

**2024**

**ANNUAL OPERATING PLAN**  
**for**  
**FISH PRODUCTION PROGRAMS**  
**in the**  
**CLEARWATER RIVER BASIN**

by

U.S Fish and Wildlife Service

Idaho Department of Fish and Game

Nez Perce Tribe

February 26, 2024

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## 0. Preamble

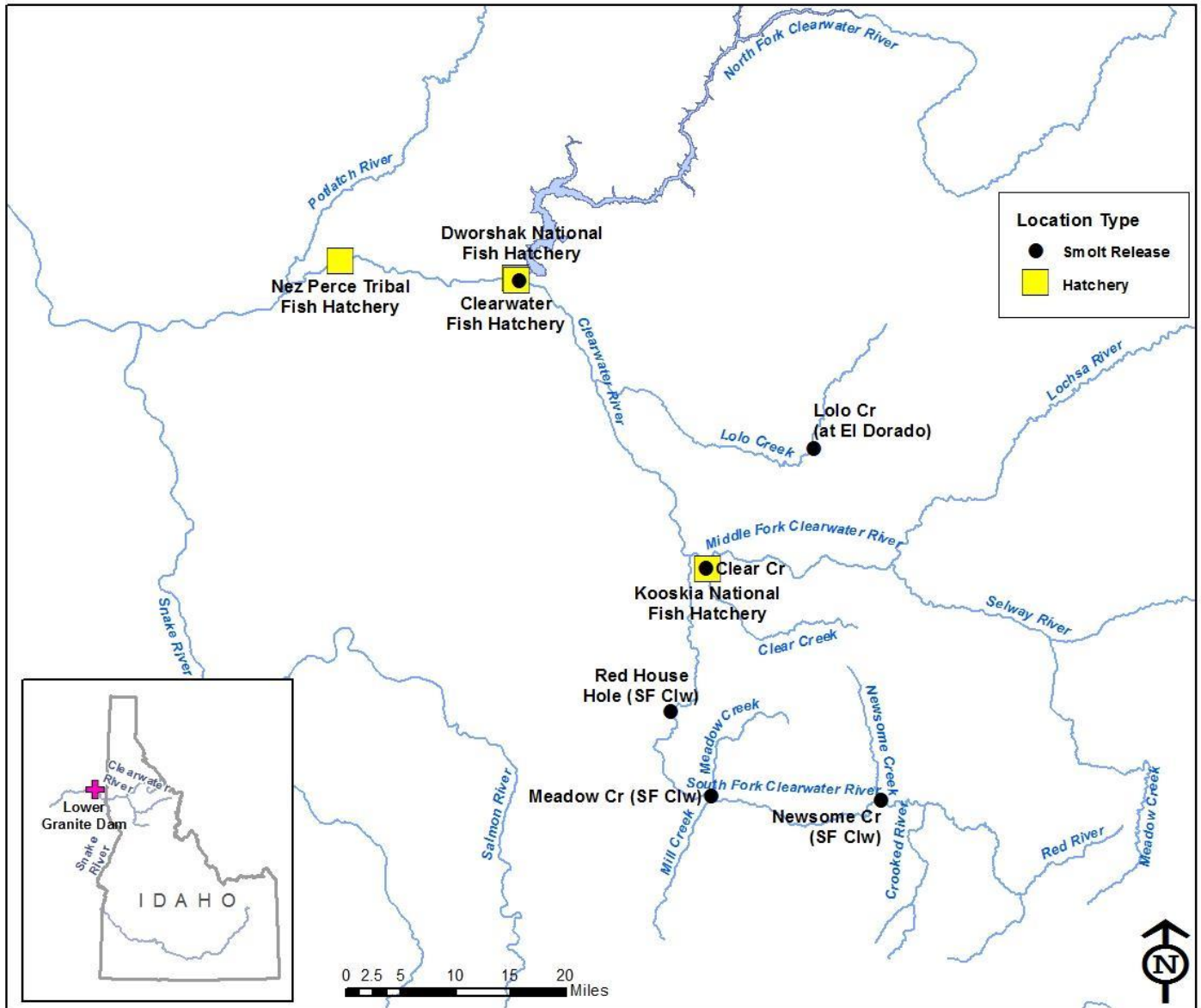
The Annual Operating Plan (AOP) meeting and AOP/SOP documents are planning, coordination and logistics tools that identify the expected implementation of a number of hatchery operation and research/monitoring activities for the coming year in a transparent, open manner.

It is the responsibility of all AOP parties to participate in AOP meetings, provide follow up information and assistance as requested or needed, and work in good faith to complete the AOP document within the timeframe agreed upon at the AOP coordination meeting. A finalized electronic version of the AOP will be available to all cooperating agencies and serve as the working version of the document.

If a disputed or incomplete item is identified at the AOP meeting and persists to the end of the agreed completion timeframe for finalizing the AOP documents, the AOP will be finalized without the disputed or incomplete section. However, parties to the dispute will add a placeholder in the document, so they can work toward resolution.

After the AOP is finalized, and based on unforeseen or unanticipated circumstances (e.g., lower than expected returns, loss of production, infrastructure issues as examples), changes or deviations from the AOP may be warranted. In those cases, there is an expectation that the lead agency that has identified the issue will communicate with the appropriate AOP parties, through the weekly coordination calls or by email, so they can work collaboratively to address it and/or work towards resolution. Implemented changes should be documented in writing by the lead agency and communicated, to ensure transparency and as documentation of the change. These changes should also be captured in various year-end reports.

# 1. Summer Steelhead



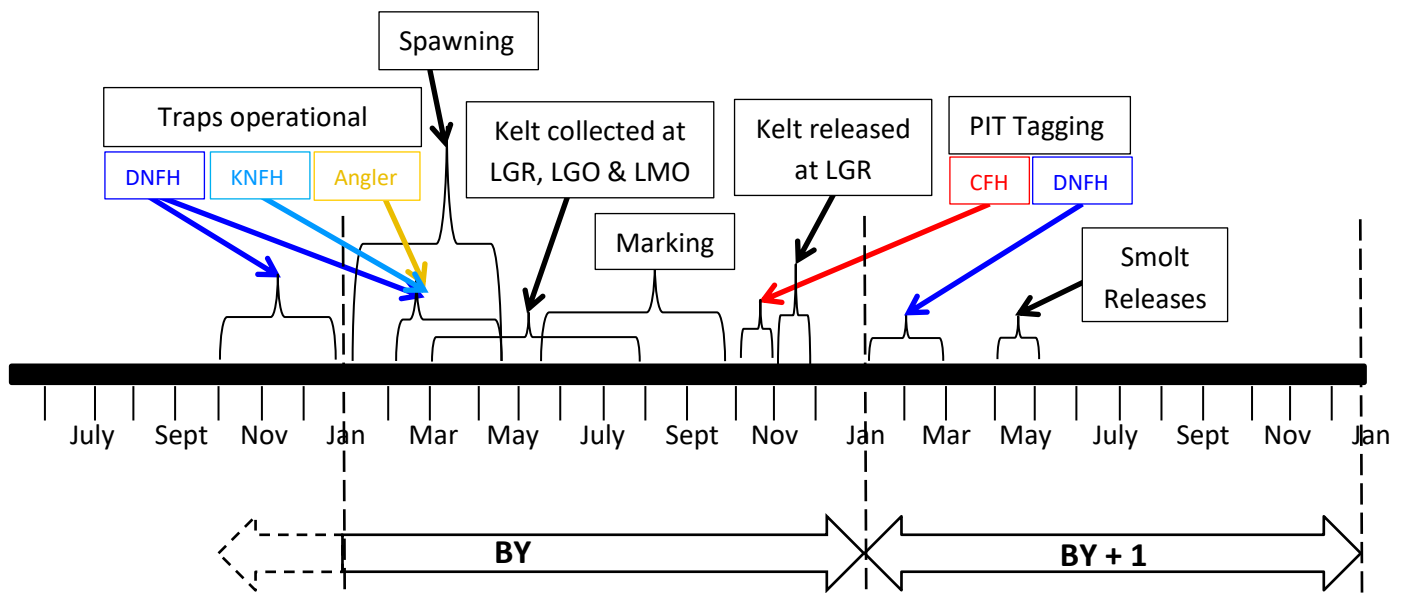
**Figure 1.1.** Steelhead trapping, hatchery facilities and smolt release locations. Table below gives smolt release goals by release site.

**Table 1.1.** BY 2023 Steelhead Release Goals for 2024.

Rearing Facility	Program	Brood Collection Site	Release Site	BY2023 Smolt Release Goals	Size (FPP)
DNFH	NF Clearwater	DNFH (Trad. Spawned)	DNFH	1,200,000	5.8
			Clear Creek	300,000	5.8
			Lolo Creek <sup>1</sup>	200,000	5.8
	SF Clearwater	SFClwR Angler (DNFH)	Red House Hole-SF Clw	400,000	5.8
Total				2,100,000	
CFH/DNFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	501,000	4.5-6.0
			Red House Hole-SF Clw	219,000	4.5-6.0
			Newsome Creek-SF Clw	123,000	4.5-6.0
Total				843,000	
Grand Total				2,943,000	

<sup>1</sup> Release will be relocated to the SFClwR at Newsome Creek site for MY2024.

**1.1. Timeline and Flowchart for Steelhead Production**



**Figure 1.2.** Timeline for Steelhead Production. Date ranges with black labels are shown to include all facilities’ operations. Color-coded labels identify activities that have variability in timing for the different facilities.



1.2. Releases in 2024 (Smolt BY 2023)

1.2.1. Releases in 2024 (Smolt BY 2023) – Totals

Table 1.2a. Steelhead Rearing Metrics for BY 2023 fish for release in 2024

Rearing Facility	Program	Brood Collection Site	Release Site	Release Goals		Inventory To Date		Excess Fry/ Fingerlings Released		Projected Smolt Releases		
				Number	Size (FPP)	Date	Number	Number	Release Site	Dates	Number	Size (FPP)
DNFH	NF Clearwater	DNFH (Trad. Spawned)	DNFH	1,200,000	5.8	11/30/2023	1,191,025			4/16/2024	1,186,261	5.8
			Clear Creek	300,000	5.8	11/30/2023	316,568			4/8-4/12/2024	315,302	5.8
			Lolo Creek 1	200,000	5.8	11/30/2023	230,563			4/8-4/12/2024	229,641	5.8
	SF Clearwater	(DNFH)	Red House Hole-SF Clw	400,000	5.8	11/30/2023	380,237			4/8-4/12/2024	378,716	5.8
Total				2,100,000			2,118,393	0			2,109,919	5.8
CFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	501,000	4.5-6.0	11/30/2023	490,594			4/1-4/19/2024	484,604	5.0
			Red House Hole-SF Clw	219,000	4.5-6.0	11/30/2023	261,967			4/1-4/19/2024	258,765	5.5
			Newsome Creek-SF Clw	123,000	4.5-6.0	11/30/2023	152,008			4/1-4/19/2024	150,150	5.8
Totals				843,000			904,569	0			893,519	
Grand Total				2,943,000			3,022,962	0			3,003,438	

<sup>1</sup> Release will be relocated to the SFClwR at Newsome Creek site for MY2024.

Table 1.2b. BY 2023 Steelhead Inventory to Date by Mark Type for release in 2024.

Rearing Facility	Program	Brood Collection Site	Release Site	Inventory to Date						PIT Tags						
				Date	Total	Adipose Fin Clip		No Clip		Total # Tags <sup>2</sup>	Funding Source <sup>3</sup>					
						No CWT	CWT	CWT	CWT		CSS	LSRCP	ACOE	NPT	SMP	
DNFH	NF Clearwater	DNFH (Trad. Spawned)	DNFH	11/30/2023	1,191,025	1,070,945	120,080	0	0	20,010	4,955		13,555		1,500	
			Clear Creek	11/30/2023	316,568	296,518	20,050	0	0	6,896	3,448		3,448			
			Lolo Creek <sup>1</sup>	11/30/2023	230,563	0	0	0	230,563	4,994	2,497		2,497			
	SF Clearwater	SFClwR Angler (DNFH)	Red House Hole-SF Clw	11/30/2023	380,237	343,995	36,242	0	0	1,000	500		500			
Total						2,118,393	1,711,458	176,372	0	230,563	32,900	11,400	0	20,000	0	1,500
CFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	11/30/2023	490,594	280,783			209,811	10,794	3,200	7,600				
			Red House Hole-SF Clw	11/30/2023	261,967	261,967				4,698	1,400	3,300				
			Newsome Creek-SF Clw	11/30/2023	152,008				152,008	15,892	800	1,800			13,300	
Totals						904,569	542,750	0	361,819	0	31,384	5,400	12,700	0	13,300	0
Grand Total						3,022,962	2,254,208	176,372	361,819	230,563	64,284	16,800	12,700	20,000	13,300	1,500

<sup>1</sup> Release will be relocated to the SFClwR at Newsome Creek site for MY2024.

<sup>2</sup> Represents actual number tagged if tags have already been applied at the time of this report

<sup>3</sup> Represents number of tags paid for by each agency. Sum total may not equal "Total # Tags" for locations where tagging has already occurred

### 1.2.2. Releases in 2024 (Smolt BY 2023) - Narrative

Here are examples of things managers talk about for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Smolt/Egg Release Targets-** e.g. Were you below goal? Was you size at release different than SOP target? Did you depart from the mark plan?
- **Fish/Egg Health-** any epizootic history, anti-biotic treatments, was production culled at any point
- **Transportation/Releases-** e.g. timing, trucking issues, site access etc.

Release Location	Plan for 2024		Changes/Conditions that Occurred 2023-Early 2024		
	Release Target Smolt BY23	Transport/Release Smolt BY23	Fish Feeding BY23	Fish/Egg Health BY23	Marking BY23
<i>Dworshak National Fish Hatchery (SOP Section 1.2)</i>					
Dworshak National Fish Hatchery (DworB)	NC	NC	Florfenicol 10 day feed treatment for Bacterial Cold Water Disease (CWD- <i>F. psychrophilum</i> )	NC	NC
Clear Creek (DworB)	NC	NC	Florfenicol 10 day feed treatment for CWD - <i>F. psychrophilum</i> Feed Study implemented: Skretting #2 crumble	NC	NC
Red House, SF Clearwater (SFClw/DworB)	NC	NC	Florfenicol 10 day feed treatment for CWD - <i>F. psychrophilum</i>	NC	NC
Lolo Creek (DworB)	NC	South Fork Release due to Lolo Creek road conditions	Florfenicol 10 day feed treatment - BP 1 only for CWD - <i>F. psychrophilum</i>	NC	NC
<i>Clearwater Fish Hatchery (SOP Section 1.3)</i>					
Meadow Creek SF Clearwater (SFClwB/DworB)	NC	Transferred 97,160 to Dworshak Hatchery	NC	NC	NC
Red House Hole SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC	NC
Newsome Creek SF Clearwater (SFClwB/DworB)	NC	Transferred 47,682 to Dworshak Hatchery	NC	NC	NC



### 1.3. Trap Operations and Production Planning for 2024 (Smolt BY 2024)

BY 2024 Steelhead smolt production goals for release in 2025.

Rearing Facility	Program	Brood Collection Site	Release Site	Smolt Release Goals
DNFH	NF Clearwater	DNFH (Trad. Spawned)	MS Clearwater at DNFH	1,200,000
			Clear Creek	300,000
	SF Clearwater	SFClwR Angler (DNFH)	Lolo Creek	200,000
		SFClwR Angler (DNFH)	Red House Hole - SF Clw	400,000
Total				2,100,000
CFH/DNFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	501,000
			Red House Hole-SF Clw	219,000
			Newsome Creek-SF Clw	123,000
Total				843,000
Grand Total				2,943,000

#### 1.3.1. Trap Operations and Production Planning for 2024 (Smolt BY 2024) – TOTALS

Table 1.3a. BY 2024 - Steelhead Spawning/Egg Take Plan.

