

LOOKINGGLASS FISH HATCHERY ANNUAL REPORT FY2008

INTRODUCTION

Location

Lookingglass Fish Hatchery is located on Lookingglass Creek 2.2 miles upstream from its confluence with the Grande Ronde River near the small community of Palmer Junction. The Grande Ronde flows another 85 miles before entering the Snake River at Heller Bar. The Imnaha satellite facility is located at river mile 46 on the Imnaha River, a tributary to the Snake River as well, and is used as a smolt acclimation and release site in the spring and for adult trapping in the summer.

OBJECTIVES

Program Goals

Lookingglass Fish Hatchery is part of the Lower Snake River Compensation Program (LSRCP) and has been in operation since 1982. Long term goals of 5,720 fish in the Grande Ronde sub-basin is to mitigate for fish losses occurring as a result of the construction and operation of the four Lower Snake River Dams. Short term goals are recovery, delisting, and utilizing captive broodstock technology and conventional supplementation to prevent the extinction of three wild Chinook populations namely the Upper Grande River stock, Catherine Creek stock, and Lostine stock. Also, reintroduction of spring/summer Chinook into Lookingglass Creek using Catherine Creek stock is a goal of the program. In the Imnaha River system, the program mitigation goal is to return 3,210 hatchery adults to the area above Ice Harbor Dam. In addition, program goals include restoring and maintaining the natural spawning population, reestablishing sport and tribal fisheries, and minimizing the impacts of the program on resident stocks of fish.

CHINOOK

Trapping and Adult Returns

The adult trap on Lookingglass Creek was put into operation on March 1, 2008 primarily to trap adult steelhead returning at this time of year. Wild steelhead are enumerated and then released upstream of the weir to spawn naturally and hatchery origin steelhead are removed. The trap was in continuous operation until September 9, 2008. The first Chinook was trapped on June 7. A total of 324 fish were trapped consisting of 142 males, 168 females, and 14 jacks. Released above the weir to spawn naturally were 78 males, 91 females, and 9 jacks. The Imnaha weir was partially installed with three weir panels in place blocking thirty feet of the ninety width span on April 29, 2008. The partial installation was to try and deflect any adults into the fish trap early in the season yet not have the entire weir wash away due to high water flows. The weir can be deployed when flows are below 1,000 to 900 cfs; however, high flows in April through June may wash out the weir which prevents deployment until after spring runoff and high flows subside. The weir was fully installed on July 10 and in operation until September 23, 2008. A total of 2,072 fish were trapped consisting of 582 males, 519 females, and 971 jacks. There were 126 males, 114 females, and 47 jacks retained and used for broodstock purposes. Fish that were excess to broodstock needs were distributed to the Nez Perce Tribe for

ceremonial and subsistence use and to charitable food banks. A total of 1,131 fish were distributed consisting of 184 males, 136 females, and 811 jacks. Also, there were 235 fish released above the weir consisting of 96 males, 70 females, and 69 jacks. There were 90 fish released below the weir to contribute to the tribal and sport fishery consisting of 35 males and 55 females. In addition, a total of 334 fish were out planted to Big Sheep Creek and Lick Creek, tributaries of the Imnaha River. Big Sheep Creek received 85 males and 65 females and Lick Creek received 70 males, 80 females, and 34 jacks.

Located on the Upper Grande Ronde River and Catherine Creek, a weir and trap are operated by the Confederated Tribes of the Umatilla (CTUIR). A portion of returning adults trapped are transported to Lookingglass and held for spawning. Lookingglass received a total of 22 fish from the Upper Grande Ronde facility. There were 8 males, 11 females, and 3 jacks. In addition, 8 males, 1 female, and 19 jacks swam into the Lookingglass trap and were identified as Grande Ronde fish due to unique marks placed on the fish. The fish from the two trap locations were combined. Lookingglass received 20 males, 26 females, and 3 jacks from the Catherine Creek weir and trap. Six females swam into the trap at Lookingglass that were identified as Catherine Creek fish due to unique marks. The six females were added to the Catherine Creek group.

Located on the Lostine River, a weir and trap is operated by the Nez Perce Tribe. A portion of returning adults trapped are transported to Lookingglass and held for spawning. A total of 53 males, 58 females, and 2 jacks were brought to Lookingglass.

