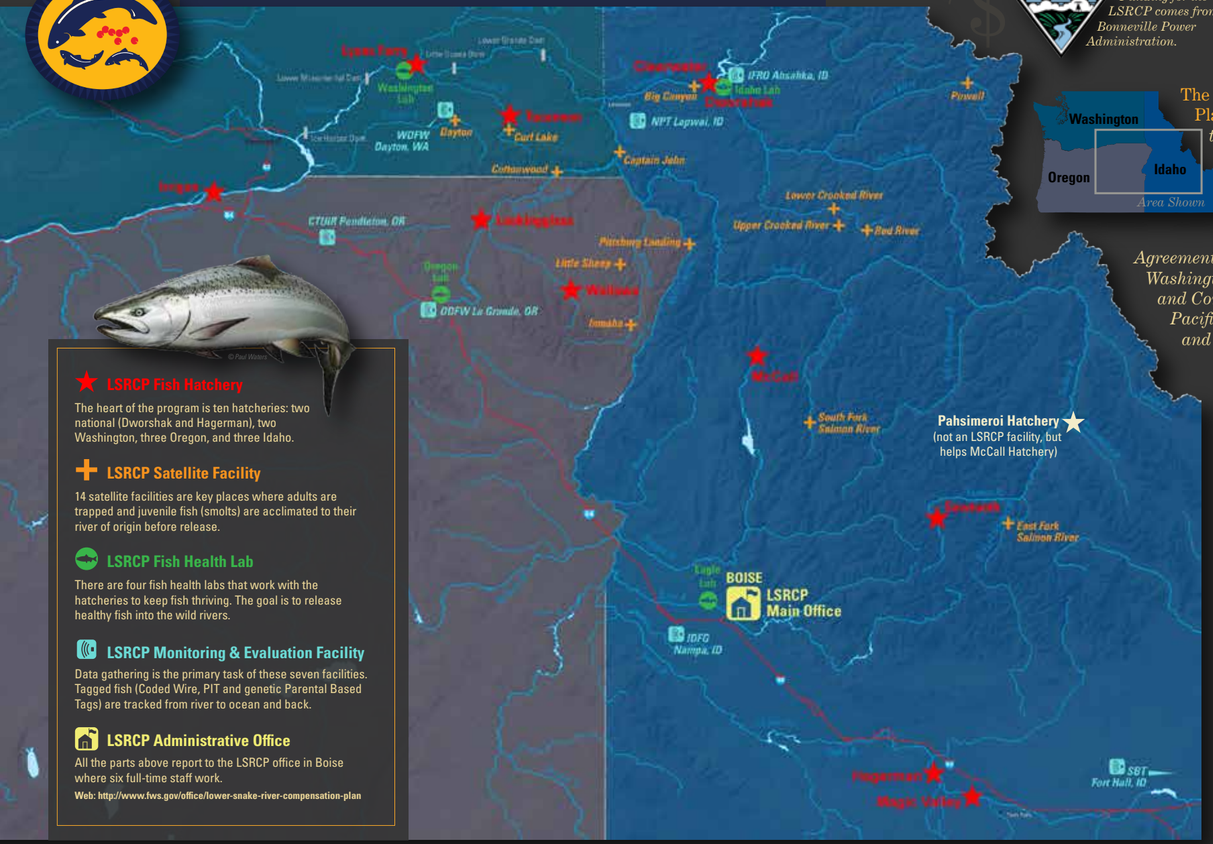
Lower Snake River Compensation Plan or LSRCP

Funding for the LSRCP comes from the Bonneville Power Administration.

The LSRCP program is administered by the U.S. Fish & Wildlife Service



The Lower Snake River Compensation Plan was authorized by Congress in 1976 to mitigate for the adverse impact four lower Snake River dams had on commercial, recreational and tribal fisheries. Our hatcheries and evaluation programs are conducted under Cooperative Agreements with the States of Idaho, Oregon and Washington, the Nez Perce, Shoshone-Bannock and Confederated Umatilla Tribes, and the Pacific States Marine Fisheries Commission and Service hatcheries and field stations.

LSRCP Fish Hatchery

The heart of the program is ten hatcheries: two national (Dworshak and Hagerman), two Washington, three Oregon, and three Idaho.

