

# Hydropower Reform Coalition Success Story

## SKAGIT RIVER PROJECT

### SKAGIT RIVER, WASHINGTON

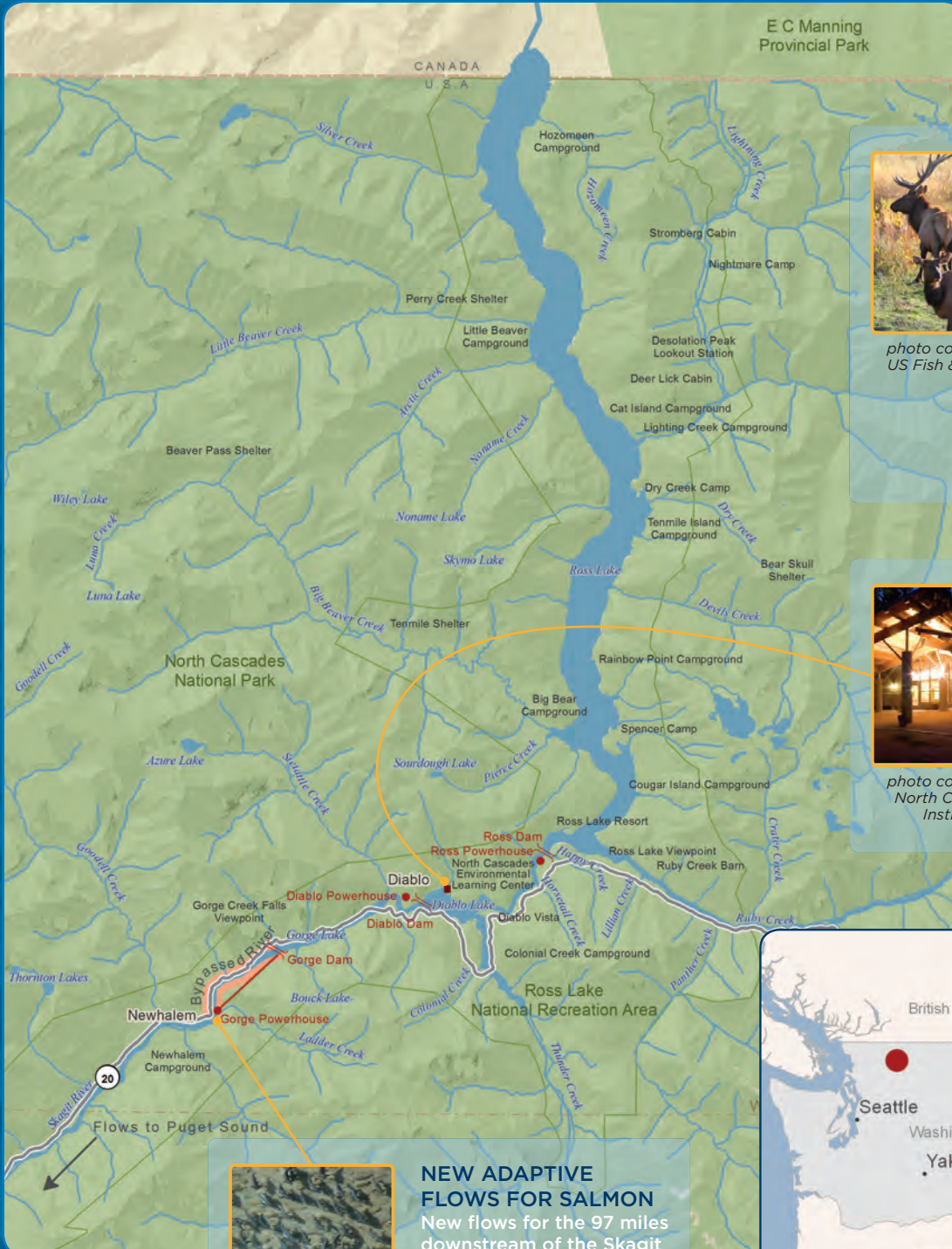


photo courtesy of US Fish & Wildlife

**NEW LAND PROTECTIONS IN THE SKAGIT BASIN**  
 \$17 million (in 1995 dollars) dedicated to acquiring and restoring habitat, wildlife research, and protection of unique landscapes around the project. These funds successfully leveraged additional resources to for habitat protection and landscape level conservation.



photo courtesy of North Cascades Institute

**NORTH CASCADES ENVIRONMENTAL LEARNING CENTER**  
 The 2005 completion and ongoing support of a world-class environmental education center on the shores of Diablo Lake.



Pink salmon crowd the Skagit in 2009. Courtesy Seattle City Light

**NEW ADAPTIVE FLOWS FOR SALMON**  
 New flows for the 97 miles downstream of the Skagit River Project. The river holds the largest run of native chinook salmon in the Puget Sound region and the largest run of chum salmon and pink salmon in the lower United States.



# SKAGIT RIVER PROJECT

## Skagit River, Washington

The Skagit River basin is the largest drainage in Puget Sound, covering 3,140 square miles and representing a unique regional and national resource. Over 158 miles of river including its major tributaries are federally protected Wild and Scenic reaches. Its upper watershed is deeply embedded in the spectacular North Cascades National Park [pictured at right]. Within the Park, the Ross Lake National Recreation Area immediately surrounds 35 miles of Skagit River, surrounding Seattle City Light's hydroelectric project.

