

**Washington State Department
Of
Fish and Wildlife**

**Lyons Ferry Complex
Annual Operation Report**

October 1, 2008 thru September 30, 2009

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INTRODUCTION

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

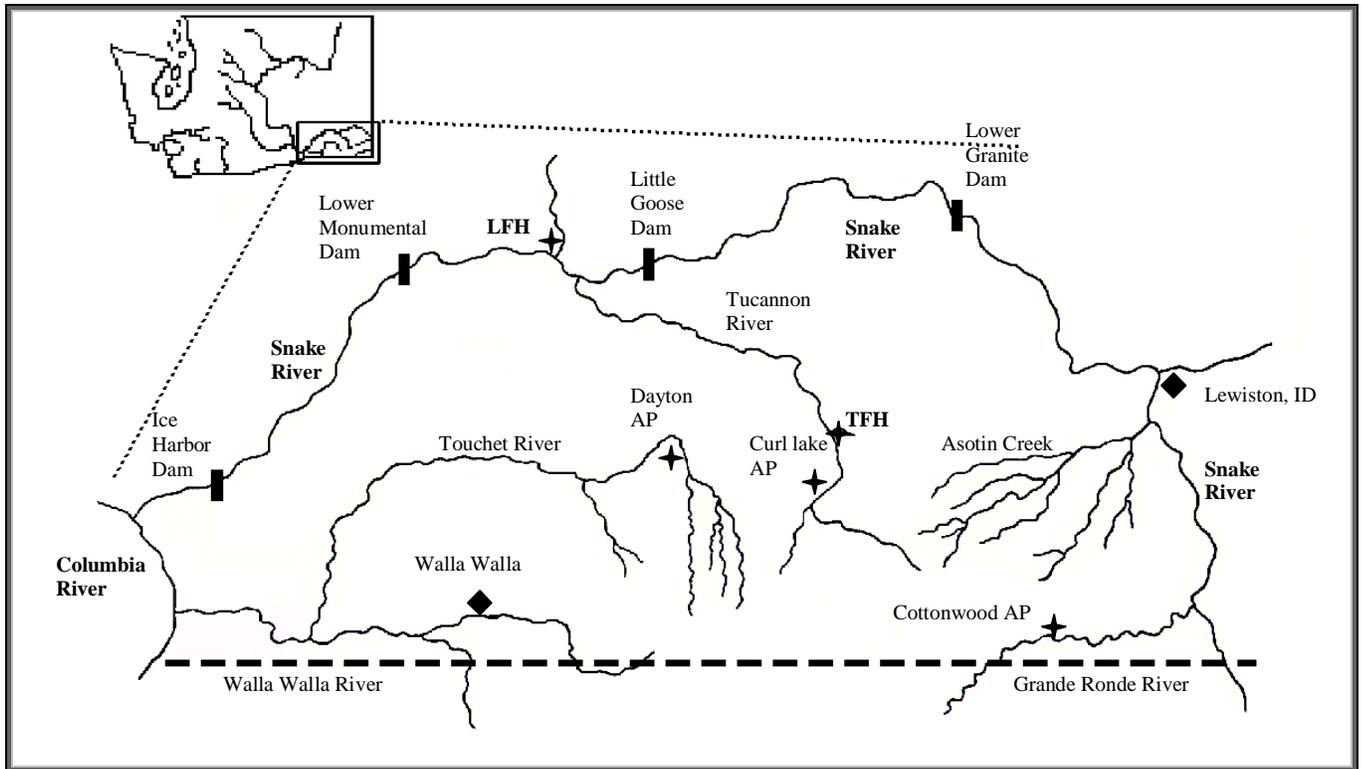


Figure I. Map of the Lower Snake River Compensation Plan (LSRCP) LFC Facilities, and major rivers and streams in Southeast Washington.

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 was completed in 1985. Major upgrades at TFH also occurred at that time, and operation of that facility has been funded by LSRCP every 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 fed 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

The Tucannon spring Chinook supplementation program is solely comprised of conventional in-river broodstock sources. 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. 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.

2007 Brood Year

The BY 2007 Tucannon spring Chinook smolts were planted in the spring of 2009. There were 114,681 smolts released from the Curl Lake acclimation site. See [table 1](#).

2008 Brood Year

In August and September 2008, there were 193,324 spring Chinook eggs taken. The Tucannon spring Chinook fry were ponded and started feeding in December 2008. These fish were reared in raceways at LFH and were marked starting in early September 2009. The supplementation yearlings were transferred from LFH to TFH in October 2009. See [tables 2 & 3](#). These fish will be transferred to Curl Lake AF in February 2010 and released in April 2010.

2009 Brood Year

The BY 2009 Tucannon spring Chinook adults arrived at the Rainbow Lake trap between May and September of 2009. See [tables 4 & 5](#) for adult collection and spawning. There were 323,341 spring Chinook eggs taken during this reporting period.

FALL CHINOOK

The LFH fall Chinook program is presently below its LSRCP adult mitigation goal. LFH origin fall Chinook that return 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 provides 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 4.981 million eggs for the production programs.

Rearing density reductions occurred for the BY 2002 year sub-yearlings. Modification of the four adult salmon holding ponds to eight holding ponds in July 2009 will provide expanded rearing of sub-yearling Chinook at a density index (DI) target of 0.09 or less. The purpose of this DI is to reduce or eliminate the occurrence of Bacterial Gill Disease (BGD), which had been a continual problem prior to BY 2002, 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. The visual implant elastomer tagging of the on-station yearling release group of 450,000 was discontinued for BY 2008. It was determined that the coded-wire-tag (CWT) was sufficient to identify the adults from this release group. All yearlings from the on-station release group are CWT'd.

2007 Brood Year

In April 2009, there were a total of 907,431 BY 2007 Snake River fall Chinook yearlings planted in the Basin. See [table 6](#).

2008 Brood Year

There were 5,010,224 fall Chinook eggs taken in October and November of 2008. See [table 23](#). These fall Chinook were ponded and started feeding in January 2009. The NPT hatchery and acclimation facilities received 1,419,496 sub-yearlings, 200,744 sub-yearlings were directly planted into Couse Creek, a surplus group of 181,400 subyearlings were directly planted into the Grande Ronde and LFH released 200,695 sub-yearlings on-site in 2009. The yearling program fish were reared in raceways throughout the summer. The NPT acclimation yearlings and LFH yearlings were marked during the fall of 2009. The NPT fish will be kept in raceways until they are transferred to their acclimation facilities in February and March 2010. The yearlings at LFH will be released in the spring of 2010 directly from rearing lake 2. See Brood Year 2008 Plants and Transfers [table 7](#).

The BY 2008 program consisted of six egg takes which created challenges for achieving transfer size goals on sub-yearlings. Reducing the number of takes in the future will support size goal issues. The total egg take exceeded the program allotment, creating a surplus release group. However, following scale sampling results, egg culling of stray origin further reduced the surplus.