Spawning and Egg Production

All conventional broodstock of the various stocks of fish were spawned at Lookingglass and all fertilized eggs were incubated at Lookingglass. It is anticipated that all resulting fry will be reared at Lookingglass with the exception of approximately 150-200,000 Lookingglass stock being sent to Irrigon Hatchery in the spring of 2009. This group of fish will be reared at Irrigon until October of 2009 and then returned to Lookingglass for rearing until release.

Egg production from 2008 spawning efforts, number of females spawned, percent eye up, green and eyed egg numbers, and fecundities for the various stocks is as follows:

There were 104 Imnaha stock females spawned yielding 479,927 green eggs resulting in 433,171 eyed eggs for an eye up of 90.3%. Average fecundity was 4,615.

A total of 56 Lostine females were spawned yielding 268,284 green eggs resulting in 247,274 eyed eggs for an eye up of 92.3%. Average fecundity was 4,790.

A total of 76 Lookingglass females were spawned yielding 286,383 green eggs resulting in 265,244 eyed eggs for an eye up of 92.6%. Average fecundity was 3,768.

A total of 32 Catherine Creek females were spawned yielding 124,373 green eggs resulting in 117,605 eyed eggs for an eye up of 94.6%. Average fecundity was 3,887.

A total of 12 Grande Ronde females were spawned yielding 47,402 green eggs resulting in 42,458 eyed eggs for an eye up of 89.6%. Average fecundity was 3,950.

Total conventional egg take was 1,206,369 green eggs yielding 1,106,202 eyed eggs.

Captive Broodstock Chinook Program

A separate annual report covers the details for operation of this program. However, a total of 53,716 smolts were released from this program including; Lostine River 10,498 and Catherine Creek stock into Lookingglass Creek 43,218.

Miscellaneous

Coded Wire Tagging was completed on the BY 2007 Imnaha, Lostine, Catherine Creek, Lookingglass, and Upper Grande Ronde River stocks of Chinook in July, 2008. A total of 757,214 fish received a CWT.

PIT-tagging was completed on the BY 2007 Imnaha, Lostine, Catherine Creek, Lookingglass, and Upper Grande Ronde River stocks of Chinook during October, 2008. A total of 52,872 fish received PIT tags.

CONSTRUCTION AND MAINTENANCE

MAINTENANCE PROJECTS ACCOMPLISHED BY ODFW PERSONNEL

- Serviced and repaired vehicles and equipment.
- Cleaned the ditches and culverts along hatchery road.
- Constructed new burn barrel and relocated to fire safe location
- Placed spill containment equipment under fuel for pressure washer at intake.
- Labeled confined space manhole covers.
- Completed maintenance and repair work on all Canadian troughs
- Repaired various snow removal equipment
- Cleaned out settling pond with backhoe and repaired cracks in pavement
- Painted floors in hatchery building
- Turned off refrigeration unit to freezer room to save electrical cost
- Built and installed a raceway headscreen as an experiment for possible use in all raceways
- Started a re-cycling program re-cycling computer paper, catalogs, plastic bottles, cardboard, aluminum, and tin cans
- Replaced water supply valves to egg incubation stacks
- Adjusted the finger weir on the Imnaha fish trap to prevent fish from jumping back out
- Made several repairs to automated fish handling system at Imnaha
- Repaired automatic fish feeders
- Repainted entryway signs into the hatchery and installed speed bumps

MAINTENANCE PROJECTS ACCOMPLISHED BY CONTRACTORS

Alpine Fire Protection- Serviced fire extinguishers and tested fire alarm systems in hatchery buildings and residences

Becker Construction –Removed the streambed load that entered the hatchery intake during spring runoff

Elkhorn Electric-Emergency repairs to domestic well system

Coffey Laboratories (Pendleton/Portland, OR) – Analyzed domestic water samples and DEQ water samples.

Delta Environmental- Domestic water quality analysis and DEQ environmental water sample analysis

Frank McGowan, MCS – Serviced and shut down chillers for the season, and installed the well monitoring system for flow and pressure.

