

Monitoring and Evaluation Program
For
U.S. Fish and Wildlife Service Hatcheries in Idaho

Report for the Third Quarter, FY200

April – June 2008

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ADMINISTRATION

Objective 1. Act as the Service's technical coordinator for all research programs using fish produced at LSRCP hatcheries operated by the FWS in Idaho.

Coordinated a meeting with Frank Loge (University of California, Davis) and Derek Fryer (ACOE) to discuss ongoing research they are doing in cooperation with Dworshak Complex associated with the causes of latent mortality of spring Chinook salmon smolts as they enter the estuary. The discussions will be held on July 16 and will also include possible future research opportunities.

Coordinated with Washington State University to continue using the adult spring Chinook salmon and steelhead carcasses left from spawning for their stream nutrient enhancement research project.

Coordinated with Kintama Research and the University of British Columbia to check the 200 spring Chinook salmon smolts at Dworshak NFH that are being used as controls for sonic tag retention and mortality.

The FRO met with the Nez Perce Tribal Fisheries Management Staff (Production and Research) to further develop cooperation and coordination between our agencies. We are currently developing guideline that will help us make better decisions as we continue to consider future requests from outside agencies for Dworshak Complex to cooperate in outside research efforts.

Idaho FRO staff participated in the All H process review of Federal hatchery programs in Idaho including the Dworshak spring Chinook and Hagerman steelhead LSRCP programs.

Idaho FRO staff gave the Hatchery Scientific Review Group (HSRG) a tour of Dworshak NFH on June 15 and then attended the HSRG recommendation meeting in Boise on June 20th.

Objective 2 Coordinate LSRCP activities between the Idaho FRO and the LSRCP Coordinator's Office.

Our office met with Steve Yundt on June 30 to review the Monitoring and Evaluation program in our office relative to the production programs at Dworshak and Hagerman NFHs. The Statement of work for BY08 was reviewed and various activities were reviewed and discussed to orient Steve to our roles and responsibilities and the history of your program.

FISH CULTURE AND PRODUCTION ACTIVITIES

Production Monitoring

Objective 3. Assist Dworshak NFH with adult spring Chinook salmon brood stock inventory and management during 2008.

The adult ladder was opened on the 16th of June. Our first inventory was conducted the next week. We have over 500 adults on station. As the run continues we will be inventorying weekly as necessary. Females will be injected with Erythromycin on July 22 and 23. Spawning is scheduled to begin on August 12.

Objective 4. Assist Dworshak NFH in scheduling and coordinating BY06 spring Chinook salmon smolt releases in 2008, documenting time and size at release, release locations, and environmental conditions.

The FRO began monitoring the flows in the mainstem Clearwater River and the inflow to Lower Granite Dam the second week of March. Conditions remained cold during March with little precipitation or warm days to increase runoff. A status report (Idaho FRO files) was submitted to the Complex HET and project managers, documenting flow conditions in both rivers as being well below the normal and optimal levels for release. Release planning was complicated by fish health conditions that had developed during January and February. The Idaho Fish Health Office recommended and supervised a series of treatments over the following weeks. Smolts were released into the North Fork Clearwater river in the late afternoons of April 2nd and 3rd. Prior to release, between 170 and 190 fish were collected from each of four raceways and were measured for fork length. The data were used to construct length frequency distributions and to provide a general quantitative assessment of the overall condition of the population prior to release.

Objective 5. Monitor and report summer steelhead smolt distribution data from Hagerman NFH during 2008.

Because of snowy weather conditions, distribution of summer steelhead out of Hagerman NFH was delayed and was about two weeks later than normal. Survival to smolt release was normal for the Sawtooth and Pahsimeroi stocks, averaging about 95%. However, survival of the Clearwater stock was about 81%, experiencing the usual mortality exhibited by that stock prior to distribution. The HET reviewed the production program at its meeting in June and made several recommendations for improvements.

Optimum Production Strategies

Objective 6. Assist the Hagerman NFH in “An Evaluation of the Affect of Continually Declining Water Availability on the Carrying Capacity of Hagerman National Fish Hatchery - A Comparison of Adult Returns Between First-Use and Third-Use Production Water Based on Coded-Wire Tag Return Rates”

The first year of rearing has been completed and a progress report has been drafted. As

soon as the HET completes the review and final edits, it will be submitted to the LSRCP office for posting on their website.

CATCH ACCOUNTING

Marking and Tagging

Objective 7 Mark (adipose clip) all spring Chinook salmon released from Dworshak NFH and coded-wire tag representative groups for comparison of migration patterns and survival differences among hatchery rearing and release groups.

Planning for coded-wire tagging of the BY07 spring Chinook salmon scheduled for release in the spring of 2009 was completed. Purchase of tags and arrangements for contractual services to tag the fish will be completed in July.

ESTIMATING PROJECT AREA ESCAPEMENT

Returns to Compensation area

Objective 8. Determine if the spring Chinook salmon production program at Dworshak NFH meets the Lower Snake River Compensation Plan goal of 9, 135 adults returning above Lower Granite Dam.

No activity this quarter

ELECTRONIC DATABASE SYSTEMS

Objective 9. Continue to develop and maintain the information and data management system at Idaho FRO.

PIT-tagging and release files were submitted to the Pacific States Marine Fisheries Commission PIT-Tag Information System (PTAGIS) in May, 2008.

PEER REVIEW, BIOMETRIC REVIEW, ANALYSIS AND REPORTING

Objective 10. Complete progress and annual reports that summarize results of our work.

The second quarterly report for FY08 was submitted in May. The FY07 annual report is still being drafted.

Objective 11. Write a summary report for adult returns of SCS to Dworshak NFH in 2007.

Completed during the second quarter and the report has been submitted.

Objective 12. Prepare spring chinook salmon brood year reports for Dworshak NFH.

Nothing to report this quarter

Objective 13. Prepare a summary report of passive integrated transponder (PIT) tagging activities for juvenile spring Chinook salmon at Dworshak during 2007.

A summary report of BY06 spring Chinook salmon smolts released in 2008 interrogations at juvenile interrogation facilities is currently being drafted.

A summary report of BY06 spring Chinook salmon smolts released in 2008 downstream travel times is currently being drafted.