

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

Report for the Second Quarter, FY2008

January – March 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.

The FRO continued to provide coordination and assistance to the following research and management projects in partnership with Dworshak Fisheries Complex.

1. Pacific Ocean Shelf Tracking (POST). Cooperation with Kintama Research and the University of B.C., Canada.
2. Latent Mortality of Chinook Associated with Barging and In-River Emigration. Cooperation with NOAA and COE.
3. Mitigation of marine-derived nutrient loss in the Boise-Payette-Weiser subbasin. Cooperation with the University of Idaho, Washington State University, and Idaho Department of Fish and Game.
4. Direct Survival and Injury Evaluation of Juvenile Chinook salmonids passed through a spillbay with a removable spillway weir at Lower Monumental Dam. Cooperation with the COE.

The FRO provided coordination and assistance to a new request this past quarter.

5. Bear Trapping Project. Cooperation with Idaho Department of Fish and Game.

The Dworshak Complex Hatchery Evaluation Team (HET) met on January 15. The Hagerman HET met on February 19.

The FRO attended the Salmon River AOP meeting in Boise on February 4 and coordinated the Clearwater AOP meeting on February 20.

FRO staff organized and led the Clearwater Basin pre-AOP meeting on January 16 and then the main AOP meeting on February 20. The 2008 AOP was finalized and distributed to all parties in March. It is also posted on the Idaho FRO website at: http://www.fws.gov/idahofro/reports_pubs.html

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

The FRO participated in the Annual Lower Snake River Compensation Plan Coordination Meeting in Boise during March.

FRO staff also participated in the Hatchery Review Team meeting in Boise on February 14.

All previous project reports, annual reports, and other administrative reports were converted to PDF files and submitted to the LSRCPC office for posting on the LSRCPC websites.

The total return of Dworshak spring Chinook salmon to the Clearwater River was estimated from data compiled on spring Chinook salmon collected in the hatchery rack, from sport harvest, and the Tribal harvest. The data is reported in the FRO's annual report for Adult Spring Chinook Salmon Returns in 2007.

FISH CULTURE AND PRODUCTION ACTIVITIES

Production Monitoring

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

A pre-season prediction was presented in the FRO's annual report on Adult Spring Chinook Salmon Returns to Dworshak and Kooskia National Fish Hatcheries. Information was presented to management personnel at both hatcheries, to the Nez Perce Tribe, and the Idaho Department of Fish and Game.

The adult ladder will be opened in May and regular inventories will be conducted of adults as they enter the ladder. Spawning usually occurs from mid-August to mid-September.

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.

Flows in the Clearwater River and Lower Granite Reservoir were monitored periodically starting the first week in March. Updates on flow conditions and the status of spring Chinook salmon smolts at Dworshak and Kooskia NFHs were distributed routinely to responsible personnel. The FRO consulted with the Idaho Fish Health Office to keep up to date on the progress of smoltification and fish health. In coordination with the Dworshak Complex Hatchery Evaluation Team, a release strategy was developed that incorporated flow conditions, smolt condition and readiness, and facility constraints. The Idaho Department of Fish and Game and the Nez Perce Tribe were informed of the Complex's release strategy to insure that releases were made in concert with other ongoing fishery activities in the lower Clearwater and Snake rivers. Releases of spring Chinook salmon at Dworshak NFH were made on the late afternoons of April 3rd and 4th into the North Fork of the Clearwater River. Releases were made from Kooskia NFH into Clear Creek on the late afternoon of April 7th. A more complete releases summary and assessment is being prepared and should be available by the next reporting period.

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

Distribution of summer steelhead from Hagerman NFH will not be completed until the next quarter.

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”

Summer steelhead smolts designated for this study are currently being transported for distribution. This is the first year that coded-wire tagged smolts will be released for the study. The first adult returns are not expected until next year. A summary report of rearing and this past year is being prepared and should be available next quarter.

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.

No Activity this quarter.

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.

The Idaho FRO made a projection of 6,769 spring Chinook salmon back to the Clearwater River in 2008. The forecast was updated this year by factoring in the El Nino ocean conditions occurring when BY06 Chinook entered the ocean.

ELECTRONIC DATABASE SYSTEMS

Objective 9. Continue to develop and maintain the information and data

management system at Idaho FRO.

Fifty-one thousand nine hundred and twenty-three BY06 spring Chinook pre-smolts were PIT tagged between January 3, 2008 and January 8, 2008. Tagging files were submitted to the Pacific States Marine Fisheries Commission PIT-Tag Information System (PTAGIS) on April 7, 2008. Raceways were monitored for rate of tag loss due to shedding and mortality. Mortality and shed data was incorporated into release files. Forty-nine thousand three hundred and eighty-one PIT-tagged smolts were released into the North Fork Clearwater River on April 2 and 3, 2008. Release files were submitted to PTAGIS on May 5, 2008.

PEER REVIEW, BIOMETRIC REVIEW, ANALYSIS AND REPORTING

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

The first quarter report for BY08 was submitted in March. The annual report for FY07 is still being completed.

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

A summary report entitled, “**Adult Spring Chinook Salmon Returns to Dworshak and Kooskia National Fish Hatcheries in 2007 and Predictions for 2008**”, was submitted in February 2008. The report documents the total rack return to the hatchery, estimated numbers harvested in the sport and Tribal harvests, a summary of the age composition of the run, and estimates the smolt to adult survival for the brood year, broken down by age class. The report also includes a prediction of the adult return expected in 2008.

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.

Summary report is currently being drafted.