



# Dworshak Fisheries Complex

## Monthly Activity Report



### May Highlights

#### Dworshak

- SST BY16 eggs-542,774
- SST BY16 nursery-2,369,750
- SST BY15 - 541,223
- SCS BY15 - 266,620
- COS BY 15 - 1,780,891

#### Kooskia

BY 15 Chinook- 752,259

#### Trap Count- 72

- 33 Hatchery males
- 32 Hatchery females
- 2 Jacks
- 2 "Wild" males
- 3 "Wild" females

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## U.S. Fish & Wildlife Service, Region 1

### Managers Message - Steve Rodgers

This was the first year I attended and helped at the Kid's Free Fishing Day at Tunnel Pond. As much as I speak of the power and importance of outreach, you'd think I would have attended before. Well, I finally made the effort and found that it was a great experience. This month's Managers Message will highlight my experience during this great event.

The first thing I noticed as we gathered at DNFH and then at the pond to unload tables, awnings, rods and reels, bait, and other supplies was the mixture of our group. We were comprised of Service and Tribal employees, volunteers, even kids. We included those beginning and many well into their careers, the retired, the young and the old, folks across all levels and specialties, from a variety of backgrounds. The Dworshak family is a fairly diverse group, and it showed as we worked together to help participants have a good day fishing.

Diversity was also evident in the various groups that came by to catch a fish or two. Some truly needed the meat, a gentle reminder that poverty exists everywhere, even in beautiful Idaho. Others didn't need the fish as much as a break from work and some down time with their families. Kids caught fish and giggled alongside parents who giggled even more. All expressed excitement at a bobber dipping under the surface; or groaned collectively as a big fat rainbow shed the hook just short of the net.

It was very clear everyone had a great experience. The pond was full of fish, outplanted in advance by both the Nez Perce Tribe and Idaho Fish and Game. Families came and went from early in the morning until long after we wrapped up in the afternoon.

Many in this community already know how to fish and have their own gear so didn't need our help. For those who were new to fishing, our team did a great job gearing them up, teaching, and helping whenever possible. Several of our employees even cleaned, iced and bagged every fish; something the families truly appreciated. It

was an interesting dynamic, where some needed a lot of help, and others needed none. Often a seasoned angler would help a beginner, and everyone was respectful. I had the joy of helping a three-year old named Eli hook and land his first trout. He wanted nothing to do with that fish after it started flopping on the bank, choosing instead to throw rocks into the pond.



Credit: Steven Rodgers, FWS

parental permission granted 2016

We all had a great time enjoying the water, sunshine, fishing and laughter. The toads were talking all morning long, and the ducks hung around for a while, squawking at all the commotion. The weather was perfect and so was the day. My understanding is the Veteran's Free Fishing Day held the following Monday was equally successful, even though the sunshine was replaced with wind and rain. That didn't bother the veterans...they just kept fishing.

It strikes me how important events like these really are. For those who attended, we were united by a love for the outdoors, a passion for fishing, and the value of family and friends. The diversity represented at that pond was striking; as was the joy, laughter, and feeling of community. It was a beautiful day, in more ways than one.

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Credit: Olson, FWS

Jason Thompson explains egg development to students at Environmental Awareness Days in Lewiston, Idaho



Credit: Olson, FWS

Scott Kohler helps make memories at the May 7th Kid's Fishing Day!



Credit: Olson, FWS

Jaden Hudson helps kids learn about and celebrate World Fish Migration Day in Lapwai, Idaho



Credit: Olson, FWS

Rob Bohn encourages "smolts" to migrate to the ocean during a game of "Hooks and Ladders".

## Dworshak Hatchery Production - Izbicki, Sommer, Bisbee

### Dworshak Stock - Spring Chinook Salmon (SCS)

#### *Brood Year 2015 (BY15)*

All BY 15 Chinook were ponded into single pass raceways on May 4-5, 2016. Most were buttoned up nicely, but there were some that were farther behind in their development and were still ponded. By the end of the month there were 2,369,750 fry in 16 raceways. Fry averaged 966 FPP (fish per pound). Mortality averaged 1.8%. Fry were held on chilled water longer and were ponded later than usual due to the installation of wider grip strut to the raceway walls. There are four distinct PBT groups for BY 15 fry: Dworshak smolt production (1.7 M end of month), NPTHC Parr (207K end of month), NPTHC Lolo (156K end of month), and Selway Parr (304K end of month).

