

HAGERMAN NATIONAL FISH HATCHERY

Fiscal Year 2008

Summary of Operations and Expenditures



INTRODUCTION

The Hagerman National Fish Hatchery (Hatchery) is located along the Snake River, about 30 miles west of Twin Falls, Idaho at a point three miles south and two miles east of Hagerman, Idaho. The Hatchery was authorized by 46 Stat, 371 on May 21, 1930 and was established in 1932. Construction of the physical facilities commenced in 1932; fish production began in 1933. The primary goal of the Hatchery, at that time, was the production of rainbow trout for stocking in Idaho, eastern Oregon, and northern Nevada.

In the late 1970s the Hatchery became part of the Lower Snake River Compensation Plan (LSRCP) which was authorized by the Water Resources Development Act of 1976, Public Law 94-587. The LSRCP is designed to mitigate for fish and wildlife losses caused by the construction of four dams on the lower Snake River. For its part in the LSRCP program, the Hatchery's primary production goal was changed from resident rainbow trout to steelhead trout. The Hatchery was extensively remodeled during 1984 to accommodate this change.

There are 78 outside raceways at the Hatchery. Of these, 66 are devoted to LSRCP steelhead production and 12 are reserved for other programs which the Fish and Wildlife Service (Service) deems appropriate. During Fiscal Year (FY) 2008, rainbow trout for the Dworshak Reservoir Mitigation program were reared in these raceways. Other major facilities include two hatchery-rearing buildings with a total of 60 rearing tanks, a water chiller building, an administration-visitor facility building, a combination shop/four-stall garage, four residences, an oil/paint storage building, and two general storage buildings.

The Hatchery's water supply emanates from the Eastern Snake Plain Aquifer via a complex of springs at a constant 59 degrees Fahrenheit with a flow rate of approximately 30,000 gallons per minute.

Located adjacent to the Hatchery is the Hagerman Fish Culture Experiment Station (HFCES). This research facility is owned and operated by the University of Idaho. The water rights and diversions for this facility are owned by the Fish and Wildlife Service and administered through the Hatchery.

STATION OPERATIONS

The LSRCP established a mitigation goal for the Hatchery program of 13,600 adult steelhead returning above Lower Granite Dam. However, within the framework of the LSRCP, specific objectives and tasks for the Hatchery's steelhead production program are established through a high degree of interagency coordination. Results of this coordination affect certain aspects of the program such as total number and strain reared, time and size at release, and location of release. During FY 2008, the LSRCP office coordinated the Salmon River Annual Operating Plan with the Idaho Department of Fish and Game (IDFG), the Shoshone/Bannock Tribes, and the Nez Pierce Tribe. This planning process is used to accomplish and document the Hatchery's steelhead production coordination.

The Hatchery also produces rainbow trout for the Dworshak Reservoir Mitigation program as an in-kind exchange with the IDFG. The trout are released into southern Idaho reservoirs; fish reared at the IDFG Nampa State Fish Hatchery are released into Dworshak Reservoir. The program calls for releasing sub-catchable trout in the spring and catchable trout in the fall. The Hatchery conducts relevant coordination on this program directly with the IDFG resident trout programmatic staff.

FISH CULTURE OPERATIONS

Pertinent fish rearing information for all species held on station during FY 2008 is presented in Table 1.

Steelhead

Brood Year (BY) 2008 Steelhead

The Hatchery's production goal remained at 1,450,000 smolts. Based on a review of the production Capacity Assessment report, Clearwater Stock performance, the logistics of marking, and the existing rearing strategies, the Hatchery Evaluation Team (HET) implemented and proposed the following hatchery practices for BY 2008:

1. Reduced monthly sample counting to lessen fish handling stress;
2. Utilized double vitamin boosted feed throughout the raceway rearing cycle;
3. Proposed PIT tagging smolts in January rather than February to avoid the "smolting" period;
4. Proposed improvements to smolt transport techniques during Passive Integrated Transponder (PIT) tagging;
5. Modified raceway ponding and fish distribution schedules to improve water management during peak production;
6. Continued ongoing water quality monitoring including N₂, O₂, & NH₄;
7. Continued evaluation of the of 1st use vs. 3rd use water on the smolt to adult survival of the Sawtooth Stock.

Three stocks of BY 2008 summer steelhead were programmed for the 2009 release year. Since the Hatchery does not have the capability to capture anadromous brood stock on site, eyed eggs are obtained from other spawning and incubation facilities. Table 2 provides the number of eggs received by species and strain during FY 2008.

In July, the Idaho Fish Health Center confirmed an epizootic of Coldwater Disease in five tanks in Hatchery Building #1. A 10-day ration of Aquaflor® (Florfenicol) medicated feed was successful in treating this disease. The mortality decreased to normal levels by the end of the 10-day treatment.

The IDFG marking crew conducted steelhead fingerling marking operations (adipose clip and coded wire tag [CWT]) during the period of August 17 through the 24th. The Hatchery and

IDFG staff worked double shifts using two Mass Automated Trailer System (MATS) units to complete marking in seven days. The double shifts reduced the travel costs incurred by the IDFG marking crew. As in BY 2007, the Hatchery was very pleased with the results of the marking and CWT in August.

As part of carrying capacity evaluation, and in light of the declining water supply, the Hatchery continued a study to compare Smolt to Adult Returns (SARs) of steelhead reared on the upper deck (1st use water) compared to the lower deck (3rd use water). The IDFG marking crew placed 40,000 CWTs in fish in Sawtooth raceways 47 and 48 in the upper deck and 40,000 CWTs in fish in the Sawtooth raceways 87 and 88 in the bottom deck. The HET will continue this tagging protocol for 5 years/2011. It is anticipated that this study will provide insight into the effects of serial reuse water quality as it relates to smolt quality.