2009 Brood Year

Snake River fall Chinook trapping started at LGD and LFH in September 2009. See adult collection and spawning [tables 8 & 9](#) 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. These fish also promote a very popular sport fishery on the Grande Ronde, just adjacent to Cottonwood Creek. A small trapping structure was installed in Cottonwood Creek 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 25.7). The trap is run intermittently until April, when high stream flows usually disable the trap. In early spring of 2009, consistent high water prohibited the operation of this trap after an initial blowout. Broodstock was collected at the Tucannon Fish Hatchery Trap. Broodstock collections take place over the entire trapping period.

Touchet stock steelhead are trapped at the new Dayton AF trap facility 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 collections 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 fish are adipose fin clipped and transferred to Rearing Lake 1 at LFH. A planned release goal is 345,000 juveniles for BY 2009. Following is the release goal for each release location in the spring of 2010: 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 85,000 were transferred from lake 1 to 4 raceways and were marked for each release group for ongoing evaluation. In January, ~20,000 fish programmed for transfer to the Dayton AF received a coded wire tag (CWT) and left ventral fin clip (LV) + 3,500 PIT tags. The LFH release tagged group, ~20,000 fish, received CWT+LV marks + 1,500 PIT tags. The Walla Walla River mark group, ~20,000 fish, received a CWT+LV mark + 3,500 PIT tags. The Tucannon mark group, ~20,000 fish, received a CWT+LV mark + 3,500 PIT tags.

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 volitional 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.

2008 Brood Year

There were 366,111 Lyons Ferry summer steelhead yearlings released at various locations in April of 2009. See [table 10](#).

2009 Brood Year

There were 490,434 BY 2009 Lyons Ferry summer steelhead eggs taken in the months of January and February 2009. See adult collection and spawning [table 11](#) and egg take [table 23](#) for information. The yearling fish were reared into August in the raceways and were then adipose clipped and transferred to rearing lake 1.

2010 Brood Year

Collection of BY 2010 Lyons Ferry summer steelhead began in September 2009. Adult fish were collected weekly from the trap at Lyons Ferry Hatchery. See [table 12](#) for adult collection numbers during this reporting period.

Wallowa Stock

In August and September all of these fish are adipose fin clipped, including ~20,000 marked with a CWT+LV marks + 6,000 PIT tags 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.

2008 Brood Year

There were 170,232 yearling Wallowa summer steelhead released into the Grande Ronde River in April of 2009. See [table 13](#).

2009 Brood Year

The Wallowa summer steelhead adults were trapped at Cottonwood Creek trap during March and April 2009. See [table 14](#). There were 487,909 eggs taken in March and April from these adults. Out of these eggs, only 159,753 eggs were kept due to the high number of IHNV positive females. See [table 23](#). There were also 40,000 eggs received from the Wallawa Hatchery in Oregon to supplement the IHNV positive females collected from Cottonwood. 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 are CWT 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.

2008 Brood Year

Due to a low return of BY 2008 adults there were no yearlings released in the Tucannon River above the Curl Lake intake trap in spring 2009. See [table 15](#) for additional release information.

2009 Brood Year

The Tucannon natural steelhead adults were captured at the Rainbow Lake intake trap (river 36.7). Spawning generally occurs during February and March each year. This year, 77,279 BY2009 Tucannon River summer steelhead eggs were taken see [table 23](#). Also, see [table 17](#) for adult collection and spawning information. There are currently 59,162 fish that will be transported to the Tucannon Hatchery in February and directly released above the Curl Lake intake in April 2010.

Touchet Stock

All Touchet River Endemic stock are reared in standard raceways at LFH. These fish are CWT 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.

2008 Brood Year

In April 2009, there were 49,656 BY 2008 yearlings released into the Touchet River at river mile 57.2. See [table 18](#) for more information on this release. A small group of 5,980 BY 2008 smolts were retained for a pilot study on 2-year smolt survival. This study is driven by little or no productivity from the smaller smolts in the yearling population. These fish will be released with a separate tag code along with the BY 2009 yearling group in April 2010.

2009 Brood Year

There were 72,543 eggs taken from BY 2009 Touchet summer steelhead adults. See [table 19](#) and [table 23](#) for spawning and egg information, respectively.

COHO

Incidental catch of coho occurs during the trapping season for fall Chinook and steelhead at LFH. Trapped Coho are were not held at LFH this year due to a high return in basin for supporting the Nez Perce Tribe program. See [table 20](#) for adult coho collection.

BULL TROUT

Bull trout captured at the Tucannon trap are enumerated and passed upstream. See [table 21](#).

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 yearlings 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 SE Washington program, and 70,000 triploid eyed Kamloops stock eggs (provided by IDFG) to meet part of the LSRCP mitigation requirement within Idaho ([table 35](#)). 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 2007 and 2008 Spokane rainbow plants and transfers are listed in tables [26](#), [27](#), [28](#), [29](#) for TFH, and tables [31](#), [32](#), & [33](#) for LFH. The Kamloops rainbow transfer and plants are listed in tables [34](#) & [35](#).

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, 2008 to September 30, 2009. Adult sampling for viral and bacterial pathogens and fish health inspections are included.

Major fish health problems were bacterial gill disease in fall chinook sub-yearling, bacterial coldwater disease (BCWD) in rainbow trout and steelhead, and infectious hematopoietic necrosis (IHN) virus detection in adult summer steelhead. Bacterial gill disease (BGD) caused mortality in fall Chinook sub-yearlings in all four large raceways and required chloramine-T treatments. Bacterial coldwater disease was diagnosed in Spokane and Hayspur rainbow trout along with Lyons Ferry and Touchet summer steelhead. The BCWD infected fish were feed Aquaflor medicated feeds. Finally, IHN virus was detected in the Wallowa summer steelhead adults at Cottonwood Pond and resulted in the destruction of the eggs from IHN virus positive females. Also, IHN virus was detected in one female Touchet and Tucannon River summer steelhead spawner with fry from IHN positive females were released into their river of origin.

Preventative fish health management was employed with bacterial gill disease, bacterial kidney disease and infectious hematopoietic necrosis. 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, along with feeding of erythromycin medicated rations. With IHN in steelhead, female broodfish were screened and segregation and destruction or fry releases of progeny were employed.

Lyons Ferry Hatchery

Lyons Ferry Fall Chinook

Adults - 2008 Spawning

At spawning, samples are collected for viral and BKD-ELISA testing. Female fall chinook from the second through sixth spawning week were sampled for BKD-ELISA. A total of 895 females were tested.

BKD prevalence was low with 99.8% Below-Low females (Table 2). Progeny of below-low BKD females were selected for the yearling programs. Progeny of below-low and low BKD females were selected for shipment to IDFG and ODFW. Progeny of all other females were utilized in the sub-yearling programs. No viral pathogens were detected ([Table 1](#)).

2007 Broodyear

The 2007 broodyear Lyons Ferry fall chinook were healthy throughout the reporting period and upon release.

2008 Broodyear

Fall Chinook sub-yearlings in AP29, AP30, AP31 and AP32 were diagnosed with bacterial gill disease in April 2009.. The fish were successfully treated with chloramines-T at 10 ppm in 1 hr drip for three consecutive days.

