



<http://www.youtube.com/watch?v=4nV9LjHZfAA>

Clearwater River Coho Salmon Production Project

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LEGEND



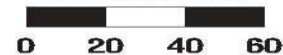
Nez Perce Reservation
from Treaty of 1855.



Present day Nez Perce
Reservation.



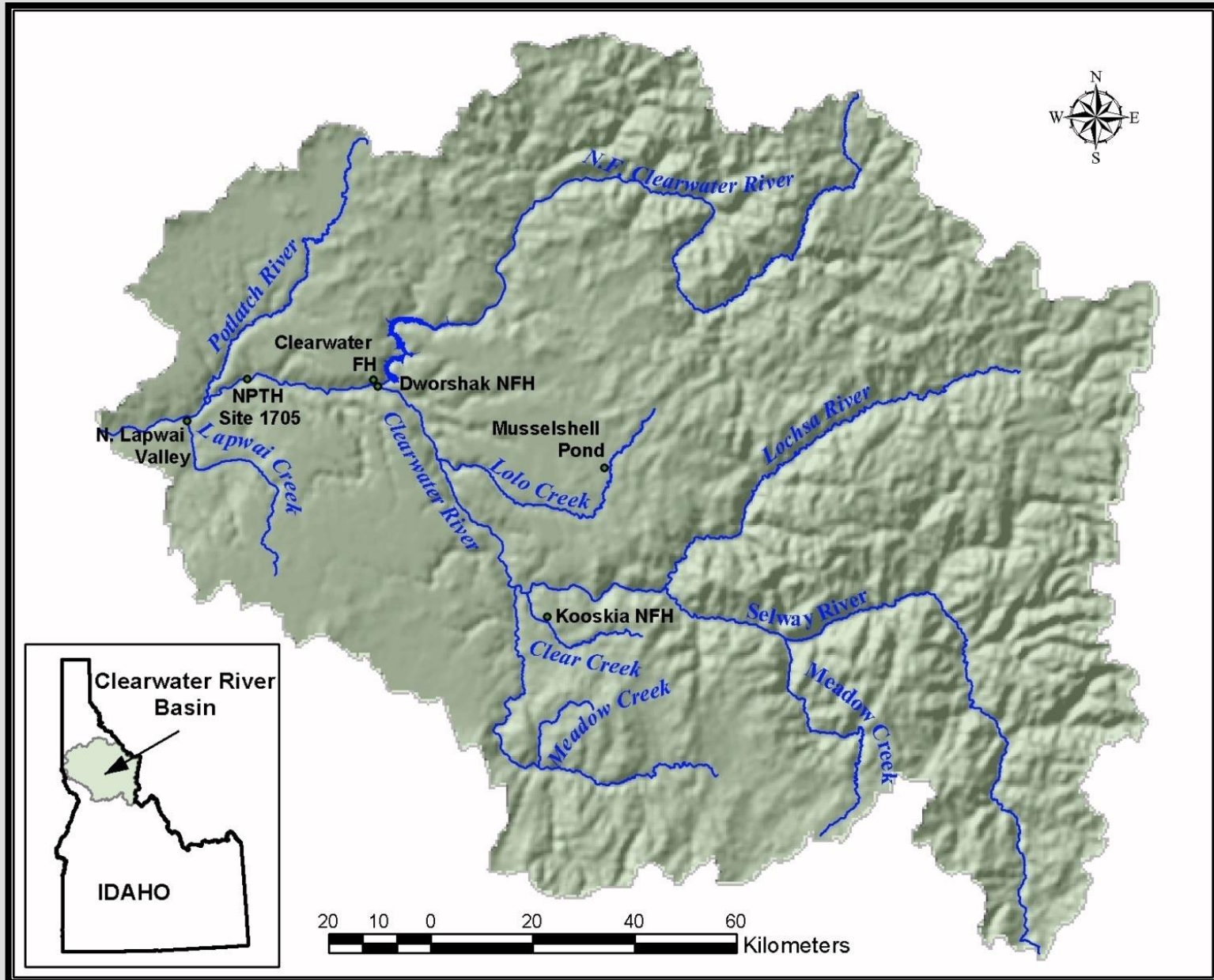
KILOMETERS



MILES



Coho were present in the Clearwater River prior to 1927.



