen gas. Ecology has taken the first steps to modifying state water quality standards for greater spill; \$580,000 is included in the operating budget to complete this process.

Saving the Southern Resident orca

In addition, Inslee's operating budget includes \$524,000 to examine issues related to increasing the Chinook population by reestablishing salmon runs above Chief Joseph Dam on the Columbia River and \$743,000 to improve monitoring and management of forage fish that provide the food source for Chinook.

Seals and sea lions (pinnipeds), along with other predators such as fish and birds, impact the abundance of Chinook and other salmon that Southern Resident orcas eat. Thanks in large part to the adoption of the Marine Mammal Protection Act in 1972, the population of pinnipeds along the West Coast has increased dramatically. However, pinniped predation is especially a problem at "pinch points" such as dams or other artificial structures where salmon congregate. The operating budget includes \$4.7 million to collect additional population information and develop management options for pinnipeds in Puget Sound and to increase management actions in the Columbia River.



Disturbance from vessel traffic

To decrease disturbance to Southern Resident orcas, the governor proposes a permanent increase in the distance all vessels must maintain from the orcas to 400 yards and creates an unprecedented permanent "go-slow" zone for all vessels within half a nautical mile of Southern Resident orcas. Scientists recommend that slowing down boats and providing a large zone where boats are absent are both necessary to quiet the waters near orcas. The governor is also requiring a temporary, three-year suspension on all Southern Resident whale watching. This would be reviewed by the Washington State Department of Fish and Wildlife after the three-year period to evaluate the effectiveness of the suspension. In addition, a limited-entry whale watching system for commercial vessels and kayaks would be established through legislation to limit and manage future interactions with orcas in state waters.

The budget includes \$1.1 million for the Washington Department of Fish and Wildlife to enforce these requirements.

The frequent daily transits of Washington state ferries are a significant contributor to underwater noise in Puget Sound. The ferries are also a major source of greenhouse gases. The transportation budget provides \$117 million to begin converting two of the state's Jumbo Mark II ferries from diesel to hybrid-electric and to begin constructing two new hybrid-electric ferries. Besides reducing noise and greenhouse gas emissions, the new and modified vessels will lower operating costs by an estimated \$7 million a year in fuel once the charging stations are in place and the boats are running in full electric mode.

Oil spills represent a low-probability but high-impact risk to Southern Resident orcas. To reduce the risk of a catastrophic oil spill, the governor supports legislation and \$751,000 to fund rule-making that will require tug escorts for barges transporting oil through high risk areas of Puget Sound. Currently only the larger oil tankers have this safety requirement.

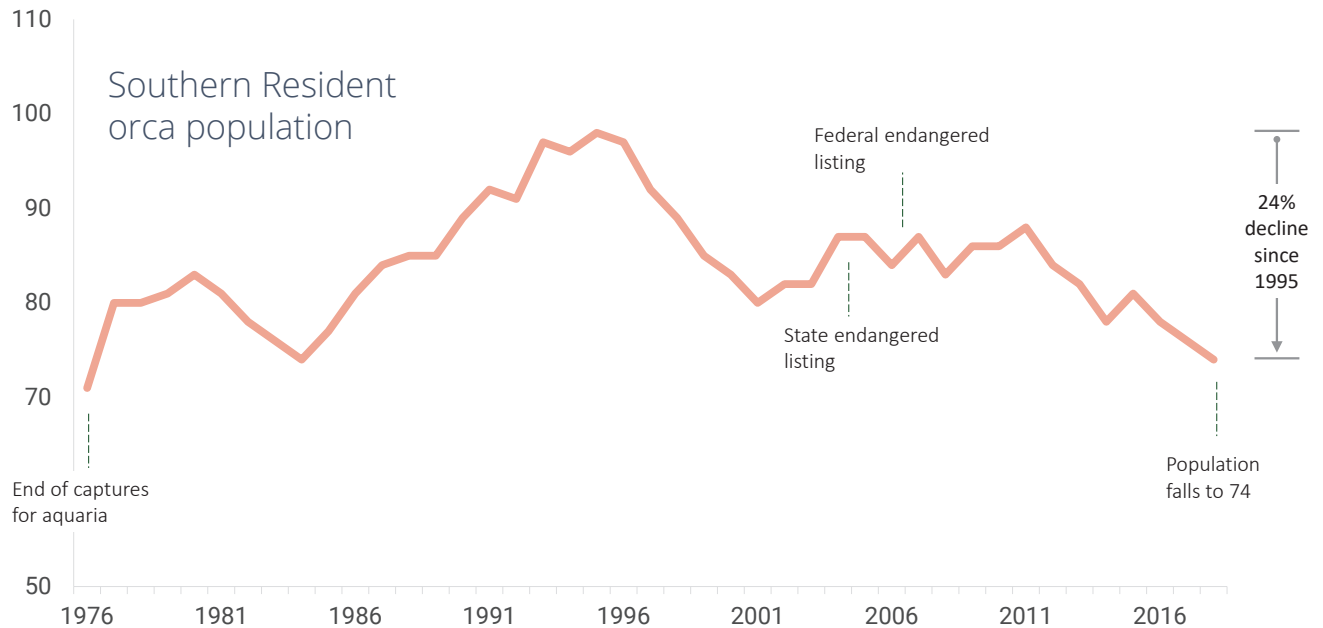


Toxic contaminants

Toxic contaminants in water and sediments are harmful to the marine food web supporting Southern Resident orcas. Besides reducing the survival of salmon and other forage fish, these toxics are also absorbed by orcas, which can disrupt reproduction and suppresses their immune system.

To reduce this threat, the operating budget includes \$3 million to enhance local source control programs and \$4.2 million to speed up the management of toxics cleanups. To remove toxics already contaminating sediments, lands and structures, the operating budget includes \$3.5 million to remove toxic creosote structures and the capital budget has

Southern Resident orca population fell to 74 in 2018, lowest count in 30 years



Source: Washington Department of Fish and Wildlife, Nov. 2018

\$57.8 million to clean up toxic sites, \$51 million to reduce and manage stormwater and \$32 million to address contaminants from wastewater systems and other nonpoint sources.

To prevent toxic chemicals from being used in consumer products and then entering the environment where they pose a health risk to people and the environment orcas rely on, the operating budget includes \$2.9 million to enhance testing for toxics in products and \$236,000 for reducing pharmaceuticals in wastewater. The operating and capital budgets provide \$7.3 million to implement chemical action plans for preventing toxics from entering the environment.

Science and support

Success in recovering Southern Resident orcas will require additional science and monitoring to fill data gaps, measure progress and improve recovery efforts. The operating budget provides \$1.4 million to monitor zooplankton and increase monitoring of pollutants in marine waters and \$3.5 million to conduct research and modeling. Meanwhile, \$1.3 million is included in the operating budget for state agencies to support overall recovery efforts and consultant support for the second year of the Governor’s Southern Resident Killer Whale Task Force.