

**2023**

**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

March 13, 2023

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## 0. Preamble

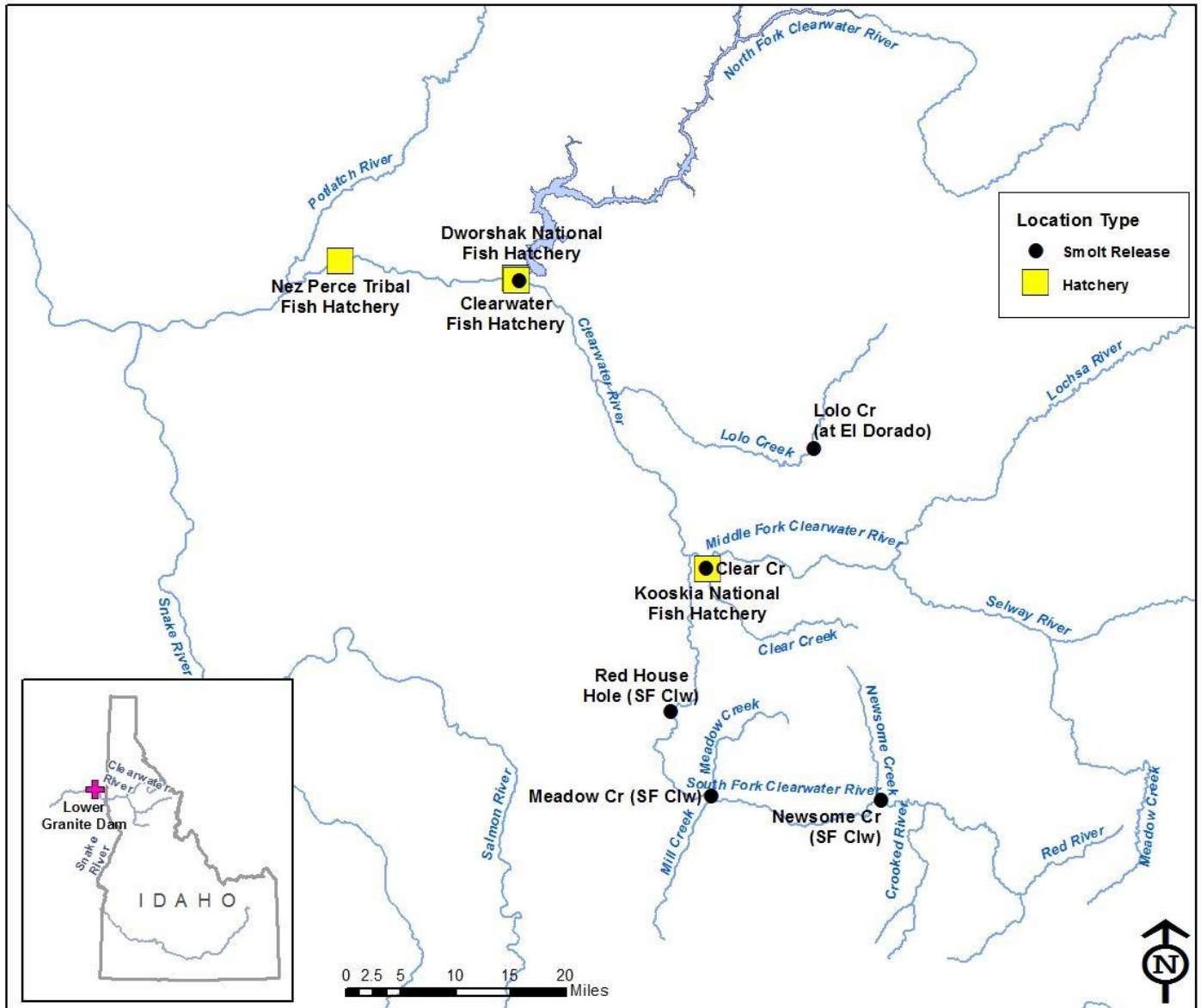
The Annual Operating Plan (AOP) meeting and AOP/SOP documents are planning, coordination and logistics tools that identify the expected implementation of a number of hatchery operation and research/monitoring activities for the coming year in a transparent, open manner.

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.

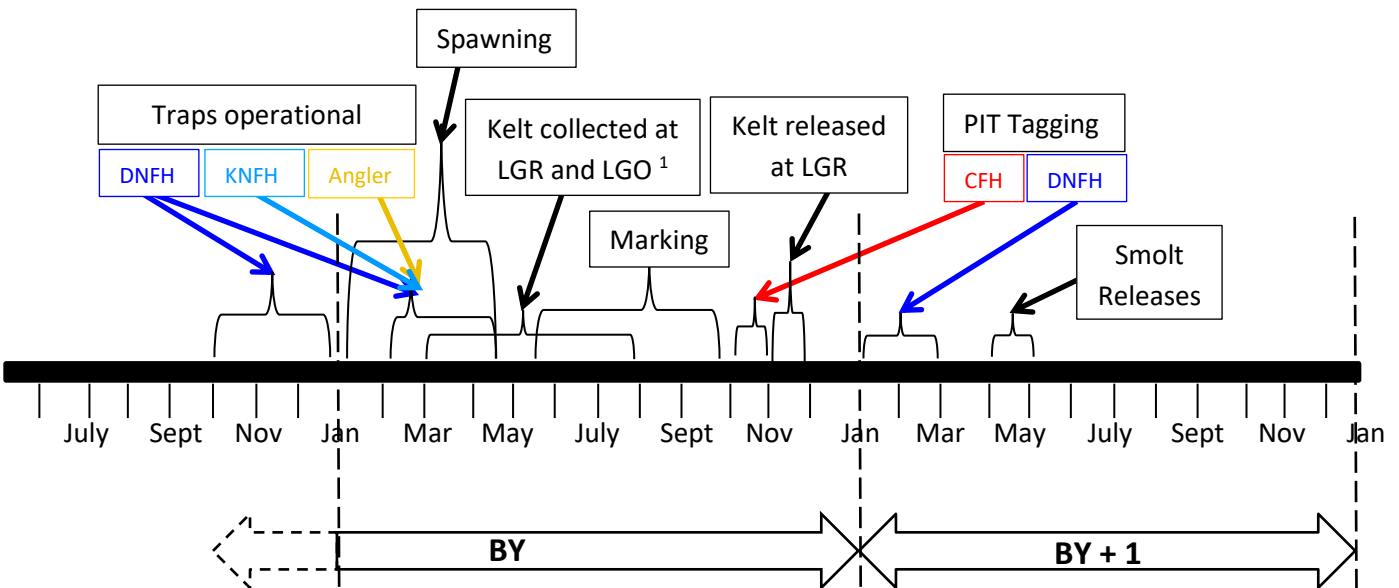
**Table 1.1. BY 2022 Steelhead Release Goals for 2023.**

Rearing Facility	Program	Brood Collection Site	Release Site	BY2022 Smolt Release Goals	Size (FPP)
DNFH	NF Clearwater	DNFH (Trad. Spawned) <sup>1</sup>	DNFH	1,200,000	5.8
			Clear Creek	300,000	5.8
			Lolo Creek <sup>2</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
			Red House Hole-SF Clw	219,000	4.5
			Newsome Creek-SF Clw	123,000	4.5
Total				843,000	
Grand Total				2,943,000	

<sup>1</sup>Additional brood were collected for the Upper Salmon River program (incubated at CFH, reared at MVFH, and released at Pahsimeroi). See the Salmon and Snake River AOP for details on rearing of these progeny.

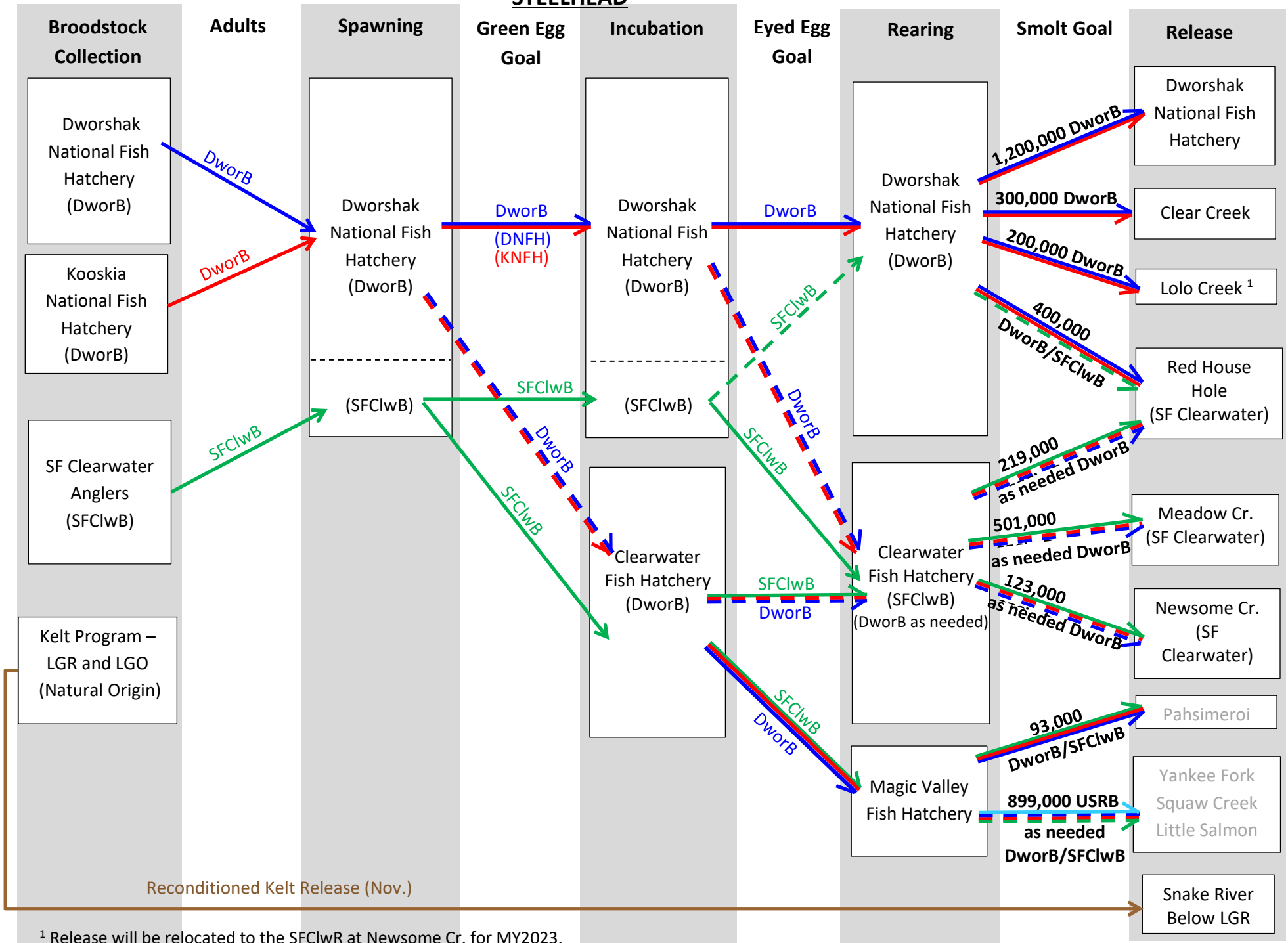
<sup>2</sup> Release will be relocated to the SFClwR at Newsome Creek site for MY2023.

**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.

## STEELHEAD



<sup>1</sup> Release will be relocated to the SFClwR at Newsome Cr. for MY2023.

**Figure 1.3.** Fish and egg movements for Steelhead. Numbers represent 2023 releases.

## 1.2. Releases in 2023 (Smolt BY 2022)

### 1.2.1. Releases in 2023 (Smolt BY 2022) – Totals

**Table 1.2a.** Steelhead Rearing Metrics for BY 2022 fish for release in 2023

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) <sup>1</sup>	DNFH	1,200,000	5.8	11/30/2022	1,152,139			4/17-4/18/2023	1,146,378	5.8
			Clear Creek	300,000	5.8	11/30/2022	270,705			4/10-4/18/2023	269,351	5.8
			Lolo Creek <sup>2</sup>	200,000	5.8	11/30/2022	200,323			4/10-4/18/2024	199,321	5.8
	SF Clearwater	(DNFH)	Red House Hole-SF Clw	400,000	5.8	11/30/2022	335,757			4/10-4/18/2025	334,078	5.8
Total				2,100,000			1,958,924	0			1,949,128	
CFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	501,000	4.5	1/3/2023	534,780			4/3-4/7/2023	533,946	4.5
			Red House Hole-SF Clw	219,000	4.5	1/3/2023	220,926			4/10-4/11/2023	220,707	4.5
			Newsome Creek-SF Clw	123,000	4.5	1/3/2023	125,641			4/13/23	125,544	4.5
Totals				843,000			881,347	0			880,197	
Grand Total				2,943,000			2,840,271	0			2,829,325	

<sup>1</sup> Additional brood were collected for the Upper Salmon River program (incubated at CFH, reared at MVFH, and released at Pahsimeroi). See the Salmon and Snake River AOP for details on rearing of these progeny.

<sup>2</sup> Release will be relocated to the SFClwR at Newsome Creek site for MY2023.

