BONNEVILLE POWER ADMINISTRATION

Nez Perce Tribal Hatchery Complex

Operations and Maintenance and 2005 Annual Operation Plan

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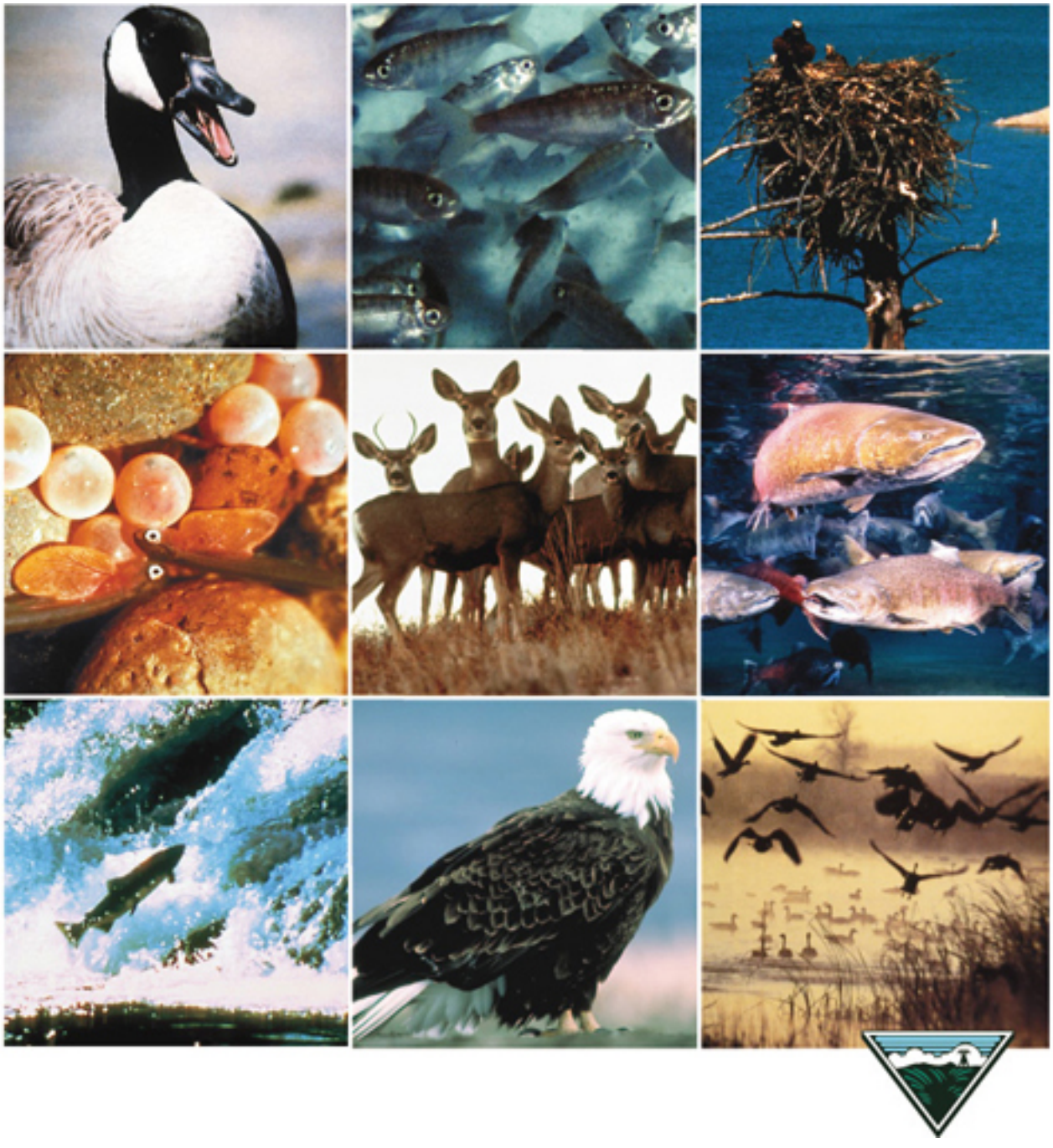

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NEZ PERCE TRIBAL HATCHERY COMPLEX

ANNUAL REPORT
JANUARY 1, 2004 — DECEMBER 31, 2004

ANNUAL OPERATION PLAN
JANUARY 1, 2005 – DECEMBER 31, 2005

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Nez Perce Tribe

February 17, 2005

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1.0 INTRODUCTION

The Nez Perce Tribal Hatchery Complex (NPTHC) responds directly to a need to mitigate the effects of the Federal Columbia River Hydropower System on naturally-reproducing salmon in the Clearwater River subbasin. The overall goal is to produce and release fish that will survive to adulthood, spawn in the Clearwater River subbasin and produce viable offspring that will support future natural production and genetic integrity. Several underlying purposes of fisheries management will be maintained through this program:

- Protect, mitigate, and enhance Columbia River subbasin anadromous fish resources.
- Develop, reintroduce, and increase natural spawning populations of salmon within the Clearwater River subbasin.
- Provide long-term harvest opportunities for Tribal and non-Tribal anglers within Nez Perce Treaty lands within four generations (20 years) following project completion.
- Sustain long-term fitness and genetic integrity of targeted fish populations.
- Keep ecological and genetic impacts to non-target populations within acceptable limits.
- Promote Nez Perce Tribal Management of Nez Perce Tribal hatchery Facilities and production areas within Nez Perce Treaty lands.

Nez Perce Tribal Hatchery is a supplementation program that will rear and release spring, fall, and early-fall stocks of chinook salmon. Two life stages of spring chinook salmon will be released: parr and presmolts. Fall and early-fall chinook salmon will be released as subyearling smolts. The intent of NPTHC is to use conventional hatchery and Natural Rearing Enhancement Systems (NATURES) techniques to develop, increase and restore natural populations of spring and fall chinook salmon in the Clearwater River subbasin

The original design target production for NPTHC was 2.8 million fall chinook sub-yearlings and 768,000 spring chinook juveniles. A two phase development process was approved by the Northwest Power Planning Council for NPTHC. Phase I production goals were set at 1.4 million fall chinook sub-yearlings and 625,000 spring chinook juveniles (Table 1) and biological triggers established for the implementation of Phase II (Table 2).

Table 1. Nez Perce Tribal Hatchery Complex Fish Production Numbers.

Species	Original Design Target	Phase I Goal
Fall Chinook		
"0+" Smolt	2,800,000	1,400,000
"1+" Smolt	- 0 -	- 0 -
Green Eggs	3,960,000[b]	1,978,000
Spring Chinook		
Smolts	- 0 -	- 0 -
Parr	503,000	400,000
Pre-Smolts	265,000	225,000
Green Eggs	768,000	1,004,000

Table 2. Summary of Biological Triggers for phased expansion of NPTHC.

Stock	Biological Trigger
Spring Chinook	Smolt-to-adult return rates for NPTH produced spring chinook salmon in Lolo and Newsome creeks meet or exceed 0.4% for 4 out of 5 years (approximately 546 returning adults to the Clearwater River subbasin from Phase I production).
Fall Chinook	Returning NPTH adults to Site 1705 sufficient to produce 500,000 sub-yearling smolts (approximately 800 returning adults to the Clearwater River subbasin from Phase I production).
Early-Fall Chinook	Returning naturally produced adults to Luke's Gulch or Cedar Flats sufficient to produce 100,000 sub-yearling smolts (approximately 120 to 170 returning adults to the Clearwater River subbasin from early-fall chinook natural production).