At the threshold of the public power era, Seattle City Light developed the Skagit River Project, a three-dam hydropower project on the upper Skagit River. In 1926, City Light built the first Skagit River dam, Gorge Dam. Slightly upstream and the second to be constructed, Diablo Dam was the highest dam in the world at the time of its completion in 1930. Finally and farthest upstream, Ross Dam was completed in 1949, creating a 24-mile reservoir that extends 1.5 miles over the Canadian border. On average, Ross Lake is more than a mile wide. None of the Skagit dams has fish passage facilities. Scientific studies show that the Gorge Reach of the Skagit was the highest point salmon could historically reach. Downstream of these dams, the Skagit is unimpeded.

Beginning in 1968, Seattle City Light publicly planned changes to the Skagit River Project, including raising the height of Ross Dam from 540 feet to 665 feet (see sidebar). As its 1927 license was set to expire, City Light filed for a new license from the Federal Energy Regulatory Commission (FERC) in 1977. At the same time, FERC initiated a separate proceeding to adjust dam releases and avoid an irreversible decline of the Skagit salmon stocks. The result of this proceeding was the 1981 Skagit Fisheries Agreement. The Agreement rewrote the flow regime for the lower 97 miles of the Skagit, improving conditions for salmon and setting the stage for licensing negotiations.

The Skagit compromise was a precedent-setting effort. In 1991, Seattle City Light filed a comprehensive set of settlement agreements addressing all environmental issues at the project. Cultural settlements with tribes were filed in 1993. FERC ultimately accepted all of the settlements into a new license, effective in 1995. At that time, a comprehensive suite of settlements resolving all issues with all parties was a novel approach to hydropower licensing.

As a part of the Fisheries Agreement, flows from Gorge Powerhouse were modified with a focus on the 25 miles immediately downstream of the powerhouse. This reach holds the largest number of spawning chinook salmon, chum salmon, and pink salmon in the basin. Seattle City Light must ramp down its generating flows, rather than drop the river level suddenly. It also must steadily release minimum flows that are 150% higher than previous minimums, varying seasonally and annually to reflect more natural conditions. Throughout the period of the license, Seattle City Light must test the response of fish populations and the habitat availability for spawning and rearing under the new flows, and make ongoing changes to protect Skagit River salmon.

Under the settlement, Seattle City Light contributed to the construction and operations of the North Cascades Environmental Learning Center. Opened in 2005, the Center occupies a portion of the site of the old Diablo Lake Resort. Today the Center provides a home for the North Cascades Institute, dedicated to environmental education and connecting people to the landscape and ecology of the North Cascades.

To mitigate for the project's footprint, City Light dedicated \$17 million to land acquisition and management in order to offset the impact of the project on wildlife habitat in the Skagit River watershed, in particular eagle and elk habitat. As of 2008, ninety-four percent of the fund has been spent, and over 8,260 acres have been acquired. Half of this acreage is in the Skagit and Sauk River watersheds. The other half is in the South Fork Nooksack River watershed, a precedent-setting example of using mitigation funds to invest in habitat in a nearby watershed as high-value mitigation for habitat lost to hydropower development.

FERC PROJECT NUMBER: P-553  
PROJECT OWNER: Seattle City Light  
GENERATING CAPACITY: 690 MW  
PROJECT CONSTRUCTED: 1926-1949  
SETTLEMENT ACHIEVED: April 30, 1991  
CURRENT LICENSE ISSUED: May 16, 1995  
LICENSE EXPIRATION DATE: April 30, 2025  
FEDERAL LANDS: 19,270 acres (Ross Lake National Recreation Area, National Park Service)

#### KEY SETTLEMENT SIGNATORIES:

- Seattle City Light
- Tribes: Swinomish Indian Tribal Community, Upper Skagit Tribe, Sauk-Suiattle Tribe, Nlaka'pamux Nation of British Columbia, Canada
- Federal Agencies: National Park Service, National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service
- State Agencies: Washington State Department of Game, Washington State Department of Fisheries, Washington Department of Ecology
- Coalition Member: North Cascades Conservation Council



#### SUCCESS BY THE NUMBERS:

- The first 25 miles downstream of the Gorge Powerhouse is the highly-productive target reach for the new flow regime. In October 2009, an estimated 1.2 million pink salmon and 25,000 chinook returned to this reach, the highest levels in 40 years.
- \$17 million set aside for land acquisition and improvements such as road retirement, bridge removal, and riverine habitat restoration, and another \$17 million spent on restoration, such as new access points to the skagit.
- Ecosystem research, long-term monitoring, and wildlife protections within the nearly 20,000 acres of the Ross Lake National Recreation Area occupied by the project.

### HIGH ROSS

In 1968, nearly twenty years after the project's completion, Seattle City Light began to explore raising Ross Dam by 125 feet, an addition that was considered in the original design and engineering of the dam. Among other damages, the raised dam option – called "High Ross" – would have drowned the magnificent Big Beaver valley and its stand of giant western red cedars, the largest remaining in the United States. On the Canadian side of the border, High Ross would have flooded ten square miles of land in British Columbia.

The City of Seattle, which governs Seattle City Light, wrestled with this option for years amid public controversy, electoral changes, and intense

opposition from the conservation community. Although FERC approved City Light's amendment to raise Ross Dam in 1977, delay from extended appeals and a third-party power analysis led to an alternate solution.

In 1983, Seattle reached a unique agreement with British Columbia, under which it would receive guaranteed power for 80 years. Both parties pooled funds together for a \$5 million Skagit River endowment to protect the upper basin. President Ronald Reagan signed this agreement as a treaty in 1984 and put the decades-long battle over High Ross to rest.