**Table 1.2b.** BY 2022 Steelhead Inventory to Date by Mark Type for release in 2023.

Rearing Facility	Program	Brood Collection Site	Release Site	Inventory to Date						PIT Tags						
				Date	Total	Adipose Fin Clip		No Clip		Total # Tags <sup>1</sup>	Funding Source <sup>3</sup>					
						No CWT	CWT	CWT	CWT		CSS	LSRCP	ACOE	USFWS	NPT	SMP
DNFH	NF Clearwater	DNFH (Trad. Spawned)	DNFH	11/30/2022	1,152,139	1,033,339	118,800				7,200		12,000			1,500
			Clear Creek	11/30/2022	270,705	250,905	19,800				1,840		3,080			
			Lolo Creek 2	11/30/2022	200,323				200,323				1,000			
	SF Clearwater	SFClwR Angler (DNFH)	Red House Hole-SF Clw	11/30/2022	335,757	296,157	39,600				2,360		3,920			
Total					1,958,924	1,580,401	178,200	0	200,323	0	11,400	-	20,000	-	-	1,500
CFH	CFH	SFClwR Angler (DNFH)	Meadow Creek-SF Clw	1/3/2023	534,780	294,877	0	239,903	0	10,791	3,200	7,600				
			Red House Hole-SF Clw	1/3/2023	220,926	220,926	0	0	0	4,695	1,400	3,300				
			Newsome Creek-SF Clw	1/3/2023	125,641	0	0	125,641	0	15,885	800	1,800				13,300
Totals					881,347	515,803	0	365,544	0	31,371	5,400	12,700	-	-	13,300	-
Grand Total					2,840,271	2,096,204	178,200	365,544	200,323	31,371	16,800	12,700	20,000	-	13,300	1,500

<sup>1</sup> Represents actual number tagged if tags have already been applied at the time of this report

<sup>2</sup> Release will be relocated to the SFClwR at Newsome Creek site for MY2023.

<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 2023 (Smolt BY 2022) - 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 2023		Changes/Conditions that Occurred 2022-Early 2023		
	Release Target Smolt BY22	Transport/Release Smolt BY22	Fish Feeding BY22	Fish/Egg Health BY22	Marking BY22
<i>Dworshak National Fish Hatchery (SOP Section 1.2)</i>					
Dworshak National Fish Hatchery (DworB)	NC	NC	NC	NC	NC
Clear Creek (DworB)	NC	NC	10 day Florfenicol fed to BP20	NC	NC
Red House, SF Clearwater (SFClw/DworB)	Projected release - 16% Below goal	NC	NC	Nursery- IHN cull 29,699 May, 11 2022	NC
Lolo Creek (DworB)	NC	NC	NC	NC	NC
<i>Clearwater Fish Hatchery (SOP Section 1.3)</i>					
Meadow Creek SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC	NC
Red House Hole SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC	NC
Newsome Creek SF Clearwater (SFClwB/DworB)	NC	NC	NC	NC	NC



### 1.3. Trap Operations and Production Planning for 2023 (Smolt BY 2023)

#### BY 2023 Steelhead smolt production goals for release in 2024.

Rearing Facility	Program	Brood Collection Site	Release Site	Smolt Release Goals
DNFH	NF Clearwater	DNFH (Trad. Spawned) <sup>1</sup>	MS Clearwater at DNFH	1,200,000
			Clear Creek	300,000
			Lolo Creek	200,000
	SF Clearwater	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

<sup>1</sup> Additional brood are collected for the Upper Salmon River program (to be incubated at CFH, reared at MVFH, and released at Pahsimeroi). Table 1.3a shows the details of brood acquisition, which include fish to be spawned for this program. See the Salmon and Snake River AOP for details on rearing of these progeny.

### 1.3.1. Trap Operations and Production Planning for 2023 (Smolt BY 2023) – TOTALS

Table 1.3a. BY 2023 - Steelhead Spawning/Egg Take Plan.

Take		Estimated Eggs per Female	Hatchery Program / Brood Source / Females Spawned By Method / Green Eggs Taken								
			DNFH - All Releases					CFH - South Fork Clearwater		Grand Totals	
			DWORK <sup>1</sup>		SFCWR		DNFH Green Eggs Projections Combined	SFCWR			
No.	Week of	Fecundity	Females Kill Sp	Green Eggs Projections	Females Kill Sp	Green Eggs Projections	Eggs Projections Combined	Females Kill Sp	Green Eggs Projections	Females Kill Sp	Green Eggs Projections
1 E	Jan 16 - Jan 20	7,046	52	366,392		0	366,392		0	52	366,392
2 E	Jan 30 - Feb 3	7,046	52	366,392		0	366,392		0	52	366,392
3	Feb 13 - Feb 17	7,046	52	366,392		0	366,392		0	52	366,392
4	Feb 20 - Feb 26	7,046		0		0	0		0	0	0
5	Feb 27 - Mar 5	7,046	48	338,208		0	338,208	5	35,230	53	373,438
6	Mar 6 - Mar 12	7,046	65	457,990		0	457,990	25	176,150	90	634,140
7	Mar 13 - Mar 19	7,046		0		0	0	75	528,450	75	528,450
8	Mar 20 - Mar 26	7,046		0	44	310,024	310,024	81	570,726	125	880,750
9	Mar 27 - Apr 2	7,046		0	44	310,024	310,024		0	44	310,024
10	Apr 3 - Apr 9	7,046	52	366,392		0	366,392		0	52	366,392
11	Apr 10 - Apr 16	7,046	48	338,208		0	338,208		0	48	338,208
	19-Apr	7,046		0		0	0		0	0	0
Grand Total			369	2,599,974	88	620,048	3,220,022	186	1,310,556	643	4,530,578

<sup>1</sup> Starting in BY2023, eggs are no longer being transferred from Dworshak to the Upper Salmon B programs

**1.3.2. Trap Operations and Production Planning for 2023 (Smolt 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”.

<b>Plan for 2023 (BY 2023)</b>					
<b>Rearing Location</b>	<b>Adult Fish Health</b>	<b>Trap Ops</b>	<b>Production target changes</b>	<b>Spawning protocol changes</b>	<b>Disposition of adults</b>
<i>Dworshak/Kooskia National Fish Hatchery Ladder/Trap (Fall 2022-Spring 2023)(SOP Section 1.2)</i>					
Dworshak National Fish Hatchery (DworB)	Kelt Project IHN Study	NC	NC	NC	NC
Kooskia National Fish Hatchery (DworkB)	Looking at Thiamine injections, group forming to discuss study plans	NC	NC	Partial ripe females will not be included in female egg needs	NC
Clearwater Fish Hatchery (DworB)	NC	NC	NC	NC	NC
Magic Valley Fish Hatchery (DworB)	NC	NC	Transfer of eggs from Dworshak to Magic Valley discontinued in BY2023	NC	NC
<i>Reconditioned Kelts (SOP Section 1.2)</i>					
Dworshak National Fish Hatchery (Natural/Ad intact B)	NC	NC	NC	NC	NC
Nez Perce Tribal Hatchery (Natural/Ad intact B)	NC	NC	NC	NC	NC

**Plan for 2023 (BY 2023)**

<b>Rearing Location</b>	<b>Adult Fish Health</b>	<b>Trap Ops</b>	<b>Production target changes</b>	<b>Spawning protocol changes</b>	<b>Disposition of adults</b>
<i>SF Clearwater Anglers (SOP Section 1.3)</i>					
Dworshak National Fish Hatchery (SFClwB)	NC	NC	NC	NC	NC
Clearwater Fish Hatchery (SFClwB)	NC	NC	NC	NC	NC

**1.4. Marking and Rearing Plan for 2023 (Smolt BY 2023)**

**BY 2023 Steelhead smolt production goals for release in 2024.**

Rearing Facility	Program	Brood Collection Site	Release Site	Smolt Release Goals
DNFH	NF Clearwater	DNFH	MS Clearwater at DNFH	1,200,000
			Clear Creek	300,000
			Lolo Creek	200,000
	SF Clearwater	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

**1.4.1. Marking and Rearing Plan for 2023 (Smolt BY 2023) – TOTALS**

**Table 1.4a.** Steelhead Projected marking for BY 2023 Production for release in 2024.

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	IPC	ACOE	USFWS	SMP
DNFH	NF Clearwater	DNFH	MS Clearwater at DNFH	1,200,000	1,080,000	120,000			20,010	4,955				13,555		1,500
			Clear Creek	300,000	280,000	20,000			6,896	3,448				3,448		
			Lolo Creek	200,000	-	-		200,000	1,000	500				500		
	SF Clearwater	SFClwR Angler (DNFH)	Red House Hole - SF Clw	400,000	360,000	40,000			4,994	2,497				2,497		
Total				2,100,000	1,720,000	180,000	-	200,000	32,900	11,400	-	-	-	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	-	333,000	-	31,400	5,400	12,700	13,300	-	-	-	-
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

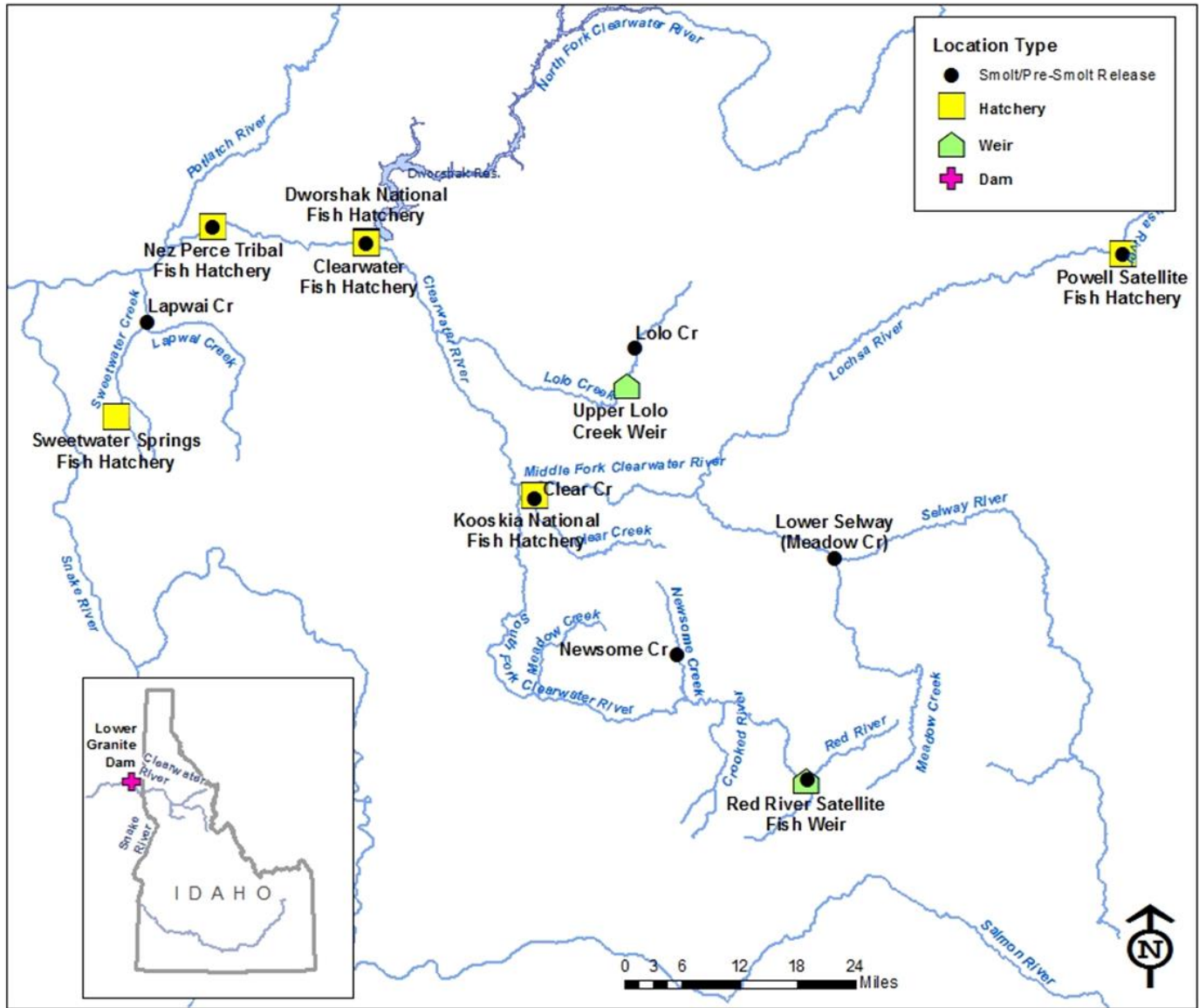
**1.4.2. Marking and Rearing Plan for 2023 (Smolt BY 2023) – NARRATIVE**

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** - 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 2023 (BY 2023)			
	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking
	<i>Dworshak National Fish Hatchery (SOP Section 1.2)</i>			
Dworshak NFH (DworB)	NC	NC	NC	NC
Clear Creek (DworB)	NC	NC	NC	NC
Red House, SF Clearwater (SFClw/DworB)	NC	NC	NC	NC
Lolo Creek (DworB)	NC	NC	NC	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 2023**

**BY2021 SMOLTS**

Action in 2023	Brood/Release Year	Hatchery Program	Rearing Facility	Brood Collection Site	Release Site	Smolt Release Goal	
Release	BY2021 RY2023	<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	SFCIw	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
				Pow	Powell Pond		321,000
		Total					3,430,000
		Spring Grand Total					6,330,000
		<b>Summer</b>					
CFH-LSRCP	CFH	Pow	Powell Pond		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