Fish production began at Nez Perce Tribal Hatchery Complex in 2002 when Phase I construction of five remote acclimation sites, the Sweetwater Springs early rearing facility and the 1705 central incubation facility was completed.

1.1. FACILITIES

Nez Perce Tribal Hatchery is a complex of several facilities throughout North Central Idaho and in this document is hereafter referred to as Nez Perce Tribal Hatchery Complex – NPTHC. The central incubation and rearing facility is located on the mainstem Clearwater River and identified as Site 1705 (Table 3). Sweetwater Springs, an early rearing facility, is located on Sweetwater Creek (Table 3). The five remote acclimation facilities (AF) are utilized for final rearing and release into NPTHC target streams. Cedar Flats AF, Luke's Gulch AF, and North Lapwai Valley AF acclimate and release fall Chinook salmon. Newsome Creek AF and Yoosa/Camp AF acclimate and release spring Chinook salmon (Table 3).

Table 3. Phase I design capacities of the Nez Perce Tribal Hatchery Complex.

Facility	Location River (mile)	Water source	Species	Capacity (# fish)	Pounds
Site 1705 (NPTH)	Clearwater (20.5)	Wells, Clearwater R.	Fall chinook Spring chinook	1,036,000[a] 400,000 226.000[b]	11,510 3,430 1.380
Sweetwater Springs (SWS)	Sweetwater Creek	Springs	Fall chinook	207,000c	1,955
Cedar Flats AF (CFAF)	Selway R. (5.0)	Wells, Selway R.	Fall chinook	200,000	3,050
Luke's Gulch AF (LGAF)	S. Fork Clearwater R. (8.0)	Wells, Clearwater R.	Fall chinook	200,000	4,260
N. Lapwai Valley AF (NLV)	Lapwai Creek (0.8)	Well, Lapwai Creek	Fall chinook	500,000	8,930
Newsome Creek AF (NC)	Newsome Creek	Newsome Creek	Spring chinook	75,000	2,590
Yoosa/Camp Creek AF (YCC)	Yoosa Creek	Camp Creek Yoosa Creek	Spring chinook	150,000	4,500

a. Current early rearing capacity of 1.4 million sub-yearlings.
b. For transfer to remote acclimation sites.
c. Transfer in from 1705 and transferred out to Cedar Flats facility.

1.2. SPRING CHINOOK

Spring chinook salmon in the Clearwater River subbasin were essentially extirpated by Lewiston Dam (Schoen et al. 1999; USFWS 1999, Murphy and Metsker 1962). However, naturalized populations have been re-established in Lolo Creek and mainstem/tributary reaches of the Lochsa, Selway and South Fork Clearwater Rivers (Larson and Mobrand 1992). Founding hatchery stocks used to re-colonize spring chinook salmon were primarily obtained from the Rapid River Hatchery. Genetic analysis has confirmed that existing natural spring chinook salmon in the Clearwater River subbasin are derived from reintroduced Snake River stocks.

The intent of the NPTH program is to develop localized brood sources to supplement Lolo Creek, Newsome Creek and Meadow Creek. Rapid River stock, returning to other locations in the Snake River basin, may be used in the event insufficient broodstock are available in the Clearwater basin. Broodstock for the NPTHC production program are collected at weirs on Lolo Creek and Newsome Creek. Currently, the NPT does not operate a weir on Meadow Creek and as a result, broodstock for the Meadow Creek program are collected from several sources: volunteers to the ladder/trap at NPTHC and surplus broodstock from the Clearwater Fish Hatchery program in the South Fork Clearwater and Lochsa and from Dworshak and Kooskia National Fish hatcheries.

1.3. FALL CHINOOK

Snake River fall Chinook salmon are considered part of a single genetically similar aggregate and managed as a single population. The NPTHC program is integrated with production at

Lyons Ferry Hatchery, the Fall Chinook Acclimation Program, and the Idaho Power mitigation. Currently broodstock for the fall Chinook program is obtained from two sources: volunteers to the ladder/trap at NPTHC and adults collected at Lower Granite Dam. NPT and WDFW share adults collected at Lower Granite Dam, annually working out an allocation and transport schedule.

1.4. MONITORING AND EVALUATION

Baseline data collection and evaluation has been occurring in NPTHC target streams of Lolo Creek, Newsome Creek, Meadow Creek, Selway and the Clearwater rivers since 1990. Monitoring and evaluation of fish produced in NPTHC facilities began in 2003. Some small scale production experiments also occur as part of the M&E program (see M&E section).

This document contains a reporting of production activities at NPTHC in 2004 and planned production activities in 2005.

2.0 NEZ PERCE TRIBAL HATCHERY COMPLEX ANNUAL PRODUCTION REPORT - 2004

Spring and fall Chinook salmon production releases from NPTHC in 2004 are listed in Table 4. Due to a broodstock shortage and mechanical facility problems at Site 1705 during incubation and rearing only 169,596 fall Chinook subyearlings were released in 2004 (Table 4). Section II. contains the specific details for the fall Chinook program in 2004 for the 2003 and 2004 brood years.

Spring Chinook production from NPTHC totaled 525,654, which was close to the 625,000 parr/pre-smolt goal. Section I. contains the specific details for the spring Chinook program in 2004 for the 2003 and 2004 brood years.

Facility testing and system monitoring continued throughout the year to clearly define the operational capabilities of the central incubation facility and the remote acclimation facilities.

Table 4. Nez Perce Tribal Hatchery Complex fall Chinook and spring Chinook salmon production and releases, 2004.

Species	Phase I NPTH Goal	2004 Planned	2004 Actual
Fall Chinook			
"0+" Smolt	1,400,000	500,000	**169,596**
"1+" Smolt	- 0 -	- 0 -	**- 0 -**
Green Eggs	1,978,000	1,978,000	**1,306,229**
Spring Chinook			
Parr	400,000	180,000	**309,555**
Pre-Smolts	225,000	225,000	**216,099**
Green Eggs	1,004,000	1,004,000	**1,053,946**

2.1. SPRING CHINOOK

2.1.1. 2003 Brood Year Rearing and Releases

Meadow Creek

Beginning on April 5, 2004, and continuing through April 13, 2004, a total of 224,006 spring chinook juveniles were marked (CWT) and transferred directly into the east "S" channel. Commencing on April 26, 2004, and continuing through May 17, 2004, another group of 123,444 spring chinook juveniles were marked (CWT) and transferred directly into the west "S" channel.

Beginning on June 15, 2004, and continuing through June 22, 2004, a total of 309,555 (76.98 fish/lb avg.) weighing 4,021.4 pounds were released into Meadow Creek/Selway (Table 5). Mortalities from time of marking to release: Known loss/mortality - 9,616

(2.768%); Unknown loss/mortality – 28,279 (8.139%). Total feed fed: 4,067.25. Conversion factor: 1.084:1.

Table 5. Spring Chinook releases in Meadow Creek in 2004 (2003 brood year).

