

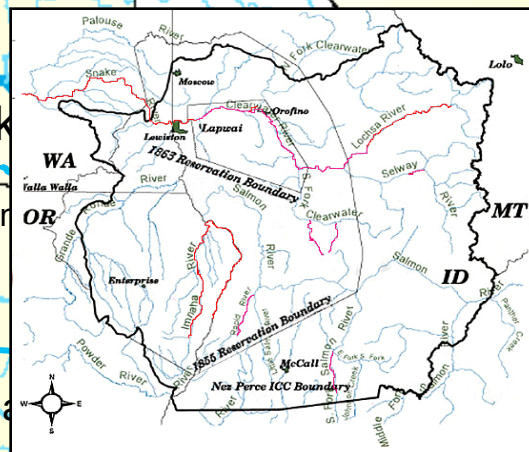
CUYE'EMNIM SEPE'EPYIMNEWE'ES

"A Place For Fish To Grow"

It is the purpose of the Production Division to utilize hatchery artificial production to restore natural spawning populations and harvest opportunities in the Nez Perce Treaty Territory.



NPT Fisheries Production Division



Nez Perce Fisheries is involved in producing a lot of fish – in 2019 – in conjunction with our co-managers, we grew, acclimated, outplanted over 13 million juvenile fish

- | | |
|------------------|-------------|
| • Spring Chinook | 5.4 million |
| • Fall Chinook | 3.6 million |
| • Steelhead | 2.3 million |
| • Coho | 1.5 million |

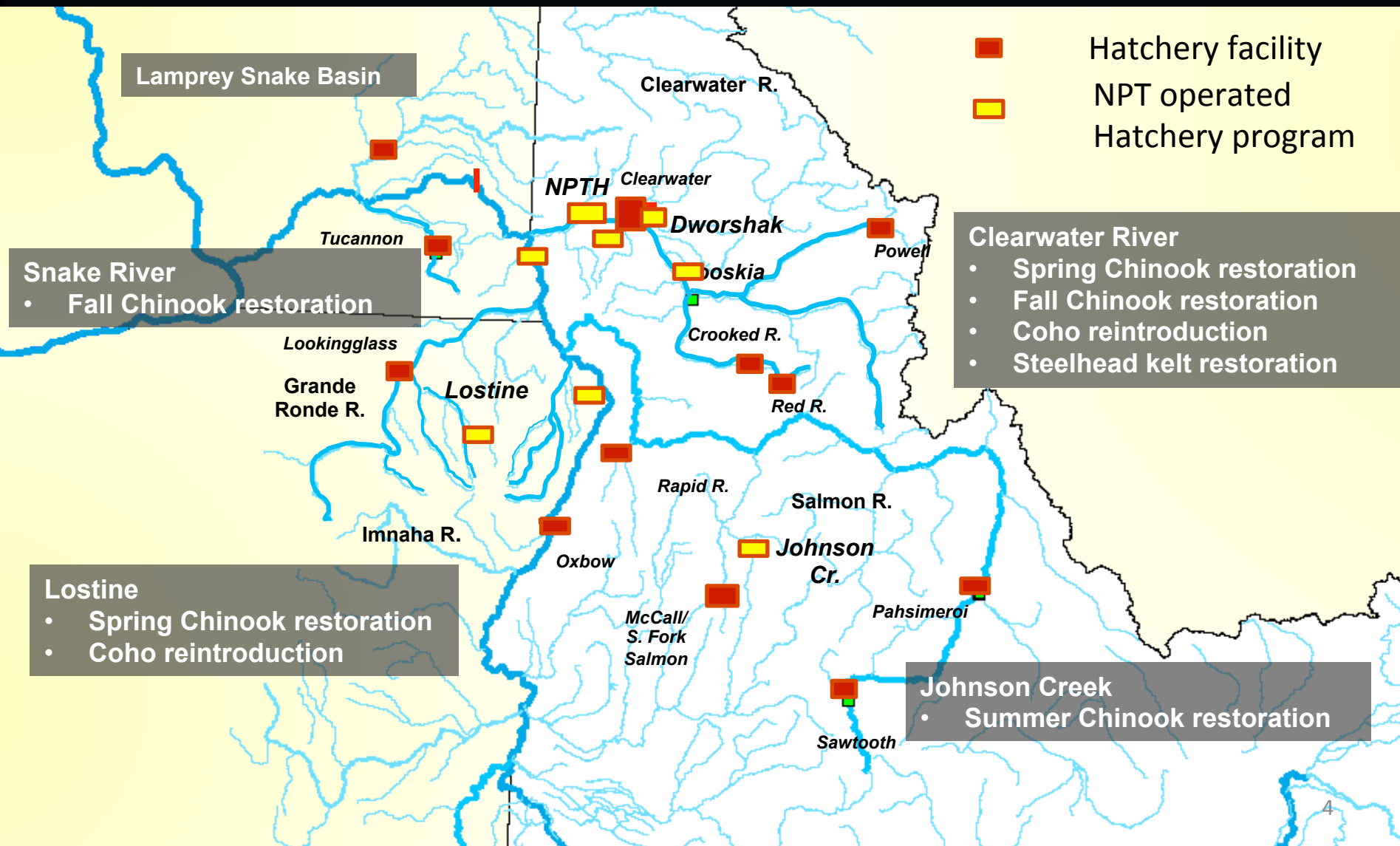
Total release of juveniles in the Snake Basin ~ 30 million juveniles