### Coho Salmon (COS)

#### *Brood Year 2015 (BY 15)*

There are currently 541,223 Coho eggs incubating in 9 stacks.

### Dworshak Stock- Summer Steelhead (SST)

#### *Brood Year 2016 (BY 16)*

Egg enumeration was completed in May with Take 10. Enumerated eye up for kill spawn egg takes (1, 2, & 7-10) averaged 90.4%. Egg quality for takes 3-5 was very poor with average enumerated eye up at 78% and total eye up at 51%.

Takes 8, 9, & 10 were moved into the nursery in May. This brood year all fish were moved into the nursery as fry.

We began inventory and marking BY 16 SST outside to System 1 Burrow's Ponds (BPs) on May 16th. This will continue through early August with a two week break from June 24 through July 10. The break will allow the later takes of fry to reach 150 FPP.

Once fry are marked and moved outside they will remain on reservoir water until they are a minimum of 60 FPP. At that point fish will be split into their final rearing densities and reared on colder river water.

At the end of May there were 542,774 fry from takes 1 & 2 in System 1 averaging 110 fpp; 1,780,891 fry in the Nursery from takes 3-9 averaging 442 fpp; and 266,620 sac fry in incubation from take 10.

**Dworshak Hatchery Production**

(Continued from page 2)

**SUMMARY**

Table 1. Total Production—Fish on Station (5/31/16).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS BY 15	15	Incubation/Eggs	266,620				
COS BY 15	15	Incubation/Eggs	1,780,891	4,027	442	1.8	45
SST BY 16	16	Incubation/Eggs	542,774	4,949	110	3.0	76
SST BY 16	16	Nursery	2,369,750	2,454	966	1.5	38
SST BY 15	15	Systems	541,223				
<b>Total Fish/Fry on Station EOM</b>			<b>5,501,258</b>	<b>11,430</b>			

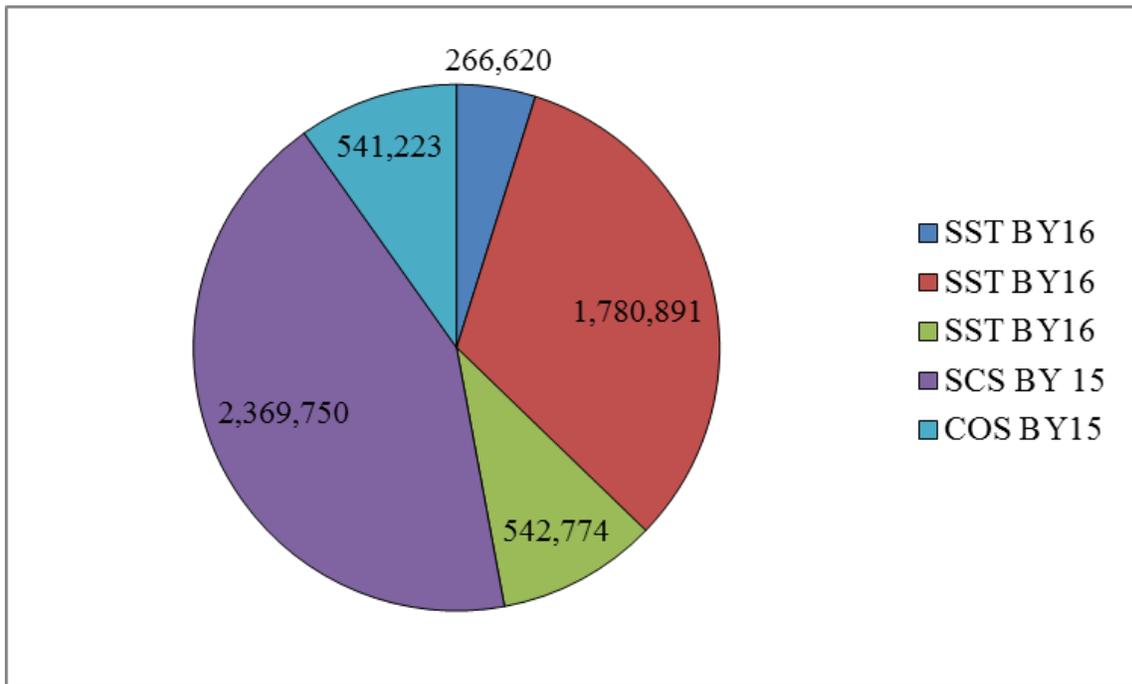


Figure 1. May 31, 2016 Total Fish/Eggs on Station.



