

Salmon

In Washington and across the Pacific Northwest, salmon populations are struggling. Climate change, habitat loss, pollution and other factors are hampering salmon recovery efforts. Gov. Jay Inslee is proposing an updated strategy and additional investments to protect and restore salmon, steelhead and trout populations across the state.

Saving our struggling salmon

Governor proposes new strategy and major investments to protect and restore salmon populations across the state

More than 30 years ago, the Snake River's Chinook salmon was declared endangered. Since then, the federal government has listed 13 additional salmon species in Washington as endangered or threatened. Dwindling Chinook salmon populations, meanwhile, are pushing Southern Resident orcas closer to extinction.

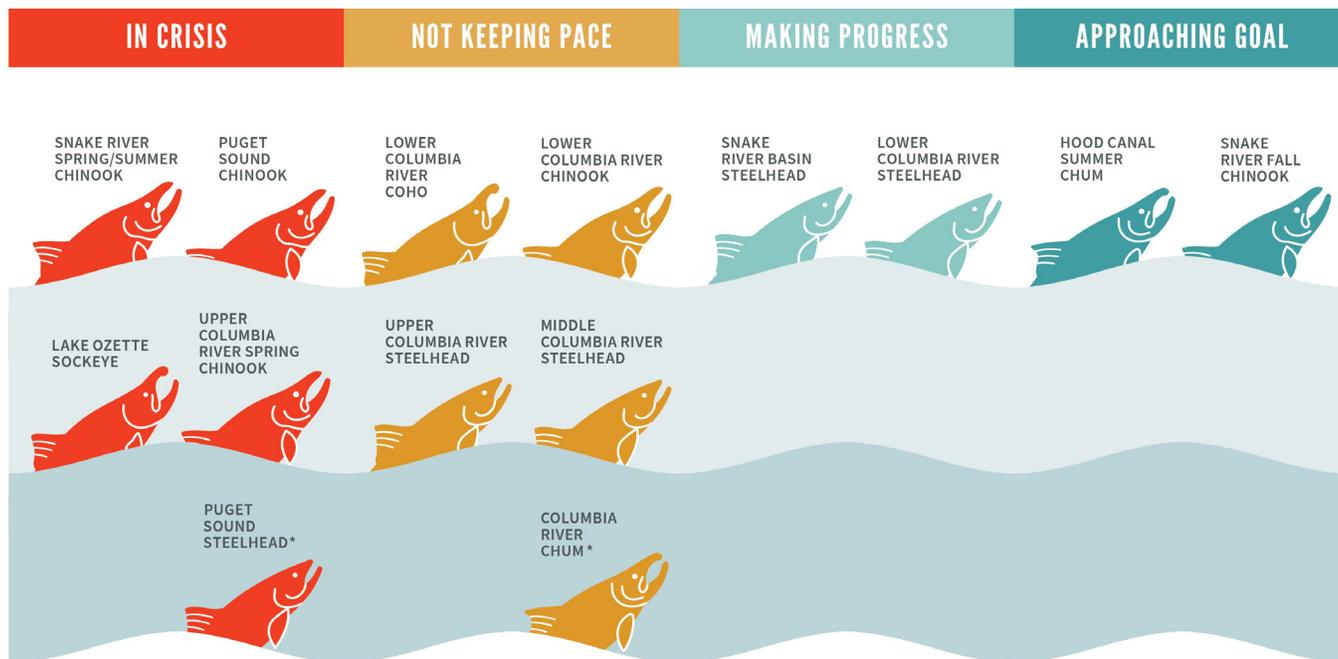
People across the region have been working tirelessly to bring salmon back from the brink, and those efforts have restored thousands of acres of fish habitat. Still, salmon and other species are losing more habitat than they are gaining. Over 70% of our endangered or threatened salmon and steelhead populations are not keeping pace with recovery goals, are still in crisis or require immediate action.

Climate change has increased wildfires and droughts, worsened ocean conditions, warmed streams, shifted food webs, intensified pollutants, thrown predator populations out of balance, and brought ecosystems that support salmon and people to a tipping point.

Drawing from decades of work by numerous experts, stakeholders and tribes, Inslee has put forward an [update to the state's salmon recovery strategy](#). It builds on the work of the [State of Salmon in Watersheds](#) report that the Governor's Salmon Recovery Office completes every two years.



