



Salmon Conservation, Culture and Economy

Adapted from Oregon Department of Fish
and Wildlife Salmon and Trout
Enhancement Program

Salmon Help the Environment

Salmon are a keystone species that plays a significant role in maintaining healthy and productive terrestrial and aquatic ecosystems.

- Birds, fish and other creatures eat salmon eggs, fry and carcasses

- More than 40 species of wildlife including bears and eagles catch and eat spawning salmon or feed on their carcasses

- Ocean nutrients in salmon carcasses are absorbed into the ground and by plants, enriching the soil helping vegetation grow

- When salmon dig their redds they help flush silt downstream, keeping the water cleaner



Salmon Help the Economy: Commercial Fishing



Photo by John Mabel

Commercial fishing for salmon is an important part of the economy in the Pacific Northwest, including for communities along the Oregon Coast.

In 2011, the Oregon commercial salmon fishing industry:

- Landed 2.4 million pounds of salmon
- 545 boats were involved in catching salmon
- The catch was worth \$6.7 million
- Total benefit to the economy was \$10.3 million

Salmon Help the Economy: Recreational Fishing



Recreational fishing for salmon and steelhead has always been a favorite pastime for people living in the Pacific Northwest. It gives people the opportunity to enjoy the outdoors and contribute to the economy.

A 2008 study found that:

- 631,000 Oregonians went fishing
- They made 5,241 fishing trips
- They spent \$341.5 million on fishing trips
- They spent 441.3 million on fishing gear

Salmon – A Vital Part of Pacific Northwest Culture



Salmon are a vital part of the culture and lives of people living in the Pacific Northwest, from the coastal towns where people make a living catching them to the cities where they are eaten in restaurants.

People create art based on salmon and dress up like salmon in parades.

Oregon even has its own salmon license plate that helps fund salmon habitat restoration projects.

Salmon and Native American Culture



Salmon have been an integral part of the culture of many Native American tribes of the Pacific Northwest for thousands of years including their religious beliefs, cultural traditions and tribal economy. Today, salmon continue to be as important to Pacific Northwest Native Americans as they always have.



Many tribal members still fish for salmon and perform traditional First Salmon Ceremonies to celebrate the arrival of salmon each year.

The tribes help manage salmon and restore salmon habitat. Their traditional fishing rights are guaranteed by treaties with the U.S. Government.

Plight of the Salmon



Salmon were abundant when the first European-American settlers came to the Pacific Northwest. There were so many fish that they became a major part of the early economy, and millions of salmon were caught, processed in canneries and shipped to market.

In the early 1800s up to 17 million salmon returned to the Columbia River each year. But overharvest and habitat destruction from logging, mining, cattle grazing and other human development reduced their numbers to a fraction of what they once were.

Salmon throughout the Pacific Northwest have suffered the same fate.



Threats to Salmon: The 4 'Hs'

Today, there are four areas where people can do things that may threaten the survival of salmon and steelhead. They are often called the 'Four Hs'.

They are:

- Habitat
- Hydropower
- Harvest
- Hatcheries



Hatcheries



Hydropower



Habitat



Harvest

Habitat



Human development and natural resources extraction can do substantial damage to rivers and streams.

Removing riparian vegetation, chemical runoff from farms and roads, and fish passage blocked by small dams and culverts all harm salmon and trout habitat.

Efforts to improve habitat for salmon and other fish include stream restoration projects, removing structures that block fish passage and passing laws to stop stream polluters.

Hydropower



While dams provide an important source of electricity they also have a major impact on salmon.

Dams can make it harder for salmon to reach spawning grounds, or block them altogether. Fish may be killed when they go through the turbines. Reservoirs created by the dams slows smolt migration and makes them more vulnerable to predators.

Ways to help salmon swim over dams include fish ladders and other passage structures, and increasing spill.

Harvest



Overharvest by commercial fishers and recreational anglers can reduce the numbers of salmon returning to spawn. A major concern is preventing the overharvest of wild salmon, whose numbers are much lower than hatchery fish.

To help prevent overharvest, fishery managers set seasons and limits on the number of salmon harvested each year based on salmon run estimates.

To protect wild salmon, limits on the numbers harvested or accidentally killed (bi-catch) are placed. Often, wild salmon must be released when caught.

Hatcheries



Fish hatcheries play an important role in fishery management, producing millions of fish for commercial, recreational and tribal fisheries to catch. But they can also cause problems for wild salmon.

If too many hatchery fish are put into a stream, they can outcompete wild fish for food and space. Salmon raised in hatcheries can reduce wild salmon's ability to survive if they interbreed.



Trapping, harvest, acclimation, integrating wild genetics, and changing release sites are some of the methods used to reduce hatchery impacts on wild salmon and steelhead.

How to Help Salmon



There are many ways to help salmon and their habitat, and many salmon conservation groups that can help you get involved. Some of those ways include:

- Help STEP, watershed councils or other groups to restore stream habitat, such as planting trees.
- Help fish biologists with their fish management, monitoring, and conservation projects
- Learn to fish, to give you a greater understanding and appreciation of salmon, trout, and their habitats
- Tell people that abundant salmon and healthy salmon habitat are important and is everyone's responsibility