

Lower Snake River Compensation Plan FY2015 Performance Report  
Idaho Department of Fish and Game - Sawtooth Fish Hatchery  
Species: A-Run/B-Run Summer Steelhead Trout, Spring Chinook Salmon, Sockeye Salmon

Objective 1: Manage all operations and maintenance at the Sawtooth Fish Hatchery (SFH), the East Fork and the Squaw Creek Satellite Facilities, to achieve Lower Snake River Compensation (LSRCP) goals. This also includes overseeing spending, all fish marking, fish transportation and fish health activities associated with this program.

Report:

- A. Provided administrative oversight, developed and managed budgets, and met reporting requirements. This included overseeing spending, fish marking, fish transportation and fish health activities associated with this program.
- B. Adult Trapping and Broodstock Development
  - 1. The LSRCP goals for the SFH are to return 13,600 adult Steelhead Trout and 19,445 adult (spring/summer) Chinook Salmon above Lower Granite Dam annually. In addition to managing SFH the staff also oversees operations at one satellite facility, East Fork Salmon River to achieve the LSRCP goals. Squaw Creek Trap is no longer operated.
    - a. Pertinent physical and biological data associated with all aspects of program operations were collected. Program operations are detailed in the Salmon River Basin Annual Operating Plan.
  - 2. Steelhead Trout
    - a. The broodstock goal for A-run Steelhead Trout is 764 adults at SFH and 14 natural pairs at the East Fork.
      - i. In 2015, there were 3,923 adult Steelhead Trout trapped at the SFH weir [(3,849 Hatchery Origin (HO) and 74 Natural Origin (NO)].
      - ii. In 2015, there were 930 adult Steelhead Trout trapped at the East Fork weir (867 HO, 43 NO and 20 strays).
  - 3. Chinook Salmon
    - a. The broodstock goal for spring Chinook Salmon is 900 adults.
      - i. In 2015, there were 2,403 Chinook Salmon trapped [1,846 HO, 335 Integrated Origin (IO) and 222 NO].
  - 4. Sockeye Salmon
    - a. In 2015, there were six Sockeye Salmon trapped, five of which were captured in seine nets during the Chinook Salmon roundup. These fish were immediately transferred to Eagle Fish Hatchery.
- C. Spawning
  - 1. Pertinent physical and biological data associated with all aspects of program operations were collected. Program operations are detailed in the Salmon River Basin Annual Operating Plan.
  - 2. Steelhead Trout
    - a. The egg collection target for the SFH A-run Steelhead Trout is up to 1,857,000 with a broodstock goal of 764 adults.
      - i. In 2015, there were 388 A-run Steelhead Trout females spawned at SFH producing 1,971,195 green eggs.

- b. The East Fork natural stock egg collection target was 77,000 green eggs with a broodstock target of 14 NO females and 14 NO males.
    - i. In 2015, there were 15 NO females spawned with eight HO males and 11 NO males producing 100,504 green eggs.
  - c. Sawtooth also incubated to eye up 1,144,631 eyed eggs from Pahsimeroi Fish Hatchery (PFH), of which 547,426 were shipped to Magic Valley Fish Hatchery (MVFH) and 576,140 were shipped to the Shoshone Bannock Tribe Egg Box Program.
3. Chinook Salmon
- a. The smolt release target is 1,800,000 spring Chinook Salmon with a green egg collection target of 2,200,000 and a broodstock target of 900 adults.
    - i. In 2015, there were 434 spring Chinook Salmon females spawned for the SFH program producing 1,577,213 green eggs. Eggs from 109 females were culled due to high Bacterial Kidney Disease (BKD).
- D. Incubation and Rearing
1. Steelhead Trout
- a. Incubate to eye up A and B-run Steelhead Trout eggs and ship to their designated hatchery; Hagerman National Fish Hatchery (HNFH) and MVFH.
    - i. In 2015, SFH produced 1,816,657 Sawtooth stock eyed eggs for a 92.2% eye up. SFH shipped 1,658,563 Sawtooth stock eyed eggs to HNFH.
    - ii. In 2015, the Pahsimeroi A-run stock eggs yielded 1,144,631 eye eggs for an 88.2% eye-up. Sawtooth shipped 547,426 PFH stock eyed eggs to MVFH. Sawtooth also shipped 576,140 PFH stock eyed eggs to the Shoshone Bannock Tribe Egg Box Program.
    - iii. In 2015, SFH shipped 92,025 East Fork stock eyed eggs to HNFH.
  - b. Collected and recorded appropriate physical and biological data during incubation and transfers.
2. Chinook Salmon
- a. Incubated and reared spring Chinook Salmon eggs and fish at appropriate lot levels.
  - b. Collected and recorded appropriate physical and biological data during incubation and rearing.
    - i. Brood Year 2013 spring Chinook Salmon survival from eyed egg to stocking was 83.7%. A total of 93,300 pounds of feed was fed for a weight gain of 96,881 resulting in a feed conversion of 0.96. The final hatchery average rearing densities were under 0.3 Density Index(D.I).
    - ii. Brood Year 2014 spring Chinook Salmon number on hand is 1,808,154 presmolts at 23 fpp. This group of fish will overwinter in twelve large outside raceways. Smolts will be released in the spring of 2016 at the Sawtooth Weir and the Yankee Fork.
    - iii. Brood Year 2015 spring Chinook Salmon number of females spawned was 434. There were 109 females culled due to high BKD, resulting in 325 females that produced 1,577,213 green eggs. The eyed egg number totaled 1,534,161 with a 97.2% eye up rate.
      - 1. In 2015, 192 female's green eggs from PFH were transferred to Sawtooth. After BKD culling 174 female's eggs remained producing

