



Snake River Stocks



Status Versus Management Goals





Status Demonstration

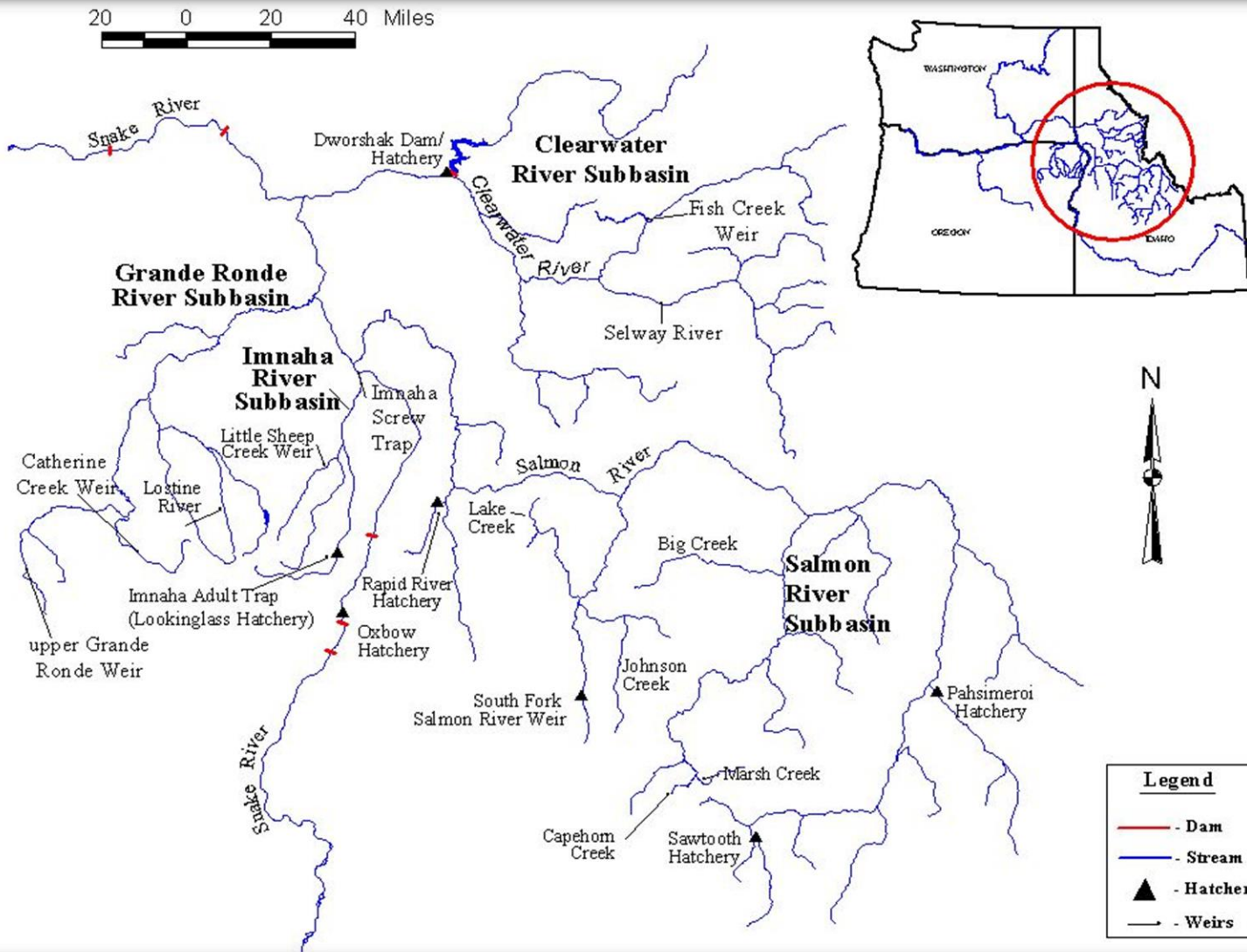
Snake River Stocks: Status Versus Management Goals
2023 Technical Management Team Year-end Review

Spring and Summer Chinook Salmon





Snake River Basin



Historically

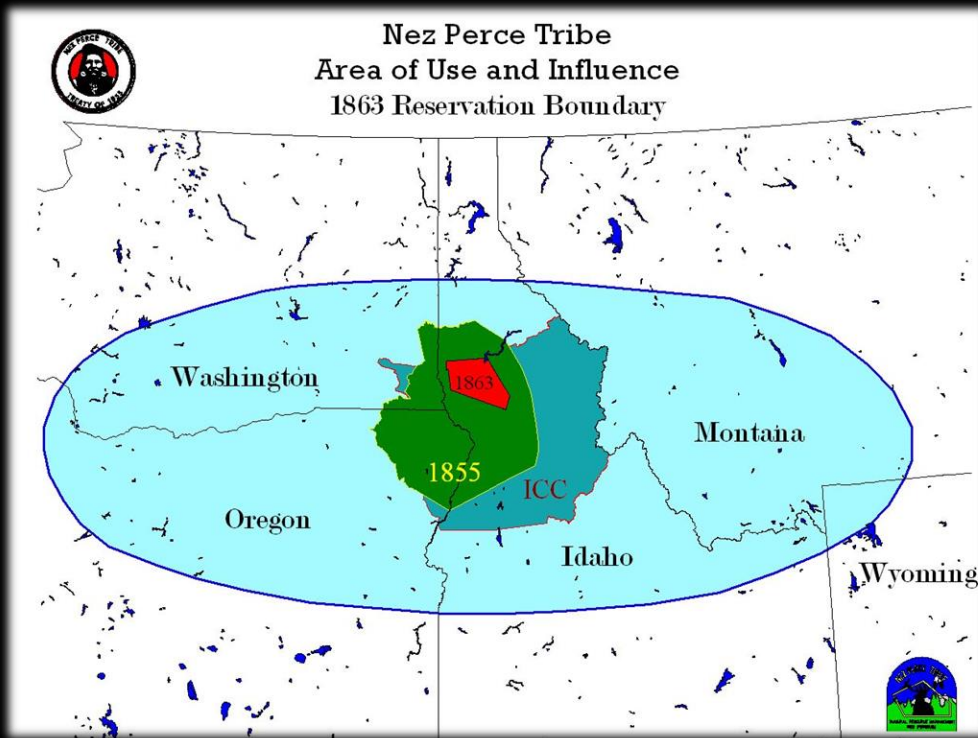
- 7 anadromous fish stocks
- Over 2 million fish returned annually
- Stronghold habitat of spring Chinook and B-run steelhead





Niimíipuu (Nez Perce People)

Salmon a cultural cornerstone
in Nimiipuu way-of-life



“...the right of taking fish at all usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing them: together with the privilege of hunting, gathering roots and berries....”

—1855 Treaty

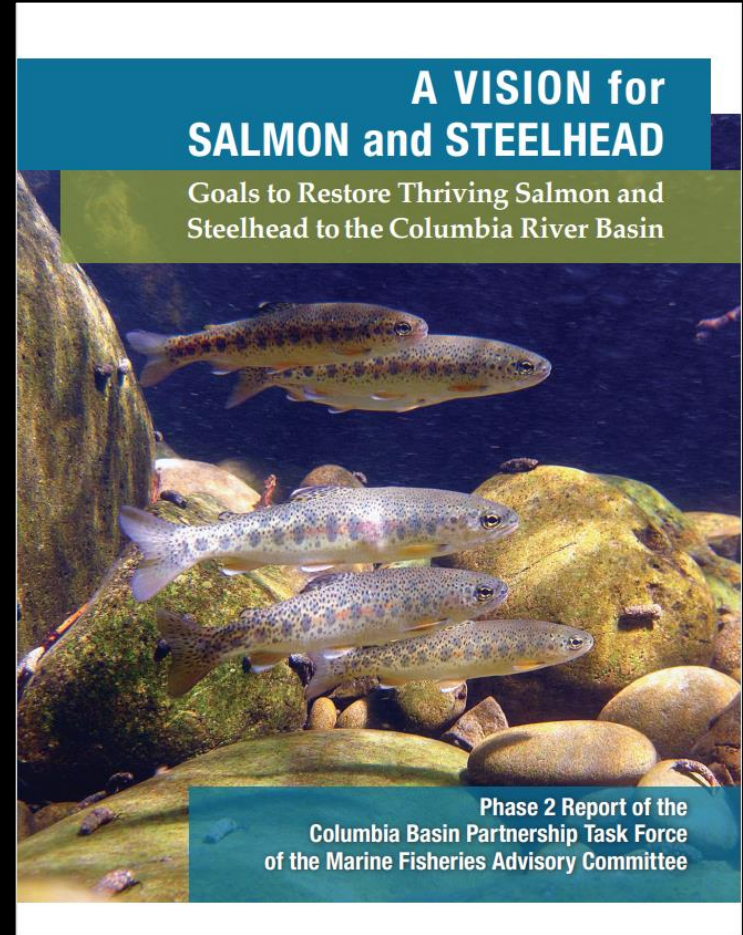
Right to Harvest Includes Responsibility to Manage