LSRCP Satellite Facility

14 satellite facilities are key places where adults are trapped and juvenile fish (smolts) are acclimated to their river of origin before release.

LSRCP Fish Health Lab

There are four fish health labs that work with the hatcheries to keep fish thriving. The goal is to release healthy fish into the wild rivers.

LSRCP Monitoring & Evaluation Facility

Data gathering is the primary task of these seven facilities. Tagged fish (Coded Wire, PIT and genetic Parental Based Tags) are tracked from river to ocean and back.

LSRCP Administrative Office

All the parts above report to the LSRCP office in Boise where six full-time staff work.

Web: http://www.fws.gov/office/lower-snake-river-compensation-plan

LSRCP yearly adult PRODUCTION:

91,500	Fall Chinook
293,500	Summer/Spring Chinook
165,300	steelhead…

for harvest in the ocean and Columbia below McNary Dam and to escape Chinook and steelhead adults along the lower Snake River. Subtract return goal (below) for coast wide harvest.

LSRCP yearly adult RETURN GOALS:

18,300	Fall Chinook
58,700	Summer/Spring Chinook
55,100	steelhead…

returning above McNary Dam to the LSRCP project or above.

LSRCP facilities raise 86,000 pounds of rainbow trout for local recreational fishing in Washington and Idaho.

NOAA's National Marine Fisheries lists Snake River Chinook and steelhead as threatened and sockeye as endangered. The LSRCP supports recovery of these endangered stocks through outplanting juvenile and adult fish.

McCall Hatchery yearly LSRCP summer Chinook goal: 1,000,000 smolts released / 8,000 adults returning

1. McCall Hathery traps summer Chinook adults at its South Fork Salmon River weir.
2. When ripe, adults are spawned at South Fork. Water-hardened eggs are then shipped to the hatchery.
3. McCall works closely with the Eagle Lab to insure that our fish stay healthy. The lab checks adult fish at spawning and juveniles prior to release.
4. Pacific States Marine Fisheries Commission marks juveniles for tracking the 1,440-mile round trip from mountain to ocean
5. We work closely with the Nez Perce and Shoshone-Bannock Tribes on their fishery restoration projects
6. McCall was the first Idaho hatchery built for the Lower Snake River Compensation Plan in 1979. In 2007 the South Fork weir/trap was renovated.

U.S. Fish & Wildlife Service

McCall
Fish Hatchery

McCall Fish Hatchery
Box 1021
McCall, ID 83638

208/634-2690
http://idfg.idaho.gov

U.S. Fish & Wildlife Service
http://www.fws.gov/office/lower-snake-river-compensation-plan

December 21, 2023

Cover photo, © Cody Clifford

Part of the ~
LOWER SNAKE RIVER COMPENSATION PLAN

Welcome to

Open daily 8 to 4.

Visitor Center self- guided tour marked on map, dashed orange line.

Summer Chinook Hatchery Cycle

Spring

- Summer Chinook smolts reach 5" in length at 1.5 years old
- Smolts are transported to the South Fork of the Salmon River for release
- Rearing ponds are cleaned

Summer

- Fry are transferred to outdoor rearing ponds
- Fingerlings are adipose clipped & coded wire tagged
- Adult Chinook broodstock are trapped at South Fork

Fall

- Broodstock are transferred to McCall for spawning
- Eggs are reared & picked in incubators
- Late Fall temps reach a low of 37° F for the winter
- Parr slow down feeding during low water temps & are PIT tagged

PIT tag placed in abdomen

Winter

- Maintenance feeding diet for parr
- Eggs hatch in incubators & are ponded to hatchery tanks

egg hatching

- Fry are fed in tanks inside
- Snow removal & facility maintenance

Summer Chinook

THE HATCHERY GROUNDS

Fish illustrations, © Paul Waters

We hold rainbow trout to stock locally for recreational fishing.

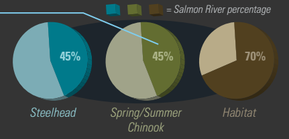
Rainbow trout

Our Water Source is a 3-foot diameter pipe that splits at Payette Lake: one branch taking warmer surface water, the other taking cold, 38°water from 50-feet below the surface.

9,000 gallons per minute

750 Miles from ocean to weir on the South Fork of the Lower Salmon River.

South Fork Salmon River is 70 percent of the total Salmon River summer Chinook



Salmon River as part of the Columbia Basin. The Salmon is appropriately named.