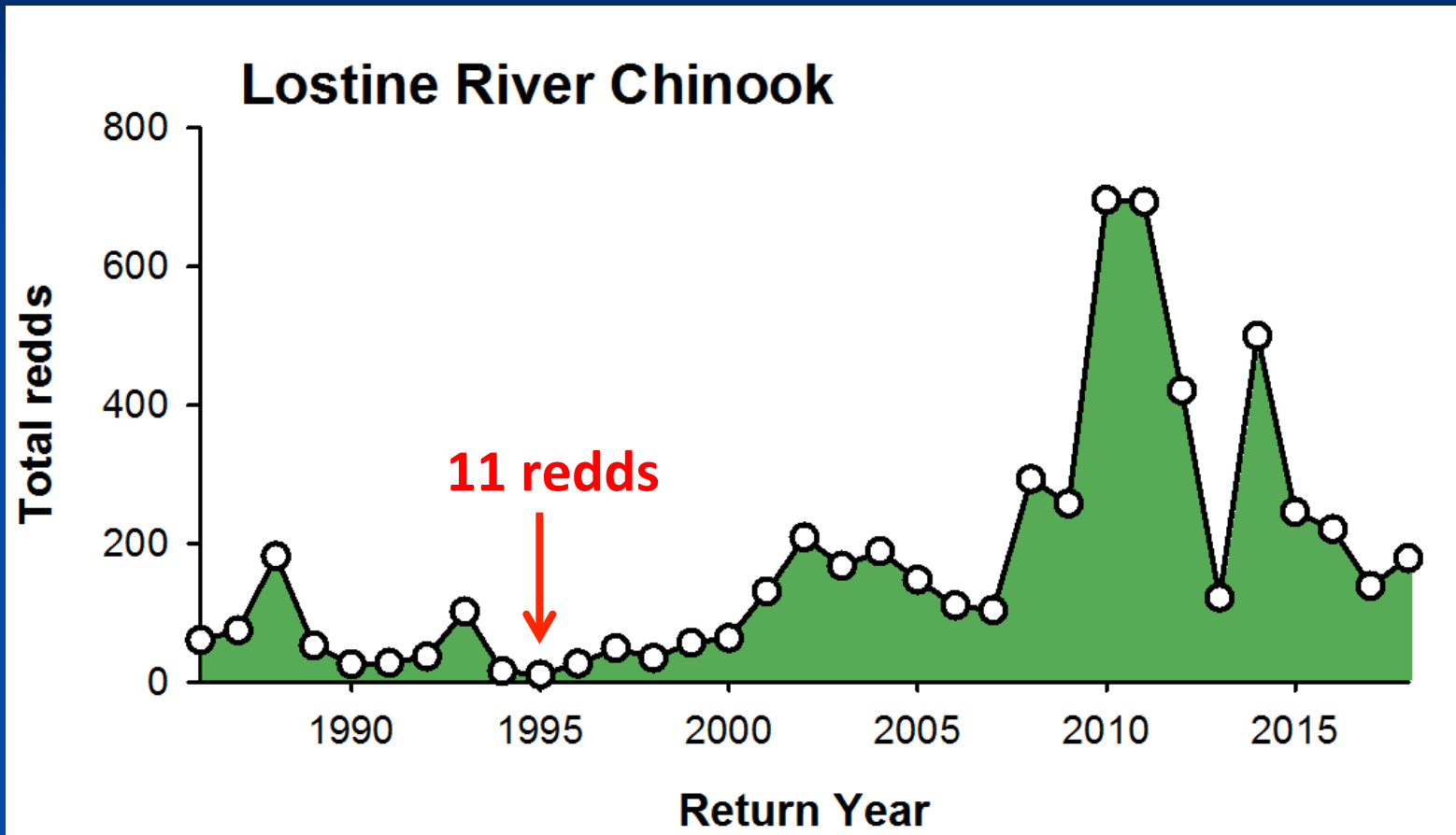
NPT Fisheries Production Division

Nez Perce Tribe Hatchery Programs

All salmon & steelhead species in Snake Basin
either listed under ESA or extirpated



A Legacy Almost Lost



Facilities

- Lostine River weir
- Lostine River acclimation

Production

- 250,000 spring Chinook

Lostine River supplementation



**Initiated with captive broodstock
transitioned to conventional broodstock**

7000
6000

Lostine River



Facilities

- Johnson Creek weir
- ## Production
- 100,000 summer Chinook