Healthy and Abundant Management Goal

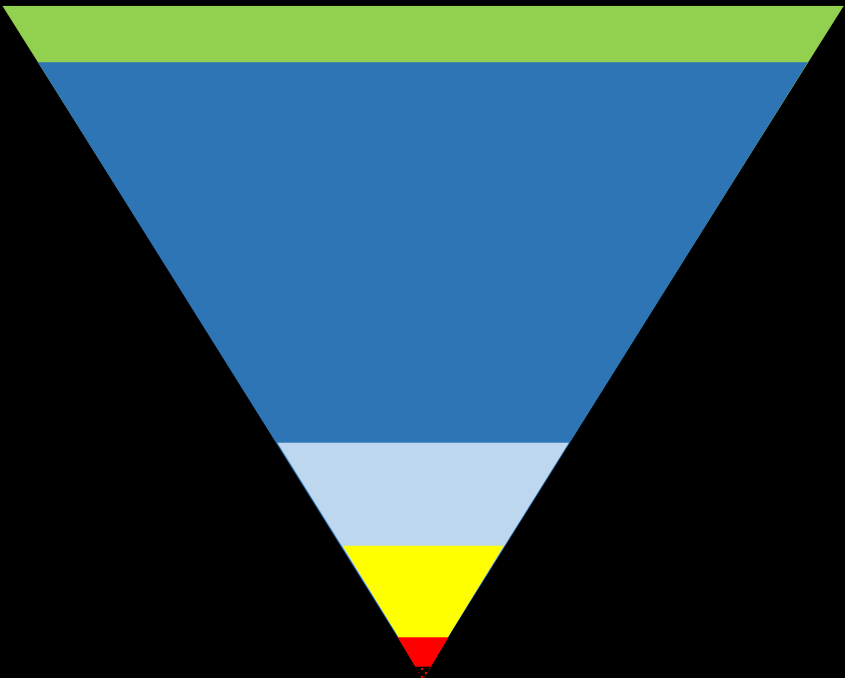
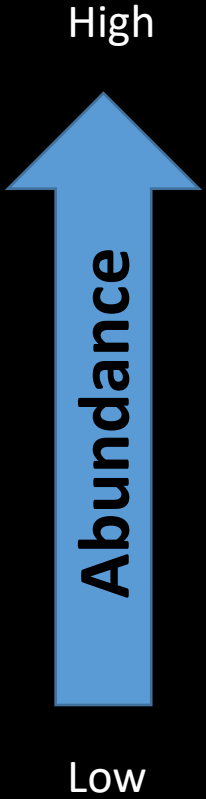
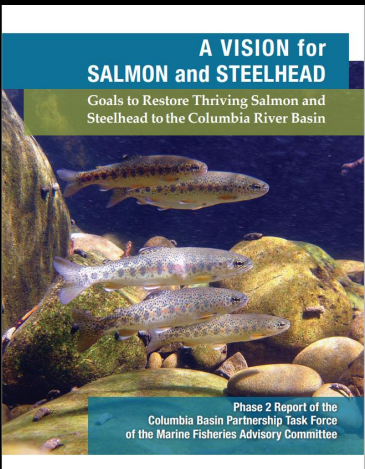
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Management Goals and Thresholds

Snake River Stocks: Status Versus Management Goals
2023 Technical Management Team Year-end Review

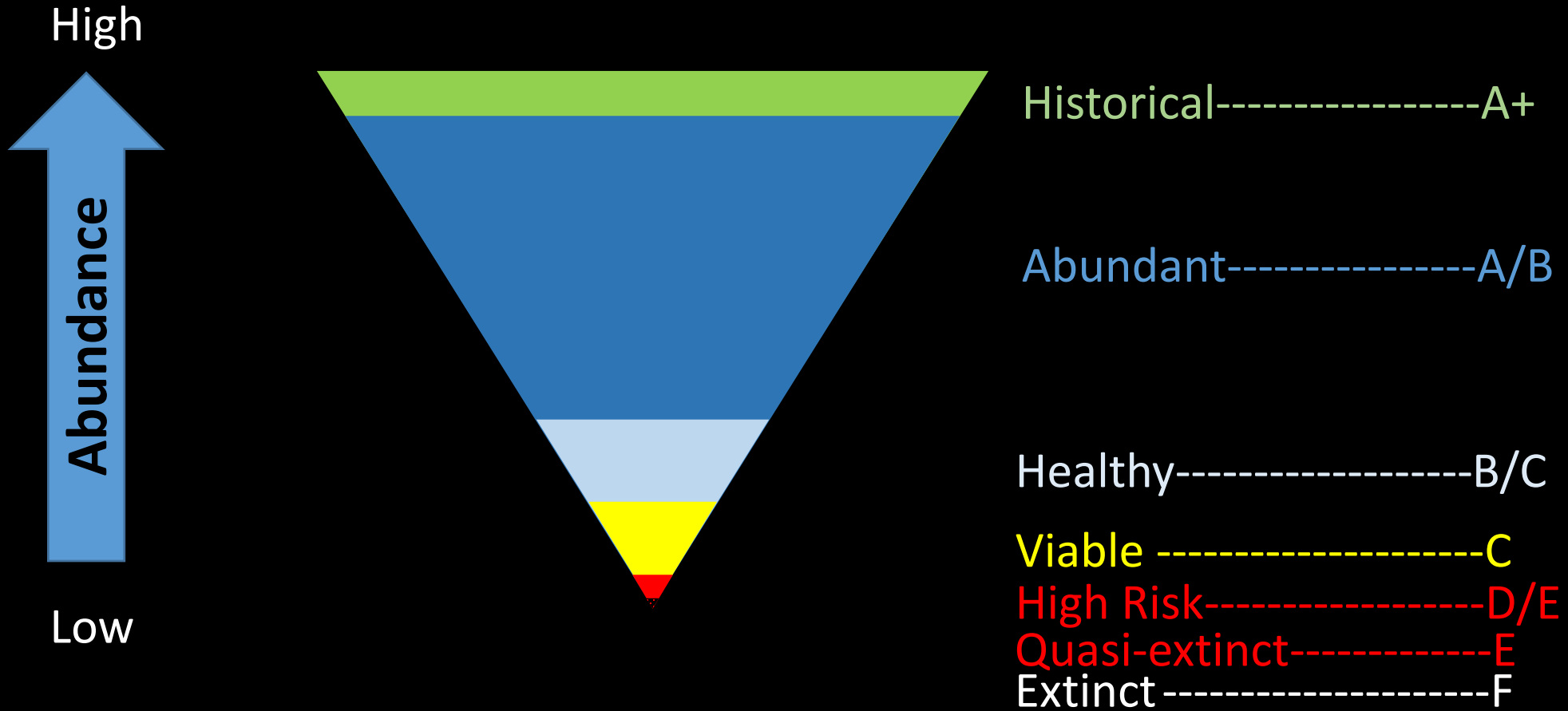


Historical
Abundant
Healthy
Viable
High Risk
Quasi-extinct
Extinct





Stock Status Grade





Snake Basin Anadromous Fish Report Card

(Stock Status Grade)