Hatchery Program / Brood Source / Females Spawned By Method / Green Eggs Taken													
DNFH - All Releases									CFH - South Fork Clearwater			Grand Totals	
DWORB			SFCWR			DNFH Green Eggs Projections Combined	SFCWR						
Take		Females		Green Eggs	Females		Green Eggs	Females	Green Eggs	Females	Green Eggs	Kill Sp	Projections
No.	Week of	Fecundity	Kill Sp	Projections	Fecundity	Kill Sp	Projections						
1 E	Jan 15 - Jan 19	7,368	50	368,400	7,417		0	368,400	7,417		0	50	368,400
2 E	Jan 29- Feb 2	7,368	52	383,136	7,417		0	383,136	7,417		0	52	383,136
3	Feb 12 - Feb 16	7,368	56	412,608	7,417		0	412,608	7,417		0	56	412,608
4	Feb 19 - Feb 23	7,368	60	442,080	7,417		0	442,080	7,417		0	60	442,080
5	Feb 26 - Mar 1	7,368	67	493,656	7,417		0	493,656	7,417		0	67	493,656
6	Mar 4 - Mar 8	7,368		0	7,417		0	0	7,417	29	215,093	29	215,093
7	Mar 11 - Mar 15	7,368	45	331,560	7,417		0	331,560	7,417	41	304,097	86	635,657
8	Mar 18 - Mar 22	7,368		0	7,417	44	326,348	326,348	7,417	41	304,097	85	630,445
9	Mar 25 - Mar 29	7,368		0	7,417	44	326,348	326,348	7,417	41	304,097	85	630,445
10 <sup>1</sup>	Apr 1 - Apr 5	7,368		0	7,417	48	356,016	356,016	7,417	29	215,093	77	571,109
11	Apr 8 - Apr 12	7,368		0	7,417		0	0	7,417		0	0	0
Grand Total			330	2,431,440		136	1,008,712	3,440,152		181	1,342,477	647	4,782,629

<sup>1</sup> 48 females spawned from SFCW stock on this day will be used for the Lolo Creek program.

**1.3.2. Trap Operations and Production Planning for 2024 (Smolt BY 2024) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

Rearing Location	Plan for 2024 (BY 2024)				
	Adult Fish Health	Trap Ops	Production target changes	Spawning protocol changes	Disposition of adults
<i>Dworshak/Kooskia National Fish Hatchery Ladder/Trap (Fall 2023-Spring 2024)(SOP Section 1.2)</i>					
Dworshak National Fish Hatchery (DworB)	NC	Adults for the Lolo Creek program will be collected by the SFCW angler collection program	NC	NC	NC
Kooskia National Fish Hatchery (DworB)	NC	NC	NC	NC	NC
Clearwater Fish Hatchery (DworB)	NC	NC	NC	NC	NC
<i>Reconditioned Kelts (SOP Section 1.2)</i>					
Dworshak National Fish Hatchery (Natural/Ad intact B)	N/C	Note: collection from Lower Monumental began in 2022 and will continue in 2024	N/C	N/C	N/C
Nez Perce Tribal Hatchery (Natural/Ad intact B)	N/C	Note: collection from Lower Monumental began in 2022 and will continue in 2024	N/C	N/C	N/C
<i>SF Clearwater Anglers (SOP Section 1.3)</i>					
Dworshak National Fish Hatchery (SFClwB)	NC	Adults for the Lolo Creek program will be collected by the SFCW angler collection program	NC	NC	NC
Clearwater Fish Hatchery (SFClwB)	NC	NC	NC	NC	NC

**1.4. Marking and Rearing Plan for 2024 (Smolt BY 2024)**

**BY 2024 Steelhead smolt production goals for release in 2025.**

Rearing Facility	Program	Brood Collection Site	Release Site	Smolt Release Goals
DNFH	NF Clearwater	DNFH (Trad. Spawned)	MS Clearwater at DNFH	1,200,000
			Clear Creek	300,000
	SF Clearwater	SFClwR Angler (DNFH)	Lolo Creek	200,000
			Red House Hole - SF Clw	400,000
Total				2,100,000
CFH/DNFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	501,000
			Red House Hole-SF Clw	219,000
			Newsome Creek-SF Clw	123,000
Total				843,000
Grand Total				2,943,000

**1.4.1. Marking and Rearing Plan for 2024 (Smolt BY 2024) – TOTALS**

**Table 1.4a.** Steelhead Projected marking for BY 2024 Production for release in 2025.

Rearing Facility	Program	Brood Collection Site	Release Site	Smolt Release Goals	Projected Marking				PIT Tags					
					Adipose Fin Clip		No Clip		Total # Tags	Funding Source				
					No CWT	CWT	CWT	No CWT		CSS	LSRCP	NPT	ACOE	SMP
DNFH	NF Clearwater	DNFH (Trad. Spawned)	MS Clearwater at DNFH	1,200,000	1,080,000	120,000			19,900	4,900			13,500	1,500
			Clear Creek	300,000	280,000	20,000			5,000	2,500			2,500	
	SF Clearwater	SFClwR Angler (DNFH)	Lolo Creek	200,000			200,000	1,000	500			500		
			Red House Hole - SF Clw	400,000	360,000	40,000			7,000	3,500			3,500	
Total				2,100,000	1,720,000	180,000	0	200,000	32,900	11,400	0	0	20,000	1,500
CFH/DNFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	501,000	291,000		210,000		10,800	3,200	7,600			
			Red House Hole-SF Clw	219,000	219,000				4,700	1,400	3,300			
			Newsome Creek-SF Clw	123,000			123,000		15,900	800	1,800	13,300		
Totals				843,000	510,000	0	333,000	0	31,400	5,400	12,700	13,300	0	0
Grand Totals				2,943,000	2,230,000	180,000	333,000	200,000	64,300	16,800	12,700	13,300	20,000	1,500

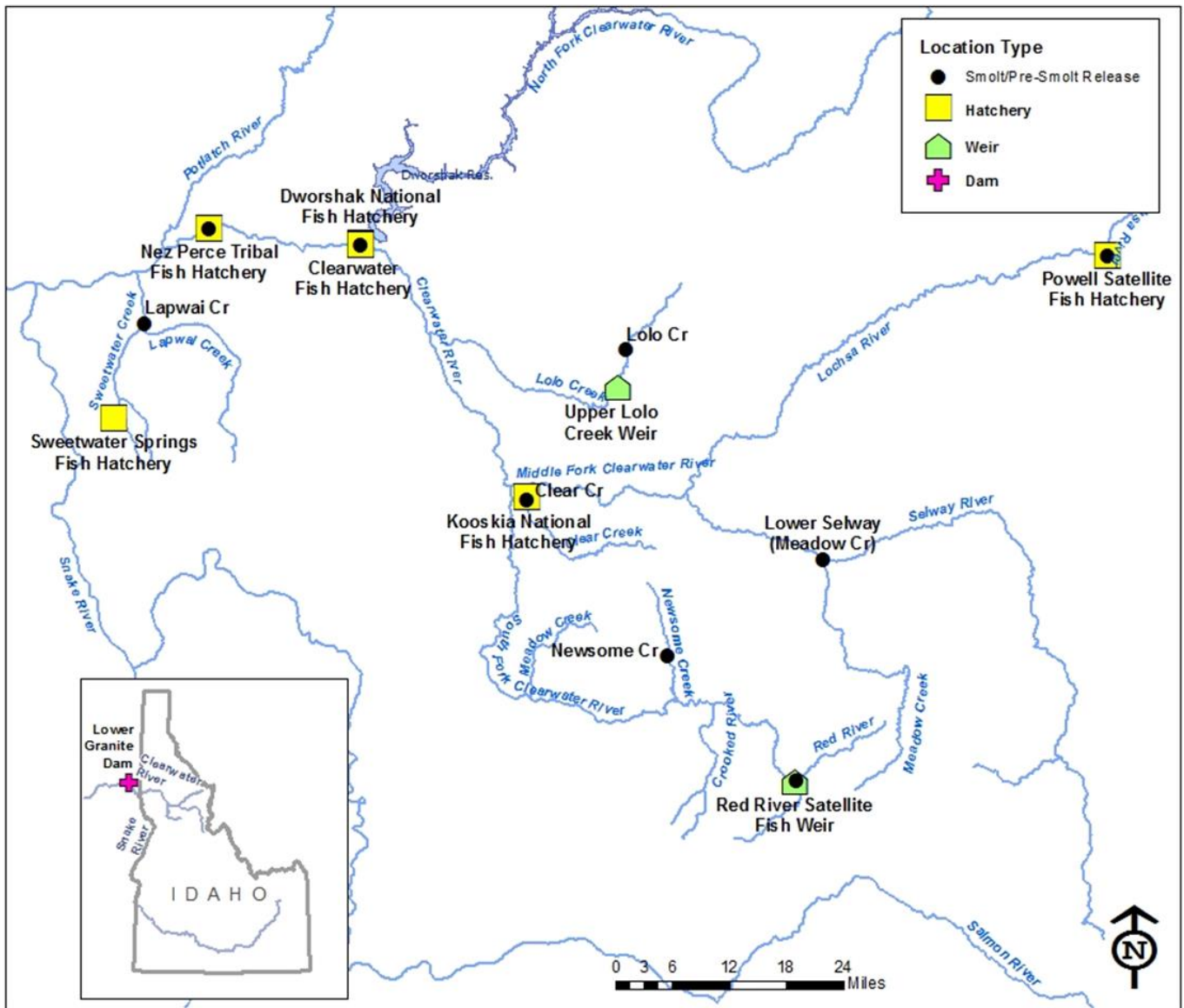
**1.4.2. Marking and Rearing Plan for 2024 (Smolt BY 2024) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Fish Health** - anticipated changes to normal fish health sampling or treatments to start for BY2020
- **Fish feeding** - changes of diets of feed manufacturer, growth regimes etc.
- **Rearing conditions** - incubation, water temp, flow, rearing density changes
- **Marking** - e.g. changes to schedules, fish handling or movement, raceway loading for PBT, %PBT etc.

Release Location	Plan for 2024 (BY 2024)			
	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking
<i>Dworshak National Fish Hatchery (SOP Section 1.2)</i>				
Dworshak NFH (DworB)	NC	Utilize Skretting # 2 Crumble as cost-saving measure	Some fish may be reared temporarily in sys III to facilitate release line replacement.	NC
Clear Creek (DworB)	NC	Utilize Skretting # 2 Crumble as cost-saving measure	Some fish may be reared temporarily in sys III to facilitate release line replacement.	NC
Red House, SF Clearwater (SFClw/DworB)	NC	Utilize Skretting # 2 Crumble as cost-saving measure	Some fish may be reared temporarily in sys III to facilitate release line replacement.	NC
Lolo Creek (SFClw)	NC	Utilize Skretting # 2 Crumble as cost-saving measure	Some fish may be reared temporarily in sys III to facilitate release line replacement.	NC
<i>Clearwater Fish Hatchery (SOP Section 1.3)</i>				
Meadow Creek SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC
Red House Hole SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC
Newsome Creek SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC

## 2. Spring/Summer Chinook



**Figure 2.1.** Locations of Spring/Summer Chinook Salmon hatchery facilities and smolt/pre-smolt releases. Table below gives smolt and pre-smolt release goals by release site.

**Table 2.1. Spring/Summer Chinook Goals for Release in 2024**

**BY2022 SMOLTS**

Action in 2024	Brood/Release Year	Hatchery Program	Rearing Facility	Brood Collection Site	Release Site	Smolt Release Goal	
Release	BY2022 RY2024	<b>Spring</b>					
		DNFH - LSRCP	DNFH	DNFH	NF Clearwater (DNFH)-Early Rel		1,650,000
					NF Clearwater (DNFH)-Late Rel		
		Total					1,650,000
		KNFH-NPT	KNFH	KNFH	Kooskia NFH		650,000
		Total					650,000
		NPTHC	NPTH	DNFH	Trans. to NPTH from DNFH-Early Rel <sup>3</sup>		100,000
					Trans. to NPTH from DNFH-Late Rel <sup>3</sup>		100,000
			NPTH	NPTH	Lolo Creek <sup>2</sup>		200,000
			NPTH	DNFH	Lapwai Creek		200,000
		Total					600,000
		CFH-LSRCP	CFH	SFClw	Red River		1,280,000
				DNFH	NF Clearwater-CFH (Early) <sup>1</sup>		389,000
				DNFH	NF Clearwater-CFH (Late) <sup>1</sup>		320,000
				DNFH	Selway River-Lower		400,000
				KNFH/DNFH	Clear Creek		720,000
		Total					3,109,000
		Spring Grand Total					6,009,000
		<b>Summer</b>					
		CFH-LSRCP	CFH	Pow	Powell Pond <sup>4</sup>		640,000
Summer Grand Total					640,000		

<sup>1</sup> The early/late release groups were reared in the unbaffled adult ponds and the regular raceways

<sup>2</sup> Group originally destined for Lolo release will now be released at NPTH as a Early Release. The Lolo Creek release site is not accessible in 2024.

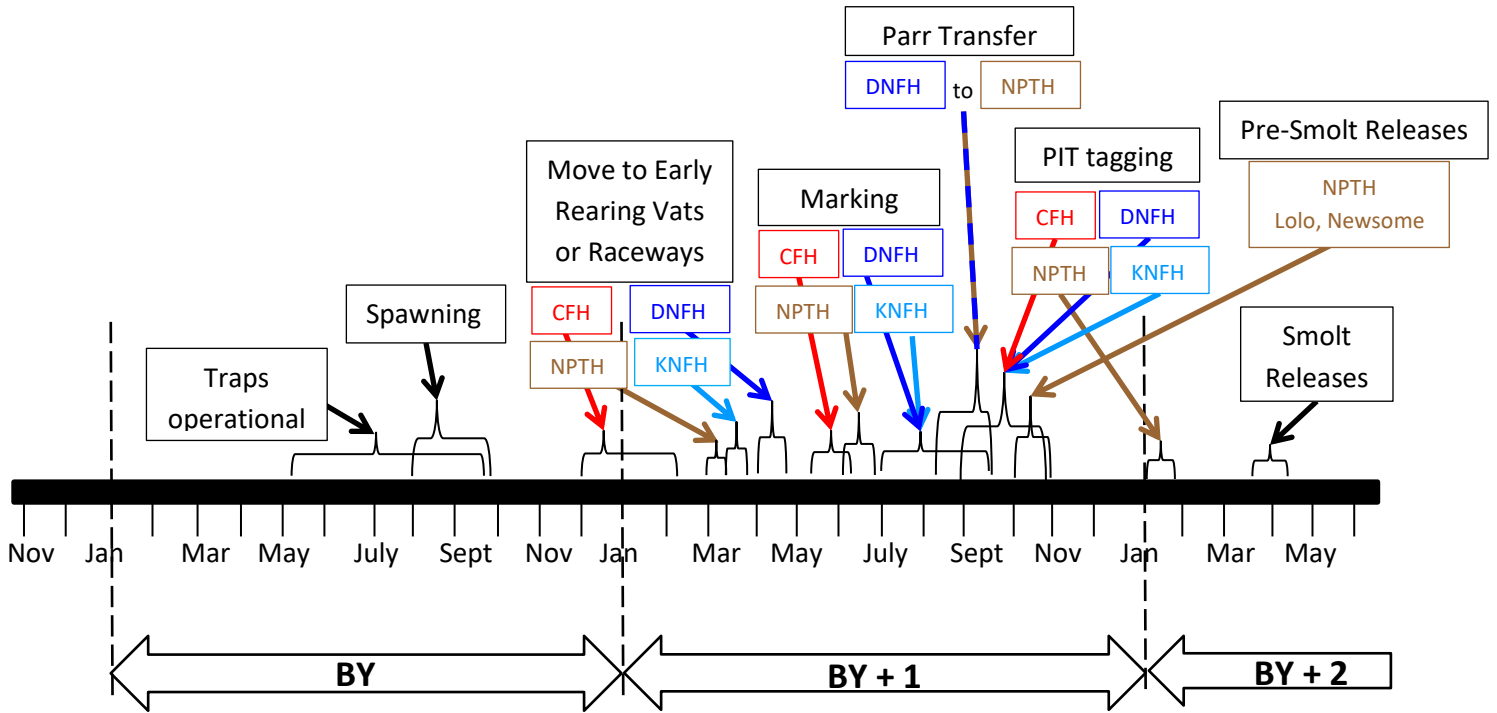
<sup>3</sup> Groups originally destined for NPTH Early and Late Releases will now be combined into one Late Release.

<sup>4</sup> BY2022 is the last Summer Run cohort to be released at Powell.

