

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

Report for the First Quarter, FY2008

October 2007 –December 2007

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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 coordinated and facilitated the following requests for research and assistance:

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. Vitality and Latent Mortality of Spring-Summer juvenile Chinook salmon in the Snake and Columbia Rivers. Cooperation with the University of Washington.
4. 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.
5. 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.
6. Comparative Survival Rate Study of PIT tagged Hatchery and Wild Chinook and Steelhead/Smolt Monitoring Project. Cooperation with the Fish Passage Center.

In cooperation with Tribal and state management and production programs in the Clearwater River Basin, the FRO coordinated, compiled, and finalized tables reporting all proposed and actual release data for steelhead, spring Chinook, fall Chinook, and coho salmon occurring in 2007.

The Dworshak Complex Hatchery Evaluation Team (HET) met twice to review the production program at Kooskia NFH to identify constraints and begin developing recommendations for improvements. The Hagerman HET met to discuss changes for the 2008 Salmon River AOP, the status of the Clearwater steelhead stock, and the status of the Production Capacity Assessment project.

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

At the request of the LSRCP office in Boise, the FRO staff prepared a brief summary of the major accomplishments completed by the FRO during FY2007.

FRO staff attended the Annual Hatchery Manager's Workshop in Kennewick.

FISH CULTURE AND PRODUCTION ACTIVITIES

Production Monitoring

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

No activities for this quarter.

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.

No activities for this quarter

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

No activities for this 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”

The project plan was reviewed and updated and information on the coded-wire tagging requirements was prepared for inclusion in the Salmon River AOP.

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 During 2008.

No Activity this Quarter.

ELECTRONIC DATABASE SYSTEMS

Our office exchanges data with several regional, Service, and state data base systems. Our on-station database system includes the use of Lotus, Dbase, and Excel software system.

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

Hatchery production staff provided monthly inventory summaries outlining the incidence of IHN in female broodstock, level of BKD and overall smolt mortality. This information was used by Idaho FRO personnel to determine which raceways contained fish suitable for tagging. Hatchery production staff followed specialized feed schedules during PIT tagging operations to facilitate tag insertion and prevent tag expulsion.

Columbia River Fisheries Program Office personnel were contracted to PIT-tag 52,000 SCS pre-smolts.

PEER REVIEW, BIOMETRIC REVIEW, ANALYSIS AND REPORTING

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

First Quarter Activity Report submitted during the second quarter. FY07 annual report still being written.

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

The report for spring Chinook salmon that returned to Dworshak NFH during 2007 has been completed and submitted to the LSRCP office and includes data on the total return broken down by rack return, estimated Tribal harvest, and estimated sport harvest. The age composition of the hatchery return was estimated. The smolt-to-adult survival for the I-Ocean (BY04), the II-Ocean (BY03), and the III-Ocean (BY02) components of the 2007 adult return were estimated. The preseason estimate for the FY07 adult return was compared with the actual return and an estimate of the anticipated return in 2008 was forecast.

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

BY02 spring Chinook salmon smolts were released in 2004. The return of adults in 2007 completed the adult returns for that brood year. Data for the adult returns have been

summarized in the annual report for spring Chinook salmon (Objective 11). Data on all the life history stages for the brood year is being compiled and summarize for the BY02 summary report.

Production and other information on BY03, 04, 05, and 06 continue to be collected and compiled. A new file for BY08 has been opened in preparation for the next brood year that will arrive this summer.

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

The PTAGIS database was queried to compile PIT tag interrogation data for the summary report of BY05 SCS smolts released in 2007. Tag loss from sheds and mortalities were documented in the PTAGIS database.

A summary report of BY05 SCS smolts released in 2007 downstream travel times and smolt interrogations at juvenile interrogation facilities is currently being drafted.