

**Washington State Department
Of
Fish and Wildlife**

**Lyons Ferry Complex
Annual Operation Report**

October 1, 2006 thru September 30, 2007

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INTRODUCTION

Lyons Ferry Complex (LFC; See Figure 1) includes LFH, TFH, Cottonwood Acclimation Facility (Cottonwood AF), Dayton Acclimation Facility (Dayton AF), and Curl Lake Acclimation Pond (Curl Lake AP).

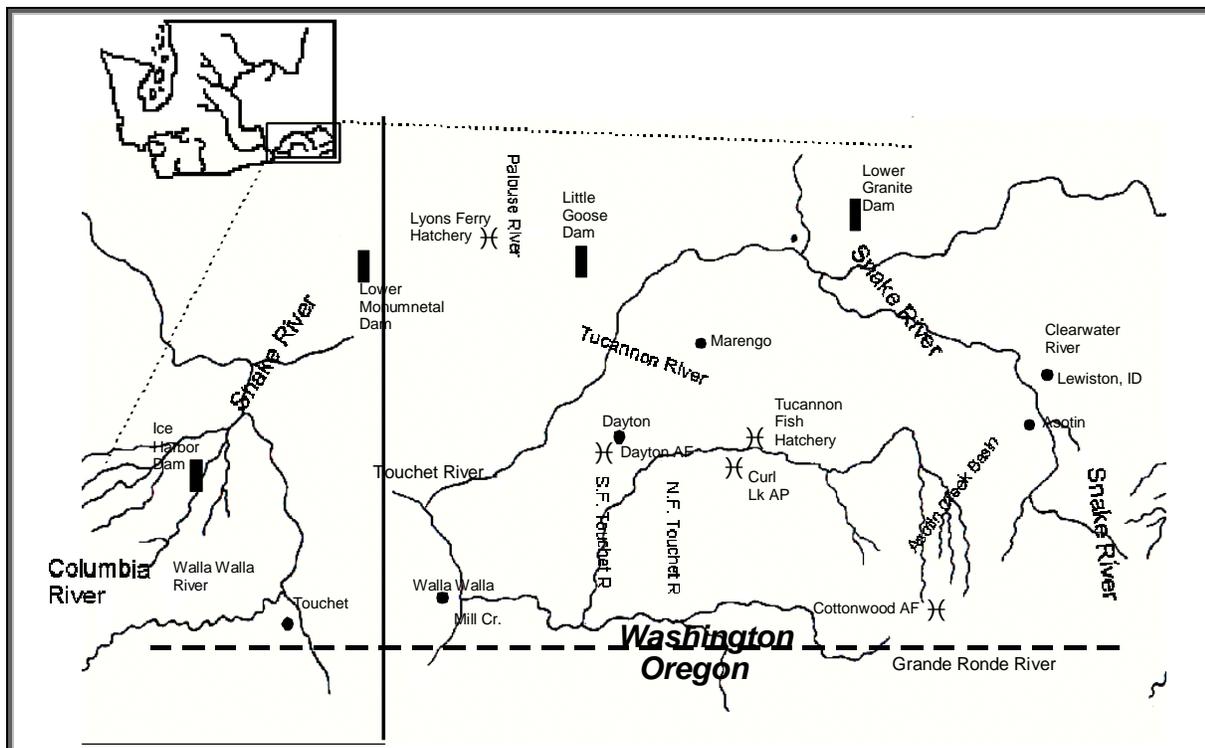


Figure 1. Map of the Lower Snake River Compensation Plan (LSRCP) LFC Facilities, and major rivers and streams in Southeast Washington.

LSRCP funded fish production in Washington began in 1983, with the construction of trout and steelhead rearing facilities at the LFH. Construction of salmon facilities and steelhead acclimation sites followed, and were completed in 1985. Major upgrades at TFH also occurred at that time, and operation of that facility has been funded by LSRCP ever since. Production at all facilities has been directed toward meeting established program goals of returning 18,300 adult fall Chinook, 1,152 adult spring Chinook, 4,656 adult summer steelhead, and providing 67,500 angler days of fishing opportunity from 86,000 pounds of rainbow trout production, currently planted at 3 fish per pound (fpp). In addition to these LSRCP production goals, Washington Department of Fish and Wildlife (WDFW) funds a jumbo-sized (1.5 pounds each) rainbow trout program at TFH.

The LFH is located along the Snake River at river mile (RM) 59.1, directly below the confluence of the Palouse River in Franklin County, Washington. Initially it was operated as two separate

facilities. Washington Department of Wildlife (WDW) operated the north hatchery, producing steelhead and rainbow trout. Washington Department of Fisheries (WDF) operated the south hatchery, rearing spring and fall Chinook. A merger of the two agencies in 1994 led to a merging of the two facilities, and has since been operated by WDFW through LSRCP funding as LFH.

Facilities include two incubation buildings with office space and feed storage, plus adult fish trapping, holding and spawning structures. A visitor center provides interpretive information for guests of the hatchery. There are eight residences for staff on site to fulfill security and emergency response needs.

The LFH rearing facilities include twenty-eight raceways at 10 ft x 100 ft x 2.8 ft and nineteen raceways at 10 ft x 88.5 ft x 3.5 ft. These raceways were covered in 2" square mesh netting in 2005 and 2006. There are three rearing lakes covered in 4" netting (added in 2003-04), holding ~ 590,000 cubic feet (ft³) of water each, approximately 1,100 ft x 90 ft x 10 ft in size. Netting has been added to these lakes and raceways to reduce predation losses. The adult holding facilities include three 83 ft x 10 ft x 5 ft adult raceways with housed spawning facilities incorporated over the center of these ponds, two 18 ft x 150 ft x 4.3 ft and two 21 ft x 150 ft x 4.3 ft adult salmon holding ponds, which also accommodate sub-yearling rearing when not needed for adult holding in the spring of the year. In 2005, channels were cut into two of these ponds, creating three temporary holding areas in each of the two modified ponds to accommodate marking and tagging of the subyearlings reared there. Screens were fabricated to fit the channels. Eight 20 ft x 4 ft fiberglass circular ponds are used for a captive brood spring Chinook program. These ponds were added in 1998 below the north raceways. No longer used for this program are fifteen 4 ft x 1.6 ft fiberglass circular ponds. Six 3.25 ft x 16 ft x 2.6 ft fiberglass tanks were added in the same area in 2006, allowing for decreased densities and improved flexibility in all stocks during early rearing. The incubation facilities include 112 full stacks (2 units of 8 trays each) of vertical incubators in the south trough room, and 88 shallow eyeing/hatching troughs and four 3.75 ft x 27.5 ft x 2 ft intermediate rearing troughs in the north trough room.

Water is supplied to LFH from the Marmes pump station, which has emergency power backup generation. The Marmes pump (wells) facility has three 300 horsepower (hp) pumps, four 200 hp pumps and one 75 hp pump. The well water right for LFH is 53,200 gallons per minute (gpm), or 118.5 cubic feet per second (cfs) of flow, and water temperature is a constant 52° F.

The TFH is located along the Tucannon River, between the towns of Dayton and Pomeroy Washington, at RM 36 in Columbia County. Fish production began in 1949 by the Washington Department of Game. In 1983, construction began to remodel the hatchery as part of a transfer of ownership to LSRCP. In November 1986 construction was complete, and LSRCP has funded operations there ever since.

The TFH includes a combined incubation and office building, back-up power generation building, feed storage shed, shop, domestic water building, two well houses and a spring water collection building. There is also a river intake and trapping facility located upstream of Rainbow Lake, along the Tucannon River. There are two residences for staff on site to fulfill security and emergency response needs.

