

Wallowa Hatchery 1997 Annual Report INTRODUCTION

Location

Wallowa Hatchery is located in Wallowa County, Oregon, approximately 324.3 miles upstream from the mouth of the Columbia River. The hatchery is located at river mile 1.0 on Spring Creek, 81.4 miles upstream from the mouth of the Grande Ronde River and 39.2 miles upstream from the mouth of the Wallowa River. Wallowa Acclimation Pond is also located at the hatchery site. Two satellite stations, Big Canyon (Wallowa system) and Little Sheep (Imnaha system), are used for adult trapping, spawning and smolt acclimation.

OBJECTIVES

Mitigation Goals

Wallowa Hatchery is operated as part of the Lower Snake River Compensation Program. Mitigation goals include collection and incubation of 2,185,000 eyed steelhead eggs for transfer to Irrigon Hatchery. Of these, 1,785,000 are Wallowa stock (5697) eggs and 400,000 are Imnaha stock (2997). An additional program goal is the acclimation of 1,087,500 steelhead smolts at Wallowa Hatchery and its two satellite facilities.

Non LSRCP fish reared for release in fiscal year 1997 include both legal and fingerling Cape Cod stock rainbow trout.

STEELHEAD

Adult Returns:

Adult (5697) steelhead returning to Wallowa Hatchery numbered 812 males and 661 females for a total of 1473, compared to a total of 998 in 1996. Adult (5697) steelhead returns to Big Canyon facility were 738 males and 539 females, totaling 1277 steelhead, up from 527 in 1996. Imnaha stock (2997) adults returning to Little Sheep facility numbered 527 males and 439 females, for a total of 966, an increase from the total return of 489 in 1996.

Eyed Egg Production:

From the 1997 Imnaha (2997) brood, 438,300 eyed steelhead eggs were incubated and transferred to Irrigon Hatchery. Green egg loss for this stock was 11.3%. A total of 2,207,900 eyed Wallowa stock (5697) steelhead eggs were transferred to Irrigon Hatchery. Green egg loss for 5697 steelhead was 8.4%. The historical green egg loss for both these stocks averages approximately 20%. Production goals for the (5697) steelhead were met in 1997. The production goal for the 2997 steelhead is now based on a sliding scale that is dependent on the return of natural spawners to the facility. Due in part to the low number of returning natural spawners, the target production goal was not met for 1997. No eggs were transferred to Lyons Ferry Hatchery during the report period.

Acclimations:

A total of 327,460 (2996) steelhead smolts were acclimated and released from Little Sheep facility. Wallowa stock (5696) steelhead smolts acclimated and released from Big Canyon facility numbered 430,323. In addition, 680,482 Wallowa stock (5696) steelhead smolts were acclimated and released from Wallowa acclimation facility during the report period. Finally 5,031 potential residual steelhead smolts from the Wallowa acclimation facility were trucked to a local closed water body (Kinney Lake) for release. Steelhead acclimated and released from the above facilities were reared at Irrigon Hatchery.

CHINOOK

Rapid River (8597) chinook adults from Lookingglass Hatchery and Lower Granite Dam were transferred to Wallowa Hatchery for holding and spawning this summer. For 1997, the entire Rapid River program was moved to Wallowa to accommodate the indigenous brood program at Lookingglass. Wallowa Hatchery received 190 males, 150 females and 2 jacks, for a total of 342 adults. A total of 21 non-marked chinook, 12 males, 9 females, were transferred back to Lookingglass Creek for liberation above the Hatchery. The number of Rapid River females spawned was 102, and produced 408,000 green eggs. Of the 408,000 eggs taken, 400,000 were shipped to Irrigon Hatchery for incubation and development and 8,000 were shipped to Lookingglass.

RAINBOW

The 1997 rainbow program consisted of 120,933 Cape Cod (7295) rainbow trout received from Klamath Hatchery in September 1996. Of the (7295) rainbow, 12,852 were released in October 1996 as fingerlings. Of the remaining (7295) rainbow, 99,030 were released March-September 1997 at legal size. At the end of the reporting period Wallowa Hatchery received 123,320 Cape Cod (7296) rainbow trout from Klamath Hatchery, weighing a total of 6,925 pounds.

CONSTRUCTION AND MAINTENANCE

There were no capital construction projects initiated or completed at Wallowa Hatchery or its satellite facilities during the report period.

Maintenance projects accomplished by the hatchery crew

Wallowa Hatchery Complex

- Modified the egg room formalin treatment system to prevent any chance of over treatment.
- Remodeled the office in the old hatchery building (new insulation, sheet rock and paint), for the research crew conducting early life history studies on chinook in the area
- Installed new, more reliable, low water alarms in the head tanks for the Wallowa egg room and the Little Sheep room.
- Made new supports for the hatch house head tanks and increased the inclination on the incubators. Changing the inclination helped solved an egg loss problem due to air bubbles trapped in the incubators.
- Replace 35 feet of upper well pipe line with new schedule 80 PVC four inch, due to several leaks in that section. The well supplies water for egg incubation.
- Completed the hatchery host domestic water system. Renovated the inside of the well house, and installed a pressure tank, water pump and associated plumbing.
- Installed two new sewage lift station pumps that service the hatchery and bunkhouse.
- Installed a drain line around the sewage lift station to eliminate the infiltration of ground water into the lift station pit. The infiltration of water led to the premature demise of the old lift station pumps.
- Started work removing the damaged section of flood wall adjoining the old hatchery building. The wall was damaged by the December 1996 flood. The project is on hold pending replacement plans from engineering.
- Installed permanent wall braces on the retaining wall below ponds 4 & 5. Excavated next to the wall, push the wall back too vertical and installed a permanent brace system.
- Installed 50 feet of new culvert leading from ponds 4 & 5. The new drain lines should help arrest the erosion of the retaining wall below the two ponds.
- Repaired cracks and broken steps in the trout ponds in addition to making new dam boards and flush gates for several the ponds.
- Increased the personal vehicles parking area at the hatchery host site.
- Made a new landing with of rip rap boulders at the Wallowa acclimation pond intake. The landing was built to facilitate the annual removal of accumulated sediment with a back hoe instead of washing it downstream.

Big Canyon Facility

- Let the contract for gravel removal at Big Canyon, the work was suppose to be completed by September 30.

Little Sheep Facility

- Removed 180 cubic yards of sediment from the acclimation pond at the conclusion of the acclimation season.

Maintenance projects accomplished by contractors

Wallowa Hatchery Complex

There were no major projects completed by contractors during the last reporting period at Wallowa Hatchery.

Big Canyon Facility

A gravel removal contract is pending completion at the end of the reporting period.

Little Sheep Facility

There were no major projects completed by contractors during the last reporting period at the Little Sheep Facility.

MAJOR PURCHASES

Fax machine	\$1530.00
Pressure washer (egg house)	\$ 950.00
Battery backup for computer	\$315.00
<u>Electric Shear</u>	<u>\$485.00</u>
Total	\$3280.00