$4.6 billion dollars value of Columbia Basin recreation

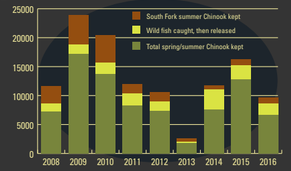
All dollar/value data from 2016

$3,392,344 value of Lower Snake Chinook recreational fishery

$91.28 Chinook* value per angler day

* **$282,649** value of 3,097 angler days in the 2016 season to catch 1,237 summer Chinook salmon, raised here at McCall Fish Hatchery

Salmon River Spring/Summer Chinook Fishery



Salmon River Recreational Fishery South Fork summer Chinook are a reliable part of the Salmon River's recreational fishery.

Part of the~ LOWER SNAKE RIVER COMPENSATION PLAN

The Chain of Habitats

Summer Chinook use an interlocking chain of habitats to the ocean and back, linked habitats where fish get exactly what they need when they need it. This chain goes from the mountains of the Lower Salmon River down the Snake/ Columbia River mainstems to Columbia's estuary and finally the ocean. A weak link in the habitat chain can lead to population decline. This chain has been set for a several million years.

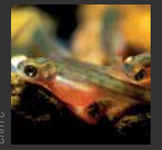
Home stream
When spawning, the salmon nest or redd is located in the stream such as to not wash away in high water, or dry up in low, nor be smothered in fine silt. Cold water has sufficient oxygen to bathe the incubating eggs whereas warm water brings disease. Complex gravel of contrasting size provides crevices for the newly hatched alevin to hide in. Once they've used up their yolk sac, the fry must have adequate bugs to eat and grow—bugs provided by their decaying parents which died after spawning. The spring freshet or highwater needs to coincide with the juveniles readiness to migrate toward the Columbia and the estuary.

Estuary
The estuary is the Chinook "nursery" where physiological changes enable juvenile Chinook to enter salt water. Here, there is eelgrass to hide in. The spots or parr marks that camouflaged the young fish in the rocky stream are exchanged for uniform shiny silver. Internal changes to kidneys allow for immersion in salt water. This process, which actually began on their outbound journey, is called smoltification and the fish undergoing it is called a smolt.

Ocean
Finally, ocean conditions ultimately dictate reproductive success of the next generation. Cooler waters are more productive for salmon because the food they need thrives in it. Decadal shifts in ocean temperatures can cycle salmon between productive years to relatively poor ones. In the ocean, Chinook grow 100 to 1,000 times their juvenile size. Bigger fish are more successful on their journey back along the habitat chain. They arrive at their home stream and the cycle begins anew.

© Kevin Butcher

WildTrout.org



CRITFC

Hatcheries work at the "home" stream end of migration. Home is where spawning and egg hatching take place.

Four New Dams

Ice Harbor Dam construction 1959

Mitigation begins: the 1980s

The Rivers and Harbors Act of 1945 authorized the Lower Snake River Project. The project called for five dams on the Lower Snake. Four dams were built from 1961 to 1975. The fifth was never built. Meanwhile, Biologist Thomas Welsh counted 91 summer Chinook in 1968 a steep decline from the 4,000 in 1960.

Declines were anticipated so the Lower Snake River Compensation Plan was passed by congress to address fish losses. McCall Hatchery was first built under this plan.

Built in 1979, McCall Hatchery was the first Lower Snake River Compensation Plan or LSRCP hatchery in Idaho. Going "on line" in 1980. It is also the only hatchery dedicated to Idaho's summer Chinook (other programs raise spring Chinook).

In 1980 the adult return of summer Chinook to Idaho's South Fork Salmon River fell to an all-time low. Only 150 adult fish were trapped.

McCall's LSRCP goal is to release 1,000,000 smolt each year. Looking at only 150 Chinook must have tried the dedication of those early hatchery workers. But they were up to the challenge. The journey to a million has to start somewhere. In 1981, 124,000 summer Chinook smolts were released into the South Fork. By 1985 the McCall Hatchery reached its full capacity, producing and releasing about one million summer Chinook smolts. Twenty years later, over 10,000 adults returned to the South Fork trap.

When an angler displays a Salmon River summer Chinook with pride, McCall Hatchery shares that smile.

Roger Phillips, IDFG