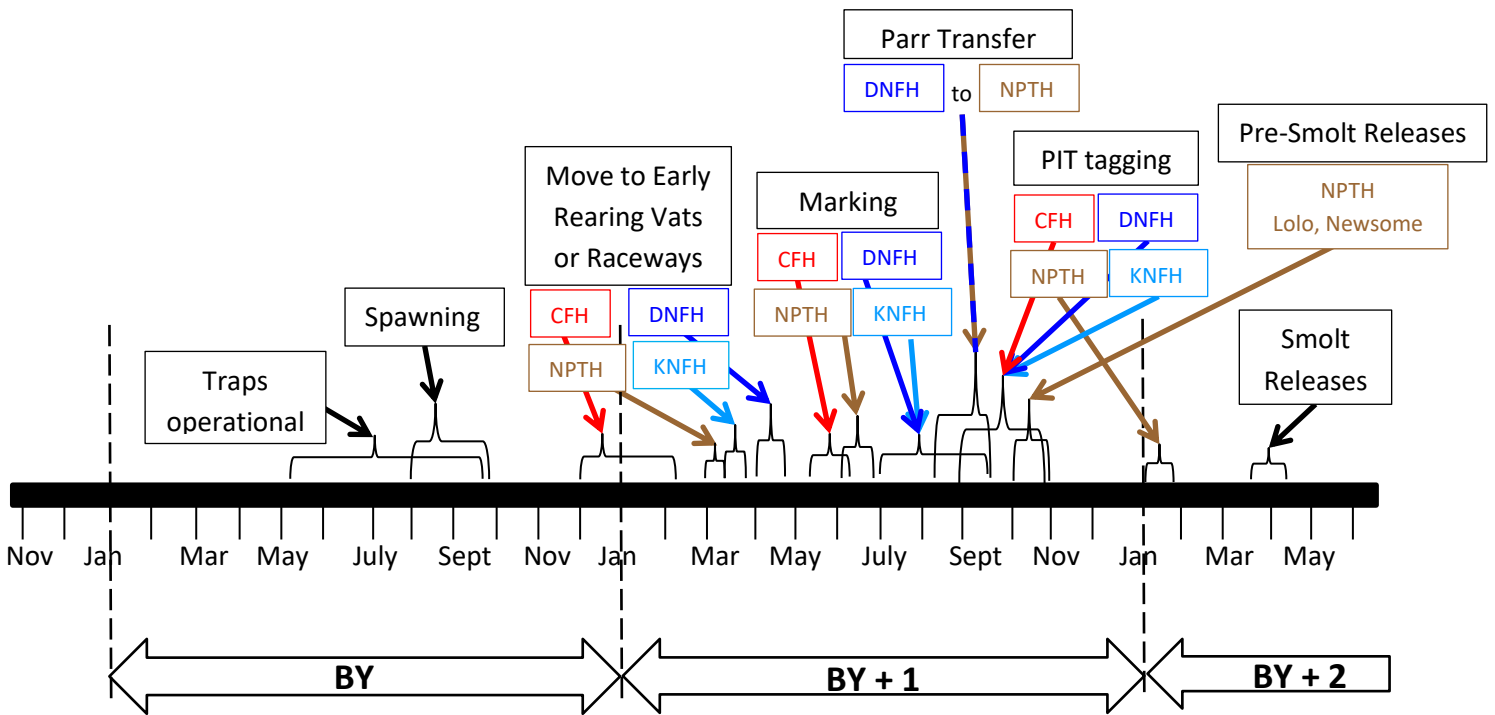
<sup>2</sup> Group originally destined for Lolo release will now be released at NPTH as a Early Release. The Lolo Creek release site is not accessible in 2023.

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

**BY2022 PRE-SMOLTS SMOLTS**

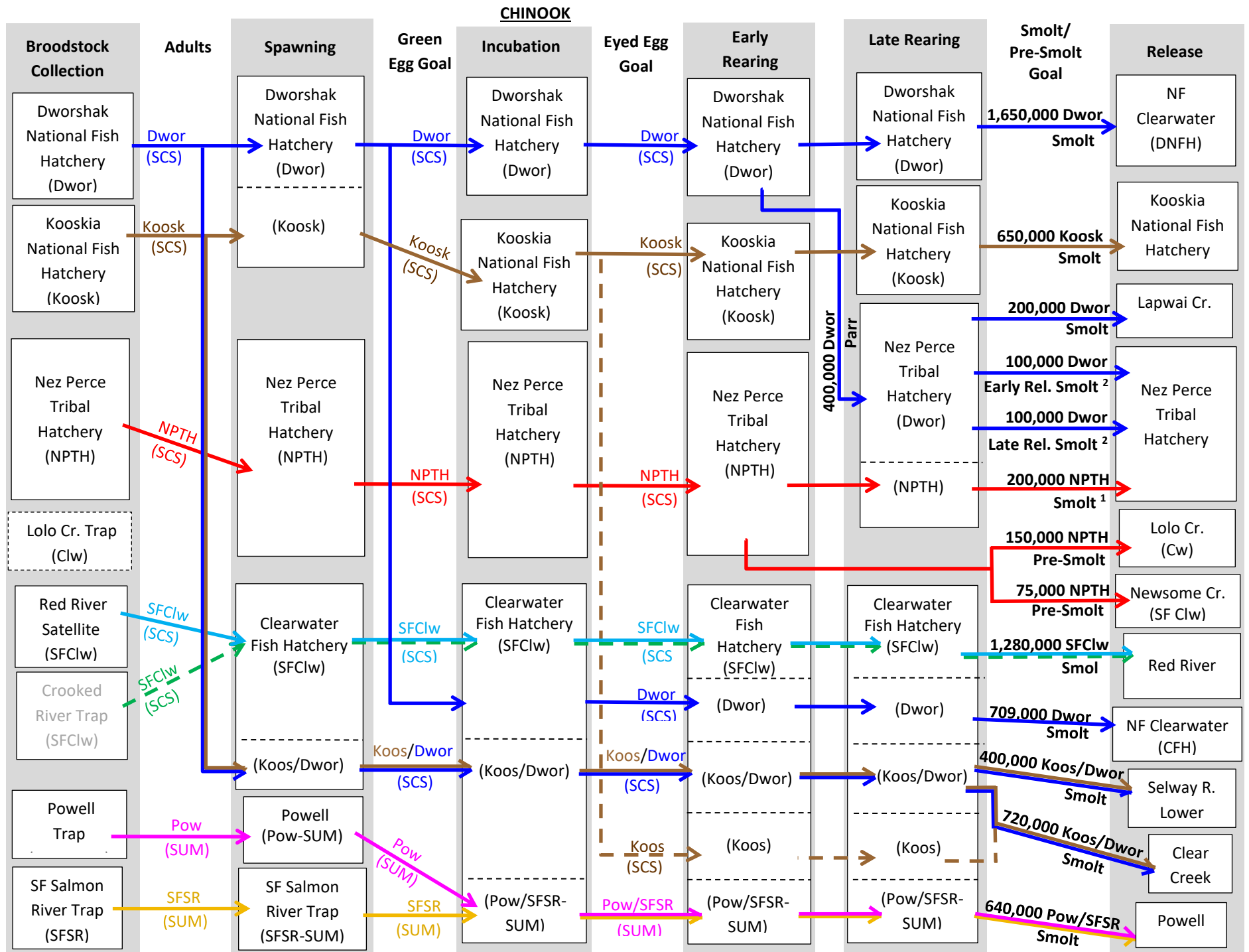
Action in 2023	Brood/Release Year	Hatchery Program	Rearing Facility	Brood Collection Site	Life Stage	Release Site	Smolt Release Goal
Marking and Release	BY2022 RY2023	<b>Spring</b>					
		NPTHC	NPTH	NPTHC	Pre-Smolt	Newsome Cr (SF Clw)	75,000
					Pre-Smolt	Lolo Cr (SF Clw)	150,000
		Spring Grand Total					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.





<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 2023.

<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 2023 releases.

## 2.2. Releases in 2023 (Smolt BY 2021, Pre-Smolt BY 2022)

### 2.2.1. Releases in 2023 (Smolt BY 2021, Pre-Smolt BY 2022) – Totals

**Table 2.2a.** BY2021 SMOLTS - Sp/Su Chinook Salmon inventories by life stage, smolt release goals and projected releases in 2023.

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	12/31/2022	1,128,807	3/30/2023	1,123,163	20.0
				NF Clearwater (DNFH)-Late Rel		20.0	12/31/2022	1,144,501	4/14/23	1,138,778	20.0
Total					1,650,000			2,273,308		2,261,941	
KNFH-NPT	SpCS	KNFH	KNFH	Kooskia NFH	650,000	20.0	12/31/2022	675,332	4/13/2023	670,000	20.0
Total					650,000			675,332		670,000	
NPTHC	SpCS	NPTH	DNFH	Trans. to NPTH from DNFH-Early Rel <sup>3</sup>	100,000	20.0	12/31/2022	118,683	3/23/2023	118,000	20.0
	SpCS			Trans. to NPTH from DNFH-Late Rel <sup>3</sup>	100,000	20.0	12/31/2022	104,243	3/23/2023	103,500	20.0
	SpCS	NPTH	NPTH	Lolo Creek <sup>2</sup>	200,000	20.0	12/31/2022	254,075	4/14/2023	253,500	20.0
	SpCS	NPTH	DNFH	Lapwai Creek	200,000	20.0	12/31/2022	225,090	4/14/2023	224,500	20.0
Total					600,000			702,091		699,500	
CFH-LSRCP	SpCS	CFH <sup>6</sup>	SFCIw	Red River	1,280,000	16.0	12/31/2022	1,237,510	3/13/2023-4/13/2023	1,237,000	16.0
			DNFH	NF Clearwater-CFH (Early) <sup>1</sup>	389,000	16.0	12/31/2022	451,050	3/30/2023	450,550	16.0
				NF Clearwater-CFH (Late) <sup>1</sup>	320,000	16.0	12/31/2022	252,083	4/14/2023	251,600	16.0
			DNFH	Selway River-Lower	400,000	16.0	12/31/2022	406,325	3/13/2023-4/13/2023	406,000	16.0
			KNFH/DNFH	Clear Creek <sup>4</sup>	720,000	16.0	12/31/2022	1,019,815	3/13/2023-4/13/2023	1,019,500	16.0
Pow	Powell Pond	321,000	16.0	12/31/2022	234,427	3/13/2023-4/13/2023	234,000	16.0			
Total					3,430,000			3,601,210		3,598,650	
Spring Grand Total					6,330,000			7,251,941		7,230,091	
<b>Summer</b>											
CFH-LSRCP	SuCS	CFH	Pow	Powell Pond	640,000	16.0	12/31/2022	238,981	3/13/2023-3/17/2023	238,500	16.0
Summer Grand Total					640,000			238,981		238,500	
Spring/Summer Grand Total					6,970,000			7,490,922		7,468,591	

<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 2023.

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

<sup>4</sup> Inventory to Date and Projected Smolt Release Numbers include excess springer production in lieu of the Powell summer shortfall.

<sup>5</sup> Dworshak projected smolt release includes 587,703 Southern Resident Killer Whale program smolts

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

**Table 2.2b. BY2021 SMOLTS - Sp/Su Chinook Salmon Inventory to Date by Mark Type for release in 2023.**

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 - LSRC	SpCS	DNFH <sup>5</sup>	DNFH	NF Clearwater (DNFH)-Early Rel	12/31/22	1,128,807	60,537	1,068,270			21,400	21,400			
				NF Clearwater (DNFH)-Late Rel	12/31/22	1,144,501	61,145	1,083,356			20,600	20,600			
Total						2,273,308	121,682	2,151,626	0	0	42,000	42,000	0	0	
KNFH-NPT	SpCS	KNFH	KNFH	Kooskia NFH	12/31/2022	675,332	104,084	516,839	0	54,409	6,000	0	0	6,000	0
Total						675,332	104,084	516,839	0	54,409	6,000	0	0	6,000	0
NPTH	SpCS	NPTH	DNFH	Trans. to NPTH from DNFH-Early Rel <sup>3</sup>	12/31/2022	118,683	31,702	79,574	0	7,407	1,600	0	0	0	1,600
	SpCS			Trans. to NPTH from DNFH-Late Rel <sup>3</sup>	12/31/2022	104,243	29,969	68,290	0	5,984	1,600	0	0	0	1,600
	SpCS	NPTH	NPTH	Lolo Creek <sup>2</sup>	12/31/2022	254,075	0	0	250,191	3,884	2,000	0	0	0	2,000
	SpCS	NPTH	DNFH	Lapwai Creek	12/31/2022	225,090	59,388	163,767	515	1,420	600	0	600	0	0
Total						702,091	121,059	311,631	250,706	18,695	5,800	0	600	0	5,200
CFH-LSRCP	SpCS	CFH	SFCiw	Red River	12/31/2022	1,237,510	120,669	1,116,841	0	0	16,974	5,000	12,000		
			DNFH	NF Clearwater-CFH (Early) <sup>1</sup>	12/31/2022	451,050	75,278	375,772	0	0	8,796		8,800		
				NF Clearwater-CFH (Late) <sup>1</sup>	12/31/2022	252,083	45,008	207,075	0	0	8,194		8,200		
			DNFH	Selway River-Lower	12/31/2022	406,325	173,270	154,119	78,936	0	16,991	5,000	12,000		
			KNFH/DNFH	Clear Creek <sup>4</sup>	12/31/2022	1,019,815	119,983	899,832	0	0	9,787	3,500	6,300		
Pow	Powell Pond	12/31/2022	234,427	0	234,427	0	0	0							
Total						3,601,210	534,208	2,988,066	78,936	0	60,742	13,500	47,300	0	0
Spring Grand Total						7,251,941	881,033	5,968,162	329,642	73,104	114,542	55,500	47,900	6,000	5,200
<b>Summer</b>															
CFH-LSRCP	SuCS	CFH	Pow	Powell Pond	12/31/2022	238,981	0	0	119,962	119,019	25,487	13,500	12,000		
Summer Grand Total						238,981	0	0	119,962	119,019	25,487	13,500	12,000	0	0
Spring and Summer Grand Total						7,490,922	881,033	5,968,162	449,604	192,123	140,029	69,000	59,900	6,000	5,200

<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 2023.

