

Colville Confederated Tribes Chief Joseph Hatchery Production Program Review

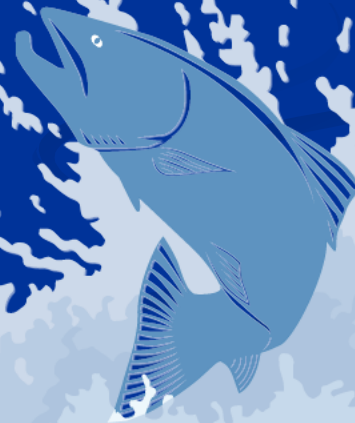


Colville Tribes Fish & Wildlife

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Overview

- Mitigation Obligations
- Program Goals
- Guiding Principles
- Production Objectives
- Production Summary
 - Full program
 - BY 13
 - BY 12
 - BY 14 Draft

Hatchery Mitigation

- ❑ BPA- Construction/Operation of the FCRPS
- ❑ Chelan PUD- NNI Recalculated Hatchery Production ^{1/}
- ❑ Douglas PUD NNI Recalculated Hatchery Production ^{2/}
- ❑ Grant PUD NNI Recalculated Hatchery Production ^{3/}

^{1/}- Rock Island and Rocky Reach Hatchery Committee Recalculation SOA

^{2/}- Wells Hatchery Committee Recalculation SOA

^{3/}- Priest Rapids Hatchery Sub-committee Recalculation SOA

Mitigation Production Obligations

<u>Mitigation Entity</u>	<u>Summer Chinook</u>			<u>Total</u>
	<u>Spring Chinook</u>	<u>Yearling</u>	<u>Sub-yearling</u>	
Chelan PUD ^{1/}	115,000	166,569	94,570	376,139
Douglas PUD ^{2/}	33,300	48,100	49,000	130,400
Grant PUD ^{3/}	110,000	278,000	0	388,000
BPA	641,700	807,331	556,430	2,005,461
Total	900,000	1,300,000	700,000	2,900,000

^{1/}- NNI Mitigation per Rock Island and Rocky Reach Hatchery Committee Statement of Agreement (12/14/11). CPUD/CCT/BPA cost-share agreement pending.

^{2/}- NNI Mitigation Per Wells HCP Hatchery Committee Statement of Agreement (12/14/11) and DPUD/CCT/BPA cost-share agreement (11/18/11).

^{3/}- NNI Mitigation per Priest Rapids Hatchery Sub-committee Statement of Agreement (1/25/12) and GPUD/CCT/BPA cost-share agreement (11/2/10).

CJH Summer Chinook Goals

- Integrated Program-
 - Enhance status of natural origin population and provide tribal and non-tribal harvest opportunities consistent with conservation
 - Re-establish “late arriving” spawning population
 - Improve spawner distribution in the Okanogan River Basin
 - Improve spawning habitat in the Okanogan River Basin
- Segregated Program-
 - Provide consistent/reliable tribal and non-Tribal harvest opportunities

CJH Spring Chinook Goals

- Integrated Program (“Experimental Population”)
 - Enhance recovery of UCR spring Chinook by establishing a fourth population in the UCR
 - Okanogan River “Experimental Population” aid as a “Reserve Population” in the event of catastrophic loss of Methow River artificial propagation programs
 - Provide Tribal and non-tribal harvest opportunities in the Okanogan River Basin, consistent with natural origin population conservation
- Segregated Program Provide
 - Artificial propagation to Support Tribal and non-tribal harvest opportunities in Columbia River Mainstem

Hatchery Program Guiding Principles

- Manage Hatchery Program Consistent with Conservation of the Natural Population
 - PNI
 - pHOS
 - Stray Rates
 - Aggressive disease management
 - Variable Integrated Program annual production determined by abundance status of natural population
 - Utilize M&E data to adaptively manage program

Hatchery Program Guiding Principles (Cont.)

