


Chief Joseph Hatchery 2013 Annual Program Review

Chief Joseph Hatchery Production
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The Goals for Okanogan Basin Summer-Fall Chinook are to:

- *Increase abundance, productivity, and temporal-spatial diversity of naturally spawning Chinook in the Okanogan Basin*
- *Increase harvest for all fishers*

The Purpose of the CJH Program is to:

- *Increase Harvest Consistent with the Natural Production Goals*
- *Support re-colonization of habitat*

The Goals for Okanogan Basin Spring Chinook are to:

- *Restore a harvestable, sustainable naturally spawning spring Chinook population in the Okanogan Basin*
- *Harvest for all fishers*
- *Contribute to recovery of the UCR ESU*

The Purpose of the CJH Program is to:

- *Re-colonize habitat in Okanogan*
- *Provide Harvest Consistent with the Natural Production Goals*

Program Commitments

- *Annually manage Program consistent with “Decision Rules” and “Biological Targets” by adjusting smolt production and broodstock management to meet targets for:*
 - *pHOS, NOR escapement, pNOB, PNI, and Stray rates*
- *Achieve FCRPS and PUD mitigation production*

CJH Su-Fa Chinook Strategy

- *Two Program Components,*
 - *An Integrated component—releases in Okanogan River*
 - *A segregated component—releases from CJH*
- *Three Phases:*
 1. *Current—Similkameen Mitigation Program*
 2. *Transition (1 and 2)—CJH program with emphasis on harvest augmentation and habitat re-colonization*
 3. *Long Term—CJH program with emphasis on harvest augmentation and local adaptation of natural populations (i.e. low pHOS, High PNI)*

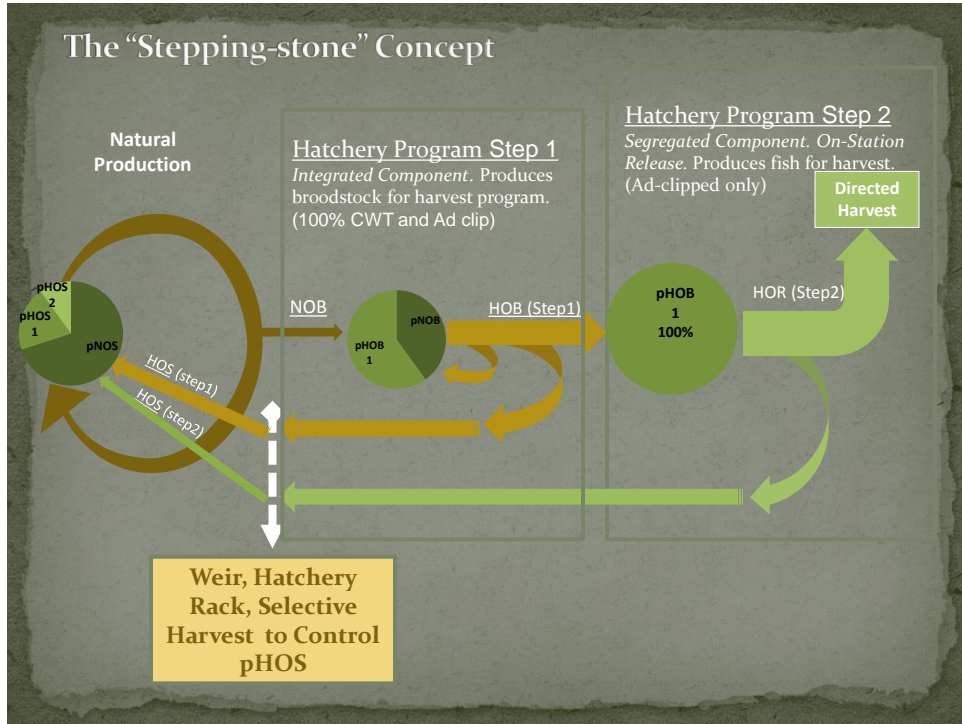
Program Type and Purpose

Summer Chinook

	Current	Transition		Long Term
	2009-2013	Period 1 2014-2018	Period 2 2019-2026	2027
Okanogan River Component	Integrated Conservation	Integrated Conservation	Integrated Conservation and Harvest	Integrated Harvest
Chief Joseph Hatchery Component	Not Applicable	Segregated Harvest (Stepping Stone)	Segregated Harvest (Stepping Stone)	Segregated Harvest (Stepping Stone)

Spring Chinook

	Phase 1- Re-colonization	phase 2- Local Adaptation	Phase 3- Conservation
Okanogan River Component	Segregated Conservation	Integrated Conservation	Integrated Conservation
Chief Joseph Hatchery Component	Segregated Harvest	Segregated Harvest	Segregated Harvest



Hatchery Production (Maximum)

Phase	Current	Transition		Long Term
	2009-2013	Period 1 2014-2018	Period 2 2019-2026	2027
Okanogan River	576,000 yearlings	800,000 yearlings 300,000 sub-yearlings	875,000 yearlings	875,000 yearlings
Chief Joseph Hatchery	No Production	500,000 yearlings 400,000 sub-yearlings	600,000 yearlings	600,000 yearlings