Release Location	Number	Size #/lb	Total Weight (Pounds)	Mark Type	CWT Tag Code
Upper Meadow Creek/Selway River	171,833	78.8	2,108.6	CWT	61-26-74, 61-26-50, 61-01-04
Lower Meadow Creek/Selway River	137,722	72.0	1,912.8	CWT	61-26-74, 61-26-50

Lolo Creek

On March 22, 2004, a total of 25,851 Lolo Creek stock juvenile spring chinook were marked (CWT) and transferred directly from the inside rearing troughs to the west raceway. An additional 137,349 Powell stock juveniles were marked (CWT) between March 29 and April 1, 2004, and transferred directly from the inside rearing troughs to the west raceway. Kathy Clemens, Pathologist; Idaho Fish Health Center diagnosed an outbreak of *Bacterial Kidney Disease* in this group of fish on April 20, 2004. The recommended 21 day medicated feed treatment was completed on May 21, 2004. On June 11, 2004, a total of 158,856 fingerlings were transferred from Site 1705 to the Yoosa/Camp acclimation facility. The fingerlings were distributed as follows: upper pond -75,428 fingerlings (44.4 fish/lb avg.), lower pond - 79,428 fingerlings (37.8 fish/lb avg.), M&E tank - 4,000 fingerlings (43.8 fish/lb avg.).

Kathy Clemens, Pathologist; Idaho Fish Health Center diagnosed an outbreak of *Bacterial Kidney Disease* in the fish on July 31, 2004, and recommended an additional 21 day medicated feed treatment. On August 6, 2004, she diagnosed an outbreak of *Ichthyophthirius "sp"* at the facility and recommended the immediate release of the fish from the upper pond. In addition, she recommended a salt treatment to the lower pond. The treatment was administered and the fish examined on August 9, 2004, by Kathy. She noted massive de-scaling and a heavy *Ichthyophthirius "sp"* infestation on fish in the lower pond and the M&E tank.

As noted above, fish releases commenced on August 6, 2004, with all fish released by August 9, 2004. An estimated 67,315 pre-smolts (32.25 fish/lb) weighing 2,087 pounds were released from the upper pond, 78,553 pre-smolts (33.9 fish/lb) weighing 2,317 pounds from the lower pond and 1,094 pre-smolts (42.3 fish/lb) weighing 25.86 pounds from the M&E tank were released into the confluence of Camp and Yoosa Creek (Table 7). Mortalities from time of transfer to release: Known loss/mortality – 11,272 (5.46%); Unknown loss/mortality – 622 (0.423%). Total feed fed: 4,327 pounds. Conversion factor: 1.163:1.

Table 6. Spring Chinook releases in Lolo Creek from the Yoosa/Camp Acclimation Facility in 2004 (2003 brood year).

Release Location	Number	Size #/lb	Total Weight (Pounds)	Mark Type	CWT Tag Code
Yoosa/Camp Creek – Acclimation Ponds	145,868	33.1	4,406.8	CWT	61-26-73
Yoosa/Camp Creek – M&E Tank	1,094	42.3	25.86	CWT	61-26-73

Newsome Creek

On March 15, 2004, a total of 17,659 Newsome Creek stock juvenile spring chinook were marked (CWT) and transferred directly from the inside rearing troughs to the east raceway. An additional 60,860 South Fork stock juveniles received a CWT on March 15 and 18, 2004, and were transferred directly from the inside rearing troughs to the east raceway. Kathy Clemens, Pathologist; Idaho Fish Health Center diagnosed an outbreak of *Bacterial Kidney Disease* in this group of fish on May 24, 2004. The recommended 21 day medicated feed treatment was completed on June 27, 2004.

On August 4, 2004, this group of fish were transferred to the Sweetwater Springs satellite facility and reared there until their transfer on September 2, 2004, to the Newsome Creek acclimation facility. A total of 73,230 fingerlings (16.9/lb avg.) were transferred to the Newsome Creek AF for approximately a six week acclimation. Volitional release began on October 18, 2004. All remaining fish were forced out by October 20, 2004. A total of 67,000 pre-smolts (14.6/lb avg.) weighing 4,589 pounds were released from the acclimation facility into Newsome Creek (Table 6). An additional 2,137 pre-smolts (21.97/lb avg.) weighing 97.58 pounds were released from the M&E tank into Newsome Creek (Table 6) between October 18, 2004 and October 20, 2004. Mortalities from time of transfer to release: Known loss/mortality - 627 (0.856%); Unknown loss/mortality – 6,224 (8.5%). Total feed fed: 5,485.55 pounds. Conversion factor: 1.327:1.

Table 7. Spring Chinook releases in Newsome Creek in 2004 (2003 brood year).

Release Location	Number	Size #/lb	Total Weight (Pounds)	Mark Type	CWT Tag Code
Newsome Creek – Acclimation Pond	67,000	14.6	4,589,0	CWT	61-26-66
Newsome Creek – M&E Tank	2,137	21.97	97.58	CWT	61-26-66

2.1.2 2004 Brood Year Trapping and Spawning

Site 1705

Trapping operations began on April 19, 2004, and ended on August 27, 2004 at Site 1705. A total of 70 adults were collected and held in the south adult holding pond.

Lolo Creek

Trapping operations at the Lolo Creek weir began on June 8, 2004, and ended on September 19, 2004. A total of 101 adults were collected and transported to the adult holding pond at the Yoosa/Camp AF. During August and September, 82 adults (41&, 41%) were spawned at this site. Adults (28%, 1& and 3 Jacks), excess to broodstock needs, were released into Lolo Creek on September 14, 2004. An additional 9 adults (4%, 4&, 1 Jack and 1 unknown) were transported and released into the Selway River on September 14, 2004. Over the course of five weeks (Aug. 11th – Sept. 7th), a total of 120,960 green eggs were taken. Gametes were transported to NPTH (site 1705) where they were mixed, water hardened in iodophore for one hour, and then placed in iso-incubation. Eggs from 3 females (fish #1002, 2004 & 4002) were destroyed due to high ELISA values. Percent eye-up: 84.89%.

Newsome Creek

Trapping operations at the Newsome Creek weir began on June 10, 2004, and ended on September 16, 2004. A total of 76 adults were collected and transported to the adult holding pond at the Newsome AF. Due to excessive water temperature, adults were transported to NPTH in July and August. During August and September, 24 adults (13%, 11&) were spawned at Site 1705. Over the course of five weeks (Aug. 10th – Sept. 7th), a total of 35,933 green eggs were taken. Gametes were mixed, water hardened in iodophore for one hour, and then placed in iso-incubation. Percent eye-up: 88.83%.

Broodstock provided by other facilities

An additional 570 adults (Powell stock – 421, South Fork stock/Clearwater Hatchery – 149) were collected at Idaho Fish and Game (IDFG) facilities and transported to NPTH for holding and spawning. Powell/South Fork stock adults (21%, 7&), excess to broodstock needs, were transported from NPTH and released into the Selway River on September 7, 2004.

2.2 FALL CHINOOK

2.2.1 2003 Brood Year Rearing and Releases

The transfer of fry from incubation stacks to production room tanks began on January 28, 2004, and continued through February 9, 2004.

Between April 19th and May 10th, a total of 172,196 juveniles received a coded wire tag (CWT) and were transferred from the tagging trailer into the south fall chinook acclimation pond.

During the final phases of rearing, water temperatures were controlled to meet specific temperatures regimes (54E F with a 0EF fluctuation over 24 hours) established in the biological criteria for design program (Biological Criteria for Design of Nez Perce Tribal Hatchery, FishPro Inc., April, 2002).

Volitional releases from the Site 1705 south acclimation pond commenced on June 4, 2004, with all fish released by June 11, 2004. A total of 169,596 sub-yearlings (55.2/lb avg.) weighing 3,072.39 pounds were released into the Clearwater River (Table 9). Mortalities from time of marking to release: Known loss/mortality - 436 (0.253%); Unknown loss/mortality – 2,136 (2.768%). Total feed fed: 2,640 pounds. Conversion factor: 0.9492:1.