Extermination

- **Lewiston dam was constructed in 1927.**
- **All returning fall salmon were blocked for the next 12-14 years, resulting in the extermination of Clearwater River Coho.**



Early Restoration Attempts

IDFG Coho salmon reintroduction

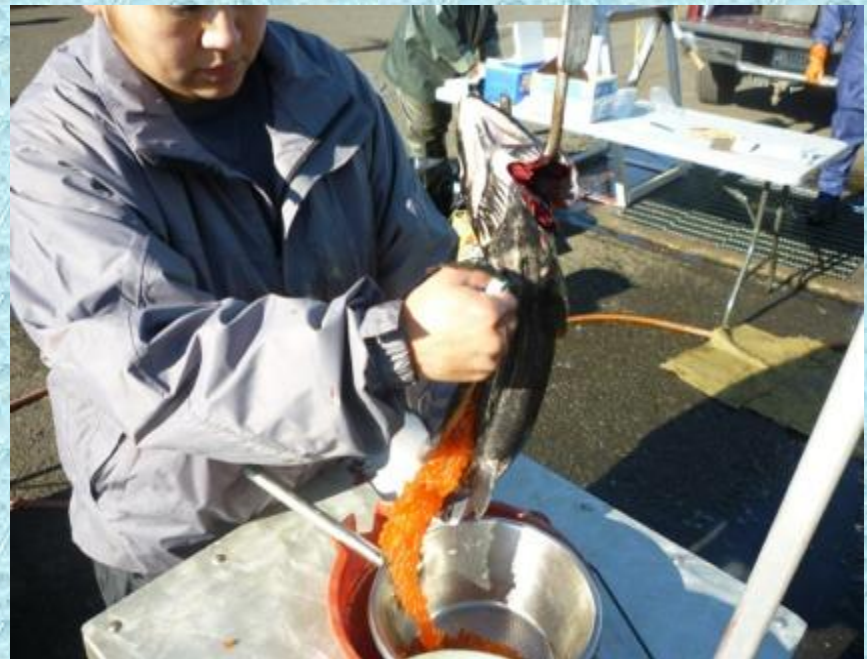
- **1962-1968**
- **11 million eggs, LCR Hatcheries**
- **Hatching Channels South Fork of the Clearwater River**
- **Ice, Dewatering, Flooding & Siltation**
- **Little to no restoration attempts thereafter.**

Year	Adult Coho Salmon
1965	21
1966	115
1967	43
1968	325
1969	31
1970	40
1971	61
1972	9

Coho officially declared extirpated (totally destroyed) from the Clearwater River in 1986.

This loss was unacceptable to the Nez Perce Tribe

- In 1994, *US vs. OR PAC* invited the Nez Perce Tribe to find a home for 10-14 million surplus LCR Coho eggs.
- Overall Goal - Reintroduce and restore Coho to the Clearwater River subbasin at levels of abundance and productivity sufficient to support sustainable runs and annual harvest.



Nez Perce Tribe Coho Restoration Project Components

Production

- Re-introduce Coho via hatchery supplementation.
- Outplant parr and smolts into systems historically known to contain Coho.
- Establish a new and localized Clearwater Coho stock

M & E

- Provide science-based recommendations for management and policy consideration.
- Demonstrate when the reintroduction program meets its restoration goals.
- Assist in the re-establishment of tribal and recreational fisheries

Clearwater River Coho Salmon Production Project

- Adults trapped at Dworshak NFH, Kooskia NFH and a Temporary Weir in Lapwai Creek

Kooskia National Fish Hatchery



- Produce 300,000 Clearwater stock smolts reared at Dworshak NFH: Transfer to Kooskia NFH for 4 weeks of acclimation then released into Clear Creek

Lapwai Creek Weir



Dworshak National Fish Hatchery



Eagle Creek NFH Clearwater River Coho Salmon Production

- 550,000 smolts reared at Eagle Creek NFH:
- 275,000 direct released in early March into Lapwai Creek.