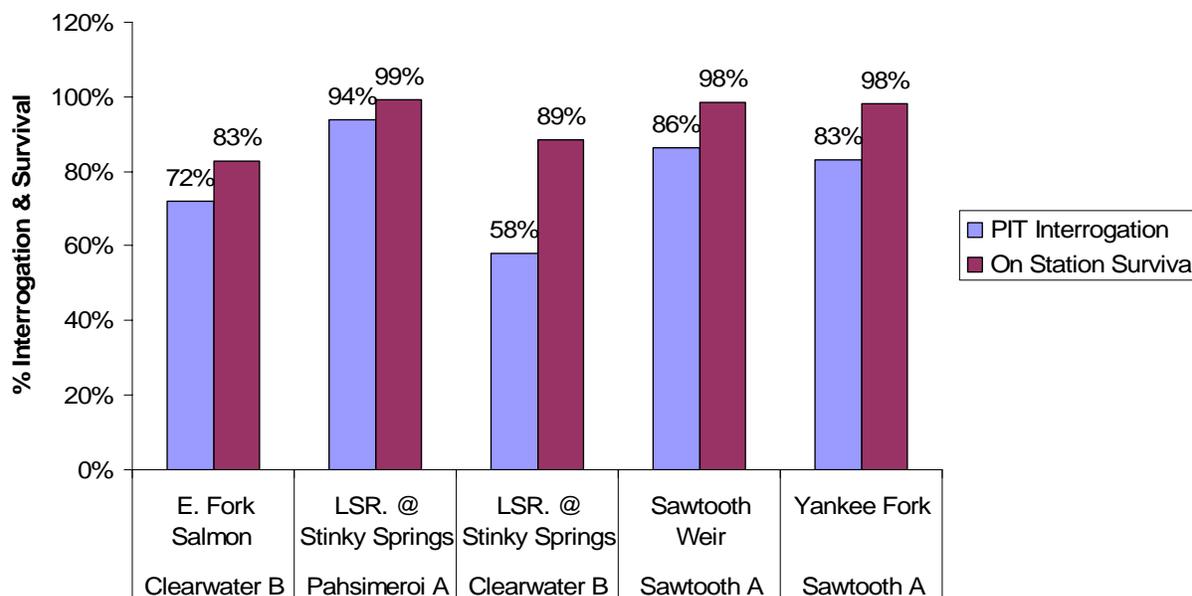
Brood Year 2007 Steelhead

As noted in Table 1, the BY2007 Clearwater stock had the lowest on-station survival. The Clearwater mortality began in late October with high prevalence of “soreback”. In April 2008, shortly before release, all stocks were diagnosed positive for *Aeromonas salmonicida* (Furunculosis). The Clearwater stock incurred the most mortality compared to either the Sawtooth or Pahsimeroi stocks. Clearwater mortalities at times exceeded 1% per day in early April, but tapered off at the end of the month. No medicated feed was administered due to the proximity to release which would not allow for the required drug withdrawal time. The Hatchery lost 15% of the total BY 2007 Clearwater stock production during the epizootic. Hatchery personnel expended 200 hours of labor to remove mortalities and scan them for PIT and CWT tags. Overall, on-station survival from feeding fry to release for the Clearwater stock was 80% compared to an average of near 90% for the past Brood Years. The Sawtooth and Pahsimeroi stock survival rates were above 94% which is typical for these two stocks.



As depicted in the following graph, the Clearwater stock also had lower PIT tag interrogation rates to Lower Granite Dam. The Clearwater stock released at the Little Salmon River (LSR) at Stinky Springs had a higher on-station survival, but much lower PIT tag interrogation rate than the Clearwater stock which were released at a later time at the East Fork Salmon River. The Clearwater stock released a month later at the East Fork Salmon River had lower on-station survival, but a higher PIT tag interrogation rate than the Little Salmon River releases.

**Downstream steelhead smolt PIT Tag Interrogations at Lower Granite Dam
and On-station survival post ponding in Steelhead Raceways at the
Hagerman NFH, BY2007**



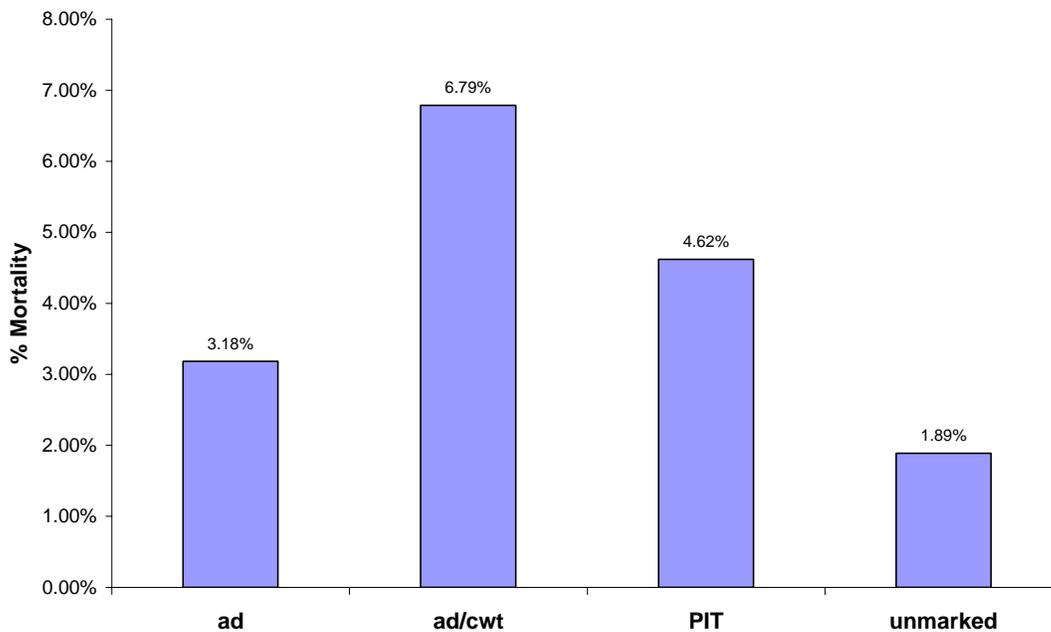
Data from PTAGIS compiled by Carl Steifl, Idaho Fish and Game

BY2007 Marking

As noted in the BY 2008 discussion, the Hatchery has taken steps to reduce handling stress; however, the requirement to mark fish results in a lot of fish handling and apparent stress on the fish. Several factors during PIT tagging are thought to have contributed to fish stress and the subsequent Furunculosis epizootic: 1.) The PIT tagging occurred during the third week of February which is very close to the smolt period; 2.) Neither the Hatchery, nor the marking crew, were prepared for handling the large number of fish required to be tagged. A total of 30,000 smolts were marked. This is 25 times the amount of fish which were marked during BY 2006; 3.) The old CWT marking trailer which was used for the PIT tagging was not capable of holding or processing large smolts efficiently; 4.) Employee fatigue may have been a factor due to both the hatchery and marking crews working double shifts; and, 5.) The intrusive nature of the PIT process itself.

An analysis of mortality for the BY 2007 indicated that marking steelhead at the Hatchery results in a higher mortality in the marked groups. The mortality occurs proportionally throughout the tagged and untagged fish in the raceway population. Hence, the additional mortality is probably more closely linked to the overall handling/marketing stress to the raceway rather than the tag itself. The following graph shows overall survival was the highest in unmarked steelhead, followed by Ad Clipped, Ad Clipped and PIT tagged, and Ad Clipped and Coded Wire Tagged.

Cumulative SST mortality after ad marking and Coded Wire Tagging (8/6-12/2007) and PIT Tagging (2/24-26/2008) until release (3/31-5/16/2008), BY2007 Hagerman NFH

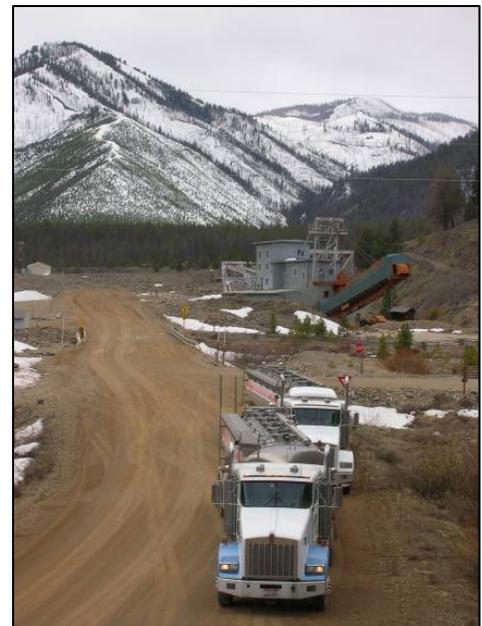


Brood Year 2007 Steelhead Distribution

Steelhead distribution began on March 31st with the release of the Pahsimeroi stock at the Little Salmon River (Table 3). The release site was moved downstream to the Pinehurst Bridge due to the fact that both scheduled sites (Stinky Springs and Hazard Creek) were blocked with snow. Cold weather and storms during April disrupted the release schedule several times. Snow remained at many sites throughout the distribution season.