Table 8. Fall Chinook releases in the Clearwater River in 2004 (2003 brood year).

Release Location	Number	Size#/lb	Total Weight (Pounds)	Mark Type	CWT Tag Code
Clearwater River @ Site 1705	169,596	55.2	3,072.39	CWT	61-26-75

2.2.2 2004 Brood Year Trapping and Spawning

Adult fall chinook trapping operations at NPTH commenced on 23 August 2004, and continued through 29 November 2004. All adults trapped were held in the south adult pond for maturation and spawning. Adults received formalin treatments, every-other day, to control fungus and decrease pre-spawning mortality. All females were injected with erythromycin. A total of 542 adults (157 females, 386 males) and 174 jacks (<53 cm) were collected at NPTH. Another 4 females and 1 male were collected at the Potlatch weir and transported to NPTH for spawning. One jack was collected at the Lapwai Creek weir. An additional 2 females and 1 male were collected at DNFH and transported to NPTH. During September, 823 adult fall chinook (289 females, 477 males) and 57 jacks (<53) were transported from Lower Granite Dam to NPTH for spawning.

On December 1st, all remaining fall chinook adults were sub-sampled and excess adults released into the Clearwater River at Cherrylane boat ramp. Adult number from the sub-sampling and release are as follows: Released: *Lower Granite stock – 161%, 20&; Volunteers – 71%, 9&.* Sacrificed (M&E - Run reconstruction): *Lower Granite – 90%, 23&. Volunteers – 0.*

Over the course of six weeks, a total of 359 females were spawned, which yielded 1,306,229 green eggs (eight females were identified as strays and eggs culled. In addition, one female was spawned with a stray male and eggs culled). Fertilized eggs were water hardened for one hour in 100 parts per million iodophore and placed in iso-incubation. Average eye up, for the Lower Granite group was 91.28%. The average eye up for the volunteer group was 91.49%.

3.0 NEZ PERCE TRIBAL HATCHERY OPERATIONS PLAN - 2005

Salmon production proposed from NPTHC in 2004-2005 is listed in Table 4. Fall chinook production was anticipated to be 1 million, which is less than the authorized 1.4 million sub-yearlings. The availability of both fall and spring chinook broodstock in 2004, will result in the hatchery facility being operated at near capacity for the coming year. Fall chinook salmon production is expected to be at 1.0 million with spring chinook salmon production at the 625,000 parr/pre-smolt goal. Facility testing and system monitoring will continue throughout the coming year to clearly define the operational capabilities of the central incubation facility.

Table 10. Expected Nez Perce Tribal Hatchery Complex 2004-2005 salmon production profile. [a]

Species	Rearing Site [b]	Number	Pounds	Fish/lb	Age	Release/ Transfer Time	Release Location
Fall Chinook	NPTH	500,000	9,615	50.0	0+	June	Site/Clearwater R.
	NLV	500,000	8,929	50.0	0+	May	N. Lapwai Creek
	SWSH	- 0 -	- 0 -	50.0	0+	April (trans)	Selway River
	NPTH	- 0 -	- 0 -	50.0	0+	Feb (trans)	S. F. Clearwater
Spring Chinook	NPTH	400,000[c]	3,419	95.0	0+	June	Meadow Cr.
	NPTH/YCC	150,000[d]	4,412	34.0	0+	October	Yoosa/Camp Cr.
	NPTH/NC, SWS	75,000[e]	2,586	29.0	0+	November	Newsome Creek

a. Release numbers and pounds for acclimated releases are as measured at acclimation facilities.
b. NPTH = Site 1705, SWSH = Sweetwater Springs Hatchery. Acclimation facilities: NLV = North Lapwai Valley, YCC = Yoosa/Camp Creek, CF = Cedar Flats, LG = Luke's Gulch, NC = Newsome Creek.
c. Rapid River stock returning to Powell.
d. Stock returning to Yoosa/Camp Cr. facility or S. Fork Stock (Rapid River)/Clearwater River returns.
e. Stock returning to Newsome Cr. facility or S. Fork Stock (Rapid River)/Clearwater River returns.

3.1 SPRING CHINOOK

3.1.1 2004 Brood Year Rearing

Meadow Creek

Beginning on December 6, 2004, and continuing through December 28, 2004, spring chinook fry were transferred from incubation stacks to production room tanks. An estimated 555,687 fry (Powell/South Fork stock), 28,585 fry (Newsome Creek stock) and 97,718 fry (Lolo Creek stock) were transferred to production room tanks. Average size at time of transfer was 1,100 fish per pound (fpp).

Fish, destined for release into Meadow Creek, will be marked (CWT) at approximately 180 fish per pound (2.52 g) mid-April to mid-May and transferred to the NATURES S-channels. Fish destined for release from acclimation facilities will be marked (CWT) at approximately 180 fish per pound (2.52 g) in mid-March, held in production room tanks or raceways at NPTH and then transferred to acclimation facilities at Newsome Creek and Yoosa/Camp for final rearing.

As of December 31, 2004, a total of 666,688 spring Chinook fry were on hand at NPTH. Fish are progeny of adults trapped at Newsome Creek (28,328 fry), Lolo Creek (97,269 fry), and Powell/South Fork (541,091 fry).

3.1.2 2004 Brood Year Acclimation Facility Operations and Release

Lolo Creek - Yoosa/Camp

Transfer of the fish will occur when conditions permit (mid-May to the first week of June). Facility will be set-up and operational at least 2 days prior to transfer of fish. Prior to release, 9,000 fish will be tagged with a PIT tag. Volitional releases will commence on/or about October 8th. Target release is October 15, 2005 at 34 fish per pound (13.3 g).

Newsome Creek

After marking, fish will be transferred to the Sweetwater Spring facility, held until September and transferred when water temperatures cool in Newsome Creek. Prior to release, 6,000 fish will be tagged with a PIT tag. Volitional releases will commence on/or about October 8th. Target release is October 15, 2005 at 29 fish per pound (15.6 g).

Meadow Creek

Direct stream release is scheduled into Upper and Lower Meadow Creek at an estimated size of 95 fish per pound (4.7 g) in mid-June, 2005. Prior to release, 15,000 fish will be tagged with a PIT tag.

3.1.3 2005 Brood Year Trapping and Spawning

Site 1705

The adult ladder and trap will also be operated at Nez Perce Tribal Hatchery to collect spring chinook adults. Trapping operations will commence on April 19th and continue through July 31st. The ladder will be operated intermittently to collect up to 542 adults needed to achieve broodstock goals, based on an estimated 85% survival from collection to spawning. In an attempt to select adults representatively across the return, the trap will be open in April and May until 34% (up to 182 adults) of the collection goal has been retained for broodstock. At that time, the trap will be closed until June 1. Beginning June 1st, the trap will reopen until 33% (up to 180 adults) of the collection goal has been retained for broodstock. Again, the trap will be closed until July 1st. Finally, beginning July 1st, the trap will reopen until the remaining 33% (up to 180 adults) of the collection goal has been retained for broodstock. Trapping operations targeting spring chinook will cease for the remainder of the season at this time. Female contribution estimated to be 50%. Broodstock selection will be based on existing fin clips, marks, or tags. Only adipose fin clipped fish will be used as broodstock and will be retained at the rate described above. All natural, non-adipose fin clipped, known

Idaho Supplementation Studies (ISS), and radio tagged fish will be returned to the Clearwater River and allowed to continue their spawning migration.