Oregon Trail Electric Coop and BPA- Contracted with BPA and Oregon Trail Electric Coop to reduce energy consumption by replacing less efficient lighting system with a higher efficiency lighting system

Pendleton Grain Growers- Repaired pump to traveling water screens

Verizon-Repaired the phone connection to the hatchery fire alarm system

MAJOR EXPENSES

Repair & maintenance of buildings and grounds	\$ 32,243.00
Fish food	52,569.00
Repairs and maintenance to equipment	3,747.00
Temporary services	5,925.00
Supplies	36,256.00
Other Services	25,991.00
Communication services	10,561.00
Utilities	995.00
Chemicals	7,051.00
Equipment	3,623.00
Office supplies	<u>2,664.00</u>
Total	\$181,625.00

Adult Returns to Hatchery

Chinook Lookingglass Creek Stock BY08

Lookingglass Fish Hatchery	
Where trapped:	Lookingglass Creek Weir
Dates trapped:	March 1 – September 8, 2008
Number of adults trapped:	142 males, 168 females, 14 jacks
Date of peak returns:	July 2, 2008
Number of adults released to spawn naturally:	78 males, 91 females, 9 jacks
Number of adults to hatchery for broodstock:	64 males, 77 female, 5 jacks
Mortality of all adult returns	0 males, 0 females
	<i>at trap:</i>
	<i>at hatchery:</i>
	7 males, 1 female, 0 Jacks

Chinook - Conventional Broodstock Program Grande Ronde River Stock BY08

Lookingglass Fish Hatchery	
Where trapped:	Lookingglass Creek Weir
Dates trapped:	June 28 – August 29, 2008
Number of adults trapped:	8 males, 1 female, 19 jacks
Date of peak trapping:	July 16, 2008
Number of adults released to spawn naturally:	0 males, 0 females, 0 jacks
Number of adults to hatchery for broodstock:	8 males, 1 males, 19 jacks
Mortality of all adults	0 males, 0 females
	<i>at trap:</i>
	<i>at hatchery:</i>
	1 male, 0 females

Chinook - Conventional Broodstock Program Catherine Creek Stock BY08

Lookingglass Fish Hatchery	
Where trapped:	Lookingglass Creek Weir
Dates trapped:	July 2 – July 12, 2008
Number of adults trapped:	0 males, 6 females, 0 jacks
Date of peak trapping:	July 12, 2008
Number of adults released to spawn naturally:	0 females, 0 males, 0 jacks
Number of adults to hatchery for broodstock:	0 males, 6 females, 0 jacks
Mortality of all adults	0 males, 0 females
	<i>at trap:</i>
	<i>at hatchery:</i>
	0 males, 0 females

Summer Steelhead

Lookingglass Creek Stock BY08

Lookingglass Fish Hatchery	
Where trapped:	Lookingglass Creek Weir
Dates trapped:	March 17 – June 16, 2008
Number of adults trapped:	58 males, 77 females, 0 jacks
Date of peak returns:	June 7, 2008
Number of adults released to spawn naturally:	54 males, 75 females, 0 jacks
Number of adults to hatchery for broodstock:	0 males, 0 female, 0 jacks
Mortality of all adult returns	0 males, 0 females
	<i>at trap:</i>
	<i>at hatchery:</i>
	0 males, 1 female, 0 Jacks

CTUIR staff dispatched 4 males and 1 female for ceremonial and subsistence purposes.

Adults Trapped Off Hatchery and Transported to Hatchery**Chinook
Imnaha Stock BY08**

Lookingglass Fish Hatchery	
Where trapped:	Imnaha Satellite Facility
Date weir installed:	June 15, 2008
Dates trapped:	June 15 - Sept 9, 2008
Number of adults trapped:	582 males, 519 females, 971 jacks
Date of peak trapping:	July 18, 2008
Number of adults released to spawn naturally:	
	<i>Imnaha River (above weir)</i>
	96 males, 70 females, 69 jacks
	<i>Imnaha River (below weir)</i>
	35 males, 55 females, 0 jacks
	<i>Big Sheep Creek</i>
	85 males, 65 females, 0 jacks
	<i>Lick Creek</i>
	70 males, 80 females, 34 jacks
Number of adults to hatchery for broodstock:	126 males, 114 females, 47 jacks
Number given away	184 males, 136 females, 811 jacks
Mortality of all adults	5 males, 8 females, 12 jacks
	<i>at trap:</i>
	<i>at hatchery:</i>
	14 males, 9 females, 4 jacks

Adults Trapped Off Hatchery and Transported to Hatchery

**Chinook - Conventional Broodstock Program
Grande Ronde River Stock BY08**

Lookingglass Fish Hatchery

Where trapped:	Upper Grande Ronde Weir
Dates trapped:	June 23 – July 21, 2008
Number of adults trapped:	13 males, 14 females, 107 jacks
Date of peak trapping:	June 30, 2008
Number of adults released to spawn naturally:	5 males, 3 females, 10 jacks
Number of adults to hatchery for broodstock:	8 males, 11 females, 3 jacks
Mortality of all adults	<i>at trap:</i> 0 male, 0 females
	<i>at hatchery:</i> 1 male, 0 females, 0 jacks

