

# MYTHBUSTERS

## FISH AND WILDLIFE MYTHS ABOUT THE NORTHWEST HYDROELECTRIC SYSTEM



*Mortality rates are high among salmon eggs and smolts before they begin their migration to the Pacific Ocean. Photos by the Bonneville Power Administration.*

**Myth No. 4**  
The federal hydro system is the greatest source of mortality for salmon in the Columbia River.

## THE FACTS: A SCIENTIFIC OVERVIEW

### ◆ The quality of freshwater habitat is a primary factor affecting the survival of salmon and steelhead in the Columbia River Basin

Fewer than 10 percent of the eggs spawned in the Snake River successfully hatch and survive as juvenile fish to begin their migration to the ocean. Sources of mortality during the juvenile rearing portion of the salmon life cycle include man-made impacts to rearing habitat, such as logging and road construction, and natural factors, such as disease and predation.

### ◆ Ocean conditions are a significant factor affecting the return of adult salmon and steelhead

Ocean researchers have been measuring the conditions in the Pacific Ocean where juvenile salmon from the Columbia River live and grow. They found that water temperature, food availability and the number of predators that eat juvenile salmon have a much greater effect on salmon and steelhead stocks than the federal dams on the Columbia River. Fewer than 5 percent of the juvenile fish that successfully migrate to the ocean return to the Columbia River as adult fish.

### ◆ The survival of juvenile salmon and steelhead passing through the Columbia River is similar to, or better than, survival observed in other river systems on the Pacific Coast of North America

Research by NOAA Fisheries, the federal agency charged with salmon recovery, shows the mean estimated survival for yearling chinook salmon traveling through the entire Columbia River hydropower system in 2006 was 55 percent; steelhead survival was about 35 percent. For comparison, the mean estimated survival for yearling chinook salmon traveling through the undammed Fraser-Thompson River system in British Columbia in 2006 was 14 percent to 34 percent; steelhead survival was 21 percent to 39 percent.

### ◆ Read more about fish and wildlife myths at [www.ruralite.org/mythbusters](http://www.ruralite.org/mythbusters)

*Source: Public Power Council, based on research collected from state and federal agencies, universities and the private sector.*