

2008

Clearwater River Basin

Annual Operating Plan

Proposed Release and Marking Tables

February 20, 2008

Table 1. Clearwater Basin Steelhead Proposed Releases, 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Release Date	Program Goal #	Estimated Release	# AD	# LV	# CWT	# PIT	Other Marks	Comments
Dworshak NFH	FWS	STHD	Dwor B	2007	Dworshak NFH	4/21-25	1,200,000	1,300,000	1,300,000	120,000	120,000	19,182		PIT tags - 1,500 SMP, 5,052 CSS, 12,630 eval
					Clear Creek	4/14-18	300,000	300,000	300,000			4,424		PIT tags - 1,264 CSS, 3,160 eval
					SF CLWR, Red House	4/14-18	400,000	400,000	400,000			5,894		PIT tags - 1,684 CSS, 4,210 eval
					Newsome Creek - SF	4/14-18	100,000	100,000						USvOR Supplementation
					American River - SF	4/14-18	100,000	100,000						USvOR Supplementation
						Sub-total	2,100,000	2,200,000	2,000,000	120,000	120,000	29,500		
Clearwater	IDFG	STHD	Dwor B	2007	Crooked River -SF	mid-April	150,000	144,600	144,600	0	60,000	3,300		US v OR Production Lower facility
					Crooked River - SF	mid-April	83,000	72,100	0	0	29,000	2,600		USvOR Supplementation (Upper)
					Red River	mid-April	100,000	83,000	83,000	0	30,000	2,800		US v OR Production
					Red River	mid-April	150,000	163,500	0	0	0	2,900		USvOR Supplementation
					SF CLWR, Red House	mid-April	260,000	248,500	248,500	0	60,000	5,700		Production
					Meadow Creek - SF	mid-April	25,000	31,400	0	0	0	900		USvOR Supplementation
					Mill Creek - SF	mid-April	25,000	31,400	0	0	0	900		USvOR Supplementation
					Lolo Creek	mid-April	50,000	45,600	0	0	0	1,000		USvOR Supplementation
						Sub-total	843,000	820,100	476,100	0	179,000	20,100		

2008 STHD RELEASES

Table 2a. Predicted steelhead to Dworshak NFH rack, 2007-2008. Prediction is calculated as if ladder was operated continuously and does not include expected sport or tribal harvest.

Ocean Age Class	2007-08 Prediction
I - Salt	430 avg. return rate
II - Salt	6,247 avg. return rate
III - Salt	218 avg. return rate
Total	6,895

Table 2b. IDFG steelhead predictions

Projected 2007-2008 return of 2-salt steelhead to the Dworshak rack = 4,146

Table 3. STEELHEAD SPAWNING / EGG TAKE PLAN AT DWORSHAK NFH - BROODYEAR 2008

Take # (E=Early Return Adults)	Spawn Date 2008	Total Female Spawned	Female DW	Female CW	Female MV	Eggs/ Female	Est. Green Eggs incub @ Dwor for CW	Est. Green Eggs to CW for MV	Eyed Eggs into DW Nurs/incub	Green Eggs Potlat Pulp & Paper
1 E	01/22	58	58			7,036			242,336	
2 E	01/29	44	44			6,700			180,000	
3E	02/05	18	18			6,700			108,000	
4	02/26	60	60	0	0	6,700	0	0	280,000	0
5	03/04	135	28	105	0	6,700	716,900	0	140,000	0
6	03/11	108	28	82	0	6,700	536,000	0	144,000	0
7	03/18	134	58	0	76	6,700	0	509,200	280,000	18,000
8	03/25	133	58	0	75	6,700	0	502,500	280,000	0
9	04/01	133	58	0	47	6,700	0	314,900	288,000	0
10	04/08	58	58	0	0	6,700	0	0	280,000	0
11	04/15	58	58	0	0	6,700	0	0	288,000	0
12	04/22	40	40	0	0	6,700	0	0	175,000	0
13	04/29	25	25	0	0	6,700	0	0	108,000	0
Tot/Ave		1,004	591	187	198	6,700	1,252,900	1,326,600	2,793,336	18,000