746,233 eyed eggs for an eye-up percentage of 91.1%. A total of 618,087 PFH stock Chinook Salmon eggs were shipped to the Shoshone Bannock Tribe Panther Creek Egg Box Program and 128,146 PFH stock will remain at SFH through final rearing and released back at PFH.

- c. Addressed objectives for Shoshone Bannock Tribe programs and worked cooperatively.

3. Sockeye Salmon

- a. Incubated from eyed egg and reared Sockeye Salmon eggs and fish at appropriate lot levels.
- b. Collected and recorded appropriate physical and biological data during incubation and rearing.
  - i. Brood Year 2013 Sockeye Salmon were released into Redfish Lake Creek on May 4-5, 2015. A total of 134,660 Sockeye Salmon smolts averaging 18.9 fish per pound were released. This was the last Brood Year of Sockeye Salmon to be reared at SFH. All production has shifted to Springfield Fish Hatchery.

E. Juvenile Fish Releases

1. Chinook Salmon

- a. Annual release plans.
  - i. Distribution of Brood Year 2013 spring Chinook Salmon segregated smolts occurred on April 1, 2015 and integrated smolts on April 3, 2015. A total of 1,729,449 (1,348,380 segregated, 197,690 integrated) were direct released at the Sawtooth weir. On April 20, 2015, 183,379 SFH stock Chinook Salmon smolt were transported by Neil Ring Trucking and released into the Yankee Fork River.
- b. Fish loading and hauling information.
  - i. All fish hauling services were contracted through Neil Ring Trucking. No unusual mortality events were observed during fish hauling.

2. Sockeye Salmon

- a. Annual release plans
  - i. Distribution of Brood Year 2013 Sockeye Salmon occurred on May 4-5, 2015. A total of 134,660 Sockeye Salmon smolts averaging 18.9 fish per pound were released into Redfish Lake Creek.

Objective 2: Develop the facility annual operating budget, to be submitted to the LSRCP office by June 15. The FY2015 proposed operating budget was \$776,044 (excluding fish feed and utilities paid directly by LSRCP office). A separate maintenance and equipment needs list will be submitted with the annual operating budget. Major maintenance and improvement projects will be coordinated with the LSRCP office.

Report:

- A. The Annual Operating Budget was submitted to IDFG Headquarters office prior to June 15, 2015.
- B. A capital improvement project list was submitted along with the budget.