- Provide Artificial Propagation to meet Mitigation Obligations
 - Adaptively manage integrated and segregated programs to achieve Mid-Columbia PUD NNI mitigation
 - Manage program as a single coordinated hatchery program to achieve mitigation obligations for the Okanogan River and Columbia River Mainstem above the confluence of the Methow River
- Provide Artificial Propagation to support Tribal and Non-Tribal Harvest Opportunities
 - Aggressively target integrated and segregated program fish that are excess to escapement and broodstock needs through adult management activities (harvest and surplusing)

CJH Production Objectives

- Integrated Summer Chinook Program
 - 800K yearling summer Chinook
 - 300K sub-yearling summer Chinook
- Segregated Summer Chinook Program
 - 500K yearling summer Chinook
 - 400K sub-yearling summer Chinook
- Integrated Spring Chinook
 - 200K yearlings
- Segregated Spring Chinook
 - 700K yearlings

BY 2013 CJH Summer Chinook Production Summary

Program	# Smolts (Yearling)	# Smolts (Sub-yearling)	Stock	Brood origin	Broodstock collection location	Smolt release location	Release facility
Integrated summer Chinook	160,000		Okanogan	Nat.	Okanogan R.	Ok. R.	Omak Pond
Integrated summer Chinook	160,000		Okanogan	Nat.	Okanogan R.	Ok. R.	Riverside Pond
Integrated summer Chinook	160,000		Okanogan	Nat.	Okanogan R.	Similk. R.	Similk. Pond
<i>Sub-Total</i>	<i>480,000</i>						
Integrated Summer Chinook		180,000	Okanogan	Nat.	Okanogan R.	Ok. R.	Omak Pond
<i>Sub-Total</i>		<i>180,000</i>					
Segregated/summer Chinook	300,000		Okanogan	Hat.	Okanogan R./CJH	Col. R.	CJH
<i>Sub-total</i>	<i>300,000</i>						
Segregated summer Chinook		240,000	Okanogan	Hat.	Okanogan R./CJH	Col. R.	CJH
<i>Sub-Total</i>		<i>240,000</i>					
<i>Grand Total</i>	<i>780,000</i>	<i>420,000</i>					

BY 2013 CJH Summer Chinook Spawning and Egg Data

Table 2. Chief Joseph Hatchery BY 2013 Summer Chinook Spawning Summary
Season Total 2013

Month	Total Adults Spawned			Green Egg Take	Eyed Egg	Mortality (Pick Off)	Cumulative Survival (%)
	M	J	F	Total	Total	Total	Total
NOR							
Oct. 9	1	0	1	5,432	5,117	315	94.20
Oct. 16	3	0	3	14,746	14,574	172	98.83
Oct. 23	15	0	15	69,618	67,439	2,179	96.87
Oct. 30	63	3	62	281,474	268,688	12,786	95.46
Nov. 6	50	2	50	237,780	227,253	10,527	95.57
Nov. 13	29	1	29	124,570	109,008	15,562	87.51
Nov. 20	13	0	13	54,865	49,614	5,251	90.43
Sub-total	174	6	173	788,485	741,693	46,792	94.07
HOR							
Oct. 9	7	0	7	32,303	31,803	500	98.45
Oct. 16	27	0	24	116,485	112,362	3,853	96.68
Oct. 23	17	0	17	68,636	62,410	6,226	90.93
Oct. 30	76	1	88	414,247	391,388	22,859	94.48
Nov. 6	29	2	32	148,350	133,526	14,824	90.01
Sub-total	156	3	168	780,021	731,489	48,262	93.81
Total	340	9	341	1,568,506	1,473,182	95,054	93.93

BY 2013 CJH Spring Chinook Production

Program	# Smolts (Yearling)	Stock	Brood origin	Broodstock collection location	Smolt release location	Release facility
Integrated spring Chinook	200,000	MetComp	Hat.	Winthrop NFH	Ok. R.	Tonasket P.
<i>Sub-Total</i>	<i>200,000</i>					
Segregated Spring Chinook	420,000	Carson	Hat.	Leavenworth NFH	Col. R.	CJH
<i>Sub-Total</i>	<i>420,000</i>					
<i>Grand Total</i>	<i>620,000</i>					

BY 13 CJH Spring Chinook Spawning and Egg Data

Month	Total Adults Spawned			Green Egg Take	Eyed Egg	Mortality (Pick off)	Cumulative Survival (%)
	M	J	F	Total	Total	Total	Total
August 19	41	0	40	146,994	126,454	20,540	86.03
August 26	86	0	85	270,189	256,987	13,202	95.11
Sub-Total	128	0	125	417,183	383,441	33,742	90.57
Sept. 4	54	9	63	188,324	157,038	31,286	83.39
Sept. 10	8	2	10	30,124	26,375	3,749	87.55
Sub-Total	62	11	73	218,448	183,413	35,035	85.47
Grand Total	190	11	198	635,631	566,854	68,777	89.18

BY 2013 Segregated Summer Chinook Sub-yearlings

Pond No.	Poned	Date	Loss	Population	Notes
Int. #1	38,787	January 24	942	37,845	From Inc.
Int. #2	34,046	January 24	825	33,221	From Inc.
Int. #3	34,046	January 24	700	33,346	From Inc.
Int. #4	34,046	January 24	446	33,600	From Inc.
Int. #5	34,046	January 24	640	33,406	From Inc.
Int. #6	34,046	January 24	631	33,415	From Inc.
Int. #7	34,046	January 24	424	33,622	From Inc.
Int. #8	34,046	January 24	1,174	32,872	From Inc.
Total	277,109	January 24	5,782 (2.08%)	271,327	From Inc.