As a BKD preventative strategy, the yearling fish were treated with erythromycin medicated feed in May and June 2009.

Tucannon Spring Chinook

Adults - 2009 Spawning

At spawning, samples are collected for viral testing and BKD-ELISA testing. IHN virus was also detected in the spawning adults (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 2009 spawning season.

The BKD-ELISA results from the 2008 spawning season are shown in Table 2. BKD prevalence was low with 93.3% below-low females.

2007 Broodyear

The 2007 broodyear Tucannon spring chinook were healthy throughout the rearing cycle at Lyons Ferry Hatchery. The fish were transferred to Tucannon Hatchery in October, 2008.

2008 Broodyear

The 2008 broodyear 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 and June 2009.

Lyons Ferry Summer Steelhead

Adults - 2009 Spawning

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

2008 Broodyear

The 2008 broodyear Lyons Ferry summer steelhead were healthy throughout the reporting period and upon release.

2009 Broodyear

Bacterial coldwater disease was observed in the 2008 broodyear Lyons Ferry summer steelhead in May and June 2009. The fish were successfully treated with Aquaflor medicated feed. After recovery from the BCWD outbreak, the fish were healthy throughout the reporting period.

Wallowa Summer Steelhead

Adults - 2009 spawning at Cottonwood Pond

All female steelhead adults were sampled for viral pathogens at spawning. IHN virus was detected in 66 of 113 (58.41%) females spawned (Table 1). The eggs from the IHN virus positive females were destroyed.

2008 Broodyear

The 2008 broodyear Wallowa summer steelhead were healthy throughout the reporting period and upon transfer to Cottonwood Pond.

2009 Broodyear

The 2009 broodyear Wallowa River summer steelhead fish were healthy throughout the reporting period.

Tucannon River Summer Steelhead

Adults - 2009 Spawning

All female steelhead adults were sampled for viral pathogens at spawning. IHN virus was detected in 1 of 14 (7.1%) of females spawned (Table 1). The fry from the positive female was release into the Tucannon River.

2007 Broodyear

The 2007 broodyear Tucannon River summer steelhead fish were healthy throughout the reporting period and upon release.

2008 Broodyear

The 2008 broodyear Tucannon River summer steelhead fish were healthy throughout the reporting period.

Touchet River Summer Steelhead

Adults - 2009 Spawning

All female steelhead adults were sampled for viral pathogens at spawning. IHN virus was detected in 1 of 15 (6.7%) of females spawned (Table 1). The fry from the positive female were released into the Touchet River.

2007 Broodyear

The 2007 broodyear Touchet River summer steelhead fish were healthy throughout the reporting period and upon release.

2008 Broodyear

The 2008 broodyear Touchet River summer steelhead fish were healthy throughout the reporting period. One round tank with yearling Touchet summer steelhead experienced severe dorsal fin erosion caused by BCWD. An experimental treatment with regular formalin drip for two weeks was employed without success.

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.

2007 Broodyear

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

2008 Broodyear

Bacterial coldwater disease was observed in the Spokane rainbow in March through June 2009. The fish were successfully treated with Aquaflor medicated feed. The fish recovered and were healthy throughout the remaining reporting period.

Hayspur Rainbow Trout

2008 Broodyear

Bacterial coldwater disease was observed in the Hayspur rainbow in July, 2009 following transfer from Tucannon Hatchery. The fish were successfully treated with Aquaflor medicated feed. The fish recovered and were healthy throughout the remaining reporting period.

Tucannon Hatchery

Tucannon Spring Chinook

2007 Broodyear

The 2007 broodyear Tucannon spring chinook were healthy throughout the reporting period and upon release.

Spokane Rainbow Trout

2007 Broodyear

The 2007 broodyear Spokane rainbow trout were healthy throughout the reporting period and upon release.

2008 Broodyear

Bacterial coldwater disease was observed in the Spokane rainbow in May 2009. The fish were successfully treated with Aquaflor medicated feed. The fish recovered and were healthy throughout the remaining reporting period.

Hayspur Rainbow Trout

2008 Broodyear

The 2008 broodyear Hayspur rainbow trout were healthy throughout the reporting period.

Table 1. Broodstock viral testing, 2008 - 2009.

Location	Date	Species-Stock	No. OF	No. KS	Results
Lyons Ferry	11-08	CHF-Snake River	60	60	Negative
Lyons Ferry	01-09	SS-Lyons Ferry	105	60	Negative
Cottonwood Pond	04-09	SS-Wallowa	113	60	IHN virus
Lyons Ferry	04-09	SS-Touchet River	15	15	IHN virus
Lyons Ferry	04-09	SS-Tucannon River	14	14	IHN virus
Lyons Ferry	09-09	CHS-Tucannon River	60	60	IHN virus

OF = ovarian fluid
 KS = kidney/spleen

Table 2. BKD-ELISA testing of female chinook broodstocks at Lyons Ferry Hatchery in 2008.

Species-Stock	No. Tested	Below Low		Low		Mod		High	
		No	%	No	%	No	%	No	%
CHF Snake R.	895	892	99.7%	3	0.3%	0	0%	0	0%
CHS Tucannon R.	60	56	93.3%	4	6.7%	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:

No other changes in personnel during this reporting period.

SIGNIFICANT PURCHASES:

New 12' flatbed trailer was purchased to replace the GMC flatbed truck.

New jig welder was purchased for the shop.

Pre-fabricated carport for heavy equipment storage was purchased by LSRCP and installed by hatchery crew.

Road scraper for the ford tractor.

New drill press for the shop.

New alarm pagers for all employees.

Stainless steel tables for use with spawning fall Chinook.

New gator 4x6 with enclosed cab.

Many tons of rock for hatchery garden beautification.

PROJECTS:

An adult holding modifications project was funded by the Umatilla Tribe and contracted by the LSRCP through McMillen Engineering. The adult ponds were divided from four to eight by installing new concrete walls. A portable adult return-to-river pipe was also installed.

The adult spawn buildings and visitor center had new roofs installed by contract.

Marmes Pump #5 was rebuilt including some rusted columns. Pump #1 had electrical repairs.

Marmes intake road was re-graveled

HOUSING MAINTENANCE:

Three resident carports were installed.

SIGNIFICANT EVENTS:

There was a budget amendment to the FFY-09 contract. \$108,000 was deobligated following the removal of the VIE tag component of the fall Chinook on-station yearlings.

TUCANNON FISH HATCHERY

PERSONNEL:

Mike Manky was promoted from an FHS-2 to a FHS-3 at the Tucannon Hatchery in September 2009. Mark Hall was appointed a six-month temporary position in the absence of the FHS-3. We are preparing to fill the FHS-2 vacancy.

SIGNIFICANT PURCHASES:

Purchased new pressure switches for spring and both well pumps.

Replace Wheel tractor with John Deere 110 4x4 tractor / backhoe. An asphalt sweeper and field mower were purchased as additional implements for the John Deere 110 tractor.

Top and side panel netting for all six round ponds.

