



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Dworshak Fisheries Complex

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## MEMORANDUM

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

From: Complex Manager  
Dworshak Fisheries Complex

Subject: **Monthly Activity Report –August, 2010**

### **Fish Management Culture**

#### ***Dworshak***

#### **SPRING CHINOOK SALMON (SCS)**

##### ***Brood Year 2009(BY09)***

At the end of the month there were 1,089,523 BY09 SCS in a total of 29 raceways (RW's) averaging 64 fish per pound (fpp) and 95 mm (3.7 inches) total length. Overall mortality was 0.1 percent and water temperature in the RW's averaged 45.9°F during the month. From August 3-13 all BY09 SCS were inventoried and received adipose fin (AD) clips. Current numbers reflect this inventory. There were also 134,185 which received coded wire tags (CWTs) for contribution research.

A-bank raceways (RW's) 1-15 had vacuum degassers installed in the headbox to strip nitrogen gas which typically comes into the hatchery at supersaturated levels. The maintenance staff modified these units after the initial installation to meet flow and water quality needs for the fish.

##### ***Brood Year 2010 (BY10)***

Spawning of BY10 SCS began August 10 and ended August 24 for eggs incubated at Dworshak from both Dworshak and Kooskia broodstock. After egg targets were met for Kooskia National Fish Hatchery (KNFH), spawning continued on August 24 and August 31 to supply Clearwater State Fish Hatchery with green eggs from 97 Kooskia females. These green eggs were transported to Clearwater Hatchery after spawning. At the end of the month there were eggs from 345 Dworshak stock and 222 Kooskia stock females incubating at Dworshak. Water temperature on the eggs averaged 42.4°F for the month. The chiller will be turned on for A-B banks of Heath Incubators on September 1st.

## COHO SALMON (COS)

### ***Brood Year 2009***

At the end of the month there were 323,307 COS on station averaging 54 fpp and 95 mm (3.8 inches) total length. Mortality was 0.12 percent and temperature averaged 45.9°F for the month.

## SUMMER STEELHEAD (SST)

### ***Brood Year 2010***

Steelhead from Takes 8(1/2) - 10 (560,000 fish) from the nursery were moved outside to BPs in System I. The fish were pumped using a PR Aqua fish pump from nursery tanks into a manual marking trailer from the Columbia River Fishery Program Office (CRFPO). All BY10 SST were moved out of the nursery by August 26, totaling 2,518,759 fish averaging 83 fpp for the year with a 90.4 percent survival from egg eye-up to outside ponding.

At the end of the month, System I had 962,353 SST from Takes 7-10 which averaged 55 fpp and 95 mm (3.7 inches) total length. System I was operated exclusively on reservoir water through the end of the month. Mortality for the month was 0.21 percent and water temperature averaged 50.6°F. During August SST from Takes 4-6 were transferred from System I into Systems II and III. Numbers from these transfers are as follows:

August 11; Take 4; 224,154 fish; 5,534 lbs; 40.8 fpp; into Systems II and III

August 19; Take 5; 257,778 fish; 6,364 lbs; 48.1 fpp; into System III

August 25-26; Take 6; 237,003; 5,851 lbs; 49.8 fpp; into System III

Inventory numbers were recorded as the fish were pumped through a VAKI fish counter from PR Aqua.

At the end of the month System II had 649,131 SST from Takes 4-6 which averaged 41 fpp and 105 mm (4.1 inches) total length. Mortality for the month was 0.31 percent and water temperature averaged 45.9°F.

At the end of the month System III had 850,066 SST from Takes 1-4 which averaged 23 fpp and 127 mm (5.0 inches) total length. Mortality for the month was 0.61 percent and water temperature averaged 45.9°F.

At the end of August, just one year ago, steelhead mortality during outside rearing (mid-May through August) had reached the 700,000 mark. During this same time frame in 2010, steelhead mortality was approximately 17,000 fish. The controllable variables between last year and this year are the renovation (reservoir water line “hot tap” and vacuum degassers) which enabled us to use reservoir water in System I through August rather than pumped river water and the diligence of the staff caring for the fish and following improved bio-security measures! All steelhead will be converted over to river water next month as the availability of reservoir decreases due to the Clearwater State Fish Hatchery’s increased water needs.