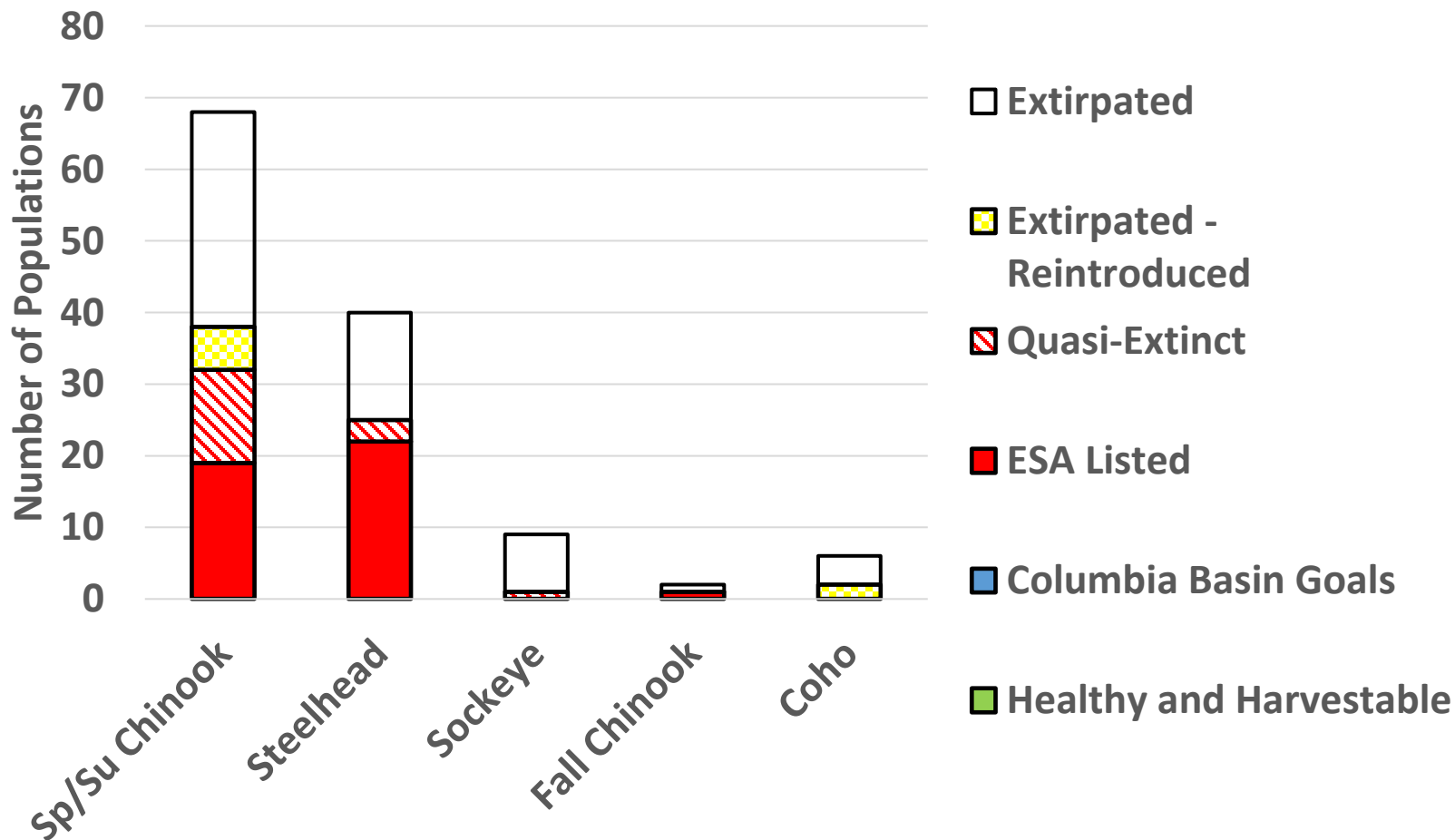
Stock	Grade	Status Description
Spring/summer Chinook	E	High risk of extinction
Steelhead	E	High risk of extinction
Fall Chinook	C	Viable, but not healthy; hatchery supplemented
Sockeye	F	Functionally extinct; hatchery life-support
Coho	F	Extinct; re-introduced, hatchery supplementation
Lamprey	E	High risk of extinction; adult translocation
Sturgeon	D	Degraded





Snake Basin

Stock Specific Population Status Summary

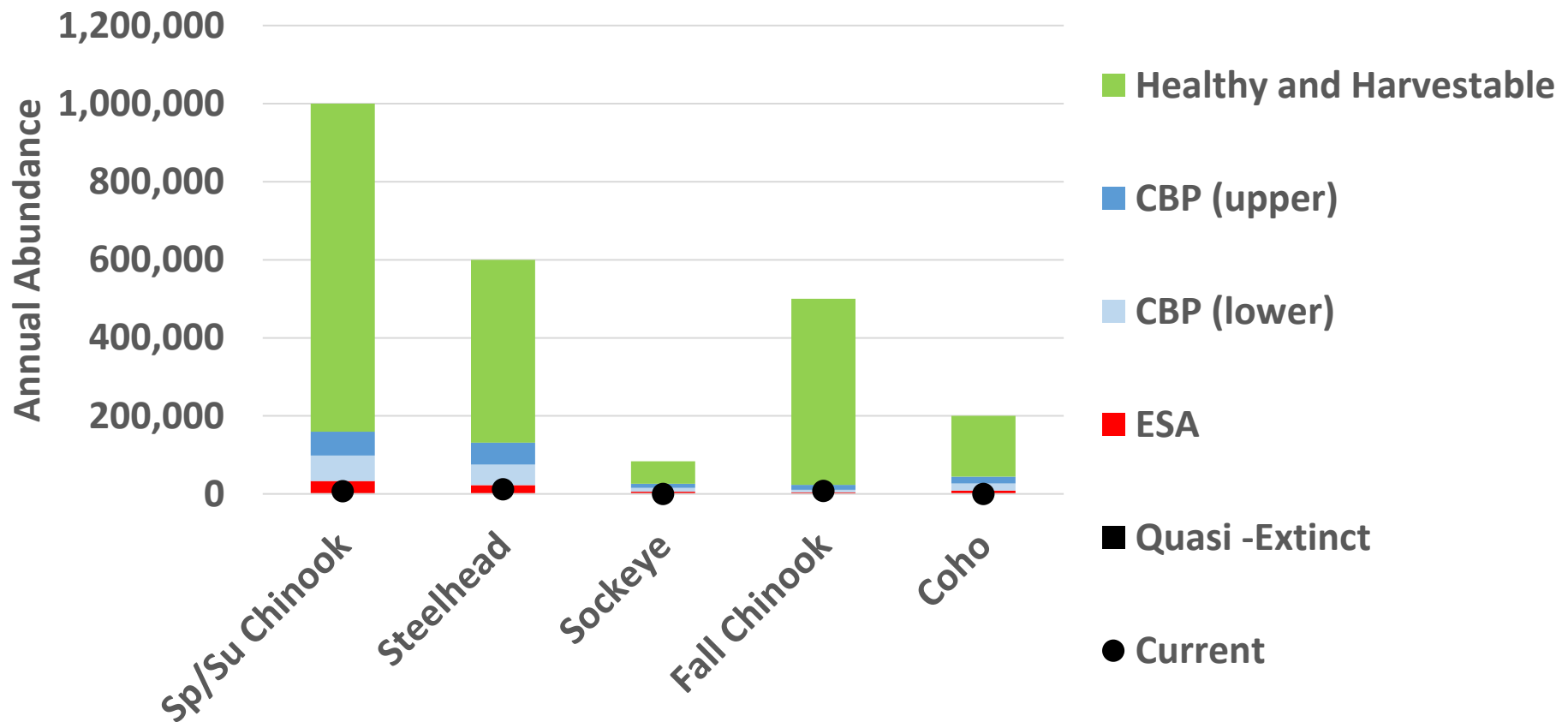


Over half the historical populations extirpated
None of the extant populations considered healthy and harvestable



