



Dworshak Fisheries Complex

Monthly Activity Report



May, 2012

U.S. Fish & Wildlife Service, Region 1

Volume 1, Issue 7

Special points of interest:

- Total Fish on station at Dworshak: 4,227,821
- Total Fish/Eggs on station at Kooskia: 701,438
- A total of 402,417 BY 11 Coho were transferred from KNFH to DWOR on May 10th
- 220,000 fall Chinook were PIT tagged and released in May

Inside this issue:

Hatchery Headlines	2-4
Total Fish on Station	2
Nez Perce Fisheries News	4
Kid's Fishing Day Report	5
Maintenance Activities	6
Fish Health Report	7
Administrative Activities	8
I & E Corner	9

Manager's Message....

Paper! My desk is littered with paper. Thank heavens I'm working in a paperless government environment. I can't imagine what a paper dependent workplace would be like. Most of you have by now figured out I am mocking the concept of a paperless government workplace. I have heard about this Utopian place but I've never seen it. Most of the paper on my desk is now worthless. It had worth and value for a moment but now is headed to the recycle bin. Unlike the paper on my desk with momentary value, the work most of you perform has long last-

ing value. The fish all you hatchery staff raise keep salmon coming back to this part of the world in perpetuity. The fish health services provided by the FHC staff help track, prevent and minimize disease and parasite issues with the fish we produce. The evaluation services provided by the FRO help us figure out how we are doing and how to be more successful. Despite my obvious disdain, I even have to put in a little plug for the paper. Some of this paper got all of you hired, buys you supplies and keeps numerous administrative pro-



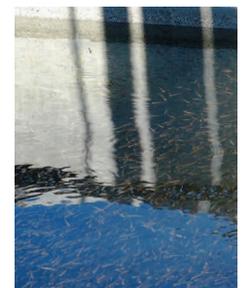
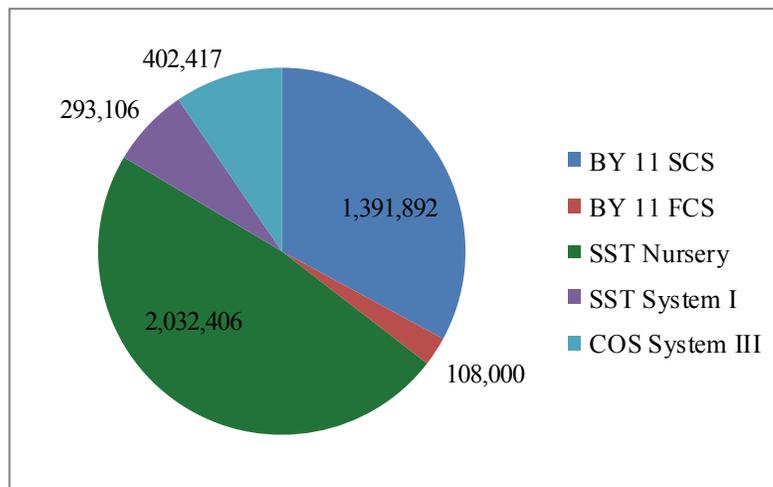
Complex Manager Larry Peltz
Credit: USFWS

cesses at bay so you can all do your job. I think we all owe thanks to those staff who deal with most of our paperwork. They have a hard job and I appreciate what they do because without them none of us would be able to do much of anything. Have a great month.

Larry Peltz

Production Summary: Dworshak National Fish Hatchery

Figure 1. Total Production—Fish on Station (5/31/12).



Newly ponded BY11 Chinook fry.

Credit: Angela Feldmann/USFWS

SCS=Spring Chinook; FCS=Fall Chinook; SST= Steelhead; COS=Coho





Pumping steelhead from Nursery tanks to tagging trailer.

Credit: Angela Feldmann/USFWS

“Steelhead fry are making their way from the Nursery, through the marking trailer, to the outside Burrow’s ponds.”



Steelhead fry.

