



Conservation and Consumption: Nez Perce Tribe Duty and Obligation



"Our fate and the fate of the fish are linked."

Dan Landeen and Allen Pinkham, *Salmon and His People*

Duty

“Fish provide us with both physical and spiritual sustenance. Other cultures seem unable to recognize how those two concepts go hand in hand. Instead, they see them as separate, traditional beliefs on one side, science on the other. For Indian people those concepts have never been separate.”

—Jamie Pinkham



Restoration and caring for fish is considered a tribal cultural ethic that has prehistoric ties.

Obligation



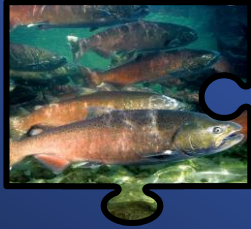
Arrival of the Nez Perce Indians to the Wallawalla Treaty
May 26 1855

“...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...”

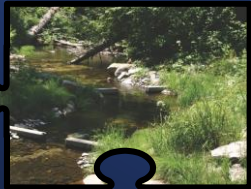
—1855 Treaty

Responsibility

Conservation



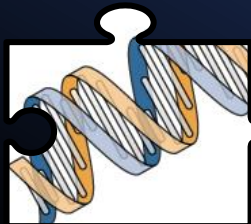
Abundance



Productivity



Distribution



Diversity

Consumption

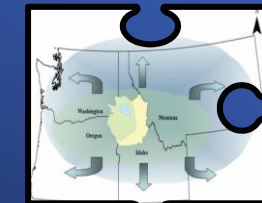
Treaty Harvest



Sustainability



All Areas

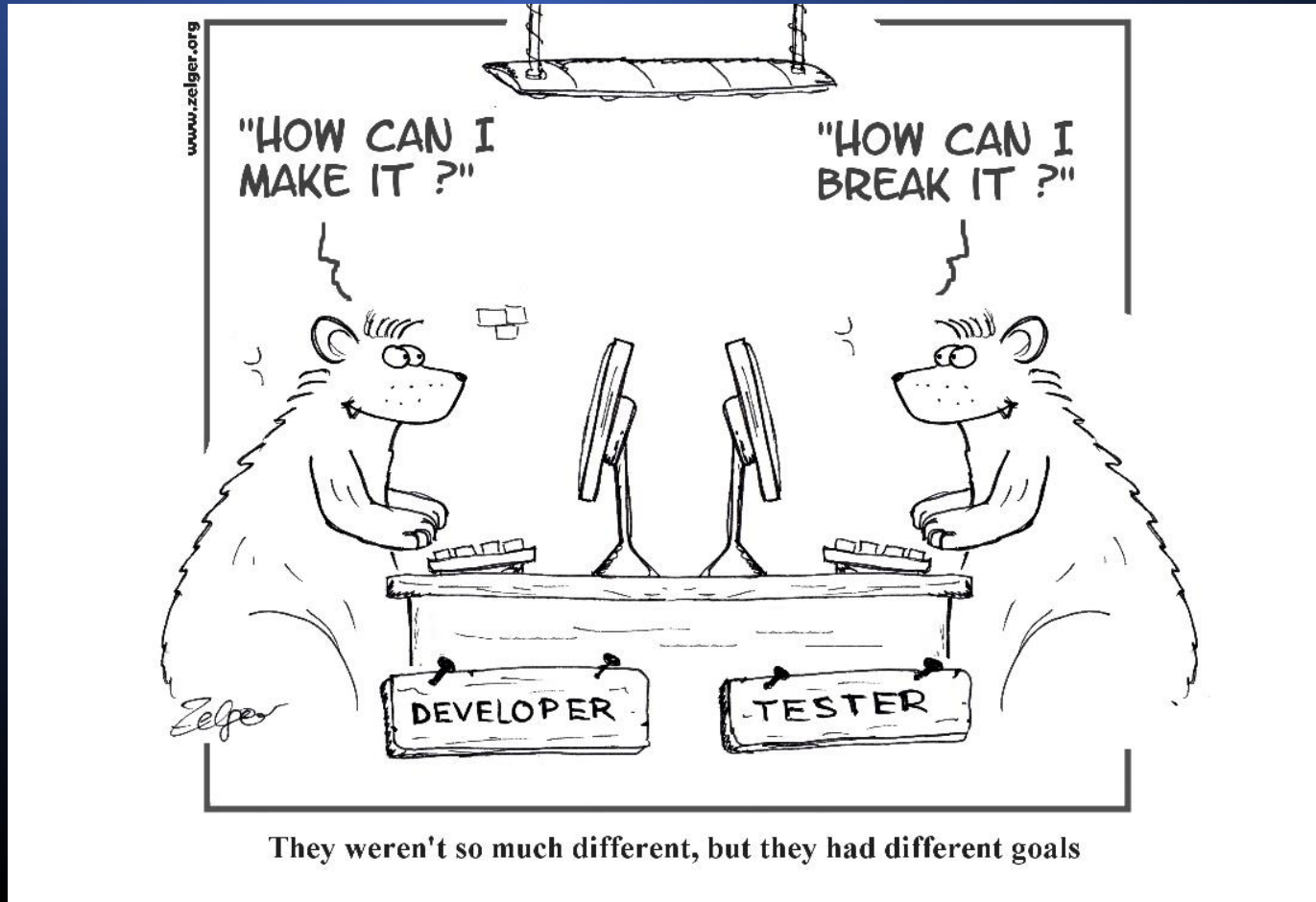


Traditional Gear



Reality #1

Different entities have different goals/priorities



They weren't so much different, but they had different goals

<http://simply-the-test.blogspot.com/2010/04/different-goals.html>

Divisive positions between pro-salmon entities confuses general public

Nez Perce Tribe Goals

- 1) Abundant and healthy salmon populations
- 2) Robust harvest opportunities throughout U&A area
- 3) Full ecosystem function



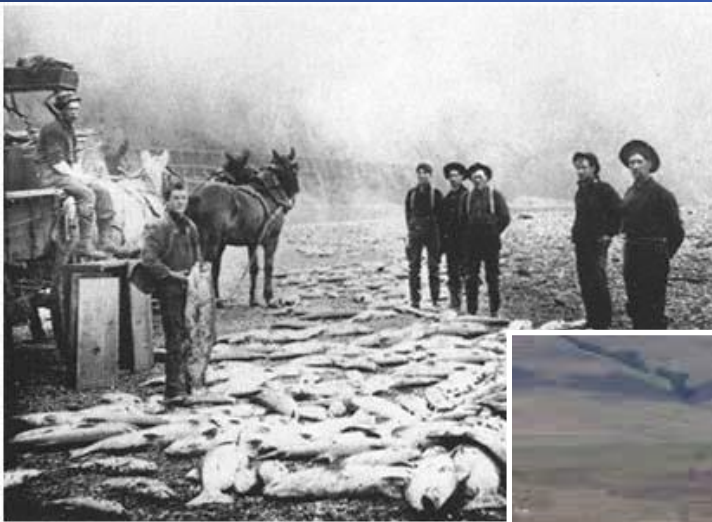
www.nptfisheries.org

Table 4. Designated stronghold populations, viable abundance thresholds, sustainable escapement objectives and ecological escapement objectives for populations of spring/summer Chinook in the Snake River Basin