Lolo Creek

Trapping operations on Lolo Creek usually begins the first week of May, after peak flows are reached. Trapping will continue through September 18th, or until zero fish are trapped for 7 consecutive days. Adult return estimate to Lolo Creek is 449. Adult broodstock needs are approximately 60 females and 60 males for Lolo Creek. Two weirs will be operated on Lolo Creek, an upper weir (RKM 51) and a lower weir (RKM 21). Pass/keep ratios for the upper and lower weirs are initially set at 4:1 until 30 adults are collected at each weir The pass:keep ratios may be adjusted on a weekly basis dependent on actual captures. The adult weirs will also be used for escapement, estimating sex composition, age structure, return timing and genetic tissue sampling. All known strays will be removed in accordance with the ISS study design. Strays will be used to fill outstanding broodstock needs. Female contribution estimated to be at 50%.

Adults captured at the Lolo Creek upper and lower weirs will be transported to Yoosa/Camp AF and placed in the adult holding raceway. In the event water temperatures reach 65º F or above, adults may be transferred to the Sweetwater Springs facility or Site 1705.

Newsome Creek

Trapping operations on Newsome Creek usually begins at the first week of May, after peak flows are reached. Trapping will continue through September 18th, or until zero fish are trapped for 7 consecutive days. Adult return estimate to Newsome Creek is 116. Adult broodstock need is approximately 30 females and 30 males. . Pass:keep ratios for the Newsome Creek weir are initially set at 2:1. Pass:keep ratios may be adjusted on a weekly basis dependent on actual captures. The adult weirs will also be used for escapement, estimating sex composition, age structure, return timing and genetic tissue sampling. All known strays will be removed in accordance with the ISS study design. Strays will be used to fill outstanding broodstock needs. Female contribution estimated to be at 50%.

Adults captured in the Newsome Creek weir will be transported to the adult holding raceway at the Newsome facility. In the event water temperatures reach 65º F or above, adults may be transferred to the Sweetwater Springs facility or Site 1705.

Broodstock provided by other facilities

Per agreement with Idaho Department of Fish and Game, adults returning to Crooked River, Clearwater Hatchery, Red River and the Powell satellites may also be used for broodstock. Approximately 400 adults (200 females and 200 males) will be collected at IDFG facilities – provided they are available - and transported to NTPH for maturation and spawning.

Spawning

Adults retained for broodstock at all holding facilities will receive formalin treatment every-other day to control fungus and decrease pre-spawning mortality. Fish will be spawned during August and September, with the first spawn expected to occur on Tuesday, August 9, 2005. Spring chinook adults, held at Site 1705, will be spawned on Tuesdays. Adults held at the Yoosa/Camp facility will be spawned on Wednesdays. The gametes will be kept separate, transported to Site 1705 where they will be combined.

Incubation

Fertilized eggs will be water hardened, for one hour in 100 parts per million (ppm) iodophore and placed in iso-incubation units. Upon receipt of virology test results, eyed eggs will be shocked and transferred into Heath trays. The trays will then be placed in stacks located in one of the incubation rooms at Site 1705. Spring chinook carcasses may be returned to their respective streams for nutrient enrichment, which is dependant upon fish health inspection results.

Table 8. Proposed spring Chinook release numbers, size, and mark type in Meadow Creek, Newsome Creek, and Lolo Creek (Yoosa/Camp) in 2005 (2004 brood year).

Site(BY)	Number	Size#/lb	Age	Mark/CWT	PIT tags
1705 (04) into Meadow Creek	400,000	95	0+	100% CWT	5,000 Upper Release 5,000 Lower Release 5,000 M&E
Newsome Creek (04)	75,000	29	0+	100% CWT	3,000 Pond 3,000 M&E
Yoosa/Camp Cr. (04)	150,000	34	0+	100% CWT	3,000 Upper Pond 3,000 Lower Pond 3,000 M&E

3.2 FALL CHINOOK

3.2.1 2004 Brood Year Rearing and Releases

As of December 31, an estimated 1,176,400 fall Chinook eggs/fry were on hand at NPTH. Upon attaining a size of 500 fish per pound, 207,000 fry will be transferred to the 16' circular ponds at Sweetwater Spring. The remaining fry will remain at Site 1705 for rearing.

Marking will commence in late April and end in early May 2005. Upon attaining a size of 180 fish per pound, 300,000 fish will be marked from each release group (Site 1705 and North Lapwai Valley); 200,000 fish will be marked with a Coded Wire Tag (CWT) and 100,000 will be marked with an adipose fin clip and a CWT. The remainder of fish in each release group will be unmarked.

Marking will occur at Site 1705 and Sweetwater Springs. Fall Chinook programmed for release at Site 1705 will be marked as described above. Fall Chinook programmed for release at North Lapwai Valley will be reared at Site 1705 and Sweetwater Springs. Marking of these group of fish will be as follows. At Sweetwater Springs 80,000 fish will be marked with a CWT and 40,000 will be marked with an adipose fin clip and a CWT. At Site 1705, 120,000 fish will be marked with a CWT and 60,000 fish will be marked with an adipose fin clip and a CWT.

At the completion of marking, the fish will be transferred to the fall chinook ponds at NPTH and North Lapwai Valley for final rearing, acclimation and release. Unmarked fish (200,000) destined for release into the Clearwater River will be held in production room tanks at Site 1705. Upon attaining a size of 180 fpp, the fish will then be transferred to the two fall chinook acclimation ponds at Site 1705.

Scheduled release date from Site 1705 is June 15th, at a size of 50 fpp. Prior to release, 3,000 fish will be PIT tagged. The NLV release date is May 31st at 50 fpp. Prior to release, 3,000 fish will be PIT tagged.

Table 10. Proposed fall Chinook release numbers, size, and mark type from Site 1705 and North Lapwai Valley in 2005 (brood year 2004)..

Site	Number	Size #/lb	PITtags	Mark/CWT	Releasedates
1705	500,000	50	3,000	100,000 - Ad/CWT 200,000 - CWT Only 200,000 – Unmarked	June 15
N. Lapwai Valley	500,000	50	3,000	100,000 - Ad/CWT 200,000 - CWT Only 100,000 - Unmarked	May 31
Lukes Gulch	- 0 -	50		CWT	June 15
Cedar Flats	- 0 -	50		CWT	June 15

3.2.2 2005 Brood Year Trapping and Spawning

Snake River fall chinook adults will be collected at Lower Granite Dam (LGR) and transported to Site 1705, in accordance with the U.S. vs. Oregon Fall Fishery Agreement. Additionally, some adult fall chinook may enter the fish ladder and be trapped at Site 1705. Assuming a fecundity of 3,500 eggs per female, 565 females would be required in BY 2005 to provide the 1.3 million eggs for the production program (Table 2).

Lower Granite Dam

Adult fall chinook will be trapped at Lower Granite Dam (LGR) commencing the last week of August for brood year 2005. Trapping at LGR will continue throughout the run and is anticipated to end by late November or early December. Fall Chinook are collected in the trap as a sub-sample of the returning run. The sub-sample rate for 2005 has not yet been determined but should range from 13-15% of the run over LGR. Currently, all adults trapped at LGR and retained for broodstock will be PIT tagged in the pelvic girdle and receive a right operculum punch (ROP). Also, all females trapped at LGR will be injected with erythromycin and oxytetracycline during the sorting process at LGR.