Johnson Creek supplementation



Supplementation/restoration using all natural origin fish for broodstock



Facilities

- NPTH & 5 satellites

Production

- 1.4 million fall Chinook
- 1 million spring Chinook
- Lamprey holding
- Future kelt reconditioning

Nez Perce Tribal Hatchery



Fall Chinook Acclimation

Facilities

- 3 satellites

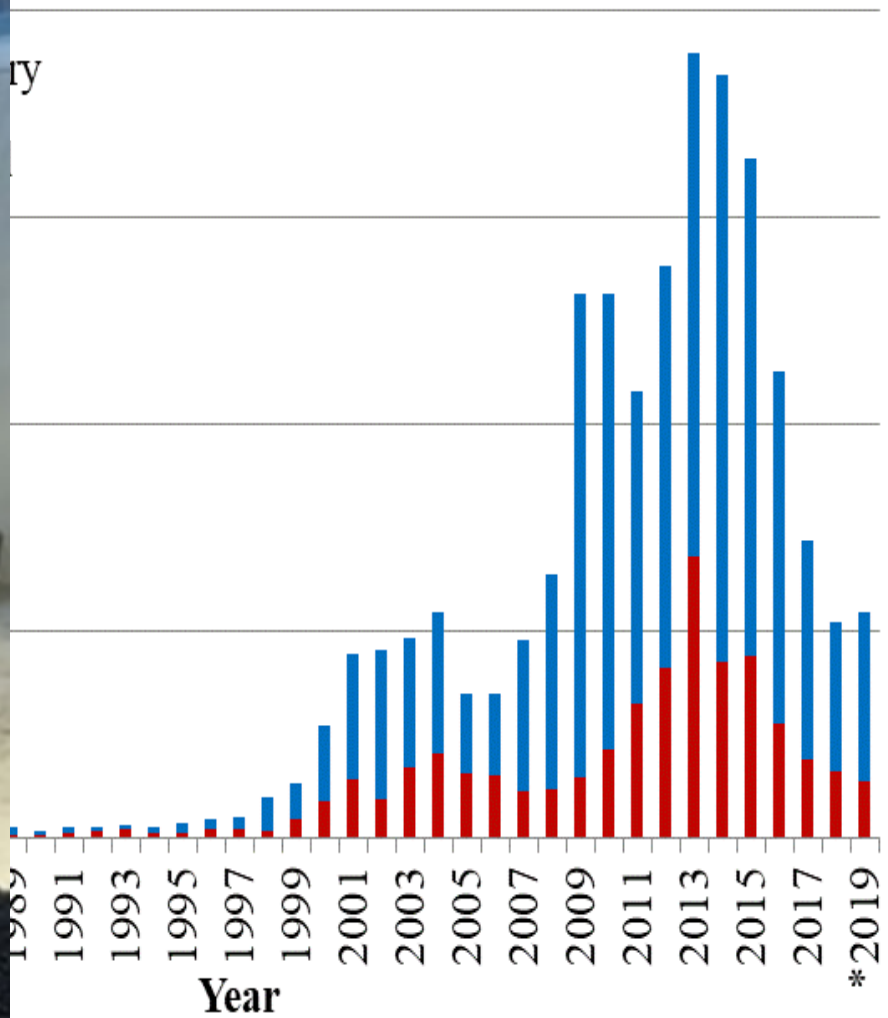
Production

- 2.1 million fall Chinook





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ook Recovery Plan delisting –
1,200 natural origin adults