**BY2023 PRE-SMOLTS SMOLTS**

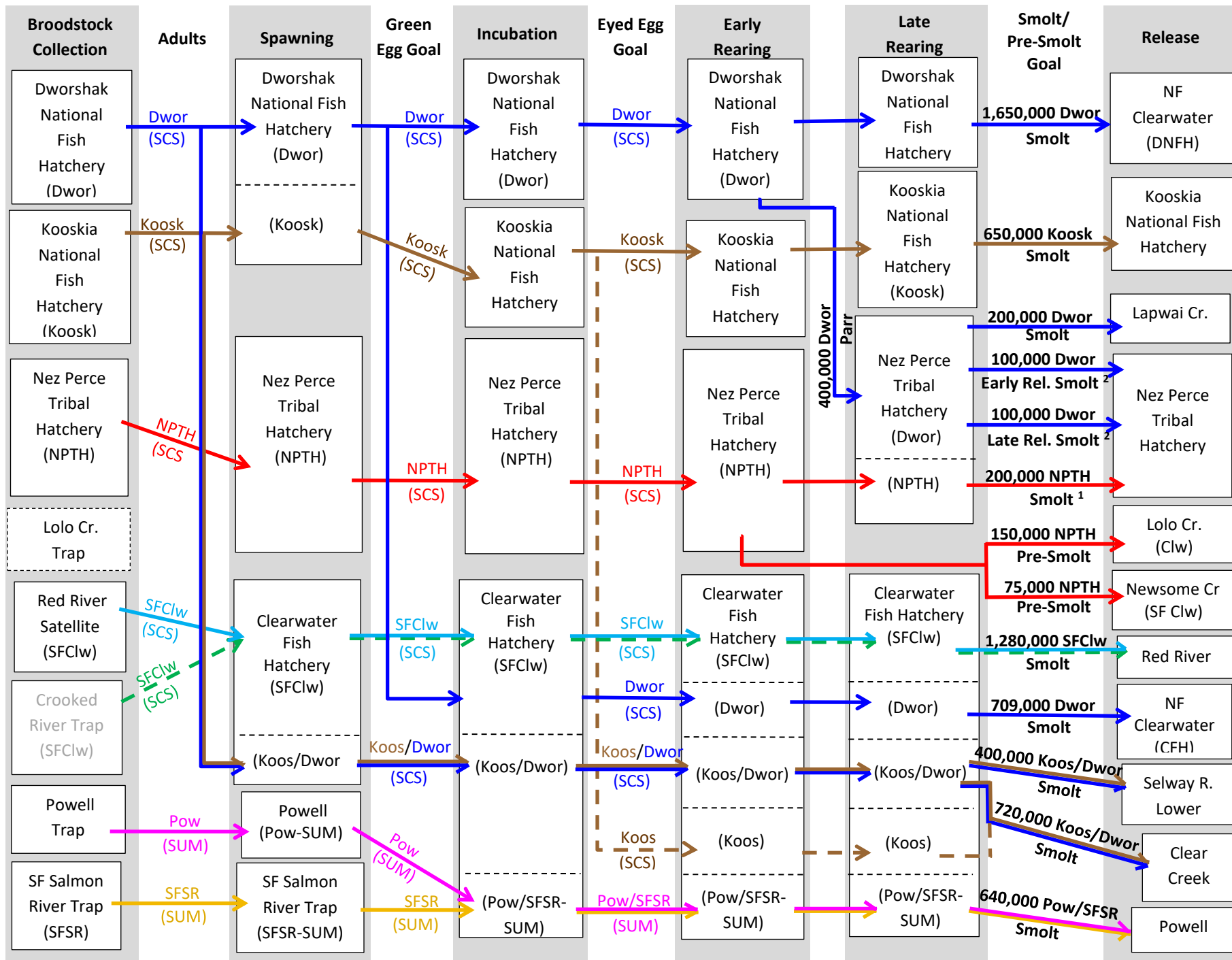
Action in 2024	Brood/Release Year	Hatchery Program	Rearing Facility	Brood Collection Site	Life Stage	Release Site	Smolt Release Goal
Marking and Release	BY2023 RY2024	<b>Spring</b>					
		NPTHC	NPTH	NPTHC	Pre-Smolt	Newsome Cr (SF Clw)	75,000
					Pre-Smolt	Lolo Cr (SF Clw)	150,000
		Spring Grand Total					225,000

## 2.1. Timeline and Flowchart for Spring/Summer Chinook Production



**Figure 2.2.** Timeline for Spring/Summer Chinook Production. Date ranges with black labels are shown to include all facilities' operations. Color-coded labels identify activities that have variability in timing for the different facilities.

### CHINOOK



<sup>1</sup> Group originally destined for Lolo release will now be released at NPTH as a Late Release. The Lolo Creek release site is not accessible in 2024.

<sup>2</sup> Groups originally destined for NPTH Early and Late Releases will now be combined into one Late Release.

**Figure 2.3.** Chinook movements for Clearwater. Numbers represent 2024 releases.



**2.2. Releases in 2024 (Smolt BY 2022, Pre-Smolt BY 2023)**

**2.2.1. Releases in 2024 (Smolt BY 2022, Pre-Smolt BY 2023) – Totals**

**Table 2.2a.** BY2022 SMOLTS - Sp/Su Chinook Salmon inventories by life stage, smolt release goals and projected releases in 2024.

Hatchery Program	Run	Rearing Facility	Brood Collection Site	Release Site	Release Goals		Inventory To Date		Projected Smolt Release		
					Number	Size (FPP)	Date	Number	Dates	Number	Size (FPP)
<b>Spring</b>											
DNFH - LSRCP	SpCS	DNFH <sup>5</sup>	DNFH	NF Clearwater (DNFH)-Early Rel	1,650,000	20.0	12/12/2023	842,993	3/31/2024	842,200	20.0
				NF Clearwater (DNFH)-Late Rel		20.0	12/12/2023	946,286	4/10/24	945,389	20.0
Total					1,650,000			1,789,279		1,787,589	
KNFH-NPT	SpCS	KNFH	KNFH	Kooskia NFH	650,000	20.0	12/01/2023	624,934	4/10/2024	622,000	20.0
Total					650,000			624,934		622,000	
NPTH	SpCS	NPTH	DNFH	Trans. to NPTH from DNFH-Early Rel <sup>3</sup>	100,000	20.0	12/1/2023	96,769	3/26/2024	96,269	20.0
				Trans. to NPTH from DNFH-Late Rel <sup>3</sup>	100,000	20.0	12/1/2023	92,827	3/26/2024	92,327	20.0
			NPTH	Lolo Creek <sup>2</sup>	200,000	20.0	12/1/2023	204,454	4/10/2024	203,454	20.0
			DNFH	Lapwai Creek	200,000	20.0	12/1/2023	201,506	4/17/2024	200,506	20.0
Total					600,000			595,556		592,556	
CFH-LSRCP	SpCS	CFH <sup>6</sup>	SFCIw	Red River	1,280,000	16.0	12/2/2023	1,111,831	3/13 - 4/13/2024	1,111,300	16.0
			DNFH	NF Clearwater-CFH (Early) <sup>1</sup>	389,000	16.0	12/2/2023	381,473	3/30/2024	381,000	16.0
				NF Clearwater-CFH (Late) <sup>1</sup>	320,000	16.0	12/2/2023	211,557	4/14/2024	211,000	16.0
			DNFH	Selway River-Lower	400,000	16.0	12/2/2023	419,911	3/13 - 4/13/2024	419,500	16.0
KNFH/DNFH	Clear Creek	720,000	16.0	12/2/2023	720,766	3/13 - 4/13/2024	720,200	16.0			
Total					3,109,000			2,845,538		2,843,000	
Spring Grand Total					6,009,000			5,855,307		5,845,145	
<b>Summer</b>											
CFH-LSRCP	SuCS	CFH	Pow	Powell Pond <sup>4</sup>	640,000	16.0	12/2/2023	435,160	3/13 - 4/13/2024	434,600	16.0
Summer Grand Total					640,000			435,160		434,600	
Spring/Summer Grand Total					6,649,000			6,290,467		6,279,745	

<sup>1</sup> The early/late release groups were reared in the unbaffled adult ponds and the regular raceways

<sup>2</sup> Group originally destined for Lolo release will now be released at NPTH. The Lolo Creek release site is not accessible in 2024.

<sup>3</sup> Groups originally destined for NPTH Early and Late Releases will now be combined into one release.

<sup>4</sup> BY2022 is the last Summer Run cohort to be released at Powell.

<sup>5</sup> Dworshak projected smolt release includes 198,488 Southern Resident Killer Whale program smolts

<sup>6</sup> CFH-LSRCP smolt release dates are generalized due to unpredictable weather conditions.

**Table 2.2b. BY2022 SMOLTS - Sp/Su Chinook Salmon Inventory to Date by Mark Type for release in 2024.**

Hatchery Program	Run	Rearing Facility	Brood Collection Site	Release Site	Inventory to Date						PIT Tags					
					Date	Total	Adipose Fin Clip		No Clip		Total # Tags	Funding Source				
							CWT	No CWT	CWT	No CWT		CSS	LSRCP	USFWS	BPA	
<b>Spring</b>																
DNFH - LSRCP	SpCS	DNFH <sup>5</sup>	DNFH	NF Clearwater (DNFH)-Early Rel	9/9/23	904,082	107,507	796,575			21,000	21,000				
				NF Clearwater (DNFH)-Late Rel	9/6/23	896,367	107,558	788,809			21,000	21,000				
Total						1,800,449	215,065	1,585,384	0	0	42,000	42,000	0	0	0	
KNFH-NPT	SpCS	KNFH	KNFH	Kooskia NFH	12/1/2023	624,934	104,992	471,646		48,296	6,000			6,000		
Total						624,934	104,992	471,646	0	48,296	6,000	0	0	6,000	0	
NPTH	SpCS	NPTH	DNFH	Trans. to NPTH from DNFH-Early Rel <sup>3</sup>	12/1/2023	96,769	65,652	26,820	87	4,210	2,800				2,800	
				Trans. to NPTH from DNFH-Late Rel <sup>3</sup>	12/1/2023	92,827	0	83,010	0	9,817	2,800				2,800	
			NPTH	Lolo Creek <sup>2</sup>	12/1/2023	204,454	0	0	199,635	4,819	5,600					5,600
			DNFH	Lapwai Creek	12/1/2023	201,506	59,601	140,793	331	781	5,000		5,000			
Total						595,556	125,253	250,623	200,053	19,627	16,200	0	5,000	0	11,200	
CFH-LSRCP	SpCS	CFH	SFClw	Red River	12/2/2023	1,111,831	121,140	990,691			17,098	5,099	11,999			
			DNFH	NF Clearwater-CFH (Early) <sup>1</sup>	12/2/2023	381,473	60,002	321,471			11,096		11,096			
				NF Clearwater-CFH (Late) <sup>1</sup>	12/2/2023	211,557	60,059	151,498			6,000		6,000			
			DNFH	Selway River-Lower	12/2/2023	419,911	119,974	166,158	133,779		17,101	5,101	12,000			
KNFH/DNFH	Clear Creek	12/2/2023	720,766	120,460	600,306			9,796	3,498	6,298						
Total						2,845,538	481,635	2,230,124	133,779	0	61,091	13,698	47,393	0	0	
Spring Grand Total						5,866,477	926,945	4,537,777	333,832	67,923	125,291	55,698	52,393	6,000	11,200	
<b>Summer</b>																
CFH-LSRCP	SuCS	CFH	Pow	Powell Pond <sup>4</sup>	12/2/2023	435,160	120,124	17,247	119,673	178,116	0					
Summer Grand Total						435,160	120,124	17,247	119,673	178,116	0	0	0	0	0	
Spring and Summer Grand Total						6,301,637	1,047,069	4,555,024	453,505	246,039	125,291	55,698	52,393	6,000	11,200	

<sup>1</sup> The early/late release groups were reared in the unbauffed adult ponds and the regular raceways.

<sup>2</sup> Group originally destined for Lolo release will now be released at NPTH as a Early Release. The Lolo Creek release site is not accessible in 2024.

<sup>3</sup> Groups originally destined for NPTH Early and Late Releases will now be combined into one Late Release.

<sup>4</sup> BY2022 is the last Summer Run cohort to be released at Powell. No PIT tags are being applied to this group since we will not need to manage broodstock needs when they return as adults.

<sup>5</sup> Dworshak release includes 198,488 Southern Resident Killer Whale program smolts

**Table 2.2c.** BY2023 PRE-SMOLT - Sp/Su Chinook Salmon inventories by life stage, release goals and projected releases in 2024.

Hatchery Program	Rearing Facility	Brood Collection Site	Life Stage	Release Site <sup>1</sup>	Inventory To Date		Release Goals		Projected Releases		
					Date	Number	Number	Size (FPP)	Dates	Number	Size (FPP)
<i>Spring</i>											
NPTHC	NPTH	NPTHC	Pre-Smolt	Newsome Cr (SF Clw)	12/1/2023	87,868	75,000	30.0	10/16/2024	86,868	30.0
			Pre-Smolt	Lolo Cr (SF Clw)	12/1/2023	0	150,000	30.0		0	30.0
Total						87,868	225,000			86,868	

<sup>1</sup> Release site undetermined due to shortage from high BKD culling. Will be evaluated upon survival data

**2.2.2. Releases in 2024 (Smolt BY 2022, Pre-Smolt BY 2023) – Total**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Smolt/Egg Release Targets-** e.g. were you below goal, was your size at release different than SOP target etc.
- **Fish/Egg Health-** any epizootic history, antibiotic treatments, was production culled at any point
- **Transportation/Releases-** e.g. timing, trucking issues, site access etc.

	Plan for 2024		Changes/Conditions that Occurred 2023-Early 2024		
Release Location	Release Target Smolt BY22 Pre-Smolt BY23	Transport/Release Smolt BY22 Pre-Smolt BY23	Fish Feeding Smolt BY22 Pre-Smolt BY23	Fish/Egg Health Smolt BY22 Pre-Smolt BY23	Marking Smolt BY22 Pre-Smolt BY23
<i>Dworshak National Fish Hatchery (SOP Section 2.2)</i>					
NF Clearwater-DNFH (Dwor)	Due to egg loss during incubation the target goal for SRKW SCS was changed from 500k to 200k.	NC	There was a feed study conducted for the SCS Early and Late release groups. BioClark #2 crumb, 1.5 and 2.0 are being compared with BioVita #2 crumb, 1.5 and 2.0 sizes. The feed is split up evenly in the raceways with each feed type being consumed by 15 raceways each. It is also broken up evenly by Early and late group	NC	NC
<i>Kooskia National Fish Hatchery (SOP Sections 2.3)</i>					
Kooskia National Fish Hatchery (Koosk)	Early fry mortality due to chiller failure delays chiller start. appr 50,000 mortality	NC	NC	NC	NC
<i>Nez Perce Tribal Hatchery (SOP Section 2.4)</i>					
Nez Perce Tribal Hatchery (Dwor Smolt transferred to NPTH from DNFH)	NC	NC	NC	NC	PIT tags increased from 3,200 to 5,600.

	Plan for 2024		Changes/Conditions that Occurred 2023-Early 2024		
Release Location	Release Target Smolt BY22 Pre-Smolt BY23	Transport/Release Smolt BY22 Pre-Smolt BY23	Fish Feeding Smolt BY22 Pre-Smolt BY23	Fish/Egg Health Smolt BY22 Pre-Smolt BY23	Marking Smolt BY22 Pre-Smolt BY23
Lapwai Creek (Dwor Smolt transferred to NPTH from DNFH)	NC	NC	NC	NC	Additional PIT tags were provided changing the number from 600 to 5,000.
Lolo Creek (NPTH-Smolt)	NC	Release will occur on station at NPTH	NC	NC	PIT tags increased from 2,000 to 5,600.
Newsome Creek (NPTH-Pre-Smolt)	NC	NC	NC	NC	NC
Lolo Creek (NPTH-Pre-Smolt)	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23	PIT Tags reallocated
<i>Clearwater Fish Hatchery (SOP Sections 2.5)</i>					
Red River (SFClw )	NC	NC	NC	NC	NC
NF Clearwater-CFH (Baffle) (Dwor)	NC	NC	NC	NC	NC
NF Clearwater-CFH (Regular) (Dwor)	NC	NC	NC	NC	NC
Selway River-Lower (Dwor)	NC	NC	NC	NC	NC
Clear Creek (Dwor/Koos)	NC	NC	NC	NC	NC
Powell (Pow/SFSR Summer)	By2022 is the last year of summer Chinook at CFH	NC	NC	NC	No PIT tags are being applied to this group since we will not need to manage broodstock needs when they return as adults.