## RAINBOW TROUT (RBT)

### *Brood Year 2010*

At the end of the month there were 8,854 triploid RBT averaging 23 fpp and 121 mm (4.8 inches) total length. Mortality for the month was 0.4 percent. These RBT will be for Kids Fishing Day in 2011.

## SUMMARY

Table 1. Total Production—Fish on Station (08/31/10).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	09	A-B Bank RWs	1,089,523	16,909	64	3.7	95
COS	09	BPs 74-76-78-80-82	323,307	5,978	54	3.8	95
SST	10	System I	962,353	17,612	55	3.7	95
SST	10	System II	649,131	16,026	41	4.1	105
SST	10	System III	850,066	37,286	23	5.0	127
RBT	10	BP 59	8,854	380	23	4.8	121
<b>Total</b>			<b>3,883,234</b>	<b>94,191</b>			

### *Kooskia Brood Year 2009*

#### *Kooskia Trap Operations BY10*

The trap was closed throughout August.

### *Kooskia Brood Year 2010*

Spawning of BY10 adults began August 10<sup>th</sup>. A total of 222 females were spawned, resulting in an estimated 777,000 green eggs.

BY 2010 Kooskia Stock SCS Spawning Summary.

Take	Date	Jacks	Males	Females	Est. Green Eggs
1	8/10/10	2	46	63	220,500
2	8/17/10	4	58	85	297,500
3	8/24/10	1	39	74	259,000
		0	0	0	0
	<b>Total:</b>	<b>7</b>	<b>143</b>	<b>222</b>	<b>777,000</b>

### *Kooskia Brood Year 2009*

Kooskia Stock BY09 SCS number 658,559 averaging 49.6 fpp at 4.07 inches long. Growth for the month was .91 inches. All Kooskia stock SCS are being reared in the outside BPs, currently on reuse with well water makeup. The reuse water temperature averaged 48.2°F during August. The *Ichthyophthirius multifiliis* (ICH) declined in severity and only two more formalin treatments were administered. Those treatments were 12-hour 50ppm formalin drip treatments and were administered August 7 and 12. Idaho Fish Health Center (IFCH) exams were conducted August 6 and 11, and showed overall good fish health.

## **Maintenance**

### ***Dworshak***

- Fabrication & welding projects: net hoops and handles; installed de-gassers in Chinook raceways; removed de-gassers, cut off pipe and reinstalled; removed de-gassers again and did some further reconstructive work and re-installed; welded front access door and door stop for a boat.
- Electrical projects: Repaired conduit and wire to underpass sump pump and walkway luminaries; installed and connected System I digester sump pump; installed #6 main pump motor; checked and prepped incubator chiller, started up and adjusted balance flows; troubleshot and repaired Mech I air compressors; disconnected battery charger for old forklift; removed boosting transformers from tagging trailer circuits; set up portable power supply for de-gassing projects; repaired light and re-lamp in Server Room; removed bad shaft coupling from #6 main pump bowl assembly shaft, performed repairs and replaced.
- Refit System II filter beds for settling, cleaning and two pipes for seals.
- Pumped sludge with contractor in System I digesters, pumped supernate from System I digesters into System I clarifiers and fixed System I, #2 digester back wash.
- Hauled Chinook for outplant to Clearwater River, Pink House Hole.
- Remounted net and brush rack in Chinook raceways.
- Repaired bird netting and side wire that was damaged in the de-gasser installation.
- Loaded and hauled discarded pipe to bone yard at Dworshak Dam.
- Grounds and building maintenance daily.
- Checked main pump house and screens daily.

### ***Kooskia***

#### **Maintenance:**

No major activities this month.

#### **ARRA/ Projects:**

**Floodwall and Weir Replacement project:** The new floodwall was poured August 13<sup>th</sup> and the new weir was installed shortly thereafter. The project was completed August 20.