Facilities

- Dworshak Hatchery

Production

- 2.1 million steelhead
- 1.5 million spring Chinook
- Coho project rearing
- Kelt reconditioning

Dworshak Hatchery



Joint Management Tribe and U.S. Fish and Wildlife Service

Facilities

- Dworshak Hatchery
- Nez Perce Tribal Hatchery

Steelhead Kelt Reconditioning



Reconditioning wild fish to spawn again

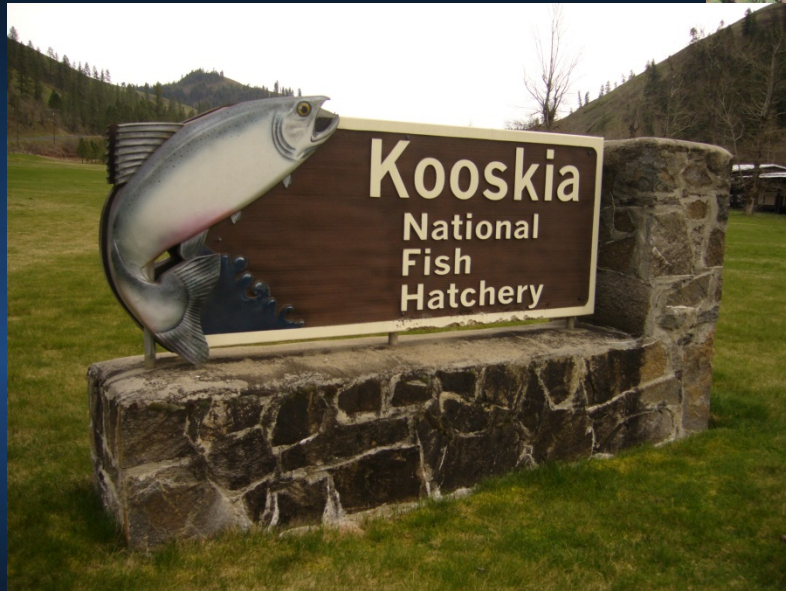
Facilities

- Kooskia Hatchery

Production

- 600,000 + spring Chinook
- Coho project rearing/acclimation

Kooskia Hatchery



Previously operated by U.S. Fish and Wildlife Service management transferred to Nez Perce Tribe in 2008