Eagle Creek National Fish Hatchery

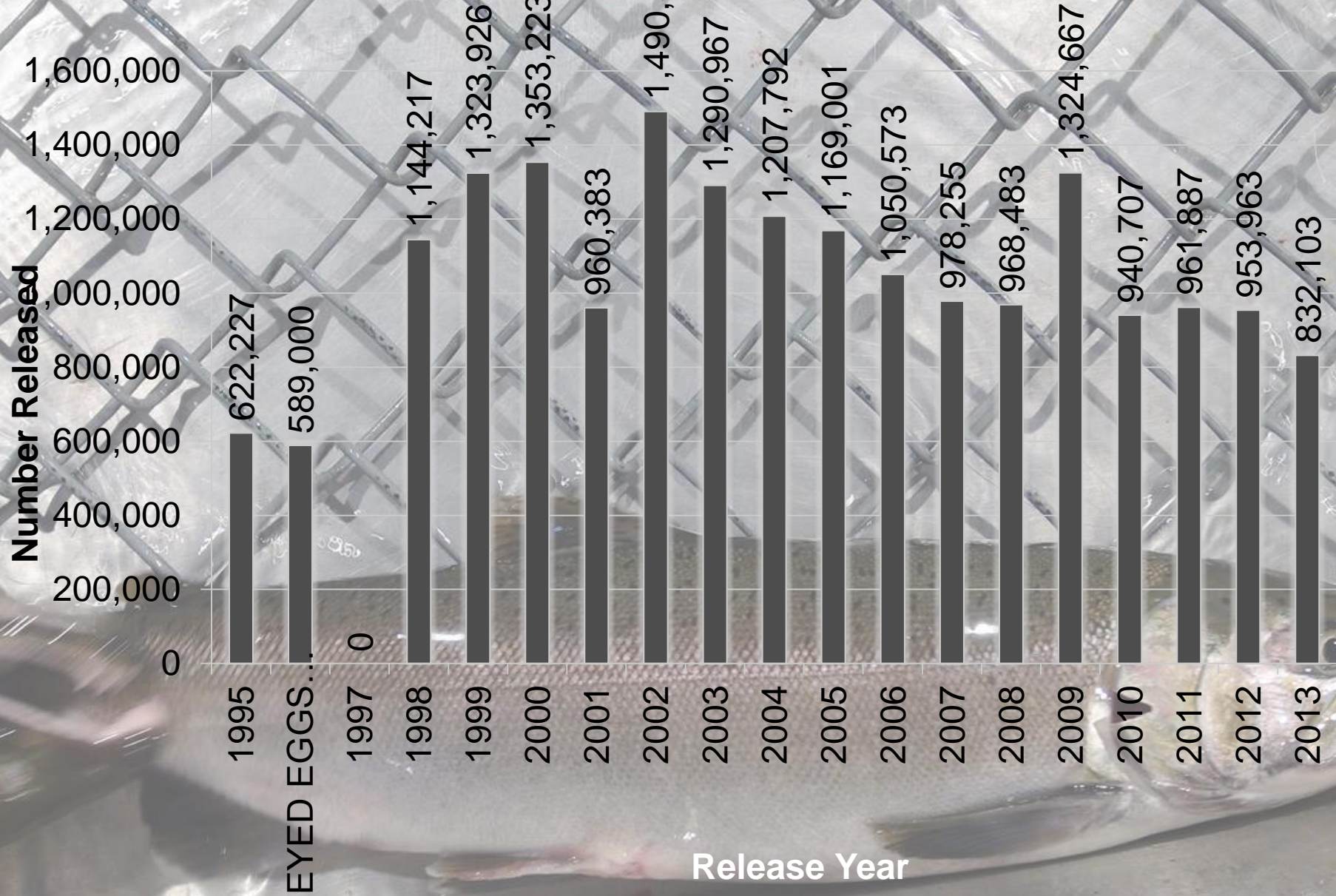


Kooskia National Fish Hatchery



