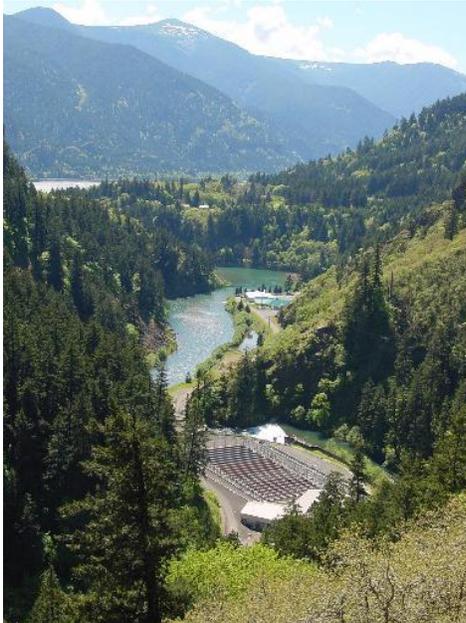




Hatchery Update

Little White Salmon National Fish Hatchery



About Little White Salmon National Fish Hatchery

The Little White Salmon National Fish Hatchery (NFH) was established in 1896 and is the oldest federal hatchery on the Columbia River. Congressional authorization was based on the intent to supplement the commercial fishing industry and to address the decline of tule fall Chinook, the native salmon stock that returned to the Little White Salmon River. The completion of Bonneville Dam in 1938 was probably the most significant event that occurred in the first 42 years of operation. Not only was the hatchery flooded by the rising Bonneville Pool, but the average annual egg take of tule fall Chinook declined by 44%. The natural spawning grounds of this fish were lost as habitat at the mouth of the river was inundated by the Bonneville pool. The original mouth of the Little White Salmon River extended nearly an additional half mile out and downstream of its current location on the Columbia River. This prime spawning habitat essential to the survival of naturally spawning tule fall Chinook was permanently lost following the completion of Bonneville Dam in 1938. It was during this time that the hatchery became part of the Mitchell Act program, producing fish to mitigate for lost habitat

that resulted from the construction and operation of the fledgling Columbia River hydropower system.

Reimbursable funds from other agencies accounted for a majority of the operational budget at the Little White Salmon NFH with most of these funds (43.0% in fiscal year 2012) coming from NOAA - Fisheries Mitchell Act appropriation. Remaining reimbursable funds are for fish reared for specific programs such as the Bonneville Power Administration reimbursed Mid-Columbia Coho Reintroduction Project, U.S. Army Corps of Engineers John Day mitigation program, and the Grant County PUD-funded White River Recovery program.

The hatchery is located in south-central Washington on the Little White Salmon River approximately one mile upstream from the Columbia River. The Little White Salmon River joins the Columbia River at river mile 162 and is located approximately 12 miles east of Stevenson, Washington. Drano Lake, a natural impoundment at the mouth of the river, is a popular sport and tribal fishing area. The hatchery is located on 432 acres of land including easements.

Current Fish Production Program

The current Complex production program is guided by specific fish production goals identified in the recently negotiated 2008-2017 United States v. Oregon Management Agreement. The purpose of the Management Agreement is to provide a framework within which the Parties (the State of Washington, the State of Oregon, the State of Idaho, the United States, the Shoshone Bannock Tribes, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Confederated Tribes and Bands of the Yakama Nation) may exercise sovereign powers in a coordinated and systematic manner in order to protect, rebuild, and enhance upper Columbia River fish runs while providing harvests for both treaty Indian and non-treaty fisheries. The primary goals of the Parties are to rebuild weak runs to full productivity and fairly share the harvest of upper river runs between treaty and non-treaty fisheries in the ocean and Columbia River Basin. As a means to accomplish this purpose, the Parties intend to use habitat protection authorities, enhancement efforts,

and artificial production techniques as well as harvest management to ensure that Columbia River fish runs continue to provide a broad range of benefits in perpetuity. Fish production goals specific to the hatchery and agreed to by the Parties include:

- 750,000 yearling spring Chinook salmon released on site.
- 150,000 endangered White River spring Chinook pre-smolts for transfer, acclimation, and release into the White River, Washington.
- 4,500,000 sub-yearling upriver bright (URB) fall Chinook released on site.
- 1,700,000 sub-yearling URB fall Chinook released off site on the Yakima Indian Reservation as mitigation for John Day Dam.
- 4,500,000 million URB fall Chinook eggs for transfer to the Yakama Nation Klickitat Hatchery.
- 1,700,000 sub-yearling tule fall Chinook salmon released on site.
- 2 year classes of endangered White River spring Chinook captive brood stock for spawning, second generation juvenile production, and to prevent the extinction of this population of fish.



Cultural Values

The Columbia River Treaty Tribes (Yakama Nation, Confederated Tribes of the Warm Springs Reservation of Oregon, Nez Perce, and Confederated Tribes of the Umatilla Indian Reservation) share the in-river harvest of spring Chinook, URB fall Chinook, and coho returning to the Little White Salmon NFH. The cultural significance of these fish to the tribes is best characterized by the following quotation:

“Salmon was presented to me and my family through our religion as our brother. The same with the deer. And our sisters are the roots and berries. And you would treat them as such. Their life to you is just as important as another person would be.”

Margaret Saluskin, Yakama Nation, Columbia River Inter-Tribal Fish Commission.

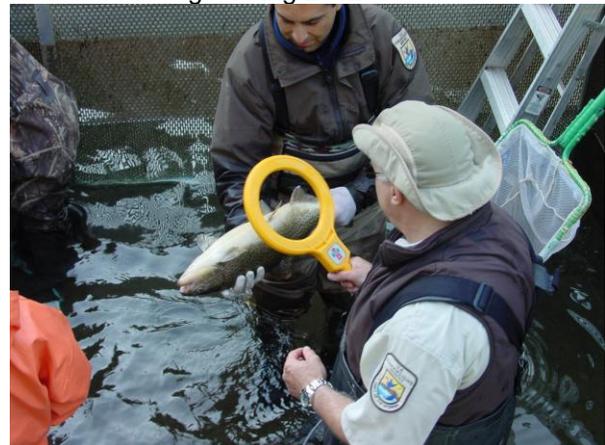
Coded-Wire Tag Marking Program

Marking of fish using an adipose fin clip and/or coded-wire tagging technology makes determining survival rates and contribution of salmon to the various fisheries in and out of the Columbia River possible. At present all spring Chinook salmon are fin clipped with 75,000 being coded-wire tagged. This mass marking of spring Chinook complies with selective fisheries management practices now instituted for hatchery releases into the Columbia River.

All spring and URB fall Chinook salmon released from the hatchery are 100% adipose fin clipped and a portion are additionally coded-wire tagged to access survival and fisheries contribution. This change from past Chinook salmon releases represents an effort to mark all hatchery salmon reared and released into the Columbia River. This marking effort is dependent on annual funding and equipment availability.

PIT Tagging Program

Both spring and fall Chinook salmon released on station include a representative PIT (passive integrated transponder) tag to provide real-time harvest management in the Columbia River and Drano Lake. A total of 15,000 spring Chinook salmon and 25,000 URB fall Chinook salmon received PIT tags during 2012.



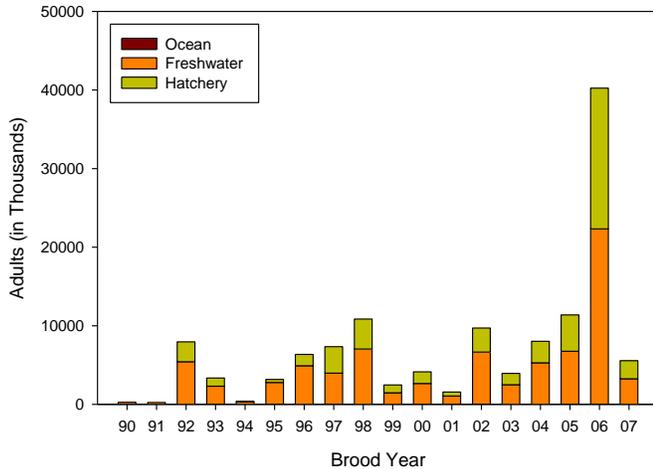
Sampling of Returning Fish

A proportion of returning adults are sampled at each hatchery. Sex and length are recorded and scales are collected to determine age. By using sample information and the number of returning fish, it is possible to calculate the number of returning fish for each age group and, consequently, the number of fish returning from each brood year or release year.

