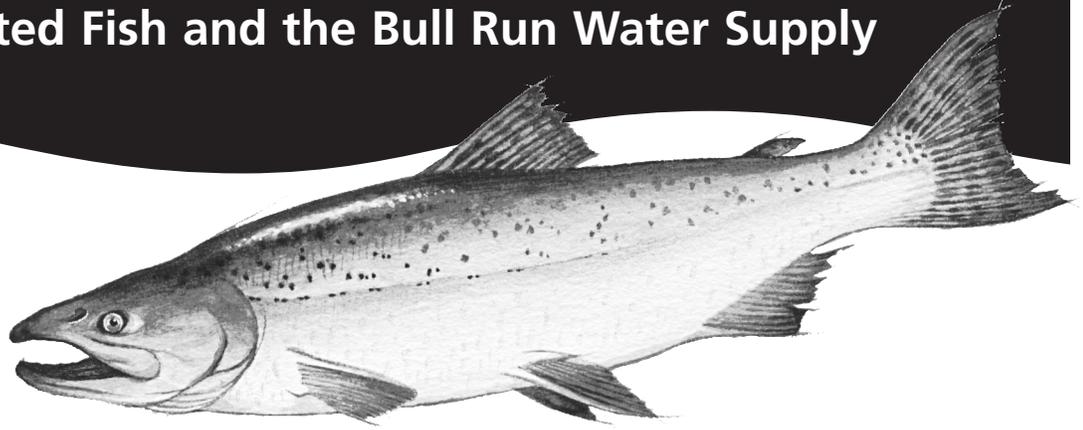


# Sharing the Water:

## ESA-Protected Fish and the Bull Run Water Supply



The Bull Run River is a drinking water resource used by 25 percent of all Oregonians. The river is also home to several species of salmon and trout protected by the federal Endangered Species Act (ESA). Learning to share the Bull Run River with these fish is an important priority for the City of Portland.

The Bull Run River is a major tributary of the Sandy River. The Bull Run River Basin makes up about 25 percent of the 500 square mile Sandy River Basin. Wild populations of steelhead and chinook have declined 75-90 percent in the Sandy River Basin.

### How does the water system affect fish?

The Bull Run water system changed the natural flow of the river, beginning about 100 years ago when the first diversion dam was built. These changes cause negative effects on fish habitat:

#### *Migration is blocked.*

When the Bull Run dams were constructed, in 1929 (Dam 1) and 1962 (Dam 2), fish were still relatively abundant and special protection was not required. Neither of the Bull Run dams have fish ladders.

#### *Historic habitat is flooded.*

Salmon and trout generally favor habitat in wide, flat river valleys. These valleys accumulate gravel for spawning and provide quiet backwaters for resting and feeding. These habitats in the Bull Run watershed were also good locations for constructing dams. Much of the historic habitat above the dams is now flooded by the reservoirs.

#### *Flow is reduced.*

Below the dams, flow in the river channel is limited during the summer. More than 800,000 Oregonians use a total of 150 to 200 million gallons from the watershed on warm summer days.

#### *Water is warmer.*

As the water slows and pools up behind the dams, it absorbs heat from the sun. The water warms even more in the rocky, shallow pools below the dams. Salmon and trout prefer cool water. Warm water stresses the fish, and temperatures above 70 degrees can be lethal. Like

many other rivers and streams in Oregon, the lower Bull Run River sometimes reaches these lethal temperatures.

The Water Bureau's responsibility is to evaluate these effects and negotiate solutions. The solutions need to be acceptable to the National Marine Fisheries Service and the Portland City Council, as well as to the community and other affected agencies. Finding solutions won't be easy.

### How will ESA affect the City's water supply and water rates?

The City's goal is to ensure a reliable and affordable water supply while also improving conditions for the ESA-protected fish. Making more efficient use of the water we have is part of the solution. Using supplemental supplies, such as groundwater and Bull Run Lake, also gives us some options during dry years. We don't expect ESA to drastically change our water supply operation or significantly increase water rates for



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Portland's customers. We also know we can and should make changes to improve the health of the river.

## What's the City doing right now to restore fish habitat in the Sandy Basin?

The City is already working to restore habitat for fish. Here are some of the highlights of 1999:

- **PGE Dam Removal:** In May 1999, the City announced a conceptual agreement to help Governor Kitzhaber and Portland General Electric (PGE) decommission the Little Sandy and Marmot hydroelectric project. Removing the dams will restore flow and/or access to 22 miles of salmon and trout habitat.
- **Sandy River Basin Agreement:** Also in May, the City signed the Sandy River Basin Agreement with PGE, National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and Oregon Department of Fish and Wildlife. The agreement partners will work together to recover protected fish populations in the Sandy Basin.
- **Flow Releases into the Bull Run River:** During August and September 1999, the Water Bureau released water from the Bull Run reservoirs into the lower Bull Run River. Three rates of flow were tested to determine the effects on

river temperatures and habitat quality. The Water Bureau also released water during the steelhead spawning season (late spring) and the chinook spawning season (early fall).

- **Gathering information and exploring partnerships:** The Water Bureau continued to gather technical data to learn more about how our water system affects the fish. The City also continued to develop new partnerships. For example, the Water Bureau and PGE, with help from the Sandy River Basin Watershed Council and private landowners, paid for Oregon Department of Fish and Wildlife staff to survey 20 miles of stream habitat on private land. The survey information will be used to identify possible habitat improvement projects.

## What's the longer-term strategy?

Over the next few years, the Water Bureau will develop a long-term strategy. This strategy will help us secure our continued access to water supply from the Bull Run River. The City will work with the Sandy River Basin Agreement partners as well as a wide range of interested groups and individuals. Evaluating habitat improvement options and negotiating the final strategy are expected to take several years.

## You can help!

Every gallon of water we use in the summer is a gallon not available to the fish in the lower Bull Run River. Efficient use of water at home, at school and at work makes it easier to share more water with the fish. Using water efficiently doesn't mean sacrificing a green garden, a clean house, or a profitable business. Water-saving fixtures and design ideas can help you do the same job with less water. Call the Water Bureau at 503-823-1303 for tips, or consult the Columbia-Willamette Water Conservation Coalition website: <http://www.conserveH20.org>

**Questions? Call the City of Portland Fish Line: 503-823-FISH (503-823-3474)**