Snake Basin Salmon and Steelhead Status

Relative to Historical Abundance and Columbia Basin Partnership



Columbia Basin Partnership high-range goals 5 – 31% of historical
All but one stock below low-range goals
Fall Chinook above low-range, but below mid-range goals

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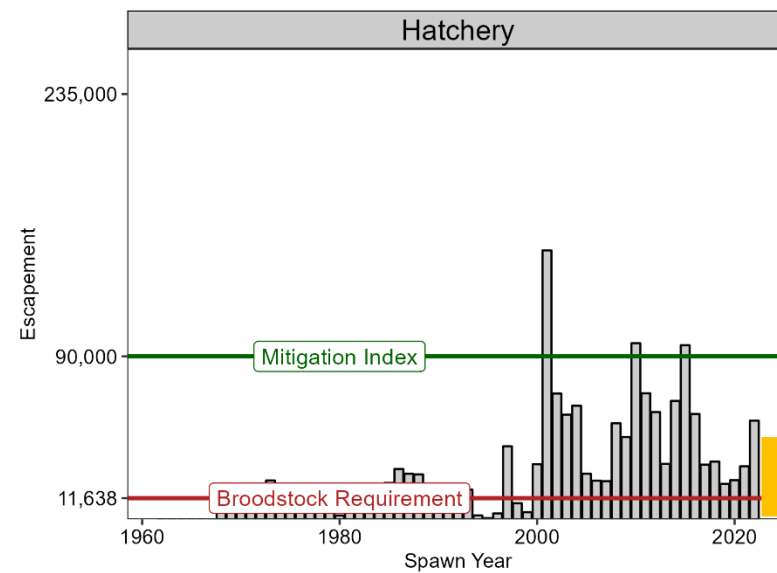
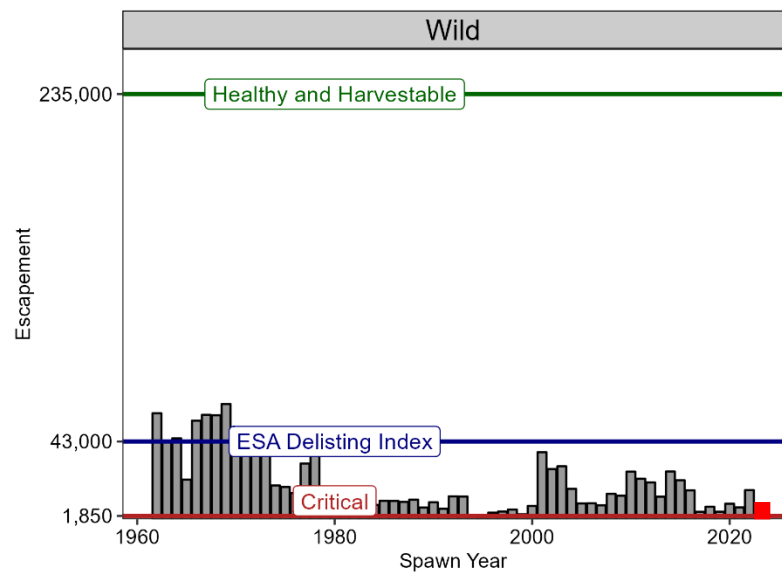
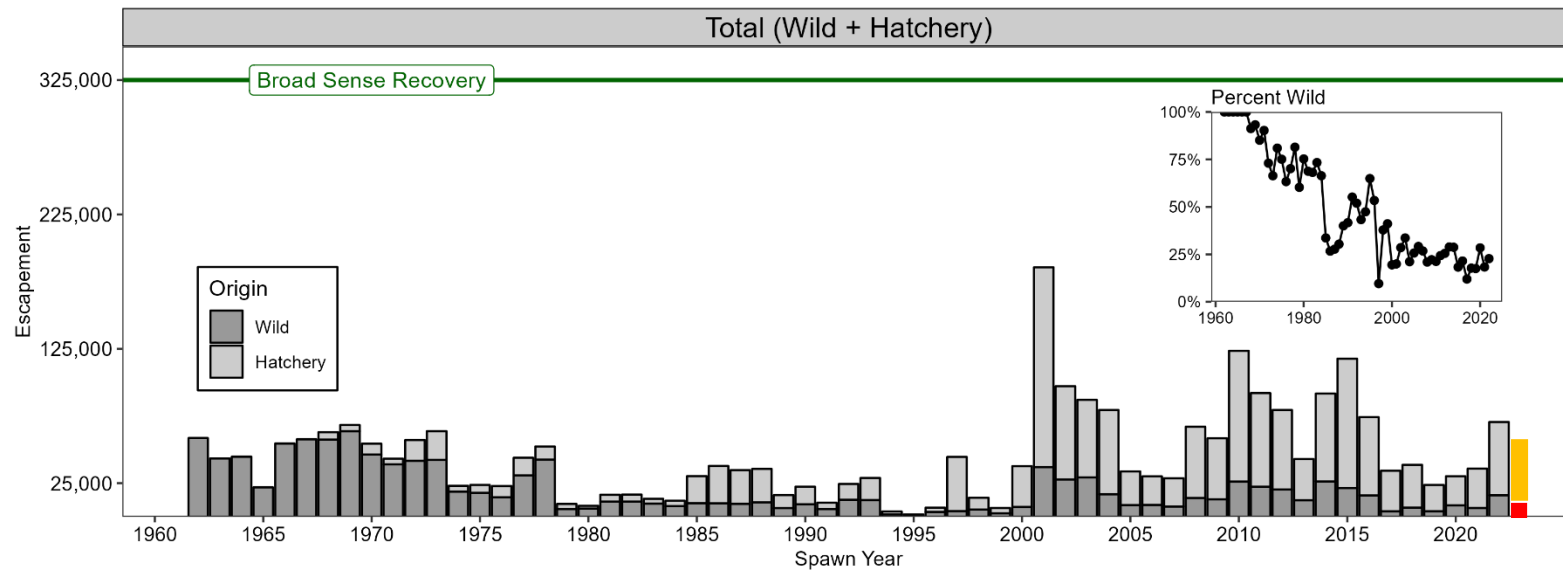




Snake River Spring – Summer Chinook Salmon

Snake River Stocks: Status Versus Management Goals
2023 Technical Management Team Year-end Review