The TFH is supplied with three different water sources. River water is captured from the Tucannon River, and ranges in temperature from 33 to 60 ° F, during use by the hatchery. The

intake is located one half mile upstream of the hatchery. This water travels down an open channel into Rainbow Lake. From the outlet of Rainbow Lake the water travels through an 18" above ground pipeline to the hatchery. This pipeline was completely replaced in 2005. Rainbow Lake functions as a reservoir to provide the hatchery with cooler water in the summer months and warmer water in the winter months. It also provides a pool of water to draw from when encountering adverse intake conditions, resulting in temporary loss of water flows. The water right for this source is 16 cfs. Well water is pumped from two separate sources to an aeration tower, and then gravity fed to the rearing units and the domestic pump building. The combined well water right is 2 cfs, with well #2 running around 54 - 57° F and well #3 running a constant 61° F. Spring water is pumped from an underground collection site to the same aeration tower and gravity fed to rearing units. The water right for this source is 5.3 cfs, and has a stable temperature of 51 or 52° F.

The rearing vessels at TFH include forty concrete 1 ft x 15ft x .5 ft shallow troughs, six concrete round ponds approximately 40 ft in diameter with a maximum of 2,660 ft³ of rearing area each, two concrete 10 ft x 80 ft x 3 ft raceways, one concrete 15 ft x 136 ft x 5 ft raceway, and one earthen rearing pond with a maximum of 136,221 ft³ of rearing space. The pond is approximately 170 ft x 200 ft x 6.5 ft in size.

Cottonwood AF is located along the Grande Ronde River at RM 28.7, directly above the confluence with Cottonwood Creek in Asotin County, Washington. Construction was completed in February 1985.

This facility includes an adult trapping facility on Cottonwood Creek, a small storage building, and a single trailer unit used as housing during operations. Cottonwood AF has a concrete bottom with earthen walls and holds ~357,000 ft³ of water. It has a water right of 2,694 gpm (6 cfs) for the period January 1st through July 1st. It is supplied with water from Cottonwood Creek through a gravity water supply system, with the intake integrated into the adult trapping facility located ~ 0.10 miles above the pond. Water temperatures range from 34 to 52° F during operation of the facility. It also has a small trailer for use by staff required to be on-site at all times while the pond is in operation. It is presently used for acclimation and release of Wallowa stock summer steelhead into the Grande Ronde River.

Dayton AF is located along the Touchet River at RM 53 in Columbia County, Washington. There is an adult trapping facility on the Touchet River just upstream of the acclimation pond at RM 53.3.

Construction of the Dayton AF was completed in October 1986. This pond is asphalt lined and holds ~ 200,000 ft³ of water. The water right to this pond is 2,694 gpm (6 cfs) for the period of Jan 1st – May 15th of each year. It is supplied with water from the Touchet River through a gravity water supply system, with the intake located at the temporary adult trapping facility just upstream of the pond. Water temperatures during use by hatchery staff for steelhead acclimation range from 34 to 52° F. The pond is located adjacent to the Snake River Lab evaluation office and has a storage garage for equipment and feed. It also has a small trailer for use by staff required to be on-site at all times while the pond is in operation. It is presently used for acclimation and release of LFH stock summer steelhead into the Touchet River.

Curl Lake AP is located along the Tucannon River at RM 41 in Columbia County, Washington.

The construction of Curl Lake AP was completed in February 1985. Curl Lake AP is an earthen pond holding ~ 784,000 ft³ of water. It has a water right of 2,694 gpm (6 cfs). It is supplied with water from the Tucannon River through a gravity water supply system. It is currently utilized for acclimation of spring Chinook yearlings for release into the Tucannon River. Water temperatures at this time of year range from 34 to 48 °F. Chinook acclimation in Curl Lake AP started in 1997. After the spring Chinook are released, the pond is stocked with resident trout for fishing. It is emptied after fishing season ends October 31st each year, and recharged by hatchery staff prior to spring Chinook acclimation the following January.

In addition to WDFW acclimation sites, LFC provides up to 465,000 yearling and 1,740,000 sub-yearling fall Chinook to three acclimation facilities operated by the Nez Perce Tribe (NPT): Pittsburg Landing and Captain John's Rapids on the Snake River between Asotin and Hells Canyon Dam, and Big Canyon on the Clearwater River. Size at transfer to the NPT AF's is 12 fpp for yearlings and 60 - 75 fpp for sub-yearlings. Size at release goal for acclimated fall Chinook yearlings is 10.0 fpp, and 50 fpp for sub-yearlings.

SPRING CHINOOK

Two Tucannon Spring Chinook programs were in operation at LFC. Up to 170 adult Chinook (85 hatchery: 85 wild) are trapped (depending upon run size) from the Tucannon River for broodstock as part of the LSRCP supplementation program. Adults are held at LFH to reduce pre-spawning mortality. All fish are spawned, producing approximately 272,000 green eggs, which provide for the maximum release of up to 225,000 yearling smolts. A captive brood program was initiated to aid the recovery of Tucannon spring Chinook. The captive brood program is funded directly by BPA, and is being phased out (2006 was the last spawn of captive brood adults and their progeny will be released in April 2008). Yearling program fish are reared into the fall at LFH. They are then marked and transferred to TFH. They are reared at TFH during the winter due to the high probability of Curl Lake and its river intake freezing over. During early spring the yearling fish are transferred to Curl Lake for final acclimation and volitional release.

2005 Brood Year

The captive brood and supplementation Tucannon Spring Chinook were planted in the spring of 2007. See tables 1 & 2.

2006 Brood Year

There were 123,629 supplemental and 162,736 captive brood spring Chinook eggs taken. See table 20. The captive brood and supplementation Tucannon Spring Chinook were ponded and started feeding in December 2006. These fish were reared in raceways at LFH and were marked starting in early September 2007. The captive brood and supplementation yearlings were transferred from LFH to TFH in October 2007. These fish will be transferred to Curl Lake AF in February 2008.

2007 Brood Year

The 2007 Tucannon Spring Chinook adults arrived at the Rainbow Lake trap between May and September of 2007. See tables 3 & 4 for adult collection and spawning.

FALL CHINOOK

LFH origin fall Chinook returning to the hatchery are used for broodstock. Additionally, LFH origin fall Chinook captured at LGD are transported to LFH for spawning in accordance with an agreement under the Columbia River Fish Management Plan. Annual adjustments to the agreement are expected. The program has expanded to provide sub-yearlings and yearlings for NPT facilities, and eyed eggs to IPC to allow them to fulfill their mitigation obligation. Assuming a fecundity of 3,400 eggs/female, ~1,442 females are needed to provide the 4.9 million eggs for the production programs.

Rearing density reductions occurred for the 2002 brood year sub-yearlings. Modification of the four adult salmon holding ponds allowed for rearing of sub-yearling Chinook in those ponds, providing for a density index target of 0.09 or less. The purpose of this change was to reduce or eliminate the occurrence of Bacterial Gill Disease (BGD), which had been a continual problem as a result of expansion of the fall Chinook program to provide sub-yearling and yearling fish to NPT acclimation facilities. Bird predation in the rearing lakes and raceways has been significantly reduced due to installation of predation netting.

2005 Brood Year

The 2005 Snake River Fall Chinook were planted in the spring of 2007. See table 5.

2006 Brood Year

There were 2,819,004 fall Chinook eggs taken in October and November of 2006. See table 20. These fall Chinook were ponded and started feeding in January 2007. The NPT hatchery and acclimation facilities received 1,436,712 sub-yearlings, Dworshak received 2,000 sub-yearlings, and LFH released 200,692 sub-yearlings in 2007. The yearling program fish were reared in raceways throughout the summer. The NPT acclimation yearlings and LFH yearlings were marked during the fall of 2007. The NPT fish will be kept in raceways until they are transferred to

their acclimation facilities in February and March 2008. The yearlings at LFH will be released in the spring of 2008 directly from Rearing Lake #2. See Plants and Transfers table 6.

2007 Brood Year

Snake River fall Chinook trapping started at LGD and LFH in September 2007. See adult collection and spawning tables 7 & 8 for adults trapped during this reporting period.