Salmon abundance



* Lacks complete data

Source: Washington Department of Fish and Wildlife

The governor's updated salmon strategy calls for several actions:

- Protect and restore vital salmon habitat.
- Invest in clean water infrastructure for salmon and people.
- Correct fish passage barriers and restore salmon access to historical habitat.
- Build climate resiliency.
- Align harvest, hatcheries and hydropower with salmon recovery.
- Address predation and food web issues for salmon.
- Enhance commitments and coordination across agencies and programs.
- Strengthen science, monitoring and accountability.

Given the condition of our salmon, these actions will be urgently pursued starting in the coming legislative session, and over the next few years.

Using these actions as a template, the governor proposes a strong, initial suite of budget and policy changes to help restore salmon populations across the state. Working aggressively on salmon recovery will help ensure a future with clean and abundant water, thriving habitat and ecosystems, resilience to climate change, a growing orca population, honored tribal treaty rights, commercially and recreationally harvestable fisheries, a diverse and robust economy, engaged communities and strong cultural traditions. Total operating and capital budget investments in new salmon recovery actions is \$187 million.

Protect and restore vital salmon habitat

The governor proposes we create a new salmon habitat standard to protect and restore riparian habitat, the green corridors along rivers and streams that are important for clean, cold water during critical periods of a salmon's lifecycle. Titled the Lorraine Loomis Act — after a prominent salmon advocate and Swinomish tribal elder — this legislation sets a 'measurement

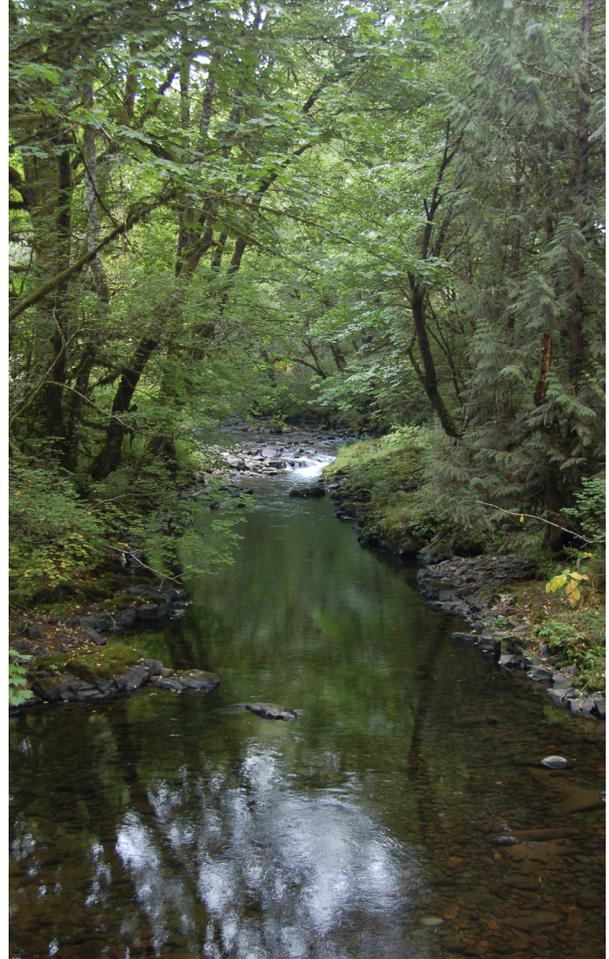
standard' based on the height of trees that grow in that area to create the right size of riparian zone. This will protect riparian corridors from development, incorporate the standard in local land use plans, and provide landowners with financial assistance to help them meet the new requirement.

The new standard implements recommendations from the State-Tribal Riparian Protection and Restoration Work Group that the governor and tribes established at the 2019 Centennial Accord. (The work group based its recommendations on the Department of Fish and Wildlife's [Riparian Ecosystem Guidance Volumes 1 and 2](#), which recommends we need a minimum tree height in forested riparian zones to achieve broad salmon recovery and water quality objectives, and safeguard waterbodies against a changing climate.)

It is in the state's best interest to maintain, preserve, conserve and rehabilitate riparian lands. This will ensure reduced water temperature, climate resiliency, carbon sequestration, and the health of fish and wildlife and ecosystems for the economic and social well-being of this state and its people.