Subbasin	Population	Designated Stronghold*	Viable Abundance Threshold	Sustainable Escapement Objective	Ecological Escapement Objective
Lower Snake R.	Tucannon River	X	750	3,400	22,000
	Asotin River		500	2,000	10,000
Grande Ronde River	Wenaha River	X	750	1,800	13,000
	Lostine/Wallowa River	X	1,000	4,800	36,000
	Minam River		750	1,900	14,000
	Catherine Creek		1,000	3,000	22,000
	Upper Grande Ronde River		1,000	4,100	31,000
	Lookingglass Creek		500	1,000	3,000
	Imnaha R.	Imnaha River	X	1,000	5,700
South Fork Salmon River	Little Salmon River	X	750	5,100	14,000
	South Fork Salmon Mainstem	X	2,000	8,600	24,000
	Secesh River	X	750	5,400	15,000
	East Fork Salmon/Johnson Creek	X	1,000	6,900	19,000
Middle Fork Salmon River	Chamberlain Creek		750	3,900	11,000
	Lower Mainstem Mid-Fork		500	2,100	6,000
	Big Creek	X	1,000	6,900	19,000
	Camas Creek		500	3,000	8,000
	Loon Creek		500	3,200	9,000
	Upper Mainstem Mid-Fork		750	6,100	17,000
	Sulphur Creek		500	1,400	4,000
	Bear Valley		X	750	5,700

Reality #2

Pacific Northwest aquatic ecosystems have been intentionally and unintentionally altered by humans



Reality #3

Mitigation measures implemented (legally promised) to replace accepted/anticipated lost production

Mitigate = 1) To make an offense or crime less serious or more excusable; and 2) To make something less harsh, severe or violent.

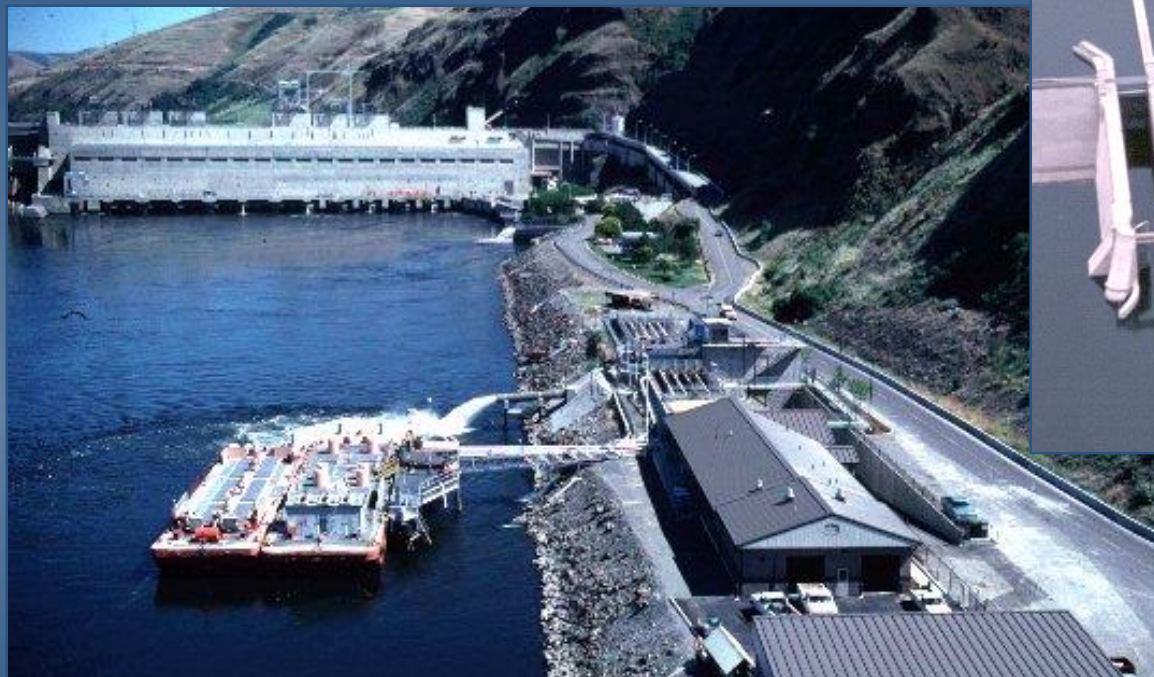
Common misconception:

We have low productivity because we have hatcheries....

We have hatcheries because of low productivity

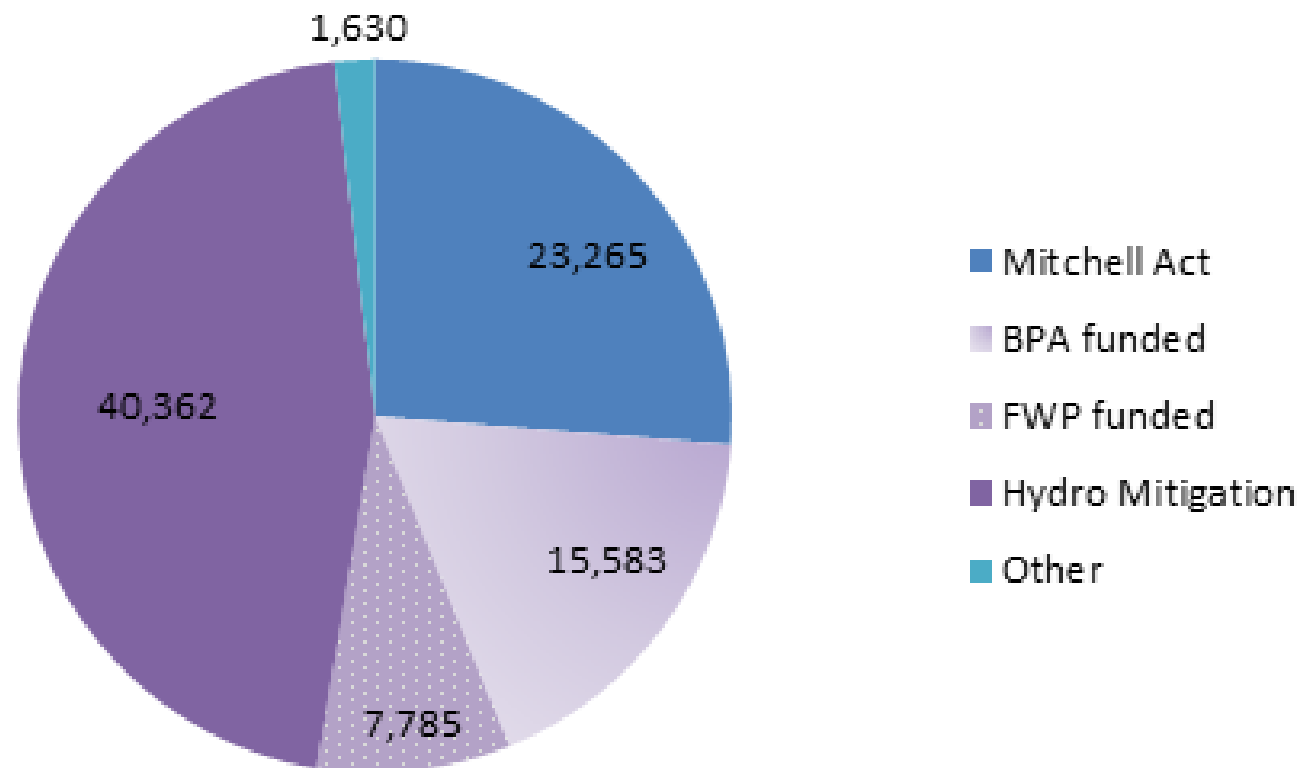


The hatchery programs in the Columbia Basin are producing fish to mitigate for the development and operation of the hydrosystem. As long as the dams are in place there is a legal obligation to provide fish.



