

# Get Involved!

Join thousands of Oregonians who are working with their neighbors to improve conditions in urban and rural streams. They're discovering that in addition to doing good work for fish, wildlife and water, the projects forge lasting community connections and help keep land productive. Organizations listed below are working on these projects and are ready to help you take action to protect and restore your part of Oregon.

### Contact your local:

#### WATERSHED COUNCIL

Call OWEB or visit the Web site for a list of more than 50 watershed councils.

#### SOIL AND WATER CONSERVATION DISTRICT

Look in your local phone book under U.S. Government, Agriculture Department, Natural Resources Conservation Service. Or contact the Oregon Association of Conservation Districts at (503) 566-9157 or [www.oacd.org](http://www.oacd.org).

#### OREGON STATE UNIVERSITY EXTENSION SERVICE

Look in your local phone book under your county government listing for "Extension Service."

#### DRIVER AND MOTOR VEHICLES SERVICES OFFICE

Purchase a salmon license plate for your vehicle (\$30 additional charge every two years) to support salmon habitat projects.

[www.salmonplate.org](http://www.salmonplate.org)

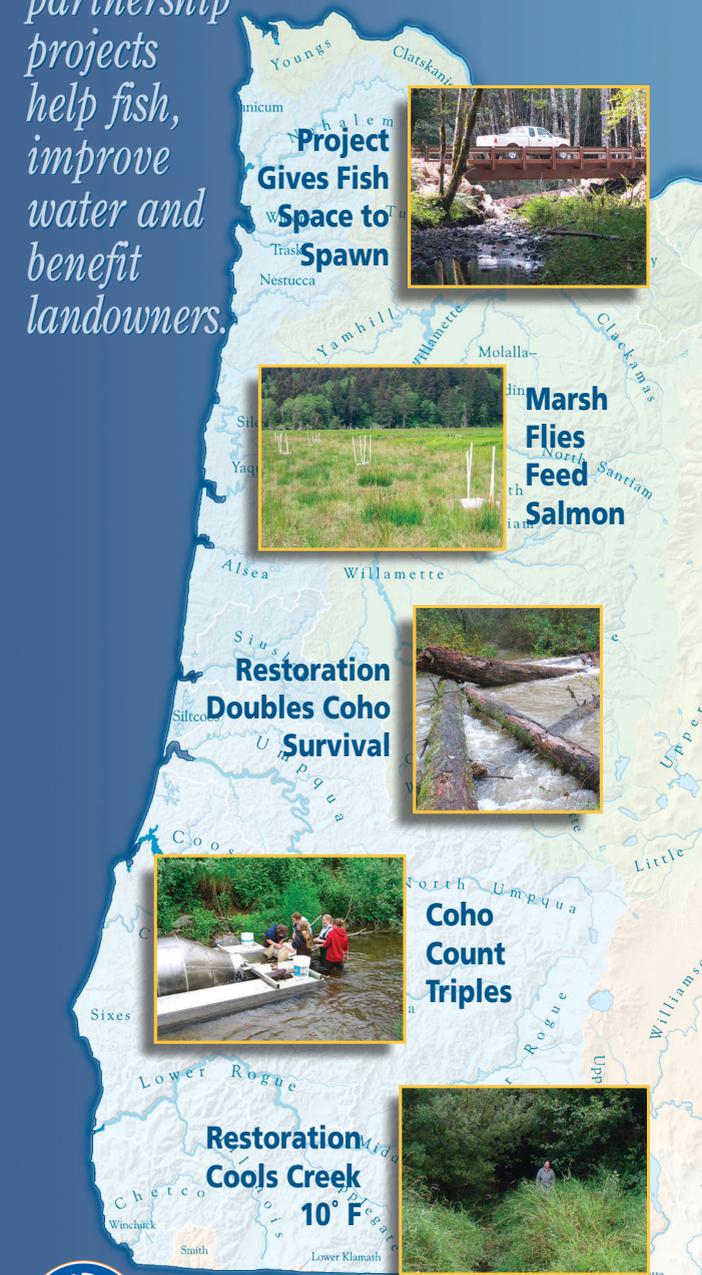



**Oregon Plan for Salmon and Watersheds**  
[www.oregon-plan.org](http://www.oregon-plan.org)  
 Telephone (503) 986-0178  
[www.oregon.gov/oweb](http://www.oregon.gov/oweb)



# People Help Coho

Five partnership projects help fish, improve water and benefit landowners.