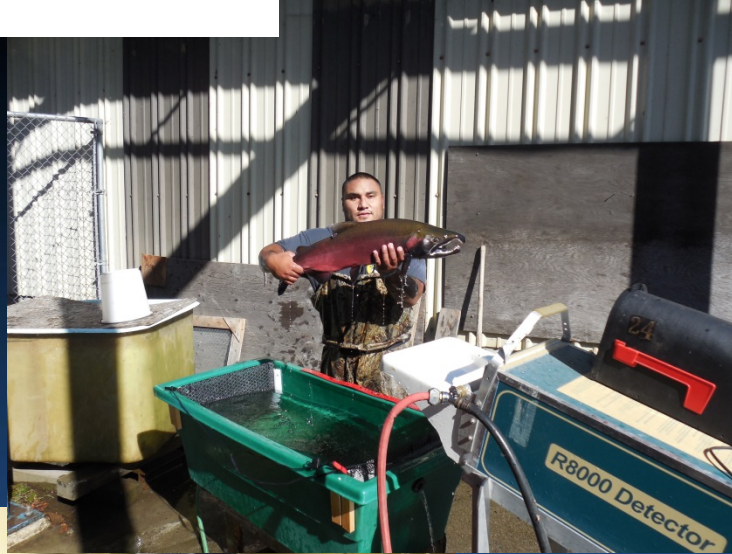
Facilities

- Dworshak/Kooskia hatcheries

Production

- 1.5 million coho

Coho Restoration

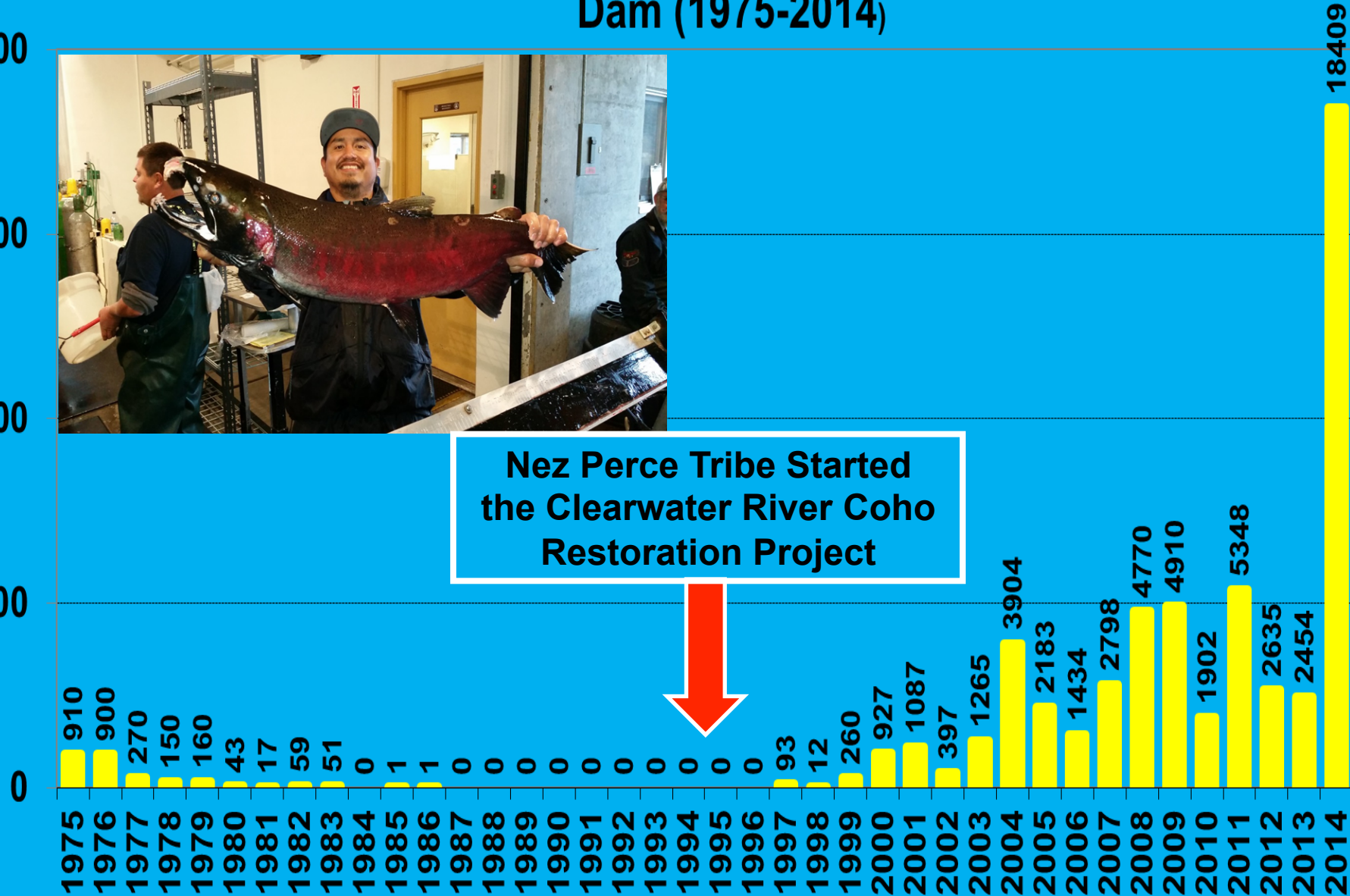


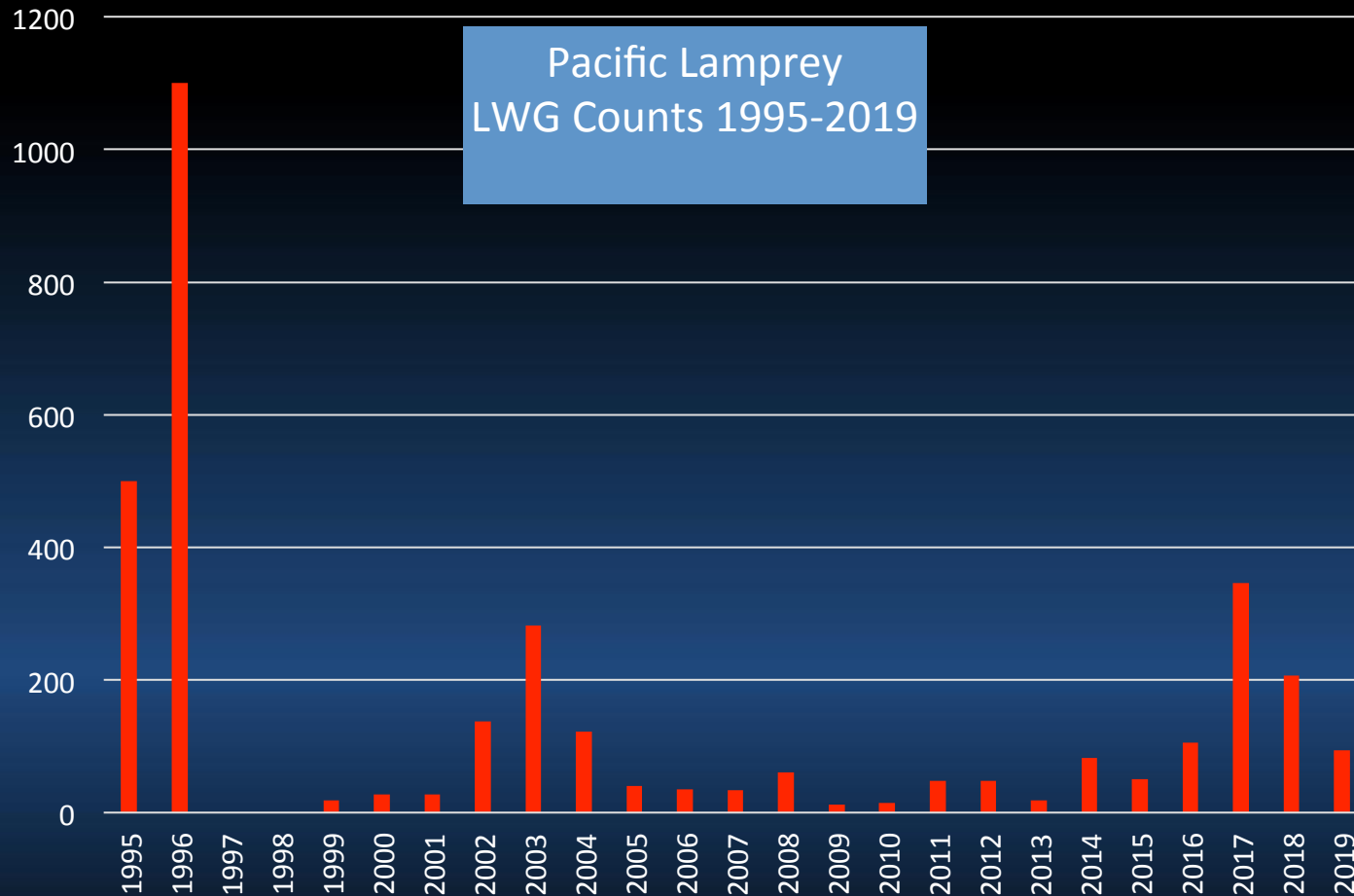
Reintroducing a species extirpated for 50 years

Total number of Adults and Jacks Coho over Lower Granite Dam (1975-2014)



Nez Perce Tribe Started
the Clearwater River Coho
Restoration Project





- Day counts at Lower Granite have declined from more than 1,000 adults in the late 1990s to 12 in 2009.
- Day counts at Lower Granite remain perilously low: 94 count in 2019 (less than the 10 yr. average of 101)