**Chinook - Conventional Broodstock Program
Catherine Creek Stock BY08**

Lookingglass Fish Hatchery

Where trapped:	Catherine Creek Weir
Dates trapped:	June 16 – July 17, 2008
Number of adults trapped:	25 males, 26 females, 4 jacks
Date of peak trapping:	June 27, 2008
Number of adults released to spawn naturally:	0 females, 0 males, 0 jacks
Number of adults to hatchery for broodstock:	20 males, 26 females, 3 jacks
Mortality of all adults	<i>at trap:</i> 0 males, 0 females
	<i>at hatchery:</i> 0 males, 0 females

**Chinook - Conventional Broodstock Program
Lostine River Stock BY08**

Lookingglass Fish Hatchery

Where trapped:	Lostine River Weir
Dates trapped:	July 10 - September 20, 2008
Date of peak trapping:	July 19, 2008
Number of adults trapped:	355 males, 342 females, 259 jacks
Number of adults released to spawn naturally:	
<i>Lostine River</i>	267 males, 246 females, 103 jacks
<i>Wallowa River</i>	27 males, 34 females, 104 jacks
<i>Bear Creek</i>	3 males, 1 female, 31 jacks
Number of adults to hatchery for broodstock	53 males, 58 females, 2 jacks
Mortality of all adults	<i>at trap:</i> 1 male, 0 females
	<i>at hatchery:</i> 8 males, 2 females

The Lower Snake River Compensation Plan funds the Chinook Captive Broodstock Program from egg incubation through release of progeny. Spawning took place at

Bonneville Fish Hatchery, green eggs were incubated at Oxbow Fish Hatchery, and the resulting eyed eggs and fry were reared at Lookingglass Fish Hatchery

SPAWNING RECORD

Chinook Captive Broodstock Program Upper Grande Ronde River Stock BY07

Bonneville Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/29/07	4,706	2	4
9/05/07	6,956	4	8
9/12/07	33,634	13	26
9/20/07	49,920	30	60
9/27/07	24,729	19	34
10/4/07	9,204	9	27

Captive broodstock fish are spawned according to specific matrices, depending on treatments and cohorts of mature fish.

Total number of females spawned:	77
Total number of males spawned:	159
Total number of cryopreserved sperm samples used:	0
Total number of green eggs:	129,149
Total number of eyed eggs:	89,747
Number of eggs retained for rearing:	0*
Number of eggs shipped:	65,249
Number of eggs culled due to high BKD titers	24,375
Date of last spawning:	10/04/07

**All upper Grande Ronde River stock green eggs were shipped to Oxbow Fish Hatchery for incubation. Once eyed, the eggs were shipped to Lookingglass Fish Hatchery for rearing.*

SPAWNING RECORD

**Chinook Captive Broodstock Program
Catherine Creek Stock BY07**

Bonneville Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
9/05/07	4,307	2	3
9/12/07	12,760	6	6
9/19/07	54,239	27	27
9/26/07	51,165	29	29
10/03/07	26,416	15	27

Captive broodstock fish are spawned according to specific matrices, depending on treatments and cohorts of mature fish.

Total number of females spawned:	79
Total number of males spawned:	92
Total number of cryopreserved sperm samples used:	0
Total number of green eggs:	148,887
Total number of eyed eggs:	134,288
Number of eggs retained for rearing:	0*
Number of eggs shipped:	108,634
Number of eggs culled due to high BKD titers	25,654
Date of last spawning:	10/03/07

**All Catherine Creek stock green eggs were shipped to Oxbow Fish Hatchery for incubation. Once eyed, the eggs were shipped to Lookingglass Fish Hatchery for rearing.*

SPAWNING RECORD

**Chinook Captive Broodstock Program
Lostine River Stock BY07**

Bonneville Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/29/07	2,890	1	2
9/05/07	5,904	3	3
9/11/07	24,526	12	12
9/19/07	66,339	38	38
9/29/07	81,595	53	42
10/03/07	31,612	21	17
10/08/07	6,127	2	5

Captive broodstock fish are spawned according to specific matrices, depending on treatments and cohorts of mature fish.