Washington Department of Fish and Wildlife (WDFW) Fish Management, Lyons Ferry Hatchery (LFH) and NPTHC will develop a transportation schedule for adults trapped at LGR. The goal of NPTHC is to receive 30 – 50% of the adult trapped at LGR (anticipated to be approximately 573 fish). A portion of known LFH origin and unknown origin hatchery chinook will be transported from LGR to Site 1705 for holding and spawning. Coded wire tagged adults, excess to broodstock needs, will be sacrificed for run-reconstruction purposes. Accurate run-reconstruction to LGR is based on a set sub-sampling protocol that requires that all hauled fish be accounted for i.e. CWT's read and scales read on unmarked/untagged fish for expansion of fish not sampled at LGR. Adults, excess to broodstock needs and without a CWT, will be anesthetized and scale samples taken before they are released into the Clearwater River.

Site 1705

Commencing on August 22, 2005, and continuing through December 2, 2005, the adult ladder and trap will be operated at Nez Perce Tribal Hatchery to collect fall chinook adults for brood year 2005.

Adults that voluntarily return to NPTH will be injected with erythromycin prior to the first spawning. Additionally, all adults will receive formalin treatments every-other day to control fungus and decrease pre-spawning mortality.

Spawning

Spawning at Site 1705 will occur weekly, Tuesdays, starting October 18th, and may continue through December 6th. All out-of-Snake River Basin adults, identified as

"strays" by CWT or other distinguishing marks, will be culled. WDFW may use scale pattern data to cull suspect "strays" and eggs. However, scale pattern data will not be used at NPTH in the culling of eggs. On all fish spawned the following data will be collected: Fork length, sex, fin clips, visual implant elastomer (VI) tags (document side and color i.g. LR for left red), coded wire tag identification number and side of opercle punch. In addition, all fish will be scanned for a PIT tag and scales will be taken. Data entry, verification and finalization of all data collected will be coordinated with WDFW and completed by mid-January 2006. Finalized database files will be sent to NPT (Bill Arnsberg, WDFW (Debbie Milks) and Technical Advisory Committee (TAC) (Cindy Lefleur).

Every adult female will be sampled individually for BKD with ELISA. Up to 150 ovarian fluid samples (3 fish pool) will be sampled for viruses. An additional 60 tissue samples will be taken for bacteria assays, and so samples for *M. cerebralis.* Brood fish health samples will be taken by NPT staff and delivered to Idaho Fish Health Center personnel for analysis. Fish with a high BKD titer will be culled.

Upon agreement with Idaho Department of Fish and Game (IDFG), fall chinook carcasses may be released into free-flowing reaches of the Clearwater River for nutrient enrichment.

Incubation

Fertilized eggs will be water hardened for one hour in 100 ppm iodophore and placed in iso-incubation. Upon receipt of virology results and eye up, eggs will be transferred to incubation rooms and placed in Heath trays for hatching. Eggs from females with and a BKD ELISA value of 0.2 and above will be culled. During all phases of incubation, water temperatures will be controlled to meet specific temperature regimes established in the design biological criteria program.

3.3 Communication

A bi-monthly NPTHC narrative and fish health report will be completed and submitted to NPT Research and Production divisions, Clearwater Fish Hatchery and all other interested parties.

Monthly fish health and pre-release pathology reports will be submitted to the Hatchery Supervisor and maintained in the files at Site 1705.

3.4 Hatchery Monitoring and Evaluation

A detailed monitoring and evaluation (M&E) proposal for the NPTH has been developed and is available on request. All aspects of ongoing or proposed M&E are discussed in detail in that document.

3.5 Fish Pathology and Fish Health Monitoring

A. All fish production at Nez Perce Tribal Hatchery (NPTH) and rearing facilities is conducted according to the United States Fish and Wildlife Service (USFWS) - National Fish Health Policy, Pacific Northwest Fish Health Protection Committee (PNFHPC) - Model Program, and Integrated Hatchery Operations Team (IHOT) policies and guidelines.
Specially, all lots of fish are monitored for fish health, all broodstock are annually inspected, strict hatchery sanitation procedures and fish culture practices (rearing criteria) are followed, and egg and fish transfer and release requirements are met. In addition, bacterial kidney disease management strategies for chinook salmon stocks are employed.

B. Fish Disease Outbreaks

The fish health specialist will respond to all fish disease outbreaks at the request of the fish hatchery staff.

C. Monthly Monitoring

As per our contract with USFWS, Idaho Fish Health Center, a fish health specialist will visit NPTH at least once a month. Mortality records and fish in all rearing containers will be inspected. Approximately 12-15 fish of each species will be sacrificed and examined at the discretion of the fish health specialist.

D. Annual Broodstock Viral Inspections

At spawning, all broodstock (spring and fall chinook) will be annually tested for viral pathogens. Ovarian fluid from 150 spawned female fish will be sampled and tested. Additionally, 60 fish will have kidney/spleen samples taken and sampled for viral and bacterial pathogens.

E. Pre-release exams on juveniles

Prior to release, a minimum 60 fish sample will be collected from each release group of fall and spring chinook for a pre-release inspection. Bacteriology, virology and parasitic assays will be performed.

F. Specific Fish Health Management

1. Bacterial Kidney Disease (BKD) Management

    a. All female chinook broodstock will receive a pre-spawning injection with erythromycin.

    b. Female chinook broodstock will be tested for BKD via ELISA (Ensyme Linked Immunosorbent Assay).

    c. Juvenile chinook may be reared separately based on the BKD-ELISA results.

d. Juvenile chinook (200 fpp or smaller) will be reared at a density index of up to then 0.3 lbs\ft3\in.. Juvenile chinook (180 fpp or larger) will be reared at a density index of 0.1 lbs\ft3\in..

e. The use of Lutenizing Hormone Releasing Hormone (LHRH), to facilitate spawning of both sexes, may be an option.

2. Broodstock and Egg Fungus Management

a. Broodstock - All chinook broodstock will be treated with formalin every other day to control fungus.

b. Eggs - All eggs will be treated with formalin daily to control fungus.

4.0 COMMUNICATION

The following list of people are either directly involved in the operation of the NPTHC, or related programs and facilities. Question about the AOP, or coordination of production or monitoring actions should be directed to the appropriate person.