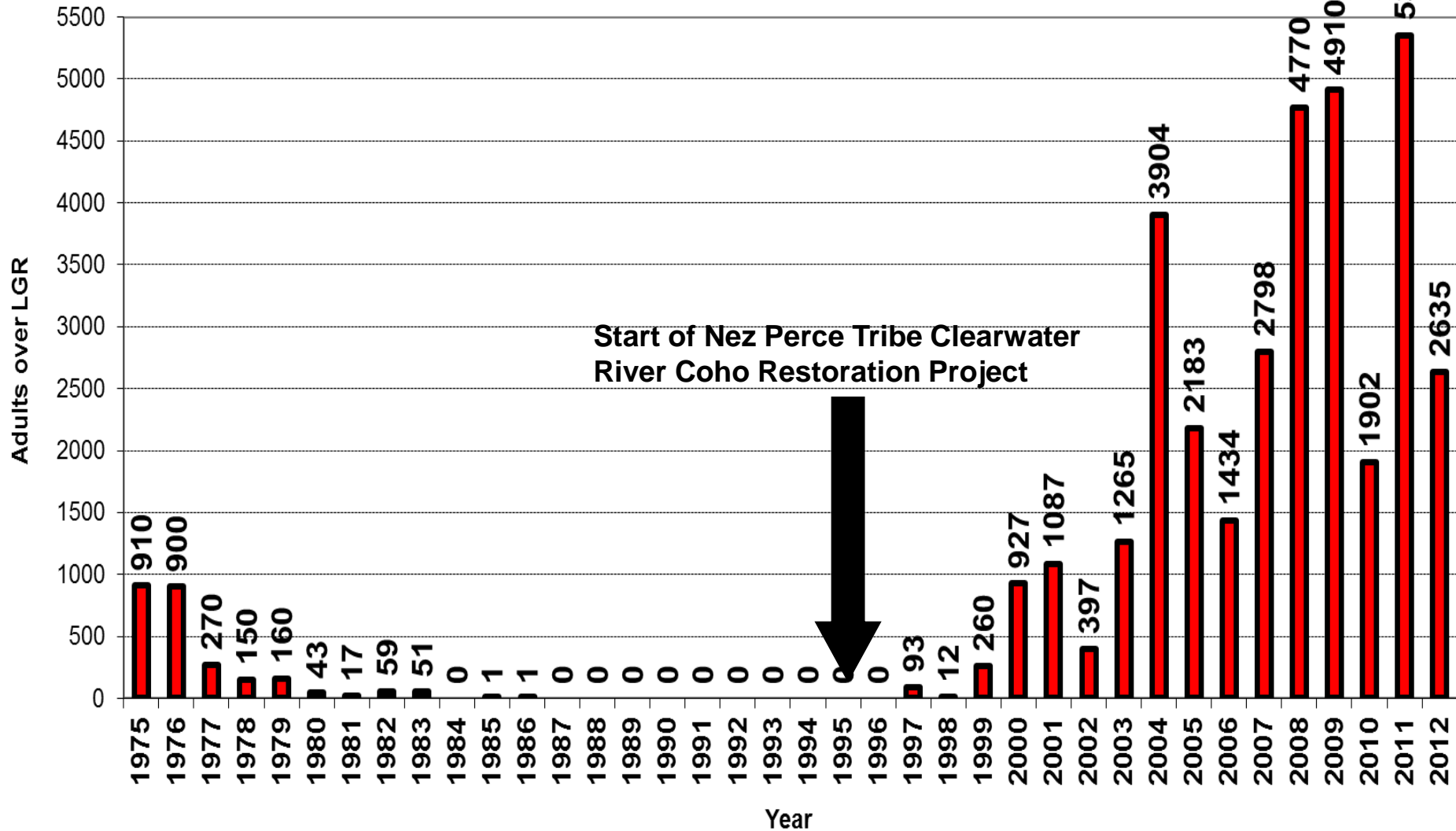
- 275,000 transferred to Kooskia NFH for acclimation along side the Clearwater River production group.