Congressionally mandated mitigation obligations associated with the FCRPS are substantial and are not supplanted by the need to comply with the Endangered Species Act

Salmon and steelhead production (in thousands) above Bonneville Dam by funding authorization



Reality #4

Hatchery program implementation has associated benefits and risks

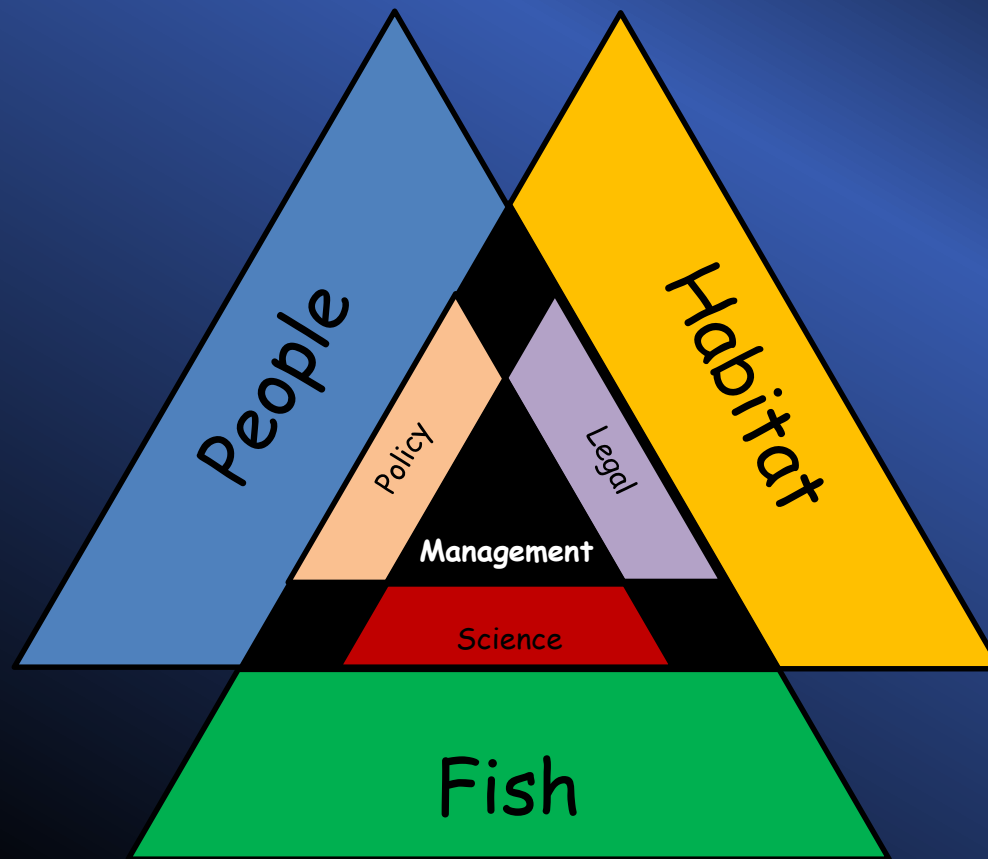
- + Increased harvest
- Reduced productivity
- + Reestablished populations
- Altered life history expression
- + Expanded distribution
- Reduced genetic fitness



“Necessity is the mother of “taking chances”” Mark Twain 1835-1910

Reality #5

Fisheries management requires balancing many perspectives



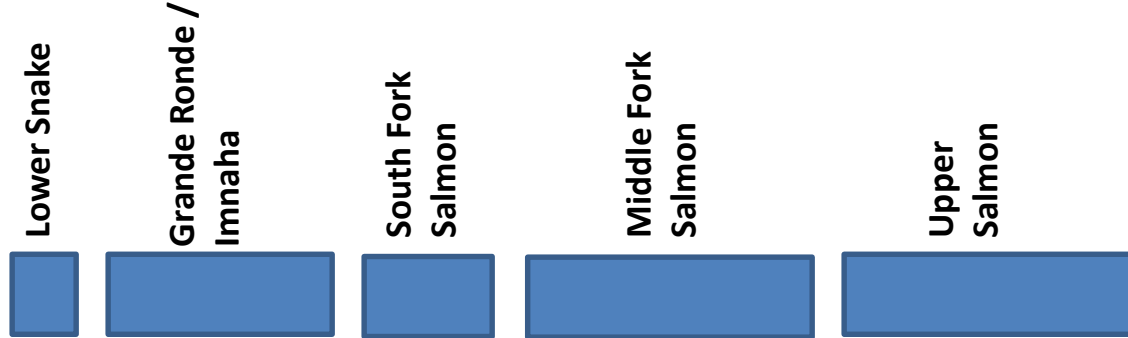
Managing Reality Action #1: Maintain some hatchery-free populations

Snake River Spring/Summer Chinook Salmon

1 - ESU



5 - MPG



31 - populations



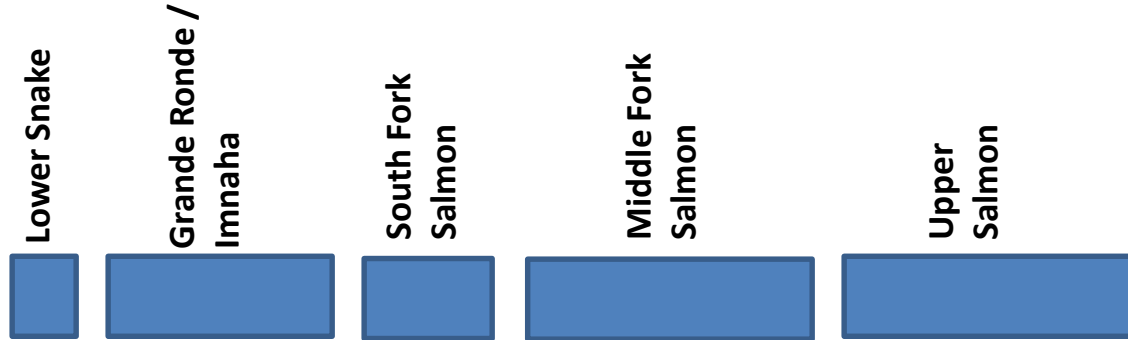
Managing Reality Action #1: Maintain some hatchery-free populations

Snake River Spring/Summer Chinook Salmon

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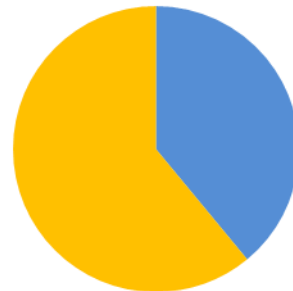


31 - populations



- = LSRCP and FWP
- = LSRCP
- = IPC
- = No Hatchery

■ 39% with hatchery program
■ 61% without hatchery program



Managing Reality Action #1: Maintain some hatchery-free populations

Snake River Spring/Summer Chinook Salmon

1 - ESU



Lower Snake

Grande Ronde /
Imnaha

South Fork
Salmon

Middle Fork
Salmon

Upper
Salmon

5 - MPG



31 - populations



Indicator Populations

**11 of 31 (35%) populations
occupy wilderness (pristine) habitat
and have no hatchery programs**

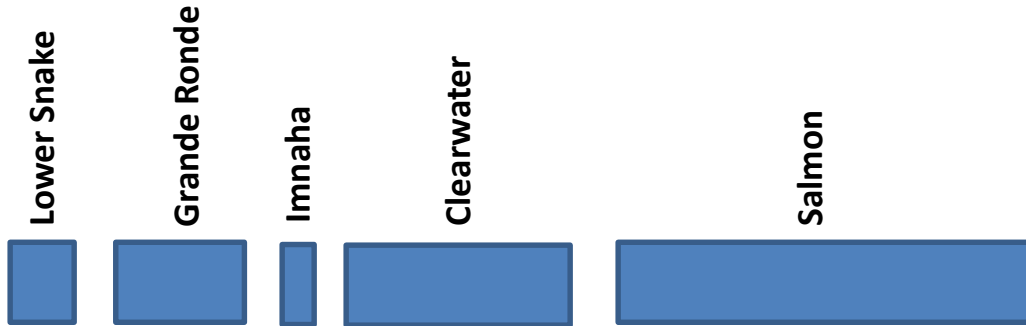
Managing Reality Action #1: Maintain some hatchery-free populations

