



Dworshak Fisheries Complex

Monthly Activity Report



October Highlights

Dworshak

SST BY15 - 2,346,999

SCS BY15 - 3,236,156

SCS BY14 - 1,513,830

COS BY14 - 554,285

Kooskia

Fish on station

660,635

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U.S. Fish & Wildlife Service, Region 1

Managers Message - Steve Rogers

Fall is here and in full swing. The leaves have changed color, and are dropping from colorful trees faster than the rakes can keep up with them at the hatcheries. It's cool to cold in the morning, and we've had lots of moisture in the form of rain and even some light snow. There are hunters everywhere, chasing deer, elk, grouse, and other species. Every day I hear boats putting up the Clearwater River below my house, and I see those same boats adjacent to the hatchery, loaded with anglers from all over the world. They travel here to try to catch a famous Idaho B-steelhead, and more importantly, to let go of the stresses they carry from home. Fall is here, and that reminds me to give thanks for all that we have.

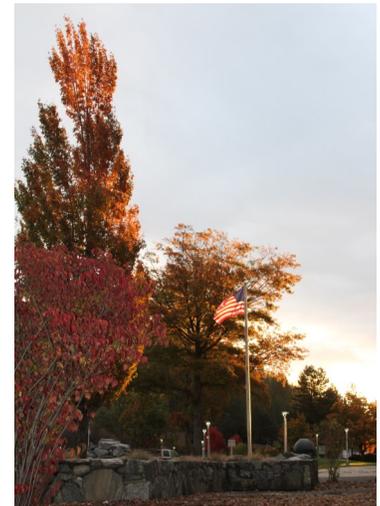
If you live in Idaho, particularly in this region of Idaho, and you enjoy the outdoors, you'd be hard pressed to find a better place to live. We can hunt all manner of game, and catch salmon, steelhead, various trout species, bass, sturgeon; the list goes on and on. You can access beautiful trails in some of the most pristine habitats left in the United States, and there is protected wilderness to explore for a lifetime. The Selway, the Lochsa, the Clearwater, the Salmon and Snake: these are some of the most famous floating and fishing streams in North America. These rivers all converge here; at the place we call home. Sometimes I need to remind myself how lucky I am. Other folks in other areas of the country just don't have these riches.

Last week when I was in Portland, I rode the MAX rail service to and from the airport. As we bumped and screeched along adjacent to the freeway, I was keenly aware of the noise and congestion of all those cars, desperately trying to get where they were going, lights flashing and horns blaring. Then I looked around inside the train, and noticed how crowded it was, and how people tended to look away from or through each other. It was uncomfortably crowded, and noisy, and urban. Where we live,

we don't have traffic jams or congestion or urban sprawl. For us, congestion is the occasional dust-up at the boat ramp when folks are a bit too eager to wet a line and forget their manners. The closest we get to 'road rage' is when we are offended that someone else is occupying our favorite camping site or hunting area. "How dare that guy...camping in my spot!"

When I wave to someone on a rural county road around Orofino, they usually wave back. They don't do the 'wave' thing in Portland or Seattle...there's just too many people to say hello to. I'm not trying to knock Portland or any city; it's just a different reality than we live here in Idaho. The slower pace and open space of Idaho works great for my family and me; just as the excitement and bustle and choices and hum of the city works for lots of other families.

I think I'm rambling a bit. My point is that we're all very lucky to live and work here in the heart of the Nez Perce Reservation, in beautiful and (mostly) unspoiled Idaho. We have our challenges, like everyone does in all corners of the globe. But when you stop and think about it, we are very blessed; to be here, in this place, doing this work. Enjoy your Thanksgiving weekend. And somewhere between the turkey and football, laughter and shopping, take a minute to appreciate what you have and give thanks.



Credit: Jill Olson, FWS

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Dworshak NFH Production - Izbicki, Sommer, Bisbee**Dworshak Stock- Spring Chinook Salmon (SCS)****Brood Year 2015 (BY15)**

Spawning began on August 11 and ended on September 22. Six egg takes were completed for Kooskia and seven egg takes were completed for Dworshak. 836 females were spawned with 622 males (14 were jacks) for the Dworshak, Selway, and Nez Perce Tribal Hatchery Complex programs. The estimated eggs count is 3,236,156. Eggs are beginning to eye up and will be shocked and inventoried in November. Eggs are being incubated on chilled water and will be ponded as fry in April 2016.