SUMMER STEELHEAD

LFC currently uses three stocks of steelhead in the Snake River Basin (LFH, Tucannon, and Wallowa), and two stocks in the Walla Walla Basin (Touchet and LFH). All of these stocks are collected from a variety of traps located throughout SE Washington.

The LFH stock are trapped on-station at LFH in September through mid-November. The trapping of Wallowa stock steelhead occurs on Cottonwood Creek (a small tributary to the Grande Ronde River) in March and April. Cottonwood Creek supplies water to the Cottonwood AF, and large numbers of hatchery adults return every year to the creek. A small trapping structure was installed in 1992 to capture returning adults for broodstock. Trapping of the Tucannon River Endemic Stock begins in September at a temporary weir/trap that is set up annually in the lower Tucannon River (river mile 11). The trap is run intermittently until April, when high stream flows usually disable the trap. Broodstock collections take place over the entire trapping period. Touchet stock steelhead are trapped at the Dayton AF trap on the Touchet River, from January (if possible) through May each year.

The National Marine Fisheries Service's (NMFS) 1999 Biological Opinion ruled that continued use of LFH and Wallowa steelhead stocks constituted jeopardy to listed steelhead populations in the Snake and Columbia Rivers. Concerns about within and out-of-basin straying, and swamping of natural populations by the hatchery stocks, led NMFS to propose the development of endemic broodstocks where possible, and eventual elimination of non-endemic stocks. Following that ruling, WDFW and the co-managers were responsive to the BIOP by initiating endemic broodstock programs in the Tucannon and Touchet Rivers, and have since followed with a decrease in production of the LFH and Wallowa stocks.

Prior to any of the endemic steelhead being collected for broodstock, WDFW and the co-managers decided that the endemic programs should be tested and evaluated for 5-years at a minimum production level (50,000 smolts annually), before abandoning the LFH or Wallowa stocks from hatchery production, or increasing the production of endemic stocks. Each endemic broodstock program began with the 2000 BY, with the original goal to collect 16 pairs for spawning. Adjustments have been made to the broodstock collection because fecundity estimates and in-hatchery survival were greater than expected. Also, the original five-year evaluation period has been extended due to lack of adequate adult returns from the first few brood years. Evaluation will continue over the next few years before decisions are made about the future use of these stocks.

Lyons Ferry Stock

During August and September fish are adipose fin clipped and transferred to Rearing Lake #1 at LFH. A planned release goal is 345,000 juveniles for brood year 2006. Following is the release goal for each release location in the spring of 2007: 85,000 from the Dayton AF into the Touchet River; 100,000 direct release into the Tucannon River; 100,000 direct release into the Walla Walla River; and 60,000 on-site release at LFH. In December, about 68,000 were transferred from Rearing Lake #1 to 4 raceways for additional marking. In January, ~20,000 fish programmed for transfer to the Dayton AF received a coded wire tag (CWT) and left ventral fin clip (LV) + 5,000 PIT tags. The LFH release marked group, ~20,000 fish, received CWT+LV marks. The Walla Walla River mark group, ~20,000 fish, received a CWT+LV mark + 5,000 PIT tags. The Tucannon mark group, ~5,000 fish, received PIT tags only prior to release.

In February of each year Lyons Ferry Summer Steelhead are transferred to Dayton AF. These fish are acclimated on Touchet River water. The discharge outlet screens are removed on April 1st and the fish are volitionally released by the 3rd week of April. After that date, feeding is discontinued and the pond level slowly lowered until the pond is completely drained by the end of April.

2006 Brood Year

There were 341,424 Lyons Ferry Summer Steelhead yearlings released at various locations in April of 2007. See table 9.

2007 Brood Year

There were 556,683 Lyons Ferry Summer Steelhead eggs taken. See adult collection and spawning table 10 and egg take table 20 for information. The yearling fish were reared into August in the raceways and were then adipose clipped and transferred to Rearing Lake #1.

2008 Brood Year

Collection of 2008 brood Lyons Ferry Summer Steelhead started in September 2007. See table 11 for adult collection numbers during this reporting period.

Wallowa Stock

In August and September these fish are adipose fin clipped, ~20,000 marked with a CWT+LV marks and transferred into rearing lake 3. During the first week in February, the juveniles are transferred to Cottonwood AF. Transfer dates may vary due to weather and road conditions. The discharge outlet screens are removed on April 1st and the fish are volitionally released through the third week of April. After that date, feeding is discontinued and the pond level slowly lowered until completely drained by the end of April.

2006 Brood Year

There were 159,242 yearling Wallowa Summer Steelhead released into the Grande Ronde River in April of 2007. See table 12.

2007 Brood Year

The Wallowa Summer Steelhead adults were trapped at the Cottonwood Creek facility during March and April 2007. See table 13. There were 265,538 eggs taken in March and April from these adults. See table 20. They will be reared in raceways until they are adipose fin clipped in August and September and moved into Rearing Lake #3.

Tucannon Stock

All Tucannon River endemic stock steelhead are reared in standard raceways at LFH. These fish were VIE (right red elastomer) tagged in January. In mid-February the fish are transferred to TFH and placed into the large acclimation raceway (formerly used for spring Chinook holding and acclimation). They are then released into the Tucannon River near Curl Lake during the month of April. A portion of the fish will be PIT tagged (~8,000) prior to release to monitor out-migration, for comparison of within-year variation of migration performance among release groups, and for estimated smolt-to-adult survival rates of endemic stock fish.

2006 Brood Year

In April 2007 there were 62,943 yearlings released in the Tucannon River above the Curl Lake intake. See table 14 for additional release information.

2007 Brood Year

The Tucannon natural steelhead adults were captured at the Lower Tucannon River Adult Trap (river mile 11.0) in the lower Tucannon River for spawning use. Spawning generally occurs during February and March each year. 64,129 eggs were taken using 13 females. See table 16 for adult collection and spawning information, and table 20 for egg information.

Touchet Stock

All Touchet River Endemic stock are reared in standard raceways at LFH. These fish were VIE (left red elastomer) tagged in January. They were direct stream released in late April/early May into the upper basin above the WDFW trap on the Touchet River. PIT tags (~8,000) to monitor out-migration, for comparison of within-year variation of migration performance between release groups, and for estimated smolt-to-adult survival rates of endemic stock fish are inserted before the groups are released.

2006 Brood Year

In April of 2007 there were 58,989 yearlings released into the Touchet River at river mile 57.2. See table 17 for more information on this release.

2007 Brood Year

There were 73,101 eggs taken from Touchet Summer Steelhead adults. See tables 18 and 20 for spawning and egg information.

COHO

Incidental catch of coho occurs during the trapping season for fall Chinook and steelhead at LFH. Trapped Coho are held at LFH, then transferred to Dworshak National Fish Hatchery by the Nez Perce Tribe on fall Chinook spawning days. See table 19 for adult coho collection.

BULL TROUT

Bull trout captured at the Tucannon trap are enumerated and passed upstream. See table 28.

RESIDENT FISH

Rainbow trout are reared to fulfill the resident fishing opportunity mitigation under LSRCP. Eggs are obtained from WDFW's Spokane Hatchery (Spokane stock) and from Idaho Fish and Game's (IDFG) Hayspur Hatchery (Kamloops stock). The production goal is 237,500 yearling and 160,000 sub-yearling Spokane Rainbows, and 50,000 fingerling Kamloops (triploid) Rainbows. This requires 500,000 eyed Spokane Rainbow trout eggs for the Washington program, and 70,000 triploid eyed Kamloops stock eggs (provided by IDFG) to meet part of the LSRCP mitigation requirement within Idaho. IDFG prefer to use Kamloops stock because of the survival advantage they exhibit to the Spokane stock when released into the Clearwater and Salmon Rivers. A small State funded program at TFH utilizes Spokane stock rainbow reared to 1½ lbs each, to provide a unique fishing opportunity in local lakes. Resident brood year 2005 and 2006 Spokane Rainbow and Kamloops Rainbow plants and transfers are listed in tables 21, 22 & 23 for TFH, and tables 24, 25, 26 & 27 for LFH.