- C. All major maintenance and improvement projects were coordinated with the LSRCP office.
1. Facility and Equipment Maintenance, Repair, Replacement. During the year the following projects were completed:
    - a. Dormitory Upgrades: A new vinyl floor was installed. New cabinets were built and installed and one of the end rooms was converted into two separate rooms with smoke alarm upgrades. New refrigerators, stoves, table and chairs, kitchen island, TV, DVD player and bunk bed mattresses were purchased and installed. Fire hydrant was repaired and landscaped.
    - b. A freezer specifically for the vat room mortality was purchased and installed.
    - c. An office for the East Fork facility was fabricated at SFH and trailered to the East Fork, where finish work was completed.
    - d. Plywood fish cutouts were made for the Stanley School's Trout in the Classroom project and installed on the fence at the Sawtooth Kid's Pond.
    - e. Feed Room Upgrades: The old walk in freezer was dismantled and removed. Concrete was poured to level out the floor. Wooden shelves were removed and replaced with metal units.
    - f. Fish Trap Upgrades: A v-weir was modified to replace the finger weirs in the trap. The old steep bypass fiberglass pipes were dug up and discarded. A slide valve was fabricated for the trap.
    - g. Large Raceway Upgrades: all lawn valve thread assemblies were serviced. New material was purchased and sewn onto jump screen frames. Actuators for water valves were purchased and replaced on all large raceways with the exception of large 13 and 14. New shade cover was constructed over the rainbow trout raceway.
    - h. Spawn Shed Upgrades: Permanent well-water piping was installed. The spawning table was modified to direct ovarian fluid to the drain trough.
    - i. Residence Upgrades: A new garage man-door was installed at residence #3 and painted. All decks were repaired and stained. Residence #4 received numerous upgrades while it was vacant i.e., repainted, cabinets repaired, electrical upgraded in living and dining room. Residence #4 received a new woodstove and piping. All residences received new dishwashers. All residences, dorm and office carpets were steam cleaned.
    - j. Construction and paving of an ADA pathway was completed at the Sawtooth Kid's Pond.
    - k. Asphalt Upgrades: Doyon Construction completed a very large repaving project at SFH over the summer. All areas received new asphalt, except the North Visitor Parking area. Areas around the hatchery building and large raceways received 18" of new base material. Roadside trees were thinned to accommodate paving requirements.
    - l. The intake channels were dredged deeper in preparation for the winter by Wickham Construction.

- m. Domestic Water System Upgrades: the original potable water hydro-pneumatic pressure tank was removed and replaced with four sealed tanks. A new VFD bypass was installed along with new wiring in Well #4 by Challenger Electric Company.
- n. New lawn equipment shed was constructed to house the new riding lawn mower that was purchased as well as other lawn maintenance equipment.
- o. Emergency lighting around the hatchery was replaced with new units.
- p. The woodshop was remodeled and repainted.
- q. A Fire Suppression System will be installed in the dormitory by Burton Construction by year's end.
- r. All belt feeders were serviced and 18 new feeders were purchased.

Objective 3: Develop an annual facility Statement of Work, to be submitted to LSRCP office by June 15.

Report: Sawtooth Fish Hatchery submitted their Annual Statement of Work prior to June 15, 2015.

Objective 4: Conduct annual safety inspections and submit findings to the LSRCP office by August 1.

Report:

- A. Sawtooth Fish Hatchery received a State Safety Inspection on August 11, 2015. A report was received on August 21, 2015 and a response was sent to LSRCP and Division of Building and Safety. All deficiencies noted have been repaired.
- B. East Fork Satellite Facility received a State Safety Inspection on June 10, 2015. A report was received on June 18, 2015 and a response was sent to LSRCP and Division of Building and Safety. All deficiencies noted have been repaired.
- C. A Department of Environmental Quality Inspection was performed on the Domestic Water System on August 6, 2015. All deficiencies found were corrected and a report was sent to IDEQ.

Objective 5: Conduct annual facility condition assessments and submit findings to the LSRCP by August 1.

Report: A condition assessment was completed by LSRCP, Chris Starr.

Objective 6: Conduct annual real property and personal property inventories; coordinate with LSRCP personnel.

Report:

- A. Verified personal property inventory with Renee Heeren on May 11, 2015.
- B. IDFG Annual Inventory submitted to the Fisheries Bureau in January 2015.
- C. IDFG Fiscal Year End Inventory was submitted to the Fisheries Bureau on June 11, 2015.

Objective 7: Contribute to the development of the Salmon River AOP.

Report: Fish Hatchery Manager attended the Salmon River AOP meeting in Boise on February 5, 2015. All SFH data was entered into the Salmon River AOP document on Google Docs in a timely manner.

Objective 8: Provide monthly fish inventory data to the LSRCP office by the 7<sup>th</sup> of each month.

Report: All monthly LSRCP reports were submitted to the LSRCP office by the 7th of each month during the fiscal year.

Objective 9: Provide a written facility annual report to the LSRCP office, including the standardized LSRCP production tables to the LSRCP office by December 31. A progress summary of all ongoing hatchery research projects will be included in this report.

Report:

- A. This annual report was submitted prior to December 31.
- B. LSRCP Standardized Production Tables

**Spring / Summer Chinook Salmon (Upper Salmon River Stock):**

Adult Return Goal:	19,445
Smolt Release Target:	1,800,000
Egg Collection Target:	2,200,000
Broodstock Target:	450 pair

**Steelhead Trout (Sawtooth A-run Stock; Hagerman NFH reared):**

Smolt Release Target:	1,400,000
Egg Collection Target:	1,857,000
Broodstock Target:	382 pair

**Steelhead Trout (East Fork Natural Stock; Hagerman NFH reared):**

Smolt Release Target:	60,000
Egg Collection Target:	77,000
Broodstock Target:	14 pair