2.3. Trap Operations and Production Planning for 2024 (Smolt and Pre-Smolt BY 2024)

BY2024 SMOLTS - Spring/Summer Chinook Goals for Release in 2026

Action in 2024	Brood/Release Year	Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Smolt Release Goal (US v OR)	Smolt Release Goal (Including Additional)	
Trapping	BY2024 RY2026	<i>Spring</i>						
		DNFH - LSRCP	DNFH	DNFH	DNFH	NF Clearwater (DNFH)	1,350,000	1,650,000
		Total					1,350,000	1,650,000
		KNFH-NPT	KNFH	KNFH	KNFH	Kooskia NFH	650,000	650,000
		Total					650,000	650,000
		NPTH	NPTH	DNFH	DNFH	Trans. to NPTH-NPTH	200,000	200,000
						Trans. to NPTH-Lapwai Creek	200,000	200,000
						NPTH	NPTH	Lolo Creek
		Total					600,000	600,000
		CFH-LSRCP	CFH	SFClw	CFH	Red River	1,100,000	1,280,000
				DNFH		NF Clearwater-CFH (Early)	0	389,000
				DNFH		NF Clearwater-CFH (Late)	0	320,000
				DNFH		Selway River-Lower	400,000	400,000
				KNFH/DNFH		Clear Creek	635,000	720,000
				KNFH/DNFH		Powell Pond (SPR)	640,000	640,000
		Total					2,775,000	3,749,000
		Spring Grand Total					5,375,000	6,649,000

BY2024 PRE-SMOLT - Spring/Summer Chinook Goals for Release in 2026

Action in 2024	Brood/Release Year	Hatchery Program	Life Stage	Brood Collection Site	Rearing Facility	Release Site	Smolt Release Goal	
Trapping	BY2024 RY2025	<i>Spring</i>						
		NPTH	Pre-Smolt	NPTH	NPTH	Newsome Cr (SF Clw)	75,000	
			Pre-Smolt	NPTH		Lolo Cr (Clw)	150,000	
		Spring Grand Total						225,000

### 2.3.1. Trap Operations and Production Planning for 2024 (Smolt and Pre-Smolt BY 2024) – TOTALS

#### FULL PRODUCTION

**Table 2.3a.** 2024 Adult brood stock acquisition schedules for hatchery Sp/Su Chinook Salmon in Clearwater River drainage for FULL PRODUCTION.

Date	Spring			
	Dworshak Trap	Kooskia Trap	NPTH Trap	Red River
2-May				
9-May				
16-May			3	
23-May		15	7	
30-May		42	10	
6-Jun		464	46	9
13-Jun		686	72	76
20-Jun		771	121	161
27-Jun		800	157	322
4-Jul	184	971	190	521
11-Jul	530	1,056	239	645
18-Jul	990	1,099	262	692
25-Jul	1,451	1,136	292	702
1-Aug	1,888		308	720
8-Aug	2,303		308	730
15-Aug			328	758
22-Aug			328	853
29-Aug			328	948
5-Sep				948
12-Sep				
19-Sep				
26-Sep				
<b>Total</b>	<b>2,303</b>	<b>1,136</b>	<b>328</b>	<b>948</b>
2024 LGR Forecast <sup>1</sup>	5,206	2,824	697	1,913

Date	Spring			
	Dworshak Trap	Kooskia Trap	NPTH Trap	Red River
2-May	0.000	0.000	0.000	0.000
9-May	0.000	0.000	0.000	0.000
16-May	0.000	0.000	0.010	0.000
23-May	0.000	0.013	0.020	0.000
30-May	0.000	0.037	0.030	0.000
6-Jun	0.000	0.409	0.140	0.010
13-Jun	0.000	0.604	0.220	0.080
20-Jun	0.000	0.679	0.370	0.170
27-Jun	0.000	0.704	0.480	0.340
4-Jul	0.080	0.855	0.580	0.550
11-Jul	0.230	0.929	0.730	0.680
18-Jul	0.430	0.968	0.800	0.730
25-Jul	0.630	1.000	0.890	0.740
1-Aug	0.820	1.000	0.940	0.760
8-Aug	1.000	1.000	0.940	0.770
15-Aug	1.000	1.000	1.000	0.800
22-Aug	1.000	1.000	1.000	0.900
29-Aug	1.000	1.000	1.000	1.000
5-Sep	1.000	1.000	1.000	1.000
12-Sep	1.000	1.000	1.000	1.000
19-Sep	1.000	1.000	1.000	1.000
26-Sep	1.000	1.000	1.000	1.000

<sup>1</sup> 2- and 3-ocean returns only. Dworshak forecast includes Clearwater Hatchery NF Clearwater release and Dworshak NF Clearwater release. Kooskia forecast includes Clearwater Hatchery Clear Creek release and Kooskia Hatchery Clear Creek release.

**FULL PRODUCTION**

**Table 2.3b.** BY 2024 SMOLT - Sp/Su Chinook Spawning and Trapping Plan for FULL PRODUCTION

Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Green Egg Goal	Green Egg Fecundity	Female Spawn Goal	Male Spawn Goal	Holding Mortality	Total Trapping Goal	Estimated Trapping Dates	Projected Returns to LGR <sup>1</sup>
<b>Spring</b>											
DNFH - LSRCP	DNFH	DNFH	NF Clearwater (DNFH)	2,187,256	3,792	577	577	2.9%	1,189		3,744
Total				2,187,256		577	577		1,189		3,744
KNFH-NPT	KNFH	KNFH	Kooskia NFH	851,302	3,150	271	271	10.0%	603		1,045
Total				851,302		271	271		603		1,045
NPTHC	DNFH	DNFH	Trans. to NPTH-NPTH	265,122	3,792	70	70	2.9%	145		330
			Trans. to NPTH-Lapwai Creek	265,122	3,792	70	70	2.9%	145		
	NPTHC	NPTHC	Lolo Creek	274,141	3,807	73	73	4.5%	153	5/1-9/1	
Total				804,385		213	213		443		330
CFH-LSRCP	SFCIw	CFH	Red River	1,565,700	3,484	450	450	5.0%	948	6/15-9/19	1,913
	DNFH		NF Clearwater-CFH (Early)	475,826	3,484	137	137	5.0%	289	6/15-9/19	1,462
	DNFH		NF Clearwater-CFH (Late)	391,425	3,484	113	113	5.0%	238	6/15-9/19	
	DNFH		Selway River-Lower	489,281	3,484	141	141	5.0%	297	6/15-9/19	981
	KNFH/DNFH		Clear Creek	880,706	3,484	253	253	5.0%	533	6/15-9/19	1,779
	KNFH/DNFH		Powell Pond (SPR)	782,850	3,484	225	225	5.0%	474	6/15-9/19	1,369
Total				4,585,788		1,319	1,319		2,779		7,504
Spring Smolt Grand Total				8,428,731		2,380	2,380		5,014		12,623

<sup>1</sup> Forecasts for Kooskia NFH, Selway River-Lower, and Powell Pond include AD clipped and unclipped returns.

**FULL PRODUCTION**

**Table 2.3c.** BY 2024 PRE-SMOLT - Sp/Su Chinook Spawning and Trapping Plan FULL PRODUCTION

Hatchery Program	Life Stage	Brood Collection Site	Rearing Facility	Release Site	Green Egg Goal	Green Egg Fecundity	Female Spawn Goal	Male Spawn Goal	Holding Mortality	Total Trapping Goal	Estimated Trapping Dates	Projected Returns to LGR
<b>Spring</b>												
NPTHC	Pre-Smolt	NPTHC	NPTHC	Newsome Cr (SF Clw)	102,803	3,807	28	28	4.5%	59	5/1-9/1	NA
	Pre-Smolt	NPTHC	NPTHC	Lolo Cr (Clw)	205,606	3,807	55	55	4.5%	116	5/1-9/1	NA
Total					308,409		83	83		175		0
Spring Parr/Pre-smolt Grand Total					308,409		83	83		175		0



**FULL PRODUCTION**

**Table 2.3d.** BY2024 Sp/Su Chinook Spawning and Trapping Plan Summarized by Trapping Facility for FULL PRODUCTION

Brood Collection Site	Female Spawn Goal	Male Spawn Goal	Total Trapping Goal	Projected Returns to LGR
<b>Spring</b>				
DNFH	1,108	1,108	2,303	6,517
KNFH	524	524	1,136	2,824
SFCIw	450	450	948	1,913
NPTHC	156	156	328	0
Pow/KNFH/DNFH	225	225	474	1,369

**BASE US v OR PRODUCTION**

**Table 2.3e.** 2024 Adult brood stock acquisition schedules for hatchery Sp/Su Chinook Salmon in Clearwater River drainage for BASE US v OR

Date	Spring			
	Dworshak Trap	Kooskia Trap	NPTH Trap	Red River
2-May				
9-May				
16-May			3	
23-May		14	7	
30-May		39	10	
6-Jun		439	46	8
13-Jun		648	72	65
20-Jun		729	121	139
27-Jun		756	157	277
4-Jul	125	917	190	448
11-Jul	359	997	239	554
18-Jul	671	1,038	262	595
25-Jul	983	1,073	292	603
1-Aug	1,279		308	619
8-Aug	1,560		308	628
15-Aug			328	652
22-Aug			328	734
29-Aug			328	815
5-Sep				815
12-Sep				
19-Sep				
26-Sep				
<b>Total</b>	1,560	1,073	328	815
2024 LGR Forecast <sup>1</sup>	5,206	2,824	330	1,913

Date	Proportion of brood acquisition over season			
	Dworshak Trap	Kooskia Trap	NPTH Trap	Red River
2-May	0.000	0.000	0.000	0.000
9-May	0.000	0.000	0.000	0.000
16-May	0.000	0.000	0.010	0.000
23-May	0.000	0.013	0.020	0.000
30-May	0.000	0.037	0.030	0.000
6-Jun	0.000	0.409	0.140	0.010
13-Jun	0.000	0.604	0.220	0.080
20-Jun	0.000	0.679	0.370	0.170
27-Jun	0.000	0.704	0.480	0.340
4-Jul	0.080	0.855	0.580	0.550
11-Jul	0.230	0.929	0.730	0.680
18-Jul	0.430	0.968	0.800	0.730
25-Jul	0.630	1.000	0.890	0.740
1-Aug	0.820	1.000	0.940	0.760
8-Aug	1.000	1.000	0.940	0.770
15-Aug	1.000	1.000	1.000	0.800
22-Aug	1.000	1.000	1.000	0.900
29-Aug	1.000	1.000	1.000	1.000
5-Sep	1.000	1.000	1.000	1.000
12-Sep	1.000	1.000	1.000	1.000
19-Sep	1.000	1.000	1.000	1.000
26-Sep	1.000	1.000	1.000	1.000

<sup>1</sup> 2- and 3-ocean returns only. Dworshak forecast includes Clearwater Hatchery NF Clearwater release and Dworshak NF Clearwater release. Kooskia forecast includes Clearwater Hatchery Clear Creek release and Kooskia Hatchery Clear Creek release.

**BASE US v OR PRODUCTION**

**Table 2.3f.** BY 2024 SMOLT - Sp/Su Chinook Spawning and Trapping Plan for BASE US v OR PRODUCTION

Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Green Egg Goal	Green Egg Fecundity	Female Spawn Goal	Male Spawn Goal	Holding Mortality	Total Trapping Goal	Estimated Trapping Dates	Projected Returns to LGR <sup>1</sup>
<i>Spring</i>											
DNFH - LSRCP	DNFH	DNFH	NF Clearwater (DNFH)	1,789,573	3,792	472	472	2.9%	973		3,744
Total				1,789,573		472	472		973		3,744
KNFH-NPT	KNFH	KNFH	Kooskia NFH	851,302	3,150	271	271	10.0%	603		1,045
Total				851,302		271	271		603		1,045
NPTHC	DNFH	DNFH	Trans. to NPTH-NPTH	265,122	3,792	70	70	2.9%	145		330
			Trans. to NPTH-Lapwai Creek	265,122	3,792	70	70	2.9%	145		
	NPTHC	NPTHC	Lolo Creek	274,141	3,807	73	73	4.5%	153	5/1-9/1	
Total				804,385		213	213		443		330
CFH-LSRCP	SFClw	CFH	Red River	1,345,523	3,484	387	387	5.0%	815	6/15-9/19	1,913
	DNFH		NF Clearwater-CFH (Baffle)	0	3,484	0	0	5.0%	0		1,462
	DNFH		NF Clearwater-CFH (Regular)	0	3,484	0	0	5.0%	0		
	DNFH		Selway River-Lower	489,281	3,484	141	141	5.0%	297	6/15-9/19	981
	KNFH/DNFH		Clear Creek	776,734	3,484	223	223	5.0%	470	6/15-9/19	1,779
KNFH/DNFH	Powell Pond (SPR)	782,850	3,484	225	225	5.0%	474	6/15-9/19	1,369		
Total				3,394,388		976	976		2,056		7,504
Spring Smolt Grand Total				6,839,648		1,932	1932		4,075		12,623

<sup>1</sup> Forecasts for Kooskia NFH, Selway River-Lower, and Powell Pond include AD clipped and unclipped returns.

**BASE US v OR PRODUCTION**

**Table 2.3g.** BY 2024 PRE-SMOLT - Sp/Su Chinook Spawning and Trapping Plan BASE US v OR PRODUCTION.

Hatchery Program	Life Stage	Brood Collection Site	Rearing Facility	Release Site	Green Egg Goal	Green Egg Fecundity	Female Spawn Goal	Male Spawn Goal	Holding Mortality	Total Trapping Goal	Estimated Trapping Dates	Projected Returns to LGR
<i>Spring</i>												
NPTHC	Pre-Smolt	NPTHC	NPTHC	Newsome Cr (SF Clw)	102,803	3,807	28	28	4.5%	59	5/1-9/1	NA
	Pre-Smolt	NPTHC		Lolo Cr (Clw)	205,606	3,807	55	55	4.5%	116	5/1-9/1	NA
Total					308,409		83	83		175		0
Spring Smolt Grand Total					308,409		83	83		175		0

**BASE US v OR PRODUCTION**

**Table 2.3h.** BY 2024 Sp/Su Chinook Spawning and Trapping Plan Summarized by Trapping Facility for BASE US v OR PRODUCTION

Brood Collection Site	Female Spawn Goal	Male Spawn Goal	Total Trapping Goal	Projected Returns to LGR
<i>Spring</i>				
DNFH	753	753	1,560	6,517
KNFH	494	494	1,073	2,824
SFCIw	387	387	815	1,913
NPTHC	156	156	328	0
Pow/KNFH/DNFH	225	225	474	1,369

**2.3.2. Trap Operations and Production Planning for 2024 (Smolts and Pre-Smolt BY2024) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

Juvenile Release Location	Plan for 2024 (BY 2024)				
	Adult Fish Health	Trap Ops	Production target changes	Spawning protocol changes	Disposition of adults
<i>Dworshak National Fish Hatchery Ladder/Trap (SOP Section 2.2)</i>					
NF Clearwater-DNFH (Dwor)	NC	NC	No SRKW	NC	NC
Nez Perce Tribal Hatchery (Dwor-Smolt)	NC	NC	NC	NC	NC
Lolo (Dwor-Smolt)	NC	NC	NC	NC	NC
NF Clearwater-CFH (Baffle) (Dwor)	NC	NC	NC	NC	NC
NF Clearwater-CFH (Regular) (Dwor)	NC	NC	NC	NC	NC
Selway River Lower (Dwor)	NC	NC	NC	NC	NC
Clear Creek (Dwor)	NC	NC	NC	NC	NC
<i>Kooskia National Fish Hatchery Trap (SOP Sections 2.3)</i>					
Kooskia National Fish Hatchery (Koo)	NC	NC	Trapping of more adults due to low fecundity	NC	NC

Juvenile Release Location	Plan for 2024 (BY 2024)				
	Adult Fish Health	Trap Ops	Production target changes	Spawning protocol changes	Disposition of adults
Clear Creek (Koos)	NC	NC	NC	NC	NC
<i>Nez Perce Tribal Hatchery Trap (SOP Section 2.4)</i>					
Lolo Creek (NPTH-Pre-Smolt)	NC	NC	NC	NC	NC
Lolo Creek (NPTH-Smolt)	NC	NC	NC	NC	NC
<i>Red River and Crooked River Traps (SOP Section 2.5)</i>					
Red River (SFClw)	NC	NC	NC	NC	NC
<i>Powell Trap (SOP Section 2.5)</i>					
Powell-Spring and summer (Pow/Koos/Dwor)	NC	NC	Goal for Summer Chinook is zero for BY2024.	NC	Will collect clipped spring Chinook for broodstock, all unclipped summer Chinook will be recycled