Spring/summer Chinook Salmon at Lower Granite Dam



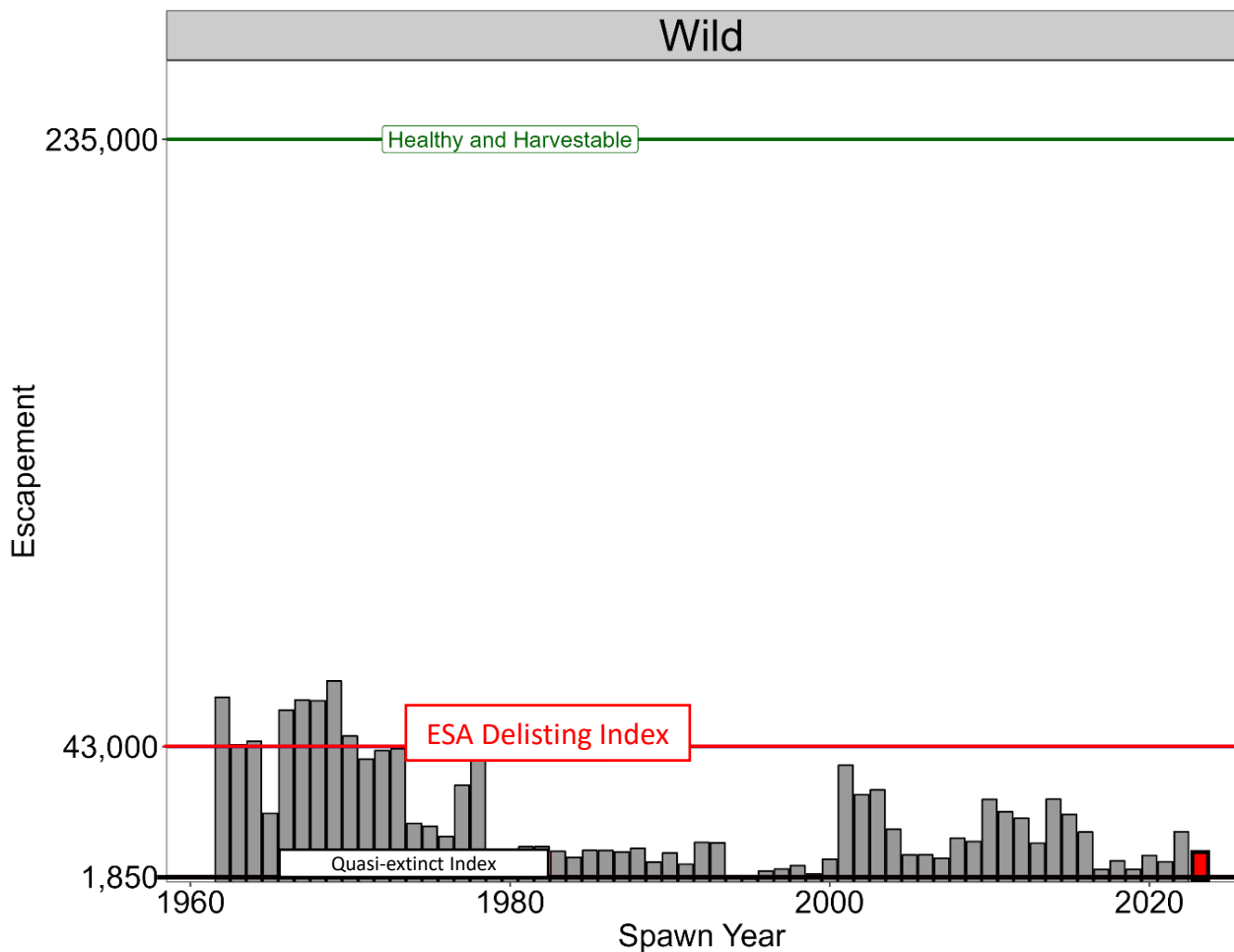
Data Source: Idaho Department of Fish and Game; Lawry et al. 2020



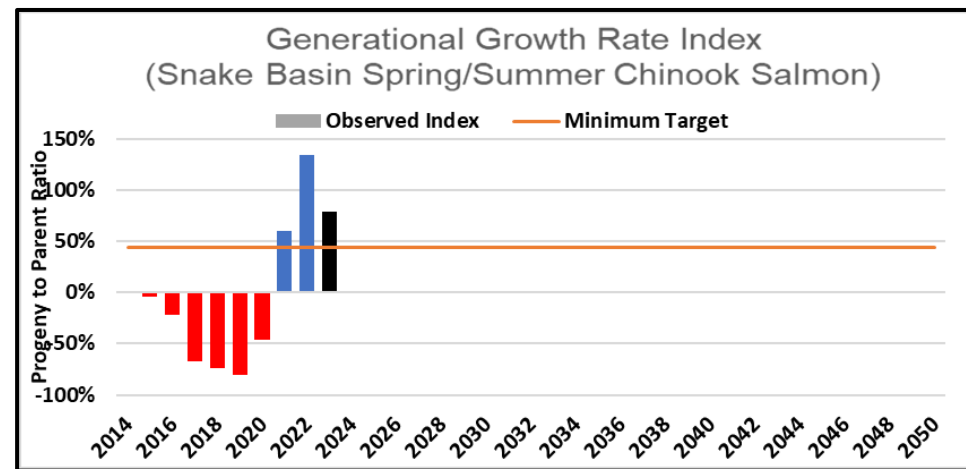


Snake River Wild Spring/Summer Chinook Salmon

Abundance at Lower Granite Dam



- 5-year (18-22) Average: 8,438
- 2022 Return: 16,048
- 2023 Preliminary Est: ~7,500



Modified from NOAA Rebuilding Report Question 6.

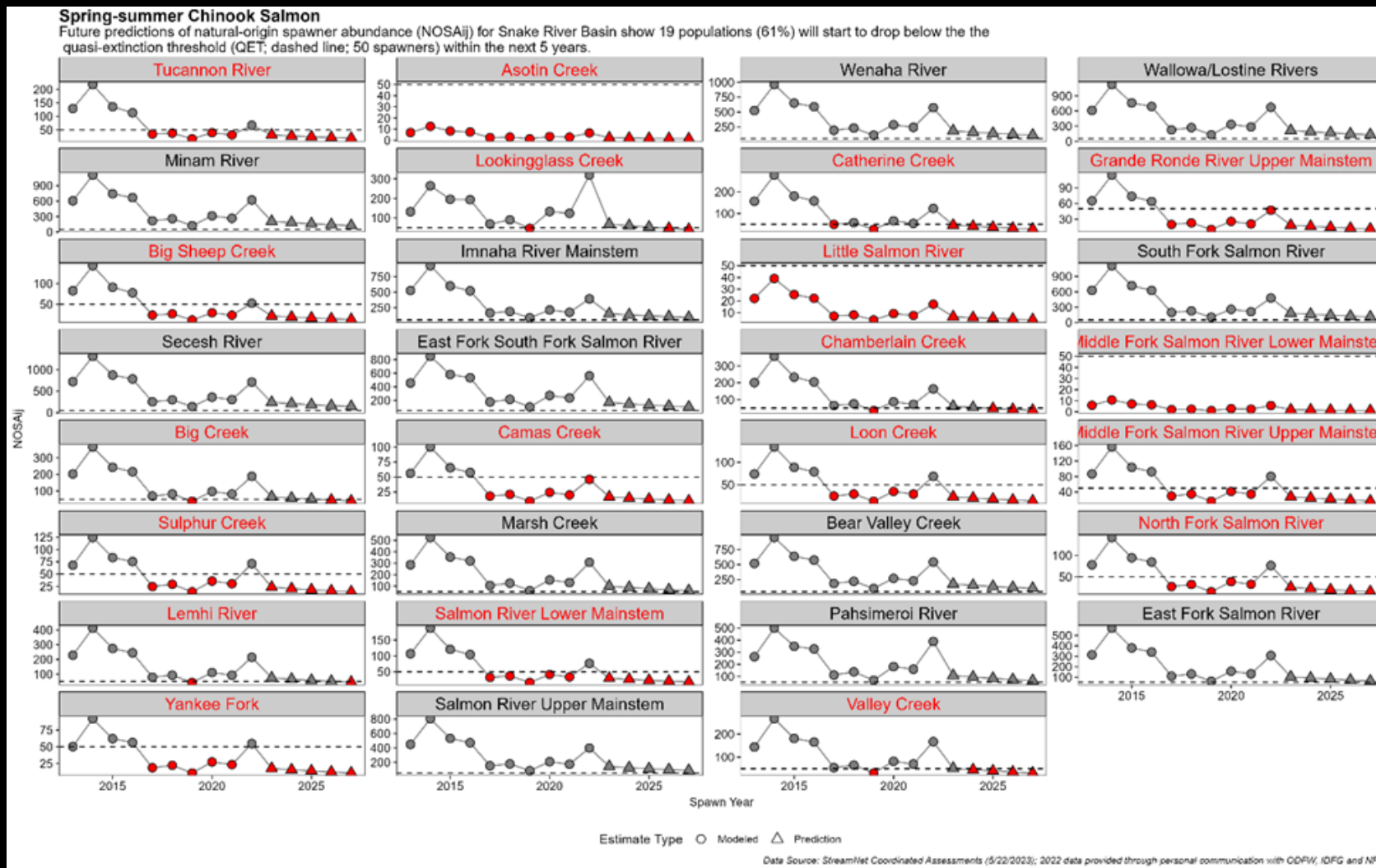
2023 consistent with high spill and good ocean expectations
2023 natural-origin abundance still below low-range goals





