



## LEAD BULLETS AND WILDLIFE

Colville Tribes' Fish and Wildlife would like to ask hunters to not leave animal carcasses in the woods that contain lead. Fragments in those carcasses can lead to death of other animals. In 2015, several eagles were found dead on the Colville Indian Reservation. They all died from lead poisoning and it is suspected that these birds ate lead fragments while feeding on carcasses.

- If you use lead bullets, carefully place your shots when hunting animals. Shots that go through bones will cause more fragmentation.

- Although careful butchering to remove more meat around the bullet trajectory in a harvested game animal may reduce lead contamination, it does not help wildlife exposed to lead fragments in game remains discarded in the field.

- All birds are susceptible to lead poisoning. However, the more likely victims from bullet sources (from ingesting bullet fragments) are scavengers: eagles, ravens, crows, turkey vultures, magpies, and waterfowl such as ducks, geese, and loons (from a lead shot).

- A little more than one grain of lead is lethal for an eagle (there are 344 grains of

lead in a 20-gauge shotgun slug, standard hunting rifle loads typically range from 70 to 220 grains of lead depending on rifle size). More information can be found at [fws.gov/midwest/refuges/non\\_toxic.html](http://fws.gov/midwest/refuges/non_toxic.html)

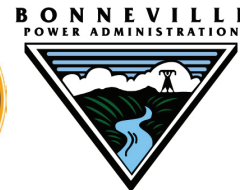
- Once lead is digested by an animal, it damages the nervous system and paralyzes its digestive tract. The animal can starve to death or become weak and easy prey.

- It is best to use copper bullets, a lead-free bullet which leaves no lead in the animal.



For more information on finding specific ammunition and videos, go to [huntingwithnonlead.org/ammoMain2015.html](http://huntingwithnonlead.org/ammoMain2015.html)

### SPECIAL THANKS TO THE PROJECT PARTNERS



For Additional Information Contact:

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## CHIEF JOSEPH HATCHERY UPDATE



Chief Joseph Hatchery (CJH) staff took care of a lot of salmon eggs over the last few months! They ponded their first batch of fish, about 415,000 sub-yearling summer chinook fry. There are currently 815,000 spring Chinook in the incubation room (200,000 MetComp 10j stock that will be ponded in March and 615,000 Leavenworth stock that will be ponded in May). There are 1,320,000 summer Chinook at the hatchery now and these fish will be ponded in June.

"Staff did a good job over the winter incubating and caring for the fish during the most critical period of the rearing cycle," said Taylor Scott, CJH assistant manager.

During much of this activity, staff worked through some challenges. "We did see some soft-shell disease issues in our Chinook eggs which resulted in pre-hatch and alevin

mortality," Scott said. "This issue was addressed using salt and formalin. We are also continuing to improve water delivery systems such as plumbing additional water where needed."

At the end of the month, fisheries staff will be ponding their next group of fish. "This takes a considerable amount of care as they constantly need to be fed small feedings throughout the workday," she said.

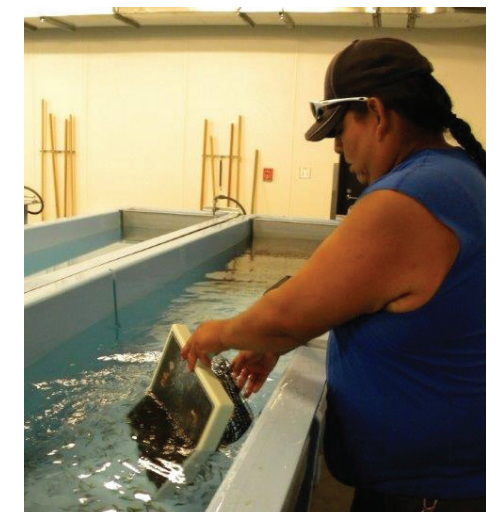
In April staff will: mark and tag sub-yearling summer Chinook, PIT tag 10,000 sub-yearling summers to monitor outmigration rate, speed, success, as well as a whole host of other purposes. They will transfer integrated sub-yearling summer Chinook to the Omak acclimation pond and will prepare for the Earth Day Celebration at CJH on April 20.



Fish-eyed eggs



Small alevin grow in incubation room



Fisheries tech releases fish fry

### CJH FACTS:

- Chief Joseph Hatchery was built to increase spring, summer, and fall Chinook salmon in the Okanogan and Columbia Rivers. The hatchery produces millions of Chinook smolts each year and provides salmon for tribal ceremonies, subsistence needs for tribal members, and increases recreational fishing opportunities for all.

- Construction cost was approximately \$50 million and was funded by monies acquired through rate payer dollars from Bonneville Power Administration, through the Colville Tribe's Fish Accords.

- Grant PUD funded \$10 million for construction of the hatchery.

- The hatchery was completed in February 2013.

- The hatchery started production in July 2013, producing 1.8 million Chinook smolts and will be fully ramped up this year producing up to 2.9 million Chinook smolts.

- It is estimated that up to one percent of each year's release will return to the Upper Columbia.





## LARGE NUMBER OF TROUT RELEASED AT RUFUS WOODS SHOULD ENTICE ANGLERS

Staff from the Colville Tribal Fish Hatchery (CTFH) released over 50,000 triploid rainbow trout into Rufus Woods Lake from February to March. The fish averaged almost two pounds each and can be identified by the absence of an adipose fin. A portion of the releases were implanted with a plastic anchor tag.