To implement this new protection for salmon riparian habitat, the governor is proposing the following steps:

- **Establish riparian standard legislation.** The governor will request legislation to establish a riparian protection zone across the state, including developing a publicly available riparian protection map. The legislation will establish a statewide riparian plant propagation program at public and private nurseries to meet future riparian restoration needs. The state will provide technical support and enforcement capacity to local jurisdictions to incorporate salmon recovery into the Growth Management Act and Shoreline Master Program regulations. (\$17.3 million General Fund-State)
- **Create a new Riparian Habitat Conservation Grant program.** The Recreation and Conservation Office will administer a riparian habitat



conservation grant program to protect and restore riparian habitat with a focus on acquiring and restoring it to fully functioning healthy conditions. (\$100 million Salmon Recovery Account)

- **Use Centennial Clean Water program for riparian protection.** We need to identify and implement new tools and incentives to advance and accelerate riparian buffer implementation to improve water quality and salmon habitat in priority-impaired watersheds. The Department of Ecology will evaluate the effectiveness of these new tools and incentives to encourage landowners to engage and participate in riparian protection. (\$5 million bonds; \$264,000 GF-S)

Invest in clean water infrastructure for salmon and people

Salmon need clean, cool water to spawn, incubate eggs in the stream gravel, and rear young smolts. The governor proposes investments to accelerate improvements to water quality, decrease stream and river temperatures and reduce nutrient loading.

- **Cold water and low flows.** Develop guidance that encourages reclaimed water use in areas with deficient water flows and temperatures for salmon. Establish an advisory group to recommend how to modernize the state water law to include salmon needs for adequate stream flows and cool water. (\$1.3 million GF-S)
- **Clean water.** Fully support Ecology's costs to implement the Nutrient General Permit for Puget Sound to reduce the impacts of wastewater treatment plants. Provide grants to local jurisdictions to increase capacity to address toxic pollutants in stormwater. Accelerate toxics cleanup in stormwater runoff from industrial and contaminated sites where salmon runs are at risk. Study the ability of stormwater systems to filter out toxic tire dust and evaluate alternatives to current toxic chemicals in tires. (\$7.9 million MTCA Operating Account; \$550,000 GF-S)
- **Community-based, public-private stormwater partnerships.** Stormwater runoff carries a multitude of pollutants from urban development and roads, impacts water quality, and harms aquatic life and salmon. Funding (in collaboration with partner agencies) will help develop local capacity and private investments to advance implementing stormwater retrofits statewide, especially among historically underserved communities. (\$1 million MTCA Stormwater Account)
- **Green infrastructure for streamflow restoration.** Build green infrastructure projects to boost stream flows during critical periods and improve stream resilience due to climate change impacts.

Funding will help us design and construct green infrastructure projects. These will capture and store excess water during times with high stream flows, and then release the stored water during periods of critical low flows, with the goal of improving base streamflow and temperature conditions in rivers and streams draining to the Puget Sound. This program will also boost stream flows for critical periods, improve water quality, support salmon recovery and provide other environmental benefits. (\$5 million bonds, \$500,000 GF-S)

Correct fish passage barriers and restore salmon access to historical habitat

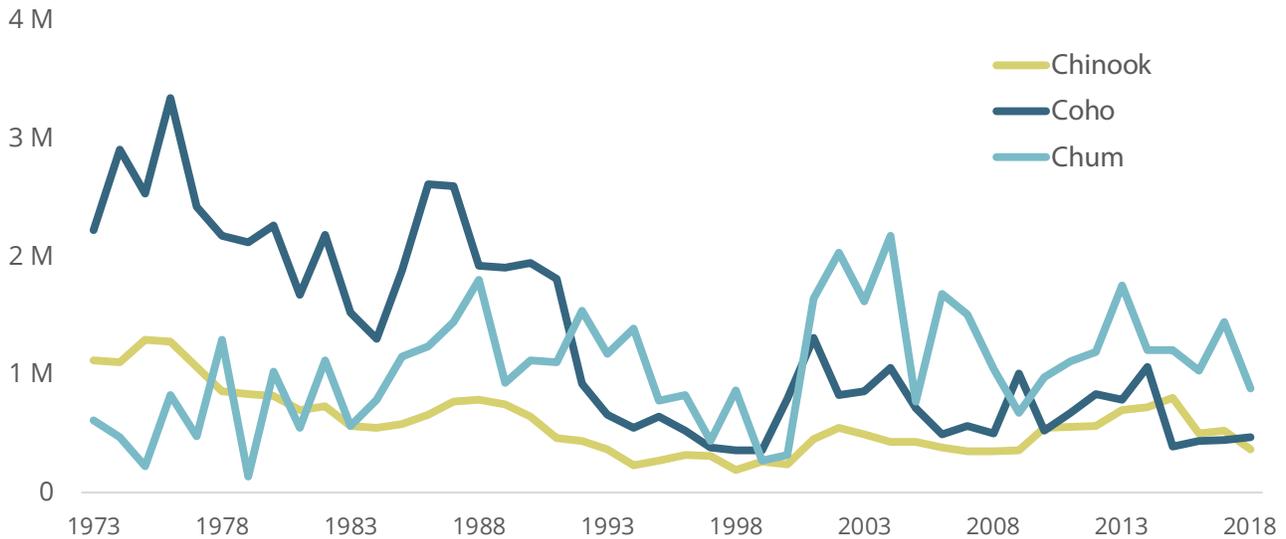
Large amounts of historic fish habitat are blocked to salmon by inaccessible culverts on roads and highways, and dams that limit important areas for rearing and spawning. The governor's proposal expands state efforts to coordinate fish passage barriers correction, mitigate impacts of existing barriers, and prevent new barriers from occurring.

