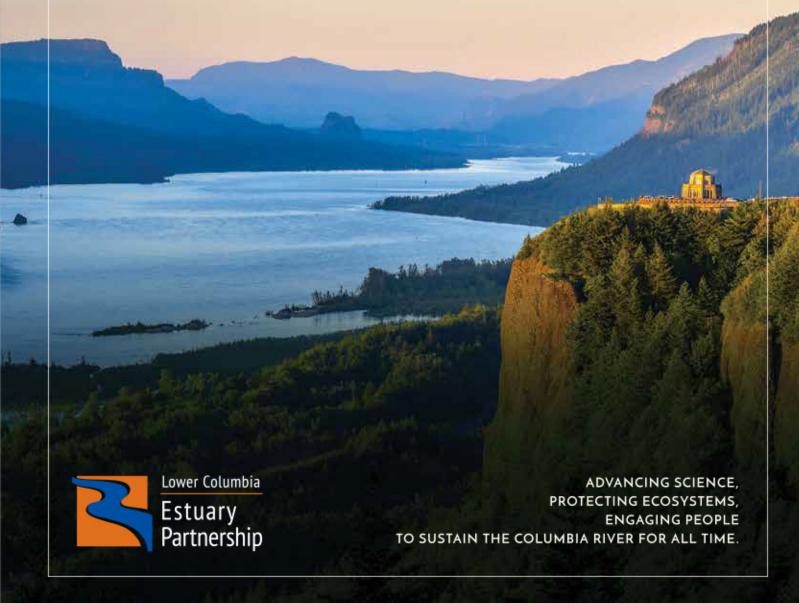
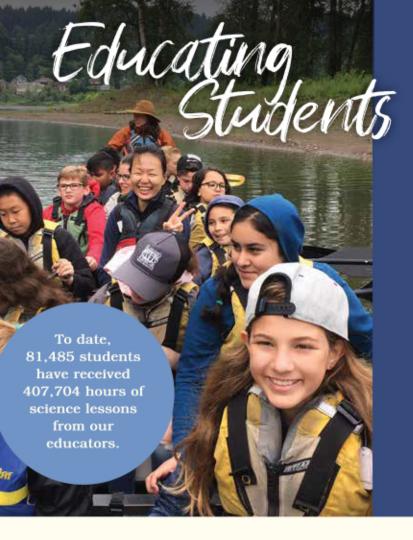
Lower Columbia Estuary Partnership Estuary Partnership

2019 PROGRAM HIGHLIGHTS





Students need science and outdoor learning even more than ever as schools cut science from K-5 curricula and kids are outdoors less.

This year:

- 4,318 STUDENTS LEARNED ABOUT THEIR WATERSHED through hands-on lessons and time outdoors. That is 24,075 hours of science instruction delivered to students at no cost to schools.
- 526 YOUTH AND ADULTS PADDLED on 27 community canoe trips offered to underrepresented community groups and summer camps throughout the study area. For many, it was their first time paddling.
- 2 INDIGENOUS AND LATINX INTERNS GAINED JOB EXPERIENCE in environmental education.

"I learned so much about water quality, watersheds, and invasive plants. I loved seeing the Great Blue Heron Rookery although it was sad when the eagle ate a baby heron!! I had an awesome time."

LIDIA, STUDENT, SCOUTERS MOUNTAIN ELEMENTARY

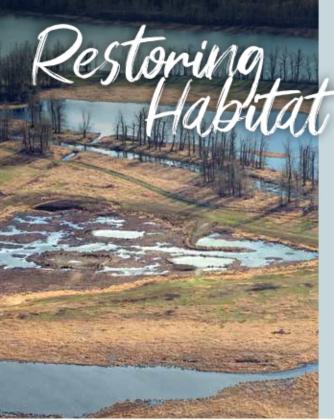
Planting along streams cools the water for fish, creates habitat, and helps volunteers build a long-term relationship with the land.

This year:

- 385 VOLUNTEERS IMPROVED HABITAT along Salmon Creek, Steigerwald Lake National Wildlife Refuge, Burnt Bridge Creek, Curtin Spring Wildlife Habitat Area, and Woodin Creek.
- 19,470 TREES AND SHRUBS PLANTED by students and volunteers, including 2 acres along Salmon Creek.
- 6,700 SQUARE FEET OF ASPHALT REMOVED by parents, students, and community members from the Boise-Eliot/Humboldt schoolyard, and replaced with play-friendly grass, trees, and a small vegetated stormwater area.
- CONSERVATION AND JOB TRAINING PROVIDED with Wisdom of the Elders and Columbia Riverkeeper for a second year at the Sandy River Delta. The team worked together to harvest and plant several hundred willows in the flood plain of one of our previous projects. The work helped Indigenous adults who are interested in environmental careers gain job experience.

To date, students & volunteers have planted 144,721 trees along the lower river & its tributaries.





Every fish, animal, and human needs a healthy habitat to thrive, and we have a long way to go; we have lost over half of the river's historic habitat since 1880.

This year:

- WE BEGAN ANALYSIS OF A PILOT PROJECT at Horsetail Creek in the Columbia River Gorge to create cold water refuges for migrating salmon in the lower Columbia.
- 100% DESIGNS COMPLETED for the Steigerwald Floodplain Restoration Project.
- WE SURVEYED NATIVE FISH
 SPECIES in partnership with ClarkSkamania Fly Fishers. The fish survey
 helped identify priority locations and
 actions for restoring the Ridgefield
 Gravel Pits of the East Fork Lewis River.