Snake River Steelhead

1 - ESU



5 - MPG

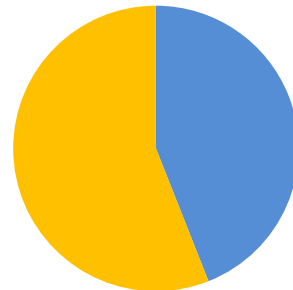


25 - populations



- = LSRCP and FWP
- = LSRCP
- = IPC
- = No Hatchery

■ 44% with hatchery program
■ 56% without hatchery program



Managing Reality Action #2: Abundance-based hatchery origin gene flow

Broodstock Management Sliding Scale Escapement to River



50

500

1000

Strict limits

- Less than 10% hatchery above weir
- 100% natural origin in broodstock
- Less than 25% natural taken for broodstock

Demographics Important

- No constraints on % hatchery in nature or % natural in broodstock.
- Keep up to 50% natural fish for broodstock.

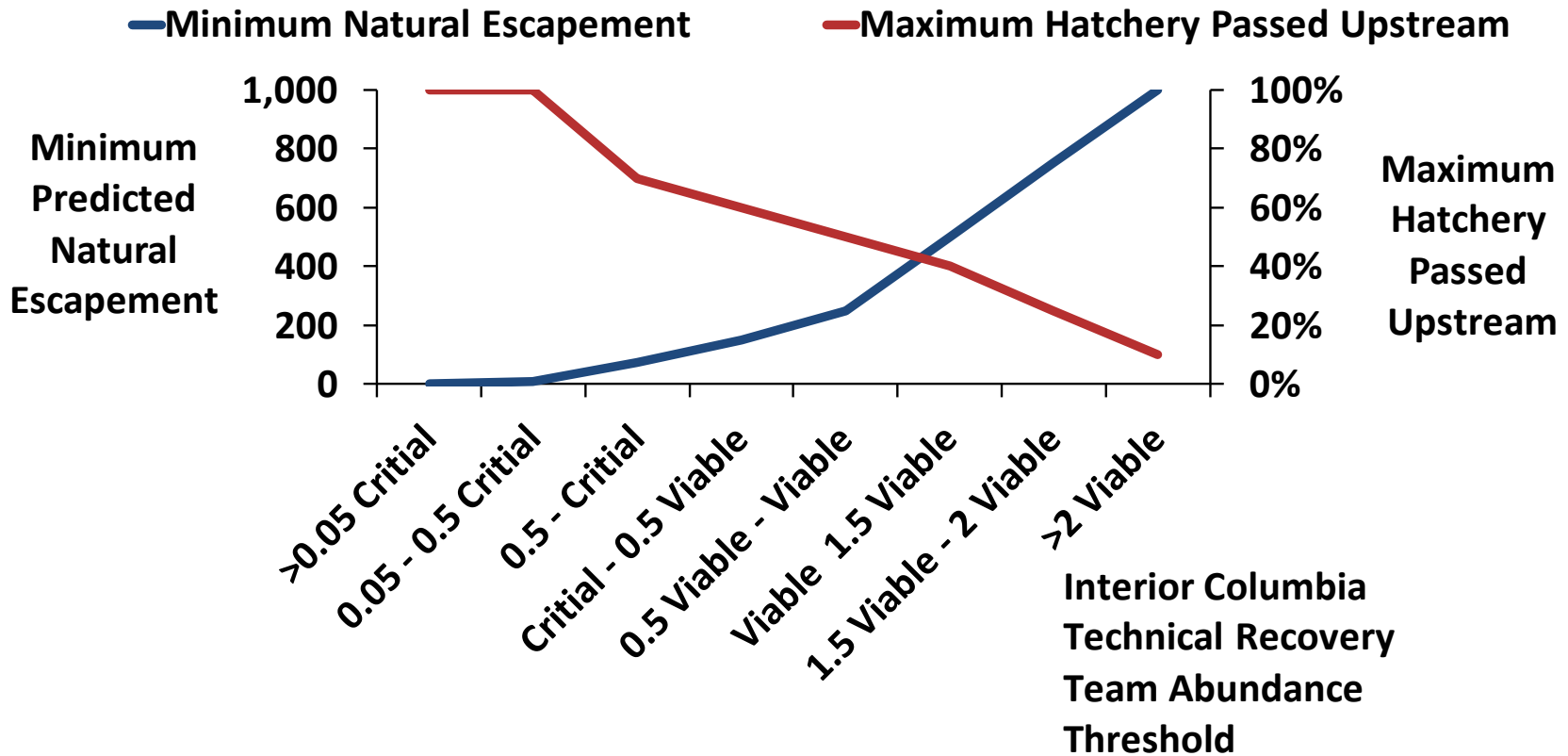
Genetic Conservation Important

- Limit % hatchery above weir to 50%
- Ensure minimum of 30% natural origin in broodstock
- Minimize of 30% natural taken for broodstock