Brood Year 2014 (BY14)

At the end of October there were 1,513,830 fry at 58 fpp. Mortality was 0.18%. There are 10 distinctive PBT groups ponded: 6 for the density study (3 high density and 3 low density), one for general Dworshak production, one for Selway production, one for Nez Perce Tribal Hatchery (NPTH) additional Lower Snake River Comp. Program (LSRCP) production, and one excess fish production, which was transferred to NPTH with the LSRCP fish in September.

Coho Salmon (COS)**Brood Year 2015 (BY 15)**

Nothing Reported for October

Brood Year 2014 (BY 14)

Nothing reported for October

Dworshak Stock- Summer Steelhead (SST)**Brood Year 2015**

There are currently no fish in the nursery. Cleaning and repairs will be on going until BY2016 SST are moved in.

All takes are in the Systems BPs and were split into their final rearing densities in October. Takes 1-8 were moved to demand feeders and are on a maintenance diet. At the end of October there were 2,346,999 fry in the BPs averaging 16.8 fish per pound. Mortality was 0.3%. All takes are on schedule to meet size at release.



Credit: Jill Olson FWS

Steve Coomer, Fisheries Tech. NPT, tosses feed to Coho Salmon on a colorful October afternoon.



Credit: Jill Olson, FWS

At the end of October there were 1,513,830 BY 2014 Spring Chinook fry at 58 fish per pound

Dworshak Hatchery Headlines

(Continued from page 2)

SUMMARY

Table 1. Total Production - Fish on Station (10/31/15).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS BY 15	15	incubation/eggs	3,236,156				
SCS BY14	14	Raceways	1,513,830	26,118	58	3.9	98
COS BY14*	14	Raceways	554,285	8,264	67	3.3	84
SST BY15	15	Systems	2,346,999	136,327	17	5.6	142
Total Fish/Fry on Station EOM			7,651,270	170,709			

*September, 2015 numbers

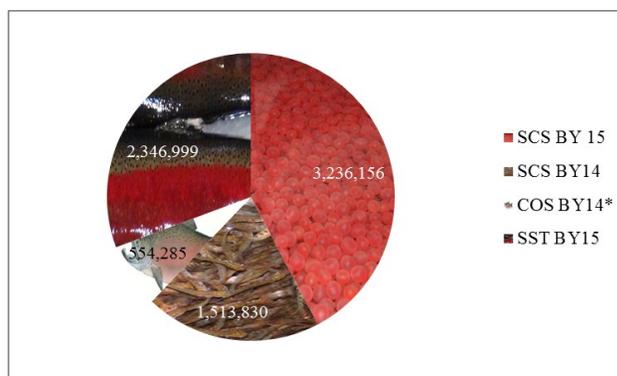


Figure 1. October 31, 2015 Total Fish/Eggs on Station.

Dworshak NFH Meetings, Training and Conferences:

On October 21st, Mark Gronbach, Facility Operations Specialist, Abernathy Fish Technology Center currently on detail to the Regional Office and Larry Zeigenfuss, Carson National Fish Hatchery Manager also on detail in the Regional Office visited and toured the Dworshak Fish Hatchery following their meeting at the Kooskia NFH in the morning.

On October 23rd, Donna Street, Chief of Engineering (Construction), Walla Walla District, U.S. Army Corps of Engineers along with the U.S. Army Corps of Engineers Leadership Development Program Group toured the hatchery and discussed the various challenges of the hatchery, recent and current projects and future needs of the hatchery.

On October 27-29, Tom Tighe (DNFH), Angela Feldmann (DNFH), Jeremy Sommer (DNFH), Adam Izbicki (DNFH), Steve Rodgers (DNFHC), Mark Drobish (DNFH), Chris Peery (IFRO), Marilyn "Guppy" Blair (IFHC), Corie Sampson (IFHC), and Kent Hills (Kooskia NFH) attended the "Hatchery Manager's Training" in Richland, Washington.