Credit: Angela Feldmann/USFWS

Hatchery Headlines: Dworshak Spring Chinook Salmon (SCS)

Brood Year 2011 (BY11)

At the end of the month there were 1,391,892 BY 11 SCS on station averaging 463 fish per pound (fpp) and 49 mm (1.93 inches) total length. There were 6,894 (0.49%) SCS morts picked in the raceways (RWs) during the month. Water temperature averaged 42.7 °F in the RWs.

Hatchery Headlines: Dworshak Fall Chinook Salmon (FCS)

There are approximately 108,000 FCS on station averaging 170fpp and 65mm (2.6 inches). Approximately 227,000 FCS were Passive Integrated Transponder (PIT) tagged during May and then transported off-station for release. These fish are part of the transportation study that Billy Conner is heading up. This is the final year of this study.

Hatchery Headlines: Dworshak Summer Steelhead (SST)

Brood Year 2012

Eggs from Take 8 were enumerated and placed in hatching jars in the nursery. Enumerated eye-up for all egg-takes averaged 93 percent for BY 12 SST. There were approximately 2,032,406 fish on feed from Takes 2-8 in the nursery at the end of the month. Eggs from Take 8 There were no eggs in incubation at the end of the month. Nursery temperature averaged 53.2°F for the month.

Take 1 was moved to System 1 Burrow’s Ponds (BP) 47 & 49 beginning May 25th after making the trip through the marking trailer. At the end of the month there were 293,106 BY 12 SST on station averaging 144 fpp and 69mm (2.71 inches) total length. There were 137 (0.21%) mortalities this month. System I temperature averaged 51.3°F for the month.

Hatchery Headlines: Dworshak Coho Salmon (COS)

Brood Year 2011

There were 403,279 Coho transported from Kooski to Dworshak on May 10. At the end of the month there were 402,417 BY 11 Coho on station averaging 111 fpp and 75mm (2.95 inches) total length. There were 862 (0.21%) mortalities this month.

Total Fish on Station: Dworshak, 5/31/2012

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	11	RWs 1-12	1,391,892	3,007	463	1.9	49
FCS	11	RWs 24,27	108,000	635	170	2.6	65
SST	12	Nursery	2,032,406	7,161	284	2.2	55
SST	12	System I	293,106	2,035	144	2.7	69
COS	11	System III	402,417	3,621	111	3.0	75
Total Fish/Fry on Station EOM			4,227,821	16,459			

Hatchery Headlines: Kooskia

Kooskia NFH Monthly Activity Report

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 NFH is owned by the USFWS and managed by Nez Perce Tribal Fisheries.

Credit:USFWS

Kooskia Adult Trap Operations Brood Year 2012

The weir on Clear Creek was put in place on February 17. The adult trap was started on May 22nd for Spring Chinook collection and operated Monday, Tuesday and Wednesday. The trap was checked on Thursday with two adults in the trap at that time. FRO was not called to pick-up fish that week. The last week of May, the trap was operated Tuesday through Thursday because of the Memorial holiday. We had over thirty fish in the trap and the FRO was contacted and elected to wait another week before coming to pick up fish. The first trap entries will be in June.

Kooskia Coho Brood Year 2011

On May 10th, Coho were transported to the DNFH for summer rearing in two loads. The morning load went well. During the second load, the 4 inch output line on the fish pump at the quick coupler developed a pin hole and ruptured before the pump could be stopped. We had Coho all over the parking lot. Hatchery personnel and Rick, the transport operator from DNFH, worked rapidly to save as many fry as possible. Total fish counted as mortalities was 3,000 to 3,500 because some were lost in the grass. Fry that had landed on the parking lot and saved were placed in a vat in the incubation room and held for observation. These fry were placed back on feed the next day and not transported until May 24th to evaluate any delayed mortality. There was not any delayed mortality.