- No broodstock taken
- Initiate captive broodstock program

Managing Reality Action #2: Abundance-based hatchery origin gene flow

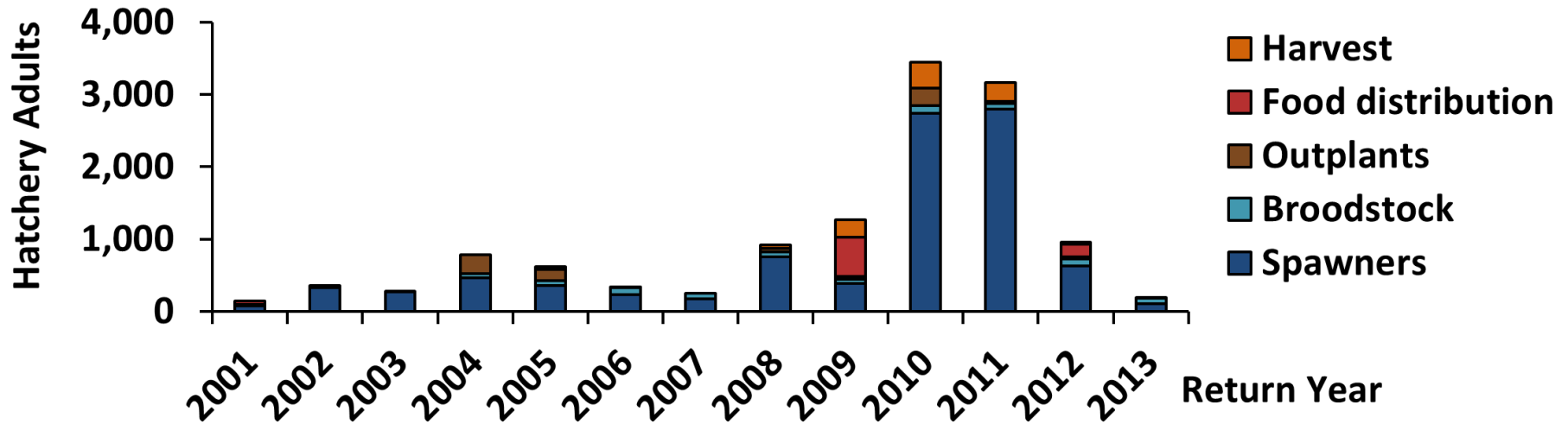
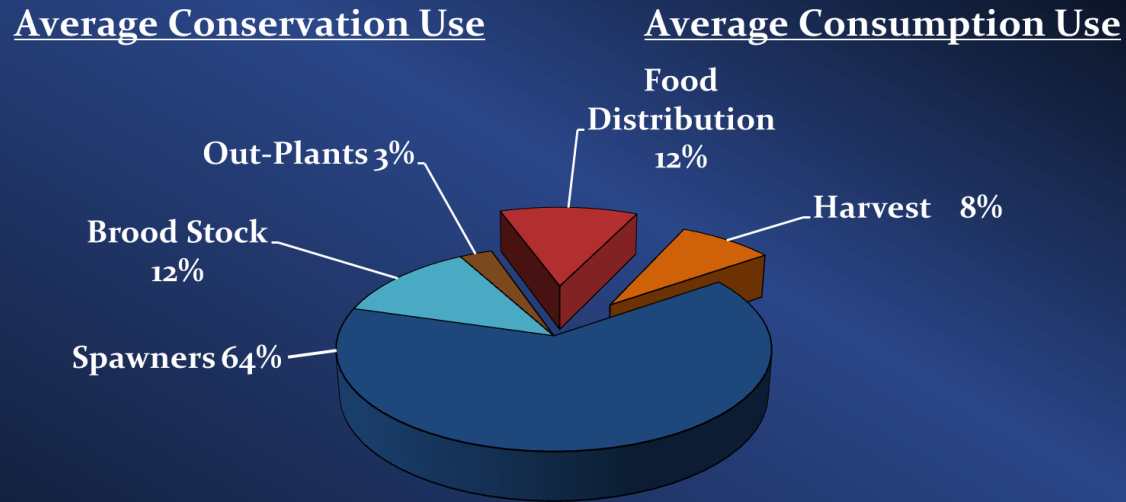
Broodstock Management Sliding Scale



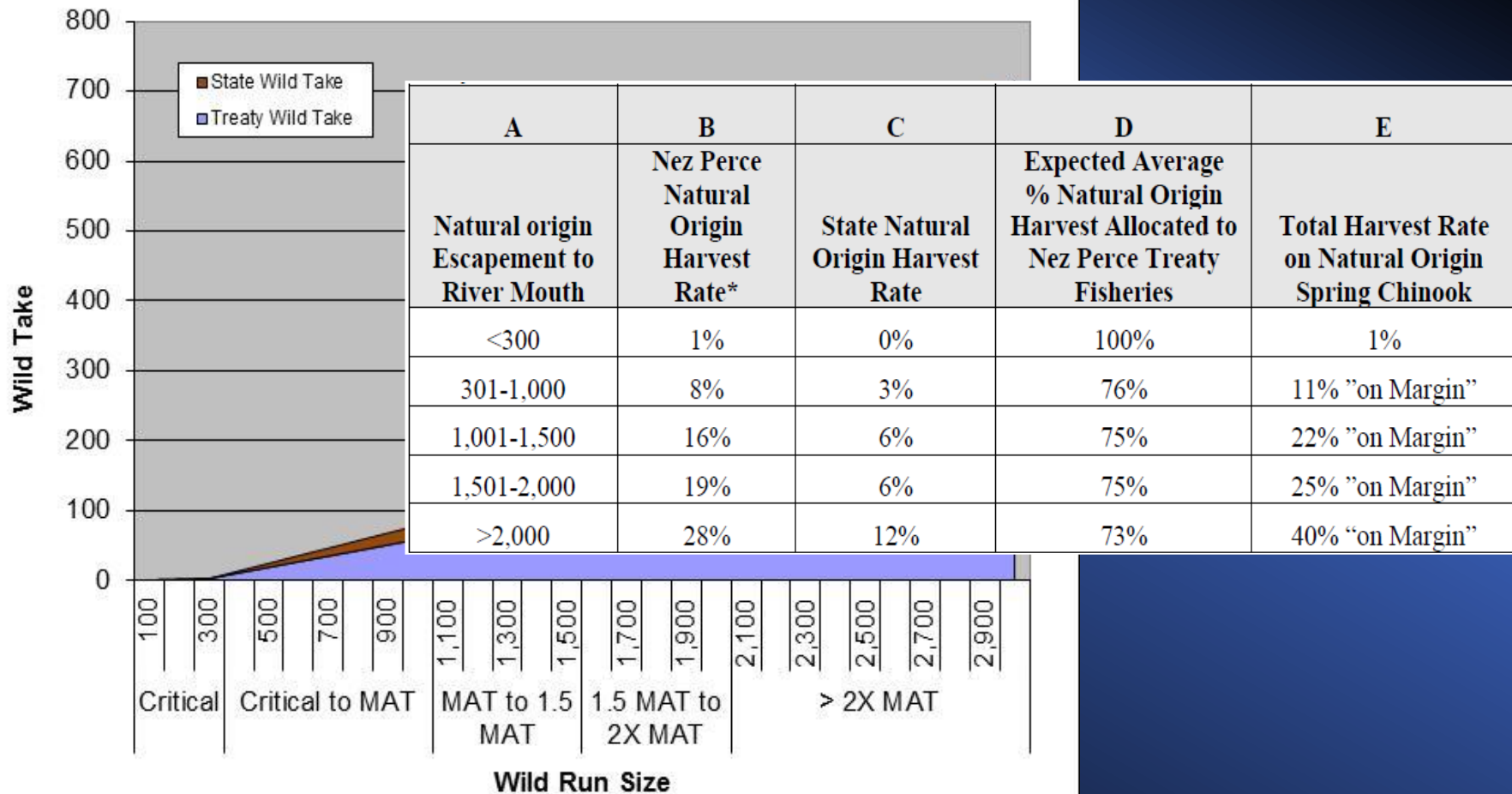
Managing Reality Action #2: Abundance-based hatchery origin gene flow