Jill Olson attended the Visitor Services training in New Mexico, October 26-30.



The Aquatic Conservation Team attended the Burbot Conservation Conference.



Credit: File photo, FWS

Completed annual collection permit reports for the states of Idaho, Oregon, and Washington fall Chinook salmon projects funded by BPA.

Dworshak Production M&E - Peery

Dworshak Complex Monitoring and Evaluation Team

Data from 2015 Chinook salmon broodstock collection and spawning was summarized and entered to the FINS database. 2015 Chinook salmon annual report is being prepared.

Participated in the weekly Snake Basin Coordination calls.

Developed the 2015 estimate of Dworshak steelhead that returned to the Clearwater River. The estimated return was 16,824 steelhead returning of which 11,965 was from the direct release group. The predicted return for 2015-16 season is 17,153. To date we estimate the return to Lower Granite Dam has been around 14,000 of which 10,000 are from Dworshak direct releases. These estimates will be updated as the run and our trapping efforts progress.

We met with Production staff to develop the plan for trapping steelhead for the brood year 2015-16. The trap was opened 13 October to collect broodstock for the steelhead and NPT coho and fall Chinook salmon programs. To date we have collected 153 adult steelhead and 32 1-ocean steelhead.

Participated in conference call with IDFG, ODFW and NPT to develop run forecast for 2016 Chinook salmon returns.

Participated in tour of Kooskia NFH for a group looking at a potential new water supply pipeline.

Developing proposal with IDFG and the Nez Perce Tribe to develop proposal for comprehensive steelhead telemetry evaluation in the Clearwater River.

Participated in the Hatchery Managers Training meeting in Richland, WA.

Participated in the weekly Snake Basin Coordination call and the RO Project Leaders call.

Worked on budgets for 2016.

Aquatic Conservation Team

J. Brostrom; traveled to Orofino to meet with Chris Peery. We reviewed the threats identified for Pacific Lamprey in the Snake Basin from Tucannon River upstream, and transferred the threats to the Regional Implementation Plan worksheets. Upon return to Salmon I continued working on the worksheets. Sent out Doodle poll to schedule Snake River Lamprey RIP meetings.

Attended the Lemhi Soil and Water Conservation District Board meeting to present a small Partners for Fish and Wildlife Project. We have an agreement with the district to act as partner and banker for our annual PFW funds in the Upper Salmon.

Attended the monthly Upper Salmon Basin Watershed Project Tech Team meeting, where we ranked projects for PCSRF funds and discussed a variety of issues pertinent to the Upper Salmon. The Office of Species Conservation member Mike Edmondson discussed the newly released Bull Trout Recovery Plan.

Participated in Lamprey Team calls.

Worked on archiving completed projects from FIS and updating targets for 2016.

Reviewed and provided FWS input on two proposals in Idaho submitted for WNTI funding. One is in the Teton Creek drainage, proposed by Friends of the Teton River, the other is in Hangman Creek proposed by the Coeur d'Alene Tribe.

Reviewed and commented on the Draft Redband Trout Conservation Strategy, in preparation of the Redband Conservation Team meeting in Sacramento November 3-4, which I will be attending.

Reviewing the 5-year Yellowstone Cutthroat Assessment and I am assigned to write the conclusions.

I attended the Lemhi Reforestation Group meeting on developing an NRCS funding project in the Jessie Creek watershed, which is the water source for the City of Salmon. The area is overgrown and if wildfire hits it the watershed and water source will be severely compromised. The plan is to develop treatments that restore the forest health while benefiting fish, wildlife and other resources. Partners are the USFS, Salmon Valley Stewardship, City of Salmon, Idaho Fish and Game.

M. Faler; consulted with Rod Engle on data needs for the LSRCP programmatic bull trout biological assessment and sister studies on the Imnaha and Tucannon rivers.

Attended the Burbot Conservation Conference.

Completed the last of 3 vertebrate sampling efforts for the NWR Climate Change Monitoring Project on Kootenai National Wildlife Refuge.

