FISH PASSAGE BARRIERS WILL BE IMPROVED FOR **RAINBOW TROUT**



A project that will cost just over one million dollars will help to improve habitat and stream flow for rainbow trout in the Sanpoil River subbasin. The project involves replacing four fish passage barriers (two at Iron Creek and two at Louie Creek), as well as fencing and planting activities. The project is being funded by Bonneville Power Administration.

"This project has been in the works for several years," said Dennis Moore, CTFW fish habitat biologist. "These areas were assessed in 2013 and were determined to be passage barriers to redband trout. Projects of this scale require a lot of planning and coordination and completing all four of the crossings this year would not be possible without the hard work of project staff in previous years."

That work included surveying approximately 70 miles of stream habitat in the Upper Columbia River subbasin and about 80 miles of stream habitat along the Sanpoil River subbasin to help fisheries biologists understand how bad the habitat conditions were.

CTFW will hire a contractor this vear to remove the old culverts and install bridges at each of the four sites.

"Providing fish passage and habitat connectivity is part of a larger strategy to improve the resiliency of our fish populations which is important given the predicted changes due to climate change," said Jason McLellan, research scientist for CTFW.

Staff will also repair approximately 17.4 miles of fencing that follows along several streams that are a part of the Sanpoil River watershed that show signs of degradation due to livestock. Cattle have destroyed much of the riparian vegetation and contributed directly to streambank erosion.

To help with the erosion problem, staff will maintain riparian plantings at Lost Creek, South Nanamkin Creek and 23 Mile Creek. This year, they will collect seeds and grow riparian species like alder and water birch to help establish more desirable vegeta-

"Because of the climate in our area, riparian zones are among the most productive and valuable habitat for a diverse range of species," said Moore. "Healthy riparian vegetation can shade streams to provide light and temperature conditions that are beneficial to plants, fish, and other organisms."



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LOCAL LAKES ARE GETTING STOCKED WITH TROUT, SOME AS BIG AS EIGHT POUNDS

Some of the most popular lakes on the Colville Indian Reservation are being stocked this month with thousands of trout and that's good news for anglers. The fish vary in size from 2 to 8 pounds.

"We are releasing between 8,000 to 10,000 triploid rainbow trout at **Rufus** Woods Lake in March that are about two pounds each," said Jill Phillips, hatchery manager. "Approximately 20 percent of these fish will be tagged so that we can evaluate catch and release rates from this group." Anglers that retain tagged fish are encouraged to contact CTFW and provide tag number and information related to the catch (i.e. date, location, length, and the approx. size) or go online to www. cctfwfishtags.com/report-a-tag.

An additional 37,000 triploid rainbow trout at an average size of two pounds will be released into Rufus



Woods and will occur prior to spring runoff.

Fisheries staff would like to remind anglers that the current rainbow trout (triploid) state record of 29.6 pounds came from Rufus Woods Lake.

"We also provide an awesome trout and bass fishery at Twin Lakes," said Phillips. "Some anglers consider the bass fishing here to be the best in northeast Washington due to the abundance of large fish."

Both North and South Twin Lakes will soon be stocked with 15,000 to 16,000 triploid rainbow trout and 1,500 "jumbo" rainbow trout averaging 5 to 8 pounds. "These trout are exciting to catch and really boost the fishery," said Phillips. "There are not many lakes in the state that provide anglers an opportunity to catch large rainbow trout or largemouth bass that could tip the scale over five pounds."

Colville tribal members fishing on the reservation must possess a Colville tribal identification card which is a legal permit to fish. All non-members who are fishing on select Interior Waters of the reservation must have a valid Colville Indian Reservation fishing permit in their possession. For more information or to buy a fishing permit, go online to https://www.cct-fnw. com/regulations-permits/. For 2019 stocking plan go to https://www.cctfnw.com/trout-hatchery-1/



INSIDE THIS ISSUE

- Stocking of Local Lakes
- 2 CJH Update
- 3 Bighorn Sheep
- Rainbow Trout Habitat passage improvement Project

CHIEF JOSEPH HATCHERY UPDATE

In the past few months, staff performed various fish culture duties such as monitoring fish growth, daily feeding, picking out dead fish eggs, ponding fish and vacuuming the ponds. A lot of care goes into how staff handles the fish eggs.