Credit: Olson, FWS

Hatchery in the Classroom  
steelhead release on Lawyer  
Creek



Credit: Olson, FWS

“Smelling the way home”.



Credit: Olson, FWS

What does a crawdad feel  
like when you touch it?



Credit: Olson, FWS

A “migrating steelhead”  
narrowly escapes a  
“commercial fisherman”  
in the Hooks and Ladders  
game!

## **Dworshak NFH Meetings, Training and Conferences - Drobish**

Steve Jeffers detailed to Entiat NFH May 10th-19th and May 24th through June 2nd.

Aidan Frye joined the Dworshak Fish Hatchery crew as an Animal Caretaker on May 9th. Welcome aboard Aidan.

On May 17th, Ann Setter, Lucian Stewart and Greg Parker, U.S. Army Corps of Engineers and Steve Rodgers, Mike Tuell, Chris Peery and Mark Drobish attended the Corps’ quarterly meeting at the Dworshak Fisheries Complex.

On May 26th, Jim Forsythe, Fire Management Officer for the South Idaho Fire Zone visited the station for a tour and provided guidance regarding procedures to enable our staff to assist with fire suppression in the local area. A memorandum of understanding is being developed with the Orofino Rural Fire Department and training coordination will be implemented in FY 2017 for Commercial Driver’s License holders to support fire suppression serving as water tenders using our on-site fish distribution truck.

## **DNFH Maintenance and Operations Activity Report - Koehler**

- Quarters #4 has been painted inside.
- Other needed repairs are being completed in the vacated hatchery houses.
- The 2500 amp breaker replacement for boiler #3 has been received. It will be installed as soon as shorted electrical feeders are replaced.
- New fencing install has been completed and greatly enhances privacy and security for quarters 3 and 4.
- More minor alterations have been completed to the new bar grating at the raceways
- Gates for the adult holding ponds have been repaired.
- Maintenance personnel assisted COE engineers in the inspection and certification of all stop logs in the main pump house.
- T-handled valve keys were purchased for the raceway mud valves and needed to be lengthened for safe and comfortable operation
- Now that all the new main river pumps have been installed, maintenance is in the process of cleaning and painting the main pump house floor.
- The Maintenance Department has completed 32 Mechanical PM work orders, 10 Electrical and 11 Custodial for a total of 53 work orders this month. 21 work order requests from staff have been addressed.

## **Idaho Fish and Wildlife Conservation Office - Connor Dworshak Complex Monitoring and Evaluation Team**

Chris Peery (APL) completed a detail in the regional office as the Fish Passage and Habitat Coordinator.

Updated the Steelhead database for FINS.

Completed the edits and released the 2015 SCS annual report.

Participated in the weekly coordination calls.

Attended a meeting to discuss program priorities for SCS at Dworshak and Kookia NFHs.

Completed the 2016 the IFWCO property inventory.

Helped transport Chinook salmon to raceways.

Conducted a safety inspection of the office and motor vehicles.

Worked on boat inspections.

Attended the complex safety meeting.

Updated the website to reflect the office's name change.

Worked on the CWT database for 2016 SST and sent it to the regional RMIS office for input into the system.

Added section IV (Sending data for RMIS input) into the CWT recovery procedures document.

Worked on a density study.

Updated software on the Clear Creek PIT-tag array.

Edited the 2016 annual report and the FINS database.

Measured lengths and weights of 50 fish samples of steelhead from each nursery tank as they were transferred to the marking trailer and into the outside burrows ponds.

Monitored the Tuesday morning Snake Basin coordination call.