Aluminum net frame materials for all six round ponds.

Replace vehicle 2000 Chevrolet 1500 4x4 with a 2010 Ford F-150 4x4.

Add an 8'x16' wood framed / metal exterior storage unit in the river intake compound.

Four hatchery-building windows received new blinds.

PROJECTS:

Constructed and installed jump prevention passage panels over the river intake sheet pile dam.

Fall and remove hazard trees above residence #1.

Staff made a short-term repair to the spring collection-building roof.

Snake River Fence Company installed approximately 235' of 6' cyclone fencing around the perimeter of the river intake building and trap. This will provide more security of the adults in the trap and the surrounding equipment.

McMillen Construction removed a portion of the old outlet sheet piling. The contractor removed most of the old sheet piling from the site.

McMillen Construction fixed a leak at the river intake sheet pile dam. There was water undermining the dam under a concrete slab.

HOUSING MAINTENANCE:

Replaced / updated bedroom blinds in residences #1 & #2.

Replaced laminate counter top in residence #2 bathroom and kitchen counter tops.

Replace front entry storm door on residence #2.

SIGNIFICANT EVENTS:

Due to the high snow amounts in the mountains, during an extended spring runoff, we witness abnormally high numbers of logs and debris that built up on our intake dam. The benefit to this high snow amount is that we had much cooler summer river temperatures than average.

There was a budget amendment to the FFY-09 contract. \$16,000 was deobligated due to unused salary funds from the vacant HS-3 position. This position was filled in September, at the end of the reporting period.

DAYTON ACCLIMATION POND

PERSONNEL:

Kent Weaver was re-hired as a temporary hatchery specialist during operations from February thru April. Kent's leadership and experience as a supervisor with WDFW are a huge asset to the program. Nathan Rouche substituted for Kent during work rotations.

SIGNIFICANT PURCHASES:

Materials for the trap cover/walkway were purchased.

PROJECTS:

Staff from the complex constructed a dam board storage rack.

An Operations and Maintenance Plan is currently being developed for WDFW and local Irrigators. A formal MOA should be completed by December 2009 for the management of this consolidation project.

HOUSING MAINTENANCE:

No significant housing maintenance events this year.

SIGNIFICANT EVENTS:

No significant events this year.

COTTONWOOD ACCLIMATION POND

PERSONNEL:

Tim Huwe was re-hired as a temporary hatchery specialist during operations from February thru April. Tim's leadership and experience as a hatchery foreman with WDFW are a huge asset to the program. Nathan Rouche substituted for Tim during work rotations.

SIGNIFICANT PURCHASES:

Walkway planks were replaced on culvert exit walkway.

PROJECTS:

Performed the annual clean-out of the drainage channel below the road.

HOUSING MAINTENANCE:

No significant housing maintenance events this year.

SIGNIFICANT EVENTS:

No significant events this year.

Table 1. Brood Year 2007 Tucannon spring Chinook - Mixed 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				
9/26/2008	59,886	1,837					32.6		36.0	CWT+VIE right purple
9/29/2008	55,880	2,166					25.8		36.0	CWT+VIE right blue
4/22/2009					59,201	4,853	12.2	Tucannon River	40.7	CWT+VIE right purple
4/22/2009					55,480	7,023	7.9	Tucannon River	40.7	CWT+VIE right blue
Total	115,766	4,003			114,681	11,876				

NOTE: All fish were CWT marked.

Table 2. Brood Year 2008 Tucannon spring Chinook – Mixed Hatchery – Transfers (Lyons Ferry).

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				
9/28/09			88,276	3,098			28.5	Tucannon Hatchery	36.0	CWT+VIE right purple
10/05/09			86,495	3,932			22	Tucannon Hatchery	36.0	CWT+VIE right blue
Total			174,771	7,030						

NOTE: All fish were CWT marked.

Table 3. Brood Year 2008 Tucannon spring Chinook – Mixed 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				
09/28/09	88,276	3,098					28.5		36.0	CWT+VIE right purple
10/05/09	86,495	3,932					22		36.0	CWT+VIE right blue
Total	174,771	7,030								

NOTE: All fish were CWT marked.

Table 4. Brood Year 2009 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		RETURNED TO RIVER			SHIPPED TO LFH			MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	NVF	J x	MALE	FEMALE	J x
	MAXI	MINI																
May -09	3			1		1	1											
Jun - 09	296	256	61	152	252	34	49	3			1							
Jul - 09	43	9 4	14	30	92						2							
Aug - 09	20	2 2	8	12	21						1		1					
Sep - 09	48	5 3	10	34	53				3	2		28	53	1	3			
SEASON TOTAL	410	425	93	229	418	35	50	3	3	2	4	28	54	1	3	0	0	0

Table 5. Brood Year 2009 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		RETURNED TO RIVER			SHIPPED TO LFH			MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	NVF	J x	MALE	FEMALE	Jx
	MAXI	MINI																
May - 09	15		2	7			6											
Jun - 09	209	43	44	86	39	44	35	4										
Jul - 09	28	12	15	13	12													
Aug - 09	14	2	11	3	2							2						
Sep - 09	61	6	26	35	6							43	42	0	3			
SEASON TOTAL	327	63	98	144	59	44	41	4				45	42	0	3	0	0	0

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

Table 6. Brood Year 2007 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	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
2/3/09			71,500	5,813			12.3	Capt. John's Rapids AP-NPT		AdCWT
2/3/09			70,749	5,833			12.3	Capt. John's Rapids AP-NPT		CWT only
3/3/09			81,859	6,655			12.3	Pittsburg Landing AP-NPT		AdCWT
3/3/09			71,500	5,813			12.3	Pittsburg Landing AP-NPT		CWT only
3/6/09			73,800	5,904			12.5	Big Canyon AP-NPT		AdCWT
3/6/09			82,871	6,630			12.5	Big Canyon AP-NPT		CWT only
4/8/09					227,000	24,674	9.2	On-site release	59	AdCWT+VIE
4/8/09					228,152	24,799	9.2	On-site release	59	CWT+VIE
Total			452,279	36,648	455,152	49,473				

Table 7. Brood Year 2008 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	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
5/5/09			101,000	1,207			83.7	Pittsburg Landing AP-NPT		AdCWT
5/5/09			101,000	1,207			83.7	Pittsburg Landing AP-NPT		CWT only
5/5/09			215,166	2,571			83.7	Pittsburg Landing AP-NPT		UM
5/7/09			101,000	1,263			80.0	Big Canyon AP-NPT		AdCWT
5/7/09			101,000	1,263			80.0	Big Canyon AP-NPT		CWT Only
5/7/09			274,800	3,435			80.0	Big Canyon AP-NPT		UM
5/5/09			101,000	1,290			78.3	Capt. John's Rapids AP-NPT		AdCWT
5/5/09			101,000	1,290			78.3	Capt. John's Rapids AP-NPT		CWT Only
5/5/09			323,530	4,132			78.3	Capt. John's Rapids AP-NPT		UM
5/26/09					200,744	4,317	46.5	Couse Creek	158	100% AdCWT
6/3/09					181,400	3,628	50.0	Grande Ronde	31	100% AdCWT
6/2/09					200,695	3,882	51.7	On-Site Release	59	100% AdCWT
Total			1,419,496	17,658	582,839	11,827				