Release Totals



Response to Supplementation (1975-2012)

Total number of Adult Coho over Lower Granite Dam (1975-2010)



Estimated SAR 1997 - 2010

1998	0.002%
1999	0.020%
2000	0.081%
2001	0.082%
2002	0.029%
2003	0.132%
2004	0.262%
2005	0.169%
2006	0.114%
2007	0.245%
2008	0.454%
2009	0.502%
2010	0.196%

Survival Rate (%) BY 08					
Egg ---> Fry		Fry ---> Parr		Parr ---> Smolt	
87.74%		94.40%		81.38%	
1,081,320	948,732	948,732	425,202	425,202	346,031

Survival Rate (%) BY 09					
Egg ---> Fry		Fry ---> Parr		Parr ---> Smolt	
96.11%		93.93%		93.19%	
376709	362042	362042	340083	340083	316920

Survival Rate (%) BY 10					
Egg ---> Fry		Fry ---> Parr		Parr ---> Smolt	
94.87%		98.33%		97.66%	
616805	585177	585177	575427	330448	322707

Survival Rate (%) BY 11					
Egg ---> Fry		Fry ---> Parr		Parr ---> Smolt	
90.33%		99.53%		99.60%	
447,587	404,318	404,318	402,417	411,126	318,798

4 year egg → smolt survival average
85.79%

Total adult Coho trapped for Broodstock										Counted over Granite	*** Using DART		% over LGR Trapped by NPT	
	Kooskia	Lapwai	Potlatch	Dworshak	Lyons Ferry	NPTH	other	Lolo	TOTAL	Adults	Jacks	Total		
YEAR	NFH	Creek	River	NFH				Creek						
2012	846	293		265					1404	2433	202	2635	53.28%	
2011	1179	441		300					1920	5060	291	5351	35.88%	
2010	420	384		132					936	1509	393	1902	49.21%	
2009	1669			303					1972	4629	283	4912	40.15%	
2008	1329		383	27	6	1745	3458	1312	4770	36.58%				
2007	305		194	41	21	561	2532	266	2798	20.05%				
2006	130			194	130	11	1	466	1141	293	1434	32.50%		
2005	58	185		105	100	103	0	0	551	2077	106	2183	25.24%	
2004	446	402		187	853	59	157	0	2104	3802	102	3904	53.89%	
2003	75	35		77	202	67	4	0	460	1135	130	1265	36.36%	
2002	0	13	63	43	2	0		0	121	248	149	397	30.48%	
2001	235	58	118	281	0	0		1	693	968	119	1087	63.75%	
2000	168	152	31	225	11	0		9	0	596	891	36	927	64.29%
1999	56	9	20	105	19	0	5	0	214	241	19	260	82.31%	
***					= Did Not Trap								AVERAGE	44.57%
													10 yr AVE	38.31%
													5 yr AVE	43.02%
													3 yr AVE	46.13%

Annual Tagging Totals

Group	CWT	PIT Tag	
Eagle Creek (Lapwai Creek)	30,000	5,000	
Eagle Creek (Clear Creek)	30,000	5,000	
NPT	60,000+	5,000	CWT numbers depend on funding.

**All Coho carcasses from spawning are outplanted into
Lapwai, Sweetwater, and Mission Creeks.**



**Surplus brood stock outplanted into
Lapwai Creek Basin.**

Localized Clearwater River Stock

- Collecting enough eggs to support Eagle Creek NFH and Dworshak NFH with all Clearwater River returning brood.
- 2008 we did collect enough eggs but due to logistical and extreme weather conditions the eggs did not get transferred.
- 2009 - 2012 we again collected enough Clearwater River returning brood for Eagle Creek NFH and Dworshak NFH.