Completed the initial distribution and population assessment of Redband Rainbow Trout in Cascade Creek and collected tissue samples from 46 individuals for DNA analysis by IDFG's Eagle Fish Genetics Lab. Frank Mullins, John Hook, and Ray Jones assisted me with this effort.

J. Hook lead snorkel surveys for the whitefish study in the Lochsa River.

C. Peery addressed comments on summary report on juvenile lamprey passage in the mainstem hydrosystem. Contacting agencies for information on trapping records for juvenile lamprey in the Snake River.

Applying for 4d permits for 2016 field studies.

Snake River Fall Chinook Team

Fall Chinook staff worked on Parts III and IV of the monograph on Snake River fall Chinook that covers the spatial distribution and management of that ESA-listed population during 1976–1991 and 1992–2015. The draft of Part III was distributed to NMFS, USGS, and WDFW coauthors for input. A meeting was held with staff of the Nez Perce Tribe Department of Fisheries Resources Management to discuss technical support. The Tribe is conducting a study to build on the work our fall Chinook salmon research team published in 2004 (*Transactions of the American Fisheries Society* 24:1134–1144). Staff also met with the collaborating partner (USGS) in the two BPA funded fall Chinook salmon research projects. Several publications were discussed that are in development as well as the upcoming redd survey season. Some time was spent proofing an analysis of abundance of juvenile fall Chinook at Lower Granite Dam, writing a manuscript about the use of drones to count redds, completing annual scientific collection permit reports for the states of Idaho, Oregon, and Washington, and routine administration of the two fall Chinook salmon projects funded by BPA. The fall Chinook salmon field crew prepared equipment for deep water redd surveys on the Snake River and assisted during red band trout surveys within the Kootenai Wildlife Refuge.

Idaho Fish Health Center - Blair

October 2015

Dworshak NFH

Steelhead juveniles: Mortalities in Systems 1 and 2 decreased substantially after reducing densities at the end of the September. Overall, fish are performing much better.

Spring Chinook juveniles: Monitoring exams of Dworshak SCS juveniles were conducted mid-October for both high and low density groups for the Dworshak SCS density study. Both groups had low levels Gas Bubble Disease and no fish were detected positive for *Renibacterium salmoninarum* (Bacterial Kidney Disease) by the ELISA test.

Coho juveniles: Reduced feed rations began in October. Some of the mortalities since then have had missing eyes, which is typically observed when feed rations are reduced.

Coho broodstock: Coho spawning started October 27. 51 females were spawned on the first take. Broodstock returns were very low with only approximately 100 total adults returning to the Dworshak rack.

Kooskia NFH

Spring Chinook juveniles: A monitoring exam of spring Chinook juveniles at Kooskia NFH was performed mid-October. Low levels of *Ichthyophthirius* were seen on gills and skin. Of the fish examined, no *Renibacterium salmoninarum* (Bacterial Kidney Disease) was detected by the ELISA test.

Information and Education

Dworshak - Jill Olson

Facebook: Reach - 590 Engagements - 60

Website: Page Loads - 228; Unique Visits - 180; First Time - 159; Returning - 21

Visitors: We had 99 visitors came from 16 states, Bulgaria and India

Tours: No public tours. Operations related tours are reported under Meetings, Training and Conferences (page 3).

Outreach: October 5- Jill Olson teamed up with Paul Pence at Dworshak Dam Visitor's Center to speak to an Ecology class from Walla Walla Community College. On October 15- Jill Olson, Jayden Hudson, Volunteer Cameron Olson, and Tod Sween (NPT) facilitated a Citizen Science field trip with Orofino Jr. High students to collect pacific lamprey ammocetes.

Volunteer Hours: Four volunteers contributed a total of 35 hours. Idaho Youth Challenge Cadets contributed 225 hours in October.

Kooskia - Kent Hills

Visitors:

There were 265 visitors to the hatchery during this month; this figure is compiled by staff. Steelhead fishermen are stopping to look for returns.



Credit: Jill Olson, FWS

Citizen Science field trip with Orofino Jr. High students to monitor juvenile Pacific lamprey.



Credit: Jill Olson, FWS

Jayden Hudson, Todd Sween, and Orofino Jr. High School Science Teacher, Ethan Kelly search for Pacific lamprey larvae as students watch from the shore.