Adult Hatchery-origin Fish Disposition

Lostine River
Chinook Salmon
2009 - 2013

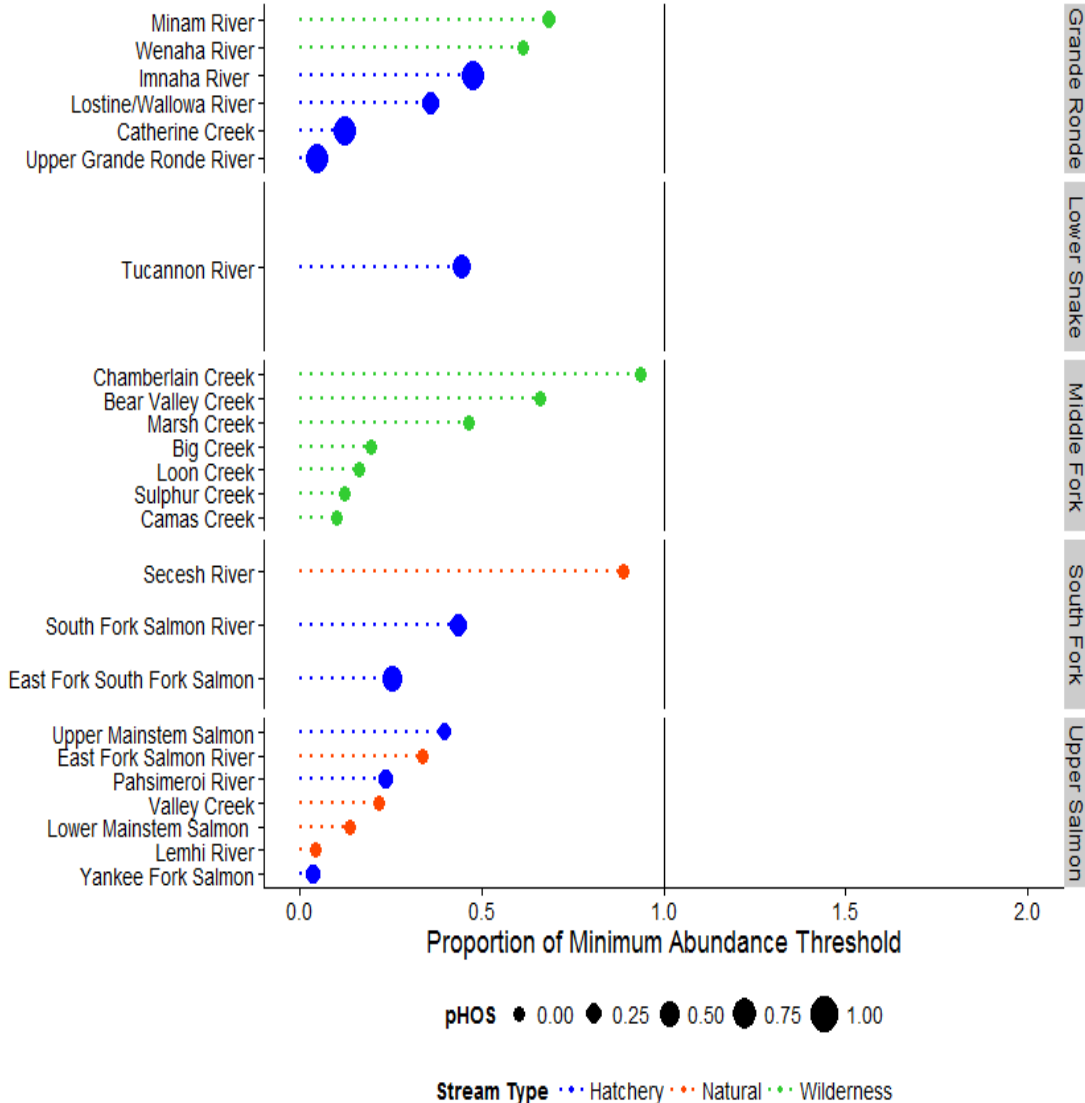


Managing Reality Action #3: Abundance-based harvest rates



Reality Check #1

Natural-origin Abundance With and Without Hatchery Programs

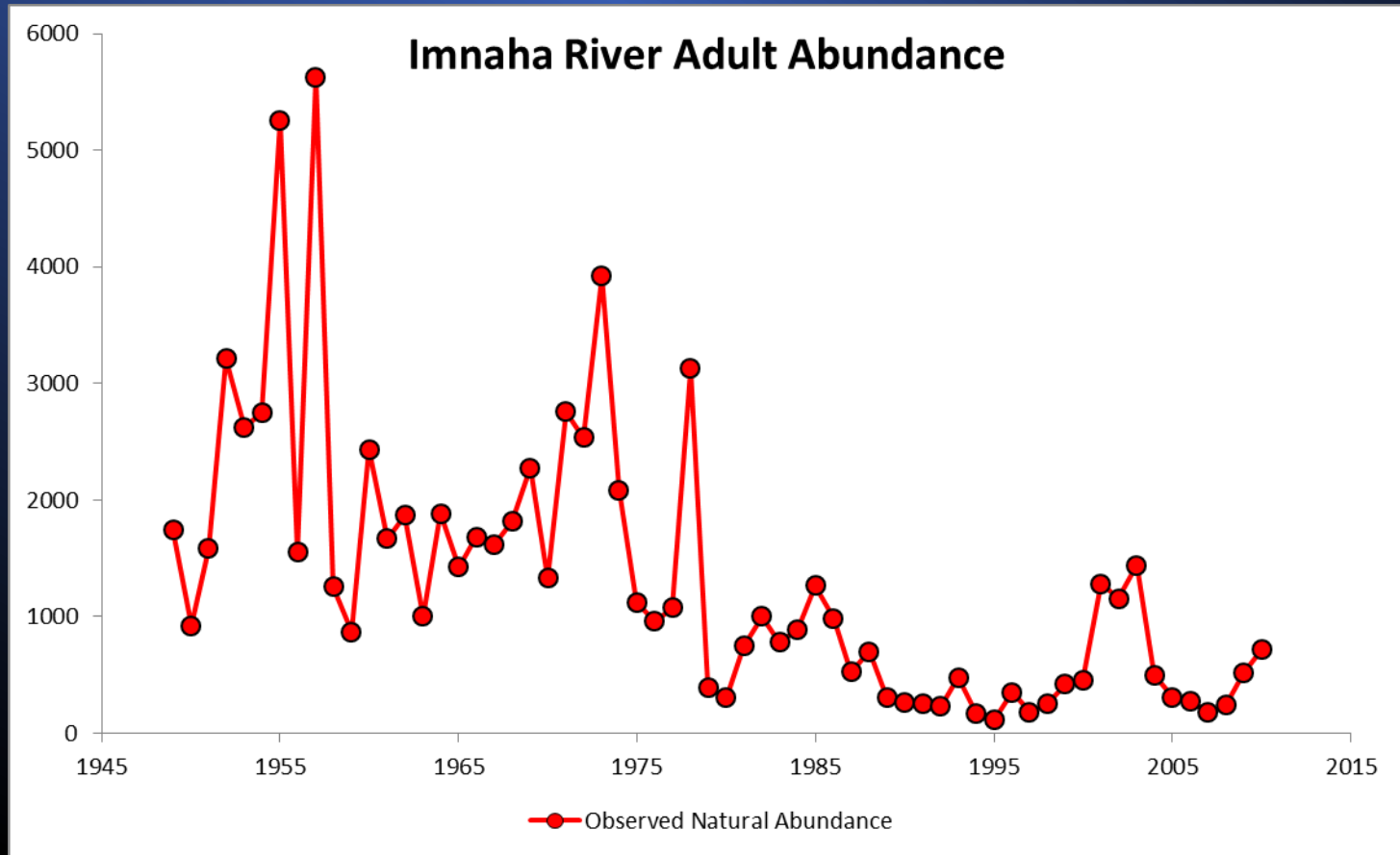


Population Abundance
Relative to Minimum
Abundance Threshold
(10 year geometric mean ~
2002-2011)

Abundance and Productivity
rated as Moderate to High
risk for all populations.