## Working to Bring Back Coho And Boost the Bottom Line

### Landowners: Funds and advice help fish, water and your property

Oregonians are committed to solving water problems and protecting fish and wildlife habitat. They have chosen to work at the local level with voluntary conservation approaches rather than waiting for laws and regulations to force them to take action. In 1998, citizens voted to use Oregon Lottery funds to help pay for the work.

From urban backyards to rural barnyards, landowners work with neighbors, scientists, conservation groups, and public organizations to improve water quality and fish and wildlife habitat. At the same time, property owners solve problems that affect their land management. Farmers stop erosion along creeks and install sprinkler systems to save water. Ranchers recharge springs and pipe drinking water to keep cattle away from riverbanks. Foresters fix roads to improve access for fish and forest management.

Oregon is concentrating on reviving coho salmon, which were once abundant along the Oregon Coast and supported a thriving fishing industry. Coho are anadromous—they hatch and grow in freshwater for about a year, spend a couple of years in the ocean and return to streams to lay eggs. For the cycle to work well, coho need streams with cool water and gravel areas where they lay eggs. Young coho seek calm pools with an abundance of nooks, crannies, and wood where they find shelter and food.

People are working together to create conditions that improve coho production while maintaining or improving productivity of the land. See the back panel to connect with organizations that provide advice and funding for projects such as the five profiled in this brochure.

Map provided by InfoGraphics Lab, Department of Geography, University of Oregon, Copyright 2006, University of Oregon

## Project Gives Fish Space to Spawn

### East Humbug Creek, Clatsop County

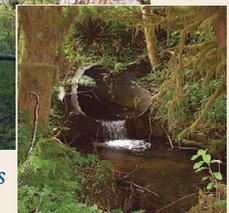
This project opened seven miles of East Humbug Creek that were previously inaccessible to fish. Project partners replaced three inadequate culverts with bridges and two failing culverts with fish-friendly

Oregon Lottery Funds approved by OWEB: \$234,000

Total estimated project cost: \$460,000

*"This project improved fish passage and had a significant economic impact to local contractors, subcontractors, and vendors."*

Jay Holland  
 Coast Tree Farm Manager  
 Longview Fibre Company



Contractors replaced culverts (inset photo shows drop in water level stopping fish passage) with bridges to open seven miles of stream to fish.

culverts. East Humbug Creek, located in the Upper Nehalem River subbasin, is recognized as an important stream for native fish. Shortly after one culvert was replaced, three spawning coho were observed in an area previously off limits to them.

#### PROJECT PARTNERS:

- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife
- Oregon Watershed Enhancement Board
- Oregon Youth Conservation Corps
- Longview Fibre Company
- Upper Nehalem Watershed Council
- U.S. Bureau of Land Management

## Marsh Flies Feed Salmon

### Salmon River Estuary, Lincoln County

In 1996, a dike was breached in the Salmon River Estuary to restore tidal waters to nearly 75 acres of marsh. Scientists discovered that the restored marsh was being used by foraging juvenile salmon. The young salmon were eating energy-rich aquatic flies, which were documented in higher abundance in the restored marsh than in nearby areas. Computer simulations showed that the high-energy flies helped salmon grow faster in the restored marsh than in other areas. The flies also



Photo by Jeffery R. Cordell

*Insect traps showed that a restored marsh contained more energy-rich flies (inset shows closeup) for young salmon than adjacent marshes.*

The U.S. Forest Service provided funding for the restoration project and Oregon Sea Grant funded the majority of the research work.

effects of habitat restoration projects on salmon. Restoration scientists work with the estuary's landowners to ensure that private properties not slated for restoration are unaffected by habitat projects in the estuary.

enabled the salmon to more effectively cope with warm water temperatures in the estuary. The Salmon River Estuary has undergone a series of marsh restoration projects since 1978. The estuary is a unique natural laboratory for scientists who evaluate the

#### PROJECT PARTNERS:

Ducks Unlimited  
National Marine Fisheries Service  
Oregon Department of Fish and Wildlife  
Oregon Sea Grant  
Oregon State University  
Private landowners  
University of Washington  
U.S. Forest Service  
Washington Department of Fish and Wildlife  
Washington Sea Grant

## Restoration Doubles Coho Survival

### Green River & Crab Creek, Lane County

Fish monitoring has shown that coho winter retention increased from 27% before a restoration project to a post-project, five-year average of 57%. In 2000, a group united to address disappointing salmon and steelhead production in Green River and Crab

Creek, tributaries of Five Rivers in the Alsea Basin. The partners designed a restoration project to improve channel and floodplain conditions for salmon. The project placed more than 400 pieces of wood in the channels and eliminated six miles of unneeded valley-bottom roads. By improving habitat