#### **Egg recirculation system and well rehab:**

Work continued on plumbing the new reservoir tower. Electrical work also continued with installation of wiring and the motor control panel. Fabrication for the chiller enclosure also began. System start up is scheduled for September 15.

## **Meetings/Training/Travel**

### ***Dworshak***

- 8/4 Larry Peltz, Complex Manager, Jack Christiansen, Aquatics Engineer and Mark Drobish, Hatchery Manager met with CH2MHill engineers to discuss NPDES project.
- 8/16-19 Larry Peltz, Howard Burge, FRO Project Leader and Marilyn “Guppy” Blair, Idaho Fish Health Center Acting Project Leader attended project leaders meeting in Portland, OR.
- 8/25 Larry Peltz and Mark Drobish attended a Tribal Access meeting with U.S. Army Corps of Engineers (COE) and Nez Perce Tribe (NPT) staff.
- 8/27 Larry Peltz, Jack Christiansen and Mark Drobish met with Tim Dykstra, COE, to discuss Dworshak Hatchery planning process.
- 8/30 Larry and Jack meet with COE staff in Walla Walla to discuss the NPDES project.

### ***Kooskia***

- 8/16-19 Adam Izbicki, Asst. Hatchery Manager attending Project Leaders training in Portland, OR.
- August 23: Adam Izbicki attended a meeting with the NPT and Dworshak NFH staff to discuss the transition to Tribal management at Kooskia NFH.

## **Miscellaneous**

Seth Oatman (Kamiah, ID) and Trevor Johnson (Orofino, ID) finished up their internships through the Coho Restoration Project and returned to high school. Seth and Trevor were introduced to fish culture and had the opportunity to participate in a variety of hatchery operations including Spring Chinook Salmon spawning. Their efforts also lightened the load for the rest of the crew by lending a hand with feeding, cleaning and inventorying fish during their internship here at Dworshak.

Preston Scheidt, Portland, Oregon volunteered for 3 days with the hatchery crew and participated in fish cultural activities and Spring Chinook Spawning. Preston also volunteered with the Idaho Fish Health Center for a day while visiting relatives (Randy Bowen, FRO biologist) in the area.

## **Personnel Actions –**

### **Safety/Wellness –**

- 8/26 Swiftwater safety training was provided by Tom Biladeau, biologist in an outdoor setting with staff getting hands-on training in knots, etc.

## **Information/Education (I/E)**

### ***Dworshak***

**Tours** - 6

**People** - 83

**Register** – 229

Visitors from 18 states (top 3: WA-41, CA-33, NV-15) and 1 country (Mexico-3)

**Visitor Contacts** – 17

**Volunteers** – 5    **Hours** – 79

**Website Visitors** – data not available

#### **On-site:**

- Completed final assignments and project planning for Earth Partnership for Schools' RESTORE Institute and the Schoolyard Habitat Restoration Project at Russell Elementary.
- Participated in monthly IdEEA board meeting and prepared minutes.
- Completed coordination for volunteers helping with spring Chinook spawning.
- Compiled and submitted content for regional Monday Morning Outside newsletter
- Completed FIS reporting on information/education programs and volunteer program.
- Ordered FWS outreach products for use at events during the next year.
- Compiled information for and participated in staff meeting to determine future direction of Dworshak's visitor services/information & education programs.
- Solicited and collected articles for September/October Complex Happenings Newsletter.
- Compiled report on Dworshak's I&E programs for regional External Affairs office.
- Prepared for Salmon and Steelhead Days in Boise.
- Updated Complex's website content.
- Planned volunteer recognition lunch.

#### **Off-site:**

- Conducted fisheries activity at Orofino Farmers Market for 40 people

### ***Kooskia***

No visitors signed the guest book. No guided tours, but many visitors stopping to check the trap, see the big fish, and take a look around the hatchery grounds.

Website contacts: (data not available)

#### **On-site:**

- Solicited and collected articles for Sept/Oct issue of Complex Happenings newsletter
- Completed FIS reporting on information/education programs.

#### **Off-site:**

None

Larry Peltz  
Complex Manager

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