Total number of females spawned:	130
Total number of males spawned:	119
Total number of cryopreserved sperm samples used:	0
Total number of green eggs:	218,993
Total number of eyed eggs:	182,239
Number of eggs retained for rearing:	0*
Number of eggs shipped:	120,754
Number of eggs culled due to high BKD titers	61,485
Date of last spawning:	10/08/07

**All Lostine River stock green eggs were shipped to Oxbow Fish Hatchery for incubation. Once eyed, the eggs were shipped to Lookingglass Fish Hatchery for rearing.*

SPAWNING RECORD

**Chinook
Imnaha Stock BY08**

Lookingglass Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/19/08	13,860	3	
8/26/08	47,116	11	1
8/29/08	38,105	7	5
9/02/08	186,177	39	15
9/05/08	75,118	17	6
9/10/08	107,673	24	50
9/12/08	11,874	3	17

Imnaha stock chinook eggs and sperm were combined according to matrices, depending on available mature broodstock. Sperm from hatchery jacks was pooled.

Total number of females spawned: 104
 Total number of males spawned: 94
 Total number of green eggs: 479,923
 Total number of eyed eggs: 433,171
 Number of eggs retained for rearing: 433,171
 Date of last spawning: 9/12/08

**Chinook
Lookingglass Stock BY08**

Lookingglass Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/20/08	11,167	3	
8/27/08	77,055	19	1
9/03/08	170,666	46	21
9/08/08	27,495	8	34

Eggs and sperm were combined by matrices, according to available mature broodstock.

Total number of females spawned: 76
 Total number of males spawned: 56
 Total number of green eggs: 286,383
 Total number of eyed eggs: 265,244
 Number of eggs retained for rearing: 265,244
 Date of last spawning: 9/08/08

Spawning Record

**Chinook - Conventional Broodstock Program
Upper Grande Ronde Stock BY08**

Lookingglass Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/13/08	3,977	1	
8/20/08	3,568	1	
8/27/08	8,486	2	
9/03/08	17,329	4	1
9/08/08	11,155	3	4
9/12/08	2,887	1	8

Eggs and sperm were combined by matrices, according to available mature broodstock.

Total number of females spawned: 12
 Total number of males spawned: 13
 Total number of green eggs: 47,402
 Total number of eyed eggs: 42,458
 Number of eggs retained for rearing: 42,458
 Date of last spawning: 9/12/08

**Chinook - Conventional Broodstock Program
Catherine Creek Stock BY08**

Lookingglass Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/20/08	4,174	1	
8/27/08	26,087	6	
9/03/08	53,605	14	1
9/08/08	40,451	11	19

Egg and sperm were combined by matrices, according to available mature broodstock.

Total number of females spawned: 32
 Total number of males spawned: 20
 Total number of green eggs: 124,373
 Total number of eyed eggs: 117,605
 Number of eggs retained for rearing: 117,605
 Date of last spawning: 9/08/08

Spawning Record

Chinook - Conventional Broodstock Program

Lostine Stock BY08

Lookingglass Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
8/18/08	17,709	3	
8/26/08	51,917	12	
9/02/08	107,063	22	3
9/05/08	39,971	8	
9/10/08	51,624	11	26

Lostine stock chinook were spawned by matrices, depending on available mature broodstock.

Total number of females spawned:	56
Total number of males spawned:	29
Total number of green eggs:	268,284
Total number of eyed eggs:	247,724
Number of eggs retained for rearing:	247,724
Date of last spawning:	9/10/08

Rearing to Fingerling Stage Only
Chinook - Conventional Broodstock Program
Lostine River Stock BY07

Number of fingerlings produced:	41,718
Weight of smolts produced (lbs.):	333.7
Percent mortality to stocking:	2.72%
Average number/pound of smolts produced:	125
Conversion rate:	1.17 at Lookingglass

Fish were released without acclimation into the Lostine River on 6/25/08.

Chinook - Captive Broodstock Program
Lostine River Stock BY07

Number of fingerlings produced:	26,130
Weight of smolts produced (lbs.):	209.0
Percent mortality to stocking:	3.34%
Average number/pound of smolts produced:	125
Conversion rate:	1.24 at Lookingglass

Fish were released without acclimation into the Lostine River on 6/25/08.