Fish Health Section

Steven Roberts

Introduction

The following section is a summary of fish health activities for the Lyons Ferry Hatchery Complex for October 1, 2006 to September 30, 2007. Adult sampling for viral and bacterial pathogens and fish health inspections are included.

The only major fish health problem was bacterial coldwater disease in rainbow trout and steelhead. Also, detection of IHN virus in the Wallowa Summer Steelhead adults resulted in the destruction of the eggs from IHN virus positive females.

Preventative fish health management was employed with bacterial gill disease (BGD), bacterial kidney disease and infectious hematopoietic necrosis (IHN). With BGD in sub-yearling Fall Chinook, low rearing densities were followed. BKD preventive measures for Chinook included erythromycin injection of female broodfish, screening and segregation of progeny, low rearing densities, and feeding of erythromycin medicated rations. With IHN in steelhead, female broodfish were screened and segregated and destruction or fry releases of progeny were employed.

Lyons Ferry Hatchery

Lyons Ferry Fall Chinook

Adults - 2006 Spawning

At spawning, samples are collected for viral and BKD-ELISA testing. Female fall Chinook from the second, third, and fourth spawning week were sampled for BKD-ELISA testing. A total of 623 females were tested.

BKD prevalence was low with 99.4% Below-Low females (Table 2). Progeny of Below-Low BKD females were selected for the yearling programs. Progeny of all other females were utilized in the sub-yearling programs.

IHN virus was also detected in the spawning adult (Table 1). No management action was taken in regards to the IHN virus detection.

2005 Brood year

Bacterial kidney disease mortality was noted in three south raceways of yearling fall Chinook in the fall, 2006. Fish in two raceways were treated with Aquamycin for 28 days. The treated fish and unaffected fish were healthy upon release in spring, 2007.

2006 Brood year

In general, the 2006 brood year were healthy throughout the reporting period. A few fish were observed with dropout syndrome and a slight increase in mortality was recorded in late summer, 2007.

As a BKD preventative strategy, the fish were treated with erythromycin medicated feed in June 2007.

Tucannon Spring Chinook

Adults - 2007 Spawning

At spawning, samples are collected for viral testing and BKD-ELISA testing. IHN virus was also detected in the spawning adult (Table 1). No management action was taken in regards to the IHN virus detection.

The BKD-ELISA testing has not been completed for the samples collected from the 2007 spawning season.

The BKD-ELISA results from the 2006 spawning season are shown in Table 2. BKD prevalence was low with 91.1% Below-Low females.

2005 Brood year

The 2005 brood year Tucannon Spring Chinook were healthy throughout the rearing cycle at Lyons Ferry Hatchery. The fish were transferred to Tucannon Hatchery in October 2007.

2006 Brood year

The 2006 brood year Tucannon Spring Chinook were healthy throughout the rearing cycle at Lyons Ferry Hatchery.

As a BKD preventative strategy, the fish were treated with erythromycin medicated feed in May 2007.

Tucannon Spring Chinook - Captive Broodstock

Spawning of Tucannon Spring Chinook captive broodstock was completed in 2006.

The BKD-ELISA results from the 2006 spawning season are shown in Table 2. BKD prevalence was low with 100% Below-Low females.

2006 Brood year

The 2006 brood year Tucannon Spring Chinook captive progeny were healthy throughout the rearing cycle at Lyons Ferry Hatchery. The fish were transferred to Tucannon Hatchery in October 2007.

Lyons Ferry Summer Steelhead

Adults - 2007 Spawning

All female steelhead adults were sampled for viral pathogens at spawning. No viral pathogens were detected (Table 1).

2006 Brood year

The 2006 brood year Lyons Ferry Summer Steelhead were healthy throughout the reporting period and upon release.

2007 Brood year

Bacterial coldwater disease was observed in the 2007 brood year Lyons Ferry Summer Steelhead in April through June 2007. The fish were successfully treated with florfenicol coated fish pills at 15 mg/kg. After recovery from the BCWD outbreak, the fish were healthy throughout the reporting period.

Wallowa Summer Steelhead

Adults - 2007 spawning at Cottonwood Pond

All female steelhead adults were sampled for viral pathogens at spawning. IHN virus was detected in 25 of 105 (23.8%) females spawned (Table 1). The eggs from the IHN virus positive females were destroyed.

2006 Brood year

The 2006 brood year Wallowa Summer Steelhead were healthy throughout the reporting period and upon transfer to Cottonwood Pond.

2007 Brood year

The 2007 brood year Wallowa River Summer Steelhead fish were healthy throughout the reporting period.

Tucannon River Summer Steelhead

Adults - 2007 Spawning

All female steelhead adults were sampled for viral pathogens at spawning. In 2007, no viral pathogens were detected (Table 1).

2006 Brood year

The 2006 brood year Tucannon River Summer Steelhead fish were healthy throughout the reporting period and upon release.

2007 Brood year

The 2007 brood year Tucannon River Summer Steelhead fish were healthy throughout the reporting period.

Touchet River Summer Steelhead

Adults - 2007 Spawning

All female steelhead adults were sampled for viral pathogens at spawning. . In 2007, no viral pathogens were detected (Table 1).

2006 Brood year

The 2006 brood year Touchet River Summer Steelhead fish were healthy throughout the reporting period and upon release.

2007 Brood year

The 2007 brood year Touchet River Summer steelhead fish were healthy throughout the reporting period.

Spokane Rainbow Trout

Spokane rainbow trout are received as eyed eggs from the Spokane Hatchery. The Spokane Rainbow broodstock is annually sampled for viral agents and is certified free of viral pathogens.

2005 Brood year

The fish were healthy throughout the reporting period and upon release.

2006 Brood year

Bacterial coldwater disease was observed in the Spokane Rainbow in March through July 2007. The rainbow trout were treated with florfenicol coated fish pills. Some raceways of rainbow trout required multiple treatments with florfenicol coated fish pills. The fish recovered and were healthy throughout the remaining reporting period.

Tucannon Hatchery

Tucannon Spring Chinook

2005 Brood year

The 2005 brood year Tucannon Spring Chinook were healthy throughout the reporting period and upon release.

Tucannon Spring Chinook - Captive Broodstock

2005 Brood year

The 2005 brood year Tucannon Spring Chinook (captive broodstock progeny) were healthy throughout the reporting period and upon release.

Spokane Rainbow Trout

2005 Brood year

Minor losses to bacterial coldwater disease were observed in January 2007. No treatments were administered. The fish were healthy upon release.

2006 Brood year

The 2006 brood year Spokane Rainbow trout were healthy throughout the reporting period.

Hayspur Rainbow Trout

2006 Brood year

The 2006 brood year Hayspur Rainbow trout were healthy throughout the reporting period.

Table 29. Broodstock viral testing, 2006 - 2007.

Location	Date	Species-Stock	No. OF	No. KS	Results
Lyons Ferry	11-06	CHF-Snake River	60	60	IHNV
Lyons Ferry	01-07	SS-Lyons Ferry	121	60	Negative
Lyons Ferry	03-07	SS-Tucannon River	11	11	Negative
Cottonwood Pond	04-07	SS-Wallowa	107	60	IHNV
Lyons Ferry	04-07	SS-Touchet River	16	16	Negative
Lyons Ferry	09-07	CHS-Tucannon River	36	36	IHNV

OF = ovarian fluid

KS = kidney/spleen

Table 30. BKD-ELISA testing of female Chinook broodstocks at Lyons Ferry Hatchery in 2006.