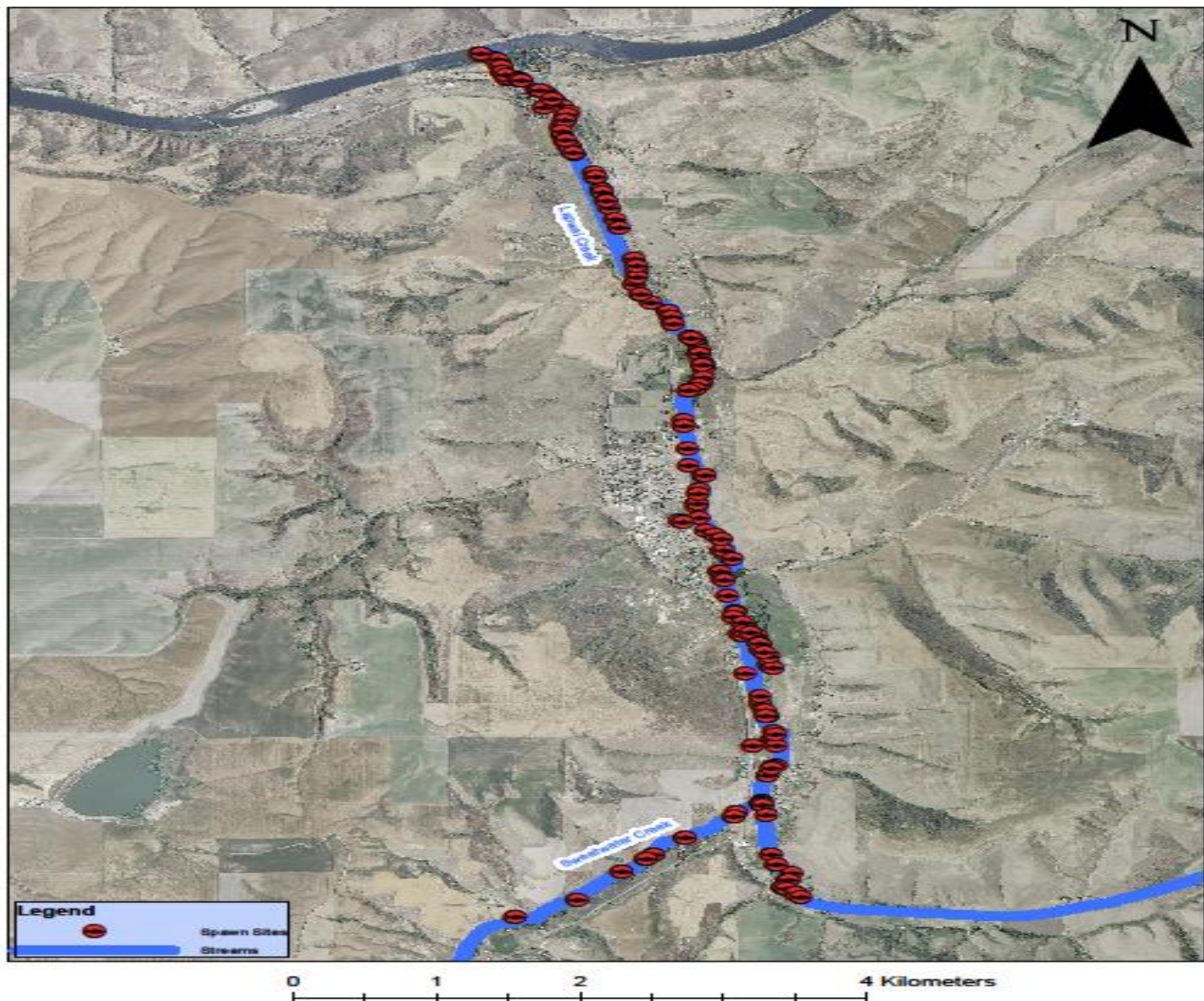
Spawning Ground Surveys

The background of the slide is a photograph of a salmon spawning in a stream. The fish is positioned horizontally, with its head to the right and tail to the left. Its body is a vibrant reddish-pink, contrasting with the darker, brownish water. The water is turbulent, with white foam and splashes around the fish, indicating it is in the middle of a spawning run. The stream bed is visible through the water, showing rocks and some organic debris.