Table 8. Brood Year 2008 Snake River fall Chinook adult collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Lyons Ferry Hatchery

MONTH ENDING	EST. TRAP/RECEIVE		RETURNED TO RIVER			SHIPPED/PLANTED			MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	NVF	J x	MALE	FEMALE	J x
Sep - 08	1,262	146							3		5							10
Oct - 08	8 7 6	176							5	12	48	206	189	2	10	44	2	755
Nov - 08	71	37	740	114	130				42	29	105	144	256	3	3	80	9	38
Dec - 08																		
SEASON TOTAL	2,209	359	740	114	130				50	41	158	350	445	5	13	124	11	803

Table 9. Brood Year 2008 Snake River fall Chinook adult collection and spawning - LGR

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Lower Granite Dam

MONTH ENDING	EST. TRAP/RECEIVE		RETURNED TO RIVER			SHIPPED/PLANTED			MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	NVF	J x	MALE	FEMALE	J x
	MAXI	MINI																
Aug - 08	55	16							1									
Sep - 08	2,151	670							4	3	7							18
Oct - 08	224	216							17	15	17	159	186	2		44	7	776
Nov - 08	46	38							162	24	80	755	699	8	4	129	20	31
Dec - 08			150	20					39		2					59	6	3
SEASON TOTAL	2,476	940	150	20					222	43	106	914	885	10	4	232	33	828

Table 10. Brood Year 2008 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				
2/11/09 – 2/12/09			65,322	9,897			6.5	Dayton AP		AD Only
2/11/09			20,803	3,152			6.5	Dayton AP		AD/LV/ CWT 63-46/83
4/16/09 – 4/27/09					65,314	13,329	4.9	From Dayton AP	54	AD Only
4/16/09 – 4/27/09					20,801	4,245	4.9	From Dayton AP	54	AD/LV/ CWT 63-46/83
4/20/09 – 4/22/09					43,784	10,182	4.3	On-site release	58	AD Only
4/16/09					21,266	4,785	4.2	On-site release	58	AD/LV/ CWT 63-46/84
4/20/09 – 4/22/09					87,420	20,330	4.3	Walla-Walla River	29.6	AD Only
4/21/09					21,531	4,785	4.5	Wall-Walla River	29.6	AD/LV/ CWT 63-46/86
4/20/09 – 4/22/09					85,855	19,966	4.3	Tucannon River	11	AD Only
4/15/09					20,140	4,912	4.1	Tucannon River	11	AD/LV/ CWT 63-46/85
Total			86,125	13,049	366,111	82,534				

Table 11. Brood Year 2009 Lyons Ferry summer steelhead - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: LFH Trap

MONTH ENDING	EST. TRAP/RECEIVE		RETURNED TO RIVER				SHIPPED/PLANTED			MORTALITY			SPAWNED				DISPOSAL				
	ADULTS	JACKS	MALE	FEMALE	J	x	MALE	FEMALE	J	x	MALE	FEMALE	Jx	MALE	FEMALE	NVF	Jx	MALE	FEMALE	Jx	
	MAXI	MINI																			
Sep - 08	776									11	15										
Oct - 08	816		64							6	20										
Nov - 08	131		575	514						13	54										
Dec - 08										3	4									19	
Jan - 09										5	2		69	70					3		
Feb - 09										6	5		36	36					67	85	
SEASON TOTAL	1,723		639	514						44	100		105	106				70	104		

Table 12. Brood Year 2010 Lyons Ferry summer steelhead - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: LFH Trap

MONTH ENDING	EST. TRAP/RECEIVE		RETURNED TO RIVER			SHIPPED/PLANTED			MORTALITY			SPAWNED				DISPOSAL		
	ADULTS	JACKS	MALE	FEMALE	Jx	MALE	FEMALE	J x	MALE	FEMALE	Jx	MALE	FEMALE	NVF	Jx	MALE	FEMALE	Jx
	MAXI	MINI																
Sep - 09	750								1	3								
Oct - 09	739									3								
Nov - 09	168		543	603					12	35								
SEASON TOTAL	1,657		543	603					13	41								

Table 13. Brood Year 2008 Wallawa 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				
2/3/09 – 2/5/09			21,624	3,180			6.8	Cottonwood AP	28.7	AD/LV/ CWT 63-46/82
2/3/09 – 2/5/09			148,608	21,854			6.8	Cottonwood AP	28.7	Ad Only
4/13/09– 4/30/09					21,624	4,601	4.7	Grande Rhonde	28.7	AD/LV/ CWT 63-46/82
4/13/09- 4/30/09					148,608	31,619	4.7	Grande Rhonde	28.7	Ad Only
Total			170,232	25,034	170,232	36,220				

Table 14. Brood Year 2009 Wallowa summer steelhead - Hatchery - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Cottonwood Creek Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED		RETURNED TO STREAM						MORTALITY			SPAWNED				DISPOSAL		
	A b o v e R a c k		B e l o w R a c k			T r a p			Lethal	Lethal	Live	Live						
	ADULTS	Jx	MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	U K	MALE	VF/NVF	N V F	MALE	MALE	FEMALE	Jx
Feb-09	107																	
Mar-09	1,436		541	593				4	12		78	73				13	26	
Apr-09	770		255	517				20	18		47	40				26	50	
SEASON TOTAL	2,313		796	1,110				24	30		125	113				39	76	

Table 15. Brood Year 2008* 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				
8/28/08					2,344	12	197	Tucannon River	36.7	
Total										

***NOTE: These fish were reported in the 2007-08 Annual Report due to the release date of August 2008.**

Table 16. Brood Year 2009 Tucannon River summer steelhead - Wild - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY/TUCANNON HATCHERY

Adult Collection Site: Marengo Trap/Rainbow Lake Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED								MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	Jx	Returned to River			Trucked to LFH			Trap			Lethal	Lethal	Live	Live				
			MALE	FEMALE	Jx	MALE	FEMALE	Jx	MALE	FEMALE	U K	MALE	FEMALE	N V F	MALE	MALE	FEMALE	J x	
Nov - 08	1			1															
Feb - 09	2			1			1												
Mar - 09	31		12	5		7	7					5			8				
Apr - 09	46		22	26		1	4		2			6			7				
May - 09	8		2	6															
SEASON TOTAL	88		36	39		8	12		2	0	0	0	11	0	15	0	0	0	

Note: Males were live spawned and returned to the river.