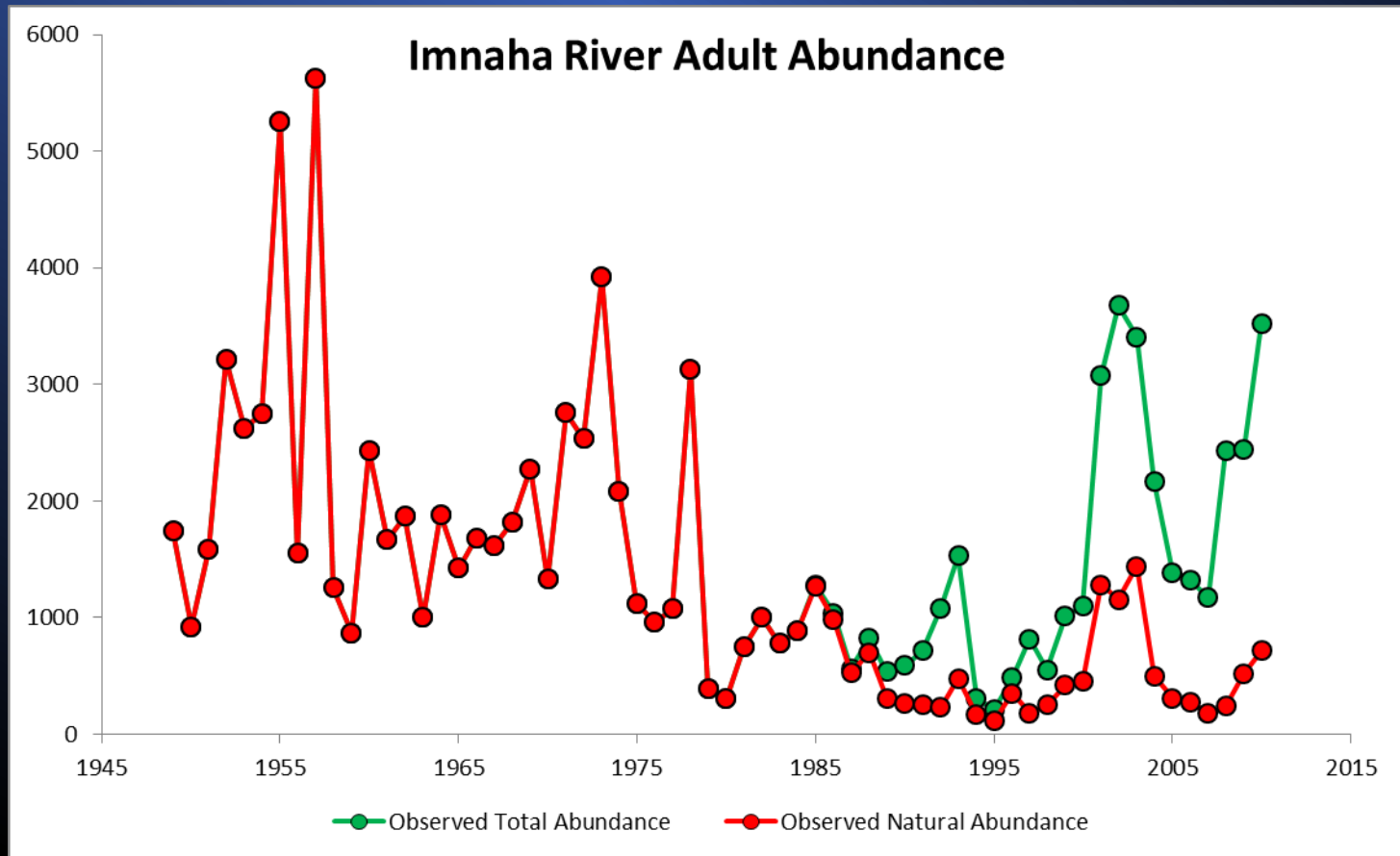
Reality Check #2

Harvest Opportunity with and without Supplementation



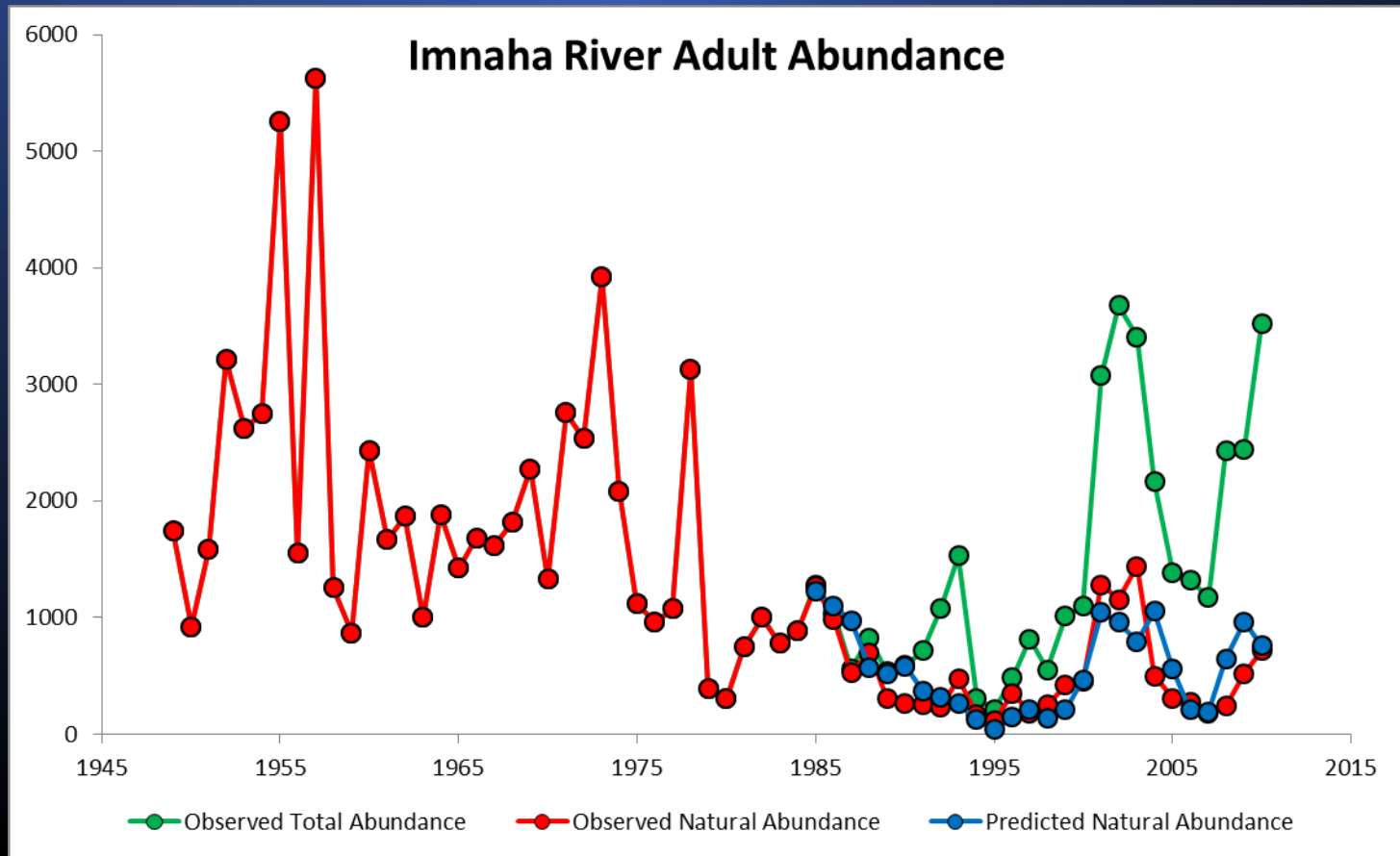
Reality Check #2