Rearing to Smolt Stage Only**Chinook**

Imnaha Stock BY06

Number of smolts produced:	348,910
Weight of smolts produced (lbs.):	17,221.6
Percent mortality to stocking:	3.91%
Average number/pound of smolts produced:	20.26
Conversion rate:	1.09 at Lookingglass

349,145 smolts (17,233.5 pounds) were transferred from Lookingglass Fish Hatchery to Imnaha Satellite Facility 3/12-3/14/2007 for acclimation. Volitional release began on 3/25/2008 and the remaining fish were forced out on 4/10/08.

**Chinook - Conventional Broodstock Program
Upper Grande Ronde River Stock BY06**

Number of smolts produced:	259,932
Weight of smolts produced (lbs.):	12,193.2
Percent mortality to stocking:	2.90%
Average number/pound of smolts produced:	21.32
Conversion rate:	1.10 at Lookingglass

Fish were transferred from Lookingglass Fish Hatchery to Grande Ronde Acclimation in two groups. The first group of 127,552 smolts (6,076.8 pounds) was transferred on 3/11/2008 for volitional release from 3/17- 3/24/2008. The second group of 132,501 smolts (6,365.3 pounds) was transferred on 3/25-3/26/2008 for volitional release from 4/07-4/14/2008. Grande Ronde Acclimation Facility is operated by the CTUIR. Facility operations are BPA funded. Fish feed is provided by the LSRCP.

**Chinook - Captive Broodstock Program (F₁'s)
Catherine Creek Stock BY06**

Number of smolts produced:	43,218
Weight of smolts produced (lbs.):	2,216.3
Percent mortality to stocking:	7.79%
Average number/pound of smolts produced:	19.5
Conversion rate:	1.13 at Lookingglass

Smolts were volitionally released into Lookingglass Creek from 4/1-4/14/2008.

Rearing to Smolt Stage Only**Chinook - Conventional Broodstock Program
Catherine Creek Stock BY06**

Number of smolts produced:	116,882
Weight of smolts produced (lbs.):	6,529.7
Percent mortality to stocking:	3.50%
Average number/pound of smolts produced:	17.9
Conversion rate:	1.08 at Lookingglass

116,967 smolts (5,506.2 pounds) were transferred from Lookingglass Fish Hatchery to Catherine Creek Acclimation Facility on 3/10/2008. Volitional release began 3/24/2008, and all remaining fish were forced out 4/14/2008. Catherine Creek Acclimation Facility is operated by the CTUIR. Facility operations are BPA funded. Fish feed is provided by the LSRCP.

**Chinook - Captive Broodstock Program (F₁'s)
Lostine River Stock BY06**

Number of smolts produced:	10,470
Weight of smolts produced (lbs.):	505.1
Percent mortality to stocking:	8.07%
Average number/pound of smolts produced:	20.7
Conversion rate:	1.13 at Lookingglass

10,493 smolts (483.6 pounds) were transferred from Lookingglass Fish Hatchery to Lostine Acclimation Facility on 3/04/087. Volitional release began 3/19/2008, and all remaining fish were forced out 4/01/2008. Lostine Acclimation Pond is operated by the Nez Perce Tribe. Facility operations are BPA funded. Fish feed is provided by the LSRCP.

**Chinook - Conventional Broodstock Program
Lostine River Stock BY06**

Number of smolts produced:	194,594
Weight of smolts produced (lbs.):	9,730.6
Percent mortality to stocking:	3.37%
Average number/pound of smolts produced:	20.0
Conversion rate:	0.99 at Lookingglass

Smolts were transferred from Lookingglass Fish Hatchery to Lostine Acclimation Facility in two groups. The first release group of 63,741 smolts (3,354.8 pounds) was transferred to the acclimation facility on 3/3-3/4/2008, volitional release began 3/19/2008, and all remaining fish were forced out 4/1/2008. The second release group of 130,394 smolts (6,699.0 pounds) was transferred to the acclimation facility 4/3/2008, volitional release began on 4/10/2008, and all remaining fish were forced out 4/17/2008. Lostine Acclimation Facility is operated by the Nez Perce Tribe. Facility operations are BPA funded. Fish feed is provided by the LSRCP.