Finalized the historical adult return database for spring Chinook salmon at Dworshak NFH and reposted it to the office website.

Sent the historical production database to the LSRCP office in Boise with the updated information on BY08 Spring Chinook Harvest and in the Lower Columbia and Lower Snake rivers.

Contacted the IDFG to coordinate collection of the PBT samples for BY12 and BY13 adults returning this year for the rearing density evaluation study at Dworshak NFH.

Attended quarterly meeting with the USACE at Dworshak NFH.

Began Beta testing the FINS offline application.

Assisted Kooskia NFH during the first and second sortings of BY16 spring Chinook salmon and 22 fish were transferred for holding at Dworshak NFH.

Conducted HET meeting to discuss how to handle AD intact Chinook salmon that will be collected at Dworshak NFH.

Fisheries managers want these fish released back to the river (they have previously been incorporated into broodstock). This produces logistical challenge since fish must be held three days prior to release after being anesthetized with Aqui-S. It was decided to switch to using CO2 for early sorts so fish can be released directly. Fisheries managers were asked to provide the truck and driver that would be used to return fish to the river. State and Tribe reps were to check on this and report back to HET the following week.

**Dworshak Complex Monitoring and Evaluation Team** (Continued from page 5)**Aquatic Conservation Team**

Credit: Izbicki, FWS

Hatchery crew using new aqua life 2.5" fish pump and new 2.5" aqua life dewatering tower to move fish out of the nursery to the tagging trailer. Because the new setup is sized properly it is easier to handle than the 4" pump and has eliminated problems of flooding out the trailer and having fish stranded in the dewatering equipment.



Credit: Izbicki, FWS

Participated in NWR-Climate Change conference call.

Worked on presentations for annual Fisheries/NWR coordination meeting.

Attended riparian field tour in the Lemhi watershed.

Reviewed restoration projects with partners, contractors and agency representatives.

Attended the Upper Salmon Basin technical team meeting.

Changed allocation amounts for Western Native Trout Initiative projects after discussion with the WNTI representative.

Coordinated with the Partners for Fish and Wildlife project with Leadore School District.

Participated in the Annual Fisheries/NWR coordination meeting in Portland.

Finalized grant paperwork.

Participated in the region's project leader call.

Met with Leadore School District on the Partners for Fish and Wildlife Project.

Potted pollinator plants.

Coordinated with Salmon School District on the Pollinator Project.

Prepared for Lamprey Technical Workgroup Critical Uncertainties Subgroup meeting.

Called into Western Lampreys Conservation Team biweekly calls.

Worked with the Idaho Panhandle National Forest and B&F staff to amend fish passage project agreements to fit anticipated work schedules.

Worked on Lamprey Technical Workgroup and Conservation Team materials.

Attended meetings on Pollinator Pathway and Pollinator Week.

Conducted meeting for Lamprey Technical Workgroup Passage Standards subgroup regarding developing passage standards for dams.

**Fall Chinook Salmon Research Team**

The editorial staff of the Canadian Journal of Fisheries and Aquatic Sciences decided that the manuscript on use of unmanned aircraft to count redds did not fit the present theme of the journal, but encouraged submission of the manuscript to the new Canadian open access journal FACETS. The manuscript was submitted as suggested.

Worked on of Part IV of a five-part monograph on Snake River fall Chinook salmon.

Analyzed data on upstream movement of adult Snake River fall Chinook salmon.

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## Fall Chinook Salmon Research Team

(Continued from page 6)

Participated in a coordination call with staff of NMFS to discuss the development of an RM&E plan for the natural emphasis area option in the draft recovery plan.

Participated in a coordination call with the research director of the Nez Perce Tribe Department of Fisheries Resources management.

Analyzed data on upstream movement of adult Snake River fall Chinook salmon.

Participated in a coordination call with staff of NMFS to discuss the development of an RM&E plan for the natural emphasis area option in the draft recovery plan.

Participated in a coordination call with the research director of the Nez Perce Tribe Department of Fisheries Resources management.

Posted Parts I through III of a monograph on Stream Net.