To date,
100 partners
have restored or
protected 28,387
acres of habitat to help
recover threatened
& endangered fish.

We have exceeded our goal to restore 25,000 acres by 2025!



Science and our understanding of ecosystems are constantly evolving.
We gather and analyze data to make sure partners have current information.

This year:

- WE SHIFTED OUR CONSERVATION APPROACH TO BECOME A CLIMATE SMART CONSERVATION PROGRAM to protect biodiversity as changes in environmental conditions disrupt critical relationships between species.
- WE MAPPED SEA LEVEL RISE and its effects on tidal
 wetlands. Estuarine and wetland habitats are
 incredibly important and will be affected by
 sea level rise, but there had been no site-

To date, we have compiled numerous data sets to aid regional restoration efforts,

including mapping cold water refuges, land cover & bathymetry, & analyzing floodplain changes. redibly important and will be attected by sea level rise, but there had been no site-specific studies done of the lower river previously. Using three scenarios—0.5, 1.0, and 1.5 meters higher at the mouth—we can predict where we will lose further habitats as sea levels rise.



Assessing how projects are doing ensures we get the intended results.

This year:

- WE WORKED WITH PARTNERS TO EXPAND WATER QUALITY MONITORING in Clatskanie and Scappoose watersheds for the third year to document temperature, turbidity, and bacteria levels across 13 long-term monitoring sites.
- WE EMPLOYED CUTTING EDGE TECHNOLOGY using multispectral UAV (drone) sensor data to track changes in native and non-native wetland plant communities across restoration and long-term ecosystem monitoring sites throughout the estuary.

To date, we have monitored restoration sites for six years & have collected trends analysis for 14 years.

Who We are

THE LOWER COLUMBIA ESTUARY PARTNERSHIP is a National Estuary Program (NEP) charged with protecting and preserving the lower Columbia River. The Columbia River estuary is one of the country's 28 estuaries of national significance—these important estuaries feed our nation, support vibrant and healthy communities, and sustain our economies.

NEPs are governed by a collaboration of diverse community members and interests, bringing together local people to solve local problems. NEPs look at the whole system: its chemical, physical, and biological properties, as well as its economic, cultural, recreational, and aesthetic values.

The Estuary Partnership focuses on the lower 146 miles of the Columbia River from the Bonneville Dam to the Pacific Ocean. The watershed includes 28 cities, 9 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.

2019 Dollars, Jobs, & Volunteers

This past year, we raised \$6 for every one federal NEP dollar—that is a total of \$4.3 million to the region, which brought more than \$8 million to our local economy. We created 86 local jobs.

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

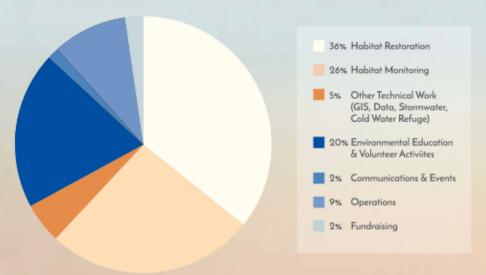
Volunteers donated 23,416 hours at a value of \$455,338.

Since 1999, the Estuary Partnership has raised over \$76.2 million in cash for the region and created 1,524 jobs. The economic multiplier gives a total impact of \$144.7 million.

Donated Volunteer Investments

	Hours	Value
BOARD MEMBERS	190	\$11,415
SCIENTISTS & TECHNICAL EXPERTS	912	\$54,720
FORUMS	384	\$23,040
STUDENTS SERVICE LEARNING	17,725	\$265,868
PARENT & TEACHER VOLUNTEERS	2,408	\$52,976
PLANTING & COMMUNITY VOLUNTEERS	1,747	\$38,445
PROFESSIONAL SERVICES	50	\$8,600
GOODS	-	\$274
TOTAL	23,416	\$455,338

Where 2019 Funds Went



Board of Directors 2019

E. Elaine Placido, Chair Cowlitz County

Susan Holveck, Vice Chair Portland Public Schools

Jane Bacchieri City of Portland, Bureau of Environmental Services

Hillary Barbour Burgerville

Robert Duff Office of Washington Governor Jay Inslee

Kevin Gray Federal Highway Administration

Marla Harrison Port of Portland

Charles Hudson Columbia River Inter-Tribal Fish Commission

Bill Hutchison, Esq. Corporate & Environmental Law

Meta Loftsgaarden Oregon Watershed Enhancement Board

Margaret Magruder Magruder Farms

Dean Marriott Watershed Health & Green Infrastructure

Dick Pedersen Environmental Policy

Jeff Smith Green Business/Infrastructure

Sally Toteff Washington Department of Ecology

Richard Whitman Oregon Department of Environmental Quality

EX OFFICIO

Kevin Brice US Army Corps of Engineers

Mike Turaski US Army Corps of Engineers

Mary Lou Soscia US Environmental Protection Agency

Yvonne Vallette US Environmental Protection Agency

Irma Lagomarsino National Marine Fisheries Service

Johnna Roy US Fish & Wildlife Service

HONORARY BOARD MEMBERS

The Honorable Brad Witt Oregon State House of Representatives

The Honorable Sharon Wylie Washington State House of Representatives

EXECUTIVE DIRECTOR

Debrah Marriott Lower Columbia Estuary Partnership

The Estuary Partnership is a 501(c)3 non-profit corporation.