"After the eggs are fertilized, they are gently laid down in the incubation trays and are treated with formalin regularly to reduce fungus," said CJH Manager Matt McDaniel. "The water temperature is recorded daily and manipulated to ensure their growth rate is on schedule and are monitored for any issues that may arise until they become eyed eggs." He said, "After they are eyed, they are shocked (dropped from a distance) to break the yolk of any dead or unfertilized eggs. The dead or unfertilized eggs are picked out and counted while the live eggs are counted by weighing 100 eggs, then weighing a larger group to estimate total eggs."

When the eggs start hatching, formalin treatments stop while water monitoring and visual inspections continue. When they are ready, they are released into the blue starter tanks where they are fed. The fish spend two to four weeks in the starter tanks to make sure they are properly feeding and there are no health issues.

"The fish are transferred to outside raceways until it's time to mark and tag them," said McDaniel. "They are marked, tagged, and enumerated and go into their permanent ponds at CJH or held in the raceways until transferred to the acclimation ponds where they are finally released the following spring."



Number of salmon currently at CJH:

Brood year 17 segregated spring chinook – 276,541
Brood year 17 segregated summer chinook – 399,275
Brood year 18 segregated spring chinook – 487,119
Brood year 18 MetComp 10j spring chinook – 192,653
Brood year 18 segregated summer chinook – 246,388
Brood year 18 integrated summer chinook – 409,445

Brooks Tract Acclimation Pond:

Brood year 17 integrated summer chinook - 281,988 were transferred on Oct. 25, currently there are 281,424 fish.

Riverside Acclimation Pond:

Brood year 17 MetComp 10j spring chinook - 211,903 were transferred on Oct. 25, 2018, currently there are 211,170 fish.

The fish at the ponds will be released the week of April 15.

Chief Joseph Hatchery Employees of the Month were:

December: Jobe Cate January: Therilyn Williams February: Leo Amundson









A bighorn ram from the Mt. Hull herd in Okanogan County was recently tested and found to have died from pneumonia caused by an infectious bacteria known as M. ovi. The bacteria can decimate bighorn populations and lambs and prevent herds from repopulating but poses no threat to humans.

The Colville Tribes' Fish and Wildlife (CTFW) Department and the Washington Department of Fish and Wildlife (WDFW) would like the public to report bighorns that appear sickly, lethargic, coughing and or showing nasal discharge.

"At this time we do not know the full extent of the pneumonia outbreak at Mt. Hull, but we are working diligently in coordination with WDFW staff to increase local monitoring efforts throughout their range," said Eric Krausz, wildlife biologist for CTFW.

"This is a highly visible herd. These sheep are in orchards and among houses," said WDFW Biologist Jeff Heinlen. "Because we can't be watching all the time, we are asking people to alert us if they notice sick sheep. This helps us assess the health of the herd."

Tribal and state biologists are testing additional bighorns and have partnered together to increase visual monitoring efforts of the Mt. Hull herd that is located near the Canadian border.

According to biologists, there is potential for wandering bighorn sheep to pass M. ovi to animals in other herds, such as the Omak Lake herd on the Colville Indian Reservation to the south, the Sinlahekin herd to the west or herds to the North just across the border in British Columbia.

"In 2012 the Colville Tribes conducted a genetic analysis between the Sinlahekin, Mt. Hull, and Omak Lake herds, showing us that the Omak Lake herd was likely founded by individuals from the Sinlahekin herd, but may have been in contact through im-

migration with the Mt. Hull herd in the past," said Krausz. "We have documented collared bighorn sheep traveling from Omak Lake to Mt. Hull, so we know bighorn sheep from these distinct herds travel back and forth on occasion and likely come into contact with one another."

Because of this, WDFW and CTFW are asking to be alerted if bighorn sheep are observed in places they aren't normally seen. The Mt. Hull herd's typical range is from approximately Tonasket to the Canadian border north of Oroville.

There are approximately 17 bighorn sheep herds across Washington State, two of which are within the bounds of the Colville Indian Reservation.

If you spot a bighorn sheep that has any of the symptoms mentioned above, please contact Jarred Erickson, wildlife biologist for CTFW at 509-634-2122 or by e-mail at Jarred. Erickson. FNW@colvilletribes.com.

 \mathcal{L} 3