



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Hagerman National Fish Hatchery  
3059 D National Fish Hatchery Road  
Hagerman, Idaho 83332

### MEMORANDUM

December 14, 2007

TO: ARD-Fisheries Attn: Rich Johnson, Field Supervisor

FROM: Project Leader, Hagerman NFH

SUBJECT: November Activity Report

### PRODUCTION

#### Steelhead Brood Year 2007

Lot Number	Stock	Number	Total Fish Weight	Size (#/lb)	Length (inches)
120	Sawtooth	1,029,770	65,361	15.8	5.56
121	Pahsimeroi	199,582	14,517	13.7	5.81
122	Clearwater B	206,755	13,951	14.8	5.67

The Clearwater stock continued to struggle with soreback and increased mortality. The Sawtooth and Pahsimeroi stocks also experience the soreback, but to a lesser degree and with lower mortality rates. →



The Main Spring rehabilitation project has caused the hatchery staff to modify water diversions to the steelhead. In order to accommodate the project, the Hatchery delayed diverting water back from the Brailsford Ditch at the end of the irrigation season and reduced the flows to the steelhead by 30% for two 8 hour periods. In addition, the trash screens were removed from the intake to reduce spill into the work area. Screen removal allows debris to flow to the raceways and also creates a potential for nitrogen super saturation. Nitrogen saturation in the headbox of the steelhead raceways has ranged from 105-108% since screen removal. No base line was established prior to the project, however, saturation measurements in the individual springs have ranged slightly lower, from 103-106%. The project should be finished by the end of December.

Kathy Clemens, Idaho Fish Health Center, and Chip Applegate, USGS-Western Fisheries Research Center, took samples of Clearwater B steelhead for *Nucleospora salmonis* research. Kathy also performed the monthly fish health examination for the Sawtooth CWT Adult Return Study and the Pahsimeroi stock.

#### Rainbow Trout (Dworshak Reservoir Mitigation)

The Idaho Fish Health Center continued to study pre-release tissue samples obtained from the Rainbow Trout Lot 119 which was released in Cascade Reservoir on 10/1-4/2007. The pre-release samples had physiological diagnoses of external lesions, swollen kidneys and spleens, and PKD looking symptoms of white pustulant lesions in the liver and spleen (cottage cheese appearance). However, PCR for PKD was negative and the Idaho Fish Health Center assumed the symptoms were caused by the persistent *Nucleospora salmonis* infection.

The Idaho Fish Health Center continued to follow-up after the release of Lot 119 with Beth MacConnell, Bozeman Fish Health Center and Kristen Arkush, UC Davis, Bodega Bay Marine Lab, to explore the possibility of Rosette agent infection. The Rosette infection is termed DRIP and is related to the older classification of Dermocystidium which is usually found in cysts on the gills and skin of trout and salmon (email communication from Keith Johnson, Idaho Fish and Game Department). Diagnosis of this parasite can be made from stained smears of kidney tissues and a PCR test published as part of Kristen Arkush's work. However, the PCR test on Lot 119 samples was negative for the Rosette agent (communication with Kathy Clemens, Idaho Fish Health Center). The Idaho Fish Health Center is continuing to explore other possibilities of identifying the cause of this condition.

## **OPERATIONS**

Bryan Kenworthy, Project Leader; Nate Wiese, Assistant Project Leader; and Jeremy Trimpey, Staff Biologist, attended a workshop co-sponsored by the University of Idaho Aquaculture Extension office and Idaho Department of Environmental Quality (IDEQ). The workshop focused on implementation of the National Pollution Discharge Permit recently issued by the U.S. Environmental Protection Agency for Idaho aquaculture facilities.

Wickham Pipeline Construction completed replacement of the Bickel Ditch outlet structure and began work on the Main Spring collection box as part of the Phase 2 pipeline construction project.



Forms for Bickel Ditch outlet



Finished project

## **COORDINATION**

Bryan Kenworthy and Jeremy Trimpey met with two research scientists representing the USDA-ARS, Northwest Irrigation and Soils Research Laboratory, Kimberly, Idaho, to discuss using several of the Hatchery's springs to monitor water quality of the Eastern Snake River Plain Aquifer. Several other spring owners are collaborating in this effort. Although a number of water quality parameters will be monitored, the presence of total coliform, fecal streptococci, *E. coli*, and *Salmonella* spp., will also be tracked.

Bryan Kenworthy and Nate Wiese traveled to Pasco, WA to attend the Hatchery Manager Workshop.

Bryan Kenworthy and Nate Wiese participated in a Strategic Planning Interview with Greer Anderson, Region 9.

## **PERSONNEL/TRAINING/SAFETY**

Nate Wiese traveled to NCTC to complete the one-week Applied Supervision course to fulfill the requirements for a new supervisor.

Region 1 Division of Human Resources and Division of Fisheries staff were on station to conduct an audit of the Hatchery's Project leader Position. A decision report is anticipated by mid-December.

Bryan Kenworthy attended the Fred Pryor, Career Track Seminar in Twin Falls, ID entitled Coaching Skills for Managers and Supervisors.

Region 1 Division of Safety conducted an audit of the Hatchery Facility. Overall score was 87%. This is a combination of a score of 87% compliance in Facilities and 75% compliance in Program Areas. The review of the Program Areas mainly focused on the Hatchery's

documentation of its Safety Program activities. Lesson learned - if it's not documented it didn't happen.

The Hatchery provided the opportunity to receive flu shots from the local clinic as part of the Hatchery's Highly Pathogenic Avian Flu, Disease Contingency Plan.

## **OUTREACH**

Anna Ray, Fisheries Program Assistant, Jeremy Trimpey, and Eric Willet, Motor Vehicle Operator, participated in a "Connecting Children with Nature" outreach event for 105 Filer Elementary 5<sup>th</sup> graders. The event was in partnership with the National Park Service, Hagerman National Monument, and the Idaho Parks and Recreation, Billingsly Creek Unit – Thousand Springs State Park. The presentation reviewed the Hatchery's steelhead program and presented information on fish anatomy and physiology as well as providing students with the opportunity to dissect a fish. A similar program is scheduled in December for the Twin Falls Central Elementary school.

The Hatchery entertained 5 official guests and had an additional 145 guests registered in the visitor's log book for a total of 150 visitors during October.

## **Maintenance**

### Buildings and Grounds

- Domestic Water system:
  - Conducted annual Nitrate, Nitrite, Lead & Copper tests for domestic water system.
  - Chad Chorney, Idaho Department of Environmental Quality, conducted the 5 year sanitary survey for the domestic well and water system.
- Conducted annual water quality tests for fish production water.
- Winterized all irrigation, fire protection & water systems that had the potential to freeze.
- Programmed gate entry keypad and security system to accept Jeremy Trimpey.
- Adjusted gate timer for daylight savings time.
- Trimmed tree at employee parking light pole.
- Tested new Bickel Ditch structure by operating both pumps.
- Shot elevations for picnic area rehabilitation .
- Built safety grate for Mainspring chamber.
- Removed screens from mainspring and welded lifting chains on each screen for safe lifting.
- Bolted drill press down as called for in the Safety Audit .
- Wired in safety starts to drill press and band saw.

### Vehicles

- Replaced F-150 emergency brake cable.