A power surge on April 29th stopped a fish pump while loading which resulted in 250 mortalities of Sawtooth stock smolts destined for the Sawtooth Weir.

The Hatchery released 1,387,523 steelhead smolts into the upper Salmon River at the Sawtooth FH weir, East Fork Salmon River, Yankee Fork Salmon River, and Little Salmon River. The Hatchery finished steelhead distribution on May 16th almost two weeks later than BY2006 because of snow conditions and inclement weather.



Yankee Fork – May 15, 2008

Rainbow Trout

Brood Year 2008 Rainbow Trout

The Hatchery modified the trout rearing practices in BY2008 in an effort to manage the water supply more efficiently. The Hatchery received both spring and fall triploid rainbow trout eggs from the IDFG, Hayspur State Fish Hatchery, in one shipment in January 2008 (Table 2). Fry were reared in Hatchery #2 until early March. The trout were then ponded into three Trout Raceways to free-up Hatchery #2 water (1 cfs) for steelhead production. The trout were reared on Spring 17 water (≈ 3 cfs) until mid-April when Main Spring water was also diverted to the Trout Raceways. 85,000 spring fingerlings (5-inch) were culled in late May for releases into Salmon Falls Reservoir (Table 4). The remaining 40,000 trout were split into four raceways and reared to nine-inch catchable size. This rearing strategy maximized the water available for steelhead production during peak production in March by moving the trout from the Hatchery to the Trout Raceways. BY2009 trout rearing will follow the same protocol as BY2008.

Brood Year 2007 Rainbow Trout

The Hatchery released 33,336 fish from Lot 119 in Cascade Reservoir after consulting with the Idaho Fish Health Center, Eagle Fish Health Laboratory, and Hagerman State Fish Hatchery (Table 4). Mortality in Lot 119 had risen just prior to release. These fish were transported at half of the IHOT recommended loading rate to reduce stress. Hauling mortalities were 711 fish over four trips during October 1-4, 2007. A large number of seagulls and pelicans at the release site complicated recovery of hauling mortalities. Lot 119 survival was 60% from egg to release.



The Idaho Fish Health Center continued to study pre-release tissue samples obtained from the Rainbow Trout Lot 119 after release. The pre-release samples had physiological diagnoses of external lesions, swollen kidneys and spleens, and symptoms indicative of PKD such as white pustulant lesions in the liver and spleen. However, PCR for PKD was negative and the Idaho Fish Health Center assumed the symptoms were caused by the persistent *Nucleospora salmonis* infection. An investigation into the possibility of a Rosette agent infection also proved negative.

Hatchery Practices

Hatchery Water Supply and Water Rights

The Hatchery's water supply continued to be a top concern in FY 2008. Spring flows did increase more than expected during the winter months. This increase was attributed to the experimental recharge project occurring in the canal systems during the Fall of 2007. However,

spring flow promptly receded after the recharge effort ceased. Spring flow reached the second lowest discharge on record in July 2008 (Figure 1).

The Hatchery focused on seeking collaborative opportunities to mitigate for the loss of water at the Hatchery and Magic Valley Fish Hatchery. These opportunities included meetings with: Clive Strong, Idaho Deputy Attorney General for Natural Resources; Dar Crammond, Region 1 Water Resources Branch Chief; Frank Irwin, Water Master, Water District 36A; Michelle Richman, Idaho Department of Water Resources; and Damien Miller, FWS Representative on the Agency Advisory Committee for the Snake River Plain, Comprehensive Aquifer Management Plan.

The Snake River Plain Comprehensive Aquifer Management Plan (CAMP) received a significant amount of focus in late FY2008. The Hatchery attended several presentations hosted by the Idaho Aquaculture Association regarding the details for the plan. The CAMP committee reached a consensus in late FY2008 and will look for comments to the plan in FY2009 before submitting it to the Idaho legislature.

The Hatchery developed a Standard Operating Procedures (SOP) handbook that was incorporated into the SOP website. The handbook can be viewed at:

[http://www.fws.gov/hagerman/documents/Water/RECORDING%20LOCATIONS%20AND%20LOGBOOKS\(2\).pdf](http://www.fws.gov/hagerman/documents/Water/RECORDING%20LOCATIONS%20AND%20LOGBOOKS(2).pdf)

NPDES permit

The Environmental Protection Agency (EPA) issued a new General Permit for Authorization to Discharge under the National Pollution Discharge Elimination System (NPDES) effective December 1, 2007. As a result, the Hatchery reviewed and updated the Best Management Practices and Quality Assurance Plans to meet the requirements of the new permit. The new permit requires ammonia monitoring in addition to the Total Suspended Solids and Phosphorus monitoring.

In April, the Hatchery was inspected by Chris Gebhardt, NPDES Compliance Officer & Inspector. The Hatchery received a written warning from EPA regarding the BMP plan not addressing potential PCB contamination. This was unfortunate because the BMP plan did address PCB contamination, however, it was overlooked during the inspection. The EPA was notified of their error in June 2008.

In September, Jeremy Trimpey, Fish Biologist, entertained another NPDES Inspection by Chad Chorney, Aquaculture Coordinator, and Sonny Buhidar, Regional Water Quality Manger, Idaho Department of Environmental Quality. The review went well with no apparent problems with the Hatchery's NPDES program.

FISCAL OPERATIONS

Personnel

Table 5 provides a summary of staffing for the Hatchery for FY 2008. Jeremy Trimpey was hired for the staff biologist position. Jeremy has a Masters of Science degree from the University of Arkansas at Pine Bluff and was previously employed as a biologist at a commercial goldfish farm in Pennsylvania. Adam Leija was hired for the Animal Caretaker position in August. Adam was previously an Engine Boss with the Bureau of Land Management, Fire Program, and worked part-time on his family farm.

Training

Table 6 provides a summary of training received by the Hatchery employees during FY 2008.

Fiscal Data

Table 7 presents an itemization of Hatchery expenditures for FY 2008.

FACILITIES MAINTENANCE AND CAPITAL OUTLAY

Damboard Replacement

The bottom deck damboards and all splashboards were replaced in July 2008 as part of routine maintenance. In addition, the raceway expansion joints will need to be cleaned and caulked with Sikoflex within the next few years.



Phase 2 Pipeline Construction

Wickham Pipeline Construction completed replacement of the Bickel Ditch outlet structure and the Main Spring diversion intake during FY2008.



Bickel Outlet Construction



Finished Outlet Structure

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 separate 8 hour periods. In addition, the trash screens were removed from the intake to reduce spill into the work area. Screen removal allowed debris to flow to the raceways and also elevated nitrogen super saturation. Nitrogen saturation in the headbox of the steelhead raceways was above 100% during the period the screens were removed. No base line had been established prior to the project, however, saturation measurements in the individual springs were lower. The Hatchery replaced the Main Spring intake screens on January 4th after the contractor completed the majority of the rehabilitation project.



