



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Dworshak Fisheries Complex

P.O. Box 18

Ahsahka, ID

Phone: (208) 476-4591 FAX: (208) 476-3252



MEMORANDUM

To: Fisheries Supervisor, Columbia Basin Ecoregion
Region 1, Portland, OR

From: Complex Manager
Dworshak Fisheries Complex

Subject: **Monthly Activity Report – April, 2011**

Fish Management Culture

Dworshak

SPRING CHINOOK SALMON (SCS)

Brood Year 2010 (BY10)

On April 15 there were 297,942 fry from the incubation room moved to circular and rectangular tanks in Burrows ponds (BPs) 17 and 19. On April 19-29 there were 806,437 feeding fry moved from 33 nursery tanks into BPs 23-25-27. At the end of the month there were 1,100,986 BY10 SCS on station in BPs averaging 892 fish per pound (fpp) and 39 mm (1.6 inches) total length. Mortality for the month averaged 0.31 percent and water temperature averaged 41.7°F in the BPs.

FALL CHINOOK SALMON

Brood Year 2010

The Idaho Fishery Research Office (IFRO) is participating in an evaluation of the effect of transportation and summer spill in the Columbia River hydro system on smolt-to-adult return rates of Snake and Clearwater River fall Chinook salmon (FCS). Lyons Ferry Hatchery stock FCS are being used and the fish are referred to as either Snake or Clearwater River surrogates depending on their release location. The Snake and Clearwater River surrogates for the transportation study were initially incubated and reared at Umatilla Hatchery (UH) in Oregon. These groups were transferred in April, 2011, to Dworshak National Fish Hatchery (DNFH) where cool water temperatures allow date and size at release to be controlled to match rearing timing and size of fish in the wild.

On April 12 a total of 114,428 Clearwater River surrogates for the transportation study were transported from UH to BP13 at Dworshak. These fish were 444 fpp at time of transport. Water temperature at the time of arrival for all transports was approximately

41°F. Mortality after transport was 0.2 percent. These fish will be PIT tagged at the end of June and beginning of July for release to the Clearwater River. Tagging of all the fish will be done by BioMark Inc. staff.

On April 13, a total of 209,234 Snake River surrogates for the transportation study were trucked from UH to BP11 at Dworshak. At the time of arrival, these fish were 225 fpp. Mortality after transport was 0.2 percent. These fish will be PIT tagged at the end of May and beginning of June for release to the Snake River. Tagging of all the fish will be done by BioMark Inc. staff.

At the end of April there were 322,634 FCS on station ranging in size from 201 – 374 fpp.

COHO SALMON (COS)

Brood Year 2010

On April 18, 2011 there were 146,670 BY10 COS transferred from Kooskia to Dworshak NFH. On April 19 there were another 146,602 COS transferred to Dworshak. There were a total of 293,049 fish COS averaging 197 fpp and 62 mm (2.4 inches) total length at the end of the month. Mortality was 0.03 percent and temperature averaged 41.6°F for the month.

SUMMER STEELHEAD (SST)

Brood Year 2010

Release of BY10 SST was finished on April 27 when 58,235 fish at 8.6 fpp and 176 mm (6.9 inches) total length were transferred to Eldorado Creek. This is a tributary of Lolo Creek on the middle fork of the Clearwater River. These fish received no adipose fin clip to designate them as hatchery fish and are under the U.S. vs. OR Harvest Settlement Agreement. All other BY10 SST were released in March, 2011 and are in Table 1 of the March Monthly Activity Report.

Brood Year 2011

During April *Infectious Hematopoietic Necrosis Virus* (IHNV) was diagnosed in the nursery in Take 1 SST. There were 14 of the 28 tanks of Take 1 SST destroyed during the month in an attempt to stop the spread of the disease to the other fish in the nursery. One stressor associated with a portion of Take 1 was a temporary loss of water in the “A Bank” of the nursery. Due to this temporary loss of water, the fry in tank 104 were dumped from the jar to keep them from suffocating. This was one of the first two tanks for SST diagnosed with IHN this month. High sediment and temperature fluctuations also occurred in the nursery during the month. Dworshak Reservoir was drawn down to elevation 1451 by April 15th to meet flood control targets and then was further drawn down at the request of fish managers to provide optimum flows for migrating Chinook salmon smolts downstream of Lower Granite Dam. At the end of the month there were 1.9 million BY11 SST in the nursery (Takes 1-7) in various stages of development. Steelhead from Take 1-5 were on feed at the end of the month. Spawning continued with 150 females spawned for Dworshak and 75 for Magic Valley State Fish Hatchery (MVSFH) during Take 8 on April 19. IHNV presence in adult females peaked at 58% in late April which required additional egg collection efforts to provide eggs for the MVSFH. Eggs from Take 8 were in trays in the incubation room at that end of the

month. There were 504,000 eyed eggs from Take 8 incubating in 54°F water and 360,000 eggs incubating in 42.5°F at the end of the month. Heated water temperature in the incubation room averaged 53.7°F and the nursery averaged 50.9°F for the month.