Estimated

Estimated

Table 4. Clearwater Basin Steelhead Proposed Marking, 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Marking Dates	Program Goal #	Estimated Release	# AD	# LV	# CWT	# PIT	Other Marks	Marking Agency	Comments
Dworshak NFH	FWS	STHD	Dwor B	2008	Dworshak NFH	May-Aug PIT - Jan 09	1,200,000	1,200,000	1,200,000	150,000	150,000	19,182		FWS	PIT tags - 1,500 SMP, 5,052 CSS, 12,630 eval
					Clear Creek	May-Aug PIT - Jan 09	300,000	300,000	300,000			4,424		FWS	PIT tags - 1,264 CSS, 3,160 eval
					SF CLWR, Red House	May-Aug PIT - Jan 09	400,000	400,000	400,000			5,894		FWS	PIT tags - 1,684 CSS, 4,210 eval
					American River - SF		100,000	100,000				TBD			USvOR Supplementation
					Newsome Creek - SF		100,000	100,000				TBD			USvOR Supplementation
						Sub-total	2,100,000	2,100,000	1,900,000	150,000	150,000	29,500			
Clearwater	IDFG	STHD	Dwor B	2008	Crooked River -SF	July PIT - Feb 09	150,000	150,000	150,000	60,000	60,000	3,300		IDFG	USvOR Production
					Crooked River - SF	July PIT - Feb 09	83,000	83,000			20,000	2,600		IDFG	USvOR Supplementation
					Red River - SF	July PIT - Feb 09	100,000	100,000	100,000			2,800		IDFG	USvOR Production
					Red River - SF	PIT - Feb 09	150,000	150,000				2,900		IDFG	USvOR Supplementation
					SF CLWR, Red House	July PIT - Feb 09	260,000	260,000	260,000	60,000	60,000	5,700		IDFG	Production
					Meadow Creek - SF	PIT - Feb 09	25,000	25,000				900		IDFG	USvOR Supplementation
					Mill Creek - SF	PIT - Feb 09	25,000	25,000				900		IDFG	USvOR Supplementation
					Lolo Creek	PIT - Feb 09	50,000	50,000				1,000		IDFG	USvOR Supplementation
						Sub-total	843,000	843,000	510,000	120,000	140,000	20,100			

2008 STHD MARKING

Table 5. Clearwater Basin Spring Chinook Salmon Proposed Releases, 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Release Date	Program Goal #	Estimated Release	# AD	# CWT	# PIT	Other Marks	Comments
Dworshak NFH	FWS	SCS	Dworshak	2006	Dworshak NFH	3/21 - 4/9	1,050,000	950,000	950,000	130,000	52,000		PIT tagging 52k - CSS (FWS)
Kooskia NFH	FWS	SCS	Kooskia	2006	Kooskia NFH	3/24 - 4/4	600,000	653,000	653,000	113,000	10,000		
						Sub-total	1,650,000	1,603,000	1,603,000	243,000	62,000		
Clearwater	IDFG	SCS	SF	2006	Red River Pond	April	400,000	424,700	424,700	40,000	12,000		PITs for project area escapement & harvest management
			SF	2006	Crooked River Pond	April	140,000	141,700	141,700		1,000		20:80 split with trap release, poor survival from pond releases
			SF	2006	Crooked River Trap	April	560,000	566,800	566,800	40,000	12,000		PITs for project area escapement & harvest management
			Powell	2006	Powell Pond	April	400,000	415,900	415,900	80,000	12,000		
			SF/RR	2007	Selway - upper	July	300,000	300,000	0	0	0	Oxy-tet	Transport to McGruder by NPT
			SF	2006	Selway - lower	April	300,000	309,300	203,000	309,000	8,500		Transport and release by NPT
			Powell	2007	Transfer to NPTH for 09 releases	Sept	125,000	unknown at this date	33%	100%	0		Number will be determined at marking.
						Sub-total	2,225,000	2,158,400	1,752,100	469,000	45,500	0	
NPTH	NPT	SCS	SF/RR?	2006	NPTH - Clearwater River	April		124,000	44,640	124,000	1,100		This release was reared at Clearwater FH until Sept, 2007
			Newsome / NPTH	2007	Newsome Cr	10/2-14	75,000	75,000		75,000	6,000		Pre-smolt - acclimated, 29 fpp
			Lolo / NPTH	2007	Lolo Cr	10/1-13	150,000	150,000		150,000	9,000		Pre-smolt - acclimated, 34 fpp
			NPTH / Dworshak	2007	Meadow Cr - Selway	6/16	400,000	40,000		40,000	5,000		Released in Lower Meadow Creek, 117 fpp
						Sub-total	625,000	389,000	44,640	389,000	21,100		