Kooskia Chinook Brood Year 2011

Fry are growing well and were moved from the outside nursery to the Burrow Ponds on May 8 and 9th. This is usually done in one day, but we had a third grade tour at the hatchery starting at 10:00 o'clock on the 8th. The elevated mortality we were seeing in vat 32 continued for a couple of days in Burrows Pond 6 but by the end of the month had subsided and the daily pond mortalities are low. At the end of the month, the fry are 106.3 fish to the pound and 3.15 inches (80 mm) long. We have a total of 701,438 on station. Total feed consumed this month was 2,622 lbs. Culture evaluations on tank thirty-two collected last month by the Idaho Fish Health Center showed no positive findings. Burrows Pond water temperature for the month has been at 49 to 51° F.





Volunteers and parents help this young fisher unhook her trout.

Credit: USFWS

“98 kids registered for Kid’s Fishing Day, up 60% from last year.”



Some finished fish prints.

Credit: USFWS

Hatchery Headlines: Nez Perce Tribal Fisheries

Performance for May 2012, BY 11 Coho

The inventory of Brood year 2011 Coho on June 1st showed 402,417 Clearwater-stock are being reared in three Burrows Ponds at Dworshak National Fish Hatchery (DNFH) as shown in Table 1 below. Coho were transported from Kooskia National Fish Hatchery to (KNH) to DNFH on May 10th.

MORTALITY:

- o The average percent mortality for Clearwater stock Coho during May was 0.21%.
- o Total monthly mortality was 862 as collected by staff.

GROWTH:

- o Fish per pound (fpp) decreased from an average of 167.19 fpp to 111.13 fpp.
- o Length increased from an average of 2.58 inches to 2.95 inches.

FEED:

- o Coho fry were fed Bio-Clark’s # 2Crum at 3% of their body weight.
- o A total of 1,364 pounds of feed was fed during the month of May. The total cost of feed for the month of April was \$1,985.06.

FISH HEALTH:

- o Corrie Samson of the USFWS Idaho Fish Health Center conducted monthly monitoring for BY11 Coho at KNFH. It was noted that “fish appear healthy at this time”.

PERSONNEL:

- o William Coomer transferred work stations back to DNFH to care for Coho.

MEETINGS/TRAINING:

- o Mike Bisbee called into weekly supervisor meeting at Dworshak.
- Nez Perce Tribe DFRM (Clearwater Coho Restoration) Page 2 DNFH Monthly Report –June 2012.
- o William Coomer attended daily morning meetings.
- o Mike Bisbee and Tui Moliga attended the Lapwai Basin Monitoring Meeting at Idaho Fish and Game in Lewiston.
- o Mike Bisbee attended managers meeting in Lapwai to discuss the intern program with the Research and Watershed divisions.

Special Report: Kid's Fishing Day

Dworshak National Fish Hatchery (Hatchery) held its 22nd annual Kid's Fishing Day on May 12, 2012. The Hatchery partnered with the Nez Perce Tribe and held the event at Tunnel Pond just east of Orofino, ID. Hatchery volunteers and staff, along with local volunteers from the Clearwater Sheriff's department, the Nez Perce Tribe, the Idaho Department of Fish and Game, the Nez Perce National Forest, and the local school district helped bring this year's event together.

Fishing opened at 8:00 for kids 14 and under. The Hatchery, Nez Perce Tribe, and local vendors provided poles, bait, nets and expertise to assist youth in their day of fishing. Each child was allowed two fish and no kid went home empty handed!

The morning was cool and the fish were hungry so it didn't take long to reach the 2 fish

limit. But there was much more for the children to do besides fish! Volunteers were on hand to help kids make artful fishing flies, create Japanese fish prints, and color origami fish. The Idaho Department of Fish and Game (IDFG) brought out their marco invertebrate collection and gave children insect nets to investigate aquatic life in Tunnel Pond. Nez Perce National Forest (USFS) staff taught kids about local fish and their life cycles. Clearwater County Sheriff deputies brought out their jet skis and taught the kids about water safety. The Nez Perce Tribe put up a teepee and the Esskah-po Powwow committee served a delicious breakfast and lunch.