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

<sup>4</sup> Inventory to Date and Projected Smolt Release Numbers include excess springer production in lieu of the Powell summer shortfall.

<sup>5</sup> Dworshak release includes 587,703 Southern Resident Killer Whale program smolts

**Table 2.2c. BY2022 PRE-SMOLT - Sp/Su Chinook Salmon inventories by life stage, release goals and projected releases in**

Hatchery Program	Rearing Facility	Brood Collection Site	Life Stage	Release Site	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)	12/31/2022	95,240	75,000	30.0	10/11/2023	94,000	30.0	
			Pre-Smolt	Lolo Cr (SF Clw)	12/31/2022	170,214	150,000	30.0	10/11/2023	168,000	30.0	
Total							265,454	225,000			262,000	

**2.2.2. Releases in 2023 (Smolt BY 2021, Pre-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, antibiotic treatments, was production culled at any point
- **Transportation/Releases-** e.g. timing, trucking issues, site access etc.

Release Location	Plan for 2023		Changes/Conditions that Occurred 2022-Early 2023		
	Release Target Smolt BY21 Pre-Smolt BY22	Transport/Release Smolt BY21 Pre-Smolt BY22	Fish Feeding Smolt BY21 Pre-Smolt BY22	Fish/Egg Health Smolt BY21 Pre-Smolt BY22	Marking Smolt BY21 Pre-Smolt BY22
<i>Dworshak National Fish Hatchery (SOP Section 2.2)</i>					
NF Clearwater-DNFH (Dwor)	NC	NC	NC	Phoma diagnosis - June. 3 day 3% Epsom salt feed topcoat treatment for Hexamita-October	Marked for 55k/ pond in all ponds
<i>Kooskia National Fish Hatchery (SOP Sections 2.3)</i>					
Kooskia National Fish Hatchery (Koosk)	NC	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	Both groups will be combined and released on station at NPTH as the “Late Release” similar to the brood year 2020 releases	NC	NC	NC
Lapwai Creek (Dwor Smolt transferred to NPTH from DNFH)	NC	NC	NC	NC	NC
Lolo Creek (NPTH-Smolt)	NC	Group will be released On station at NPTH as the “Early Release”. Similar to the brood year 2020 release	NC	NC	NC

Release Location	Plan for 2023		Changes/Conditions that Occurred 2022-Early 2023		
	Release Target Smolt BY21 Pre-Smolt BY22	Transport/Release Smolt BY21 Pre-Smolt BY22	Fish Feeding Smolt BY21 Pre-Smolt BY22	Fish/Egg Health Smolt BY21 Pre-Smolt BY22	Marking Smolt BY21 Pre-Smolt BY22
Newsome Creek (NPTH-Pre-Smolt)	NC	NC	NC	NC	NC
Lolo Creek (NPTH-Pre-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- 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)	Due to low Summer chinook returns, surplus Spring chinook eggs have been used to bolster the release.	NC	NC	NC	NC

### 2.3. Trap Operations and Production Planning for 2023 (Smolt and Pre-Smolt BY 2023)

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

Action in 2023	Brood/Release Year	Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Smolt Release Goal (US v OR)	Smolt Release Goal (Including Additional Production)		
Trapping	BY2023 RY2025	<b>Spring</b>							
		DNFH - LSRCF	DNFH	DNFH	NF Clearwater (DNFH)		1,350,000	1,650,000	
		Total					1,350,000	1,650,000	
		KNFH-NPT	KNFH	KNFH	Kooskia NFH		650,000	650,000	
		Total					650,000	650,000	
		NPTHC	DNFH	DNFH	Trans. to NPTH-NPTH		200,000	200,000	
					Trans. to NPTH-Lapwai Creek		200,000	200,000	
			NPTHC	NPTHC	Lolo Creek		200,000	200,000	
		Total					600,000	600,000	
		CFH-LSRCP		SFCIw	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
		Total					2,135,000	3,109,000	
		Spring Grand Total					4,735,000	6,009,000	
		<b>Summer</b>							
CFH-LSRCP		Pow/SFSR	CFH	Powell Pond (SUM)		640,000	640,000		
Summer Grand Total <sup>1</sup>					640,000	640,000			

<sup>1</sup> 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.

#### BY2023 PRE-SMOLT - Spring/Summer Chinook Goals for Release in 2025

Action in 2023	Brood/Release Year	Hatchery Program	Life Stage	Brood Collection Site	Rearing Facility	Release Site	Smolt Release Goal
Trapping	BY2023 RY2024	<b>Spring</b>					
		NPTHC	Pre-Smolt	NPTHC		Newsome Cr (SF Clw)	75,000
			Pre-Smolt	NPTHC		Lolo Cr (Clw)	150,000
		Spring Grand Total					225,000

### 2.3.1. Trap Operations and Production Planning for 2023 (Smolt and Pre-Smolt BY 2023) – TOTALS

#### FULL PRODUCTION

**Table 2.3a.** 2023 Adult brood stock acquisition schedules for hatchery Sp/Su Chinook Salmon in Clearwater River drainage for FULL

Date	Spring					Summer
	Dworshak Trap	Kooskia Trap	NPTH Trap	Lolo Cr Weir	Red River Trap	Powell
2-May						
9-May						
16-May			3			
23-May		14	6			
30-May		41	10			
6-Jun		454	44		10	
13-Jun		671	70		83	
20-Jun		754	117		176	24
27-Jun		782	152		352	63
4-Jul	187	950	184		569	160
11-Jul	537	1,032	231		703	204
18-Jul	1,004	1,075	254		755	223
25-Jul	1,470	1,111	282		765	228
1-Aug	1,914		298		786	228
8-Aug	2,334		298		796	233
15-Aug			317		827	243
22-Aug			317		931	247
29-Aug			317		1,034	306
5-Sep					1,034	427
12-Sep						485
19-Sep						
26-Sep						
<b>Total</b>	<b>2,334</b>	<b>1,111</b>	<b>317</b>	<b>TBD</b>	<b>1,034</b>	<b>485</b>
2023 LGR Forecast <sup>1</sup>	6,665	4,452	470	0	3,373	867

Proportion of brood acquisition over season						
Date	Spring					Summer
	Dworshak Trap	Kooskia Trap	NPTH Trap	Red River	Powell <sup>2</sup>	
2-May	0.000	0.000	0.000	0.000	0.000	0.00
9-May	0.000	0.000	0.000	0.000	0.000	0.00
16-May	0.000	0.000	0.010	0.000	0.000	0.00
23-May	0.000	0.013	0.020	0.000	0.000	0.00
30-May	0.000	0.037	0.030	0.000	0.000	0.00
6-Jun	0.000	0.409	0.140	0.010	0.000	0.00
13-Jun	0.000	0.604	0.220	0.080	0.000	0.00
20-Jun	0.000	0.679	0.370	0.170	0.000	0.05
27-Jun	0.000	0.704	0.480	0.340	0.000	0.13
4-Jul	0.080	0.855	0.580	0.550	0.000	0.33
11-Jul	0.230	0.929	0.730	0.680	0.000	0.42
18-Jul	0.430	0.968	0.800	0.730	0.000	0.46
25-Jul	0.630	1.000	0.890	0.740	0.000	0.47
1-Aug	0.820	1.000	0.940	0.760	0.000	0.47
8-Aug	1.000	1.000	0.940	0.770	0.000	0.48
15-Aug	1.000	1.000	1.000	0.800	0.000	0.50
22-Aug	1.000	1.000	1.000	0.900	0.000	0.51
29-Aug	1.000	1.000	1.000	1.000	0.000	0.63
5-Sep	1.000	1.000	1.000	1.000	0.000	0.88
12-Sep	1.000	1.000	1.000	1.000	0.000	1.00
19-Sep	1.000	1.000	1.000	1.000	0.000	1.00
26-Sep	1.000	1.000	1.000	1.000	0.000	1.00

<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.

<sup>2</sup> Based on Crooked River timing.



**FULL PRODUCTION**

**Table 2.3b. BY 2023 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)	2,118,894	3,829	554	554	3.6%	1,150	6/15 - 9/19	5,383
Total				2,118,894		554	554		1,150		5,383
KNFH-NPT	KNFH	KNFH	Kooskia NFH	851,302	3,580	238	238	10.0%	529		2,233
Total				851,302		238	238		529		2,233
NPTHC	DNFH	DNFH	Trans. to NPTH-NPTH	259,456	3,829	68	68	3.6%	142	6/15 - 9/19	470
			Trans. to NPTH-Lapwai Creek	259,456	3,829	68	68	3.6%	142	6/15 - 9/19	
	NPTHC	NPTHC	Lolo Creek	271,063	3,879	70	70	5.0%	148		NR
Total				789,975		206	206		432		470
CFH-LSRCP	SFCIw	CFH	Red River	1,565,700	3,193	491	491	5.0%	1,034	6/15-9/19	3,373
	DNFH		NF Clearwater-CFH (Early)	475,826	3,193	150	150	5.0%	316	6/15-9/19	1,282
	DNFH		NF Clearwater-CFH (Late)	391,425	3,193	123	123	5.0%	259	6/15-9/19	
	DNFH		Selway River-Lower	489,281	3,193	154	154	5.0%	325	6/15-9/19	485
	KNFH/DNFH		Clear Creek	880,706	3,193	276	276	5.0%	582	6/15-9/19	2,219
Total				3,802,938		1,194	1,194		2,516		7,359
Spring Smolt Grand Total				7,563,110		2,192	2,192		4,627		15,445
<b>Summer</b>											
CFH-LSRCP	Pow/SFSR	CFH	Powell Pond (SUM)	830,824	3,614	230	230	5.0%	485	6/15-9/19	867
Summer Smolt Grand Total				830,824		230	230		485		867

<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 2023 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)	101,648	3,879	27	27	5.0%	57		NA
	Pre-Smolt	NPTHC	NPTHC	Lolo Cr (Clw)	203,297	3,879	53	53	5.0%	112		NA
Total					304,945		80	80		169		0
Spring Parr/Pre-smolt Grand Total					304,945		80	80		169		0

**FULL PRODUCTION**

**Table 2.3d.** BY2023 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	1,117	1,117	2,334	7,620
KNFH	514	514	1,111	4,452
SFCIw	491	491	1,034	3,373
NPTHC	150	150	317	0
<b>Summer</b>				
Pow/SFSR	230	230	485	867

**BASE US v OR PRODUCTION**

**Table 2.3e.** 2023 Adult brood stock acquisition schedules for hatchery Sp/Su Chinook Salmon in Clearwater River drainage for BASE US v OR PRODUCTION.

Date	Spring					Summer Powell
	Dworshak Trap	Kooskia Trap	NPTH Trap	Lolo Cr Weir	Red River	
2-May						
9-May						
16-May			3			
23-May		13	6			
30-May		38	9			
6-Jun		426	44		9	
13-Jun		630	69		71	
20-Jun		708	116		151	24
27-Jun		734	151		302	63
4-Jul	124	892	182		489	160
11-Jul	356	969	229		605	204
18-Jul	666	1,009	251		649	223
25-Jul	976	1,043	279		658	228
1-Aug	1,270		295		676	228
8-Aug	1,549		295		685	233
15-Aug			314		711	243
22-Aug			314		800	247
29-Aug			314		889	306
5-Sep					889	427
12-Sep						485
19-Sep						
26-Sep						
<b>Total</b>	1,549	1,043	314	TBD	889	485
2023 LGR Forecast <sup>1</sup>	6,665	4,452	470	0	3,373	867

Date	Spring				Summer Powell <sup>2</sup>
	Dworshak Trap	Kooskia Trap	NPTH Trap	Red River	
2-May	0.000	0.000	0.000	0.000	0.00
9-May	0.000	0.000	0.000	0.000	0.00
16-May	0.000	0.000	0.010	0.000	0.00
23-May	0.000	0.013	0.020	0.000	0.00
30-May	0.000	0.037	0.030	0.000	0.00
6-Jun	0.000	0.409	0.140	0.010	0.00
13-Jun	0.000	0.604	0.220	0.080	0.00
20-Jun	0.000	0.679	0.370	0.170	0.05
27-Jun	0.000	0.704	0.480	0.340	0.13
4-Jul	0.080	0.855	0.580	0.550	0.33
11-Jul	0.230	0.929	0.730	0.680	0.42
18-Jul	0.430	0.968	0.800	0.730	0.46
25-Jul	0.630	1.000	0.890	0.740	0.47
1-Aug	0.820	1.000	0.940	0.760	0.47
8-Aug	1.000	1.000	0.940	0.770	0.48
15-Aug	1.000	1.000	1.000	0.800	0.50
22-Aug	1.000	1.000	1.000	0.900	0.51
29-Aug	1.000	1.000	1.000	1.000	0.63
5-Sep	1.000	1.000	1.000	1.000	0.88
12-Sep	1.000	1.000	1.000	1.000	1.00
19-Sep	1.000	1.000	1.000	1.000	1.00
26-Sep	1.000	1.000	1.000	1.000	1.00

<sup>1</sup> 2- and 3-ocean returns only

<sup>2</sup> Based on Crooked River timing.