**2.4. Early Rearing and Marking Plan for 2024 (Smolts BY 2023, Pre-Smolt BY2023)**

**BY2023 SMOLTS - Spring/Summer Chinook Goals for Release in 2025**

Action in 2024	Brood/Release Year	Hatchery Program	Preferred Collection Site	Rearing Facility	Release Site	Smolt Release Goal	
Early Rearing and Marking	BY2023 RY2025	<b>Spring</b>					
		DNFH - LSRCP	DNFH	DNFH	DNFH	NF Clearwater (DNFH)	1,650,000
		Total					1,650,000
		KNFH-NPT	KNFH	KNFH	KNFH	Kooskia NFH	650,000
		Total					650,000
		NPTHC	DNFH	NPTHC	NPTH	Trans. to NPTH-NPTH	200,000
			DNFH			Trans. to NPTH-Lapwai Creek	200,000
			NPTHC			Lolo Creek	200,000
		Total					600,000
		CFH-LSRCP	SFCIw	CFH	CFH	Red River	1,280,000
			DNFH			NF Clearwater-CFH (Early)	389,000
			DNFH			NF Clearwater-CFH (Late)	320,000
			DNFH			Selway River-Lower	400,000
			KNFH/DNFH			Clear Creek	720,000
			KNFH/DNFH			Powell Pond (SPR)	640,000
Total					3,749,000		
Spring Grand Total					6,649,000		

**BY2023 PRE-SMOLT - Spring Chinook Goals for Release in 2024**

Action in 2024	Brood/Release Year	Hatchery Program	Life Stage	Preferred Collection Site	Rearing Facility	Release Site	Smolt Release Goal
Early Rearing, Marking and Release	BY2023 RY2024	<b>Spring</b>					
		NPTHC	NPTHC	NPTH	NPTH	Newsome Cr (SF Clw)	75,000
			NPTHC			Lolo Cr (Clw)	150,000
		Total					225,000
		Spring Grand Total					225,000

**2.4.1. Early Rearing and Marking Plan for 2024 (Smolts BY 2023, Pre-Smolt BY2023) – TOTALS**

**Table 2.4a.** BY 2023 Sp/Su Chinook Salmon - Early Rearing Inventory for smolt releases in 2025 (including anticipated set out)

Hatchery Program	Run	Preferred Collection Site	Rearing Facility	Release Site	Release Goals for 2025	Size (FPP)	Inventory to Date		
							Date	Goal <sup>1</sup>	Actual
<i>Spring</i>									
DNFH	SpCS	DNFH	DNFH	NF Clearwater (DNFH)	1,650,000	20.0	12/1/2023	1,829,301	1,829,301
Totals					1,650,000	20.0		1,829,301	1,829,301
KNFH	SpCS	KNFH	KNFH	Kooskia NFH	650,000	20.0	12/12/2023	675,000	628,819
Totals					650,000			675,000	628,819
NPTHC	SpCS	DNFH	NPTH	Trans. to NPTH-NPTH	200,000	20.0	12/1/2023	204,000	223,929
		DNFH		Trans. to NPTH-Lapwai Creek	200,000	20.0	12/1/2023	204,000	89,516
		NPTHC		Lolo Creek	200,000	20.0	12/1/2023	200,000	204,785
Totals					600,000			608,000	518,230
CFH	SpCS	SFCIw	CFH	Red River	1,280,000	16.0	12/1/2023	1,325,052	1,227,280
		DNFH		NF Clearwater-CFH (Early)	389,000	16.0	12/1/2023	402,692	375,552
		DNFH		NF Clearwater-CFH (Late)	320,000	16.0	12/1/2023	331,263	309,655
		DNFH		Selway River-Lower	400,000	16.0	12/1/2023	414,079	387,084
		KNFH/DNFH		Clear Creek	720,000	16.0	12/1/2023	745,342	692,516
		KNFH/DNFH		Powell Pond (SPR)	640,000	16.0	12/1/2023	700,219	605,300
Totals					3,749,000			3,918,647	3,597,387
Spring Grand Total					6,649,000			7,030,948	6,573,737

<sup>1</sup> Estimated fish needed in vats to reach eventual smolt release goals, based on brood calculator exclusive of the buffer.

**Table 2.4b.** BY 2023 SMOLTS - Sp/Su Chinook Projected Marking of BY 2023 juveniles to be released in 2025.

Hatchery Program	Run	Preferred Collection Site	Rearing Facility	Release Site	Release Goals for 2025	Likely Marking Date(s)	Inventory to Date		Projected Marking				Projected PIT Tags				
							Date	Number	Adipose Fin Clip		No Clip		Total # Tags	Funding Source			
									No CWT	CWT	CWT	No CWT		CSS	LSRCP	USFWS	BPA
<i>Spring</i>																	
DNFH	SpCS	DNFH	DNFH	NF Clearwater (DNFH)	1,650,000	9/4-9/23/2024	12/1/2023	1,829,301	1,546,493	120,000			42,000	42,000			
Totals					1,650,000			1,829,301	1,546,493	120,000	0	0	42,000	42,000	0	0	0
KFH	SpCS	KNFH	KNFH	Kooskia NFH	650,000	5/20/2024	12/12/2023	628,819		100,000		55,000	6,000			6,000	
Totals					650,000			628,819	0	100,000	0	55,000	6,000	0	0	6,000	0
NPTHC	SpCS	DNFH	NPTH	Trans. to NPTH-NPTH	200,000	8/19/2024	12/1/2023	223,929	163,929	60,000	0	0	3,200				3,200
		DNFH		Trans. to NPTH-Lapwai Creek	200,000	9/3-9/13/2024	12/1/2023	89,516	29,516	60,000	0	0	5,000		5,000		
		NPTHC		Lolo Creek	200,000	6/24/2024	12/1/2023	204,785	0	0	204,785	0	2,000				2,000
Totals					600,000			518,230	193,445	120,000	204,785	0	10,200	0	5,000	0	5,200
CFH	SpCS	SFCIw	CFH	Red River	1,280,000	04/29-05/17/2024	12/1/2023	1,227,280	1,107,280	120,000			17,100	5,100	12,000		
		DNFH		NF Clearwater-CFH (Early)	389,000	04/29-05/17/2024	12/1/2023	375,552	315,552	60,000			8,800		8,800		
		DNFH		NF Clearwater-CFH (Late)	320,000	04/29-05/17/2024	12/1/2023	309,655	249,655	60,000			8,200		8,200		
		DNFH		Selway River-Lower	400,000	04/29-05/17/2024	12/1/2023	387,084	147,089	120,000	119,995		17,100	5,100	12,000		
		KNFH/DNFH		Clear Creek	720,000	04/29-05/17/2024	12/1/2023	692,516	572,516	120,000			9,800	3,500	6,300		
		KNFH/DNFH		Powell Pond (SPR)	640,000	04/29-05/17/2024			485,300	120,000			12,000		12,000		
Totals					3,749,000			2,992,087	2,877,392	600,000	119,995	0	73,000	13,700	59,300	0	0
Spring Grand Total					6,649,000			5,968,437	4,617,330	940,000	324,780	55,000	131,200	55,700	64,300	6,000	5,200

**Table 2.4c.** BY2023 PRE-SMOLT - Sp Chinook Salmon Inventory to Date by Projected Mark Type for release in 2024.

Hatchery Program	Run/ Life Stage	Preferred Collection Site	Rearing Facility	Release Site <sup>1</sup>	Inventory to Date		Projected Marking & Tagging				PIT Tags
					Date	Total	Adipose Fin Clip		No Clip		Funding Source
							No CWT	CWT	CWT	No CWT	
NPTH	NPTHC	NPTH	NPTH	Newsome Cr (SF Clw)	12/1/2023	87,868	0	0	87,868	0	3,000
	NPTHC			Lolo Cr (Clw)	12/1/2023	0	0	0	0	0	0
Total						87,868	0	0	87,868	0	3,000
Spring Grand Total						87,868	0	0	87,868	0	3,000

<sup>1</sup> No Lolo Creek release due to shortage from high BKD culling BY23.



**2.4.2. Early Rearing and Marking Plan for 2024 (Smolts BY 2023, Pre-Smolt BY2023) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Fish Health** - fish health issues, action taken and how was the treatment implemented, anticipated changes to normal fish health sampling or treatments
- **Fish feeding** - changes of diets of feed manufacturer, growth regimes etc.
- **Rearing conditions** - incubation, water temp, flow, rearing density changes
- **Marking** - e.g. schedule changes, planned changes to fish handling or movement, marking schedule, raceway loading for PBT etc.
- **Current Inventory** - . If projected marking lines up with the current inventory, then no comment is needed at this bullet (enter NC). If current inventory is significantly above or below the projected numbers, then explain why.

Plan for 2024 (Smolts BY 2023, Pre-Smolt BY2023)					
Release Location	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking	Meets Release Target
<i>Dworshak National Fish Hatchery (SOP Section 2.2)</i>					
NF Clearwater-DNFH (Dwor)	NC	Utilize Bio Clark 1.5, 2.0	NC	NC	NC
Nez Perce Tribal Hatchery (Dwor)	NC	NC	NC	NC	NC
Lapwai Creek (Dwor)	NC	NC	NC	NC	projected number is 89,516 due to brood shortage and loss
<i>Kooskia National Fish Hatchery (SOP Sections 2.3)</i>					
Kooskia National Fish Hatchery (Koos)	NC	NC	NC	NC	NC
<i>Nez Perce Tribal Hatchery (SOP Section 2.4)</i>					
Lolo Creek (NPTH-Pre-Smolt)	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23	No Release due to high ELISA culls BY23
Newsome Creek (NPTH-Pre-Smolt)	NC	NC	NC	NC	NC

Plan for 2024 (Smolts BY 2023, Pre-Smolt BY2023)					
Release Location	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking	Meets Release Target
Lolo Creek (NPTH-Smolt)	NC	NC	NC	NC	NC
<i>Clearwater Fish Hatchery (SOP Sections 2.5)</i>					
Red River (SFClw)	NC	NC	NC	NC	NC
NF Clearwater - Baffle (Dwor)	NC	NC	NC	NC	NC
NF Clearwater – Regular (Dwor)	NC	NC	NC	NC	NC
Selway River-Lower (Dwor)	NC	NC	NC	NC	NC
Clear Creek (Koos/Dwor)	NC	NC	NC	NC	NC
Powell-Spring (Koos/Dwor)	NC	NC	NC	NC	Short of smolt target by 12% due to lack of broodstock

### 3. Coho Salmon

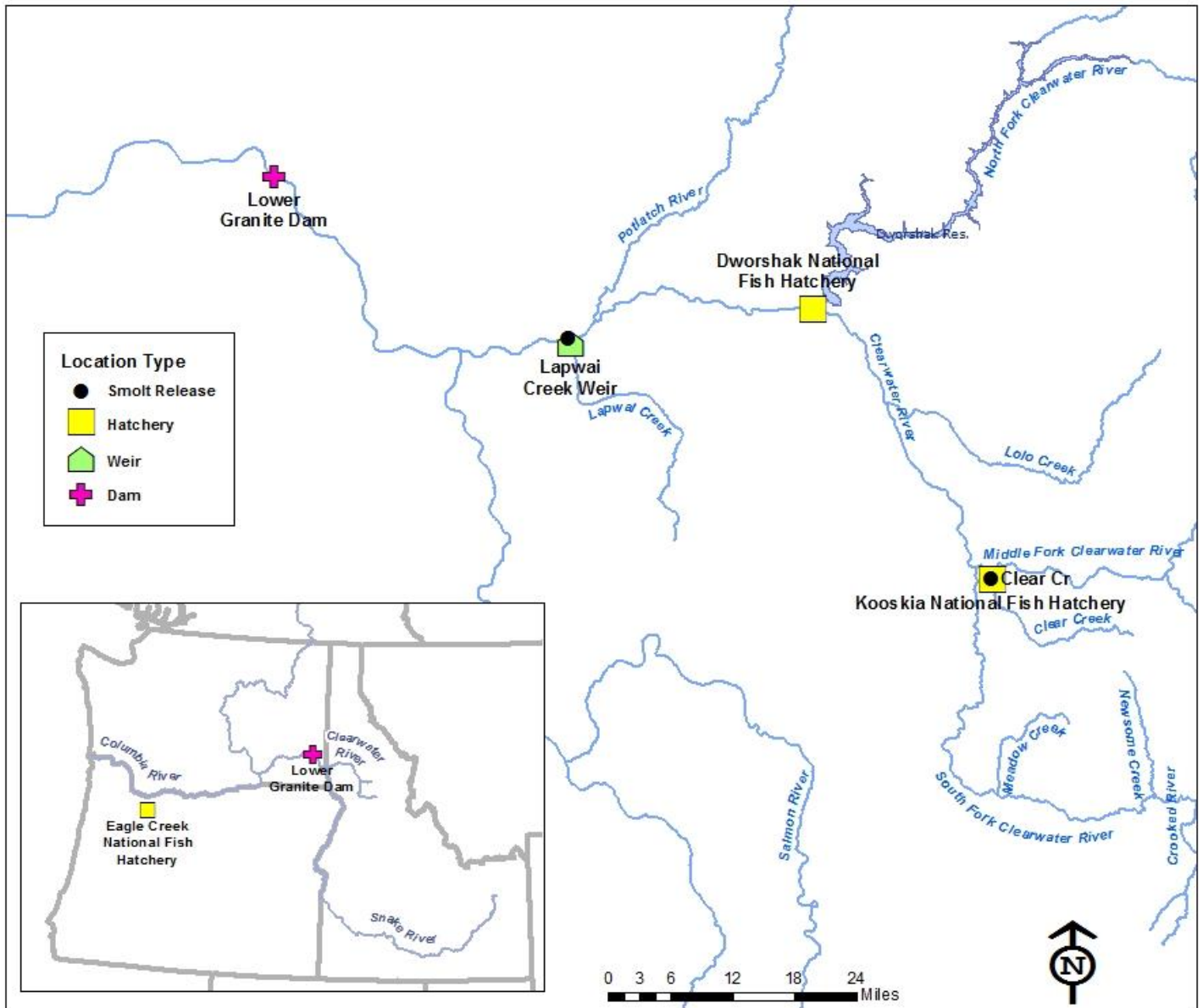
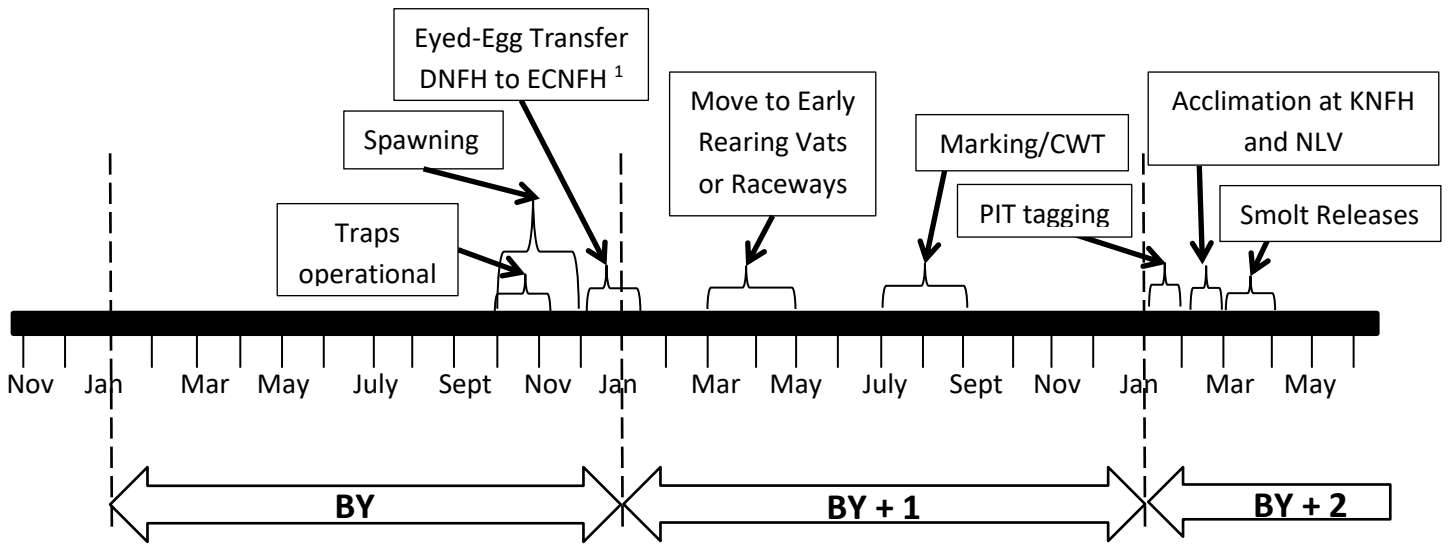


Figure 3.1. Coho trapping, hatchery facilities and smolt release locations.