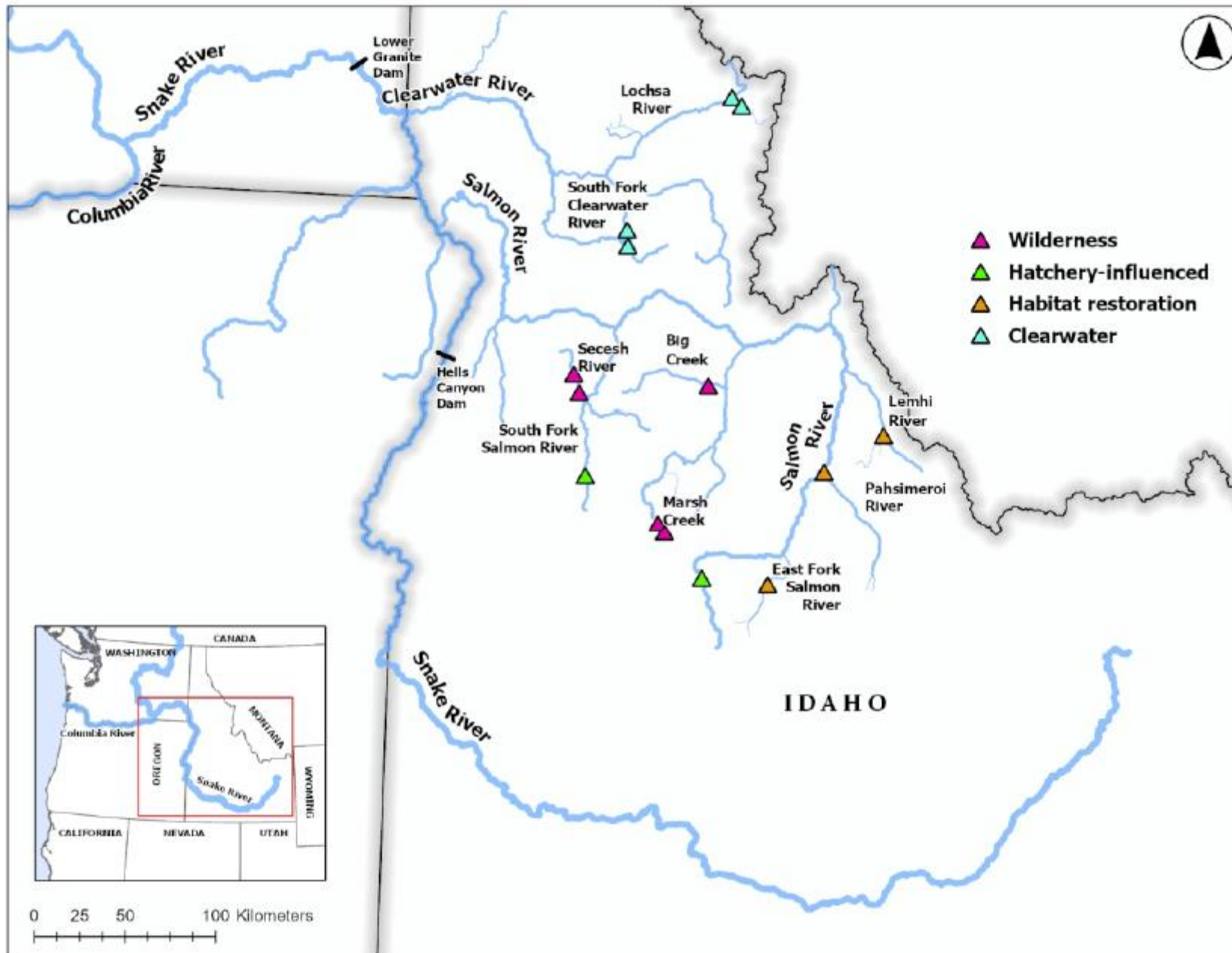
Quasi-Extinction Threshold (QET)

Spring/Summer Chinook Populations
Currently At or Below QET (50)

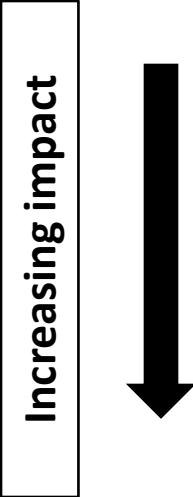


From 2018 to 2021, 13 (42%) populations with 50 or fewer spawners
5 additional pops below 50 spawners in at least one year since 2017



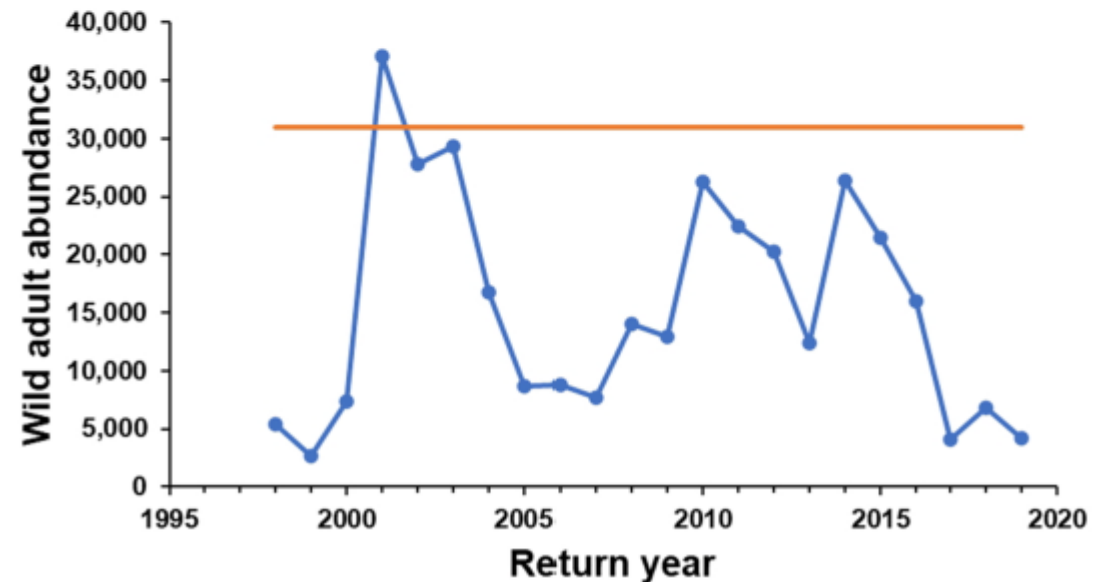
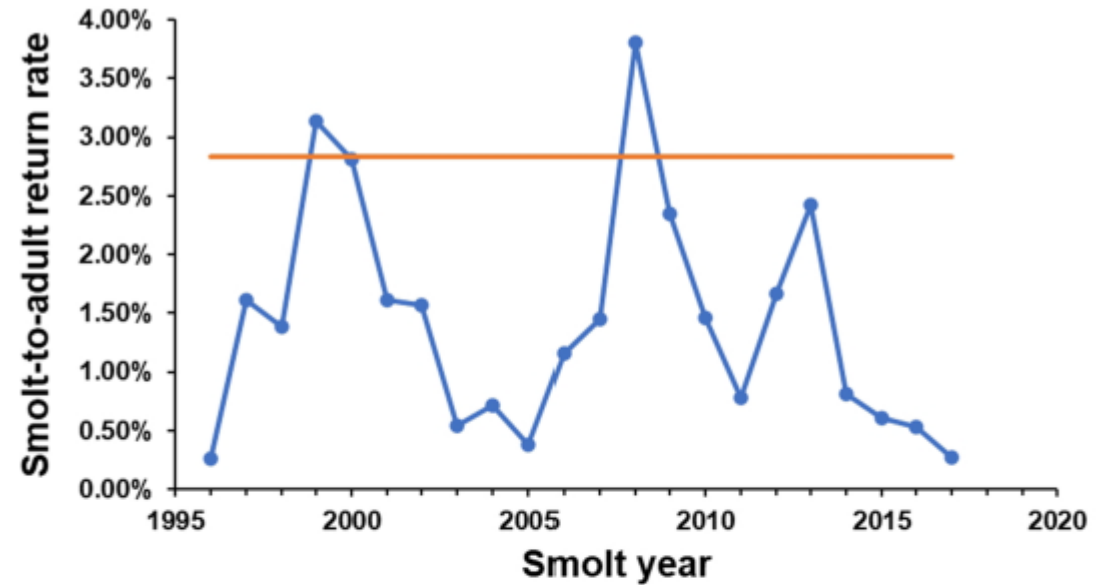