**BASE US v OR PRODUCTION**

**Table 2.3f. BY 2023 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>
<b>Spring</b>											
DNFH - LSRCP	DNFH	DNFH	NF Clearwater (DNFH)	1,733,641	3,829	453	453	3.6%	940	6/15 - 9/19	5,383
Total				1,733,641		453	453		940		5,383
KNFH-NPT	KNFH	KNFH	Kooskia NFH	851,302	3,580	238	238	10.0%	529		2,233
Total				851,302		238	238		529		2,233
NPTHC	DNFH	DNFH	Trans. to NPTH-NPTH	259,456	3,829	68	68	3.6%	142	6/15 - 9/19	470
			Trans. to NPTH-Lapwai Creek	259,456	3,829	68	68	3.6%	142	6/15 - 9/19	
	NPTHC	NPTHC	Lolo Creek	271,063	3,879	70	70	4.0%	146		NR
Total				789,975		206	206		430		470
CFH-LSRCP	SFCIw	CFH	Red River	1,345,523	3,193	422	422	5.0%	889	6/15-9/19	3,373
	DNFH		NF Clearwater-CFH (Baffle)	0	3,193	0	0	5.0%	0	6/15-9/19	
	DNFH		NF Clearwater-CFH (Regular)	0	3,193	0	0	5.0%	0	6/15-9/19	
	DNFH		Selway River-Lower	489,281	3,193	154	154	5.0%	325	6/15-9/19	
KNFH/DNFH	Clear Creek	776,734	3,193	244	244	5.0%	514	6/15-9/19	2,219		
Total				2,611,538		820	820		1,728		7,359
Spring Grand Total				5,986,456		1,717	1717		3,627		15,445
<b>Summer</b>											
CFH-LSRCP	Pow/SFSR	CFH	Powell Pond	830,824	3,614	230	230	5.0%	485	6/15-9/19	867
Summer Grand Total				830,824		230	230		485		867

<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 2023 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
<b>Spring</b>												
NPTHC	Pre-Smolt	NPTHC	NPTHC	Newsome Cr (SF Clw)	101,648	3,879	27	27	4.0%	57		
	Pre-Smolt	NPTHC		Lolo Cr (Clw)	203,297	3,879	53	53	4.0%	111		
Total					304,945		80	80		168		0
Spring Grand Total					304,945		80	80		168		0

**BASE US v OR PRODUCTION**

**Table 2.3h.** BY 2023 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
<b><i>Spring</i></b>				
DNFH	743	743	1,549	7,620
KNFH	482	482	1,043	4,452
SFCIw	422	422	889	3,373
NPTHC	150	150	314	0
<b><i>Summer</i></b>				
Pow/SFSR	230	230	485	867

**2.3.2. Trap Operations and Production Planning for 2023 (Smolts and 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”.

Juvenile Release Location	Plan for 2023 (BY 2023)				
	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	500K SRKW, pending available adults above fishery needs	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 (Koos)	NC	NC	NC	Kooskia will not include partial ripe female in total females spawned	NC
Clear Creek (Koos)	NC	NC	NC	NC	NC

Juvenile Release Location	Plan for 2023 (BY 2023)				
	Adult Fish Health	Trap Ops	Production target changes	Spawning protocol changes	Disposition of adults
	<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 (Pow-Summer)	NC	NC	NC	NC	NC

**2.4. Early Rearing and Marking Plan for 2023 (Smolts BY 2022, Pre-Smolt BY2022)**

**BY2022 SMOLTS - Spring/Summer Chinook Goals for Release in 2024**

Action in 2023	Brood/Release Year	Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Smolt Release Goal	
Early Rearing and Marking	BY2022 RY2024	<b>Spring</b>					
		DNFH - LSRCP	DNFH	DNFH	NF Clearwater (DNFH)		1,650,000
		Total					1,650,000
		KNFH-NPT	KNFH	KNFH	Kooskia NFH		650,000
		Total					650,000
		NPTH	DNFH	NPTH	Trans. to NPTH - NPTH		200,000
			NPTH		Lolo Creek		200,000
			DNFH		Trans. to NPTH - Lapwai Creek		200,000
		Total					600,000
		CFH-LSRCP	SFClw	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
		Total					3,109,000
		Spring Grand Total					6,009,000
		<b>Summer</b>					
CFH-LSRCP	Pow	CFH	Powell Pond (SUM)		640,000		
Summer Grand Total					640,000		

**BY2022 PRE-SMOLT - Spring Chinook Goals for Release in 2023**

Action in 2023	Brood/Release Year	Hatchery Program	Life Stage	Brood Collection Site	Rearing Facility	Release Site	Smolt Release Goal
Early Rearing, Marking and Release	BY2022 RY2023	<b>Spring</b>					
		NPTH	Pre-Smolt	NPTH	NPTH	Newsome Cr (SF Clw)	75,000
			Pre-Smolt			Lolo Cr (SF Clw)	150,000
		Total					225,000
		Spring Grand Total					225,000

**2.4.1. Early Rearing and Marking Plan for 2023 (Smolts BY 2022, Pre-Smolt BY2022) – TOTALS**

**Table 2.4a.** BY 2022 Sp/Su Chinook Salmon - Early Rearing Inventory for smolt releases in 2024 (including anticipated set out)

Hatchery Program	Run	Brood Collection Site	Rearing Facility	Release Site	Release Goals for 2023	Size (FPP)	Inventory to Date		
							Date	Goal <sup>1</sup>	Actual
<b>Spring</b>									
DNFH	SpCS	DNFH <sup>2</sup>	DNFH	NF Clearwater (DNFH)	1,650,000	20.0	11/30/22	1,805,618	2,022,861
Totals					1,650,000			1,805,618	2,022,861
KNFH	SpCS	KNFH	KNFH	Kooskia NFH	650,000	20.0	12/31/2022	760,234	731,409
Totals					650,000			760,234	731,409
NPTH	SpCS	DNFH	NPTH	Trans. to NPTH - NPTH	200,000	20.0	11/30/2022	221,030	222,075
		NPTH		Lolo Creek	200,000	20.0	12/31/2022	200,000	233,634
		DNFH		Trans. to NPTH - Lapwai Creek	200,000	20.0	11/30/2022	221,030	220,985
Totals					600,000			642,060	676,694
CFH	SpCS	SFCIw	CFH	Red River	1,280,000	16.0	12/31/2022	1,325,052	1,132,687
		DNFH		NF Clearwater-CFH (Early)	389,000	16.0	12/31/2022	402,692	396,876
		DNFH		NF Clearwater-CFH (Late)	320,000	16.0	12/31/2022	331,263	214,750
		DNFH		Selway River-Lower	400,000	16.0	12/31/2022	414,079	410,859
		KNFH/DNFH		Clear Creek	720,000	16.0	12/31/2022	745,342	739,924
Totals					3,109,000			3,218,428	2,895,096
Spring Grand Total					6,009,000			6,426,340	6,326,060
<b>Summer</b>									
CFH	SuCS	Pow	CFH	Powell Pond (SUM)	640,000			700,219	459,185
Totals					640,000			700,219	459,185
Summer Grand Total					640,000			700,219	459,185

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

<sup>2</sup> Dworshak collected eggs for 200K release for the Southern Resident Killer Whale Program



**Table 2.4b. BY 2022 SMOLTS - Sp/Su Chinook Projected Marking of BY 2022 juveniles to be released in 2024.**

Hatchery Program	Run	Brood Collection Site	Rearing Facility	Release Site	Release Goals for 2023	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
<b>Spring</b>																	
DNFH	SpCS	DNFH	DNFH	NF Clearwater (DNFH)	1,650,000	9/5/2023	11/30/2022	2,022,861	1,902,861	120,000			42,000	42,000			
Totals					1,650,000			2,022,861	1,902,861	120,000	0	0	42,000	42,000	0	0	0
KFH	SpCS	KNFH	KNFH	Kooskia NFH	650,000	5/22/2023	12/31/2022	731,409	570,409	106,000		55,000	6,000	0	0	6,000	0
Totals					650,000			731,409	570,409	106,000	0	55,000	6,000	0	0	6,000	0
NPTH	SpCS	DNFH	NPTH	Trans. to NPTH - NPTH	200,000	8/14/2023	11/30/2022	222,075	162,075	60,000	0	0	3,200	0	0	0	3,200
		NPTH		Lolo Creek	200,000	6/12/2023	12/31/2022	233,634	0	0	200,000	33,000	2,000	0	0	0	2,000
		DNFH		Trans. to NPTH - Lapwai Creek	200,000	9/5/2023	11/30/2022	220,985	160,985	60,000	0	0	600	0	600	0	0
Totals					600,000			676,694	323,060	120,000	200,000	33,000	5,800	0	600	0	5,200
CFH	SpCS	SFClw	CFH	Red River	1,280,000		12/31/2022	1,132,687	1,012,687	120,000			17,100	5,100	12,000		
		DNFH		NF Clearwater-CFH (Early)	389,000		12/31/2022	396,876	336,876	60,000			8,800		8,800		
		DNFH		NF Clearwater-CFH (Late)	320,000		12/31/2022	214,750	154,750	60,000			8,200		8,200		
		DNFH		Selway River-Lower	400,000		12/31/2022	410,859	155,279	120,000	135,580		17,100	5,100	12,000		
		KNFH/DNFH		Clear Creek	720,000		12/31/2022	739,924	619,924	120,000			9,800	3,500	6,300		
Totals					3,109,000			2,895,096	2,279,516	480,000	135,580	0	61,000	13,700	47,300	0	0
Spring Grand Total					6,009,000			6,326,060	5,075,846	826,000	335,580	88,000	114,800	55,700	47,900	6,000	5,200
<b>Summer</b>																	
CFH	SuCS	Pow	CFH	Powell Pond (SUM)	640,000		1/0/1900	459,185	19,185	120,000	120,000	200,000	25,500	13,500	12,000		
Totals					640,000			459,185	19,185	120,000	120,000	200,000	25,500	13,500	12,000	0	0
Summer Grand Totals					640,000			459,185	19,185	120,000	120,000	200,000	25,500	13,500	12,000	0	0
Spring/Summer Grand Total					6,649,000			6,785,245	5,095,031	946,000	455,580	288,000	140,300	69,200	59,900	6,000	5,200

**Table 2.4c. BY2022 PRE-SMOLT - Sp Chinook Salmon Inventory to Date by Projected Mark Type for release in 2023.**

Hatchery Program	Run/ Life Stage	Brood Collection Site	Rearing Facility	Release Site	Inventory to Date		Projected Marking & Tagging				PIT Tags				
					Date	Total	Adipose Fin Clip		No Clip		Total # Tags	Funding Source			
							No CWT	CWT	CWT	No CWT		CSS	LSRCP	USFWS	BPA
NPTH	Pre-Smolt	NPTH	NPTH	Newsome Cr (SF Clw)	12/31/2022	95,240	0	0	95,000	0	3,000	0	0	0	3,000
	Pre-Smolt			Lolo Cr (SF Clw)	12/31/2022	170,214	0	0	170,000	0	6,000	0	0	0	6,000
Total						265,454	0	0	265,000	0	9,000	0	0	0	9,000
Spring Grand Total						265,454	0	0	265,000	0	9,000	0	0	0	9,000

**2.4.2. Early Rearing and Marking Plan for 2023 (Smolts BY 2021, Pre-Smolt BY2022) – 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 2023 (Smolts BY 2022, Pre-Smolt BY2022)					
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)	Poor eye up in late part of take 5 due to improper saline solution mixture	NC	55K per pond after marking	NC	200K SRKW as a result of high incidence of BKD culling and take 5 eye up.
Nez Perce Tribal Hatchery (Dwor)	NC	NC	NC	NC	NC
Lapwai Creek (Dwor)	NC	NC	NC	NC	NC
<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)	NC	NC	NC	NC	NC
Newsome Creek (NPTH-Pre-Smolt)	NC	NC	NC	NC	NC
Lolo Creek (NPTH-Smolt)	NC	NC	NC	NC	NC

Plan for 2023 (Smolts BY 2022, Pre-Smolt BY2022)					
Release Location	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking	Meets Release Target
<i>Clearwater Fish Hatchery (SOP Sections 2.5)</i>					
Red River (SFClw)	NC	NC	NC	NC	Poor eyed egg survival due to improper formalin delivery and BKD
NF Clearwater - Baffle (Dwor)	NC	NC	NC	NC	Poor eyed egg survival due to improper formalin delivery and BKD
NF Clearwater – Regular (Dwor)	NC	NC	NC	NC	Poor eyed egg survival due to improper formalin delivery and BKD
Selway River-Lower (Dwor)	NC	NC	NC	NC	Poor eyed egg survival due to improper formalin delivery and BKD
Clear Creek (Koos/Dwor)	NC	NC	NC	NC	Poor eyed egg survival due to improper formalin delivery and BKD
Powell (Pow/SFSR-Summer)	NC	NC	NC	NC	Poor eyed egg survival due to improper formalin delivery