Name	Affiliation	Speciality	Phone, ext.	e-mail
Policy				
Sharon Kiefer	IDFG	Anadromous Coordinator	208-334-3791	skiefer@idfg.state.id.us
Bill Tweit	WDFW		360-902-2723	tweitwmt@dfw.wa.gov
Gary James	CTUIR		541-276-4109	garyjames@ctuir.com
Dave Johnson	NPT	Director, DFRM	208-843-7320, Ext. 2441	davej@nezperce.org
Production				
Becky Johnson	NPT	Production Coordinator	208-843-7320, Ext. 433	beckyj@nezperce.org
Brad George	IDFG	Clearwater Hatchery	208-476-3331	bgeorge@idfg.state.id.us
Harold (Butch) Harty	NPT	Hatchery Supervisor III	208-843-7384, Ext. 3502	hartyhb@nezperce.org
Jeff Lundberg	NPT	Hatchery Supervisor I	208-843-7384, Ext. 3503	jeffl@nezperce.org
Kent Hills	IDFG	Oxbow Hatchery	541-785-3459	oxbowfh@pinetel.com
Mike Key	NPT	Acclimation Facilities	208-843-7320, Ext. 2486	mikek@nezperce.org
Jerry McGehee	IDFG	Clearwater Hatchery	208-476-3331	jmcgehee@idfg.state.id.us
Bruce McCleod	NPT	Acclimation Facilities	208-843-7320, Ext. 2403	brucem@nezperce.org
Aaron Penney	NPT	Asst. Hatchery Manager	208-843-7384, Ext. 3504	aaronp@nezperce.org
Scott Everett	NPT	Coho Project Leader	208-843-7384, Ext. 2442	scotte@nezperce.org
Brian Zimmerman	CTUIR	Production Coordinator	541-276-4109	brianzimmerman@ctuir.com
Evaluation				
Bill Arnsberg	NPT	Fall chinook	208-476-7296, Est. 3115	billa@nezperce.org
Ryan Johnson	NPT	Spring chinook	208-476-4920, Ext. 3103	ryanj@nezperce.org
Steve Rocklage	NPT	Fall chinook	208-476-3626, Ext. 3106	stever@nezperce.org
Sherman Sprague	NPT	M&E Spring chinook	208-476-4044, Ext. 3108	shermans@nezperce.org
Mark Schuck	WDFW	WDFW Evaluations	509-382-1004	schucmls@dfw.wa.gov
Deborah Milks	WDFW	Fall chinook	509-382-1710	milksdjm@dfw.wa.gov
Management				
Jay Hesse	NPT	Acting Research Director	208-843-7145, Ext. 3042	jayh@nezperce.org
Ed Larson	NPT	Production Director	208-843-7320, Ext. 2440	edl@nezperce.org
Glen Mendel	WDFW	Fish Management	509-382-1005	mendegwm@dfw.wa.gov
Tom Rogers	IDFG	Hatcheries Supervisor	208-334-3791	trogrs@idfg.state.id.us
Kathy Clemens	USFWS	Id. Fish Health Center	208-476-9500	kathy_clemens@fws.gov
Bill Horton	IDFG		208-334-3791	bhorton@idfg.state.id.us

ATTACHMENT 1: NEZ PERCE TRIBE - OUTPLANT - 2004

2004 ACTUAL FINAL

	Index	Actual # Fish Releases	# CWT	# PIT	# AdClip
Juvenile Spring Chinook Outplant	*Page 1*	**1,142,887**	**865,619**	**44,621**	**504,363**
Adult Sp/Su Chinook Outplant	*Page 1*	**1,809**			
Juvenile Coho Outplant	*Page 2*	**1,258,095**	**220,000**	**6,500**	**60,000**
Adult Coho Outplant	*Page 2*	**37**			
Juvenile Fall Chinook Outplant	*Page 3*	**1,921,468**	**1,134,898**	**25,043**	**414,452**
Juvenile Steelhead Outplant	*Page 4*	**791,262**	**20,000**	**17,100**	
Adult Steelhead Outplant	*Page 5*	**3,019**			
2004 TOTAL Juveniles		**5,113,712**	**2,240,517**	**93,264**	**978,815**
2004 TOTAL Adults		**4,865**			

Actual Spring/Summer Chinook Juveniles - 2004 Page 1

Final 2/17/05

Rearing Location	Acclimation Location	Species	Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip	Fish Per Pound	Release Location	Release Subbasin	Comments
NPTH	None	SpChk	2003	6/21-22/04	Parr	137,722	130,836	5,015	0	72.0	lower Meadow Creek	Selway	CWT = 61-26-74, 61-26-50, 61-01-
NPTH	None	SpChk	2003	6/15-16/04	Parr	171,833	163,241	5,010	0	78.8	upper Meadow Creek	Selway	CWT = 61-26-74, 61-26-50
NPTH	Newsome Creek AF	SpChk	2003	10/18-20/04	Pre-Smolt	69,137	67,339	6,449	0	29.0	Newsome Creek	S.Fk Clearwater	CWT = 61-26-66
NPTH	Lolo Creek AF	SpChk	2003	8/6-9/2004	Pre-Smolt	146,962	141,084	0	0	32.3, 33.9, 42.3	Lolo Creek	Clearwater	CWT = 61-26-73
					Subtotal	*525,654*	*502,500*	*16,474*	*0*				
Rapid River	None	SpChk	2003	8/31,9/8/04	Pre-Smolt	183,923	0	0	183,923	56.3	McGruder Corridor	Selway	Surplus production from RR
Dworshak	None	SpChk	2003	9/21/04	Pre-Smolt	70,191	0	0	70,191	78.6	McGruder Corridor	Selway	Surplus production from DNFH
					Subtotal	*254,114*	*0*	*0*	*254,114*				
Lookingglass	Lostine	SpChk	2002	3/15-3/21/04	Smolt	116,507	116,507	6,669	116,507	20.0	Lostine River	Grande Ronde	58,508 Red VIE
Lookingglass	Lostine	SpChk	2002	3/29-4/15/04	Smolt	133,742	133,742	9,292	133,742	20.0	Lostine River	Grande Ronde	58,144 Red VIE
					Subtotal	*250,249*	*250,249*	*15,961*	*250,249*				
McCall	None	SuCHk	2002	3/15-18/04	Smolt	112,870	112,870	12,186	0	27.1	Johnson Creek	S. Fk. Salmon River	100% VIE Right Green; CWT = 10-17-75 (27,202 fish), 10-16-75 (30,249 fish), 10-78-71 (55,419 fish)
					Subtotal	112,870	112,870	12,186	0				
				2004	**Total**	*1,142,887*	*865,619*	*44,621*	*504,363*				

Spring/Summer Chinook Adults - 2004

Final 2/17/05

Return Location			Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip		Release Location	Release Subbasin	Comments
DNFH		SpChk		8/26,9/3,9/16/04	Adult	1,008					Lower Selway	Selway	
					Subtotal	*1,008*							
NPTH	**Powell/S. Fork stock**	**SpChk**		**9/7/04**	**Adult**	**28**					**Lower Selway**	**Selway**	**21 Males, 7 Females**
NPTH	**Lolo Creek AF**	**SpChk**		**9/14/04**	**Adult**	**32**					**Lolo Creek**	**Clearwater**	**28 Males, 1 Female, 3 Jacks**
NPTH	**Lolo Creek AF**	**SpChk**		**9/14/04**	**Adult**	**9**					**Lower Selway**	**Selway**	**4 Males, 4 Females, l Unknown**
					Subtotal	***69***							
Imnaha Satellite	Lookingglass	SpChk		Summer	Adult	285					Big Sheep Creek	Imnaha	
						0							
Lostine Weir	NA	SpChk		Summer	Adult	183					Wallowa River	Wallowa/Grande Ronde	Lostine River stock
Lostine Weir	NA	SpChk		Summer	Adult	264					Bear Creek	Wallowa/Grande Ronde	Lostine River stock
					Subtotal	*732*							
				2004	**Total**	**1,809**							