Food Fed and Weight Gain

**Chinook
Imnaha Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	5,784.9
Conversion rate	1.41
Total weight gain (lbs.) - all sizes produced	4,098.1

**Chinook
Imnaha Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	10,163.9
Conversion rate	1.08
Total weight gain (lbs.) - all sizes produced	9,400.8

**Chinook
Lookingglass Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	1,572.4
Conversion rate	1.04
Total weight gain (lbs.) - all sizes produced	1,512.6

**Chinook – Conventional Program
Upper Grande Ronde River Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	3,717.1
Conversion rate	1.25
Total weight gain (lbs.) - all sizes produced	2,981.2

Food Fed and Weight Gain

**Chinook – Conventional Program
Upper Grande Ronde River Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	3,935.1
Conversion rate	1.27
Total weight gain (lbs.) - all sizes produced	3,097.0

**Chinook – Captive Broodstock Program (F₁'s)
Upper Grande Ronde River Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	2,097.2
Conversion rate	1.29
Total weight gain (lbs.) - all sizes produced	1,628.8

**Chinook - Conventional Broodstock Program
Catherine Creek Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	1,375.9
Conversion rate	1.25
Total weight gain (lbs.) - all sizes produced	1,104.2

**Chinook - Conventional Broodstock Program
Catherine Creek Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	4,565.8
Conversion rate	1.12
Total weight gain (lbs.) - all sizes produced	4,070.4

Food Fed and Weight Gain

**Chinook - Captive Broodstock Program (F₁'s)
Catherine Creek Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	890.3
Conversion rate	1.48
Total weight gain (lbs.) - all sizes produced	602.9

**Chinook - Captive Broodstock Program (F₁'s)
Catherine Creek Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	3,220.7
Conversion rate	1.08
Total weight gain (lbs.) - all sizes produced	2,974.3

**Chinook - Conventional Broodstock Program
Lostine River Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	3,016.4
Conversion rate	0.86
Total weight gain (lbs.) - all sizes produced	3,507.5

**Chinook - Conventional Broodstock Program
Lostine River Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	6,216.0
Conversion rate	1.12
Total weight gain (lbs.) - all sizes produced	5,564.3

Food Fed and Weight Gain

**Chinook - Captive Broodstock Program (F₁'s)
Lostine River Creek Stock BY06**

Lookingglass Fish Hatchery	
Total pounds of food fed	114.4
Conversion rate	0.94
Total weight gain (lbs.) - all sizes produced	121.9

**Captive Broodstock Chinook (F₁'s)
Lostine River Stock BY07**

Lookingglass Fish Hatchery	
Total pounds of food fed	1,954.3
Conversion rate	1.12
Total weight gain (lbs.) - all sizes produced	1,738.5

**On Hand at Lookingglass Fish Hatchery
September 30, 2008**

Fish on Hand – BY07

Species	Stock	Number
Spring Chinook	Imnaha	294,608
Spring Chinook	Grande Ronde	94,601
Spring Chinook	Grande Ronde Captive Brood	52,573
Spring Chinook	Lookingglass	50,197
Spring Chinook	Lostine River	186,454
Spring Chinook	Lostine River Captive Brood	62,124
Spring Chinook	Catherine Creek	139,241
Spring Chinook	Catherine Creek Captive Brood	100,662

FY2008 Stocking

Total number of distribution trips:	25*
Number of fry stocked:	0
Weight of fry stocked:	0 lbs

Number of parr stocked:	67,848
Weight of parr stocked:	542.8 lbs
Number of smolts stocked:	974,551
Weight of smolts stocked:	48,235.4 lbs
Date, location, number and weight at each stocking:	See Attached