### 3. Coho Salmon

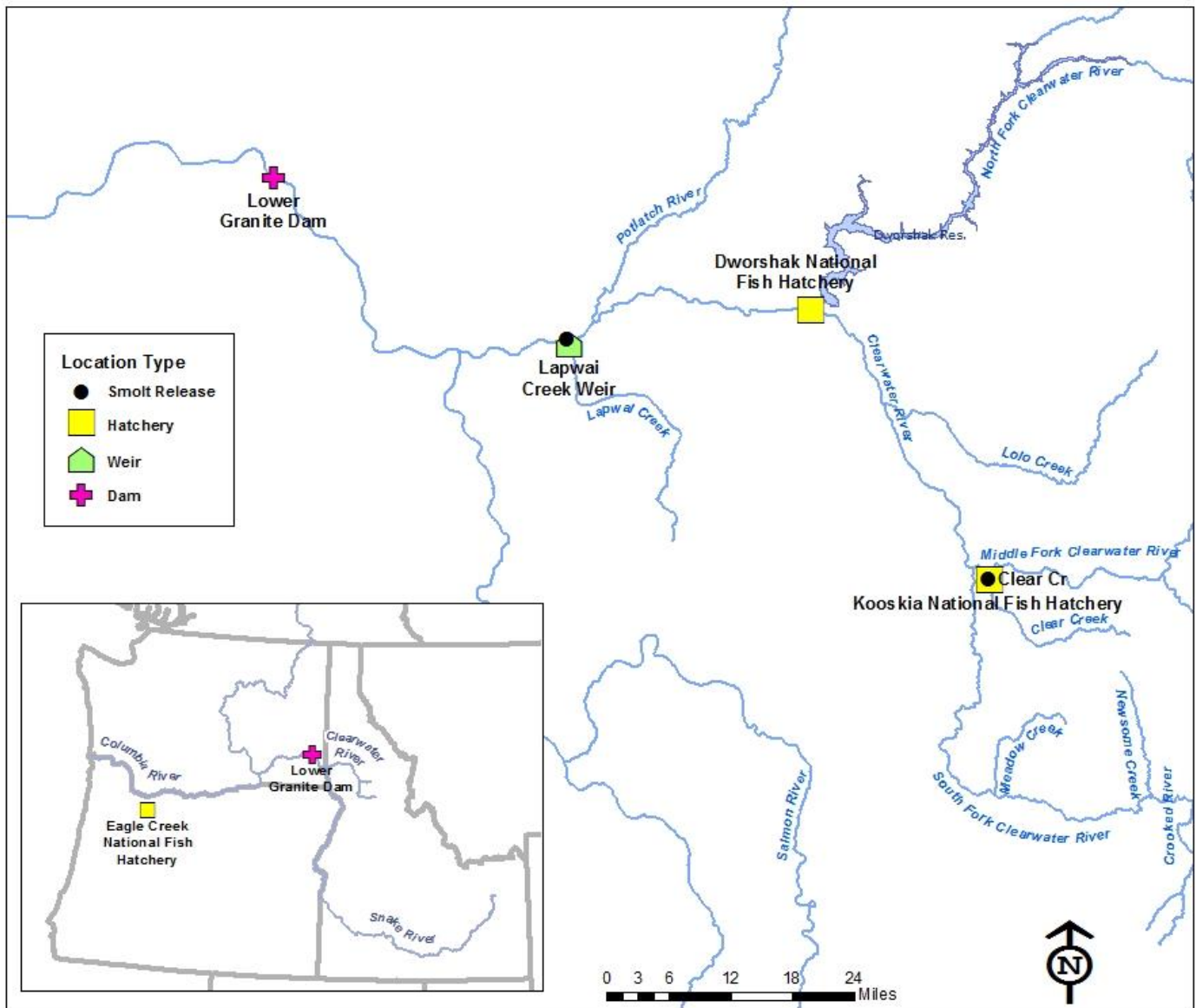
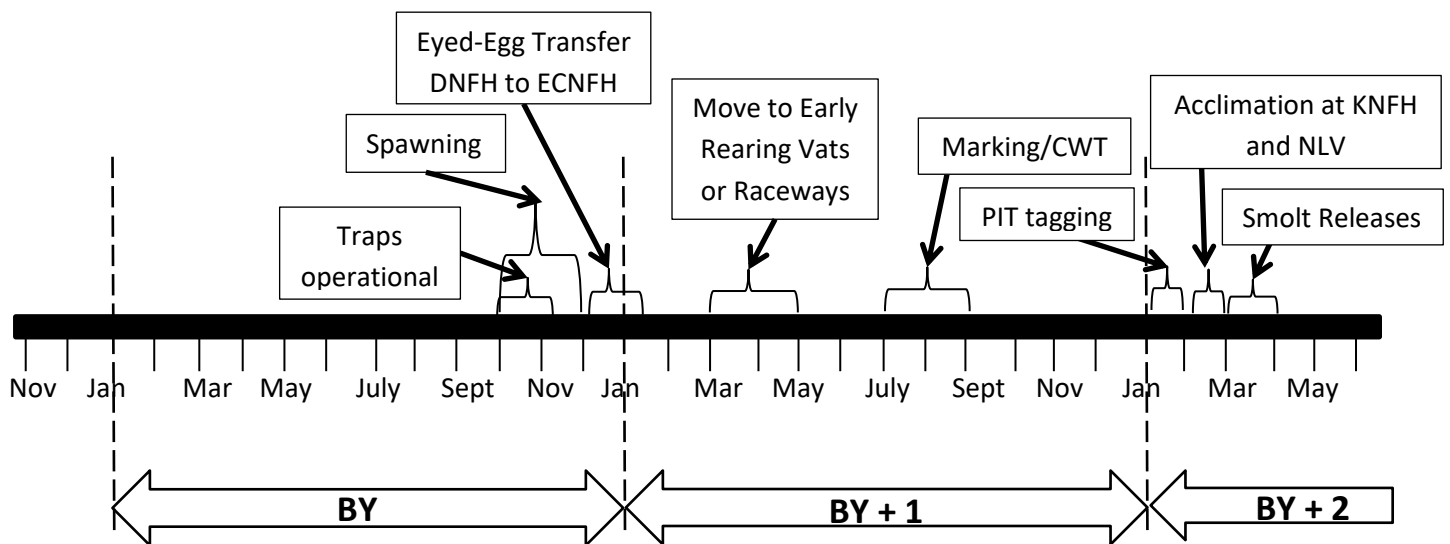


Figure 3.1. Coho trapping, hatchery facilities and smolt release locations.

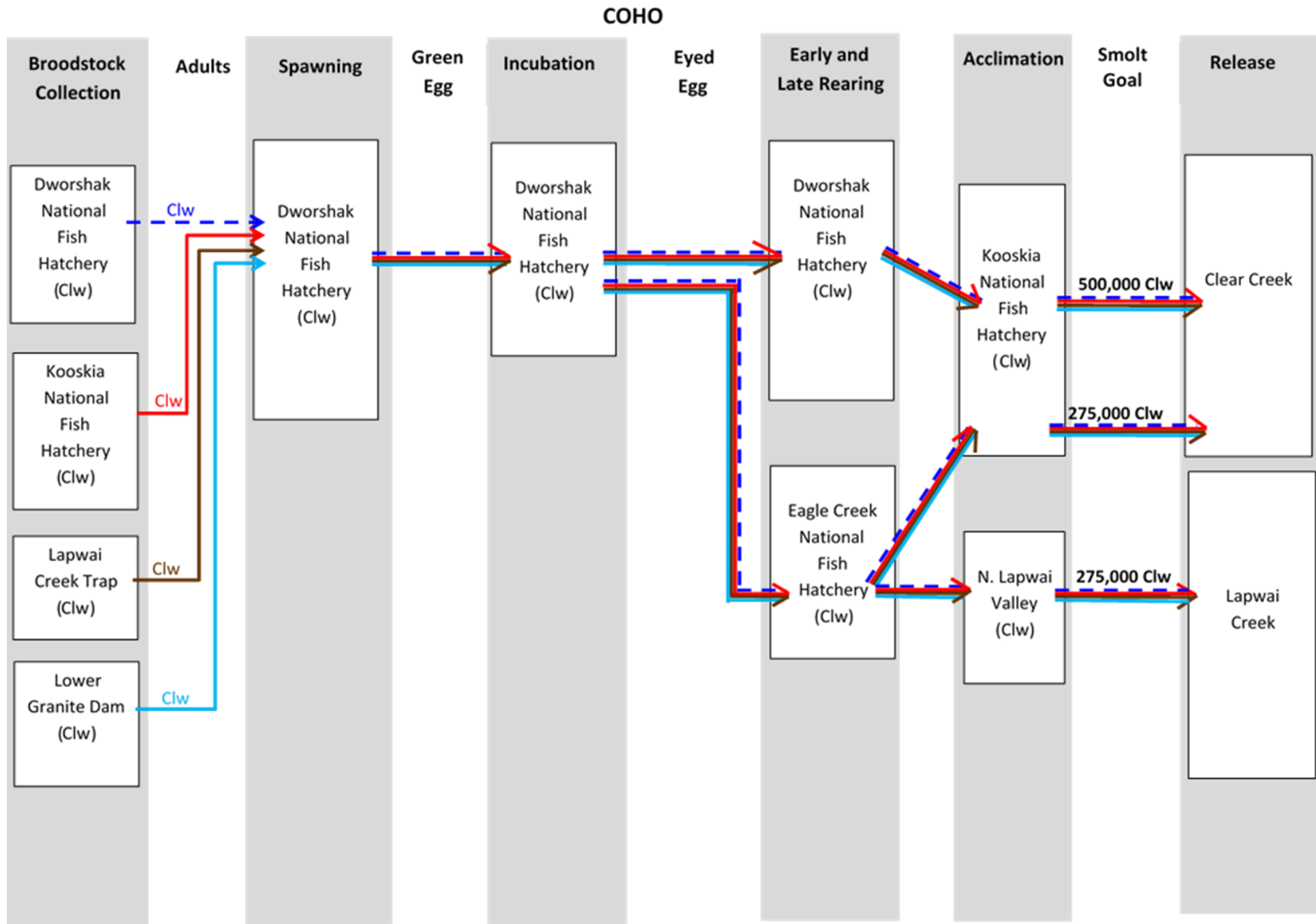
**Table 3.1.** BY2021 SMOLTS - Coho Release Goals for 2023

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2023 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**



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



**Figure 3.3.** Coho movements in Clearwater. Numbers represent BY2023 releases.

**3.2. Releases in 2023 (Smolt BY 2021)**

**3.2.1. Releases in 2023 (Smolt BY 2021) – Totals**

**Table 3.2a.** BY2021 SMOLTS - Coho Salmon inventories by life stage, smolt release goals, and projected releases in 2023.

Rearing Facility	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory To Date		Release Goals		Projected Smolt Release		
					Date	Number	Number	Size (FPP)	Dates	Number	Size (FPP)
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Clear Creek	1/16/2023	597,676	500,000	38.6	March 2023	590,000	20.0
Total						597,676	500,000			590,000	
ECNFH	Coho	LAP, DNFH, KNFH, LGR	ECNFH	Lapwai Creek	1/3/2023	291,059	275,000	27.3	March 2023	285,000	20.0
	Coho			Clear Creek	1/3/2023	292,086	275,000	27.3	March 2023	285,000	20.0
Total						583,145	550,000			570,000	
Grand Total						1,180,821	1,050,000			1,160,000	

**Table 3.2b.** BY2021 SMOLTS - Coho Salmon Inventory to Date by Mark Type for release in 2023.

Rearing Facility	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory to Date						PIT Tags
					Date	Total	Adipose Fin Clip		No Clip		
							No CWT	CWT	CWT	No CWT	Total # Tags (Mitchell Act)
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Clear Creek	1/16/2023	597,676	0	0	65,039	532,637	4,000
Total						597,676	0	0	65,039	532,637	4,000
ECNFH	Coho	LAP, DNFH, KNFH, LGR	ECNFH	Lapwai Creek	1/3/2023	291,059	0	0	30,000	261,059	4,995
	Coho			Clear Creek	1/3/2023	292,086	0	0	30,000	262,086	4,989
Total						583,145	0	0	60,000	523,145	9,984
Grand Total						1,180,821	0	0	125,039	1,055,782	13,984

**3.2.2. Releases in 2023 (Smolt BY 2021) – 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 2023		Changes/Conditions that Occurred 2022-Early 2023		
Location	Release Target Smolt BY21	Transport/Release Smolt BY21	Fish Feeding Smolt BY21	Fish/Egg Health Smolt BY21	Marking Smolt BY21
	<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 2023 (Smolt BY 2023)

#### 3.3.1. Trap Operations and Production Planning for 2023 (Smolt BY 2023) – TOTALS

**Table 3.3a.** BY 2023 SMOLTS - Coho Smolt Production Goals for Release in 2025.

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2025 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
<b>Grand Total</b>					<b>1,050,000</b>

#### 3.3.2. Trap Operations and Production Planning for 2023 (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”.

Location	Plan for 2023 (BY 2023)				
	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 2023 (Smolts BY 2022)

#### 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
<b>Grand Total</b>					<b>1,050,000</b>

#### 3.4.1. Early Rearing and Marking Plan for 2023 (Smolts BY 2022) – TOTALS

**Table 3.4a.** BY 2022 Coho - Early Rearing Inventory (including anticipated set out)

Rearing Hatchery	Species	Stock	Inventory to Date		
			Date	Goal <sup>1</sup>	Actual
DNFH	Coho	Clw			
ECNFH	Coho	Clw			636,464