Spring Chinook Salmon

Most returning adult spring Chinook salmon return as 4 year olds. Almost all spring Chinook are harvested in fresh water in the Columbia River. The majority are harvested in the sport fishery in Drano Lake, just below the hatchery. Washington Department of Fish and Wildlife estimates that adult spring Chinook salmon were harvested by sport and tribal fisherman in Drano Lake in 2011.

Total Adult Production of Spring Chinook Salmon by Brood Year



has encouraged the Yakama Nation to hold these Drano Lake lottery gillnet fisheries to help reduce the number of fish that are excess to hatchery escapement goals. In addition, terminal area fisheries similar to the Drano Lake spring and fall tribal fisheries emphasize the harvest of hatchery fish while avoiding the potential impacts on wild and endangered fishes that occurs in mainstem Columbia River mixed stock fisheries. The Yakama Nation lottery fishery occurs one day per week (Tuesday night thru Wednesday noon) coincident with a one day sport fishing closure. A total of 20 randomly drawn tribal fishermen are limited to 150-foot of gillnet during each fishing period.

In addition, 12,162 spring Chinook, fall Chinook and coho salmon carcasses were donated to the Yakama Nation, Confederated Tribes of the Warm Springs Reservation, and Northwest Harvest Food Bank.



Mitigation Production – Producing Fish for Tribal Harvest



Producing fish for tribal harvest is an important goal of the hatchery mitigation program. To help minimize excess fish at the hatchery, the Yakama Nation scheduled a fall tribal gillnet fishery in Drano Lake targeting fish returning to Little White Salmon NFH. A total of four days of fishing occurred during October resulting in the harvest of 8,403 URB fall Chinook, 201 Coho, and 34 Steelhead. The annual spring tribal fishery in Drano Lake resulted in the harvest of 1,819 fish. The Service

Drano Lake Tribal Platform Fishery

The U.S. District Court reaffirmed Native American fishing rights as reserved under the Treaty of 1855 to fish in "usual and accustomed" places along the Columbia River. Drano Lake, located downstream of the Little White Salmon NFH, is one of those areas. The Yakama Nation Tribal Council opened Drano Lake for a year round tribal platform and hook and line fishery. Focusing on the harvest of fish returning to Little White Salmon NFH, this fishery is an integral component of the Service's tribal trust responsibility that focuses on cooperation with Native Americans. As a result the Drano Lake platform fishery is an appropriate use of Service-owned land. The consistently strong returns of Chinook salmon to the hatchery provide plenty of harvestable fish for all users in this shared fishery.

Providing Harvest Opportunities for Persons with Disabilities

An additional complication of the newly created tribal platform fishery involved the construction of two platforms on the public fishing area commonly known as "Social Security Beach", an area intensely

used by sport bank fisherman. During October 2010 the Service initiated engineering design work to construct an Americans with Disabilities (ADA) compliant wheelchair access ramp at the social security beach fishing area. Unfortunately the two tribal platforms presented a formidable obstacle to disabled individuals wishing to fish from the Drano Lake shoreline. Service staff held discussion with representatives from both Washington Department of Fish and Wildlife (WDFW) and the Yakama Nation to help achieve shared use of this popular bank fishing area. As a result, the Yakama Nation Fish, Wildlife and Law and Order Committee took official action on August 25, 2011 to prohibit tribal fishing scaffolds within 50-feet of “Social Security Beach” on Drano Lake. A description of the formal action taken by the tribal council follows:



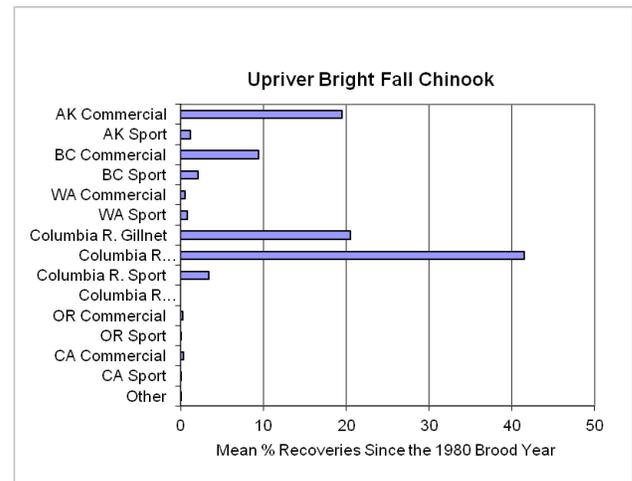
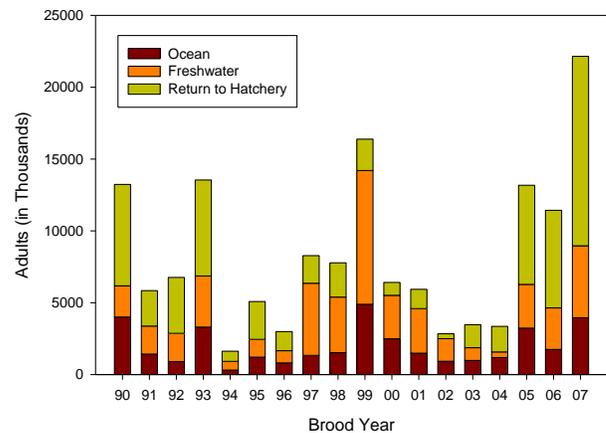
“Social Security Beach” at Drano Lake is so-called because its low bank provides the only access to elders and handicapped wishing to participate in the bank fishery. The construction of two scaffolds at that site has greatly reduced the limited space available to elders and disabled bank fishers at Drano Lake and may interfere with the planned construction of a fishing dock for disabled and wheelchair-bound fishers. In respect for the ability of elders and disabled to have an opportunity to fish, the Yakama Nation hereby prohibits the presence of fishing scaffolds within 50 feet of “Social Security Beach” on Drano Lake.

The open dialogue between representatives of the Service, WDFW, and Yakama Nation leading to the Yakama Nation resolution is most notable. This is an excellent example of the strong agency partnership that exists in the Columbia River Gorge. This partnership effort not only shows a willingness to constructively work together for shared use of scarce bank fishing areas upstream of Bonneville Dam, it also assures equally bank fishing opportunities for all Americans regardless of their physical limitations.

Upriver Bright Fall Chinook

Most URB fall Chinook salmon return and are harvested at age four. These fish have contributed to commercial and sport fisheries along the west coast of the U.S. and Canada from Alaska to California. Commercial fisheries in Alaska, British Columbia and gillnet fisheries in the Columbia River harvest the majority of the fish. In 2012, 8,403 upriver bright fall Chinook salmon were harvested in the Drano Lake tribal fishery. Little White Salmon NFH production annually contributes significantly to the sport fisheries in the U.S. and Canada.

Total Adult Production for Bright Fall Chinook Salmon At Little White Salmon NFH by Brood Year



For more information, please contact:

Casey Risley, Hatchery Manager
Little White Salmon National Fish Hatchery
509-538-2755 or email casey_risley@fws.gov
<http://www.fws.gov/gorgefish/littlewhite/>

Rod Engle or William R. Brignon, Fish Biologists
Hatchery Assessment Team
Columbia River Fisheries Program Office
360-604-2500 or email Rod_Engle@fws.gov or bill_brignon@fws.gov

*Produced by Cheri Anderson
Database maintained by Stephen Pastor
<http://www.fws.gov/columbiariver>*