**Table 3.1.** BY2022 SMOLTS - Coho Release Goals for 2024

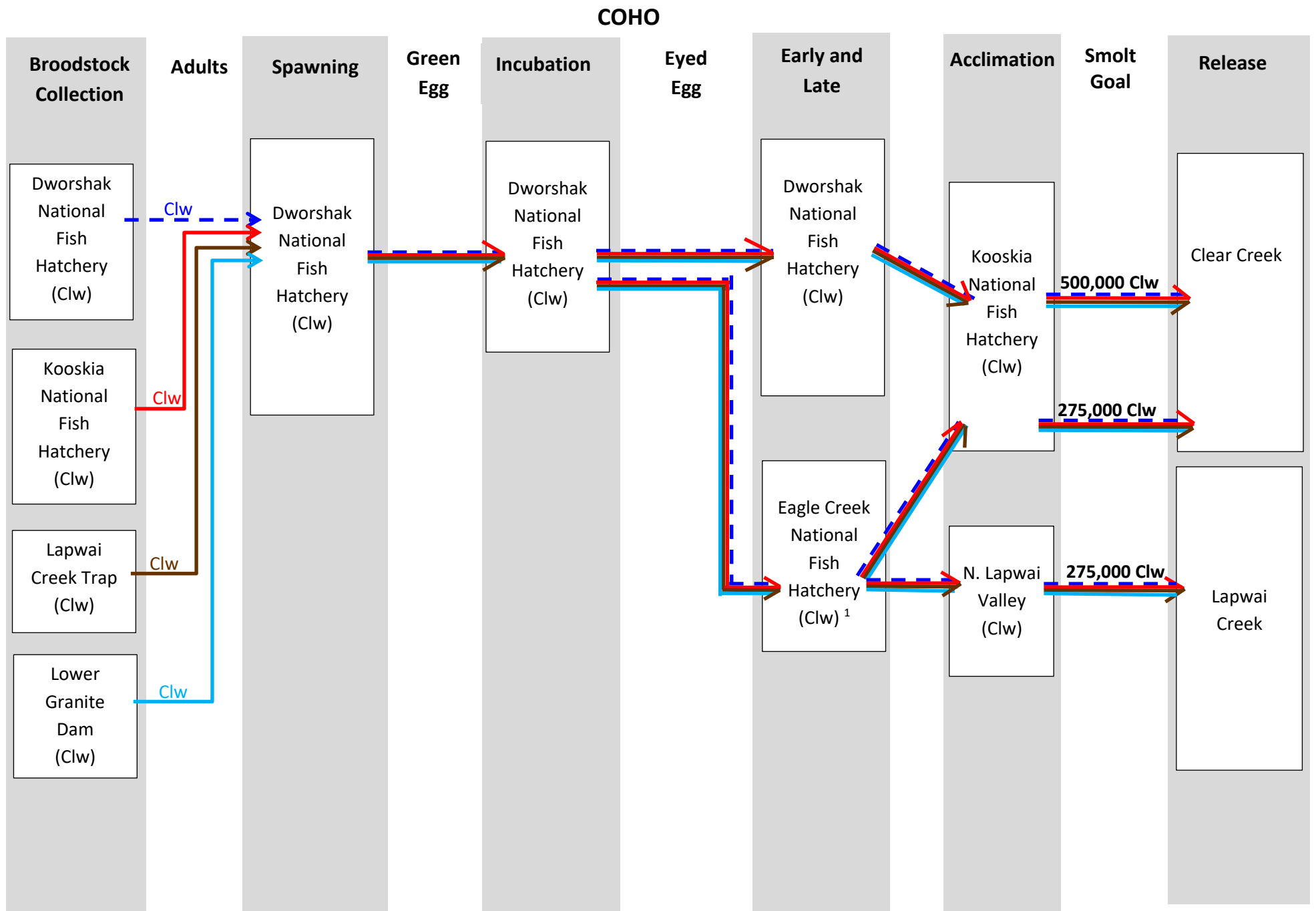
Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2024 Smolt Release Goal
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Clear Creek	500,000
Total					500,000
NPT	Coho	LAP, DNFH, KNFH, LGR	ECNFH	Lapwai Creek	275,000
	Coho			Clear Creek	275,000
Total					550,000
Grand Total					1,050,000

**3.1. Timeline and Flowchart for Coho Production**



<sup>1</sup> Starting BY23, all Coho eggs will be reared at DNFH

**Figure 3.2.** Timeline for Coho Production. Date ranges with black labels are shown to include all facilities' operations.



<sup>1</sup> Beginning BY23, Coho eggs will not be transferred down to Eagle Creek NFH for rearing. BY23 Coho will be reared at Dworshak NFH. This is due to shortfall in Mitchell Act funding and the uncertainty of Eagle Creek NFH operation into the future.

**Figure 3.3.** Coho movements in Clearwater. Numbers represent BY2024 releases.

**3.2. Releases in 2024 (Smolt BY 2022)**

**3.2.1. Releases in 2024 (Smolt BY 2022) – Totals**

**Table 3.2a.** BY2022 SMOLTS - Coho Salmon inventories by life stage, smolt release goals, and projected releases in 2024.

Rearing Facility	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory To Date		Release Goals		Projected Smolt Release		
					Date	Number	Number	(FPP)	Dates	Number	(FPP)
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Clear Creek	12/1/2023	699,710	500,000	35.6	4/11/2024	690,000	20.0
Total						699,710	500,000			690,000	
ECNFH	Coho	LAP, DNFH, KNFH, LGR	ECNFH	Lapwai Creek	12/6/2023	290,122	275,000	28.0	3/29/2024	285,000	20.0
	Coho			Clear Creek	12/6/2023	295,450	275,000	28.0	4/11/2024	290,000	20.0
Total						585,572	550,000			575,000	
Grand Total						1,285,282	1,050,000			1,265,000	

**Table 3.2b.** BY2022 SMOLTS - Coho Salmon Inventory to Date by Mark Type for release in 2024.

Rearing Facility	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory to Date						PIT Tags
					Date	Total	Adipose Fin Clip		No Clip		Total # Tags (Mitchell Act)
							No CWT	CWT	CWT	No CWT	
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Clear Creek	12/1/2023	699,710	0	0	64,583	635,127	5,000
Total						699,710	0	0	64,583	635,127	5,000
ECNFH	Coho	LAP, DNFH, KNFH, LGR	ECNFH	Lapwai Creek	12/6/2023	290,122	0	0	30,000	260,122	5,000
	Coho			Clear Creek	12/6/2023	295,450	0	0	30,000	265,450	5,000
Total						585,572	0	0	60,000	525,572	10,000
Grand Total						1,285,282	0	0	124,583	1,160,699	15,000

**3.2.2. Releases in 2024 (Smolt BY 2022) – Total**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Smolt/Egg Release Targets-** e.g. were you below goal, was your size at release different than SOP target etc.
- **Fish/Egg Health-** any epizootic history, anti-biotic treatments, was production culled at any point
- **Transportation/Releases-** e.g. timing, trucking issues, site access etc.

	Plan for 2024		Changes/Conditions that Occurred 2023-Early 2024		
Location	Release Target Smolt BY22	Transport/Release Smolt BY22	Fish Feeding Smolt BY22	Fish/Egg Health Smolt BY22	Marking Smolt BY22
<i>Dworshak National Fish Hatchery (SOP Section 3.2)</i>					
Clear Creek - DNFH (Clw)	NC	NC	NC	NC	NC
<i>Eagle Creek National Fish Hatchery (SOP Section 3.3)</i>					
Lapwai Creek (Clw)	NC	NC	NC	NC	NC
Clear Creek (Clw)	NC	NC	NC	NC	NC

**3.3. Trap Operations and Production Planning for 2024 (Smolt BY 2024)**

**3.3.1. Trap Operations and Production Planning for 2024 (Smolt BY 2024) – TOTALS**

**Table 3.3a.** BY 2024 SMOLTS - Coho Smolt Production Goals for Release in 2026.

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2026 Smolt Release Goal
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Lapwai Creek	275,000
	Coho			Clear Creek	775,000
Total					1,050,000
<b>Grand Total</b>					<b>1,050,000</b>

**3.3.2. Trap Operations and Production Planning for 2024 (Smolts BY 2024) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

Plan for 2024 (BY 2024)					
Location	Adult Fish Health	Trap Ops	Production target changes	Spawning protocol changes	Disposition of adults
<i>Primary Trapping Facilities (SOP Section 3.2) <sup>1</sup></i>					
Kooskia National Fish Hatchery Trap (Clw)	NC	NC	NC	NC	NC
Lapwai Creek Trap (Clw)	NC	NC	NC	NC	NC
<i>Secondary Trapping Facilities (SOP Section 3.2) <sup>1</sup></i>					
Dworshak National Fish Hatchery Trap (Clw)	NC	NC	NC	NC	NC
Lower Granite Dam (Clw)	NC	NC	NC	NC	NC

<sup>1</sup> If broodstock collection at primary and secondary trapping locations falls short of goals, green eggs from Eagle Creek National Fish hatchery and/or Kalama Fish Hatchery may be used as a source.



**3.4. Early Rearing and Marking Plan for 2024 (Smolts BY 2023)**

**BY2023 SMOLTS - Coho Release Goals for 2025**

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2025 Smolt Release Goal
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Lapwai Creek	275,000
	Coho			Clear Creek	775,000
Total					1,050,000
<b>Grand Total</b>					<b>1,050,000</b>

**3.4.1. Early Rearing and Marking Plan for 2024 (Smolts BY 2023) – TOTALS**

**Table 3.4a.** BY 2023 Coho - Early Rearing Inventory (including anticipated set out)

Rearing Hatchery	Species	Stock	Inventory to Date		
			Date	Goal <sup>1</sup>	Actual
DNFH	Coho	Clw			

<sup>1</sup> Estimated fish needed in vats to reach eventual smolt release goals, based on brood calculator

**Table 3.4b.** BY 2023 SMOLTS - Coho Projected Marking of BY 2023 fish in 2024

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	Likely Marking Date(s)	Release Goals for 2025	Inventory to Date		Projected Marking				PIT Tags 1		
									Adipose Fin Clip		No Clip		Total #	Funding Source	
							Date	Number	CWT	CWT	CWT	CWT	Tags	Act	
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Lapwai Creek		275,000					30,000		5,000	5,000	
	Coho			Clear Creek		775,000					90,000		10,000	10,000	
Total						1,050,000		0	0	0	120,000	0	15,000	15,000	0
<b>Grand Total</b>						<b>1,050,000</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>120,000</b>	<b>0</b>	<b>15,000</b>	<b>15,000</b>	<b>0</b>

<sup>1</sup> PIT Tagging occurs in spring 2025

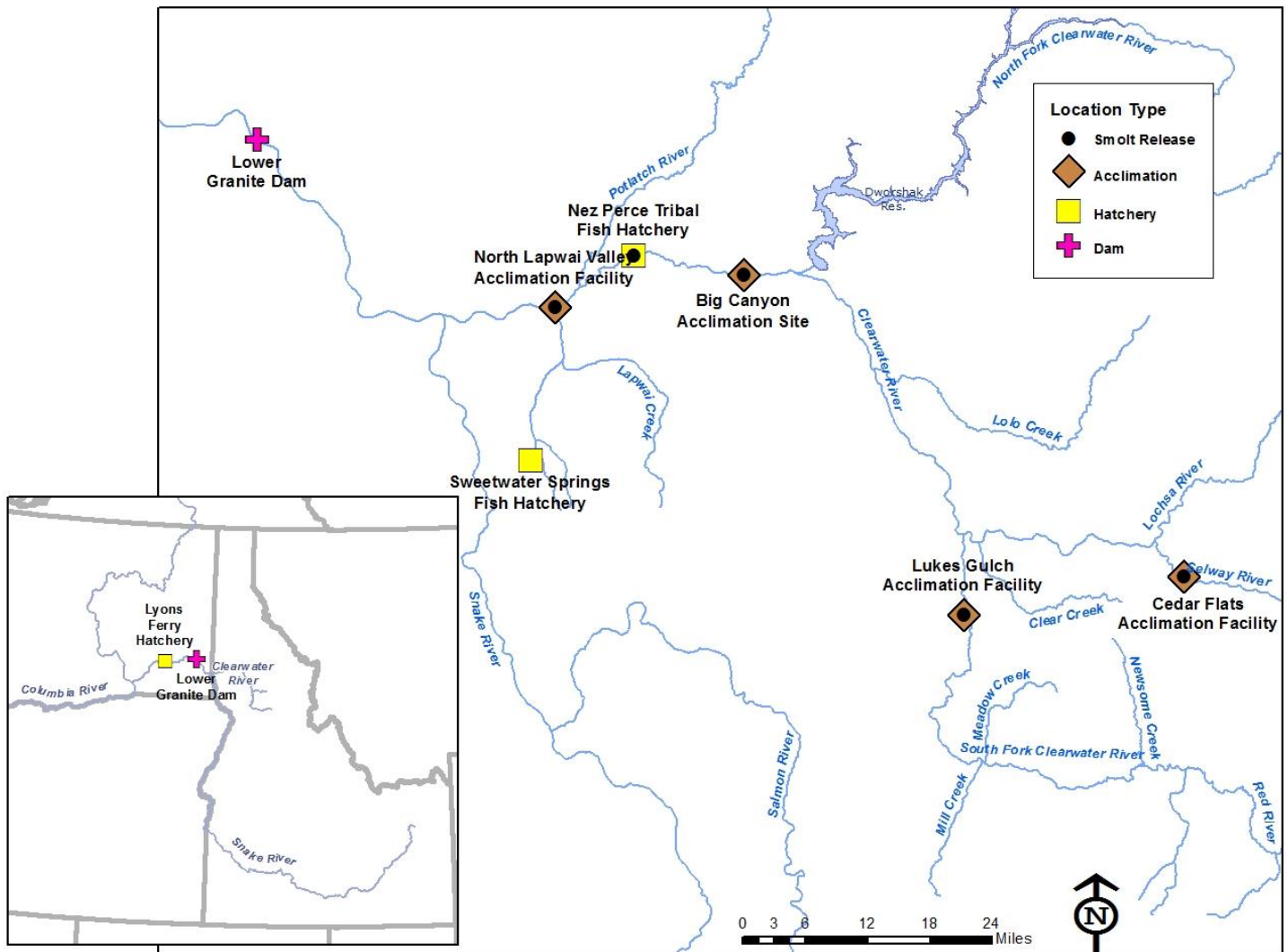
**3.4.2. Early Rearing and Marking Plan for 2024 (Smolts BY 2023) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Fish Health** - observed fish health issues, what action was taken and how was the treatment implemented, anticipated changes to normal fish health sampling or treatments
- **Fish feeding** - changes of diets of feed manufacturer, growth regimes etc.
- **Rearing conditions** - incubation, water temp, flow, rearing density changes
- **Marking** - e.g. schedule changes, planned changes to fish handling or movement, marking schedule, raceway loading for PBT etc.
- **Current Inventory** - . If projected marking lines up with the current inventory, then no comment is needed at this bullet (enter NC). If current inventory is significantly above or below the projected numbers, then explain why.