Credit: Jill Olson, FWS

Jayden Hudson and Orofino Jr. High students collect monitoring data on juvenile Pacific lamprey

Dworshak NFH Maintenance - Koehler

DNFH Maintenance and Operations Activity report. October 2015

- Maintenance has made some enhancements to Fish Health's new pick up.

- Catwalk over the fish ladder has been installed. It needs paint and safety chains, but should be complete very soon.

- New fire maintenance pump has been installed. This upgrade will provide about 100 GPM more water and has taken care of our cavitation problem, adding years of service and dependability to the Fire and Maintenance system.

- A damaged roof on one of our Titan carts has been replaced and back in use.

- All COE fish tankers have been relocated to the hatchery and are now part of the maintenance department's routine maintenance responsibilities.

- The electrical department has acquired a new used Chevy Colorado pick-up truck to help them perform their maintenance duties here at the hatchery.

- Fall leaves seem to be peaking and hopefully cleanup will be coming to an end this year.

- Maintenance has completed 61 Preventive work orders and 12 hand written request for the month of October. This is 100% of PMs complete on or before their due date. Thanks to a dedicated crew. Thanks to all.

Kooskia NFH - Hills

This activity report is implemented by the Tribal Fish Hatchery Manager, Kent Hills. All information in this report was collected and or performed by the hatchery staff during the preceding month.

Under SRBA and the Clearwater Annual Operating Plan, the Tribe, Service and Idaho Fish & Game have agreed to implement other fish production actions related to KNFH mitigation. Reports will include additional information about other species reared, processed and released in relation to KNFH operations.

Kooskia Chinook Brood Year 2014

There are 660,635 fish on station, they are an average of 37 fish per pound and are 4.48 inches (114 mm). All fish are in the Burrows ponds on chilled well water at an average temperature of 47 degrees. Total mortality for the month was 74. The fish consumed 3,432 pounds of Bio-Vita feed.

Kooskia Chinook Brook Year 2015

There are 523,196 green eggs and 337,261 eyed eggs on station; they are on chilled well water at 39 degrees. Take 1, 2, 3 & 4 have been shocked and enumerated. The fecundity for the first four takes has averaged 3,531 per female spawned. This is under the average 3,764 and the percent eye-up is low at 86%, total enumerated eyed eggs on station are 337,261 at this time.

Kooskia Adult Trap Operations:

The trap has been closed all month due to Coho circular tank construction on the main inflow and out flow pipes. Water connections will be spliced into the main lines to feed two 30 foot tanks to increase Coho acclimation at the hatchery.

Maintenance & Operations:

- Oct 05: The new egg counter arrived. Shocked take 2 of BY15.
- Oct 08: Enumerated take 2 of BY15.
- Oct 11: Received a low water alarm at the mixing chamber on the well side, it was determined that the pump in well #1 was having low flow problems due to a water restriction possibly caused by debris on the intake screen. Once it was turned off, the back pressure pushed the screen clear. The pump was restarted and worked properly. Culled 8 trays of BY15 eggs for high BKD.
- Oct 12: Put the Nez Perce travel trailer in the pole building. Picked up all the old fence pieces on the nature trail and put them on the burn pile.
- Oct 13: Installed new tires on the Gator.
- Oct 17: Shocked take 3 of BY15.



Credit: KNFH

Engineers from regional office, tribal personnel and US Fish & Wildlife personnel inspected the hatchery for a new pipeline from the Clearwater River to the hatchery.



Credit: KNFH

Personnel from Regional office, US Fish & Wildlife and Nez Perce Tribe were at the Hatchery to discuss installation of a new pipeline from the Clearwater River .



Credit: KNFH

Kooskia NFH Spring Chinook eggs (BY 15) Takes 1, 2, 3 & 4 have been shocked and enumerated.