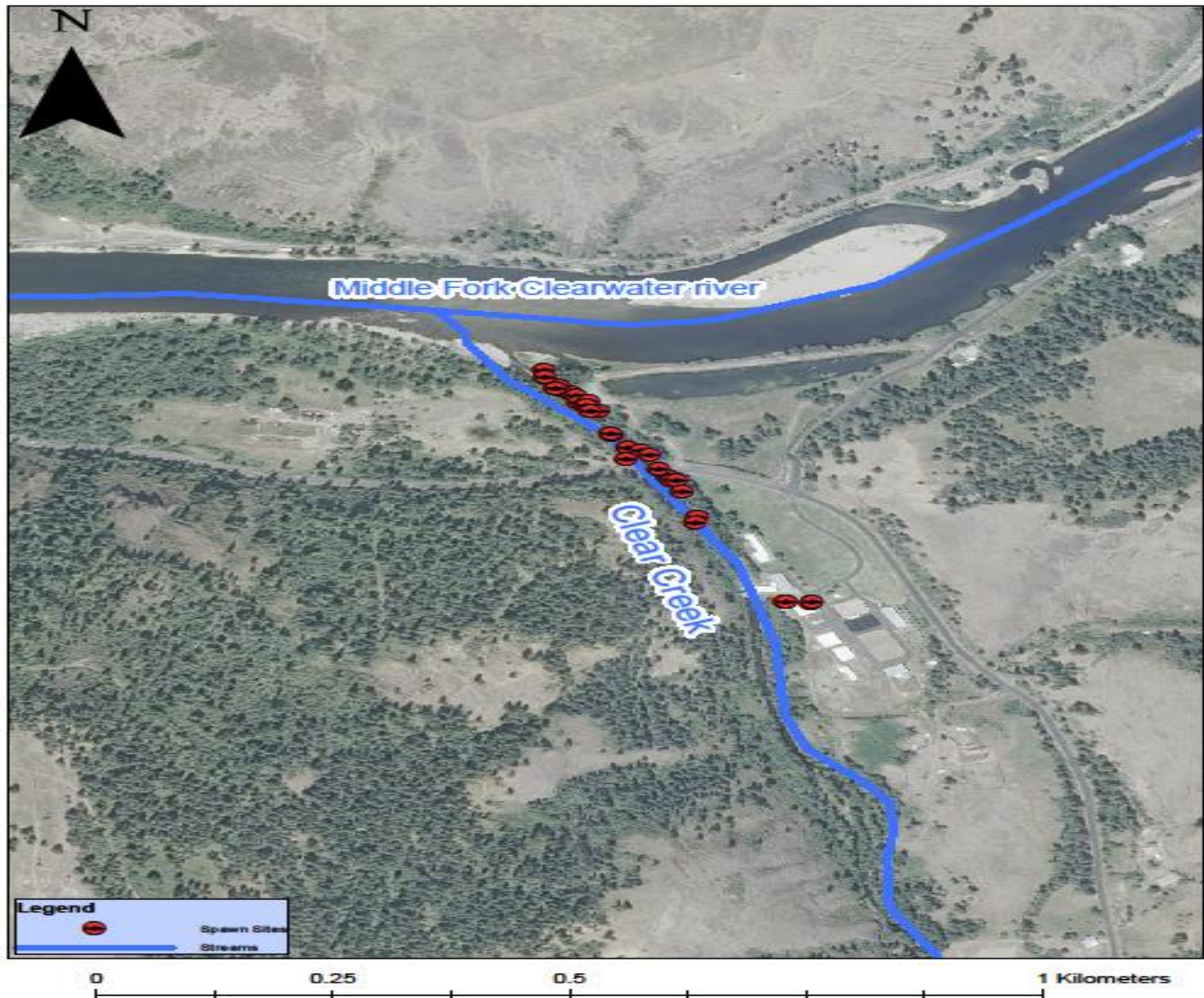
2011 – 246 redds surveyed. 195 Lapwai Creek, 8 Sweetwater Creek, 4 Potlatch River, 4 Cottonwood Creek, 4 Lawyer Creek, 31 Clear Creek,

2012 – 12 redds surveyed. High murky water made surveying difficult. High Fall Chinook numbers above weir.

Lapwai Creek



Clear Creek



A Look to the Future

- **Coho are presently crossing Lower Granite Dam at higher numbers than the previous 10 years.**
- **Collect all brood stock from returning adults in the Clearwater River.**
- **Acclimation for the Eagle Creek groups on Lapwai Creek and Clear Creek.**
- **Reduce reliance on LCR Hatcheries for egg and smolt supplementation. (Used only Clearwater stock since 2009)**
- **Fill in M&E gaps whenever possible.**
- **Continue to increase adult returns.**
- **Attain returns of 14,000 adults over LGD to support both tribal and non-tribal harvest.**