Release Location	Plan for 2024 (Smolts BY 2023)				
	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking	Meets Release Target
<i>Dworshak National Fish Hatchery (SOP Section 3.2)</i>					
Clear Creek (Clw)	NC	NC	Beginning in BY23, coho will be reared at Dworshak Hatchery instead of Eagle Creek NFH	NC	NC
Lapwai Creek (Clw)	NC	NC	Beginning in BY23, coho will be reared at Dworshak Hatchery instead of Eagle Creek NFH	NC	NC

## 4. Fall Chinook



**Figure 4.1.** Fall Chinook Salmon hatchery and acclimation facilities, and sub-yearling release locations.

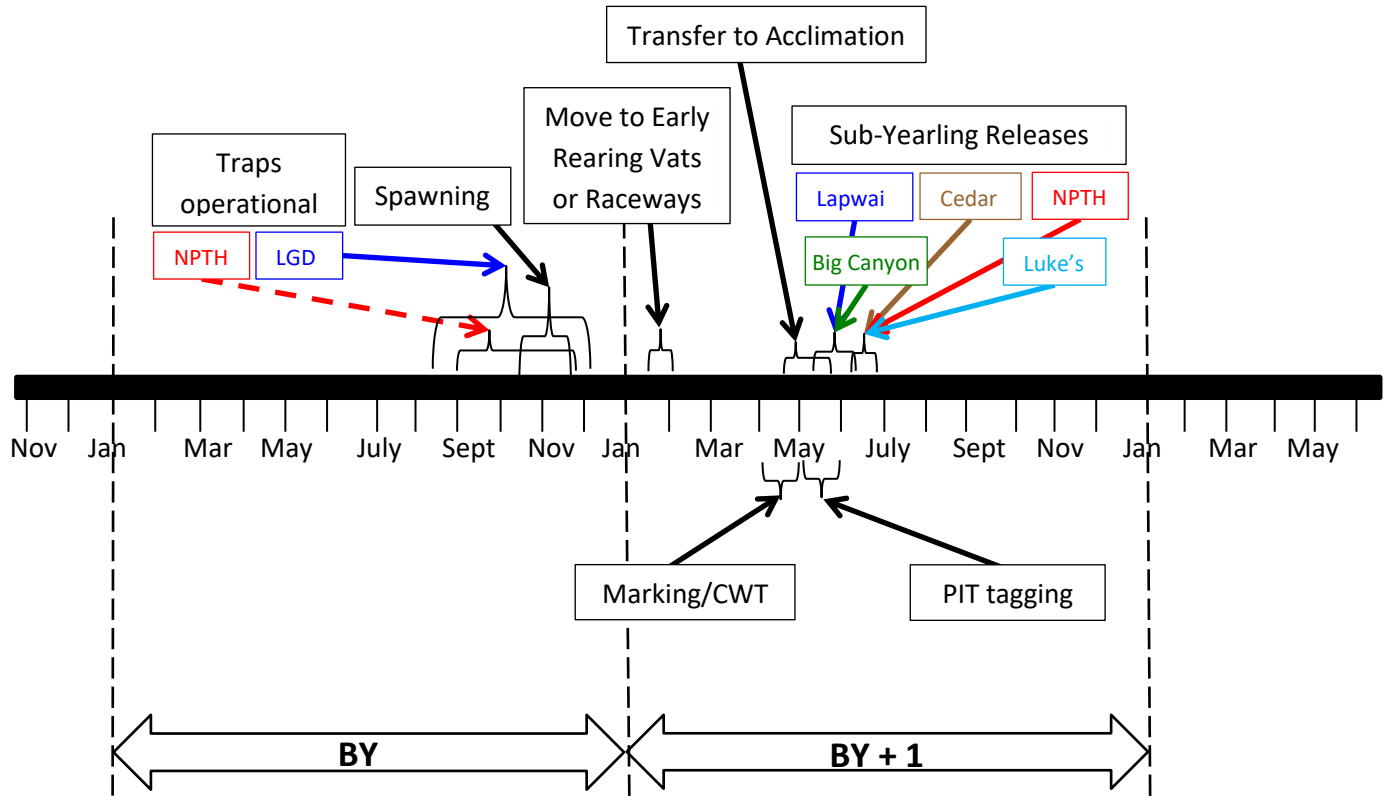
**Table 4.1.** Fall Chinook Goals for Release in 2024

**BY2023 SUB-YEARLINGS**

Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Sub-Yearling Release
NPT	SnakeR	Lyons Ferry	Big Canyon Creek 1	450,000
				200,000
Total				650,000
NPT	SnakeR	NPTH	NPTH	600,000
	SnakeR		N Lapwai Valley	250,000
	SnakeR		Lukes Gulch	300,000
	SnakeR		Cedar Flats	250,000
Total				1,400,000
Grand Total				2,050,000

<sup>1</sup> Two separate release goals at Big Canyon Creek (different release dates)

**4.1. Timeline and Flowchart for Fall Chinook Production**



**Figure 4.2.** Timeline for Sub-Yearling Fall Chinook Production. Date ranges with black labels are shown to include all facilities' operations. Color-coded labels identify activities that have variability in timing for the different facilities.

### FALL CHINOOK

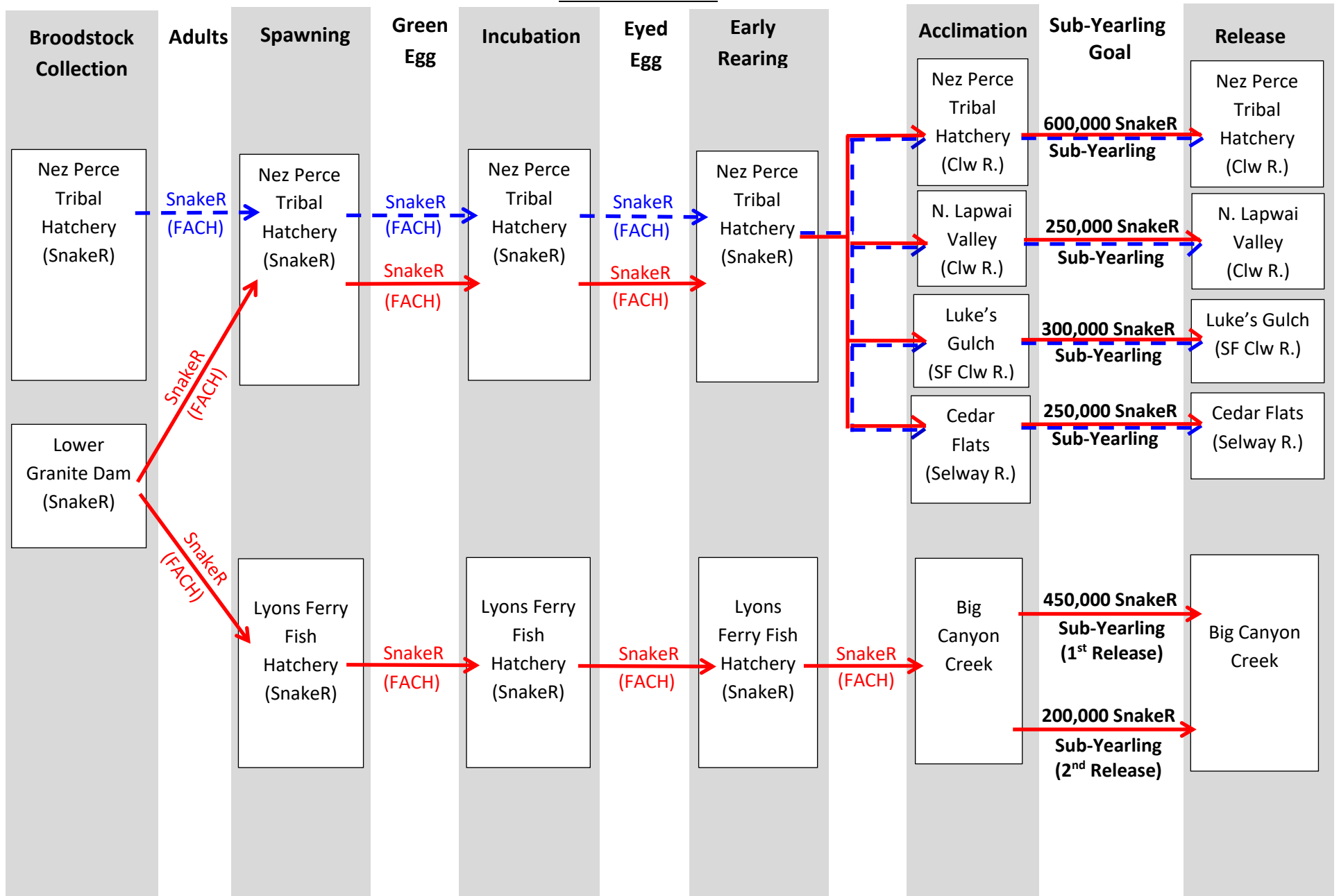


Figure 4.3. Fall Chinook movements in Clearwater. Numbers represent 2024 releases.

**4.2. Releases in 2024 (Sub-Yearling BY 2023)**

**4.2.1. Releases in 2024 (Sub-Yearling BY 2023) – Totals**

**Table 4.2a. BY2023 SUB-YEARLINGS - Fall Chinook Salmon inventories by life stage, smolts release goals and projected releases in 2024.**

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory To Date		Release Goals		Projected Sub-Yearling Release		
					Date	Number	Number	(FPP)	Dates	Number	(FPP)
NPT	FACH	SnakeR	Lyons Ferry	Big Canyon Creek	12/31/2023	455,000	450,000	50.0	5/8/2024	450,000	50.0
					12/31/2023	205,000	200,000	50.0	5/31/2024	200,000	50.0
Total						660,000	650,000			650,000	
NPT	FACH	SnakeR	NPTH	NPTH	12/15/2023	710,890	600,000	50.0	6/12/2024	708,890	50.0
	FACH	SnakeR		N Lapwai Valley	12/15/2023	287,649	250,000	50.0	5/15/2024	286,649	50.0
	FACH	SnakeR		Lukes Gulch	12/15/2023	291,906	300,000	50.0	6/11/2024	290,906	50.0
	FACH	SnakeR		Cedar Flats	12/15/2023	255,469	250,000	50.0	6/10/2024	254,469	50.0
Total						1,545,914	1,400,000			1,540,914	
Grand Total						2,205,914	2,050,000			2,190,914	

<sup>1</sup> Two separate release goals at Big Canyon Creek (different release dates)

**Table 4.2b. BY2023 SUB-YEARLINGS - Fall Chinook Salmon Inventory to Date by Mark Type for release in 2024.**

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory to Date						PIT Tags		
					Date	Total	Adipose Fin Clip		No Clip		# Tags	Funding Source	
							No CWT	CWT	CWT	No CWT		CSS	BPA
NPT	FACH	SnakeR	Lyons Ferry	Big Canyon Creek	12/31/2023	455,000	0	200,000	0	255,000	11,100	11,100	
					12/31/2023	205,000	0	205,000	0	0	4,500	4,500	
Total						660,000	0	405,000	0	255,000	15,600	15,600	0
NPT	FACH	SnakeR	NPTH	NPTH	12/15/2023	708,890	0	100,000	0	608,890	4,500		4,500
	FACH	SnakeR		N Lapwai Valley	12/15/2023	286,649	0	100,000	0	186,649	4,500		4,500
	FACH	SnakeR		Lukes Gulch	12/15/2023	290,906	0	100,000	0	190,906	4,500		4,500
	FACH	SnakeR		Cedar Flats	12/15/2023	254,469	0	100,000	0	154,469	4,500		4,500
Total						1,540,914	0	400,000	0	1,140,914	18,000	0	18,000
Grand Total						2,200,914	0	805,000	0	1,395,914	33,600	15,600	18,000

<sup>1</sup> Projected marking numbers because marking/tagging occurs in April/May

**4.2.2. Releases in 2024 (Sub-Yearling BY 2023) - Narrative**

Here are examples of things managers talk about for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Smolt Release Targets**- e.g. Were you below goal? Was you size at release different than SOP target? Did you depart from the mark plan?
- **Fish Health**- any epizootic history, anti-biotic treatments, was production culled at any point
- **Transportation/Releases**- e.g. timing, trucking issues, site access etc.

	Plan for 2024		Changes/Conditions that Occurred 2023-Early 2024		
Release Location	Release Target Sub-YrIng BY23	Transport/Release Sub-YrIng BY23	Fish Feeding Sub-YrIng BY23	Fish/Egg Health Sub-YrIng BY23	Marking Sub-YrIng BY23
<i>Nez Perce Tribal Hatchery (SOP Section 4.2)</i>					
Nez Perce Tribal Hatchery (Clw R.)	NC	NC	NC	NC	NC
N. Lapwai Valley (Clw R.)	NC	NC	NC	NC	NC
Luke’s Gulch (SF Clw R.)	NC	NC	NC	NC	NC
Cedar Flats (Selway R.)	NC	NC	NC	NC	NC
<i>Lyons Ferry Fish Hatchery (SOP Section 4.3)</i>					
Big Canyon Creek Sub-Yearling <sup>1</sup>	NC	NC	NC	NC	NC
Big Canyon Creek Sub Yearling <sup>1</sup>	NC	NC	NC	NC	NC

<sup>1</sup> Two separate release goals at Big Canyon Creek (different release dates)

### 4.3. Trap Operations and Production Planning for 2024

#### 4.3.1. Trap Operations and Production Planning for 2024 – TOTALS

**Table 4.3a.** BY 2024 SUB-YEARLINGS - Fall Chinook Production Goals for Release in 2025

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2026 Sub-Yearling Release Goal
FCAP	FACH	SnakeR	Lyons Ferry	Big Canyon Creek	450,000
					200,000
Total					650,000
NPTH	FACH	Snake R.	NPTH	NPTH	600,000
	FACH	Snake R.		N Lapwai Valley	250,000
	FACH	Snake R.		Lukes Gulch	300,000
	FACH	Snake R.		Cedar Flats	250,000
Total					1,400,000
Grand Total					2,050,000

#### 4.3.2. Trap Operations and Production Planning for 2024 (Sub-Yearling) – NARRATIVE

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

Rearing Location	Plan for 2024 (BY 2024)				
	Adult Fish Health	Trap Ops	Production target changes	Spawning protocol changes	Disposition of adults
<i>Lower Granite Dam Ladder/Trap (SOP Sections 4.2 and 4.3)</i>					
Nez Perce Tribal Hatchery (SnakeR)	NC	NC	NC	NC	NC
Lyons Ferry Fish Hatchery – Sub-Yearling (SnakeR)	NC	NC	NC	NC	NC
<i>Nez Perce Tribal Hatchery Trap (SOP Section 4.2)</i>					
Nez Perce Tribal Hatchery (SnakeR)	NC	NC	NC	NC	NC



**4.4. Early Rearing and Marking Plan for 2024 (Sub-Yearling BY 2023)**

**4.4.1. Early Rearing and Marking Plan for 2024 (Sub-Yearling BY 2023) – NARRATIVE**

Here are examples of things managers were instructed to discuss for each release group, if there are departures from the norm (i.e., SOP). If no departure from the norm, enter NC for “No Change”.

- **Fish Health** - fish health issues, action taken and how was the treatment implemented, anticipated changes to normal fish health sampling or treatments
- **Fish feeding** - changes of diets of feed manufacturer, growth regimes etc.
- **Rearing conditions** - incubation, water temp, flow, rearing density changes
- **Marking** - e.g. schedule changes, planned changes to fish handling or movement, marking schedule, raceway loading for PBT etc.
- **Current Inventory** - . If projected marking lines up with the current inventory, then no comment is needed at this bullet (enter NC). If current inventory is significantly above or below the projected numbers, then explain why.

Plan for 2024 (Sub-Yearling BY 2023)					
Release Location	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking	Meets Release Target
<i>Nez Perce Tribal Hatchery (SOP Section 4.2)</i>					
Nez Perce Tribal Hatchery (Clw R.)	NC	NC	NC	NC	NC
N. Lapwai Valley (Clw R.)	NC	NC	NC	NC	NC
Luke’s Gulch (SF Clw R.)	NC	NC	NC	NC	NC
Cedar Flats (Selway R.)	NC	NC	NC	NC	NC
<i>Lyons Ferry Fish Hatchery (SOP Sections 4.3)</i>					
Big Canyon Creek Sub-Yearling <sup>1</sup>	NC	NC	NC	NC	NC
Big Canyon Creek Sub-Yearling <sup>1</sup>	NC	NC	NC	NC	NC

<sup>1</sup> Two separate release goals at Big Canyon Creek (different release dates)

## 5. Lamprey

### 5.1. Releases in 2024 - Narrative

- **Release Targets-** Release Targets based on maximization of summer collections at Bonneville, The Dalles, and John Day dams which are no longer limited by an allocation cap but seek to trap and collect as many lamprey as possible since trap efficiencies remain low. Now that summer trap collections far exceed the carrying capacity of holding tanks at NPTH, the majority of outplants will be Direct Releases into the mainstem Clearwater River, with Conventional Overwintering decreased due to reduced the carrying-capacity.
- **Fish Health-** Transferred from USFWS to WDFW and WSU/WADDL (mortalities only)
- **Transportation/Releases-** Releases of adult lamprey will continue with Direct Releases (trapped current Migration Year fish transported past all eight dams then released back into mainstem river to continue volitional migration) and Conventional Overwintering (trapped fish transported to hatchery and held overwinter in holding tanks then released the following spring in targeted tributaries).

