

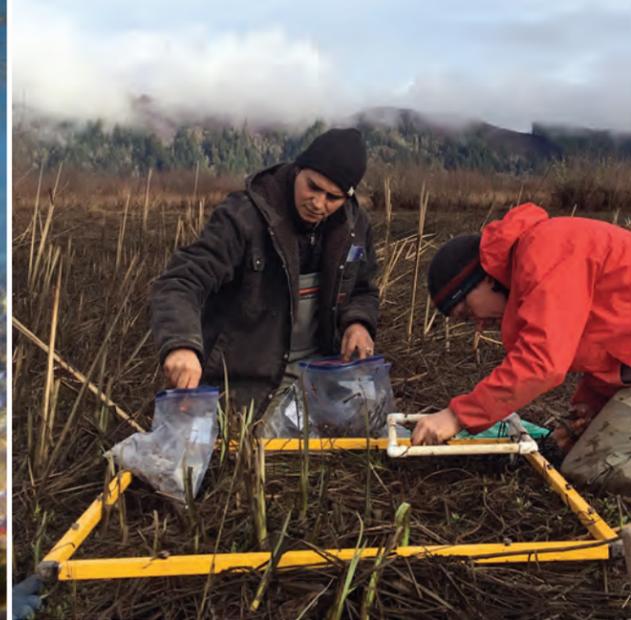
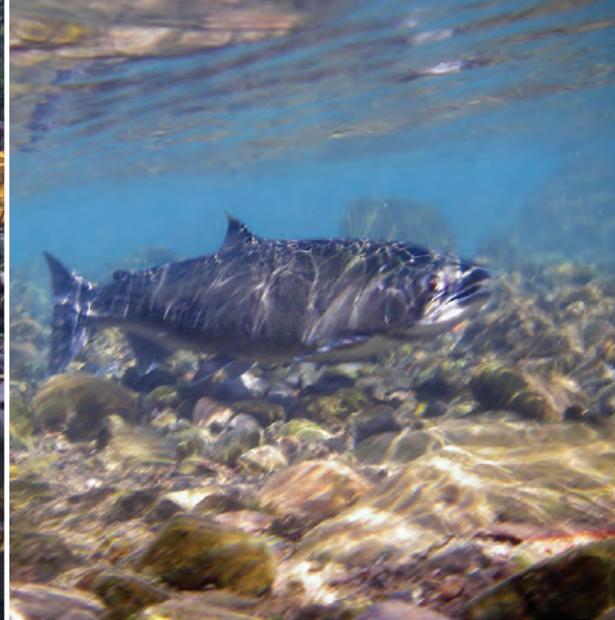


Year in Review

2018 Program Highlights



ADVANCING SCIENCE
PROTECTING ECOSYSTEMS
ENGAGING PEOPLE
TO SUSTAIN THE COLUMBIA RIVER FOR ALL TIME



Educating Students

Greening Our World

Restoring Habitat

Sharing Info

Monitoring

Students need science and outdoor learning. Yet science is being cut from K-5 curricula and kids are outdoors less.

Planting along streams cools waters for fish, creates habitat, and helps volunteers build long-term stewardship.

We have lost over half of the river's historic habitat since 1880. Every fish, animal, and human needs healthy habitat to thrive.

Science and knowledge about ecosystems is constantly evolving. We gather and analyze data to make sure partners have current information on a range of topics.

Assessing how projects are doing ensures we get the intended results. Modeling improves the likelihood of success and reduces costs.



4,959 Students Learned About Their Watershed through hands-on lessons and immersive time outdoors. That's over 34,700 hours of science instruction delivered to students at no cost to schools.

"Some of our students have never even experienced a short hike in the woods. I loved seeing my students so engaged and enjoying learning." – 5TH GRADE TEACHER, HARTLEY ELEMENTARY



512 People Paddled on 25 community canoe trips offered throughout the study area. For many it was their first time paddling.

2 Interns & 2 Short Term Staff Hired from diverse backgrounds to gain experience in environmental education.

To date, over 77,000 students have received 365,908 hours of science lessons from our educators.

428 Volunteers Restored Habitat along Salmon Creek, Steigerwald Lake National Wildlife Refuge, Sandy River Delta, La Center Wetlands, Burnt Bridge Creek, and Gee Creek.

15,556 Trees and Shrubs Planted by students and volunteers to cool stream temperatures and improve habitat.



34 Bags of Trash Removed by volunteers to clean up Vancouver Lake for people and wildlife.

Reduced Stormwater by Working with 64 Businesses in Clackamas County to assess on-site stormwater infiltration, and developed concept plans and drawings for three sites for future on-the-ground stormwater projects.

To date, students and volunteers have planted 125,251 trees along riparian corridors of the lower river.



12 Acres Restored along East Fork Lewis River to create salmon access to two side channels and improve mainstem habitat in Clark County, Washington.