The event had 98 registered kids, up 60% from last year. Staff helped net fish, bait hooks, provide casting lessons, iced caught fish, and

provided fish cleaning lessons. It was a wonderful spring day and everyone had a great time.

This event would not have been possible without the commitment from our Hatchery volunteers, the Nez Perce Tribe, the IDFG, the Clearwater County Sheriff Department, the USFS, the Guide Shop, and funding from the LSRCP.

Kid's Fishing Day was followed up by Veteran's Fishing Day on May 14th. Twelve Veterans from the Lewiston Veterans Home came to Tunnel pond for a day of limitless fishing.

By the end of the day over 80 fish had been caught and cleaned. The fish were taken back to the Veterans Home and fried up for all the Vet's at the Home to enjoy.



A group of Kid's enjoy the fishing at Tunnel Pond
Credit: Angela Feldmann/USFWS



Lily Feldmann hauls in a lunker!
Credit: Angela Feldmann/USFWS



After fishing, kid's had fun making fish prints.
Credit: Angela Feldmann/USFWS



Veteran's hard at work fishing at Tunnel Pond.
Credit: Terri Brockman/Lewiston Veterans Home



A satisfied fisherman views his catch.
Credit: Angela Feldmann/USFWS



Damage to fire and maintenance pump.

**Credit: Adam Izbicki/
USFWS**

“Load limit signs have been installed on the bridge at Dworshak.”



Split hose during Coho Transfer.

Credit: Kent Hills/NPT

Maintenance Activities

Dworshak

Replaced battery chargers on generators I and II
 Replaced radiator coolant hoses on generators I and II
 Replaced fire and maintenance pumps #2 and #3
 Installed new check valves on fire and maintenance pumps #2 and #3
 Annual PM performed on portable Davey fire pump
 Non Plumbed in eyewash stations serviced by Oxarc
 Service performed on Chevy Trailblazer, engine oil and transmission service
 Service performed on 2001 Dodge Ram, new hoses and thermostat
 Replaced broken light globes in the hatchery building
 Completed System I pump house ATS installation
 Two floway pumps picked up by Jetco for rebuild
 Replaced fuel gauges on fuel storage tanks
 Purchased new Karcher pressure washer
 Replaced tires on fire pump cart
 Installed mechanical seal filter on sys III effluent pump
 Repaired fire and maintenance water system leaks
 Installed new pump #6 in the main pump house
 Repaired blown hydraulic hose on manlift
 PM performed on electric Cushman carts
 Annual PM performed on pressure washers
 Quarterly PM performed on rotating screens
 PM performed on sys I supply pumps
 Installed load limit signs on bridge

Kooskia

5/02: Hatchery mail box's had to be moved up 17 inches according to the post office. Hatchery personnel moved and rearranged all mailboxes in the correct order as outlined by the U. S. Post office for everyone at the Toll Road and Kings Bluff road area.

5/02: Hatchery personnel installed the shade netting over the burrows ponds and the water was started into the ponds.

5/07: Fish pump was picked-up at DNFH and transported to the KNFH to be used for moving spring Chinook from the nursery vats to the Burrows Ponds and for loading the Coho fry onto the transport truck to be shipped to DNFH.

5/08: Started pumping fry from the nursery vat to the Burrows ponds.

5/09: Finished moving fry to the Burrows ponds. Hatchery personnel met with the SRBA Coordinator on Complex operation and co-management evaluation.

5/15: A trailer was moved onto the hatchery for the spring Chinook Creel Survey Clerk to live in while working on Clear Creek. Hatchery personnel have been doing some maintenance on the trailer.

5/18 Recirculation pumps in the nursery were shut off and the water to the one Coho vat was routed through the system as a single pass. Outside drains were opened. Sand was cleaned out of the adult trap.

5/22: Light fixtures were installed in the feed room to help save on power.

Bio Oregon delivered fish feed to the hatchery.

