

Lower Columbia Estuary Partnership

Columbia CONNECTIONS

Building connections...

Science comes to life as students head outdoors



Estuary Partnership educators arrive in classrooms throughout our study area with a very large case. As it unfolds, a river model complete with sand, trees, houses, and flowing water emerges and becomes a laboratory for students. Students play with the model to learn about rivers: how they change over time and the relationships between plants, wildlife, sediment and flowing water. Students of all ages are always happy to get their hands dirty, observing firsthand how trees and buildings affect "river" flows. Next, we take the students outdoors to continue the lesson at a river or natural area near their school.

Once outdoors students make scientific observations and discover how organisms depend

on each other. Students improve wildlife habitat by removing invasive plants or planting new native trees. On a local stream or river, they learn how organisms interact with the physical environment while paddling a 34-foot canoe.

Sustaining our large investments to restore the lower Columbia River requires a key ingredient: a future generation who is well educated in the sciences and understands the natural environment. Unfortunately, schools districts in Oregon and Washington struggle to fund field based learning and many have cut these programs all together. Through support from over 60 public and private entities, the Estuary Partnership Education Program provides over 25,000 hours of instruction each year to approximately 4,500 students.

[Read the full story](#)



Toxics in the Columbia threaten health

The data is clearer than ever: toxic contamination in the Columbia River Basin is a significant threat to the environment and human health. There are many contaminants including mercury, DDT and its breakdown products, PCB's and PBDE flame-retardants that are found throughout the Columbia River Basin that harm fish, wildlife and people. The contamination is the collective result of many activities over many years, it is extensive and requires a comprehensive solution.

Fish, birds, animals, people, habitat, and the economy are all affected. Contaminants in flame-retardants, pharmaceuticals and other chemicals cause male fish to morph to females during their life cycle. Thirteen types of salmon that use the lower Columbia are threatened or endangered and listed under the Endangered Species Act. Toxics also affect the developing brains of children and alter behavior and learning. Contamination gets in the way of the dredging necessary to keep ports and marinas operational; the disposal costs are high and the disposal sites limited.

[Read the full story](#)



East Fork Lewis River restoration plan moves ahead

Salmon, steelhead, wildlife and riparian areas along East Fork Lewis River will benefit when the main stem of the river reconnects with two floodplain parcels near La Center, Washington and a side channel three miles upstream. The Lower Columbia Fish Recovery Board and Bonneville Power Administration are funding the two restoration projects that are a partnership between the Estuary Partnership and landowner Clark County. Acquiring over 1,000 acres adjacent to the East Fork Lewis River since 1985, Clark County is restoring the land and protecting large parcels from development.



HDR and the Estuary Partnership

HDR's support of the Lower Columbia Estuary Partnership runs deep. A corporate partner of the organization since 2001, HDR recently expanded



Upcoming Events

Connect to the Columbia Volunteer Tree Plantings

[Tree Planting Schedule](#)

February 8, 2014 - Sandy River Delta, Troutdale, OR

February 15, 2014 - Meldrum Bar Park, Gladstone, OR

February 22, 2014 - Steigerwald Lake National Wildlife Refuge, Washougal, WA

March 1, 2014 - Sandy River Delta, Troutdale, OR

March 8, 2014 - Steigerwald Lake National Wildlife Refuge, Washougal, WA

March 15, 2014 - Steigerwald Lake National Wildlife Refuge, Washougal, WA

March 22, 2014 - Ridgefield National Wildlife Refuge, Ridgefield, WA

April 12, 2014 - Meldrum Bar Park, Gladstone, OR

Workshops

[CREW 2014: Columbia River Estuary Workshop](#)

Forging Links in the Columbia River Estuary
May 28-30, 2014, Liberty Theater, Astoria, OR

[Science to Policy Summit 2014: Toxics Reduction](#)

June 13, 2014, Vancouver Hilton, Vancouver, WA

its support with a \$28,184 grant from the HDR Foundation. These funds will implement aspects of our "Science in Action" Outdoor Environmental Education Program that brings students outdoors for hands-on learning activities that improve our environment.

The HDR Foundation invests in key priorities for HDR: healthcare, healthy communities and healthy environments. The Foundation supports activities that align with the firm's values and areas of expertise, with a preference given to charitable organizations where HDR employees volunteer. Kevin Gray, HDR's Oregon Transportation Business Group Manager, has served on the board of the Estuary Partnership since 2011. The Estuary Partnership was among the first out of a national competition to receive a grant award from HDR.

"The Outdoor Program was an easy thing for our company to get behind," notes Kevin. "The company was looking for established programs to support through the Foundation's inaugural year. With its focus on educating students on watershed science, health and monitoring, the Outdoor Program is a great fit with HDR's values and company philosophy."

HDR is a full service, employee-owned engineering, architecture, construction and consulting firm with 16 offices in Oregon and Washington and over 8,000 employees worldwide. For more information, visit www.hdrinc.com.

[Support Us](#) | [Get Involved](#) |  [Facebook](#) | [Forward to a Friend](#)

www.estuarypartnership.org



MailChimp

Copyright © 2014

All rights reserved.

[unsubscribe from this list](#) | [update subscription preferences](#)