Species-Stock	No. Tested	Below Low		Low		Mod		High	
		No	%	No	%	No	%	No	%
CHF Snake R.	623	619	99.4%	3	0.5%	1	0.2%	0	0%
CHS Tucannon - Anadromous	45	41	91.1%	2	4.4%	2	4.4%	0	0%
CHS Tucannon - Captive	86	86	100%	0	0%	0	0%	0	0%

Below-Low = < 0.10

Low = 0.11 - 0.199

Mod = 0.2 - 0.45

High = > 0.45

PERSONNEL/PURCHASES/MAINTENANCE

LYONS FERRY HATCHERY

Personnel

Tanner Gallaher, Derek Gloyn and Larabee Miller were hired into vacant permanent positions.
Brandon Kilmer transferred to Sol Duc Hatchery in western Washington.
Steve Rodgers transferred to the CM position at Wells Dam.
Steve Mansfield promoted to FHS 3 at Ringold Springs.

Significant Purchases

2008 International 7600 fish planting truck.
Smaller mesh bird netting for Lake 2
Main breakers for Marmes pump house
Koch rings for water distribution tower

Projects

Replaced adult pond and Lake 1 stop logs.
Replaced netting on Lake 2 with 4" instead of 8" for bird predation control.
Built jump screens for the south side raceways.
Replaced Koch rings in water tower.
Continued with landscaping projects

Housing Maintenance

The decks for residences 1, 2 & 3 were replaced due to old age and wear and tear.
The septic tanks for residences 2, 6 & 7 were dug up and pumped.

Significant Events

No significant events this year.

TUCANNON FISH HATCHERY

Personnel

No significant personnel changes or issues occurred during this period.

Significant purchases

A 24hp Honda replacement motor was purchased for the 1985 Nielson fish pump.

Projects

Continued brush cleanup following the fire in the summer 2005. There was several brush piles that needed to be controlled burned by the staff to reduce fuel loads.

Replaced the 16hp Onan engine on the 1985 Nielson fish pump with a 24hp Honda. Included in this process was the re-design of the pump priming system.

During our annual river intake maintenance, the WDF&W Yakima Screen shop performed maintenance on the intake drum screen. Repairs consisted of replacement of the rubber drum seal at both ends of the rotating screen.

We completed a 95% wiring replacement and additional fuse installation on our 1971 Galion road grader.

Hatchery staff repaired and re-painted one of the banks of hatchery shallow troughs. Some of the rebar that was close to the concrete surface was rusting and causing the walls to crack.

An in-stream construction project was completed at the Curl Lake intake during the summer. This consisted of changing the intake pool elevations to meet fish passage requirements.

Hatchery staff installed three-inch cam-loc connections on the round pond intake manifolds. This will allow staff ease in making flow adjustments with the reduction of a connection failure.

Completed repairs identified on the condition assessment list.

Patch approximately 400 square feet of asphalt by the spring collection building. This project was the result of a section of asphalt that was removed during our river pipeline replacement. We rented a roller and had the cold patch delivered on site.

Housing maintenance

Minor upkeep projects were performed on both residences. Replaced some of the outdated light fixtures in residence one and two. Both residences had the heat pump ductwork cleaned out. Residence two had the exterior re-painted with the same earth tone color.

Significant events

No significant hatchery or weather related events occurred during this period.

Table 1. Brood Year 2005 Tucannon Spring Chinook - Supplementation - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY/TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Oct. 02, 2006			149,716	4,830			31	Tucannon Hatchery	36	Right Red VIE
April 2-23, 2007					149,466	18,683	8	Tucannon River	40.7	Right Red VIE
			149,716	4,830	149,466	18,683				

Table 2. Brood Year 2005 Tucannon Spring Chinook - Captive Brood - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY / TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Sept. 28, 2006			90,222	2,864			31.5	Tucannon Hatchery	36	CWT
April 2-23, 2007					90,056	12,170	7.4	Tucannon River	40.7	CWT
			90,222	2,864	90,056	12,170				

Table 3. Brood Year 2007 Tucannon River Spring Chinook - Hatchery - collection and spawning.

ADULT COLLECTION AND SPAWNING

TUCANNON HATCHERY

Adult Collection Site: Rainbow Lake Trap

MONTH ENDING	EST. TRAP/ RECEIVE									MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS		RETURNED TO RIVER			SHIPPED TO LFH			Male	Female	Jx	Male	Female	NVF	Jx	Male	Female	Jx
		MAXI	MINI	Male	Female	Jx	Male	Female	Jx										
May-07	18	2	0	2	9	2	4	3	0										
Jun-07	26	47	0	3	8	39	3	11	4									1	4
Jul-07	2	10	0	0	0	9	1	1	0										1
Aug-07	3	0	0	0	0	0	3	0	0		1								
Sep-07	3	0	0	0	0	0	2	1	0		1	1	11	8	1	1	18		4
SEASON TOTAL	52	59	0	5	17	50	13	16	4	0	2	1	11	8	1	1	18	1	9

Table 4. Brood Year 2007 Tucannon River Spring Chinook - Wild - collection and spawning.

ADULT COLLECTION AND SPAWNING

TUCANNON HATCHERY

Adult Collection Site: Rainbow Lake Trap

MONTH ENDING	EST. TRAP/ RECEIVE									MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	JACKS		RETURNED TO RIVER			SHIPPED TO LFH			Male	Female	Jx	Male	Female	NVF	Jx	Male	Female	Jx	
		MAXI	MINI	Male	Female	Jx	Male	Female	Jx											
May-07	35	0		10	8	0	7	10	0	0	0	0	0	0	0	0	0	0	0	0
Jun-07	52	10		11	15	9	10	16	1	0	1	0	0	0	0	0	0	0	0	0
Jul-07	4	3		2	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-07	2	0		0	0	0	2	0	0	0	1	0	3	2	0	0	0	0	0	0
Sep-07	6	1		0	0	0	3	3	1	0	0	1	16	23	1	0	24	0	1	
Adjustments																	1			
SEASON TOTAL	99	14	0	23	23	12	24	29	2	0	2	1	19	25	1	0	25	0	1	

Note: Adjustments are fish that were identified at trapping as wild but were found to be hatchery by scale analysis.

Table 5. Brood Year 2005 Snake River fall chinook - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS			
Feb. 5, 2007			159,927	12,808			12.5	Capt. John's Rapids AP - NPT	
March 7-9, 2007			160,366	13,656			11.7	Big Canyon AP - NPT	
March 5-6, 2007			150,166	13,518			11.1	Pittsburg Landing AP - NPT	
April 2-6, 2007					503,160	47,465	10.6	On-site release	59
			470,459	39,982	503,160	47,465			

Table 6. Brood Year 2006 Snake River fall chinook - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS			
May 9, 2007			407,250	4,244			95.9	Pittsburg Landing AP-NPT	
May 2-4, 2007			513,390	5,978			85.9	Big Canyon AP - NPT	
May 8, 2007			516,072	5,724			90.2	Capt. John's Rapids AP - NPT	
May 10, 2007			2,000	20			100	Dworshak Hatchery	
May 15-17, 2007					199,817	3,262	61.25	On-Site Release	59
May 15-17, 2007					875	9	103	On-Site Release	59
			1,438,712	15,966	200,692	3,271			

Table 7. Brood Year 2007 Snake River fall chinook adult collection and spawning

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Lower Granite Dam

MONTH ENDING	EST. TRAP / RECEIVE								MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	Returned to River			Shipped/Planted			Male	Female	Jx	Male	Female	NVF	Jx	Male	Female	Jx
			Male	Female	Jx	Male	Female	Jx										
Sep-07	1,027	87							5	2	0							3
Oct-07	1,917	177	199		387				9	13	9	93	94	3	3	29	2	210
Nov-07	642	50							71	39	132	872	957	6	6	65	26	90
Dec-07			151	20	18				169	8	52							1
SEASON TOTAL	3,586	314	350	20	405	0	0	0	254	62	193	965	1,051	9	9	94	28	304