The Translocation Process

- Adults are collected during summer at Bonneville, The Dalles and John Day Dams
- Fish are then transported to holding facilities at Nez Perce Tribe Hatchery (NPTH)
- Adults are held over-winter and released during spring (April-June) to target recipient streams (2018 new strategy: direct release)
- Follow-up production monitoring is conducted via incidental screw trap collections, electro-fishing and genetic parentage analyses

Loading adult lamprey at
BON for transport to NPTH



Fish Truck w/ 400 gal. slip tank



Summary of Adult Pacific Lamprey Releases

Release Year	Adults Released	LGR Day Count
2007	177	34
2008	106	61
2009	140	12
2010	91	15
2011	29	48
2012	257	48
2013	187	19
2014	51	82
2015	377	50
2016	586	106
2017	503	346
2018	1,206	207
2019	1,094	94
TOTAL	4,804	1,122

Snake Basin Release Streams (14)

Asotin Creek (SE WA)
Big Canyon Creek
Orofino Creek
Lolo Creek
Newsome Creek
Red River
Wallowa River (NE OR)
Minam River (NE OR)
Joseph Creek (NE OR)
S Fk Salmon
Johnson Creek
Secesh River
Potlatch River
Clearwater R. (direct)

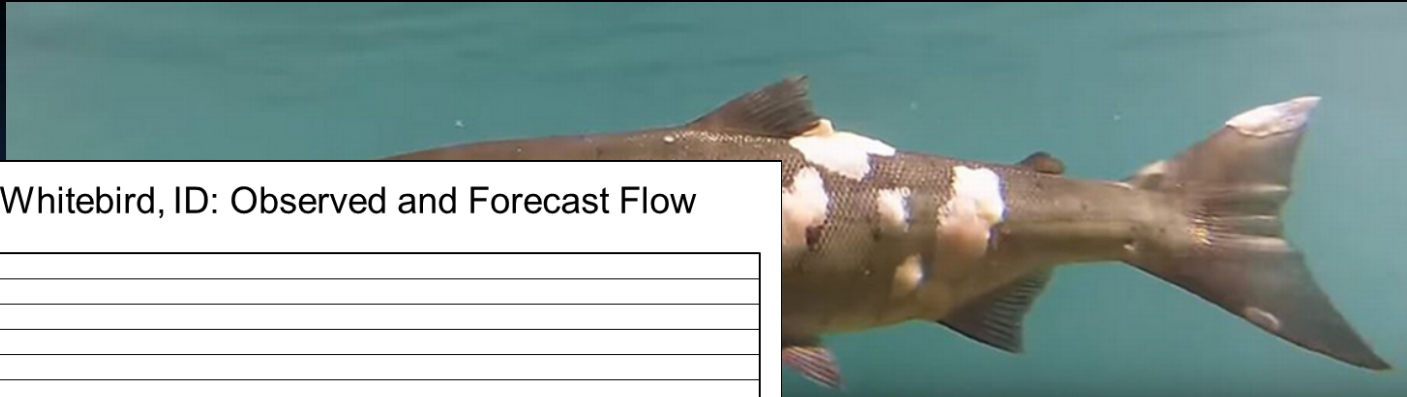
Fall 2019: Direct Release
into Potlatch River