Bids were obtained from local vendors for a new furnace and heat pump for Gerry's house.

5/24: Coho that were rescued from the flexible tubing break on the fish pump were transported to DNFH. Remaining water to nursery was shut off. Screen chamber was cleaned.

Idaho Fish Health Center

Complex Hatcheries

Kooskia: Guppy examined SCS in Tank 32 on 5/4 and 5/8 for increased mortality, lethargy and lighter color than normal. No pathogens detected. Samples sent to Olympia FHC for analysis by histology.

Dworshak: Rick examined juvenile SCS from A bank after report of increased mortality. Found no parasites or bacteria on gills or skin. Virology results are pending.

FCS were collected on 5/8 and 5/16 for prerelease exams for 2 groups of Billy Connor's (FRO) research study fish at Dworshak NFH. Samples were also taken on 5/11, 5/16 and 5/17 for further analysis by Corie after finding abnormal red blood cells. Samples were sent to Olympia FHC for histological analysis.

Corie examined Coho at Dworshak for monthly monitoring on 5/31. Low levels of Gas Bubble Disease were detected. Corie also examined steelhead in the nursery with no parasites or bacteria seen.

Nez Perce Tribe: Sub-yearling FCS were collected at FCAP sites of Captain John on 5/21 and Pittsburgh Landing on 5/22 by Rick for prerelease exams. Liz collected samples from Big Canyon on 5/23 and Laura from Lyons Ferry on 5/23, also for prerelease exams for the FCAP sub-yearling program.

Laura performed monthly monitoring on FCS. She sent EWOS feed samples to Ann Gannam; food was drier than normal and slightly elevated peroxide levels.

High sub-yearling prerelease FCS mortality was reported in the east pond at the North Lapwai site during the first week of May. FCS were examined by Rick on May 7 and numerous protozoa parasites were observed on gill and skin tissue. Necrotic gill tissue was also heavily infected with Saprolegnia fungus. Dissolved oxygen levels were normal at the time of the visit, but there appeared to have been a die-off the green algae in the pond the previous week which may have caused low dissolved oxygen levels. The remaining survivors were released that week.

Laura collected samples for prerelease exams at NPTH for FCS sub-yearlings on 5/9 and for SCS destined for Meadow Creek on 5/30.

Guppy collected FCS at NPTH acclimation sites of Lukes Gulch on 5/17 and Cedar Flats on 5/24 for prerelease exams

Bacteriology: Streaks were made from viral sample pellets onto TSA (tryptic soy agar). These were from pre-release sampling done from Nez Perce Tribal FCAP sites. There were no reportable bacteria found.

Virology: Corie ran a total of 96 samples from FCS pre-releases, SCS pre-release and diagnostic samples. She ran 70 blind passes from NPTH and DNFH samples. Corie also received samples from Kootenai White Sturgeon spawning adults on 5/30 and 5/31 to include testing on additional cell lines for White Sturgeon Iridovirus.

PCR: Rick screened for *Nucleospora salmonis* (Ns) using the nested PCR for 585 samples from ovarian fluid and virology pellets from SCS and FCS spawning adults at NPTH, prerelease COS and SCS from NPTH, DW and KK and prerelease STT at Hagerman. Twelve additional samples from monitoring and diagnostic cases were screened for Ns from NPTH, DW and Hagerman.

Samples were received from Doug Munson of IDFG from spawning adults at Sawtooth (Hagerman NFH brood stock) to test for *Nucleospora salmonis* on 5/30.

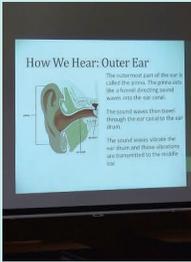
Rick also set up and checked out the operation of the new AB StepOnePlus Real -Time PCR System. Six of the case histories from the nested PCR's for Ns were verified by real-time PCR.