BY 2013 Integrated Summer Chinook Sub-yearlings

Pond No.	Ponded	Date	Loss	Population	Notes
Int. #1	22,536	February 10	71	22,465	From Inc.
Int. #2	28,170	February 10	5,237	22,933	From Inc.
Int. #3	28,170	February 10	436	27,734	From Inc.
Int. #4	28,170	February 10	401	27,769	From Inc.
Int. #5	22,536	February 10	303	22,233	From Inc.
Int. #6	28,170	February 10	352	27,818	From Inc.
Int. #7	22,536	February 10	293	22,184	From Inc.
Int. #8	28,170	February 10	465	27,705	From Inc.
Total	208,458	February 10	7,558 (3.6%)	200,841	From Inc.

BY 2013 Segregated Spring Chinook Yearlings

Pond No.	Ponded	Date	Loss	Population	Notes
Int. #1	47,278	March 3	71	22,465	From Inc.
Int. #2	47,278	March 3	5,237	22,933	From Inc.
Int. #3	47,278	March 3	436	27,734	From Inc.
Int. #4	47,278	March 3	401	27,769	From Inc.
Int. #5	47,278	March 3	303	22,233	From Inc.
Int. #6	47,278	March 3	352	27,818	From Inc.
Int. #7	47,278	March 3	293	22,184	From Inc.
Int. #8	52,497	March 3	465	27,705	From Inc.
Total	383,443	March 3	7,558	200,841	From Inc.

BY 2012 Summer Chinook Production Omak Acclimation Pond

- Production Target
 - DPUD – 48,100 yearlings (NNI production for 2014 release)
- Brood Collection Location
 - Okanogan R. via purse seine (WDFW/CCT)
- Rearing Location
 - DPUD – Wells Hatchery
- Acclimation/Release Location
 - Omak Acclimation Ponds (CCT)
- Rearing Summary
 - Juveniles Transferred from Wells to Omak October 24, 2013
 - 44,836 Summer Chinook @ 16.7 FPP
 - Currently on hand – 44,265 98.72% post transfer survival
 - Since transfer, only two weeks of ice free conditions

BY 2014 Summer Chinook Production Summary

Program	# Smolts (Yearling)	# Smolts (Sub-yearling)	Stock	Brood origin	Broodstock collection location	Smolt release location	Release facility
Integrated summer Chinook	275,000		Okanogan	Nat.	Okanogan R.	Ok. R.	Omak Pond
Integrated summer Chinook	275,000		Okanogan	Nat.	Okanogan R.	Ok. R.	Riverside Pond
Integrated summer Chinook	250,000		Okanogan	Nat.	Okanogan R.	Similk. R.	Similk. Pond
<i>Sub-Total</i>	<i>800,000</i>						
Integrated Summer Chinook		300,000	Okanogan	Nat.	Okanogan R.	Ok. R.	Omak Pond
<i>Sub-Total</i>		<i>300,000</i>					
Segregated/summer Chinook	500,000		Okanogan	Hat.	Okanogan R./CJH	Col. R.	CJH
<i>Sub-total</i>	<i>500,000</i>						
Segregated summer Chinook		400,000	Okanogan	Hat.	Okanogan R./CJH	Col. R.	CJH
<i>Sub-Total</i>		<i>400,000</i>					
<i>Grand Total</i>	<i>1,300,000</i>	<i>700,000</i>					

BY 2014 Spring Chinook Production Summary

Program	# Smolts (Yearling)	Stock	Brood Origin	Broodstock Collection	Smolt Release	Facility Release
Integrated spring Chinook	200,000	MetComp	Hat.	Winthrop NFH	OK. R	Tonasket P.
<u>Sub-Total</u>	<u>200,000</u>					
Segregated spring Chinook	700,000	LVNW	Hat.	Leavenworth NFH	Col. R	CJH
<u>Sub-Total</u>	<u>700,000</u>					
Grand Total	<u>900,000</u>					