Screen Washing Pad

Tom Mendonca, Region 1 Civil Engineering Technician, Steve Money, Maintenance Mechanic, and the Hatchery crew constructed a pond screen washing containment pad located on the west side of the Chiller Building. Waste water during screen cleaning is now able to drain to the settling pond from the pad.



Mixing Chamber Valve



The crew drained and inspected the mixing chamber because the main 60"x 60" sluice gate has been sticking and not sealing completely when operated. The valve appears to be in good condition, but the electric control motor needs to be serviced. The Hatchery will send the control motor to a vendor for repair in June 2009 after steelhead distribution.

Access Ramp and Viewing Deck

The Hatchery completed the replacement of the deteriorated ramp and viewing deck at the Hatchery's visitor Display Pond/ Picnic Area. The new installation meets the requirements of the Americans with Disabilities Act (ADA). Total cost for the project was \$21,938.78 which was funded through several sources.

Funding/Cost Break Down:

Watchable Wildlife Grant	\$ 3,000.00
Station funds (LSRCP)	\$13,938.78
U.S. Fish and Wildlife Service	\$ 5,000.00



Before.....



After.

Spring 17 Pipeline

Spring 17 ruptured again in FY2008 in October and just before ponding of BY08 rainbow trout in March. Both ruptures were patched by Steve Money, Maintenance Mechanic. The ruptures are mainly occurring at previously patched sections of the pipe. The section with most ruptures is a stainless steel section of pipe that was patched with mild steel patches. The Hatchery plans on excavating the Spring 17 pipeline in February 2009 and inspecting the remaining mild steel patches.

March Spring 17 rupture →



October Spring 17 pipeline rupturepatched for another year.

Transport Trailers

Fish Transport Trailer #369 was taken to Giltner Trucking for a frame inspection and repair. The vendor reported the trailer was in relatively good condition for its age and was impressed with the quality put into the trailer's construction. He stated that the gauge of steel used in this trailer is much thicker and therefore stronger, which is not typical of tankers now being constructed. His inspection identified a significant amount of rust for the length of the trailer on the sub-frame which had been covered by the foam insulation. The insulation material trapped moisture in this location. We concurred with the vendor's recommendation to remove the insulation from this area, since it was below the actual fish holding tank and had limited, if any, function for temperature control. The frame, sub-frame, running gear, and landing gear were sand blasted and painted. In addition, new fasteners were installed to secure the tank skins.



Road side sub-frame



Lifted Trailer panels

OTHER ITEMS OF INTEREST

Aquatic Nuisance Species

New Zealand Mud Snail Research

Researchers from the University of Idaho (UI) and the US Geological Survey (USGS) continued studies to evaluate the efficiency of using the Krebs Engineering Hydrocyclone® to remove New Zealand mudsnails (*Potamopyrgus antipodarum*) from a Hatchery water supply. Tests indicated this device may be an effective means for removing New Zealand mudsnails from a water supply. Jordan Nielson, UI graduate student, was onsite during the summer months to conduct more rigorous studies. Dr. Christine Moffitt and Dr. Barnaby Watten, both USGS Scientists, are responsible for project oversight. The project was jointly funded



between the Service's Aquatic Nuisance Species program and the Lower Snake River Compensation Plan. Jordan Neilson's thesis is available on the Hatchery website at: <http://www.fws.gov/hagerman/Reports.html>. The Hatchery hosted the New Zealand Mud Snail Workshop at the University of Idaho, Hagerman Fish Culture Experimental Station. The workshop had 31 Attendees from USGS, University of Idaho, Idaho Department of Fish and Game, Colorado State University, Utah Division of Wildlife Resources, US Fish and Wildlife Service, and the Montana Fish, Wildlife, and Parks. Jordan Nielson, University of Idaho Graduate Student, explained the operation of the Hydrocyclone to workshop attendees.

Hazard Analysis and Critical Control Point (HACCP)

The Hatchery continues to operate under the protocols established in its Aquatic Nuisance, HACCP Plan for control of the New Zealand Mud Snail. The Hatchery staff conducted periodic checks for the presence of this snail in fish stomachs and intestinal tracts during the Idaho Fish Health Center routine fish health exams. No snails were found in fish sampled during 2008. According to Service policy, the presence of the snail in the Hatchery's water supply limits the distribution of steelhead smolts to within the Salmon River Drainage.

College of Southern Idaho Cooperative Internship Agreement

During 2008 the Hatchery continued operation of its long standing Cooperative Agreement with the College of Southern Idaho (CSI), Twin Falls, Idaho, and the Idaho Aquaculture Association. The Hatchery first established the Cooperative Agreement in 1994. It is designed to provide undergraduate students, enrolled in the Fisheries Technology program at CSI, an opportunity to gain conservation hatchery experience while completing their required coursework. Mr. Kevin Kincaid worked from October through the end of August 2008 fiscal year and finished his summer internship and headed to Moscow, Idaho to continue working towards a Fisheries B.S. at the University of Idaho.



Bliss Rapids Snail (*Taylorconcha serpenticola*)

During Wickham's Pipeline Construction work on the Main Spring Diversion intake, they installed a pneumatic bladder, commonly called a pig, to restrict water flow in the 24-inch pipe supplying Hatchery #1, Bickel Ditch, and the Trout Raceways. At 4:00 pm on December 5th, the pig failed. As a result of the failure, approximately 20 to 30 cubic foot/second of water sluiced down the Display Pond diversion, into the Hatchery's Display Pond, and into Riley Creek. The Contractor took swift action to reduce the water spillage by securing a board against the opened pipe with their excavator bucket and boom. Concurrently, the Hatchery staff bypassed a portion of flow away from the Main Spring Diversion. The Contractor secured the failure in approximately 45 minutes by installing a new pig. The Hatchery staff then returned all flow to normal configuration. The Contractor completed installation of the new pipe by 3:00 am the following morning. The Hatchery estimated approximately 1.2 cubic yards of sediment, sand, and rock discharged downstream as a result of the failure. A good portion of this material settled out in the Hatchery's Display Pond. However, Riley Creek remained "muddy" in appearance for approximately 30 to 40 minutes. As required under Section IV.B of the NPDES Permit, the Hatchery staff notified the U.S. Environmental Protection Agency (EPA), Idaho Department of Environmental Quality (IDEQ), and the Boise Ecological Services (ES) Office of the U.S. Fish and Wildlife Service of the incident.



Main Spring before the plug failure



Main Spring after the failure

Dave Hopper and Bob Kibler, Boise ES Office, surveyed Bliss Rapids snails in the Display Pond diversion and the Len Lewis Spring overflow channel to determine the effect of the pipeline failure during the Main Spring Diversion Intake construction project. They also surveyed Bickel Lake as a control site. They reported Bliss Rapid snails were more abundant in the Display Pond diversion than observed during a similar survey done in February 2004. Consistent with previous surveys, zero Bliss Rapids snails were located in Bickel Lake although it appears to offer some habitat. Dave Hopper also trained Nate Wiese, Assistant Project Leader, in the sample collection techniques and identification of Bliss Rapids snails.