Table 8. Brood Year 2007 Snake River fall chinook adult collection and spawning

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Lower Granite Dam

MONTH ENDING	EST. TRAP / RECEIVE								MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	Returned to River			Shipped/Planted			Male	Female	Jx	Male	Female	NVF	Jx	Male	Female	Jx
			Male	Female	Jx	Male	Female	Jx										
Sep-07	874	620							2	7	5							
Oct-07	500	686	88		203				1	8	12	23	25		2	32	2	571
Nov-07	65	50							8	12	31	397	433	3	38	79	5	267
Dec-07			92	45	46				4	2	29	47	48		1	82	24	137
SEASON TOTAL	1,439	1,356	180	45	249	0	0	0	15	29	77	467	506	3	41	193	31	975

Table 9. Brood Year 2006 Lyons Ferry Summer Steelhead - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Feb. 13, 2007			66,375	10,074			6.6	Dayton AP		AD Only
Feb. 13, 2007			20,610	3,078			6.7	Dayton AP		AD/LV/CWT 63-36/65
April 9-25, 2007					66,375	14,429	4.6	From Dayton AP	54	AD Only
April 9-25, 2007					20,610	4,480	4.6	From Dayton AP	54	AD/LV/CWT 63-36/65
April 15-18, 2007					39,536	9,194	4.3	On-Site Release	59.1	AD Only
April 15-18, 2007					20,447	4,647	4.4	On-Site Release	59.1	AD/LV/CWT 63-36/67
April 16-18, 2007					76,909	17,886	4.3	Walla-Walla	35	AD only
April 16-18, 2007					20,857	4,740	4.4	Walla-Walla	35	AD/LV/CWT 63-36/66
April 16-18, 2007					91,853	21,361	4.3	Tucannon River	11	AD Only
April 16-18, 2007					4,837	1,075	4.5	Tucannon River	11	AD/Pit Tag
			86,985	13,152	341,424	77,812				

Table 10. Brood Year 2007 Lyons Ferry Summer Steelhead - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: LFH Trap

MONTH ENDING	EST. TRAP / RECEIVE								MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	RETURNED TO RIVER			DONATION			Male	Female	Unsexed	Lethal	Lethal	Lethal	Live	Male	Female	Jx
			Male	Female	Jx	Male	Female	Jx				Male	Female	NVF	Male			
Sep-06	615								2	11								
Oct-06	750									1								
Nov-06	336		470	556					4	31					4	3		
Dec-06										11						46		
Jan-07									7	8		225	113	2				
Feb-07									1	4		20	10		57	118		
Adjustment																		
SEASON TOTAL	1,701	0	470	556	0	0	0	0	14	66	0	245	123	2	0	61	167	0

Table 11. Brood Year 2008 Lyons Ferry Summer Steelhead - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: LFH Trap

MONTH ENDING	EST. TRAP / RECEIVE								MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	JACKS	Returned to River			Shipped/Planted			Male	Female	Jx	Lethal		Lethal		Male	Female	Jx	
			Male	Female	Jx	Male	Female	Jx				Male	Female	NVF	Jx				
Sep-07	601								5	9									
Oct-07	763								4	12									
Nov-07	302		382	654					17	84						2	3		
SEASON TO DATE	1,666	0	382	654	0	0	0	0	26	105	0	0	0	0	0	2	3	0	0

Table 12. Brood Year 2006 Wallowa Summer Steelhead - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY - Cottonwood Acclimation Pond

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Feb. 7-9, 2007			159,247	23,395			6.8	Cottonwood AP		AD/LV/CWT 63A-36/64
April 10-18, 2007					18,709	3,981	4.7	Grande Rhonde	28.7	AD/LV/CWT 63A-36/65
April 10-18, 2007					140,533	29,901	4.7	Grande Rhonde	28.7	AD ONLY
			159,247	23,395	159,242	33,882				

Table 13. Brood Year 2007 Willowa Summer Steelhead - Hatchery - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Cottonwood Creek Trap

MONTH ENDING	EST. TRAP / RECEIVE		Returned to Stream						MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	Above Rack			Below Rack			Trap			Lethal	Lethal	Live	Live			
			Male	Female	Jx	Male	Female	Jx	Male	Female	Unsexec	Male	VF / NVF	Female	Male	Male	Female	Jx
Mar-07	488		159	179					3	3		9	4 / 2	31	31	1	22	
Apr-07	70		41	35					13	16		15	51 / 0	20	42	4	1	
SEASON TOTAL	558	0	200	214	0	0	0	0	16	19		24	55 / 2	51	73	5	23	0

Table 14. Brood Year 2006 Tucannon Summer Steelhead - Hatchery - plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
February 14, 2007	63,063	10,626			62,943	13,716	5.9	Tucannon River	41.9	VI-Left Green
April 03 - 11, 2007							4.3			VI-Left Green
	63,063	10,626	0	0	62,943	13,716				

Table 15. Brood Year 2006 Tucannon Summer Steelhead - Wild - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Feb. 15, 2007			65,602	10,615			6.2	Tucannon Hatchery	41	VIE Right Green /CWT 63-11/86
			65,602	10,615						

Table 16. Brood Year 2007 Tucannon River Summer Steelhead - Wild - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Ducharme Trap

MONTH ENDING	EST. TRAP/ RECEIVE		RETURNED TO RIVER						MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	Above Rack			Trucked to bridge from LFH			Hatchery		Trap	Live		Lethal		Male	Female	Jx
			Male	Female	Jx	Male	Female	Jx	Male	Female	Unsexed	Male	Female	NVF	Jx			
Sep-06	6		2	4														
Oct-06	4			4														
Nov-06	8		3	5														
Dec-06	0																	
Jan-07	1																	
Feb-07	12			3								2	2					
Mar-07	18		1						1			8	8					
Apr-07						11	1		1			4	3					
SEASON TOTAL	49	0	6	16	0	11	1	0	2	0	0	17	13	0	0	0	0	0

Males were live spawned and returned to the river.

Table 17. Brood Year 2006 Touchet Summer Steelhead - Wild - plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
April 19, 2007					26,638	5,920	4.5	Touchet River	57.2	VIE left pink + pit tag
April 30, 2007					32,351	7,353	4.4	Touchet River	57.2	VIE left pink + pit tag
					58,989	13,273				

Table 18. Brood Year 2007 Touchet River Summer Steelhead - Wild - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Dayton Trap

MONTH ENDING	EST. TRAP / RECEIVE		RETURNED TO RIVER						MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	JACKS	Above Rack			Trucked above Dayton from LFH			Hatchery		Trap	Live	Lethal		Lethal		Male	Female	Jx
			Male	Female	Jx	Male	Female	Jx	Male	Female	M / F	Male	Female	NVF	Male				
Jun-06	2		2																
Feb-07	13			2															
Mar-07	106		15	67					2			13	12						
Apr-07	32		5	27		11	1		5			4	4						
May-07	4			4															
SEASON TOTAL	157	0	22	100	0	11	1	0	7	0	0/0	17	16	0	0	0	0	0	0

Male were live spawned and returned to the river.

Table 19. Brood Year 2006 Lyons Ferry Coho - Hatchery - collection.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: LFH Trap

MONTH ENDING	EST. TRAP / RECEIVE								MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	Returned to River			Shipped/Planted			Male	Female	Jx	Live		Lethal		Male	Female	Jx
			MALE	FEMALE	JACK	MALE	FEMALE	JACK				Male	Female	NVF	Jx			
Oct-06	107	1				36	57	1	7	7								
Nov-06	36					22	10		2	2								
SEASON TO DATE	143	1	0	0	0	58	67	1	9	9	0							

Note: Coho coincidentally trapped along with fall chinook volunteering into Lyons Ferry Hatchery.
Coho returned to stream were transported from Lyons Ferry Hatchery by Nez Perce Tribe.