The Nez Perce Tribe hauled 58,235 unclipped steelhead to Lolo Creek on April 27th. These fish were the last of the steelhead to be released and were delayed until late April when access to the site was feasible due to heavy snow throughout the winter and into the spring.

SUMMARY

Table 1. Total Production—Fish on Station (04/31/11).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
FCS	10	BPs 11, 13	322,634	1,533	210.5	2.5	64
SCS	10	BPs 17,19,23,25,27	1,100,986	892	1,234	1.4	35
COS	10	RWs 17, 18	293,049	1,490	196.7	2.4	62
SST	11	Incubation Trays	864,000	Eyed Eggs			
SST	11	Nursery	1,915,704	1,893	1,012	1.4	36
Total Fish/Eggs on Station EOM			4,496,373	5,808			

Kooskia

Kooskia Adult Trap Operations Brood Year 2011

On April 7, the trap was closed for steelhead collection for the 2010-2011 rack. Carrie Bretz and a team from DNFH research department came to evaluate the adults in the trap. We had a total of 121 adults, 31 were males and 90 females. The age breakdowns are two age-1, both males, and 116 age-2, 26 males and 90 females, and age-3 we had 3 males. Adult hatchery fish released in the Southfork at Stites Mile Marker 19 included 87 females and 29 males for a total of 116 fish. One wild fish was returned to Clear Creek. One adult was killed for CWT recovery. Total adult steelhead interrogated this spring can be seen in the table on the last page.

Kooskia Brood Year 2010

On April 29, BY10 Kooskia SCS stock number 709,908 fry with average size of 155.9 fpp at 2.78 inches (70 mm) length. Total feed consumed for the month was 1,268 lbs. Mortalities for the month totaled 1,266. On April 20, fry were moved from the outside nursery tanks to the Burrows Ponds. The attached Monthly Inventory Summary contains more detailed information.

Coho Brood Year 2010

On April 29, BY 10 Coho fry on station numbered 283,294 with an average size of 298.8 fpp at 2.12 inches (54 mm) length. On April 14, we lost the secondary lift pump for the inside nursery room. This facilitated the transport of the larger Coho from vats 13 through 24 to DNFH for summer rearing. Transport was started April 18, and was completed April 19, a total of 293,272 were transported. The smaller fish will stay at KNFH until the first part of May.

Adult Steelhead Spring Trapping 2011.

Date Trapped	Age 1		Age 2		Age 3		Total		Hatchery		Wild	
	M	F	M	F	M	F	M	F	M	F	M	F
3/24	3	1	34	79	0	0	37	80	36	76	1	4
4/7	2	0	26	90	3	0	31	90	30	90	1	0
Total	5	1	60	169	3	0	68	170	66	166	2	5

Maintenance

Dworshak

Preventative Maintenance

- Cushman cart tires were repaired and additional tires were purchased for inventory-contractor.
- Routine servicing of the 2001 Dodge Ram PU was completed-contractor.
- Oil drain plugs for the main pump were purchased and installed.
- All of the batteries were replaced for the backup generator for the main pump house.
- The Detroit Diesel Genset #3 generator was serviced-contractor.
- Oil changes were performed on all three traveling screens in the main pump house.

Corrective Maintenance

- Replaced tires on the 21003 Dodge Van.
- Replace Batteries in the Maintenance Cushman cart and Cart #3.
- Replaced Pond Scrubber Hydraulic Pump-contractor.
- An air dryer for the incubation compressor was purchased and installed.
- A “Taskmaster Valve” was purchased and installed for the fish diverter in the spawning room.
- The starter cord for concrete saw was replaced.
- The fire maintenance PVC line adjacent to the main aeration building was excavated and repaired.
- The Digital Controller on Generator #3 was replaced by the service contractor.