Connor, W.P., B.D. Arnsberg, J.A. Chandler, T.D. Cooney, P.A. Groves, J.A. Hesse, G.W. Mendel, D.J. Milks, D.W. Rondorf, S.J. Rosenberger, M.L. Schuck, K.F. Tiffan, R.S. Waples, and W. Young. 2015. A Retrospective (circa 1800–2015) on abundance, spatial distribution, and management of Snake River Basin fall Chinook salmon. Draft 2 Parts I, II, and III. [http://www.streamnetlibrary.org/?page\\_id=1349](http://www.streamnetlibrary.org/?page_id=1349) (Available May 13, 2016).

Continued the 2016 beach seining season in cooperation with the USGS.

## Idaho Fish Health Center - Blair

May 2016

### Dworshak NFH

*Steelhead juveniles:* Mortality jumped in tank 503 after sample counting and a temperature decrease from 57 to 53. Fish were examined on 12 May 2016. Bacteriology samples were conducted but were negative. Mortality decreased to normal over the weekend and it was recommended to continue to keep the tanks clean and monitor mortality.

*Spring Chinook juveniles:* Fingerlings were moved from the incubation room to outdoor raceways on 6 May 2016. Initial mortality was high, likely due to handling stress and increased focus by hatchery staff to remove fish showing swimming abnormalities and/or deformities. Monthly monitoring was performed on 17 May on fish from two raceways. A few fish from each raceway did have light coagulated yolk and gills were slightly swollen. It was recommended to continue to keep the tanks clean and free from algae and monitor mortality. Mortality has decreased to normal over the past week. Shade cloth was put up last week to aid in decreasing light exposure and hopefully decrease algal growth rate.

*Coho juveniles:* Coho crew has been busy preparing the burrows ponds for the BY2015 Coho that will be moved outside from the incubation room soon.

### Kooskia NFH

*Spring Chinook juveniles:* A monitoring exam was conducted on May 18 at Kooskia NFH. All mortalities were low, but Chinook fry were examined from one nursery tank. Some debris was noted in the gills and recommendations were to continue to keep tanks clean and to move fish soon to burrows ponds as planned.

## Kooskia National Fish Hatchery - 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 Brook Year 2015

There are 752,259 fry on station; mortality this month was 1,224. They are on well water at 51 degrees. They are an average of 258.4 fish per pound, 2.35 inches (60mm). The fish consumed 925 lb. of Bio Oregon fish feed this month and grow .34 inches with a total weight gain of 1,349 pounds. The Idaho Fish Health Center was out on May 18th and performed the monthly health exam. Gills showed low to moderate levels of debris on gills and very low levels of Sanguinicola, no parasites were seen on the fish at this time. Fish Health recommended to keep cleaning tanks and to move to the Burrows ponds soon.

### Kooskia Adult Trap Operations:

The trap was opened on May 16, and will be closed on the weekends to help improve Tribal catch rates. The trap was open a total of 12 days this month. Total trapped in May was 72 fish consisting of 33 hatchery males, 32 hatchery females, 2 hatchery jacks, 2 wild males and 3 wild females. All hatchery fish were transported to Dworshak for broodstock and all wild fish were released into Clear Creek at the second bridge.

### Maintenance & Operations:

**May 03:** Shade netting was installed on the bio-filter to help keep moss from growing and help keep the water cooler.

**May 04:** Burton Construction began warrantee work on the Burrows ponds coating that was installed last spring.

**May 04:** Hale Floor began installing new flooring in quarters 4.

**May 05:** The main chiller was turned on to cool the bio-filter water, which the fish are on, from 57° F to 52° F.

**May 06:** Fresh gravel is being spread at the hatchery.

**May 07:** Art was elected to NPTC. This was his last day as an employee at Kooskia National Fish Hatchery.

**May 16:** Carter Lopez is on loan from DWNF for a week to assist in personnel shortage. The Obermeyer weir was closed forcing creek water into the hatchery, the trap was cleaned out and opened for trapping Chinook.

**May 17:** Kent attended a Project Leaders meeting and the Chinook call in meeting in Lapwai.

**May 18:** Guppie from Fish Health arrived at the hatchery for the monthly inspections, debris was found on the gills of the fish in tank 16. This is due to the small environment. The fish are destined to be moved from the rearing tanks to the burrows pond early next month.