SARs required to achieve population specific goals



Population Group	Viable	Healthy & Harvestable
Wilderness (5)	0.9% 0.7%-1.3%	2.7% 1.6%-5.0%
Hatchery Influenced (2)	1.9% 1.8%-1.9%	8.3% 6.4%-10.2%
Habitat Restoration (3)	4.3% 3.2%-5.1%	17.2% 12.9%-20.7%
Clearwater (4)	10.9% 4.0%-22.2%	47.8% 15.1%-100.1%
Aggregate (2)	2.8% 2.5%-3.1%	12.4% 11.1%-13.8%

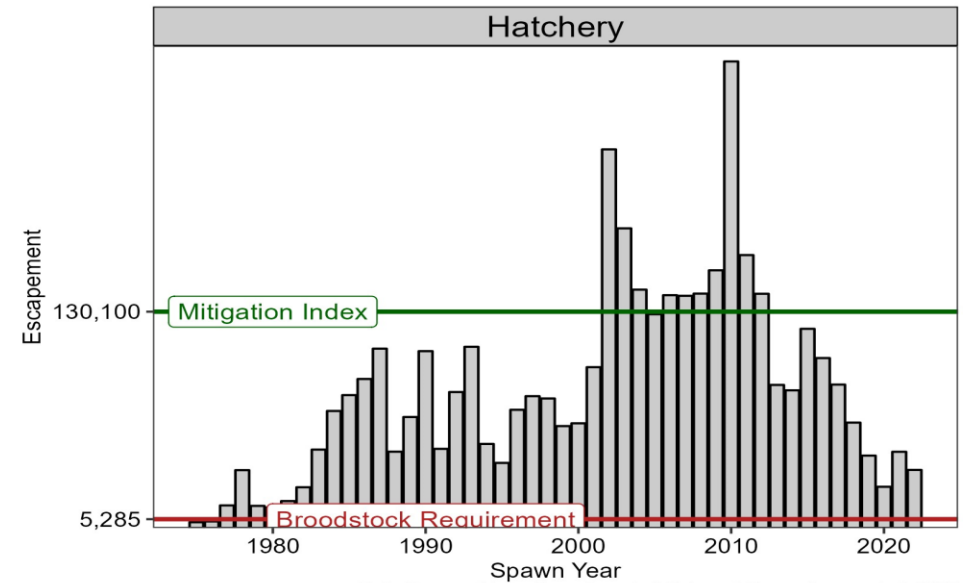
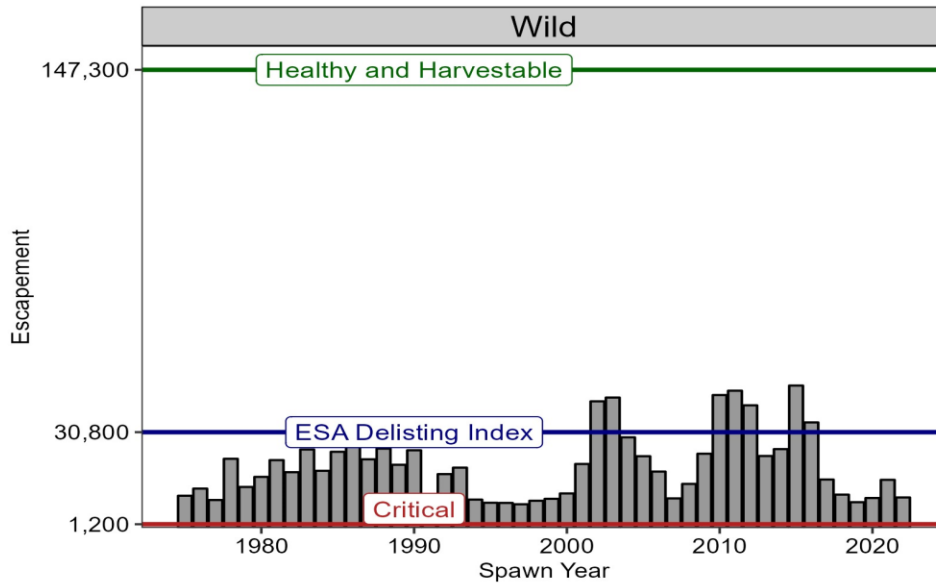
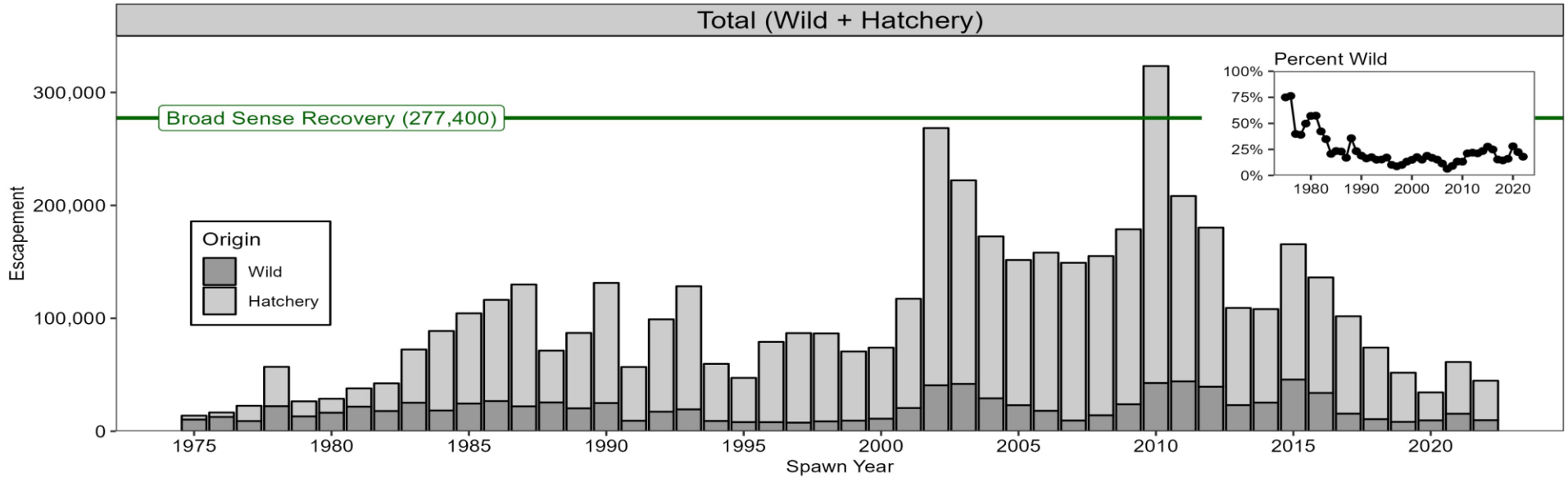
Observed SAR (top) and adult Chinook abundance at Lower Granite Dam