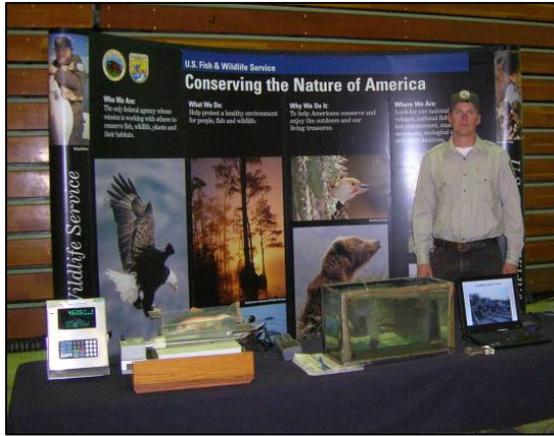


Wildland Fire Control and Suppression

The Hatchery hired a contractor to disk the fire-line around the Hatchery grounds in FY2008.

Outreach and Partnerships

The Hatchery's outreach efforts focused on the Fish and Wildlife Service initiative towards Connecting People and Nature. The Regional Director challenged each employee to "Give 8" hours towards the initiative. Overall, the Hatchery reached directly 4,256 individuals during 32 events totaling 133 hours of staff time. The Hatchery did numerous school group tours and drove the distribution truck through the Hagerman Fossil Days Parade.



The Hatchery again staffed an interactive booth at the annual College of Southern Idaho Science and Technology Expo. The Expo focused on introducing 5th graders in the Magic Valley to practical applications of science and technology implemented around the area. The event had over 1400 attendees. The Hatchery demonstrated: reading Coded Wire Tags; scanning Passive Integrated Transponders (PIT) tags; measuring and weighing steelhead on a digitizer; measuring dissolved oxygen in a steelhead aquarium; observing the different life stages of salmon and steelhead, and a looped power point presentation of the Hatchery and life journey of steelhead.

The Hatchery also made several winter presentations in partnership with the National Park Service, Hagerman National Monument, and the Thousand Springs State Park for local elementary school students. The presentations 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.



The Hatchery hosted the 14th annual Hatchery Activities With Kids (HAWK) program for students from the Hagerman Elementary school. The HAWK program uses the Fish Bin and other educational outreach programs for kids from the Project WILD materials. The program teams 5th grade "Teachers" with younger kindergarten through 4th grade students to learn about Steelhead and Salmon lifecycles.

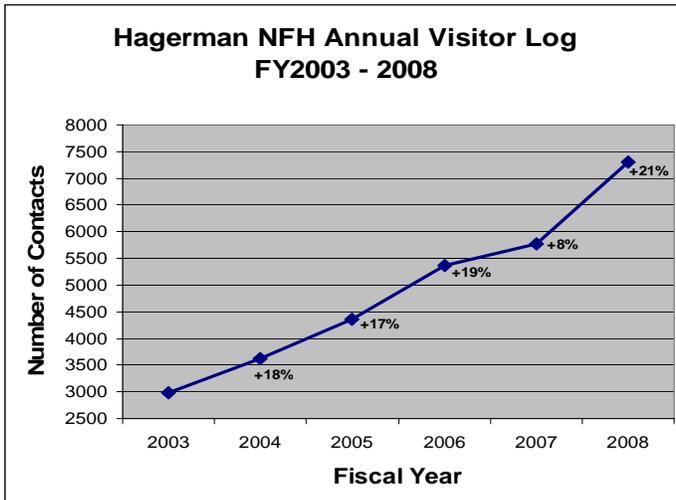
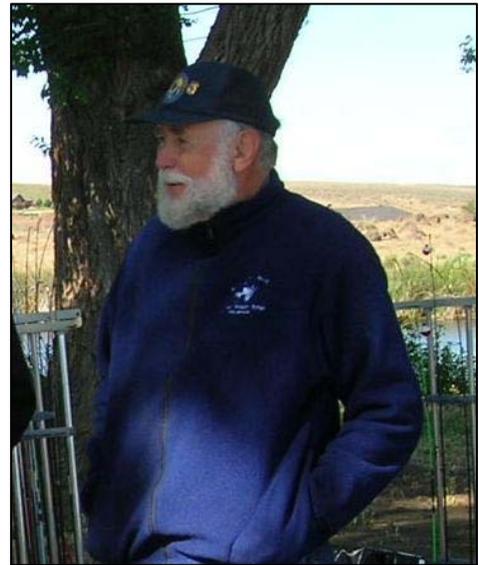


The Hatchery also helped with the annual Idaho Free Fishing Day event at the Idaho Department of Fish and Game (IDFG), Hagerman State Fish Hatchery. Nearly 600 people registered at the event on Saturday, June 7 and 14% of the registrants were new anglers.

← Coner Ray with his catch

The Hatchery also utilized several volunteers throughout the year. Most notably, Mr. Ray Harrington, Hatchery Host worked tirelessly on many outreach projects including painting the Hatchery fish trail, installation of the new access ramp at the display pond, picking up litter at Oster Lakes, and serving as a tour guide to visitors. The Hatchery’s volunteers logged 850 hours of service.

Ray Harrington, Hatchery Host →



The Hatchery Outreach Program continued to increase in the number of visitor contacts made in recent years with the Hatchery Outreach Program. The numbers represent visitor logs, formal tours, guests, and both on-site and off-site school programs.