2008 SCS RELEASES

Table 6. Clearwater Basin Spring Chinook Salmon Proposed Marking 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Marking Date	Program Goal #	Estimated Release	# AD	# Ventral	# CWT	# PIT	Other Marks	Marking Agency	Comments
Dworshak NFH	FWS	SCS	Dworshak	2007	Dworshak NFH	Jul-Aug PIT - Jan 09	1,050,000	1,050,000	1,050,000		130,000	52,000		FWS	PIT tagging 52k - CSS
Kooskia NFH	FWS	SCS	Kooskia	2007	Kooskia NFH	Jul-Aug PIT - Feb 09	600,000	446,000	446,000			10,000		FWS	
			Dworshak	2007	Kooskia NFH	Jul-Aug		161,000	161,000		161,000			FWS	
						Sub-total	1,650,000	1,496,000	1,496,000	0	130,000	62,000			
Clearwater	IDFG	SCS	SF	2007	Red River Pond	July PIT - Mar 09	400,000	400,000	400,000		40,000	12,000		IDFG	PITs for project area escapement & harvest management
			SF/Powell	2007	Crooked River Pond	July PIT - Mar 09	700,000	700,000	700,000		40,000	12,000		IDFG	PITs for project area escapement & harvest management
			Powell	2007	Powell Pond	July PIT - Mar 09	400,000	400,000	400,000		80,000	12,000		IDFG	PITs for project area escapement & harvest management
			Powell	2007	Powell Pond	May PIT - Aug 08	335,000	335,000	335,000			1,000		IDFG	Pre-smolts/FTS rearing study
			RR	2007	Selway - upper	Mar-Apr	300,000	300,000	0				Oxy-tet	IDFG	Parr - NPT program
			Powell	2007	Selway - lower	July PIT - Aug 08	300,000	300,000	200,000		307,000	8,500		IDFG	
			SF	2007	SF Clearwater	May	125,000	0	125,000					IDFG	presmolt release in SF Clearwater
			Powell	2007	NPTH	May	125,000	unknown	33%		100%	1,000	TBD	IDFG	CWT provided by NPT - marking done by IDFG
						Sub-total	2,685,000	2,435,000	2,160,000	0	467,000	46,500			
NPTH	NPT	SCS	Newsome / NPTH	2007	Newsome Cr	late Apr PIT - Sept 08	75,000	75,000			75,000	6,000		NPT	Pre-smolt - acclimated
			Lolo / NPTH	2007	Lolo Cr	late Apr PIT - Sept 08	150,000	150,000			150,000	9,000		NPT	Pre-smolt - acclimated
			NPTH / DNFH	2007	Meadow Cr - Selway	late Apr PIT - May 08	400,000	40,000			40,000	5,000		NPT	Parr - direct stream
						Sub-total	625,000	265,000	0	0	265,000	20,000			

2008 SCS MARKING

Table 7a. Predicted returns of spring Chinook salmon to the Clearwater River from Dworshak and Kooskia NFHs releases, 2008. Includes fish available for sport and tribal harvest, and expected rack return.

Ocean Age Class	Dworshak NFH	Kooskia NFH
I -Salt	174	114
II - Salt	6,172	2,285
III - Salt	423	116
Total	6,769	2,515

Table 7b. NPT Chinook predictions for 2008.

Projected Adult Returns (Son-Of-Ralph Method)

Lolo Creek	971
Newsome Creek	301

No estimates were made for adult return to Meadow Creek, Selway

Table 8a. Sites, release numbers, and marks for adult Spring Chinook Salmon, when all Clearwater basin production programs are above broodstock needs.*

Release Location	Hatchery Source	Number Limit
Selway Basin		
McGruder	RR, NPTH, Clear, DNFH, KNFH	800 - 1,000
O'Hara Creek	RR, NPTH, Clear, DNFH	200
Lower Selway	RR, NPTH, Clear, DNFH, KNFH	0 - 2,000
SF Clearwater R.		
Mill Creek	RR, NPTH, Clear, DNFH	150
Meadow Creek	RR, NPTH, Clear, DNFH	150 - 300
SF Clearwater R.	RR, NPTH, Clear, DNFH	0 - 500*
Lochsa River		
Colt Killed Creek	RR, NPTH, Clear, DNFH	500
Subtotal		1,800 - 4,650

*Release Locations are not prioritized

If adult Chinook available for outplant exceed the numbers agreed upon above the NPT will consult with co-managers on additional outplant sites or numbers.

Table 8b. 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) 2 right opercle v-notchs	outplant / fishery recycle
	2) if recycle returnees - additional upper caudal clip	outplant / fishery recycle
Clear Creek above weir	right opercle v-notch	ISS and natural spawners
Lochsa (Powell satellite)	left opercle punch	fishery recycle / outplant
Crooked Fork Cr weir	right opercle punch	ISS - natural fish above weir
SF Clearwater satellites -		
Red River/Crooked River	1) right opercle punch	fishery recycle
	2) 2 right opercle punches	outplant (early)
Rapid River	dorsal punch	Clearwater (Selway) outplants
Lower Lolo Ck weir	1) left opercle punch, numbered orange Tyvek tag.....	NPT weir evaluation (fish collected at weir and released above weir)
Upper Lolo Ck weir	2) right opercle punch.....	NPT weir evaluation (fish collected at weir and released above weir)
Newsome Ck above weir	1) left opercle punch	NPT weir evaluation (fish collected at weir and released above weir)