(Continued on page 9)



Credit: Olson, FWS

Rick King and Thomas Trock assist two time POW Veteran Elton Ankney enjoy a great day of fishing at Tunnel Pond!



Credit: Olson, FWS

Big fish = Big smiles at Veteran's Fishing Day!  
May 9, 2016



Credit: KNFH file photo

Forest Service and Kooskia NFH staff hosted classes of approximately 70 children from local schools for tours and education.

## Kooskia NFH - Hills

(Continued from page 8)

### Maintenance & Operations:

- May 23:** Gerry removed the broken shower door and replaced it with a shower curtain in quarters 4.
- May 23:** We emptied the trap and removed the following Chinook: 17 hatchery females, (4 with cwt's 2 with pit tags), 6 hatchery males, (1 with a cwt), 1 wild female 1 wild male. All hatchery fish were transported to Dworshak for brood stock; all wild fish were transported 9 miles up Clear Creek and released for natural spawning.
- May 24:** The burrows pond covers were installed.
- May 25:** Chinook were taken from the trap as follows: 15 hatchery females 26 hatchery males and 2 hatchery jacks were all transported to Dworshak for brood stock. A total of 2 wild females and 1 wild male were released into Clear Creek at the second bridge. Additional Chinook were left in the trap due to limited space in the transport vehicle.
- May 26:** Forest Service and Kooskia NFH staff hosted classes of approximately 70 children from local schools for tours and education about plants, wildlife and fish.
- May 27:** Trap was closed for the weekend.
- May 31:** Trap was opened for the week.

### Kooskia NFH Training and conferences:

- May 05:** Kent attended a Project Leaders meeting at Dworshak.
- May 12:** Kent attended a Project Leaders meeting in Lapwai.
- May 17:** Kent attended a Project Leaders meeting and the Chinook call in meeting in Lapwai.
- May 18:** Kent attended the 401k Board meeting in Lapwai.
- May 26:** HET meeting at Dworshak.



We emptied the trap and removed the Chinook



Shade netting was installed on the bio-filter to help keep moss from growing and help keep the water cooler.



Burton Construction began warrantee work on the Burrows ponds coating that was installed last spring.

## Information and Education

### Dworshak - Jill Olson

**Facebook:** Reach -2.201 K Engagements-308 **Website:** Page Views 268; Unique Visits 209; First Time 170; Returns 39

**Visitors:** 119 visitors signed in from 16 states & Costa Rica **Tours:** We had six guided tours for 34 adults and 83 kids.

**Outreach:** We were involved in eight outreach events including the Annual Kid's and Veteran's fishing days, Environmental Education and Cultural Knowledge Day in Lapwai, Nez Perce County Soil and Water Conservation District's Environmental Education Days (2), Camas Prairie Hatchery in the Classroom fish releases, Forest Service Environmental Outreach Day at Kooskia NFH, and Nez Perce Oral History presentations at Orofino Jr./Sr. High School. Our involvement helped reach 847 children and 223 adults.

**Volunteer Hours:** Six volunteers put in 52.25 hours this month.

### Kooskia - Kent Hills

**Visitors:** There were 304 visitors to the hatchery during this month; this figure is compiled by staff. Many visitors this month are looking for adult Chinook.



Credit: Olson, FWS

**Let's Go Outside!**

**Experience Nature** [http://www.fws.gov/pacific/experience\\_nature/](http://www.fws.gov/pacific/experience_nature/)

### Dworshak Fisheries Complex Management:

## Staff List

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 Fish and Wildlife Conservation 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, Steve Coomer, Carter Lopez, Zach Broncheau, Jayden Hudson, Steve Jeffers, Jayson Thompson, Aidan Frye

**Administration:** Heather Leopard- Administrative Officer, Brian Devin- Budget Technician,

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

**Idaho Fish Health Center:** Laura Sprague, Corie Samson, Sean Roon, Tim Bundy

**Idaho Fishery Resource Office:** Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Jody Brostrom, Chris Griffith

**Complex Information and Education:** Jill Olson

**Kooskia NFH:** Art Broncheau, Kenny Simpson,