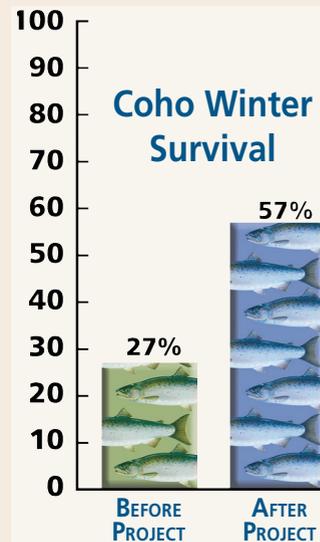
Oregon Lottery Funds approved by OWEB: \$231,000

Total estimated project cost: \$857,000

conditions, more juvenile coho are now able to remain in Green River and Crab Creeks during the winter, thus avoiding potentially deadly conditions elsewhere.



*Large pieces of wood placed by helicopter boosted salmon winter survival by slowing water flow and providing hiding places for fish.*



#### PROJECT PARTNERS:

Alsea Community Effort  
Bio-Surveys LLC  
MidCoast Watersheds Council  
Oregon Department of Fish and Wildlife  
Oregon Watershed Enhancement Board  
Private landowner  
Roseburg Resources  
U. S. Forest Service

## Coho Count Triples

### Knowles Creek, Lane County

The number of juvenile coho in Knowles Creek has tripled since a large-scale restoration project started in 1992. A fish count conducted from 1992 to 1994 documented approximately 11,000 juvenile coho salmon

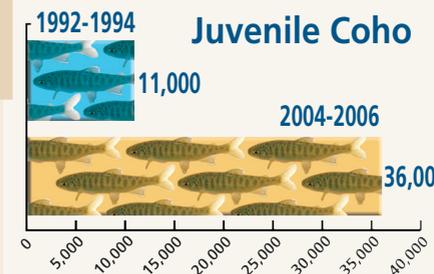


*Using a fish-friendly trap, students documented that juvenile coho tripled in 10 years.*

Oregon Lottery Funds approved by OWEB for monitoring in this creek and other locations within the Siuslaw basin: \$221,000

Total estimated project cost for monitoring in the entire Siuslaw basin: \$645,000

adjacent to two miles of stream to encourage the growth of long-lived trees, replaced or removed culverts on five miles of roads, and storm-proofed roads. The coho increase in Knowles Creek is likely the result of a combination of events, including the restoration efforts, improved ocean conditions, and coho harvest reductions.



#### PROJECT PARTNERS:

Ecotrust  
Hancock Forest Management  
Lincoln Timber LLC  
Oregon Department of Fish and Wildlife  
Oregon Watershed Enhancement Board  
Pacific Rivers Council  
Pacific West Timber (Oregon) LLC  
Private landowners  
R&R King Logging  
U.S. Forest Service  
Siuslaw Watershed Council  
The Campbell Group

## Restoration Cools Creek 10°F

### Willanch Creek, Coos County

Temperature monitoring at this Coos Bay tributary has shown that the maximum seven-day temperature at the downstream end of a restoration site dropped from 74° F to 64° F in eight years. Water temperatures of 64° F or lower are essential for the growth and survival of juvenile coho salmon. In addition to reducing water temperatures, Willanch Creek restoration projects have reduced streambank erosion, improved salmon spawning gravels, provided fish

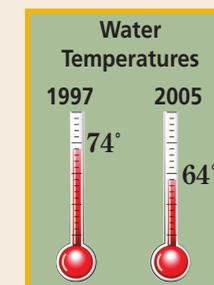
Oregon Lottery Funds approved by OWEB: \$167,000

Total estimated project cost: \$292,000

access to previously blocked areas, and created pools and hiding places for fish. From 1991 to 2004, project partners worked to remove invasive plants, stabilize slumping banks, replace culverts with bridges, place large pieces of wood in the creek, install fencing, and plant native vegetation.



*A restoration project produced shaded, cool conditions dropping water temperatures 10 degrees (inset shows same site 10 years earlier).*



#### PROJECT PARTNERS:

Coos Bay – North Bend Water Board  
Coos County Road Dept.  
Coos Watershed Assoc.  
Lone Rock Timber Co.  
Menasha Corporation  
Oregon Department of Environmental Quality  
Oregon Department of Fish and Wildlife  
Oregon Watershed Enhancement Board  
Private landowners  
U.S. Bureau of Land Mgmt.  
U.S. Fish and Wildlife Service  
Weyerhaeuser Timber Co.