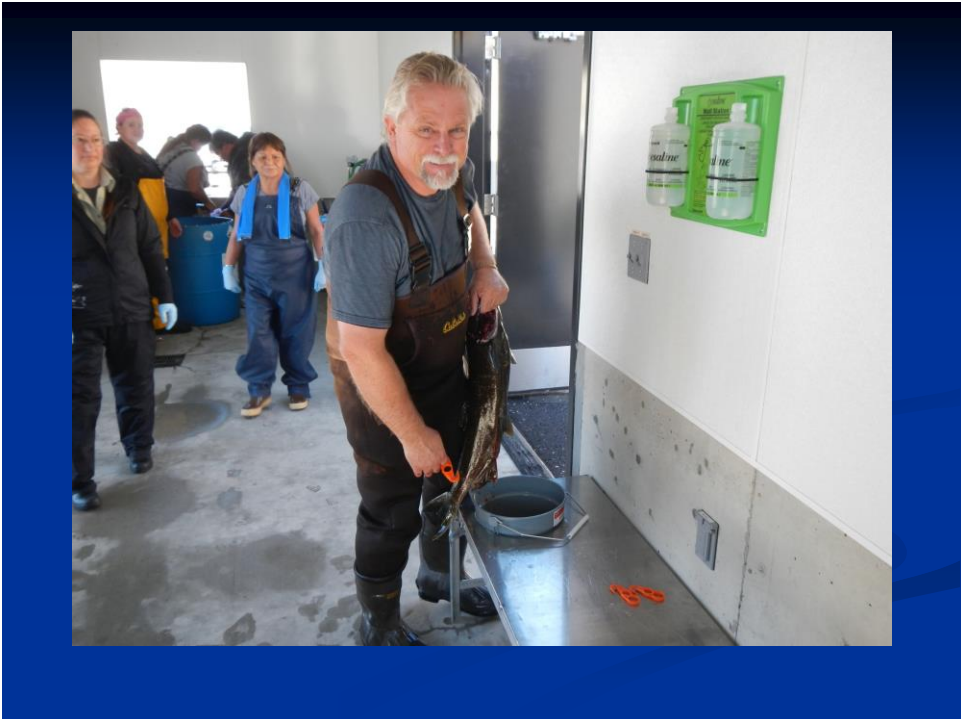
CJH BY 2014 Adult Brood & Production Summary (Draft)

Production Group	Adult Goal	Green Egg Take Goal	Eyed Egg Goal	Fry Ponded	CWT / Ad-clip	PIT Tagged	Release Goal	Release Location
SU Chinook EA – INT YRL	160 (10% Mortality)	349,200 (3% Cull)	314,280 (10% Loss)	298,566 (5% Loss)	100% AD/CWT	0	267,000 (11.7% Loss)	Similkameen Pond
SU Chinook LT – INT YRL	158 (10% Mortality)	348,764 (3% Cull)	313,887 (10% Loss)	298,193 (5% Loss)	100% AD/CWT	0	266,000 (10.7% Loss)	Omak Pond
SU Chinook LT – INT Subs	180 (10% Mortality)	393,287 (3% Cull)	353,958 (10% Loss)	336,260 (5% Loss)	100% AD/CWT	5,000	300,000 (11.2% Loss)	Omak Pond
SU Chinook EA – INT YRL	158 (10% Mortality)	348,764 (3% Cull)	313,887 (10% Loss)	298,193 (5% Loss)	100% AD/CWT	5,000	266,000 (11.7% Loss)	Riverside Pond
SU Chinook SEG YRL	304 (10% Mortality)	647,900 (5% Cull)	583,110 (10% Loss)	553,954 (5% Loss)	100% AD 40% CWT	5,000	500,000 (9.4% Loss)	CJH Hatchery
SU Chinook SEG Subs	248 (10% Mortality)	530,100 (5% Cull)	477,090 (10% Loss)	453,236 (5% Loss)	100% AD 50% CWT	5,000	400,000 (12.1% Loss)	CJH Hatchery
SP Chinook LVNW YRL	640 (10% Mortality)	875,520 (20% Cull)	787,968 (10% Loss)	748,570 (5% Loss)	100% AD 29% CWT	5,000	700,000 (10.5% Loss)	CJH Hatchery
SP Chinook MetComp YRL	0	0	235,296 WNFH	223,531 (5% Loss)	100% CWT	0	200,000 (10.8% Loss)	Tonasket Pond

















Questions?