Parasitology: Rick completed 20 cases of the archived wild fish samples from 2010 for *Mxyobolus cerebralis* (Mc) and completed screening 2011 and 2012 adult spawning STT from Dworshak and 2011 adult spawning SCS from NPTH for Mc. Rick helped Liz with Mc screening for prerelease samples. Pre-release samples from Dworshak and Hagerman were negative for MC.



Gills exhibiting heavy gas bubble disease

Credit: IFHC/USFWS



Hearing training took place on May 2nd

Credit: Angela Feldmann/USFWS



5th graders from Kamiah Middle School dissect a trout

Credit: Guppy Blair/USFWS



Respirator fit testing took place in May

Credit: Angela Feldmann/USFWS

Meetings....Training....Travel

Dworshak

- 5/4 Larry Peltz traveled to Walla Walla for a Rehab team meeting
- 5/8-9 Rob Bohn, Rob Kellar, Rick King and Nate Wiese completed chainsaw training on-site. Brandon Skinner of the Forest Service provided the two day training.
- 5/15-16 Guppy Blair, Angela Feldmann and Nate Wiese attended the Lower Snake River Compensation Program Chinook meeting in Boise, Idaho.
- 5/17 Rachel Life gave a webinar talk to staff about IHNV
- 5/21 Larry Peltz, Mark Drobish, Jack Christiansen, traveled to Walla Walla for Rehab Team Meeting
- 5/30 Becky Johnson, Ed Larson and Kent Hills met with Mark Drobish, Nate Wiese and Larry Peltz for the monthly Snake River Basin Adjudication meeting
- 5/31 Julie Davin, Project Manager for the main aeration degassing project scheduled for FY 2013 met with Adam Izbicki, Larry Peltz and Jack Christiansen to lay out schedules and plans for this project.

Kooskia

- 5/2 Youth Camp Planning Committee Meeting at KNFH.
- 5/7 Kent Hills attended the Monday meeting at DNFH and met with Ed Larson, SRBA Coordinator.
- 5/9 Meeting with Trevor, Snake River Basin Data Collection at KNFH. Ed Larson, SRBA Coordinator from DNFH, traveled to KNFH to have a meeting with Kooskia NFH personnel on evaluating the DNFH Complex Management role and the co-management process.
- 5/14-16 Holiday, Kent traveled to Boise to present on the hatchery incubation recirculation chiller system at the Lower Snake Comp Meetings. Traveled home on the evening of the 16th.
- 5/21 Meeting at DNFH with the SRBA Coordinator and a second one with the Coho program on increasing fish production.
- 5/30 SRBA meeting at DNFH

Staff Service Anniversaries and Birthdays

March Birthdays Years of Service

- | | |
|--------------|---------------|
| Mark Drobish | None reported |
| Carrie Bretz | |
| Guppy Blair | |
| AJ Sisto | |



Administrative Activities

Safety

On May 2nd, Dr. Kim Campbell, Clearwater Valley Hospital and Clinic provided hearing education to the Dworshak Complex.

Respirator Fit-Testing was completed for staff utilizing respirators on May 10th.

Annual hearing testing was conducted for staff on-site by Dawn Enlow, Federal Occupational Health nurse out of Pasco, Washington.

Personnel Actions

Brent Goosen's last day was May 24. He accepted a position with the COE.

Katie Alverson began working full time at the end of May.



3rd graders take a break in the shade while touring Kooskia NFH

Credit: Kent Hills/NPT

Information and Education Corner

Dworshak

Stats: Tours-2, 121 people; Register- 150 visitors from 8 states, 2 countries; Volunteers- 14 logging 90 hours; Website visitors- 390; Blog Visitors- 420 from 10 countries!

On Site:

- Posted 4 articles to the Dworshak Fisheries Complex Blog. Please visit the site: [The Fish Ladder: Notes from Dworshak Fisheries Complex](#), and feel free to contribute to the blog!
- Provided steelhead eggs to 5 schools participating in HIC.
- Lead one hatchery tour.
- Coordinated volunteers for tours and Kid's Fishing Day.
- Updated Dworshak web page.
- Coordinated food vendors, bussing, and participants for Kids Fishing Day.
- Published a press release and posted flyers for Kids Fishing Day.
- Coordinated gear and bait for Veteran's Fishing Day.
- Was interviewed by Jennifer Bauer of the Lewiston Tribune for a Kid's Fishing Day article.