	Phase 1- Re-colonization	Phase 2- Local Adaptation	Phase 3- Conservation
	2014 - 20??	?	?
Okanogan River Component	200,000 yearlings	?	?
Chief Joseph Hatchery Component	700,000 yearlings	700,000 yearlings	700,000 yearlings

Key Biological Targets

- Integrated Program (HSRG)
 - PNI > 0.67
 - pHOS < 30 Percent
- Segregated (Stepping stone) Program
 - pHOS < 5 Percent (within and outside Okanogan)
- Natural Population
 - Natural Origin Spawners (NOR) >5,000 Adults
 - Minimum NOR > 800

How Will Biological Targets be Met?

- Harvest/Adult Management:
 - Live capture, selective fisheries, hatchery surplus
 - Mainstem seining
 - Fish platforms
 - Beach seines
 - Sport fishing
 - HOR removal at CJH ladder
 - HOR removal at Okanogan Weir
 - Working with managers to reduce marine and lower Columbia harvest impacts to NOR's
- Hatchery Operations
 - Adjust program size consistent with NOR abundance, pHOS and PNI
 - Adjust smolt release numbers to address short-fall in pHOS and PNI
 - Adjust pNOB to address short-fall in pHOS and PNI, consistent with NOR abundance targets
 - On-station release of segregated fish (Stepping Stone)

2013 Hatchery Production

- Segregated spring Chinook
- Re-introduction of spring Chinook
- Segregated summer Chinook
 - Early return
 - Late return
- Integrated summer Chinook
 - Early return
 - Late return

2013 Segregated Spring Chinook

- Broodstock
 - Leavenworth National Fish Hatchery (LNFH)
 - Brood collected throughout return to LNFH
 - CCT CJH staff collect and transfer to CJH
 - CCT/USFWS developing broodstock MOU
 - Broodstock target- 402
 - Sex ratio 1:1
- Smolt Release
 - 2013 target production- 420,000 smolts
 - Release size- 30 grams
 - Smolt release location- CJH
 - Release date- mid-April 2015

2013 Reintroduction of Spring Chinook

- Broodstock
 - Methow Composite HOB, Winthrop National Fish Hatchery (WNFH)
 - Brood collected throughout the return to WNFH
 - Brood target- 190 adults
 - Sex ratio- 1:1
- Egg/Fish Transfer
 - CCT CJH staff to transfer eyed-eggs to CJH (post 2012 brood)
 - USFWS to transfer BY-12 MetComp from Winthrop to Tonasket, Omak or Riverside Ponds in fall of 2013 (pending NOAA issuance of ESA Section 10j and Section 10 Permits).
- Smolt release
 - Target release- 200,000 yearling smolts
 - Release size- 30 grams
 - Release location- Okanogan River
 - Release date- mid-late April

2013 Segregated Summer Chinook

- Broodstock Collection
 - Hatchery origin brood (HOR)
 - Purse seine- Okanogan River confluence (July-early September)
 - CJH ladder (July-early November)
 - Tangle net- (July-October)
 - Okanogan weir (September-mid-October)
 - Target- 340 adults
 - Sex ratio- 1:1
- Smolt Releases
 - Target release- 300,000 yearling and 240,000 sub-yearling smolts
 - Release size- 45 grams yearling; 11 grams sub-yearling
 - Release location- CJH
 - Release date- mid-late April 2015 (yearlings); mid-June 2014 (sub-yearlings)

2013 Integrated Summer Chinook

- Broodstock Collection
 - Natural Origin Brood (NOR)
 - Purse seine- Okanogan River confluence (July-early September)
 - Tangle net- (July-October)
 - Wells Dam (late-August - early-September)*
 - Okanogan weir (September-mid-October)
 - Beach seine- Okanogan (mid-September-early October)
 - CJH ladder (early-October - early November)
 - Target- 412 adults
 - Sex ratio- 1:1
- Smolt Releases
 - Target release- 480,000 yearling and 180,000 sub-yearling smolts
 - Release size- 45 grams yearling; 11 grams sub-yearling
 - Release location- Okanogan River
 - Omak Acclimation Pond (160,000 yearlings)
 - Omak Acclimation Pond (180,000 sub-yearlings)
 - Riverside Acclimation Pond (160,000 yearlings)
 - Similkameen Acclimation Pond (160,000 yearlings)
 - Release date- mid-late April 2015 (yearlings); mid-June 2014 (sub-yearlings)
- * - Contingency collection location based on degree of short-fall by end of the third week of August. Initiate collection at Wells to attain 75% of end of August collection target.

Conclusions

CJH program will be implemented through

- ❑ *A science "Framework" defined by Key Assumptions, and supported by:*
 - ❑ *Annual Status and Trends updates and In-season Biological Targets and*
 - ❑ *Informed Decision Making, through adaptive management of which this APR is an important component*
- ❑ *A unified closely coordinated management program that incorporates mitigation for FCRPS, and mid-Columbia PUDs*

Thank you!