Table 17. Brood Year 2009 Tucannon River summer steelhead - Endemic - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY/TUCANNON HATCHERY

Adult Collection Site: Marengo Trap/Rainbow Lake Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED								MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	Jx	Returned to River			Trucked to LFH			Trap			Lethal	Lethal	Live	Live				
			MALE	FEMALE	Jx	MALE	FEMALE	Jx	MALE	FEMALE	U K	MALE	FEMALE	N V F	MALE	MALE	FEMALE	J x	
Nov - 08	1			1															
Jan - 09	11		3	8															
Feb - 09	17		10	7															
Mar - 09	130		66	57	3	4		1				4			2				
Apr - 09	82		40	43				1				0			1				
May - 09	1			1															
SEASON TOTAL	242		119	117	3	4		2	0	0		0	4		3		0	0	0

Note: Males were live spawned at Lyons Ferry and returned back to the Tucannon river.

Table 18. Brood Year 2008 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				
4/27/09					25,722	5,592	4.6	Touchet River	57.2	CWT+PIT 63-46-89
4/28/09					23,934	4,986	4.8	Touchet River	57.2	CWT+PIT 63-46-89
Total					49,656	10,578	4.7			

Table 19. Brood Year 2009 Touchet River summer steelhead - Wild - collection and spawning.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: Dayton Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED		RETURNED TO RIVER						MORTALITY			SPAWNED				DISPOSAL				
	ADULTS	J x	A b o v e R a c k			Trucked above Dayton			Trap			Lethal	Lethal	Live	Live					
			MALE	FEMALE	J x	MALE	FEMALE	J x	MALE	FEMALE	U K	MALE	FEMALE	NVF	Ma le	MALE	FEMALE	Jx		
Feb-09	7		4	2																
Mar-09	67		11	30									4				5			
Apr-09	58		29	37				2					8				10			
May-09	12		4	8																
SEASON TOTAL	144		48	77				2	0	0		0	12		0	15		0	0	0

Table 20. Brood Year 2008 Lyons Ferry coho - Hatchery - collection.

ADULT COLLECTION AND SPAWNING

LYONS FERRY HATCHERY

Adult Collection Site: LFH Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED								SPAWNED				DISPOSAL					
	RETURNED TO RIVER			SHIPPED/PLANTED			MORTALITY			Lethal	Lethal	Live	Live					
	ADULTS	J x	MALE	FEMALE	J x	MALE	FEMALE	Jx	MALE	FEMALE	U K	MALE	VF/NVF	NVF	MALE	MALE	FEMALE	Jx
Oct - 08	26	1				9	17	1										
SEASON TOTAL	26	1	0	0	0	9	17	1			0	0	0	0	0	0	0	0

Note: Coho coincidentally trapped along with fall Chinook volunteering into Lyons Ferry Hatchery.

Table 21. Brood Year 2009 Tucannon River bull trout handling at Rainbow Lake Trap.

ADULT COLLECTION AND SPAWNING

TUCANNON HATCHERY

Adult Collection Site: Rainbow Lake Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED		RETURNED TO RIVER						MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	J x	Above Barrier			Below Barrier			Trap			Lethal	Lethal	Live	Live				
			MALE	FEMALE	Adult	MALE	FEMALE	J x	MALE	FEMALE	U K	MALE	VF/NVF	NVF	Male	MALE	FEMALE	Jx	
Jan - 09	1				1														
Jun - 09	10				10														
Jul - 09	9				9														
Aug - 09	1				1														
SEASON TOTAL	21	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 22. Brood Year 2009 Tucannon River Whitefish handling at Rainbow Lake Trap.

ADULT COLLECTION AND SPAWNING

TUCANNON HATCHERY

Adult Collection Site: Rainbow Lake Trap

MONTH ENDING	EST. TRAPPED/ RECEIVED		RETURNED TO RIVER						MORTALITY			SPAWNED				DISPOSAL			
	ADULTS	J x	Above Barrier			Below Barrier			Trap			Lethal	Lethal	Live	Live				
			MALE	FEMALE	Adult	MALE	FEMALE	J x	MALE	FEMALE	U K	MALE	VF/NVF	NVF	Male	MALE	FEMALE	Jx	
May - 09	1				1														
SEASON TOTAL	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 23. Egg take and disposition summary for the period Oct 1, 2008 - Sept 30, 2009

EGG TAKE AND DISPOSITION

LYONS FERRY HATCHERY

SHEET 1 OF 3

SPAWNING PERIOD	STOCK CODE	FEMALES SPAWNED	EGGS LOST	% LOSS	EGGS EYED	EGGS SHIPPED	EGGS DESTROYED	TOTAL TAKE	FECUNDITY
Oct.-Dec. 2008	CK:FA:SNAK:08:H	1,330	187,019	3.73	2,969,200	1,810,800	43,205	5,010,224	3,767
Aug.-Oct. 2009	CK:SP:TUCA:09:M	96	24,129	7.46	299,212	N/a	N/a	323,341	3,368
Feb.-Mar. 2009	SH:SU:TUCA:09:W	15	8,320	11.0	68,959	N/a	N/a	77,279	5,152
Mar.-Apr. 2009	SH:SU:TOUC:09:W	15	2,742	4.0	69,801	N/a	N/a	72,543	4,836
Jan.-Feb. 2009	SH:SU:LYON:09:H	106	65,310	13.3	425,124	N/a	N/a	490,434	4,627
Mar.-Apr. 2009	SH:SU:WARI:09:H	121	27,386	15.0	172,367 ^a	N/a	328,156 ^b	487,909	5,037

^a**40,000 eggs were transferred to Lyons Ferry Hatchery from Wallowa Hatchery (ODFW) so program goals could be met due to the high number of IHN+ females spawned at Cottonwood.**

^b**Due to the high number of females that tested positive for IHNV these eggs were not picked or sampled so this number is an estimate based on average fecundity per female per take.**

Table 24. Eggs received for Tucannon during the period Oct 1, 2008 - Sept 30, 2009

EGGS RECEIVED

TUCANNON HATCHERY

SHEET 2 OF 3

DATE	SHIPPED FROM	STOCK CODE	EGG STAGE	EGG NUMBER
January 8, 2009	Hayspur Hatchery	RB:NA:KAML:08:H	Eyed	68,703
January 7, 2009	Spokane Hatchery	RB:NA:SPOK:08:H	Eyed	175,029

Table 25. Eggs received/shipped for Lyons Ferry during the period Oct 1, 2008 - Sept 30, 2009

LYONS FERRY HATCHERY

SHEET 3 OF 3

DATE	RECEIVED FROM	SHIPPED TO	STOCK CODE	EGG STAGE	EGG NUMBER
12/15/08	Spokane Hatchery		RB:NA:SPOK:08:H	Eyed	200,177
1/07/09	Spokane Hatchery		RB:NA:SPOK:08:H	Eyed	130,036
12/8/08		Oxbow hatchery	CK:FA:SNAK:08:H	Eyed	210,000
12/30/08		Irrigon Hatchery	CK:FA:SNAK:08:H	Eyed	305,800
12/23/08		Irrigon Hatchery	CK:FA:SNAK:08:H	Eyed	40,000
12/15/08		Umatilla Hatchery	CK:FA:SNAK:08:H	Eyed	585,000
12/23/08		Umatilla Hatchery	CK:FA:SNAK:08:H	Eyed	670,000