Hagerman National Fish Hatchery

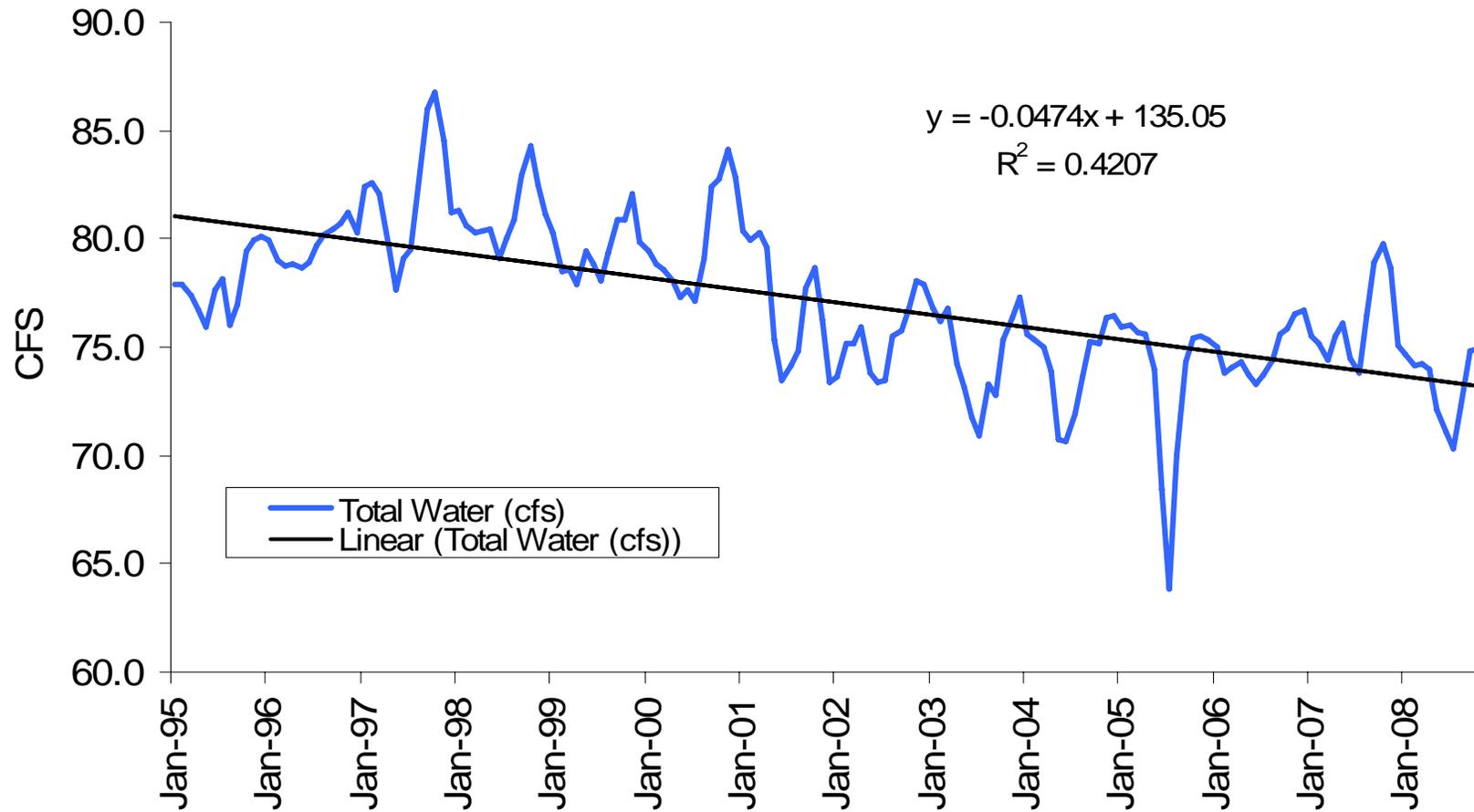


Figure 1. Average monthly spring flows at Hagerman NFH, 1999-2008 (cfs)

Hagerman National Fish Hatchery

Table 1. Hatchery Production Summary as of September 30, 2008

Station: Hagerman National Fish Hatchery					PERIOD COVERED: Oct 1, 2007 THRU Sept 30, 2008					
Species/Strain & Lot Number	Fish on Hand:				To Date Totals:					
	Number	Weight	Length	D.I.	F.I.	Weight Gain	Feed	Feed	Conv.	Percent Survival
							Pounds	Costs		
SST-SAW-07-ID-120	0	0	0.00	0.00	0.00	222,206	240,122	\$86,813.06	1.08	94.54
SST-PAW-07-ID-121	0	0	0.00	0.00	0.00	41,666	43,158	\$15,730.14	1.04	94.53
SST-CRW-07-ID-122	0	0	0.00	0.00	0.00	31,891	42,544	\$15,563.36	1.33	80.51
SST-SAW-08-ID-124	1,071,628	22,008	3.81	0.04	0.52	21,690	20,836	\$11,851.21	0.96	96.18
SST-PAW-08-ID-125	202,171	6,665	4.47	0.06	0.52	6,604	6,117	\$3,260.25	0.93	96.09
SST-CRW-08-ID-126	203,780	6,034	4.31	0.05	0.52	5,972	5,686	\$3,033.74	0.95	97.33
RBT-T9/KT-07-ID-119	0	0	0.00	0.00	0.00	12,685	16,275	\$5,638.78	1.28	63.04
RBT-T9/KT-08-ID-123	40,918	18,998	9.98	0.35	0.47	23,908	22,860	\$9,365.81	0.96	96.23
Total/Averages	1,518,497	53,705	5.64	0.13	0.51	366,622	397,598	\$151,256.35		

6T

Hagerman National Fish Hatchery

Table 2. Eyed eggs received at Hagerman NFH during Fiscal Year 2008

Species	Stock	Lot No.	No. Eggs	% Survival to Hatch
Rainbow Trout	Hayspur T9 Triploid	RBT-T9-08-ID (Lot 123)	139,711	91.5%
			Total	
			139,711	
20 Steelhead	Pahsimeroi ¹	SST-PAW-08-ID (Lot125)	217,119	96.0%
Steelhead	Sawtooth ²	SST-SAW-08-ID (Lot 124)	1,150,056	98.8%
Steelhead	Clearwater ³	SST-CRW-08-ID (Lot 126)	212,867	98.6%
			Total	
			1,580,042	

¹ Spawned at Pahsimeroi Fish Hatchery and incubated at Sawtooth Fish Hatchery.

² Spawned and incubated at Sawtooth Fish Hatchery.

³ Spawned at Dworshak NFH and incubated at Clearwater Fish Hatchery.

Hagerman National Fish Hatchery

Table 3. Steelhead Distribution During Fiscal Year 2008

Lot / Strain	Type of release	River/Site	Weight (lbs)	Number	#/lb	Length		Date(s)
						in	mm	
<u>120 SST-SAW-07-ID</u>								
		<u>Salmon River</u>						
Sawtooth	Direct	Sawtooth Fish Hatchery Weir	195,418	767,523	3.93	8.83	224	4/16/08 - 5/07/08
Sawtooth	Direct	Yankee Fork	53,925	235,420	4.37	8.52	216	5/12/08 - 5/16/08
<u>121 SST-PAW-07-ID</u>								
		<u>Little Salmon River</u>						
Pahsimeroi	Direct	Little Salmon River @ Pine Hurst Bridge	37,550	161,236	4.29	8.57	218	3/31/08 - 4/25/08
Pahsimeroi	Direct	Lower Hazard Creek	10,680	44,310	4.15	8.67	220	4/10/08
<u>122 SST-CRW-07-ID</u>								
		<u>Little Salmon River</u>						
Clearwater	Direct	Little Salmon River @ Pine Hurst Bridge	19,949	92,103	4.62	8.36	212	4/07/08 - 4/25/08
		<u>East Fork Salmon River</u>						
Clearwater	Direct	Lower East Fork	18,136	86,931	4.79	8.26	210	3/31/08 - 4/25/08
Total			335,658	1,387,523				

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Table 4. Rainbow Trout Distribution During Fiscal Year 2008

Lot / Strain	Reservoir	Site	Weight (lbs)	Number	Length (in)	Date(s)
Lot 119 RBT-T9-07-ID	Cascade Reservoir	Sugarloaf	14,255	33,336	9.69	10/01/07- 10/04/07
Lot 123 RBT-T9-08-ID	Salmon Falls Reservoir	Dam	4,910	85,286	4.97	5/20/08- 5/21/08
Total			19,165	118,622		

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Table 5. Report of Station Personnel During Fiscal Year 2008