Table 20. Egg take and disposition summary for the period Oct 1, 2006 - Sept 30, 2007.

EGG TAKE AND DISPOSITION

LYONS FERRY HATCHERY

SPAWNING PERIOD	STOCK CODE	FEMALES SPAWNED	EGGS LOST	PERCENT LOSS	EGGS EYED	EGGS SHIPPED	EGGS DESTROYED	TOTAL TAKE	FEMALES SPAWNED	FECUNDITY
Aug.-Sept. 2004	CK:SP:TUCA:04:M	46	6,383	5.3%	134,076			140,459	46	3,053
Aug.-Oct. 2005	CK:SP:TUCA:05:CB	167	158,033	60.4%	103,812			261,845	167	1,568
Oct.-Dec. 2006	CK:FA:SNAK:06:H	786	89,761	3.2%	2,601,679	127,564	0	2,819,004	786	3,587
Aug.-Oct. 2006	CK:SP:TUCA:06:M	45	6,685	5.4%	116,944			123,629	45	2,747
Sept.-Oct. 2006	CK:SP:TUCA:06:CB	86	63,316	38.9%	99,420			162,736	86	1,892
Feb.-March 2006	SH:SU:TUCA:07:W	13	7,159	9.8%	56,970			64,129	13	4,933
Mar.-Apr 2006	SH:SU:TOUC:07:W	16	3,475	4.7%	69,626			73,101	16	4,569
Jan.-Feb. 2006	SH:SU:LYON:06:H	123	48,995	8.8%	507,688			556,683	123	4,526
Mar.-Apr 2006	SH:SU:WARI:06:H	106	30,110	11.3%	235,428			265,538	106	2,505

Table 20. Eggs received/shipped for Lyons Ferry Hatchery during the period Oct 1, 2006 - Sep 30, 2007.

DATE	RECEIVED FROM	SHIPPED TO	STOCK CODE	EGGS STAGE	EGG NUMBER
Jan. 05,2007	Spokane Hatchery		RB:NA:SPOK:06:H	Eyed	140,786
Jan. 11,2007	Spokane Hatchery		RB:NA:SPOK:06:H	Eyed	200,035
Dec. 12, 2006		IPC - IDFW	CK:FA:SNAK:06:H	Eyed	127,564

Table 21. Brood Year 2005 Spokane Rainbow trout plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
April 5, 2007					3,002	790	3.8	Rainbow Lake		
April 5, 2007					1,998	526	3.8	Spring Lake		
April 5, 2007					2,500	658	3.8	Watson Lake		
April 5, 2007					502	132	3.8	Beaver Lake		
April 5, 2007					4,001	1,053	3.8	Blue Lake		
April 6, 2007					1,001	278	3.6	Dayton Jv Pond		
April 9, 2007					400	111	3.6	Donnie Lake		
April 9, 2007					3,002	834	3.6	West Evans Pond		
April 9, 2007					3,990	1,050	3.8	Golf Course Pond		
April 12, 2007					2,500	658	3.8	Quarry Pond		
April 12, 2007					1,600	421	3.8	Deer Lake		
April 13, 2007					2,044	584	3.5	Fishhook Park Pond		
April 13, 2007					2,048	585	3.5	Pampa Pond		
April 13, 2007					2,964	780	3.8	Bennington Lake		
April 16, 2007					2,009	558	3.6	Golf Course Pond		
April 17, 2007					1,999	526	3.8	Blue Lake		
April 17, 2007					2,299	605	3.8	Dalton Lake		
April 17, 2007					494	130	3.8	Rainbow Lake		
April 19, 2007					503	136	3.7	Casey Pond		
April 19, 2007					7,300	1,973	3.7	Quarry Pond		
April 19, 2007					7,700	2,081	3.7	Dalton Lake		
April 20, 2007					1,999	526	3.8	Garfield Pond		
April 20, 2007					1,501	395	3.8	Gilcrest Pond		
Page 1 Total					57,356	15,390				
Sub Total					57,356	15,390				

Table 21. Brood Year 2005 Spokane Rainbow trout plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 1 Subtotal					57,356	15,390				
April 23, 2007					500	139	3.6	Jefferson Park Pond		
April 23, 2007					306	85	3.6	Lions Park Pond		
April 24, 2007					2,002	556	3.6	Headgate Pond		
April 24, 2007					3,132	870	3.6	Curl Lake		
April 27, 2007					1,404	390	3.6	Spring Lake		
May 3, 2007					3,366	1,020	3.3	Bennington Lake		
May 3, 2007					3,366	1,020	3.3	West Evans Pond		
May 4, 2007					3,240	900	3.6	Golf Course Pond		
May 4, 2007					3,366	1,020	3.3	Watson Lake		
May 4, 2007					3,366	1,020	3.3	Blue Lake		
May 4, 2007					1,749	530	3.3	Rainbow Lake		
May 7, 2007					500	139	3.6	Jefferson Park Pond		
May 7, 2007					400	111	3.6	Lions Park Pond		
May 7, 2007					2,808	780	3.6	Bennington Lake		
May 8, 2007					1,000	303	3.3	Dayton Jv Pond		
May 10, 2007					2,000	625	3.2	Pampa Pond		
May 10, 2007					3,162	1,020	3.1	Curl Lake		
May 11, 2007					3,366	1,020	3.3	West Evans Pond		
May 18, 2007					1,547	455	3.4	Union Flat Cr.		
May 21, 2007					4,135	1,253	3.3	Watson Lake		
Page 2 Total					44,715	13,256				
Sub Total					102,071	28,646				

Table 21. Brood Year 2005 Spokane Rainbow trout plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 2 Subtotal					102,071	28,646				
May 22, 2007					1,000	303	3.3	Deer Lake		
May 22, 2007					2,574	780	3.3	Bennington Lake		
May 22, 2007					1,705	550	3.1	Curl Lake		
May 22, 2007					1,752	565	3.1	Rainbow Lake		
May 24, 2007					1,612	520	3.1	Spring Lake		
May 24, 2007					1,634	527	3.1	Blue Lake		
May 24, 2007					2,139	690	3.1	West evans Pond		
May 25, 2007					2,511	810	3.1	Golf Course Pond		
June 7, 2007					3,001	1,364	2.2	Bennington Lake		
June 8, 2007					3,001	1,364	2.2	Rainbow Lake		
June 8, 2007					2,288	1,040	2.2	West evans Pond		
June 9, 2007					150	68	2.2	Rainbow Lake		
June 11, 2007					2,024	920	2.2	Watson Lake		
June 19, 2007					2,200	1,100	2.0	Golf Course Pond		
June 19, 2007					1,040	520	2.0	Watson Lake		
June 19, 2007					2,040	1,020	2.0	Blue Lake		
June 21, 2007					480	240	2.0	Blue Lake		
June 21, 2007					2,000	1,000	2.0	Spring Lake		
June 22, 2007					1,100	550	2.0	Blue Lake		
Page 3 Total					34,251	13,931				
Sub Total					136,322	42,577				

Table 21. Brood Year 2005 Spokane Rainbow trout plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 3 Subtotal					136,322	42,577				
January 10, 2006	195,160						238/oz			
January 12, 2006			200				238/oz	Asotin High school		
January 12, 2006			200				238/oz	Asotin Elementary		
January 12, 2006			200				238/oz	Clarkston High school		
January 12, 2006			200				238/oz	Clarkston Elementary		
January 12, 2006			400				238/oz	Garrison middle school		
January 12, 2006			200				238/oz	Touchet elementary		
January 12, 2006			200				238/oz	Palouse elementary		
January 12, 2006			200				238/oz	Opportunity program school		
January 12, 2006			200				238/oz	Waitsburg elementary		
January 17, 2006			200				238/oz	Pomeroy elementary		
January 17, 2006			200				238/oz	Dayton elementary		
September 11, 2006					150	25	5.9	Lions park Pond		
September 18, 2006					265	48	5.5	Donnie Lake		
September 18, 2006					60	11	5.5	Blue Lake		
Page 4 Total			2400		475	84				
Sub Total			2400		475	84				