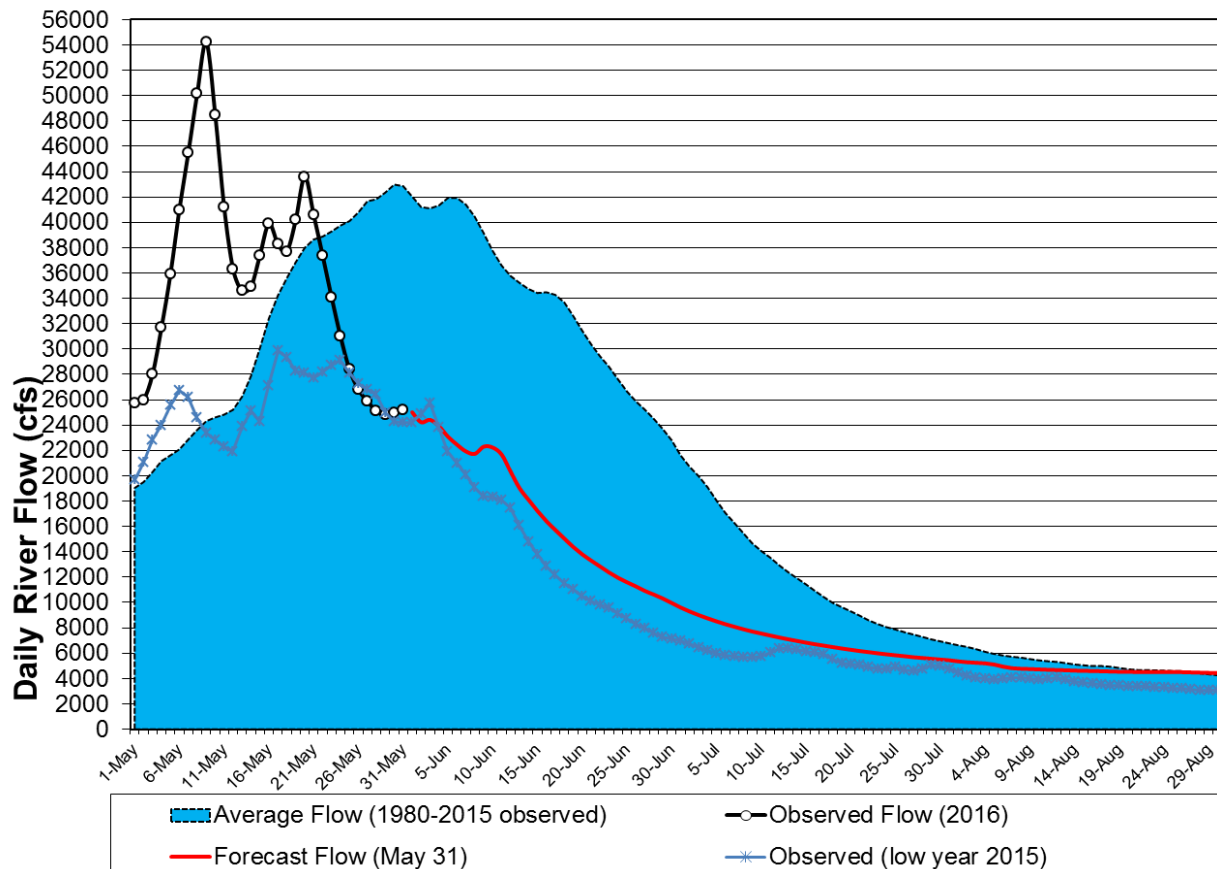
Ammocoete and Macrophthalmia



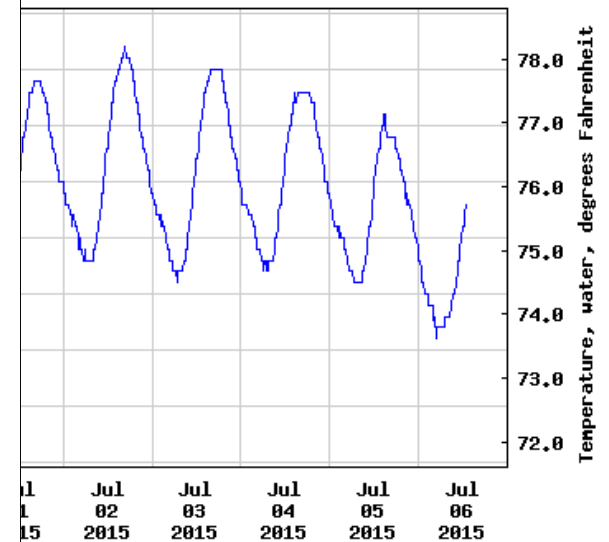
Hot water kills half of Columbia River sockeye salmon



Salmon River at Whitebird, ID: Observed and Forecast Flow



2000 SALMON RIVER AT WHITE BIRD ID



Graph courtesy of the U.S. Geological Survey

Use of hatcheries in the face of climate change

- Supplementation to buffer against low abundance & rebuild populations
 - Captive broodstock
 - Conventional broodstock (HxN, NxN)
 - Reconditioning kelts
- Reintroduction of extirpated populations
- Refuge from warm/hot water & disease
- Refuge from landslides/flooding
- Transport around dewatered sections/passage barriers
- Transport past warm/hot water sections of rivers
- Genetic repository