Release Location	Plan for 2024		Changes/Conditions that Occurred 2023-Early 2024		
	Release Target <sup>1</sup>	Transport/Release	Fish Feeding	Fish Health	Marking
<i>Nez Perce Tribal Hatchery (SOP Section 5.1)</i>					
Lolo Creek	0				
Orofino Creek	50				
Newsome Creek	25				
Red River	25				
Big Canyon Creek	0				
SF Salmon River	(100- Fall D.R.)				
Johnson Creek	0				
Asotin Creek	50				
Wallowa River	25				
Minam River	25				
Secesh River	(100- Fall D.R.)				
Joseph Creek	50				
Potlatch River	50				
Mainstem Clearwater River		3700			
<b>TOTAL RELEASED</b>	<b>300</b>	3700			

<sup>1</sup> Fish have been overwintered at the NPTH unless otherwise noted as a Direct Release.

**5.2. Trap Operations for 2024**

**5.2.1. Trap Operations for 2024 - Narrative** Trap operation targets based on maximization of summer collections at Bonneville, The Dalles, and John Day dams which are no longer limited by an allocation cap but seek to trap and collect as many lamprey as possible since trap efficiencies remain low.

Plan for 2024					
Trapping Location	Adult Fish Health	Trap Ops	Trapping target changes	Holding protocol changes	Disposition of adults
<i>Primary Trapping Facilities (SOP Sections 5.1)</i>					
Bonneville Dam		2500			
John Day Dam		1000			
The Dalles Dam		500			

# 6. Appendices

## 6.1. Clearwater Brood Calculators

### 6.1.1. FULL PRODUCTION Brood Calculator

PROGRAM INPUTS							HISTORICAL HATCHERY PERFORMANCE METRICS (5-YR AVG)						FORM CALCULATED VALUES										
SPECIES	HATCHERY	PROGRAM	Life Stage	PREFERED TRAPPING SITE	FORMAL RELEASE GOAL (F)	COMANAGER APPROVED CUSHION % (G)	% FEMALES IN BROODSTOCK (H)	% MORTALITY DURING HOLDING (I)	GREEN EGG FECUNDITY (J)	REMAINING AFTER DISEASE CULLING (K)	% SURVIVAL GREEN TO EGG (L)	% SURVIVAL EGG TO RELEASE (M)	RELEASE GOAL WITH CUSHION (N)	EYED EGGS (O)	GREEN EGGS (P)	GREEN EGGS BEFORE DISEASE CULL (Q)	FEMALES SPAWNED (R)	MALES SPAWNED (S)	TOTAL ADULTS SPAWNED (T)	TRAPPED ADULTS NEEDED (U)	ADULTS TRAPPED TO MEET 1:1 RATIO (V)	SMOLTS PER TRAPPED ADULTS NEEDED (W)	NOTE #
STLHD	DNFH	MS Clearwater at DNFH		DNFH	1,200,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	1,248,000	1,548,387	1,787,976	1,951,939	265	265	530	575	575	2,170	
		Red House Hole - SF Clw		SFClw Angler	400,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	416,000	516,129	595,992	650,646	89	89	178	193	193	2,155	
		Clear Creek		DNFH	300,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	312,000	387,097	446,994	487,985	67	67	134	146	146	2,137	
		Lolo Creek		SFClw Angler	200,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	208,000	258,065	297,996	325,323	45	45	90	98	98	2,122	
	CFH	Clearwater		SFClw Angler	843,000	3%	50.0%	3.5%	7,417	100.0%	87.5%	74.0%	868,290	1,173,365	1,340,988	1,340,988	181	181	362	376	376	2,309	
SP/SU CHIN	DNFH	NF Clearwater (DNFH)		DNFH	1,650,000	4%	50.0%	2.9%	3,792	90.4%	95.0%	91.5%	1,718,750	1,878,415	1,977,279	2,187,256	577	577	1,154	1,189	1,189	1,446	(3)
		Trans. to NPTH-NPTH		DNFH	200,000	4%	50.0%	2.9%	3,792	90.4%	95.0%	91.5%	208,333	227,687	239,670	265,122	70	70	140	145	145	1,437	
		Trans. to NPTH-Lapwai Creek		DNFH	200,000	4%	50.0%	2.9%	3,792	90.4%	95.0%	91.5%	208,333	227,687	239,670	265,122	70	70	140	145	145	1,437	(4)
	KNFH	Kooskia NFH		KNFH	650,000	5%	50.0%	10.0%	3,150	94.5%	94.5%	90.0%	684,211	760,234	804,480	851,302	271	271	542	603	603	1,135	
	CFH	Red River		SFClw	1,280,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	1,280,000	1,325,052	1,424,787	1,565,700	450	450	900	948	948	1,350	
		Selway River-Lower		DNFH	400,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	400,000	414,079	445,246	489,281	141	141	282	297	297	1,347	
		Clear Creek		KNFH/DNFH	720,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	720,000	745,342	801,443	880,706	253	253	506	533	533	1,351	
		NF Clearwater-CFH (Early)		DNFH	389,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	389,000	402,692	433,002	475,826	137	137	274	289	289	1,346	(5)
		NF Clearwater-CFH (Late)		DNFH	320,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	320,000	331,263	356,197	391,425	113	113	226	238	238	1,345	(6)
		Powell Pond (SPR)		KNFH/DNFH	640,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	640,000	662,526	712,393	782,850	225	225	450	474	474	1,350	
	NPTHC	Lolo Cr (Clw)	Pre-Smolt	NPTHC	150,000	1%	50.0%	4.5%	3,807	89.0%	90.0%	92.0%	151,515	164,690	182,989	205,606	55	55	110	116	116	1,306	
Newsome Cr (SF Clw)		Pre-Smolt	NPTHC	75,000	1%	50.0%	4.5%	3,807	89.0%	90.0%	92.0%	75,758	82,345	91,495	102,803	28	28	56	59	59	1,284		
Lolo Creek		Smolt	NPTHC	200,000	1%	50.0%	4.5%	3,807	89.0%	90.0%	92.0%	202,020	219,587	243,986	274,141	73	73	146	153	153	1,320		
FACH	NPTHC	Snake River		LGR/NPTH	1,400,000	1%	50.0%	8.0%	4,167	96.0%	90.0%	92.4%	1,414,000	1,529,641	1,699,601	1,770,418	425	425	850	924	924	1,530	
COHO	DNFH	Clearwater			500,000	10%	49.3%	15.1%	2,488	97.3%	80.2%	81.2%	550,000	677,090	844,462	868,074	349	359	708	835	810	659	
	ECFH	Clearwater			550,000	10%	49.3%	15.1%	2,488	97.3%	80.2%	81.2%	605,000	744,799	928,908	954,881	384	396	780	918	892	659	
										CELL FORMULAS	F*(1+G)	N/(M)	O/(L)	P/(K)	ROUNDUP (Q/J,0)	R/(H)-R	R+S	ROUNDUP (T/(1-I),0)	ROUNDUP(R/(1-H))/(1-I),0)	N/U			

(1) In the 2013 AOP process, the co-managers approved a 10% cushion to meet release targets

(2) Culling of eggs for BKD, IHN, etc.

(3) Includes the New Production started in BY2015. Added production by increasing densities to 65k in all B-Bank rcwys.

(4) New production started in BY2015, Lolo release group.

(5) NEW PRODUCTION in 2015. First timing rearing smolt in the adult holding ponds

(6) NEW PRODUCTION in 2015. Increasing rearing densities across raceways and spreading the new smolts across release groups

(7) Powell is not a US v OR program; however we will target 640,000 summer Chinook smolts even if the spring Chinook production target is set at the base US v OR level.

### 6.1.2. US v OR Brood Calculator

PROGRAM INPUTS							HISTORICAL HATCHERY PERFORMANCE METRICS (5-YR AVG)						FORM CALCULATED VALUES											
SPECIES	HATCHERY	PROGRAM	Life Stage	PREFERRED TRAPPING SITE	FORMAL RELEASE GOAL (F)	COMANAGER APPROVED CUSHION % (1)	% FEMALES IN BROODSTOCK (H)	% MORTALITY DURING HOLDING (I)	GREEN EGG FECUNDITY (J)	REMAINING AFTER DISEASE CULLING (2)	% SURVIVAL GREEN TO EYED EGG (L)	% SURVIVAL EYED EGG TO RELEASE (M)	RELEASE GOAL WITH CUSHION (N)	EYED EGGS (O)	GREEN EGGS (P)	GREEN EGGS BEFORE DISEASE CULL (Q)	FEMALES SPAWNED (R)	MALES SPAWNED (S)	TOTAL ADULTS SPAWNED (T)	TRAPPED ADULTS NEEDED (U)	ADULTS TRAPPED TO MEET 1:1 RATIO (V)	SMOLTS PER TRAPPED ADULTS NEEDED (W)	NOTE #	
STLHD	DNFH	MS Clearwater at DNFH		DNFH	1,200,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	1,248,000	1,548,387	1,787,976	1,951,939	265	265	530	575	575	2,170		
		Red House Hole - SF Clw		SFClw Angler	400,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	416,000	516,129	595,992	650,646	89	89	178	193	193	2,155		
		Clear Creek		DNFH	300,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	312,000	387,097	446,994	487,985	67	67	134	146	146	2,137		
		Lolo Creek		SFClw Angler	200,000	4%	50.0%	7.7%	7,368	91.6%	86.6%	80.6%	208,000	258,065	297,996	325,323	45	45	90	98	98	2,122		
	CFH	Clearwater		SFClw Angler	843,000	3%	50.0%	3.5%	7,417	100.0%	87.5%	74.0%	868,290	1,173,365	1,340,988	1,340,988	181	181	362	376	376	2,309		
SP/SU CHIN	DNFH	NF Clearwater (DNFH)		DNFH	1,350,000	4%	50.0%	2.9%	3,792	90.4%	95.0%	91.5%	1,406,250	1,536,885	1,617,774	1,789,573	472	472	944	973	973	1,445	(3)	
		Trans. to NPTH-NPTH		DNFH	200,000	4%	50.0%	2.9%	3,792	90.4%	95.0%	91.5%	208,333	227,687	239,670	265,122	70	70	140	145	145	1,437		
		Trans. to NPTH-Lapwai Creek		DNFH	200,000	4%	50.0%	2.9%	3,792	90.4%	95.0%	91.5%	208,333	227,687	239,670	265,122	70	70	140	145	145	1,437	(4)	
	CFH	KNFH	Kooskia NFH		KNFH	650,000	5%	50.0%	10.0%	3,150	94.5%	94.5%	90.0%	684,211	760,234	804,480	851,302	271	271	542	603	603	1,135	
			Red River		SFClw	1,100,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	1,100,000	1,138,716	1,224,426	1,345,523	387	387	774	815	815	1,350	
			Selway River-Lower		DNFH	400,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	400,000	414,079	445,246	489,281	141	141	282	297	297	1,347	
			Clear Creek		KNFH/DNFH	635,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	635,000	657,350	706,828	776,734	223	223	446	470	470	1,351	
			NF Clearwater-CFH (Baffle)		DNFH	0	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	0	0	0	0	0	0	0	0	0	#DIV/0!	(5)
			NF Clearwater-CFH (Regular)		DNFH	0	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	0	0	0	0	0	0	0	0	0	#DIV/0!	(6)
			Powell Pond (SPR)		KNFH/DNFH	640,000	0%	50.0%	5.0%	3,484	91.0%	93.0%	96.6%	640,000	662,526	712,393	782,850	225	225	450	474	474	1,350	
NPTH	Lolo Cr (Clw)	Pre-Smolt	NPTH	150,000	1%	50.0%	4.5%	3,807	89.0%	90.0%	92.0%	151,515	164,690	182,989	205,606	55	55	110	116	116	1,306			
	Newsome Cr (SF Clw)	Pre-Smolt	NPTH	75,000	1%	50.0%	4.5%	3,807	89.0%	90.0%	92.0%	75,758	82,345	91,495	102,803	28	28	56	59	59	1,284			
	Lolo Creek	Smolt	NPTH	200,000	1%	50.0%	4.5%	3,807	89.0%	90.0%	92.0%	202,020	219,587	243,986	274,141	73	73	146	153	153	1,320			
FACH	NPTH	Snake River		LGR/NPTH	1,400,000	1%	50.0%	5.0%	4,167	96.0%	90.0%	92.4%	1,414,000	1,529,641	1,699,601	1,770,418	425	425	850	895	895	1,580		
COHO	DNFH	Clearwater			500,000	10%	49.3%	15.1%	2,488	97.3%	80.2%	81.2%	550,000	677,090	844,462	868,074	349	359	708	835	810	659		
	ECFH	Clearwater			550,000	10%	49.3%	15.1%	2,488	97.3%	80.2%	81.2%	605,000	744,799	928,908	954,881	384	396	780	918	892	659		
												CELL FORMULAS	F*(1+G)	N/(M)	O/(L)	P/(K)	ROUNDUP (Q/J,0)	R/(H)-R	R+S	ROUNDUP (T/(1-I),0)	ROUNDUP(R/(1-H)/(1-I),0)	N/U		

- (1) In the 2013 AOP process, the co-managers approved a 10% cushion to meet release targets
- (2) Culling of eggs for BKD, IHN, etc.
- (3) Includes the New Production started in BY2015. Added production by increasing densities to 65k in all B-Bank rcwys.
- (4) New production started in BY2015, Lolo release group.
- (5) NEW PRODUCTION in 2015. First timing rearing smolt in the adult holding ponds
- (6) NEW PRODUCTION in 2015. Increasing rearing densities across raceways and spreading the new smolts across release groups
- (7) Powell is not a US v OR program; however we will target 640,000 summer Chinook smolts even if the spring Chinook production target is set at the base US v OR level.

**6.2. Sites, release numbers for adult Spring Chinook Salmon, when all Clearwater Basin Production Programs are above broodstock, harvest and C&S needs.\***

<b>Release Location</b>	<b>Hatchery Source</b>	<b>Guideline Range</b>	<b>Max</b>
<i>Selway Basin</i>			
McGruder	RR, NPTH, Clear, DNFH, KNFH	800 - 1,000	6,000
O'Hara Creek	RR, NPTH, Clear, DNFH	200	
Lower Selway	RR, NPTH, Clear, DNFH, KNFH	0 - 2,000	3,400
<i>SF Clearwater R.</i>			
Mill Creek	RR, NPTH, Clear, DNFH	150	
Meadow Creek	RR, NPTH, Clear, DNFH	150 - 300	
SF Clearwater R.	RR, NPTH, Clear, DNFH	0 - 500	
Crooked River	RR, NPTH, Clear, DNFH	0 - 500	
Lolo Creek	RR, NPTH, Clear, DNFH	0 - 500	
<i>Lochsa River</i>			
Main Lochsa, Badger Cr., Boulder Cr.	RR, NPTH, Clear, DNFH	500	
	<b>TOTAL</b>	<b>1,800 - 4,650</b>	<b>10,000</b>

\*Release Locations are not prioritized. If guideline range is likely to be exceeded, co-managers will discuss disposition of excess fish.

\*There are weekly conference calls scheduled for Tuesdays, to keep all parties updated, informed, and coordinated on in-season run development, harvest estimates, broodstock collection, outplanting plans, etc...

**6.3. Proposed hatchery identifying marks for adult spring Chinook salmon outplanting in the Clearwater River.**

<b>Hatchery / Location</b>	<b>Mark</b>	<b>Purpose</b>
Dworshak	left opercle v-notch	outplant
Kooskia	1) 1 right opercle v-notches	outplant / fishery recycle
	2) if recycle returnees - additional opercle v-notch	outplant / fishery recycle
Clear Creek above weir	right opercle v-notch	natural spawners
Lochsa (Powell satellite)	left opercle punch	fishery recycle / outplant
Red River/Crooked River	1) right opercle punch	fishery recycle
	2) 2 right opercle punches	outplant (early)
Rapid River	dorsal punch	Clearwater (Selway) outplants
Lolo Cr. weir	right opercle punch	Broodstock collection for NPTH
NPTH	left opercle punch	outplant / fishery recycled to Lenore Boat Launch