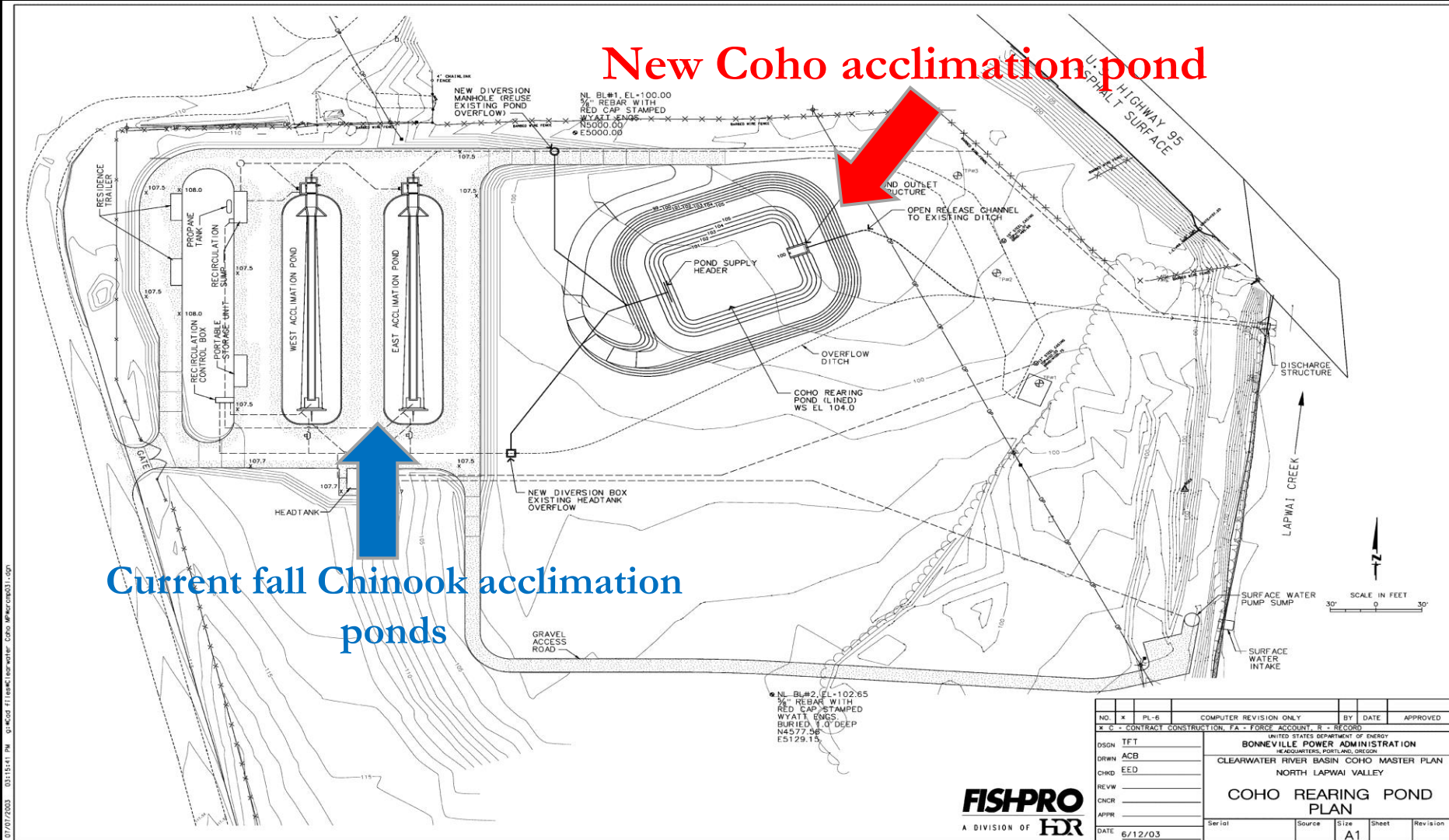




2013

- Plan to put in four acclimation tanks (2 North Lapwai Valley, 2 Kooskia NFH). Tanks are 30 feet wide by 6 feet deep.
- Able to pass adult Coho above Kooskia NFH weir. (ISS done)

Preliminary design for acclimation pond at the Nez Perce Tribal Hatchery: North Lapwai Valley facility



Thanks for Listening



28 lb Rainbow Trout
caught on 6 lb test
line.

