



Hatchery Update

Warm Springs National Fish Hatchery

About Warm Springs National Fish Hatchery

The hatchery is located at Rkm 16 of the Warm Springs River, within the Warm Springs Reservation of Oregon. The Warm Springs River is one of two rivers in the Deschutes River subbasin that supports natural production of spring Chinook salmon (*Oncorhynchus tshawytscha*). Construction of the hatchery was authorized by an Act of Congress in 1966 and fish production began in 1978. Production from the hatchery is considered pivotal for the enhancement of spring Chinook salmon populations and meeting tribal trust responsibilities.



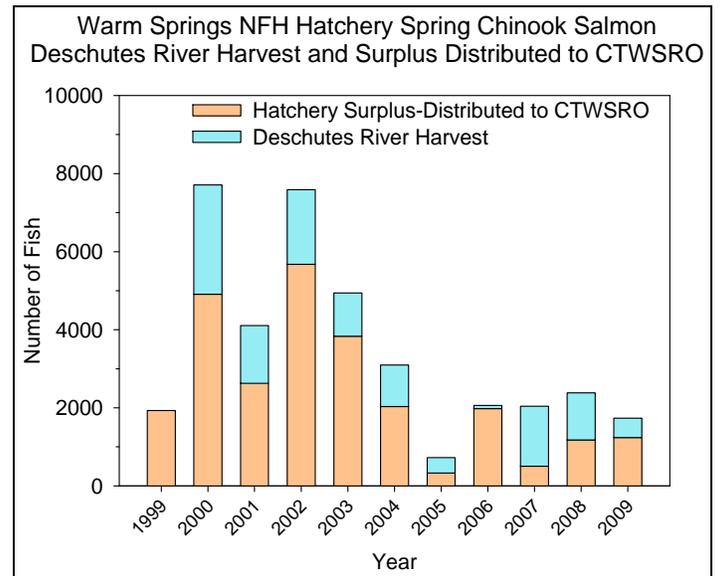
Tribal fisherman at Sherars Falls on the Deschutes River.

Goal

The Service and the Confederated Tribes of the Warm Springs Reservation of Oregon cooperatively manage the hatchery in a manner that will provide tribal and sport harvest opportunities, enhance the anadromous fish runs in Reservation waters, and meet the future needs of the resource as well as those of the Tribes while protecting wild fish populations. The Service and Tribes have taken an integrated approach to the management of the hatchery that focuses not only on producing fish but also on determining what effects hatchery fish have on the ecosystem into which they are released.

Objectives of the Hatchery

- Produce fish for tribal and sport harvest
- Enhance anadromous fish runs to meet the needs of the resource and the Tribes.
- Maintain wild fish traits in the hatchery program and minimize impacts to wild populations.
- Develop and implement a hatchery operation plan to conserve Warm Springs River fish populations

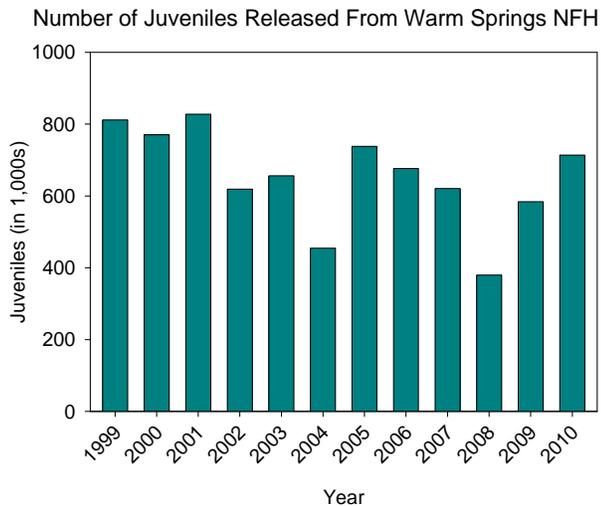


Hatchery Operation Plan and Production

The Service and the Confederated Tribes of the Warm Springs Reservation of Oregon revise the hatchery's operations and implementation plan every five years to meet the changing needs of the resource or operations of the hatchery and to meet management objectives.

Current production goals:

- Release up to 750,000 juveniles annually
- Produce at least 2,925 adults returning to the mouth of the Deschutes River
- Maintain a minimum escapement of 1,000 wild adults upstream of the hatchery.
- Long term escapement goal of 2,800 wild adults upstream of the hatchery.



Hatchery Monitoring and Evaluation

In 1984, the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO) asserted that separating the hatchery and natural producing fish would best serve the fish and the needs of the tribal people. The CTWSRO proposed a two stock concept, whereby only wild (unmarked) fish would be passed above the hatchery. To this end, all fish released from the hatchery are marked with a coded-wire tag and a fin-clip to distinguish them from wild fish. The differential marking of hatchery and wild fish provides consistent long term data on the life-history patterns and possible changes which may occur within stocks. It also allows for maintenance of the genetic integrity of the naturally producing stock. The hatchery tries to maintain the genetic and life-history characteristics of the wild population in the hatchery environment by incorporating wild fish into its broodstock, but only when wild returns are greater than 1,000 adults.

The Service, Tribes, and their partners work together to evaluate hatchery rearing and release practices in order to determine the best way to meet hatchery production and return goals. Examples of such evaluations include rearing and release evaluations, adult migration and behavior monitoring, and passive integrated transponder (PIT) tag monitoring.

Reports of the hatchery evaluations and monitoring programs can be found on the web at:

<http://www.fws.gov/pacific/columbiariver/>

Outlook for the Future

The Service and the Tribes use the information gathered from the evaluation programs to update the hatchery operations and implementation plan every five years. Results of the evaluations also guide the hatchery in the production of hatchery fish that mimic the wild population in the Warm Springs River, minimize negative interactions with native fish populations, and meet the harvest and resource needs of the Confederated Tribes of the Warm Springs Reservation of Oregon.



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