Part I - Permanent Personnel (FTE's: 7.92)				
Name of Employee	Functional Title	Grade	Period Worked	Remarks
Bryan Kenworthy	Project Leader Fish Biologist (Supervisory)	GS0482/13/09	10/01/2007 - 09/30/2008	
Nathaniel J. Wiese	Fish Biologist (Supervisory)	GS0482/11/01	10/01/2007 – 09/30/2008	
Robert James Brandon	Animal Caretaker	WG5048/05/04	10/01/2007 - 04/26/2008	Transferred to Corps of Engineers
Brian P. Clifford	Motor Vehicle Operator	WG5703/08/05	10/01/2007 - 09/30/2008	
Adam Leija	Animal Caretaker	WG5048/02/05	08/17/2008 - 09/30/2008	Transferred from BLM
Stephen W. Money	Maintenance Mechanic	WG4749/10/05	10/01/2007 - 09/30/2008	
Anna M. Ray	Fisheries Program Assistant	GS0303/06/07	10/01/2007 - 09/30/2008	
Jeremy Trimpey	Fish Biologist	GS0482/07/01	10/28/2007 - 09/30/2008	From commercial fish industry
Eric W. Willet	Motor Vehicle Operator	WG5703/06/05	10/01/2007- 09/30/2008	
Part II - Temporary Personnel (FTE's: 0.0)				

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Table 6. Personnel Training during Fiscal Year 2008

R. James Brandon:

Confined Space Entry by R1 Safety, Bob VanBuskirk 11/08/2007
Warm & Cold Water Fish Culture Class by NCTC 12/3-7/2007
2008 Orientation to the Privacy Act – DOI Learn 01/08/2008
2008 Records Management Awareness – DOI Learn 01/08/2008
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008
Forklift Pre-Class: On-Line Computer Based Training 01/25/2008
Quicktime Employee WBT 02/14/2008
Cardholder – Travel Business Line 03/27/2008

Brian Clifford:

58th Annual Northwest Fish Culture Conference (NWFCC) @ PDX 12/4-6/2007
Confined Space Entry by R1 Safety, Bob VanBuskirk 11/08/2007
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008
2008 Orientation to the Privacy Act – DOI Learn 01/23/2008
2008 Records Management Awareness – DOI Learn 01/23/2008
Forklift Pre-Class: On-Line Computer Based Training 01/31/2008
Powered Industrial Truck (Forklift) PreClass by DOI Learn 01/31/2008
Quicktime Employee WBT 02/13/2008
Cardholder – Travel Business Line 03/18/2008
2008 Federal Information Systems Security Awareness – DOI Learn 07/15/2008

Bryan Kenworthy:

Confined Space Entry by R1 Safety, Bob VanBuskirk 11/08/2007
Team Building, Mentoring, & Coaching Skills for Supervisors by Fred Pryor 11/13/2007
Excel Basics and Excel Beyond the Basics by Fred Pryor 12/10-11/2007
2008 Orientation to the Privacy Act – DOI Learn 01/02/2008
2008 Records Management Awareness – DOI Learn 01/03/2008
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008
Tribal Trust Training (8hr EEO) by USFWS – 01/29-30/2008
Quicktime Employee WBT 02/14/2008

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Table 6. Personnel Training during Fiscal Year 2008

Bryan Kenworthy (continued):

Cardholder – Travel Business Line & Purchase Business Line 03/14/2008
Safety: Control of Hazardous Energy (Lockout/Tagout) by DOI Learn 03/14/2008
Cardholder – Approving Official AO Training 04/01/2008
2008 Federal Information Systems Security Awareness – DOI Learn 04/30/2008
A Supervisor's Guide to Worker's Compensation: Fact and Fiction – NPS TelNet 05/07/2008
Section 508 Awareness: Promoting Awareness, Providing Solutions / DOI Learn 07/02/2008

Adam Leija:

USFWS New Employee Orientation – DOI Learn 9/24/2008

Stephen Money:

Confined Space Entry by R1 Safety, Bob VanBuskirk 11/08/2007
OSHA 2264: Permit-Required Confined Space Entry by DOL 01/08-10/2008
Region 3 Train the Trainer – 01/29-31/2008
Analyzing your Staffing Requirements LED6W20 – DOI Learn 02/04/2008
Quicktime Employee WBT 02/14/2008
Safety: Control of Hazardous Energy (Lockout/Tagout) by DOI Learn 03/14/2008
Cardholder – Travel Business Line & Purchase Business Line 03/26/2008
Safety: Permit-Required Confined Spaces by DOI Learn 03/26/2008
Region 1 Backhoe / Forklift training by R.Aulbach, Deer Flat NWR 04/22-23/2008
2008 Federal Information Systems Security Awareness – DOI Learn 04/25/2008
Heavy Equipment Safety Training for Class 5 Forklift & Backhoe/Loader / NCTC 05/20/2008
Powered Industrial Truck Safety Training for Class 5 Forklift / NCTC 05/20/2008
2008 Orientation to the Privacy Act – DOI Learn 07/18/2008
2008 Records Management Awareness – DOI Learn 07/18/2008
Gas Detection Made Easy/M40 CBT Training - Industrial Scientific Corporation 08/26/2008

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Table 6. Personnel Training during Fiscal Year 2008

Anna M. Ray:

Confined Space Entry by R1 Safety, Bob VanBuskirk 11/08/2007
DOI LEARN "DOI General Environmental Mgmt System Awareness Training" – 12/05/2007
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008
2008 Orientation to the Privacy Act – DOI Learn 01/11/2008
2008 Records Management Awareness – DOI Learn 01/11/2008
GovTrip Webex Training – 01/15/2008
Region 1 QuickTime @ PDX – 01/30-31/2008
Region 1 DataMart Brio – 02/12-13/2008
Managing Travel & TDY Travel by Concepts Management 03/17-21/2008
Cardholder – Travel Business Line & Purchase Business Line 03/26/2008
Cardholder – Convenience Check 03/26/2008
2008 Federal Information Systems Security Awareness by DOI Learn 03/27/2008
Safety: Control of Hazardous Energy (Lockout/Tagout) by DOI Learn 03/27/2008
A Supervisor's Guide to Worker's Compensation: Fact and Fiction – NPS TelNet 05/07/2008
S-260 Fire Business Management – Forest Service & BLM @ CSI 5/19-20/2008
D-110 Dispatch Recorder and ROSS training – BLM Shoshone 05/22-23/2008
GovTrip TAVS hands-on & group orientation training @ PDX RO 06/18-19/2008
Section 508 Awareness: Promoting Awareness, Providing Solutions / DOI Learn 07/01/2008

Jeremy Trimpey:

2007 Federal Information Systems Security Awareness 11/01/2007
Confined Space Entry by R1 Safety, Bob VanBuskirk 11/08/2007
Cardholder – Travel Business Line 11/09/2007
2007 Discrimination and Whistleblowing in the Workplace – DOI Learn (No Fear) 11/09/2007
Orientation to the Privacy Act – DOI Learn 11/09/2007
USFWS New Employee Orientation – DOI Learn 11/14/2007
Records Management Awareness – DOI Learn 11/14/2007
Career Planning and the IDP – DOI Learn 11/15/2007
Forklift Safety – DOI Learn 11/27/2007
Uofl Extension Workshop, NPDES Permit, including QA/QC and BMP Plan Implementation 11/27/2007
2008 Orientation to the Privacy Act – DOI Learn 01/09/2008
2008 Records Management Awareness – DOI Learn 01/09/2008
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008

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Table 6. Personnel Training during Fiscal Year 2008

Jeremy Trimpey (continued):