Table 21. Brood Year 2005 Spokane Rainbow trout (Jumbo) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
February 22, 2007					300	333	0.9	Big Four Lake		Jumbos
February 23, 2007					100	118	0.85	Rainbow Lake		Jumbos
February 23, 2007					100	118	0.85	Blue Lake		Jumbos
February 23, 2007					100	118	0.85	Spring Lake		Jumbos
February 26, 2007					100	122	0.82	West evans Pond		Jumbos
February 26, 2007					100	122	0.82	Golf Course Pond		Jumbos
February 26, 2007					100	122	0.82	Watson Lake		Jumbos
March 16, 2007					100	137	0.73	Rainbow Lake		Jumbos
March 16, 2007					150	205.5	0.73	West evans Pond		Jumbos
March 21, 2007					150	214	0.7	Golf Course Pond		Jumbos
March 22, 2007					100	143	0.7	Blue Lake		Jumbos
March 29, 2007					51	80	0.64	Dayton JV Pond		Jumbos
March 30, 2007					100	156	0.64	Watson Lake		Jumbos
March 30, 2007					100	156	0.64	Spring Lake		Jumbos
April 5, 2007					100	156	0.64	Blue Lake		Jumbos
April 6, 2007					50	78	0.64	Dayton JV Pond		Jumbos
April 6, 2007					100	156	0.64	Watson Lake		Jumbos
April 6, 2007					69	108	0.64	Rainbow Lake		Jumbos
April 9, 2007					150	249	0.6	West evans Pond		Jumbos
April 12, 2007					300	477	0.63	Quarry Pond		Jumbos
April 13, 2007					150	240	0.63	Fish Hook Park Pond		Jumbos
Page 5 Total					2,570	3,609				
Sub Total					2,570	3,609				

Fish food purchased with state funds for the Jumbo trout program.

Table 21. Brood Year 2005 Spokane Rainbow trout (Jumbo) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 5 Subtotal					2,570	3,609				
April 13, 2007					200	320	0.63	Pampa Pond		Jumbos
April 13, 2007					200	320	0.63	Bennington Lake		Jumbos
April 13, 2007					98	157	0.63	Spring Lake		Jumbos
April 16, 2007					150	249	0.60	Golf Course Pond		Jumbos
April 17, 2007					300	510	0.59	Dalton Lake		Jumbos
April 20, 2007					25	40	0.63	Garfield Pond		Jumbos
April 20, 2007					25	40	0.63	Gilcrest Pond		Jumbos
April 23, 2007					100	160	0.63	Jefferson Park Pond		Jumbos
April 23, 2007					100	160	0.63	Lions Park Pond		Jumbos
April 24, 2007					100	166	0.6	Curl Lake		Jumbos
May 8, 2007					25	51	0.49	Dayton Jv Pond		Jumbos
May 10, 2007					100	204	0.49	Curl Lake		Jumbos
May 10, 2007					131	267	0.49	Rainbow Lake		Jumbos
May 11, 2007					76	155	0.49	West Evans Pond		Jumbos
Page 6 Total					1,630	2,799				
Total					4,200	6,408				

Fish food purchased with state funds for the Jumbo trout program.

Table 22. Brood Year 2006 Spokane Rainbow trout plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
January 5, 2007	227,501						290/oz			
January 8, 2007			200				290/oz	Pomeroy Elementary		
January 11, 2007			200				290/oz	Dayton Elementary		
January 11, 2007			200				290/oz	Garrison Middle school		
January 11, 2007			200				290/oz	Garrison Middle school		
January 11, 2007			200				290/oz	Touchet Elementary		
January 11, 2007			200				290/oz	Walla Walla High		
January 12, 2007			200				290/oz	Asotin Elementary		
January 12, 2007			200				290/oz	Asotin High school		
January 12, 2007			200				290/oz	Clarkston High school		
January 12, 2007			200				290/oz	Lincoln Middle school		
January 12, 2007			200				290/oz	Dayton Elementary		
April 19, 2007					14,880	30	496	Rainbow Lake		
April 19, 2007					6,349	12.8	496	Spring Lake		
September 17,2007					100	26	3.8	Lions Park Pond		
September 17,2007					123	31	3.8	Donnie Lake		
	227,501		2,200		21,452	100				

Table 23. Brood Year 2006 Kamloops rainbow trout plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
January 3, 2007	65,000						423/oz			triploids
July 3, 2007			26,560	320			83	Lyons Ferry Hatchery		triploids
July 5, 2007			27,248	348			78	Lyons Ferry Hatchery		triploids
	65,000		53,808	668	0					

Table 24. Brood Year 2005 Spokane Rainbow trout plants and transfers.

PLANTS

LYONS FERRY HATCHERY

Page 1 of 2

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Feb. 14, 2007					1,500	500	3.0	Riparia Pond		
Feb. 15, 2007					6,075	2,025	3.0	Quarry Pond		
Feb. 15, 2007					7,050	2,350	3.0	Dalton Pond		
Feb. 15, 2007					3,500	1,167	3.0	West Evans Pond		
Feb. 16, 2007					3,000	1,000	3.0	Golf Course Pond		
Feb. 21, 2007					2,754	918	3.0	Bennington Lake		
Feb. 21, 2007					2,502	834	3.0	Watson Lake		
Feb. 21, 2007					501	167	3.0	Beaver Lake		
Feb. 21, 2007					3,504	1,168	3.0	Blue Lake		
Feb. 22, 2007					3,000	1,000	3.0	Big Four Lake		
Feb. 23, 2007					2,001	690	2.9	Spring Lake		
Feb. 23, 2007					3,002	1,035	2.9	Rainbow Lake		
Feb. 23, 2007					702	242	2.9	Deer Lake		
Feb. 26, 2007					2,010	670	3.0	Orchard Pond		
Feb. 27, 2007					1,002	358	2.8	Pampa Pond		
Feb. 27, 2007					3,038	1,085	2.8	Fish Hook Park Pond		
Feb. 27, 2007					1,002	358	2.8	Marmes Pond		
Feb. 27, 2007					1,002	358	2.8	Dam Pond		
March 5, 2007					1,001	417	2.4	Silcott Pond		
March 6, 2007					504	210	2.4	Jefferson Park Pond		
March 7, 2007					6,510	3,100	2.1	Dalton Pond		
Subtotal					55,160	19,652	2.8			

Table 24. Continued - Brood Year 2005 Spokane Rainbow trout plants and transfers.

PLANTS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 1 Total					55,160	21,761				
March 7, 2007					3,570	1,700	2.1	West Evans Pond		
March 7, 2007					3,045	1,450	2.1	Golf Course Pond		
March 8, 2007					6,300	3,000	2.1	Quarry Pond		
March 13, 2007					2,520	1,200	2.1	Watson Lake		
March 13, 2007					3,003	1,430	2.1	Rainbow Lake		
March 13, 2007					2,835	1,350	2.1	Blue Lake		
March 13, 2007					1,995	950	2.1	Spring Lake		
March 14, 2007					2,504	1,252	2.0	Bennington Lake		
March 14, 2007					1,000	500	2.0	Marmes Pond		
March 16, 2007					1,000	500	2.0	Dayton Jv Pond		
Page Totals					27,772	13,332				
Total					82,932	35,093				

Table 25. Brood Year 2006 Spokane Rainbow trout plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
May 3, 2007			170,125	2,892			59.0	IDF&G		
			170,125	2,892						

Table 26. Brood Year 2005 Kamloop rainbow trout plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
September 7, 2006			46,894	1,980			24	IDF&G		
			46,894	1,980						