Off-site:

- Participated in a KFD meeting with Tod Sween at Tunnel Pond.
- Coordinated the KFD event May 12th at Tunnel Pond.
- Fish Health staff, Guppy Blair, Corie Samson, and veterinary student Johnny Shelley led classroom dissections for the Kamiah Middle school 5th grade students.
- Assisted at the Veteran's Fishing Day event May 14th at Tunnel Pond.
- Lead a Hatchery in the Classroom fish release at Lawyer Creek with 4th graders from Prairie Elementary in Cottonwood, ID.
- Lead the "Find Your Salmon Water Address" activity at the final release celebration for all Lewiston and Lapwai Hatchery in the Classroom students, about 200 students attended.

Kooskia

Hatchery Personnel are trying to keep a number count of visitors on the grounds. The weather is starting to warm up and more people are getting outside. We had approximately 300 visitors for the month by the manual count. We had third grade field trips all day May 8th. We presented information on fish and their importance to our environment and the role they play in the life history of the area and Nez Perce. We had a total of seventy children and twenty adults.

Staff List

Complex Management

Larry Peltz, Complex Manager
Ed Larson, Nez Perce Tribe Co-Manager
Mark Drobish, Hatchery Manager
Nathan Wiese, Assistant Hatchery Manager
Jack Christiansen, Aquatic Engineer

Dworshak Production Staff

Mark Bright, Angela Feldmann, Jill Olson,
John Vargas, Rick Allain, Rob Bohn,
Wayne Hamilton, Ben Wright,

Nez Perce Tribe Production Program

Mike Bisbee, Tuianna Moliga, Lou Ann
Lasswell, Steve Coomer, AJ Sisto, Clarice
Holt, Paul Eneas

Administration

Penny Hasenoehrl, Steve Bradbury, Katie
Alverson

Maintenance

Adam Izbicki, Ben Greene, Terry Weeks,
Rick King, Rob Kellar, Gerald "Scooter"
Stretsbery, James Oatman

Idaho Fish Health Center

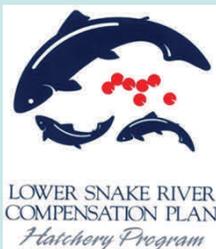
Dr. Marilyn Blair, Liz Steiner, Laura Sprague,
Corie Samson, Rick Cordes

Idaho Fishery Resource Office

Howard Burge, Mike Faler, Dr. William
Conner, Ray Jones, Aaron Garcia, Carrie
Bretz, Frank Mullins, Dr. Chris Peery, Jody
Brostrom, Randy Bowen, Ken Bugler

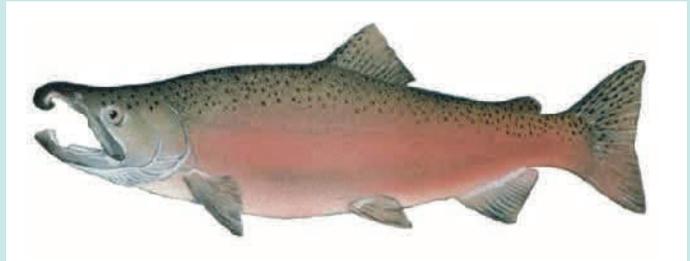
Kooskia National Fish Hatchery

Kent Hills, Art Broncheau, Kenny Simpson,
Gerry Fogelman



Nez Perce Tribe and Dworshak NFH Production, Maintenance, and Administrative staff.

Credit: Angela Feldmann/USFWS



Parting Shot



Recent retiree turned volunteer, Thomas Trock, assists with fishing at Veteran's Fishing Day!

Credit: Terri Brockman/Lewiston Veterans Home