Kooskia

- Burton Construction arrived to start replacing the old generator.
- Tested the temporary generator to make sure it would turn on during a power failure.
- Aluminum screen repairs in the Burrows ponds started.
- Cleaned and disinfected Burrows ponds in preparation for BY 10 Kooskia SCS fry relocation.
- We lost the secondary lift pump for the inside nursery vats. This necessitated adjusting water to the vats and pushing some of the vat outflow water to Clear

- Creek. Gerry did a great job of adjusting water and ensuring that the fish had enough oxygen to survive. This made some long nights.
- UV systems were installed in both hatchery residences and the break room.
 - Shade netting was installed over the Burrows Ponds.
 - Half the Coho were transported to DNFH for summer rearing.
 - Kent wired in a new 480 receptacle at the Bio filter. This will eliminate borrowing the 480 volt extension cord from DNFH to run the fish pump.
 - Moved spring Chinook from the outside nursery vats to the Burrows Ponds.
 - Guppy Blair from Idaho Fish Health Center (IFHC) performed fish health evaluations on the spring Chinook and the Coho at KNFH. The fish were given a clean bill of health at this time.
 - We did a two-hour load test on the temporary generator to make sure that we would not trip out the breaker.
 - Performed monthly water test on the well.

Meetings/Training/Travel

Dworshak

- 4/5 Larry Peltz, Complex Manager and Jack Christiansen, Aquatics Engineer attended a NPDES meeting in Walla Walla with the COE and CH2MHill engineers.
- 4/6 Larry Peltz, Mark Drobish, Hatchery Manager, Adam Izbicki, Fisheries Biologist and Nate Wiese, Asst. Hatchery Manager attended a SRBA coordination meeting with the Nez Perce Tribe.
- 4/13 Oxarc was on site and conducted “Respirator Fit Testing” for all staff requiring respirators.
- 4/14 Larry traveled to Lapwai to meet with Nez Perce Tribe Fisheries representatives and discussion future plans for Dworshak Hatchery
- 4/21 Larry and Jack met with Ch2MHill engineers to discuss Dworshak Hatchery plans.
- 4/26 Larry and Jack met with COE staff in Walla Walla to discuss future plans for Dworshak Hatchery.
- 4/27 The Boise Speech and Hearing Clinic conducted “hearing tests” for all required hatchery staff. Listening testing may be implemented if needed in the future!
- 4/27-29 Terry Weeks and Rick King traveled to Spokane and completed their certification for safe operation of articulating cranes.
- 4/28 Larry met with Mike Hannah and Mike Roach from US Senator James Risch office to discuss recent happenings at Dworshak Hatchery.
- 4/28 Annual reservoir water valve exercise was conducted in cooperation with the Clearwater State Fish Hatchery. Procedural changes were developed and implemented and as a result we avoided the typical temperature spikes to the nursery tanks and incubation stacks this year.
Barnaby Watten, USGS, Leetown Science Center visited the hatchery and packaged up his vacuum degasser for transport to Bozeman, Montana. Barnaby reviewed some graduate work conducted by Kelly Stockton,

University of Idaho who had conducted a portion of her Master's project on the experimental mixed cell units (modified burrows ponds).

Kooskia

- Apr 05: 2011 Inter-agency Pre Season Planning Meeting at the IDFG office in Lewiston.
- Apr 07: Budget meeting with Ed Larson, SRBA liaison at Dworshak National Fish Hatchery (DNFH) 8:00 to 9:00 then had an EMS meeting from 9:30 to 12:00 and a SRBA meeting from 1:00 to 3:30.
- Apr 14 Budget meeting at DNFH with Ed Larson and Mike Bisbee.
- Apr 19 The KNFH EMS Audit was conducted by Carlton Morris, Environmental Compliance Coordinator, and Ed Larson.
- Apr 28 Budget meeting with Ed on KNFH personnel costs.

Miscellaneous

- 4/6 "Post-Fish Release" BBQ held in the Crew Room. Volunteers and staff were recognized for their hard work with supervisors providing a great lunch

Personnel Actions –

- Wayne Hamilton, Animal Caretaker worked at the Hagerman National Fish Hatchery from April 11 through May 6 to assist during Hagerman's fish distribution season.

Visitors –

Dworshak - 141 visitors signed in on the Visitor Register.

Kooskia

No guests signed our visitor log book this month. A contributing factor is the location of the book. Hatchery Personnel are trying to keep a number count of visitors on the grounds. We had 132 visitors for the month by the manual count.

- Apr 30 Idaho Hunters Education training stations were held on the KNFH grounds.



Larry Peltz
Complex Manager

cc: Kooskia NFH
Hagerman NFH
CFRU – Moscow
Dworshak Production (2)
LSRCP – Boise