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

**Table 3.4b.** BY 2022 SMOLTS - Coho Projected Marking of BY 2022 fish in 2023

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	Likely Marking Date(s)	Release Goals for 2022	Inventory to Date		Projected Marking				PIT Tags <sup>1</sup>
									Adipose Fin Clip		No Clip		Total # Tags (Mitchell Act)
							Date	Number	No CWT	CWT	CWT	No CWT	
NPT	Coho	LAP, DNFH, KNFH, LGR	DNFH	Clear Creek		500,000					60,000		5,000
Total						500,000		0	0	0	60,000	0	5,000
NPT	Coho	LAP, DNFH, KNFH, LGR	ECNFH	Lapwai Creek		275,000					60,000		5,000
	Coho			Clear Creek		275,000				60,000		5,000	
Total						550,000		0	0	0	120,000	0	10,000
<b>Grand Total</b>						<b>1,050,000</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>180,000</b>	<b>0</b>	<b>15,000</b>

<sup>1</sup> PIT Tagging occurs in spring 2024

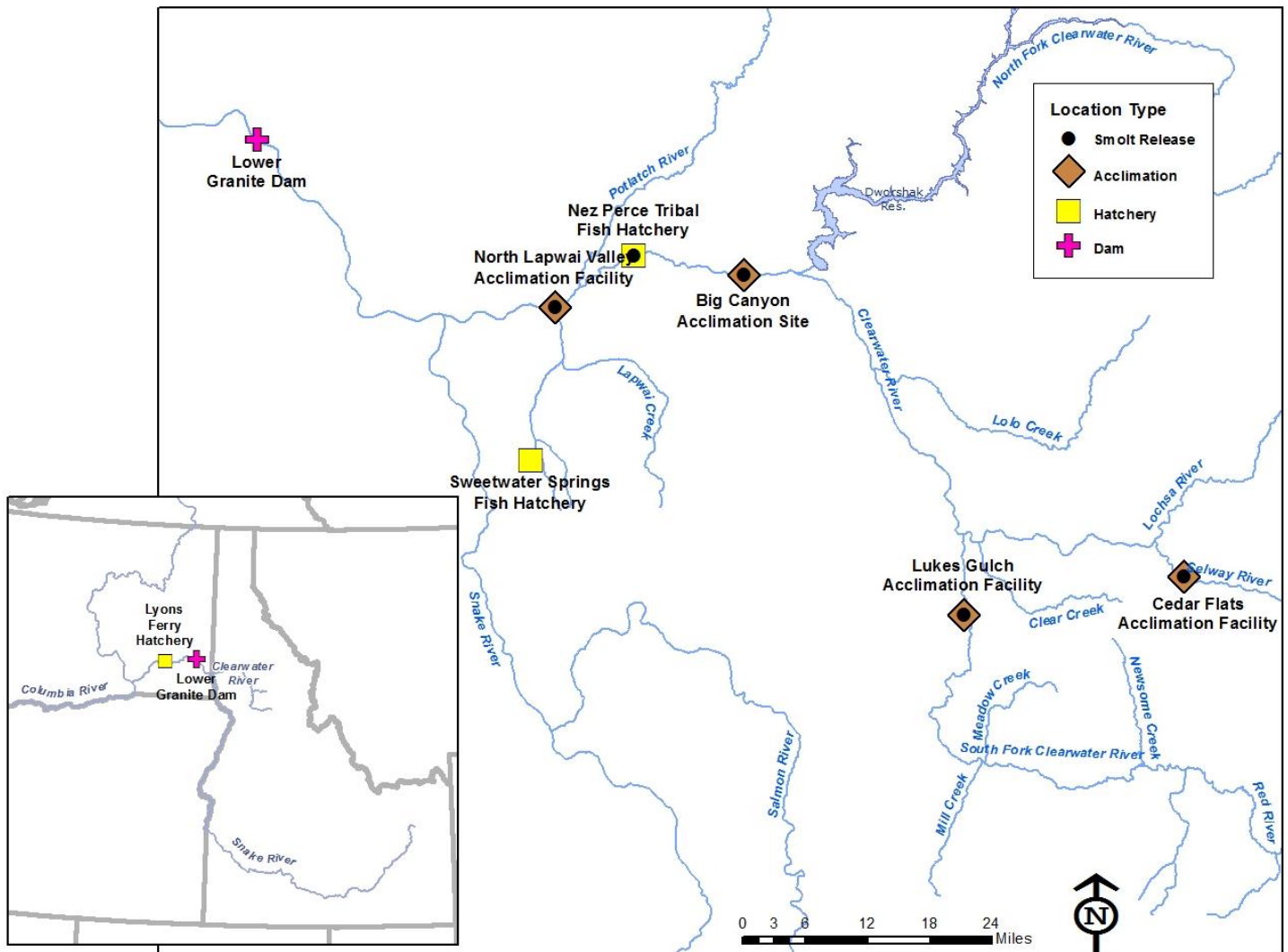
**3.4.2. Early Rearing and Marking Plan for 2023 (Smolts BY 2022) – NARRATIVE**

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 2023 (Smolts BY 2022)				
	Juvenile Fish Health	Fish Feeding	Rearing Conditions	Marking	Meets Release Target
	<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 Sections 3.3)</i>				
Clear Creek (Clw)	NC	NC	NC	60,000 CWT, increased from 30k	NC
Lapwai Creek (Clw)	NC	NC	NC	60,000 CWT, increased from 30k	NC

## 4. Fall Chinook



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

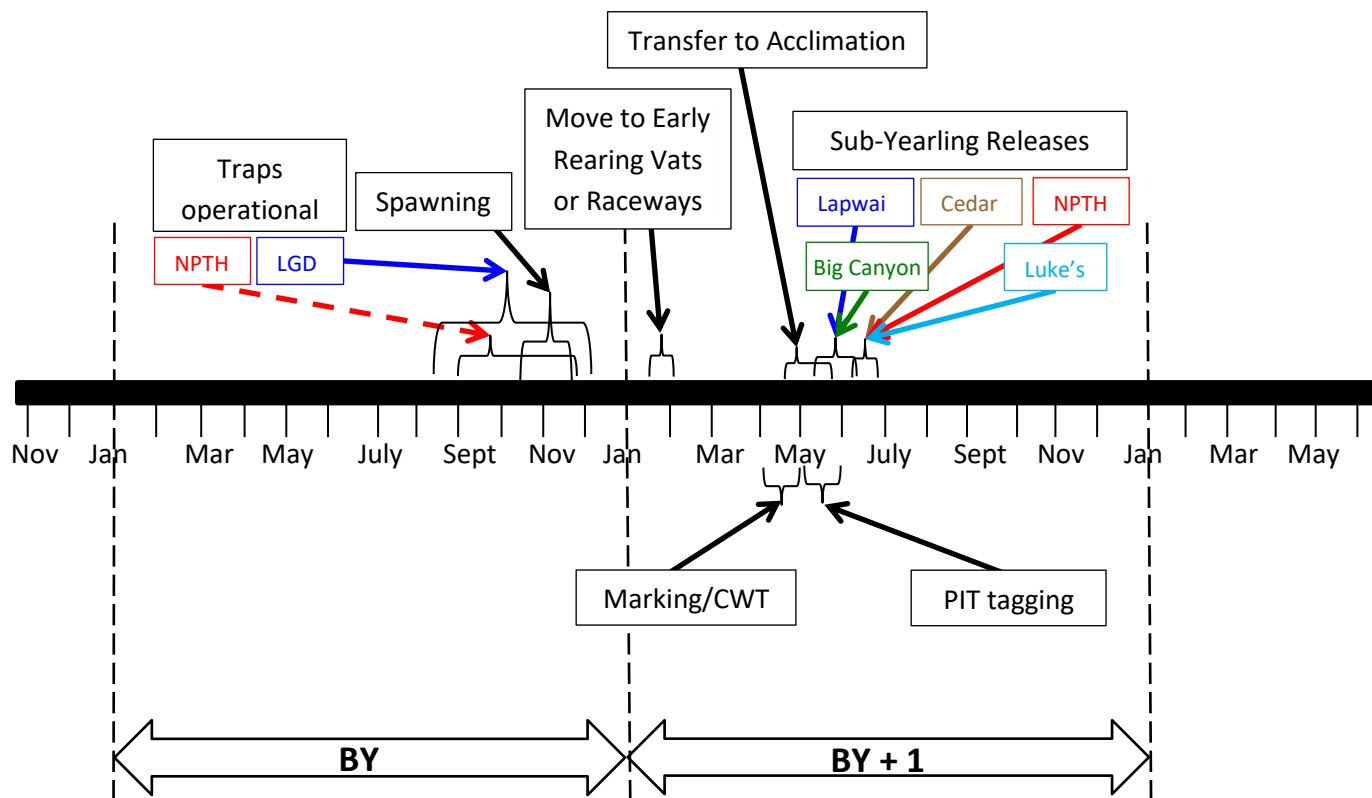
**Table 4.1.** Fall Chinook Goals for Release in 2023

**BY2022 SUB-YEARLINGS**

Hatchery Program	Brood Collection Site	Rearing Facility	Release Site	Sub-Yearling Release Goal
NPT	SnakeR	Lyons Ferry	Big Canyon Creek <sup>1</sup>	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.

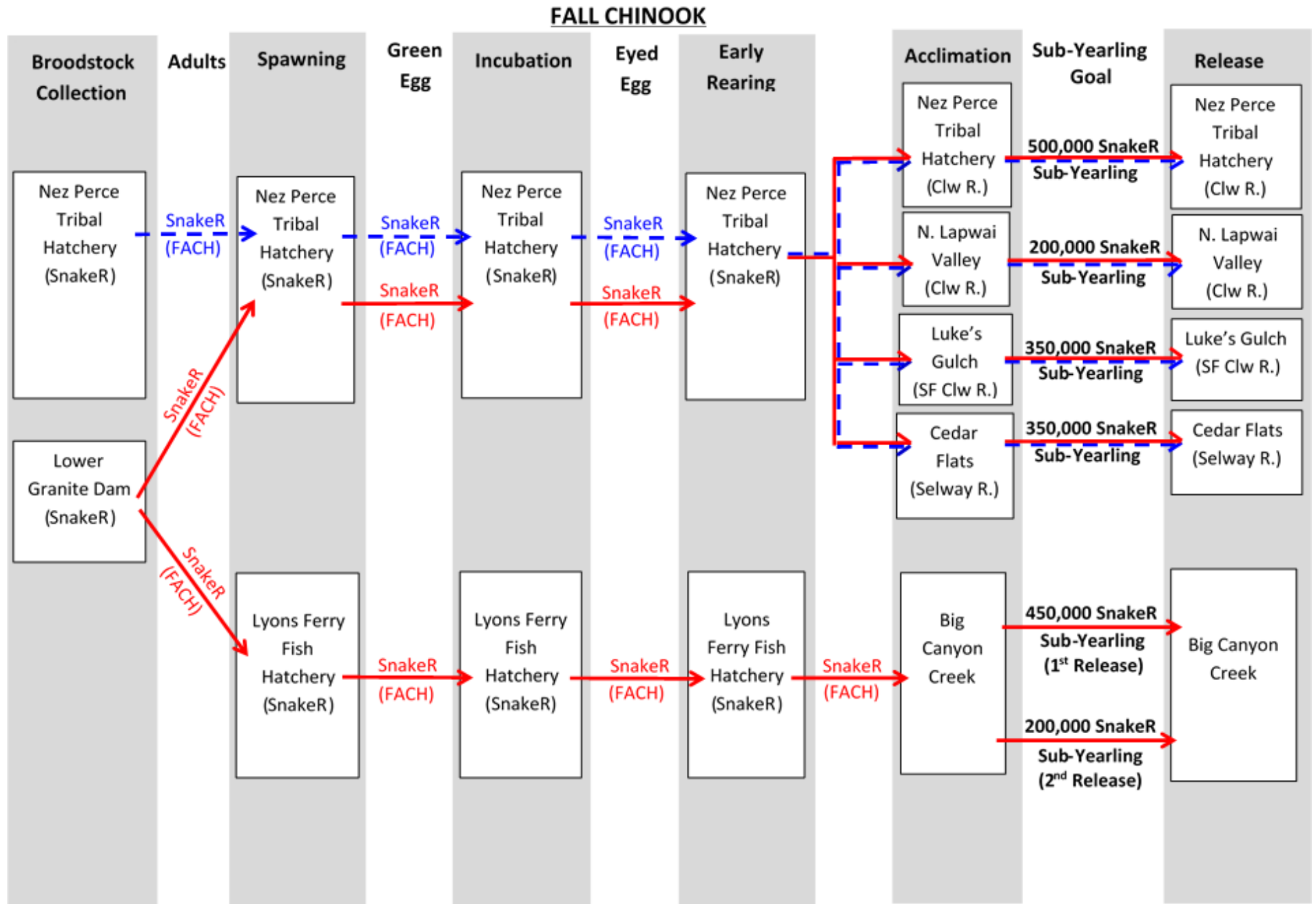


Figure 4.3. Fall Chinook movements in Clearwater. Numbers represent 2023 releases.

## 4.2. Releases in 2023 (Sub-Yearling BY 2022)

### 4.2.1. Releases in 2023 (Sub-Yearling BY 2022) – Totals

**Table 4.2a.** BY2022 SUB-YEARLINGS - Fall Chinook Salmon inventories by life stage, smolts release goals and projected releases in 2023.

