



FISH PASSAGE & REINTRODUCTION

— into the —

U.S. & CANADIAN UPPER COLUMBIA BASIN

Fish passage & reintroduction are key to integrating ecosystem-based functionality into the Columbia River Treaty.

Since time immemorial, indigenous people in the Columbia Basin sustained a way of life dependent on a healthy ecosystem. Fish were a mainstay of diet – physically and spiritually.

In 1942, Grand Coulee Dam was built on the Columbia River without fish passage. The dam is responsible for the loss of about two to four million salmon harvested and consumed by native peoples throughout the basin annually.

The Columbia Basin tribes and First Nations jointly developed a paper to inform the U.S. and Canadian entities, federal governments, and other regional sovereigns and stakeholders on how anadromous salmon and resident fish can be reintroduced into the upper Columbia River Basin.

COLUMBIA RIVER TREATY

In 1964, the Columbia River Treaty resulted in further development of the Columbia River by the United States and Canada. The Treaty was designed with two primary purposes, reducing flood risk and increasing hydropower generation.

In the process of harnessing the river, substantial habitat for salmon, steelhead and other fish species was inundated or blocked. Major anadromous fish runs were eliminated or decimated.

Little, if any, consideration and accommodation was planned for ecosystem values and the rights and needs of native peoples.

PROPOSAL

Restoring fish passage and reintroducing anadromous fish should be investigated and implemented as a key element of integrating ecosystem-based function into the Treaty.

Reintroduction would occur incrementally, beginning with a series of preliminary planning, research and experimental pilot studies designed to inform subsequent reintroduction and passage strategies.

PHASES

- 1 Pre-assessment planning for reintroduction and fish passage.
- 2 Experimental, pilot-scale salmon reintroductions and interim passage facilities.
- 3 Construction of permanent juvenile and adult passage facilities and support of propagation facilities. Implement priority habitat improvements.
- 4 Monitoring, evaluation and adaptive management. Continue needed habitat improvements.

OBJECTIVES

- 1 Restore natural spawning and hatchery-based runs of sockeye and chinook salmon into the upper Columbia River Basin and commercial and subsistence harvest opportunities.
- 2 Determine contribution of reintroductions to salmon recovery, habitat diversity, ecosystem health, and long-term sustainability of salmon and other fish species with expected climate change impacts.
- 3 Establish and increase ceremonial and subsistence, sport and commercial fish harvest opportunities.
- 4 Restore access and population structure of resident bull trout, lamprey, sturgeon and other native fish species to historical habitats.

PASSAGE STRATEGIES AND TECHNOLOGIES

Fish passage technology and scientific tools and methods for investigating fish behavior and survival have improved significantly in the past several years.

Determining the initial feasibility of passage through Grand Coulee, Chief Joseph, Hugh Keenleyside and Brilliant projects could then lead to implementation of more permanent passage facilities at these facilities while further feasibility testing is undertaken at Waneta and Seven Mile projects.

CLIMATE CHANGE

With predicted climate change, many current salmon habitats in the U.S. may be lost to intolerable temperature conditions. At this time, the key salmon management strategy for preparing for climate change in the Columbia Basin is to restore fish access to historical habitats where water temperatures should remain cool. This means providing access to higher elevation habitats.

CULTURAL SIGNIFICANCE

The importance of salmon and other fish species to tribes and First Nations is paramount to their culture and being. Salmon are a sacred resource.

The loss of the salmon and other fish species irreparably harmed native peoples. Tribal members lost economic activity, fishing related jobs and trading opportunities. The loss interrupted the ecological integrity and health of the environment.

NATIVE PEOPLE'S RIGHTS

Recognition and protection of the rights of native peoples is an established principle of the domestic legal systems of both Canada and the U.S., as well as a recognized principle of international law.

Regrettably, these principles were not honored at the time the U.S. and Canadian governments built the dams that have so fundamentally altered the flows of the Columbia River system.

POTENTIAL EFFECTS OF FISH PASSAGE

The fish passage technologies should function within the current operational limits and purposes of the U.S. and Canadian projects. The tribes expect fish passage and reintroduction to have no substantial impacts on current flood risk management and irrigation operations at the Chief Joseph and Grand Coulee projects.

Hydropower is an important clean energy source, but maximizing hydropower generation is not clean energy when it comes at the expense of ongoing salmon extinction and cultural loss.

FUNDING AND COST ALLOCATION

Complementary and coordinated funding avenues and opportunities should be the subject of negotiations between the U.S. and Canada to modernize the Treaty. Funding can come from a variety of sources, with initial elements funded through the Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program.



UPPER COLUMBIA UNITED TRIBES



CANADA COLUMBIA RIVER
INTER-TRIBAL
FISHERIES COMMISSION



COLUMBIA RIVER INTER-
TRIBAL FISH COMMISSION



OKANAGAN
NATION ALLIANCE



UPPER SNAKE
RIVER TRIBES



COWLITZ INDIAN TRIBE



CONFEDERATED SALISH &
KOOTENAI TRIBES