- **Fish passage and reintroduction programs.** Complete a statewide prioritization of fish passage barriers and develop a plan to correct them in sequence with known state culvert corrections to maximize habitat gains. Complete and implement rules for fishways, flows and screens that will create protections for salmon to freely migrate within river and stream systems. (\$654,000 GF-S)

Align harvest, hatcheries and hydropower with salmon recovery

Preventing overharvest of commercial and recreational fisheries is key to rebuilding critically low stocks. And it's necessary for the state to meet its co-management responsibilities with the state's tribes. Inslee's budget creates a robust monitoring program to ensure recreational and commercial harvest of salmon and steelhead are within permit limits and demonstrate accountability on the state's share of salmon harvest. It also ramps up enforcement and prosecution of fisheries crimes.

Salmon harvest, commercial and recreational catch



Source: Washington Department of Fish and Wildlife. Data is for hatchery and wild coho, chum, and Chinook salmon caught (tribal and non-tribal) in the state's rivers and the ocean as reflected on sport catch record cards and commercial landings.

State hatcheries provide fish for harvest and help meet our treaty obligation. However, additional work is needed to improve the survival rates of hatchery fish. While hydropower projects provide important clean power, they can also have negative impacts on water quality.

- Salmon harvest monitoring and enforcement.** Expand our monitoring of recreational and commercial salmon catch in freshwaters along Puget Sound, the Coast, the marine water of Puget Sound and the ocean. Increase the number of law enforcement officers to enforce fisheries laws and to coordinate compliance efforts with federal agencies and tribes. Increase capacity to analyze salmon abundance to negotiate fisheries harvest. Expand capacity for the state to prosecute fisheries and other environmental crimes that county courts do not pursue. Implement a license buyback program to reduce the commercial gillnet fishery on the Columbia River. (\$27.2 million GF-S)

- Hatchery program improvements.** Evaluate hatchery programs in Puget Sound with a focus on improving hatchery fish survival rates. Increase support for basic hatchery operations and compliance with water quality laws. (\$4.9 million GF-S)
- Hydropower impacts.** Collaborate on Columbia and Snake River hydropower impacts and participate in new hydropower licensing efforts to ensure we address the impacts to salmon and state waters. Identify whether there are reasonable means for replacing the benefits of the four lower Snake River dams should the federal government move to remove them. (\$1.5 million GF-S)
- Skagit River protection.** Protect the upper reaches of the Skagit River from future development. (\$4.5 million GF-S)

- **Deschutes Watershed Hatchery.** Design and permit to build a new hatchery that would meet all Clean Water Act requirements in the Deschutes River and increase salmon production. (\$2.2 million bonds)

Strengthen science, monitoring and accountability

Successfully recovering salmon requires additional investments in science and monitoring to ensure recovery actions and investments occur in the most effective and efficient manner. Expand resources to implement salmon recovery plans, improve monitoring efforts, and work collaboratively on regional issues.