Kooskia NFH - Hills

(Continued from page 8)

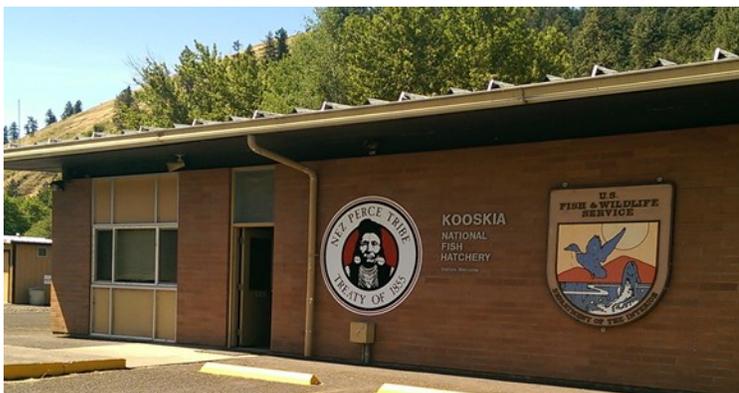
- Oct 19: Enumerated take 3 of BY15.
- Oct 20: Quality Heating serviced the furnaces in the office. Paramount Pest Control sprayed herbicide and pesticide to combat weeds and bugs, a ground sterilizer was applied to all the gravel areas of the hatchery.
- Oct 21: Engineers from regional office, tribal personnel and USF & Wildlife personnel inspected the hatchery for a new pipeline from the Clearwater River to the hatchery.
- Oct 22: Gerry is installing new hoist controllers on the weir by the trap.
- Oct 24: Take 4 was shocked.
- Oct 27: Take 4 was enumerated.
- Oct 28: Gateway Materials arrived to install piping for new circular tanks, it was determined that they were unable to complete their task because the trenches were too small to accommodate the pipes. Tina Hurt and Peter Heinricher with the US Army Corp of Engineers arrived at the hatchery for an EPA compliance inspection Coho personnel installed a picket weir in front of the trap in Clear Creek to trap returning Coho. The fish trap for Kooskia Hatchery is closed due to pipe construction for the new circular tanks.
- Oct 30: Quality Heating finished inspection repairs to the heating systems in the main building.

Kooskia NFH Training and conferences:

Personnel from Regional office, US Fish & Wildlife and Nez Perce Tribe were at the Hatchery to discuss installation of a new pipeline from the Clearwater River to the hatchery.

Oct 19: Project leaders meeting at Dworshak Hatchery

Oct 27-29: Regional Hatchery Managers meetings in the Tri-cities.



Credit: KNFH



Credit: KNFH

We can also be found on the web @

<http://www.fws.gov/dworshak/>



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Let's Go Outside!

Connecting People With Nature

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Staff List

Dworshak Fisheries Complex Management:

Steve Rodgers, Dworshak Fisheries Complex Manager

Mark Drobish, Dworshak NFH Manager

Adam Izbicki (FWS) & Jeremy Sommer (NPT)
Dworshak NFH Assistant Hatchery Managers

Mike Tuell, SRBA Coordinator

Dr. Marilyn "Guppy" Blair, Project Leader-Idaho Fish Health Center

Scott Koehler, Dworshak NFH Maintenance Supervisor

Vacant, Project Leader, Idaho Fishery Resource Office

Mike Faler, Aquatic Conservation Lead

Dr. William Conner, Fall Chinook Research Lead

Dr. Chris Peery, Fish Production M&E Lead

Kent Hills, Kooskia NFH Manager

Gerry Fogelman, Kooskia NFH Maintenance Supervisor

Dworshak NFH Production: Angela Feldmann, Tom Tighe, Rob Bohn, Wayne Hamilton, Mike Bisbee, Tui Moliga, Lou Ann Lasswell, Steve Coomer, Carter Lopez, Casey Mitchell, Zach Broncheau, Jayden Hudson, Steve Jeffers, Jayson Thompson

Administration: Heather Leopard- Administrative Officer, Brian Devin-Budget Technician, Randy Bowen- IT Specialist

Dworshak NFH Maintenance: Terry Weeks, Rick King, Rob Kellar, James Oatman, James Paddelty, Melissa Wright, Joe Livesay

Idaho Fish Health Center: Laura Sprague, Corie Samson

Idaho Fishery Resource Office: Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Jody Brostrom, Ken Bugler, John Hook

Complex Information and Education: Jill Olson

Kooskia NFH: Art Broncheau, Kenny Simpson,