Table 9. Clearwater Basin Coho Proposed Releases, 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Release Date	Program Goal #	Estimated Release	# AD	# CWT	# PIT	Other Marks	Comments
Eagle Creek	NPT	Coho	Eagle Creek	2006	Lapwai Creek	3/5	275,000	275,000	0	0	0		Direct Stream smolts, 20 fpp
			Eagle Creek	2006	Clear Creek	3/7	275,000	275,000	0	0	0		Direct Stream smolts, 20 fpp
Dworshak NFH	NPT	Coho	Clearwater/Eagle	2006	Clear Creek	5/11	280,000	280,000	0	80,441	0		Acclimated smolts, 20 fpp
Dworshak NFH*	NPT	Coho	Clearwater.Eagle	2007	Lolo/Musselshell Creek	Late Sept	0	0	0	0	0	0	
Potlatch	NPT	Coho	Clearwater	2007	proposed Orofino Cr.	April	30,000	30,000					fry - Potlatch P&P
Clearwater	NPT	Coho	Clearwater/Eagle	2007	Lolo/Eldorado Creek	Late Sept	0	0	0	0	0		due to lack of funding, this program was stopped
Cascade	NPT	Coho	Mid-Columbia	2006	Clear Creek	2/29	0	74,966	0	74,966	0	0	Excess Coho from the Yakama Tribe's Wenatchee Coho Program
						Sub-total	860,000	934,966	0	155,407	0		

2008 COHO RELEASES

Table 11. Clearwater Basin Fall Chinook Salmon Proposed Releases, 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Release Date	Program Goal #	Estimated Release	# AD/CWT	# CWT (only)	# PIT	Other Marks	Comments
Lyons Ferry	NPT	FACH	Snake River	2006	Big Canyon Creek	15-Apr	150,000	150,000	70,000	80,000	19,000		unmarked, 15,000 PIT for transportation study
				2007	Big Canyon Creek	1-Jun	500,000	500,000	100,000	100,000	38,941		Sub-yearlings - acclimated, 50 fpp 34,708 PIT for transportation study
NPTH	NPT	FACH	Snake River	2007	Site 1705 - NPTH	15-Jun	500,000	500,000	100,000	200,000	3,000		Sub-yearlings - acclimated, 50 fpp
				2007	N Lapwai Valley	30-May	500,000	200,000	100,000	80,000	3,000		Sub-yearlings - acclimated, 50 fpp
				2007	Lukes Gulch	15-Jun	200,000	100,000		100,000	8,178		Facility test 3rd yr operation, 50 fpp 5,178 PIT for Transportation study
				2007	Cedar Flats	15-Jun	200,000	100,000		100,000	8,178		Facility test 3rd yr operation, 50 fpp 5,178 PIT for Transportation study
						Sub-total	2,050,000	1,550,000	370,000	660,000	80,297		
Dworshak	FWS	FACH	Snake River	2007	Couse Cr, Snke R.	5/19 - 30		230,000			230,000		Transportation / Spill Study
				2007	Big Canyon Cr.	6/23 - 7/8		98,400			98,400		Transportation / Spill Study
						Sub-total		328,400			328,400		

2008 FACH RELEASES

Table 12. Clearwater Basin Fall Chinook Salmon Proposed Marking 2008.

2008 Clearwater AOP

Fish Hatchery	Agency	Species	Stock	Brood Year	Release Location	Marking Date	Program Goal #	Estimated Release	AD/ CWT	# Ventral	# CWT (only)	# PIT	Other Marks	Marking Agency	Comments
Lyons Ferry	NPT	FACH	Snake River	2007	Big Canyon Creek	Apr- May PIT - 2008	500,000	500,000	100,000		100,000	19,000		WDFW	sub-yearlings, 50 fpp
				2007	Big Canyon Creek	April PIT - 2008	150,000	150,000	70,000		80,000	38,941		WDFW	yearlings, 10fpp
NPTH	NPT	FACH	Snake River	2007	Site 1705 - NPTH	May PIT - 2008	500,000	500,000	100,000		200,000	3,000		NPT	sub-yearlings, 50 fpp
				2007	N Lapwai Valley	April PIT - 2008	500,000	180,000	100,000		80,000	3,000		NPT	sub-yearlings, 50 fpp
				2007	Lukes Gulch	May PIT - 2008	200,000	25,000			25,000	8,178		NPT	sub-yearlings, 50 fpp
				2007	Cedar Flats	May PIT - 2008	200,000	25,000			25,000	8,178		NPT	sub-yearlings, 50 fpp
						Sub-total	2,050,000	1,380,000	370,000	0	510,000	80,297			
Dworshak	FWS	FACH	Snake River	2007	Couse Cr, Snke R.	5/19 - 30			230,000			230,000			Transportation / Spill Study
				2007	Big Canyon Cr.	6/23 - 7/8			98,400			98,400			Transportation / Spill Study
						Sub-total			328,400			328,400			

2008 FACH MARKING