Snake River Steelhead

Summer Steelhead at Lower Granite Dam



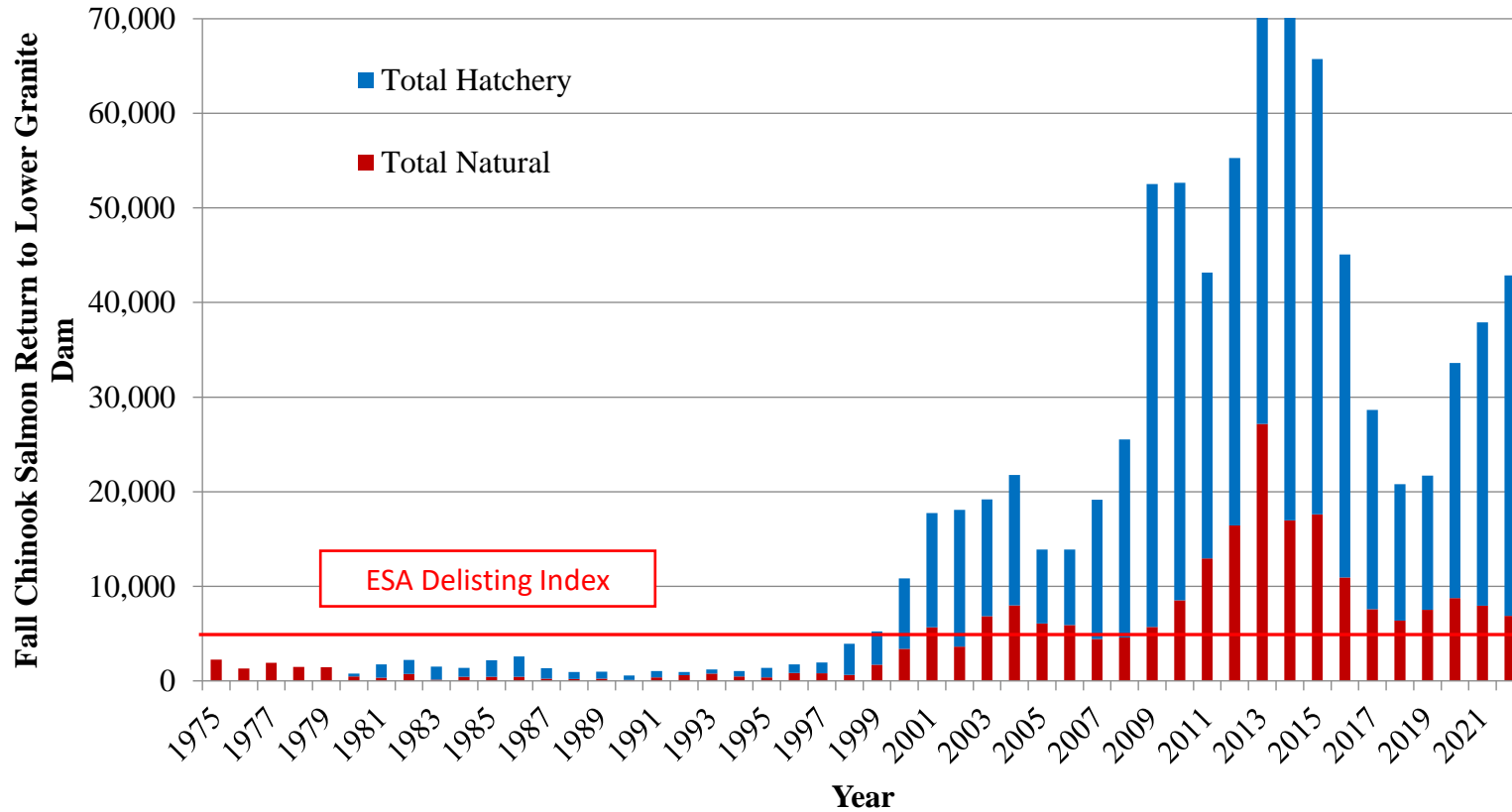
Data Source: Idaho Department of Fish and Game; Lawry et al. 2020





Snake River Fall Chinook Chinook Salmon

Abundance at Lower Granite Dam



10-year (13-22) Average

9,840 natural

2022 Return

6,222 natural

32,879 hatchery

2023 Return

~9,000 natural

TBD hatchery

Natural-origin abundance above ESA delisting criteria of 4,200
Non-selective ocean and Zone 1 -6 harvest rate is ~50%



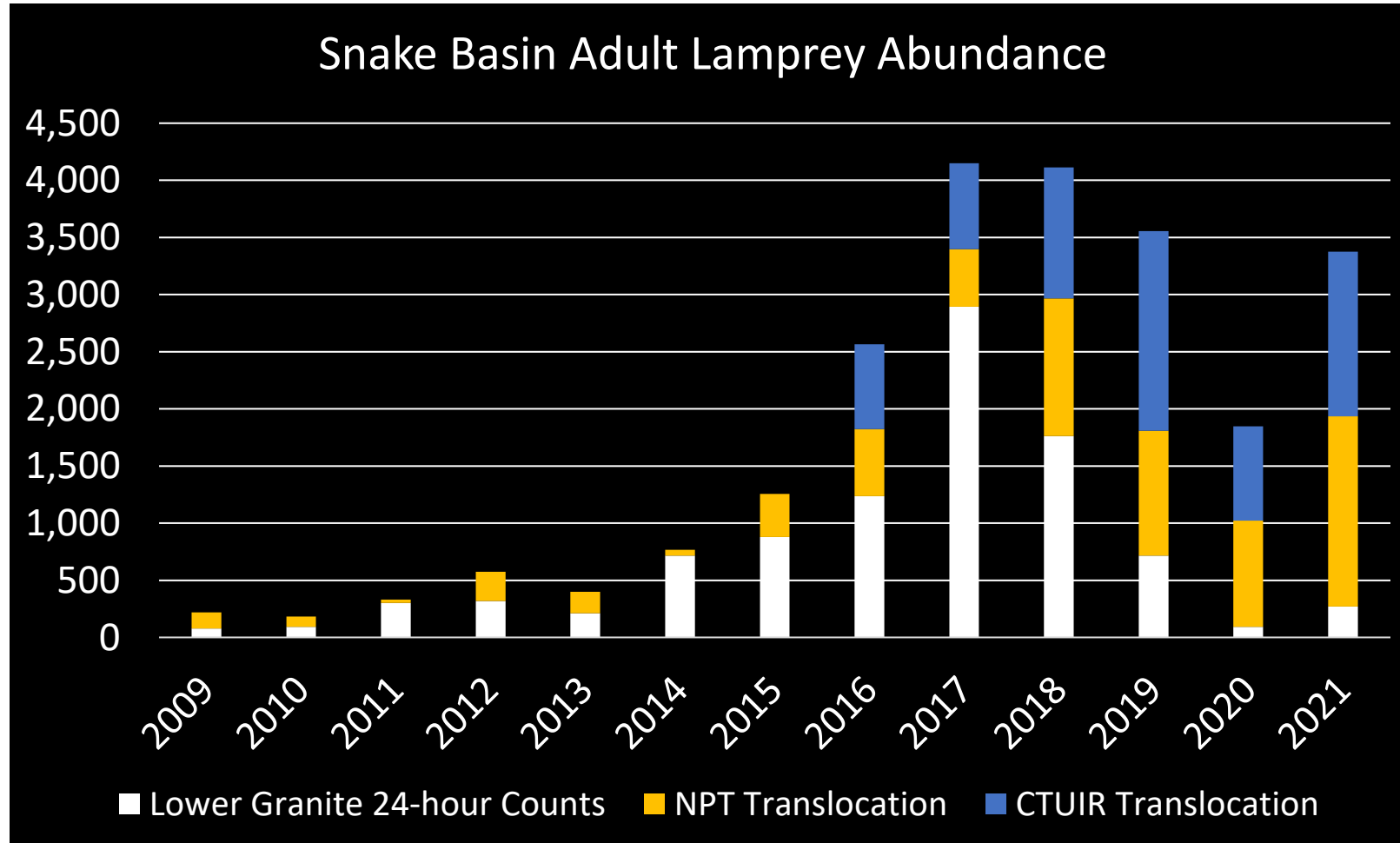


Photos by Mary Edwards (www.maryedwardsphotography.com)

Questions?

Lamprey

Data provided by NPT, CTUIR, and Corps of Engineers



Translocation releases 1.4 times more than volitional index