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory To Date		Release Goals		Projected Sub-Yearling Release		
					Date	Number	Number	Size (FPP)	Dates	Number	Size (FPP)
NPT	FACH	SnakeR	Lyons Ferry	Big Canyon Creek <sup>1</sup>	12/31/2022	455,000	450,000	50.0	5/10/2023	450,000	50.0
					12/31/2022	205,000	200,000	50.0	5/31/2023	200,000	50.0
Total						660,000	650,000			650,000	
NPT	FACH	SnakeR	NPTH	NPTH	12/31/2022	670,037	600,000	50.0	6/15/2023	669,500	50.0
	FACH	SnakeR		N Lapwai Valley	12/31/2022	289,682	250,000	50.0	5/15/2023	289,000	60.0
	FACH	SnakeR		Lukes Gulch	12/31/2022	323,341	300,000	50.0	6/12/2023	323,000	50.0
	FACH	SnakeR		Cedar Flats	12/31/2022	270,229	250,000	50.0	6/13/2023	270,000	50.0
Total						1,553,289	1,400,000			1,551,500	
Grand Total						2,213,289	2,050,000			2,201,500	

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

**Table 4.2b.** BY2022 SUB-YEARLINGS - Fall Chinook Salmon Inventory to Date by Mark Type for release in 2023.<sup>2</sup>

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	Inventory to Date						PIT Tags				
					Date	Total	Adipose Fin Clip		No Clip		Total # Tags	Funding Source			
							No CWT	CWT	CWT	No CWT		CSS	LSRCP	IPC	BPA
NPT	FACH	SnakeR	Lyons Ferry	Big Canyon Creek <sup>1</sup>	12/31/2023	450,000	0	200,000	0	250,000	11,100	11,100	0	0	0
					12/31/2023	200,000	0	200,000	0	0	4,500	4,500	0	0	0
Total						650,000	0	400,000	0	250,000	15,600	15,600	0	0	0
NPT	FACH	SnakeR	NPTH	NPTH	12/31/2022	669,500	0	100,000	0	569,500	4,500	0	0	0	4,500
	FACH	SnakeR		N Lapwai Valley	12/31/2022	289,000	0	100,000	0	189,000	4,500	0	0	0	4,500
	FACH	SnakeR		Lukes Gulch	12/31/2022	323,000	0	100,000	0	223,000	4,500	0	0	0	4,500
	FACH	SnakeR		Cedar Flats	12/31/2022	270,000	0	100,000	0	170,000	4,500	0	0	0	4,500
Total						1,551,500	0	400,000	0	1,151,500	18,000	0	0	0	18,000
Grand Total						2,201,500	0	800,000	0	1,401,500	33,600	15,600	0	0	18,000

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

<sup>2</sup> Projected marking numbers because marking/tagging occurs in April/May

**4.2.2. Releases in 2023 (Sub-Yearling BY 2022) - 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.

Release Location	Plan for 2023		Changes/Conditions that Occurred 2022-Early 2023		
	Release Target Sub-Yrlng BY22	Transport/Release Sub-Yrlng BY22	Fish Feeding Sub-Yrlng BY22	Fish/Egg Health Sub-Yrlng BY22	Marking Sub-Yrlng BY22
<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 2023

#### 4.3.1. Trap Operations and Production Planning for 2023 – TOTALS

**Table 4.3a.** BY 2023 SUB-YEARLINGS - Fall Chinook Production Goals for Release in 2024

Hatchery Program	Species	Brood Collection Site	Rearing Facility	Release Site	2024 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 2023 (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”.

Plan for 2023 (BY 2023)					
Rearing Location	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 2023 (Sub-Yearling BY 2022)**

**4.4.1. Early Rearing and Marking Plan for 2023 (Sub-Yearling BY 2022) – 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.

	<b>Plan for 2023 (Sub-Yearling BY 2022)</b>				
<b>Release Location</b>	<b>Juvenile Fish Health</b>	<b>Fish Feeding</b>	<b>Rearing Conditions</b>	<b>Marking</b>	<b>Meets Release Target</b>
	<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 2023 - 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. A strategy of balancing Direct Releases with Conventional Overwintering (approximately 50%-50%) will be pursued.
- **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 2023		Changes/Conditions that Occurred 2022-Early 2023		
	Release Target <sup>1</sup>	Transport/Release	Fish Feeding	Fish Health	Marking
	<i>Nez Perce Tribal Hatchery (SOP Section 5.1)</i>				
Lolo Creek	100				
Orofino Creek	100				
Newsome Creek	100				
Red River	100				
Big Canyon Creek					
SF Salmon River	(100 Direct Release MY23)				
Johnson Creek	(100 Direct Release MY23)				
Asotin Creek	100				
Wallowa River	100				
Minam River	100				
Secesh River	(100 Direct Release MY23)				
Joseph Creek	100				
Potlatch River					
Mainstem Clearwater River	(2000 Direct Release MY2023)				
<b>TOTAL RELEASED</b>					

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

**5.2. Trap Operations for 2023**

**5.2.1. Trap Operations for 2023 - 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 2023					
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		2000			85% D. R.; 15% Overwinter
John Day Dam		1000			65% D.R.; 35% Overwinter
The Dalles Dam		500			25% D. R.; 75% Overwinter

# 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										NOTE #
SPECIES	HATCHERY	PROGRAM	Life Stage	PREFERRED 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 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)	
STLHD	DNFH	MS Clearwater at DNFH		DNFH	1,200,000	4%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	1,248,000	1,459,649	1,641,900	1,794,426	255	255	510	551	551	2,265	
		Red House Hole - SF Clw		SFClw Angler	400,000	4%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	416,000	486,550	547,300	598,142	85	85	170	184	184	2,261	
		Clear Creek		DNFH	300,000	4%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	312,000	364,912	410,475	448,607	64	64	128	139	139	2,245	
		Lolo Creek		DNFH	200,000	5%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	210,000	245,614	276,281	301,947	43	43	86	93	93	2,258	
	MVH	Salmon River		DNFH	93,000	5%	50.0%	6.2%	6,681	100.0%	84.0%	85.0%	97,650	114,882	136,765	136,765	21	21	42	45	45	2,170	
CFH	Clearwater		SFCLW	843,000	3%	50.0%	3.5%	7,247	100.0%	87.5%	74.0%	868,290	1,173,365	1,340,988	1,340,988	186	186	372	386	386	2,249		
SP/SU CHIN	DNFH	NF Clearwater (DNFH)		DNFH	1,650,000	1%	50.0%	3.6%	3,829	90.6%	95.3%	91.1%	1,666,667	1,829,491	1,919,718	2,118,894	554	554	1,108	1,150	1,150	1,449 (3)	
		Trans. to NPTH-NPTH		DNFH	200,000	2%	50.0%	3.6%	3,829	90.6%	95.3%	91.1%	204,082	224,019	235,068	259,456	68	68	136	142	142	1,437	
		Trans. to NPTH-Lapwai Creek		DNFH	200,000	2%	50.0%	3.6%	3,829	90.6%	95.3%	91.1%	204,082	224,019	235,068	259,456	68	68	136	142	142	1,437 (4)	
	KNFH	Kooskia NFH		KNFH	650,000	5%	50.0%	10.0%	3,580	94.5%	94.5%	90.0%	684,211	760,234	804,480	851,302	238	238	476	529	529	1,293	
	CFH	Red River		SFClw	1,280,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	1,280,000	1,325,052	1,424,787	1,565,700	491	491	982	1,034	1,034	1,238	
		Selway River-Lower		DNFH	400,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	400,000	414,079	445,246	489,281	154	154	308	325	325	1,231	
		Clear Creek		KNFH/DNFH	720,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	720,000	745,342	801,443	880,706	276	276	552	582	582	1,237	
		NF Clearwater-CFH (Early)		DNFH	389,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	389,000	402,692	433,002	475,826	150	150	300	316	316	1,231 (5)	
		NF Clearwater-CFH (Late)		DNFH	320,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	320,000	331,263	356,197	391,425	123	123	246	259	259	1,236 (6)	
		Powell Pond (SUM)		Pow/SFSR	640,000	0%	50.0%	5.0%	3,614	98.0%	86.0%	91.4%	640,000	700,219	814,208	830,824	230	230	460	485	485	1,320 (7)	
NPTH	Lolo Cr (Clw)	Pre-Smolt	NPTH	150,000	1%	50.0%	5.0%	3,879	90.0%	91.0%	91.0%	151,515	166,500	182,967	203,297	53	53	106	112	112	1,353		
	Newsome Cr (SF Clw)	Pre-Smolt	NPTH	75,000	1%	50.0%	5.0%	3,879	90.0%	91.0%	91.0%	75,758	83,250	91,484	101,648	27	27	54	57	57	1,329		
	Lolo Creek	Smolt	NPTH	200,000	1%	50.0%	5.0%	3,879	90.0%	91.0%	91.0%	202,020	222,000	243,956	271,063	70	70	140	148	148	1,365		
FACH	NPTH	Snake River		LGR/NPTH	1,400,000	1%	50.0%	8.0%	4,167	94.0%	90.0%	96.0%	1,414,000	1,472,917	1,636,574	1,741,036	418	418	836	909	909	1,556	
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										NOTE	
SPECIES	HATCHERY	PROGRAM	Life Stage	PREFERRED 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 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)	#	
STLHD	DNFH	MS Clearwater at DNFH		DNFH	1,200,000	4%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	1,248,000	1,459,649	1,641,900	1,794,426	255	255	510	551	551	2,265		
		Red House Hole - SF Clw		SFClw Angler	400,000	4%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	416,000	486,550	547,300	598,142	85	85	170	184	184	2,261		
		Clear Creek		DNFH	300,000	4%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	312,000	364,912	410,475	448,607	64	64	128	139	139	2,245		
		Lolo Creek		DNFH	200,000	5%	50.0%	7.3%	7,046	91.5%	88.9%	85.5%	210,000	245,614	276,281	301,947	43	43	86	93	93	2,258		
	MVH	Salmon River		DNFH	93,000	5%	50.0%	3.5%	6,681	100.0%	84.0%	85.0%	97,650	114,882	136,765	136,765	21	21	42	44	44	2,219		
CFH	Clearwater		SFCLW	843,000	3%	50.0%	3.5%	7,247	100.0%	87.5%	74.0%	868,290	1,173,365	1,340,988	1,340,988	186	186	372	386	386	2,249			
SP/SU CHIN	DNFH	NF Clearwater (DNFH)		DNFH	1,350,000	1%	50.0%	3.6%	3,829	90.6%	95.3%	91.1%	1,363,636	1,496,857	1,570,678	1,733,641	453	453	906	940	940	1,451	(3)	
		Trans. to NPTH-NPTH		DNFH	200,000	2%	50.0%	3.6%	3,829	90.6%	95.3%	91.1%	204,082	224,019	235,068	259,456	68	68	136	142	142	1,437		
		Trans. to NPTH-Lapwai Creek		DNFH	200,000	2%	50.0%	3.6%	3,829	90.6%	95.3%	91.1%	204,082	224,019	235,068	259,456	68	68	136	142	142	1,437	(4)	
	KNFH	Kooskia NFH		KNFH	650,000	5%	50.0%	10.0%	3,580	94.5%	94.5%	90.0%	684,211	760,234	804,480	851,302	238	238	476	529	529	1,293		
	CFH	Red River		SFClw	1,100,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	1,100,000	1,138,716	1,224,426	1,345,523	422	422	844	889	889	1,237		
		Selway River-Lower		DNFH	400,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	400,000	414,079	445,246	489,281	154	154	308	325	325	1,231		
		Clear Creek		KNFH/DNFH	635,000	0%	50.0%	5.0%	3,193	91.0%	93.0%	96.6%	635,000	657,350	706,828	776,734	244	244	488	514	514	1,235		
		NF Clearwater-CFH (Baffle)		DNFH	0	0%	50.0%	5.0%	3,193	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%	3,193	91.0%	93.0%	96.6%	0	0	0	0	0	0	0	0	0	#DIV/0!	(6)	
		Powell Pond (SUM)		Pow/SFSR	640,000	0%	50.0%	5.0%	3,614	98.0%	86.0%	91.4%	640,000	700,219	814,208	830,824	230	230	460	485	485	1,320	(7)	
NPTH	Lolo Cr (Clw)	Pre-Smolt	NPTH	150,000	1%	50.0%	4.0%	3,879	90.0%	91.0%	91.0%	151,515	166,500	182,967	203,297	53	53	106	111	111	1,365			
	Newsome Cr (SF Clw)	Pre-Smolt	NPTH	75,000	1%	50.0%	4.0%	3,879	90.0%	91.0%	91.0%	75,758	83,250	91,484	101,648	27	27	54	57	57	1,329			
	Lolo Creek		NPTH	200,000	1%	50.0%	4.0%	3,879	90.0%	91.0%	91.0%	202,020	222,000	243,956	271,063	70	70	140	146	146	1,384			
		Snake River		LGR/NPTH	1,400,000	1%	50.0%	5.0%	4,167	94.0%	90.0%	96.0%	1,414,000	1,472,917	1,636,574	1,741,036	418	418	836	880	880	1,607		
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.\*

Release Location	Hatchery Source	Guideline Range	Proposed Max
<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	600
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	
<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.

\*Weekly conference calls are 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.

Hatchery / Location	Mark	Purpose
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