**23 distribution trips were made to acclimation facilities associated with Lookingglass Fish Hatchery.*

**Lookingglass Fish Hatchery and Associated Facility Stocking Records
October 1, 2007 through September 30, 2008**

HATCHERY	SPECIES	STOCK	TYPE	DATE	FROM/TO	NO/LB	MORTS	NUMBER STOCKED	POUNDS STOCKED
CATH.CR. ACC	SPRING CHINOOK	201 06	LIBERATION	3/24/2008	CATHERINE CR AT ACC PD - CTUIR	17.90	0	116,882	6,530
GRND RND ACC	SPRING CHINOOK	080 06	LIBERATION	4/7/2008	GRANDE RONDE AT ACC PD -CTUIR	20.70	0	132,441	6,398
GRND RND ACC	SPRING CHINOOK	080 06	LIBERATION	3/17/2008	GRANDE RONDE AT ACC PD -CTUIR	22.00	0	127,491	5,795
IMNAHA PD	SPRING CHINOOK	029 06	LIBERATION	3/25/2008	IMNAHA R	20.26	0	34,891	1,722
IMNAHA PD	SPRING CHINOOK	029 06	LIBERATION	3/25/2008	IMNAHA R	20.26	0	314,019	15,499
LOSTINE ACC	SPRING CHINOOK	200 06	LIBERATION	3/19/2008	LOSTINE AT ACC POND - NPT	24.82	0	63,724	2,567
LOSTINE ACC	SPRING CHINOOK	200 06	LIBERATION	4/10/2008	LOSTINE AT ACC POND - NPT	18.27	0	130,870	7,163
LOSTINE ACC	SPRING CHINOOK	200F06	LIBERATION	3/19/2008	LOSTINE AT ACC POND - NPT	20.73	0	10,470	505
LOOKINGGLASS	SPRING CHINOOK	200 07	LIBERATION	6/25/2008	LOSTINE R	125.00	0	41,718	334
LOOKINGGLASS	SPRING CHINOOK	200F07	LIBERATION	6/25/2008	LOSTINE R	125.00	0	26,130	209
LOOKINGGLASS	SPRING CHINOOK	201F06	LIBERATION	4/1/2008	LOOKINGGLASS CR	19.50	0	25,252	1,295
LOOKINGGLASS	SPRING CHINOOK	201F06	LIBERATION	4/1/2008	LOOKINGGLASS CR	19.50	0	17,966	921
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/12/2008	IMNAHA PD	21.39	0	59,660	2,789
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/12/2008	IMNAHA PD	20.43	0	35,340	1,730
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/13/2008	IMNAHA PD	19.03	0	44,968	2,363
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/13/2008	IMNAHA PD	18.28	0	50,032	2,737
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/12/2008	IMNAHA PD	20.43	0	24,301	1,189
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/12/2008	IMNAHA PD	19.03	0	14,699	772
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/13/2008	IMNAHA PD	18.28	0	9,466	518
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/13/2008	IMNAHA PD	20.85	0	29,534	1,417
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/14/2008	IMNAHA PD	20.85	0	29,780	1,428
LOOKINGGLASS	SPRING CHINOOK	029 06	ACCLIMATE	3/14/2008	IMNAHA PD	22.43	0	51,365	2,290
LOOKINGGLASS	SPRING CHINOOK	080 06	ACCLIMATE	3/11/2008	GRND RND ACC	20.92	0	63,650	3,043
LOOKINGGLASS	SPRING CHINOOK	080 06	ACCLIMATE	3/11/2008	GRND RND ACC	21.06	0	19,354	919
LOOKINGGLASS	SPRING CHINOOK	080 06	ACCLIMATE	3/25/2008	GRND RND ACC	20.01	0	63,582	3,178
LOOKINGGLASS	SPRING CHINOOK	080 06	ACCLIMATE	3/26/2008	GRND RND ACC	21.62	0	68,919	3,188
LOOKINGGLASS	SPRING CHINOOK	080 06	ACCLIMATE	3/11/2008	GRND RND ACC	21.06	0	44,548	2,115
LOOKINGGLASS	SPRING CHINOOK	200 06	ACCLIMATE	4/3/2008	LOSTINE ACC	18.48	22	65,330	3,535
LOOKINGGLASS	SPRING CHINOOK	200 06	ACCLIMATE	4/3/2008	LOSTINE ACC	18.94	0	65,604	3,464
LOOKINGGLASS	SPRING CHINOOK	200 06	ACCLIMATE	3/3/2008	LOSTINE ACC	19.00	10	37,996	2,000

**Lookingglass Fish Hatchery and Associated Facility Stocking Records
October 1, 2007 through September 30, 2008**

HATCHERY	SPECIES	STOCK	TYPE	DATE	FROM/TO	NO/LB	MORTS	NUMBER STOCKED	POUNDS STOCKED
LOOKINGGLASS	SPRING CHINOOK	200 06	ACCLIMATE	3/4/2008	LOSTINE ACC	19.00	3	25,745	1,355
LOOKINGGLASS	SPRING CHINOOK	200F06	ACCLIMATE	3/4/2008	LOSTINE ACC	21.70	5	10,493	484
LOOKINGGLASS	SPRING CHINOOK	201 06	ACCLIMATE	3/10/2008	CATH.CR. ACC	21.03	0	58,509	2,782
LOOKINGGLASS	SPRING CHINOOK	201 06	ACCLIMATE	3/10/2008	CATH.CR. ACC	21.46	0	15,741	734
LOOKINGGLASS	SPRING CHINOOK	201 06	ACCLIMATE	3/10/2008	CATH.CR. ACC	21.46	0	42,717	1,991