Table 26. Brood Year 2007 Spokane rainbow trout (catchable) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

Page 1 of 3

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
9/18/08					197	63.55	3.1	Blue Lake		
10/06/08					524	106.94	4.9	Blue Lake		
04/02/09					7,995	1950	4.1	Quarry Pond		
04/02/09					3,525	750	4.7	Bennington Lk.		
04/02/09					3,240	720	4.5	West Evans Pd.		
04/03/09					8,970	1950	4.6	Dalton Lake		
04/03/09					2,000	465.12	4.3	Pampa Pond		
04/03/09					3,200	800	4	Golf Course Pond		
04/04/09					1,030	251.22	4.1	Dalton Lake		
04/07/09					3,004	751	4	Quarry Pond		
04/07/09					500	125	4	Dayton JV Pond		
04/08/09					2,004	501	4	Fishhook Park Pond		
04/09/09					3,485	850	4.1	Bennington Lk.		
04/09/09					3,198	780	4.1	Blue Lake		
04/09/09					2,481	605.12	4.1	Watson Lake		
04/13/09					2,521	614.88	4.1	Watson Lake		
04/13/09					1,620	395.12	4.1	Deer Lake		
04/13/09					3,198	780	4.1	Rainbow Lake		
04/13/09					1517	370	4.1	Spring Lake		
04/21/09					501	151.82	3.3	Casey Pond		
04/22/09					2,000	606.06	3.3	Garfield Pond		
04/22/09					1,000	303.03	3.3	Gilcrest Pond		
04/22/09					500	151.52	3.3	Lions Park Pond		
Page 1 Total					58,210	14,041.38	4.15			
Sub Total					58,210	14,041.38	4.15			

Table 26. Brood Year 2007 Spokane rainbow trout (catchable) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

Page 2 of 3

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 1 Subtotal					58,210	14,041.38				
04/23/09					500	151.52	3.3	Jefferson Park Pd.		
04/24/09					2,013	610	3.3	Headgate Pond		
04/24/09					4,000	1,212	3.3	Curl Lake		
04/27/09					1,502	442	3.4	Spring Lake		
04/27/09					401	1184	3.4	Donnie Lake		
04/27/09					510	150	3.4	Dayton JV Pond		
04/29/09					3,468	1,020	3.4	West Evans Pond		
04/29/09					3,468	1,020	3.4	Golf Course Pond		
04/29/09					3,468	1,020	3.4	Blue Lake		
05/05/09					4,004	1,144	3.5	Bennington Lake		
05/08/09					4,216	1,240	3.4	Golf Course Pond		
05/12/09					4,002	1,291	3.1	Curl Lake		
05/12/09					3,007	970	3.1	Rainbow Lake		
05/12/09					4,356	1,320	3.3	Blue Lake		
05/19/09					510	150	3.4	Jefferson Park Pd.		
05/19/09					510	150	3.4	Lions Park Pond		
05/20/09					510	150	3.4	Dayton JV Pond		
05/20/09					1,000	294	3.4	Deer Lake		
05/21/09					3,366	1,020	3.3	West Evans Pond		
05/21/09					4,092	1,240	3.3	Watson Lake		
Page 2 Total					48,903	14,712	3.32			
Sub Total					107,113	28,753.81	3.73			

Table 26. Brood Year 2007 Spokane rainbow trout (catchable) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

Page 3 of 3

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 2 Subtotal					107,113	28,753.81				
05/21/09					1,755	585	3	Spring Lake		
06/03/09					1,512	560	2.7	Union Flat Creek		
06/04/09					3,132	1,160	2.7	Golf Course Pond		
06/05/09					3,001	1,072	2.8	Rainbow Lake		
06/05/09					3,500	1,250	2.8	Bennington Lake		
06/05/09					3,010	1,075	2.8	West Evans Pond		
06/08/09					1,904	680	2.8	Blue Lake		
06/09/09					1,110	444	2.5	Watson Lake		
06/09/09					810	324	2.5	Curl Lake		
06/10/09					300	150	2.0	Spring Lake		
Page 3 Total					20,034	7,299.79	2.74			
Sub Total					127,147	36,053.6	3.53			

Table 27. Brood Year 2007 Spokane rainbow trout (Jumbo) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON 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				
02/23/09					300	454.55	0.66	Big Four Lake		Jumbos
02/25/09					100	151.52	0.66	Spring Lake		Jumbos
02/25/09					150	227.27	0.66	Blue Lake		Jumbos
02/25/09					100	151.52	0.66	Rainbow Lake		Jumbos
02/25/09					100	151.52	0.66	Watson Lake		Jumbos
02/27/09					200	303.03	0.66	Rainbow Lake		Jumbos
03/12/09					120	181.82	0.66	Blue Lake		Jumbos
03/25/09					150	223.88	0.67	West Evans Pond		Jumbos
03/25/09					30	44.78	0.67	Blue Lake		Jumbos
03/25/09					100	149.25	0.67	Spring Lake		Jumbos
03/26/09					100	149.25	0.67	Golf Course Pd.		Jumbos
03/26/09					100	149.25	0.67	Rainbow Lake		Jumbos
03/26/09					100	149.25	0.67	Watson Lake		Jumbos
04/02/09					150	223.88	0.67	Bennington Lake		Jumbos
04/02/09					150	223.88	0.67	West Evans Pond		Jumbos
04/03/09					150	223.88	0.67	Pampa Pond		Jumbos
04/03/09					4	5.97	0.67	Golf Course Pd.		Jumbos
04/03/09					146	211.59	0.69	Golf Course Pd.		Jumbos
04/04/09					300	434.78	0.69	Dalton Lake		Jumbos
04/07/09					300	447.76	0.67	Quarry Pond		Jumbos
04/07/09					25	37.31	0.67	Dayton JV Pond		Jumbos
Page 1 Total					2,875	4,295.94	0.67			
Sub Total					2,875	4,295.94	0.67			

Table 27. Brood Year 2007 Spokane rainbow trout (Jumbo) plants and transfers.

PLANTS AND TRANSFERS

TUCANNON HATCHERY

Page 2 of 2

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 1 Subtotal					2875	4,295.94	0.67			
04/08/09					150	220.59	0.68	Fishhook Park Pond		Jumbos
04/09/09					53	77.94	0.68	Blue Lake		Jumbos
04/09/09					75	115.38	0.65	Watson Lake		Jumbos
04/13/09					25	41.67	0.6	Watson Lake		Jumbos
04/22/09					25	37.88	0.66	Garfield Pond		Jumbos
04/22/09					25	37.88	0.66	Gilcrest Pond		Jumbos
04/22/09					50	75.76	0.66	Lions Park Pond		Jumbos
04/23/09					25	37.88	0.66	Jefferson Park Pond		Jumbos
04/24/09					150	241.94	0.62	Curl Lake		Jumbos
04/24/09					100	161.29	0.62	Rainbow Lake		Jumbos
04/27/09					100	169.49	0.59	Spring Lake		Jumbos
04/27/09					25	39.68	0.63	Dayton JV Pond		Jumbos
05/19/09					50	104.17	0.48	Lions Park Pond		Jumbos
05/20/09					25	52.08	0.48	Dayton JV Pond		Jumbos
05/22/09					150	312.5	0.48	Curl Lake		Jumbos
05/22/09					100	208.33	0.48	Blue Lake		Jumbos
06/04/09					75	166.67	0.45	Rainbow Lake		Jumbos
06/05/09					50	111.11	0.45	West Evans Pond		Jumbos
06/09/09					32	74.42	0.43	Watson Lake		Jumbos
06/09/09					20	46.51	0.43	Curl Lake		Jumbos
Page 2 Total					1,305	2,333.17	0.56			
Sub Total					4,180	6,629.11	0.63			