Actual Coho Juveniles - 2004 Page 2

Final 2/17/05

Rearing Location	Species	Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip	Fish Per Pound	Release Location	Release Subbasin	Comments
Eagle Creek	Coho	2002	3/9/04, 3/11/04	Smolt	30,000	30,000			19.8	Lapwai Cr.	Clearwater	CWT = 61-01-16
Eagle Creek	Coho	2002	3/9/04, 3/11/04	Smolt	30,000	30,000		30,000	19.8	Lapwai Cr.	Clearwater	CWT = 61-01-17
Eagle Creek	Coho	2002	3/9/04, 3/11/04	Smolt	239,084		1,000		19.8	Lapwai Cr.	Clearwater	
Eagle Creek	Coho	2002	3/2/04, 3/4/04	Smolt	30,000	30,000			22.0	Potlatch R.	Clearwater	CWT = 61-01-14
Eagle Creek	Coho	2002	3/2/04, 3/4/04	Smolt	30,000	30,000		30,000	22.0	Potlatch R.	Clearwater	CWT = 61-01-15
Eagle Creek	Coho	2002	3/2/04, 3/4/04	Smolt	237,271		1,000		22.0	Potlatch R.	Clearwater	
Dworshak	Coho	2002	4/27/04	Smolt	356,323	100,000	1,500		17.7	Clear Ck.	M.Fk Clearwater	CWT = 61-26-44 (50,000 fish), 61-26-45 (50,000 fish)
				SubTotal	*952,678*	*220,000*	*3,500*	*60,000*				
Potlatch	Coho	2003	March	Fry	0					Orofino Cr.	Clearwater	mortality at Potlatch - no releases in 2004
				Total	*0*	*0*	*0*	*0*				
Clearwater	Coho	2003	9/28-29/04	Presmolts	305,417	124,700	3,000	0	30	Lolo Cr.	Clearwater	CWT = 61-26-88 (64,700 fish), 61-26-79 (30,000), 61-26-80 (30,000)
				SubTotal	*305,417*	*0*	*3,000*	*0*				
			2004	**Total**	**1,258,095**	**220,000**	**6,500**	**60,000**				

Coho Adults - 2004

Return Location			Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip		Release Location	Release Subbasin
KNFH				11/17/2004	Adult	15					Lolo Creek	Clearwater - KNFH opercle punch
DNFH				11/24/04	Adult	13					Lolo Creek	Clearwater - DNFH opercle punch
KNFH				11/24/04		9					Lolo Creek	Clearwater - KNFH opercle punch
					Subtotal	*37*						

Actual Fall Chinook Juveniles - 2004 Page 3

Final 2/17/05

Rearing Location	Species	Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip	Fish Per Pound	Release Location	Release Subbasin	Comments
Lyons Ferry	FaChk	2002	4/12-13/2004	1+ Smolt	151,443	151,443	4,983	151,443	10.8	Pittsburg Landing	Snake	VIE Green R eye
Lyons Ferry	FaChk	2002	4/7/2004	1+ Smolt	153,251	153,251	4,982	153,251	10.3	Captain John's Rapid	Snake	VIE Blue L eye
Lyons Ferry	FaChk	2002	4/14-15/04	1+ Smolt	109,758	109,758	4,984	109,758	9.0	Big Canyon Cr.	Clearwater	VIE Green L eye
				SubTotal	*414,452*	*414,452*	*14,949*	*414,452*				
Oxbow	FaChk	2003	5/24/04	0+ Smolt	165,438	165,438	0	0	48.2	Pittsburg Landing	Snake	CWT = 10-69-73, 10-79-76, 10-08-76
Lyons Ferry	FaChk	2003	5/31/04	0+ Smolt	197,687	0	2,496	0	54.3	Pittsburg Landing	Snake	
Lyons Ferry	FaChk	2003	6/1/04	0+ Smolt	500,739	192,649	2,493	0	52.0	Captain John's Rapid	Snake	CWT
Lyons Ferry	FaChk	2003	6/3/04	0+ Smolt	473,556	198,190	2,490	0	57.6	Big Canyon Cr.	Clearwater	CWT
				SubTotal	*1,337,420*	*556,277*	*7,479*	*0*				
NPTH	FaChk	2003	6/4-11/04	0+ Smolt	169,596	164,169	2,615	0	55.2	Site 1705 - NPTH	Clearwater	CWT = 61-26-75
				SubTotal	*169,596*	*164,169*	*2,615*	*0*				
			Total	Yearlings	414,452	414,452	14,949	414,452				
			Total	Subyearlings	1,507,016	720,446	10,094	0				
			2004	**TOTAL**	**1,921,468**	**1,134,898**	**25,043**	**414,452**				

Actual/Proposed Steelhead Juveniles - 2004 Page 4

Final 2/17/05

Rearing Location	Species	Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip	Fish Per Pound	Release Location	Release Subbasin	Comments
Irrigon	STHD	2003	April	Smolt	100,000		0	50000		Big Sheep Creek	Imnaha	A strain - released by ODFW per Fall Fishery Agreement
				Subtotal	*100,000*	*0*	*0*	*50,000*				
Clearwater	STHD	2003	4/26/04	Smolt	51,562	0	300	0	4.42	Lolo Creek	Clearwater	B strain - reared by IDFG per Fall Fishery Agreement - transport and release by NPT
Clearwater	STHD	2003	April	Smolt	25,000	0	1,250	0		Meadow Creek	S.Fk Clearwater	B strain - released by IDFG per Fall Fishery Agreement
Clearwater	STHD	2003	Aprl	Smolt	25,000	0	1,250	0		Mill Creek	S.Fk Clearwater	B strain - released by IDFG per Fall Fishery Agreement
Clearwater	STHD	2003	April	Smolt	150,000	0	5,000	0		Red River	S.Fk Clearwater	B strain - released by IDFG per Fall Fishery Agreement
Clearwater	STHD	2003	April	Smolt	100,000	20,000	300	0		Crooked River	S.Fk Clearwater	B strain - released by IDFG per Fall Fishery Agreement
				Subtotal	*351,562*	*20,000*	*8,100*	*0*				
Hagerman	STHD	2003	April	Smolt	160,000	0	300	0		Little Salmon	Salmon	A strain - released by FWS per Fall Fishery Agreement
Hagerman	STHD	2003	April	Smolt	40,000	0	0	0		Hazard Cr./Little Salmon	Salmon	A strain - released by FWS per Fall Fishery Agreement
Dworshak	STHD	2003	4/22-26/04	Smolt	74,620	0	300	0	5.3-7.6	American River	S.Fk Clearwater	B strain - reared by FWS per Fall Fishery Agreement - transport and release by NPT
Dworshak	STHD	2003	4/19-21/04	Smolt	65,080	0	300	0	5.6-7.1	Newsome Creek	S.Fk Clearwater	B strain - reared by FWS per Fall Fishery Agreement - transport and release by NPT
				Subtotal	*339,700*	*0*	*9,000*	*0*				
			2004	**Total**	**791,262**	**20,000**	**17,100**	**50,000**				

Actual Steelhead Adults- 2004 Page 5

Rearing Location	Species	Brood Year	Release Date	Life Stage	Actual # Fish Releases	# CWT	# PIT	# AdClip		Release Location	Release Subbasin	Comments
Irrigon	STHD		March-04	Adult	697					Big Sheep	Imnaha	
Irrigon	STHD		April-04	Adult	1,018					Big Sheep	Imnaha	
Irrigon	STHD		May-04	Adult	26					Big Sheep	Imnaha	
Irrigon	STHD			Adult	1,741					Big Sheep	Imnaha	
				Subtotal								
Dworshak	STHD		3/11/04	Adult	404					SF Clearwater	Clearwater	Lukes Gulch
			3/25/04	Adult	166					SF Clearwater	Clearwater	Lukes Gulch
			4/1/04	Adult	367					SF Clearwater	Clearwater	Cougar Creek
			4/8/04	Adult	159					SF Clearwater	Clearwater	Peasley Creek
			4/15/04	Adult	182					SF Clearwater	Clearwater	Sour Dough
				Subtotal	1,278							
Oxbow	STHD		Fall	Adult	0					Little Salmon River	Salmon	
			2004	**Total**	**3,019**							