- **Science and monitoring.** Continue work to monitor forage fish populations, an important food source for migrating salmon. Monitor adult and juvenile migration in and out of streams as an indicator of overall watershed function and salmon productivity. (\$3.1 million GF-S)

- **Accountability and adaptive management.** Update salmon recovery watershed plans in Puget Sound and provide technical support to local governments on implementation. Coordinate how to implement the Governor’s Statewide Salmon Strategy Update, develop a biennial workplan, and report on accomplishments. Update the cost amount we need to effectively implement the federally-approved regional salmon recovery plans and identify potential revenue sources that could support future implementation efforts. Expand the Northeast Salmon Recovery Region and coordinate efforts to reintroduce salmon above Chief Joseph Dam. Increase DNR’s efforts to coordinate salmon recovery efforts on forestlands in the Snoqualmie and Skykomish watersheds. (\$3.4 million GF-S)

Salmon strategic agenda table

Summary of investments, 2022 supplemental operating and capital budgets

Focus Area	Items	Agency	Amount
Riparian Habitat Protection and Restoration	Riparian Grant Program	Recreation and Conservation Office	\$100,000,000
	Riparian Standard Legislation	Fish and Wildlife	\$8,628,000
	Riparian Standard and Land Use Planning	Commerce, Ecology and Fish and Wildlife	\$2,623,000
	Riparian Protection Mapping	Fish and Wildlife, Ecology, Natural Resources	\$4,746,000
	Riparian Plant Nursery	State Conservation Commission	\$1,300,000
	Centennial Clean Water Fund Riparian Projects	Ecology	\$5,264,000
	Quinault River Restoration Project	Recreation and Conservation Office	\$1,000,000
Total			\$123,399,000
Clean Water	Address Toxic Tire Wear	Ecology	\$2,704,000
	Reduce Nutrients in Puget Sound	Ecology	\$989,000
	Protect State Waters from Toxics	Ecology	\$714,000
	Increase Local Stormwater Capacity	Ecology	\$4,000,000
	Public-Private Stormwater Partnerships	Ecology	\$1,000,000
Total			\$9,407,000
Low Flows and Cold Water	Reclaimed Water Guidance	Ecology, Health	\$554,000
	Water Code Advisory Group	Ecology	\$709,000
	Streamflow Restoration Projects	Ecology	\$5,500,000
Total			\$6,763,000

Focus Area	Items	Agency	Amount
Harvest, Monitoring and Enforcement	Salmon Harvest Monitoring	Fish and Wildlife	\$6,912,000
	Fisheries Enforcement	Fish and Wildlife	\$1,283,000
	Environmental Prosecution	Fish and Wildlife	\$852,000
	Building North of Falcon Capacity	Fish and Wildlife	\$842,000
	Marine Fisheries Compliance Liaison	Fish and Wildlife	\$226,000
	Electronic Catch Record Cards	Fish and Wildlife	\$372,000
	License Reduction and Alternative Gear	Fish and Wildlife	\$16,700,000
Total			\$27,187,000
Hatchery Improvements	Hatchery Maintenance and Compliance	Fish and Wildlife	\$574,000
	Hatchery Production Evaluation	Fish and Wildlife	\$4,283,000
	Deschutes Watershed Center	Fish and Wildlife	\$2,200,000
Total			\$7,057,000
Hydropower Impacts	Hydropower Compliance Assistance and Participation	Ecology, Fish and Wildlife	\$1,051,000
	Columbia Basin Collaborative	Governor's Office	\$50,000
	Snake River Mitigation Study	Governor's Office	\$375,000
	Skagit River Protection	Commerce	\$4,500,000
Total			\$5,976,000
Fish Passage Programs	Statewide Prioritization of Barriers	Fish and Wildlife	\$360,000
	Fish Passage Rulemaking	Fish and Wildlife	\$294,000
Total			\$654,000

Focus Area	Items	Agency	Amount
Science	Forage Fish Spawning Monitoring	Fish and Wildlife	\$721,000
	Fish In/Fish Out Monitoring	Fish and Wildlife	\$2,392,000
Total			\$3,113,000
Accountability and Adaptive Management	Expand NE Salmon Recovery Region	Recreation and Conservation Office	\$200,000
	Implement Governor's Salmon Strategy	Recreation and Conservation Office	\$139,000
	Salmon Recovery Long-term Funding	Recreation and Conservation Office	\$250,000
	Snohomish County Salmon Action Plan	Natural Resources	\$222,000
	Salmon Recovery Plan Updates	Puget Sound Partnership	\$2,576,000
Total			\$3,387,000
Grand Total			\$186,943,000