Table 28. Brood Year 2008 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				
01/07/09	175,029	30.81					290/oz.	Spokane Hatchery		
01/09/09			250				290/oz.	Pomeroy Elementary		
01/12/09			250				290/oz.	Asotin Elementary		
01/12/09			250				290/oz.	Asotin High School		
01/12/09			250				290/oz.	Clarkston High School		
01/12/09			250				290/oz.	Lincoln Middle School		
01/12/09			250				290/oz.	Dayton Elementary		
01/12/09			250				290/oz.	Walla Walla High School		
01/12/09			500				290/oz.	Garrison Middle School		
04/28/09					13,545	26.2	517 fpp	Bennington Lake		
Total	175,029		2,250		13,545					

Table 29. Brood Year 2008 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				
01/08/09	68,703	eyed eggs					309/oz.	Hayspur Hatchery		Triploids
06/26/09			29,585	243			121.6	Lyons Ferry Hatchery		Triploids
06/29/09			28,131	236			119.3	Lyons Ferry Hatchery		Triploids
Totals	68,703		57,716		0	0				

Table 30. Plants and Transfers summary for the period October 1, 2008 - September 30, 2009.

Oct 1, 2008 – Sep 30, 2009

PLANTS AND TRANSFERS SUMMARY

TUCANNON HATCHERY

STOCK CODE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		AVERAGE SIZE FISH / POUND
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS	
CK:SP:TUCA:07:M					59,201	4,853	12.2
CK:SP:TUCA:07:M					55,480	7,023	7.9
CK:SP:TUCA:08:M	88,276	3,098					28.5
CK:SP:TUCA:08:M							
SH:SU:TUCA:08:H							
SH:SU:TUCA:08:H							
RB:NA:SPOK:07:H					127,147	36,019	3.53
RB:NA:SPOK:07:H					4,180	6,629	.63
RB:NA:SPOK:08:H	175,029	eyed eggs					
RB:NA:SPOK:08:H			2,250	eyed eggs			
RB:NA:SPOK:08:H					13,545	26.1	517
RB:NA:KAML:08:H	68,703	eyed eggs					
RB:NA:KAML:08:H			57,716	481			120
Total	332,008	3,098	59,966	481	259,553	54,550	

Table 31. Brood Year 2007 Spokane rainbow trout (catchable) plants and transfers.

PLANTS AND TRANSFERS

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				
2/09/09					3,582	1,235	2.9	Golf Course Pond		
2/09/09					4,568	1,575	2.9	West Evans Pond		
2/10/09					1,015	350	2.9	Orchard Pond		
2/10/09					1,015	350	2.9	Marmes Pond		
2/10/09					4,599	1,586	2.9	Blue Lake		
2/10/09					3,045	1,050	2.9	Rainbow Lake		
2/13/09					8,048	2,775	2.9	Quarry Pond		
2/17/09					2,001	690	2.9	Pampa Pond		
2/17/09					7,932	2,735	2.9	Dalton Pond		
2/17/09					1,015	350	2.9	Dam Pond		
2/18/09					3,019	1,118	2.7	Fish Hook Park Pd.		
2/18/09					1,502	518	2.9	Riparia Pond		
2/19/09					3,002	1,112	2.7	Watson Lake		
2/23/09					2,025	750	2.7	Big Four Lake		
2/24/09					702	260	2.7	Deer Lake		
2/24/09					2,025	750	2.7	Spring Lake		
3/02/09					1,000	357	2.8	Dayton JV Pond		
3/04/09					7,560	3,150	2.4	Quarry Pond		
Page 1 Total					56,640	20,711	2.7			
Sub Total										

Table 33. Continued - Brood Year 2007 Spokane rainbow trout (catchable) plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

Page 2 of 2

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
Page 1 Total					56,640	20,711	2.7			
3/04/09					7,560	3,150	2.4	Dalton Pond		
3/10/09					2,004	835	2.4	Pampa Pond		
3/11/09					4,560	1,900	2.4	West Evans Pond		
3/11/09					3,500	1,458	2.4	Golf Course Pond		
3/12/09					1,006	419	2.4	Silcott Pond		
3/16/09					3,005	1,252	2.4	Sprague Lake		
3/17/09					6,010	2,504	2.4	Bennington Lake		
3/19/09					1,001	455	2.2	Marmes Pond		
3/19/09					1,001	455	2.2	Orchard Pond		
3/20/09					1,001	455	2.2	Jefferson Park Pond		
3/23/09					3,003	1,430	2.1	Rainbow Lake		
3/23/09					3,003	1,430	2.1	Watson Lake		
3/24/09					3,801	1,810	2.1	Blue Lake		
3/24/09					2,100	1,000	2.1	Spring Lake		
Page 2 Total					42,555	18,553				
Total					99,195	39,264				

Table 32. Brood Year 2007 Spokane rainbow trout (Jumbo) plants and transfers.

PLANTS AND TRANSFERS

LYONS FERRY HATCHERY

Page 1 of 1

DATE	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		SIZE FISH / POUND	WATER LOCATION	RIVER MILE	MARKS
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS				
2/10/09					25	31	.8	Orchard Pond		
2/10/09					25	31	.8	Marmes Pond		
2/13/09					50	63	.8	Quarry Pond		
2/17/09					50	63	.8	Dalton Pond		
2/17/09					25	31	.8	Dam Pond		
2/17/09					25	31	.8	Pampa Pond		
2/18/09					25	31	.8	Riparia Pond		
2/24/09					25	36	.7	Deer lake		
3/02/09					25	36	.7	Dayton JV Pond		
3/10/09					40	60	.67	Pampa Pond		
3/11/09					54	81	.67	Golf Course Pond		
3/17/09					60	92	.65	Bennington Lake		
3/19/09					30	46	.65	Marmes Pond		
3/19/09					30	46	.65	Orchard Pond		
3/20/09					97	162	.6	Jefferson Park Pond		
Total					586	840				

Table 33. Brood Year 2008 Spokane rainbow trout 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				
5/14/09			71,600	1,278			56	Idaho Fish & Game		
5/15/09			85,300	1,458			58.5	Idaho Fish & Game		
Total			156,900	2,736			57.3			

Table 34. Brood Year 2007 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				
10/08/08			53,970	3,722			14.5	Idaho Fish & Game		
Total			53,970	3,722			14.5			