Anglers that retain tagged fish are encouraged to contact CTFW and provide tag number and information related to the catch (date, location, length, and the approximate size) or login into [ctfwfishtags.com/report-a-tag](http://ctfwfishtags.com/report-a-tag) to report a tagged fish electronically. This information assists biologists in managing annual fish releases into Rufus Woods Lake.

Additional trout from the Colville Tribal Fish Hatchery are distributed throughout reservation waters to mitigate for the lost anadromous fish that once thrived in the upper Columbia River before construction of Chief Joseph and Grand Coulee dams. The

Rufus Woods Net Pen Project is also part of a supplementation effort that is overseen by the hatchery staff which provides fish to the Rufus Woods fishery.

Staff would like to remind folks that all non-members who are fishing by boat on the boundary waters of the reservation or from the shore of Rufus Woods at the Designated Fishing Area (DFA) must have either a valid Colville Indian Reservation Fishing Permit or a valid fishing license issued by the State of Washington. Non-members fishing from the reservation shoreline outside of the DFA must have a tribal permit. At this time, there is only one DFA on Rufus Woods which is located downstream of the Pacific Aquaculture Fish Farm net pens. Colville tribal members must possess a Colville tribal identification card that serves as a permit to fish. Anglers who purchase tribal permits help support the continued success of this fishery.



*Erica Moses, Fisheries Tech Rufus Woods release*

*Rufus Woods net pens*

## MEETING BRINGS FUNDING ENTITIES, FISH CO-MANAGERS, AND STAKEHOLDERS TOGETHER



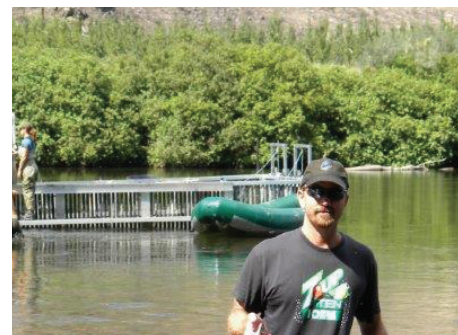
The Seventh Annual Chief Joseph Hatchery (CJH) Program Review was held on March 22 and 23, at the 12 Tribes Casino and Resort in Omak, Wash. The event was hosted by the Colville Tribes' Fish and Wildlife (CTFW) Department.

CTFW staff presented on research, monitoring and evaluation efforts, habitat, selective harvest and fish brood collection, adult fish management, fish ladder and weir operations from the previous year.

"There were more than 10,000 summer and fall Chinook spawners in the Okanogan and Similkameen Rivers in 2016, which was the fourth highest in the last 20 years, indicating that the future looks bright for wild Chinook in the Okanogan River," said Casey Baldwin, CTFW senior research scientist. "In 2017, the overall summer Chinook run size forecast is about one-third smaller than the 2016 forecast and nearly one-half of the actual returns from 2016." He continued, "The good news is that there will be a larger proportion of CJH returns in 2017 which

should result in good fisheries from the Okanogan River upstream to Chief Joseph Dam. The Colville Tribes harvest allocation of summer and fall Chinook is 4,300; which will be updated if the actual run size comes in different than the forecast," said Baldwin.

The goals of the annual program review are to inform the funding entities, fish co-managers, and stakeholders of CJH related activities and to increase the overall scientific defensibility and effectiveness

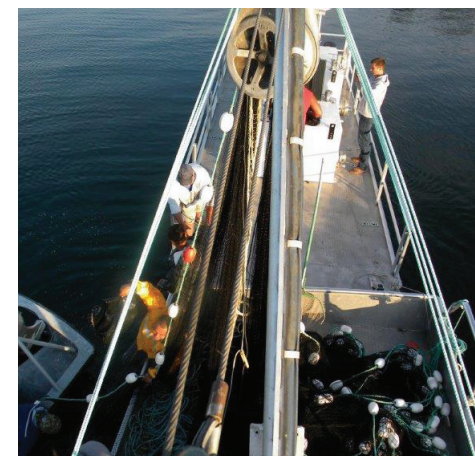


*Casey Baldwin, Sr Research Scientist collects salmon in the Okanogan*

of the programs. Discussions also lead to the development of an operational plan for the hatchery.

"In 2017, the CJH and associated acclimation ponds will be releasing approximately 1.8 million Chinook, including approximately 900,000 of both spring and summer Chinook," said Baldwin. "Additionally, the hatchery has more than two million Chinook on hand for releases in the spring of 2018 and plans to add another 700,000 to that total if 2017 collections go as planned."

Representatives from the Northwest Power and Conservation Council (NPCC), Department of Fisheries and Oceans Canada (DFO), Bonneville Power Administration (BPA), The United States Fish and Wildlife Service (USFWS), Washington Department of Fish and Wildlife, Okanogan Nation Alliance, Chelan, Douglas and Grant County (GCPUD) Public Utility Districts were in attendance.



*Barge Connects with Purse Seine to collect broodstock*

## CEREMONY TO BE HELD AT CHIEF JOSEPH HATCHERY

The Colville Tribes' Fish and Wildlife (CTFW) Department will host the First Salmon Ceremony at the Chief Joseph Hatchery in Bridgeport, Wash. on Friday, May 12. Attendees will celebrate the return of spring Chinook with a sunrise ceremony beginning at 5:30 a.m. at the CJH fish ladder where tribal fishermen will catch the first

salmon. Folks will also hear from speakers and elders and a luncheon will be provided at 11:30 a.m. After the luncheon, people can tour the hatchery, feed fish, watch videos, and take educational pieces home with them. Last year, approximately 200 people attended this event including many students from the Inchelium School District.