Forklift Pre-Class: On-Line Computer Based Training 01/25/2008
Quicktime Employee & Timekeeper WBT 03/07/2008
Safety: Control of Hazardous Energy (Lockout/Tagout) by DOI Learn 03/13/2008
Cardholder – Travel Business Line 03/20/2008
Region 1 Backhoe / Forklift training by R.Aulbach, Deer Flat NWR 4/22/23/2008
2008 Federal Information Systems Security Awareness / DOI Learn 06/16/2008
Section 508 Awareness: Promoting Awareness, Providing Solutions / DOI Learn 07/02/2008
Clean Water Act Computer-Based Training 07/25/2008
Employee Foundations @ NCTC 7/13-18/2008

Nathaniel Wiese:

Applied Supervision by NCTC (REQUIRED) 11/05-09/2007
Safety: Bloodborne Pathogens – DOI Learn 11/27/2007
Safety: First Responder Awareness Level (HAZWOPER) – DOI Learn 12/13/2007
Safety: Personal Protective Equipment – DOI Learn 12/13/2007
Safety: Office Safety – DOI Learn 12/13/2007
Safety: Hazard Communication – DOI Learn 12/13/2007
Safety: Hearing Conservation – DOI Learn 12/13/2007
Safety: DOI Safety and Occupational Health Overview – DOI Learn 12/13/2007
Safety: Fire Protection – DOI Learn 12/14/2007
Safety: Federal Safety and Health Programs – DOI Learn 12/14/2007
Safety: Exit Routes, Emergency Action Plans and Fire Prevention Plans – DOI Learn 12/14/2007
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008
2008 Orientation to the Privacy Act – DOI Learn 01/11/2008
2008 Records Management Awareness – DOI Learn 01/11/2008
Safety: Cranes and Rigging – DOI Learn 01/19/2008
Safety: Electric Safety Design – DOI Learn 01/19/2008
Safety: Control of Hazardous Energy (Lockout/Tagout) – DOI Learn 01/19/2008
Safety: Excavations – DOI Learn 01/20/2008
Safety: Flammable and Combustible Liquids – DOI Learn 01/20/2008
Safety: Fall Protection – DOI Learn 01/20/2008
Safety: Introduction to OSHA Standards – DOI Learn 01/21/2008
Safety: Hand and Portable Powered Tools – DOI Learn 01/21/2008

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Table 6. Personnel Training during Fiscal Year 2008

Nathaniel Wiese (continued):

Safety: Introduction to Industrial Hygiene – DOI Learn 01/21/2008
Safety: Walking and Working Surfaces – DOI Learn 01/22/2008
Safety: Machinery and Machine Guarding – DOI Learn 01/22/2008
Forklift Pre-Class: On-Line Computer Based Training 01/27/2008
Tribal Trust Training (8hr EEO) by USFWS – 01/29-30/2008
Quicktime Employee & Certifier WBT 02/09/2008 & 03/10/2008
Safety: Introduction to OSHA – DOI Learn 02/08/2008
Safety: DOI Collateral Duty Safety Training Exam#1 – DOI Learn 02/09/2008
Safety: DOI Collateral Duty Safety Training Exam#2 – DOI Learn 02/09/2008
Safety: Powered Industrial Trucks – DOI Learn 02/09/2008
Safety: Permit-Required Confined Spaces – DOI Learn 02/09/2008
Safety: Welding, Cutting, and Brazing – DOI Learn 02/09/2008
Cardholder – Travel Business Line & Purchase Business Line 03/31/2008
Cardholder – Approving Official AO Training 03/31/2008
Region 1 Backhoe / Forklift training by R.Aulbach, Deer Flat NWR 4/22-23/2008
Section 508 Awareness: Promoting Awareness, Providing Solutions / DOI Learn – 06/22/2008
A Supervisors Guide to Diversity-The Diversity Plan and MD715 / DOI Learn 06/22/2008
2008 Federal Information Systems Security Awareness – DOI Learn 07/16/2008
8th Annual International Congress on the Biology of Fish @ PDX – 7/27-31/2008

Eric Willet:

58th Annual Northwest Fish Culture Conference (NWFCC) @ PDX 12/4-6/2007
Excel Basics and Excel Beyond the Basics by Fred Pryor 12/10-11/2007
NPDES Quality Assurance & Best Management Practices Plan training by HNFH 01/10/2008
2008 Orientation to the Privacy Act – DOI Learn 01/10/2008
2008 Records Management Awareness – DOI Learn 01/10/2008
Introduction to Welding WELD S004-C01 College of Southern Idaho 02/05-03/06/08
Forklift Pre-Class: On-Line Computer Based Training 01/24/2008
Quicktime Employee WBT 02/13/2008
Cardholder – Travel Business Line 03/31/2008
Special Welding WELD S017-C02 College of Southern Idaho 03/24-04/23/2008
Region 1 Backhoe / Forklift training by R.Aulbach, Deer Flat NWR 04/22/23/2008
2008 Federal Information Systems Security Awareness – DOI Learn 07/18/2008

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Table 7a. LSRCP Funding Fiscal Year 2008

		+	-	Balance	Comments
<u>Operations 14230-1936-0300:</u>		\$853,170			
Salaries, OT, Awards, Benefits			\$550,925		
Travel/Tuition			\$25,820		
NZMS Study (OFT 11/15/06)			\$627		
Utilities			\$15,385		
Steelhead Fish Food			\$123,220		
All Distribution			\$34,950		
Production Expense			\$15,298		
Repairs & Maintenance			\$30,013		
Fuels & Oils			\$17,081		
Office Admin/Misc. Services			\$21,509		
CSI Coop. Agreement			\$6,900		
Outreach			\$1,673		
Total Operation Expenses:			(\$843,401)	\$9,769	

(continued next page)

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Table 7a. LSRCP Funding Fiscal Year 2008 (continued)

		+	-	Balance	Comments
Total Operation Expenses Balance Forward:		\$9,769			
Capital Outlay:					
Misc Expenses – Display Pond ADA			\$9,133		\$3K paid by FY07 Watchable Wildlife Grant, see Table 7c
			-		
Total OFT Carried Forward to FY2008:			-	\$636	
	*	* * * * *	* * * * *	* * * * *	
Cooperator Assistance Sub-account:					
MVFH Dist.Trucks w/drivers 14230-1936-0021:		\$114,750	-		returned unused funds = \$4,931
Niel Ring #10181-6-M231			(\$109,819)	\$0	
			-		
			-		

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Table 7b. Other Funding Sources Fiscal Year 2008

	+	-	Balance	Comments
<u>Operations:</u>				
Dworshak Mitigation RBT 14230-1932-1019:	\$37,500.00	(\$37,500.00)	\$0.00	
Quarters Funding 14230-8610-0000:				
FY2007-Prior Year Carryover	(\$399.94)			
Collections	\$16,887.80			
Overhead deductions @ 21%		(\$3,546.44)		
General Expenditures		(\$3,487.72)		
FY2008- Carry forward:			\$9,453.70	
Watchable Wildlife Grant / IDF&G 14230-1702-1003	\$3,000.00	(\$3,000.00)	\$0.00	\$9,133 paid by LSRCP 1936-0300
WUI Disc Fire Line 14610-9264-1536	\$509.50	(\$509.50)	\$0.00	