1.3 River Miles Restored at Hamilton Creek to create high-quality salmon rearing and refuge habitat in Skamania County, Washington.

Leveraged Resources to Restore Steigerwald by securing a \$4.6 million award from Washington Department of Ecology's Flood Plains by Design program. Together with Bonneville Power Administration funding, the Steigerwald Restoration Project will reduce community flooding and open over 900 acres of habitat for salmon.

To date, 100 partners have restored or protected 23,758 acres of habitat to help recover threatened and endangered fish.



Cold Water Refuges for Salmon Studied by modeling flow diversion structures at tributary confluences. Models show these structures will increase areas of cold water, cueing migrating fish that there is a place to rest out of the warm mainstem waters.

Our next step is to build one of these structures to see if salmon can find and use them as a stopping point. Right now, there is a 60-mile gap in resting places for salmon between the Columbia Gorge and the estuary.

Food Web Analyzed to find what makes good habitat for salmon. Our data from various sites within the estuary show that salmon rely heavily on high-quality marsh prey, expanding our understanding of how food webs function and the role marsh habitat can play in salmon recovery.

To date, we have developed numerous data sets, including floodplain changes, land cover, and bathymetry.



Restoration Sites Monitored for pre- and post-project water surface elevation and temperature to assess how salmon use the sites.

Marine Debris Mapped to quantify and locate debris in the lower Columbia River so we can clean it up.

Modeled Steigerwald Wildlife Refuge to forecast floodplain hydrology for proposed restored conditions. This allows us to develop a better project by identifying species-specific needs and developing planting plans for the entire 800-acre site that lead to higher plant survival.

To date, we have monitored restoration sites for 5 years and collected trends analysis for 13 years.

The Lower Columbia Estuary Partnership is one of the country's 28 estuaries of national significance. Local National Estuary Programs (NEPs) are governed by a collaboration of diverse community members—local people working to solve local problems. Farmers, educators, foresters, fishers, businesses, conservation groups, recreation users, state governments, federal agencies, utilities, and tribal members come together to listen and learn so we can take care of our critical water bodies.

Estuaries sustain our economies, feed our nation, and create vibrant and healthy communities. NEPs look at the whole system: its chemical, physical, and biological properties, as well as its economic, cultural, recreational, and aesthetic values. We build regional networks and secure resources to support and expand local efforts.

The Estuary Partnership focuses on the lower 146 miles of the Columbia River from Bonneville Dam to the Pacific Ocean. The watershed includes 28 cities, nine counties, and 45 school districts within the states of Oregon and Washington. The States of Washington and Oregon and the US EPA established the Estuary Partnership in 1995 to provide regional coordination, advance science, and get on-the-ground results.



2018 Dollars, Jobs & Volunteers

This past year, the Estuary Partnership leveraged each federal NEP dollar 17:1.

We brought \$10,853,642 in cash to the region, all being spent here in northwest Oregon and southwest Washington.

Those funds are creating 217 jobs, mostly construction jobs related to habitat restoration work and all family wage jobs—none can be exported.

More than 500 businesses, private foundations, and individuals support the Estuary Partnership.

Volunteers donated 27,011 hours, at a value exceeding \$699,000.

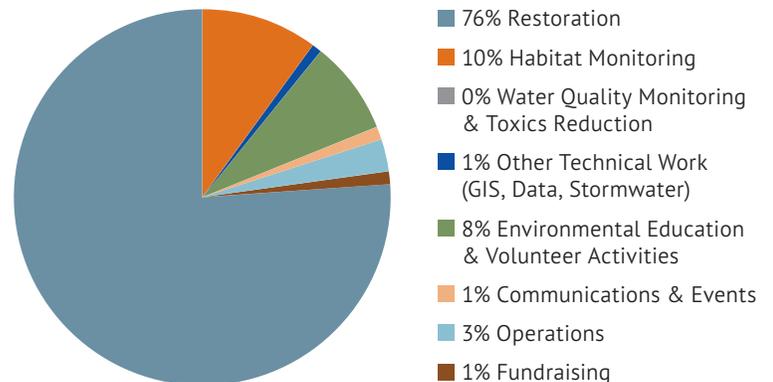
Since 1999, the Estuary Partnership has raised over \$77 million cash for the region and created 1,557 jobs. The economic multiplier gives a total impact of over \$148 million.

Donated Volunteer Investments

	HOURS	VALUE
Board Members	170	\$10,170
Scientists	4,993	\$311,430
Community Volunteers	2,064	\$45,408
Parent Volunteers	4,080	\$89,749
Students Service Learning	15,680	\$235,196
Other Education & Volunteer Services	–	\$2,724
Other Professional Services	26	\$5,078
TOTAL	27,013	\$699,755

Where 2018 Funds Went

100% spent in Washington & Oregon



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