Harvest Opportunity with and without Supplementation



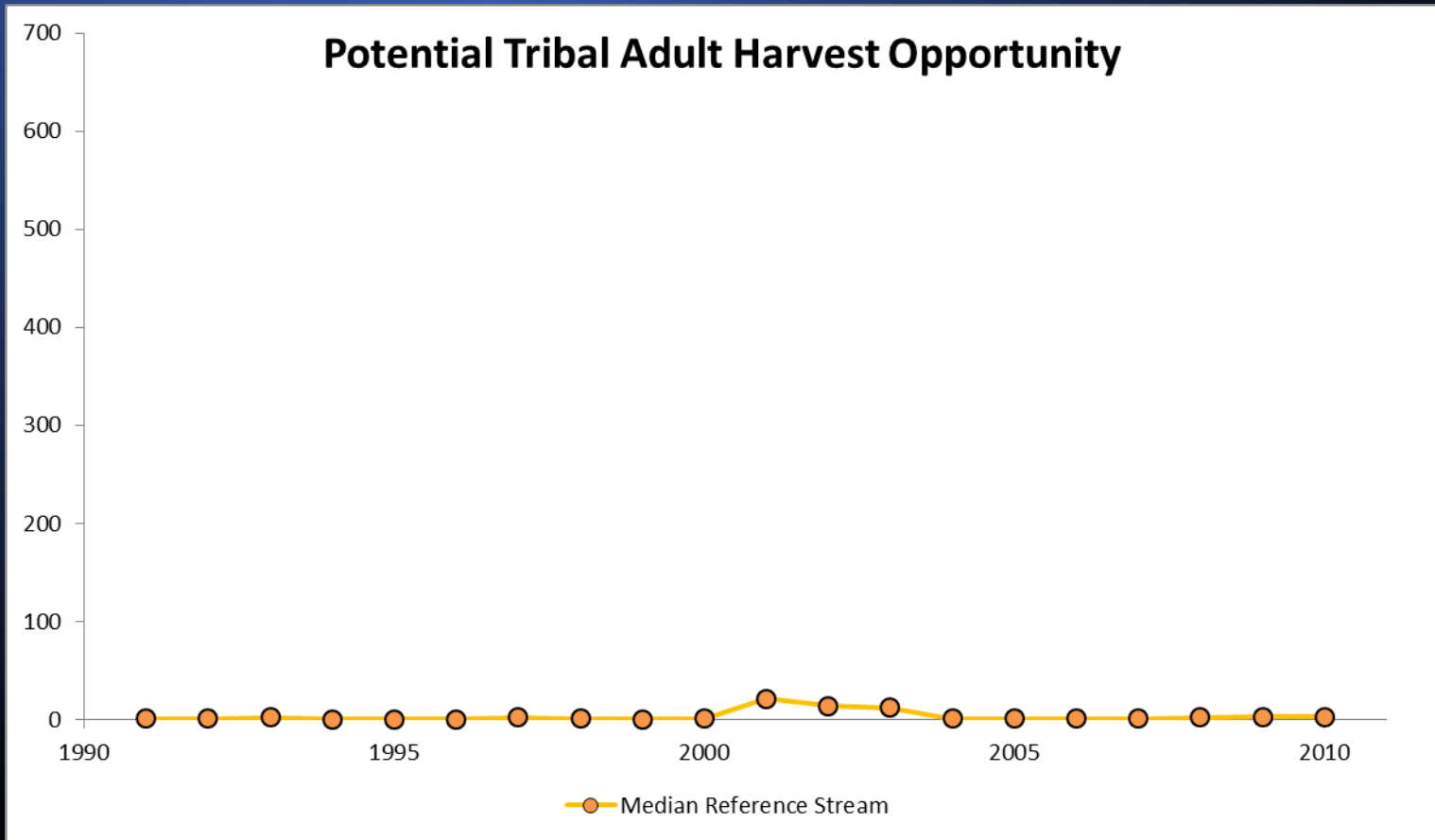
Reality Check #2

Harvest Opportunity with and without Supplementation



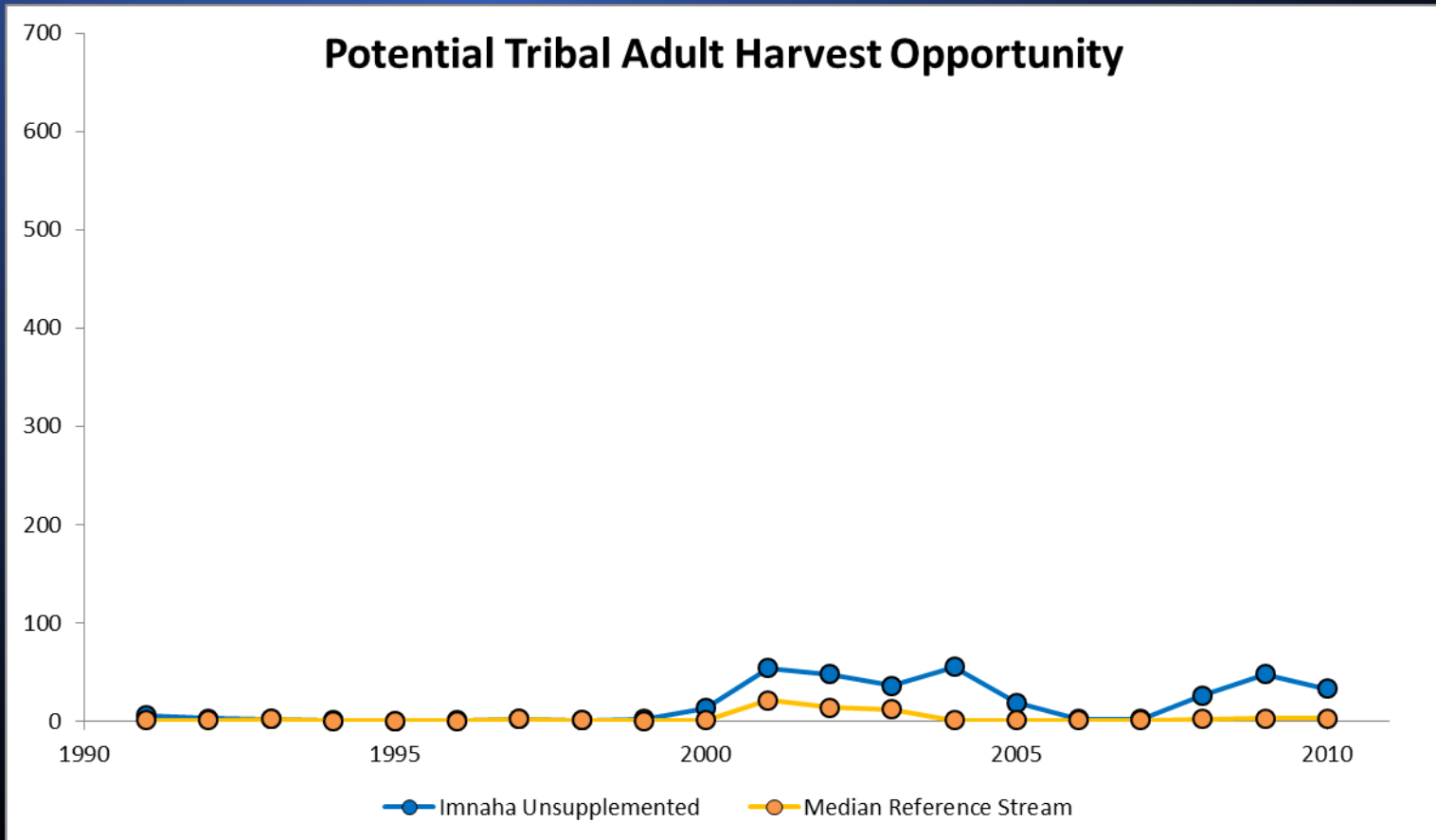
Reality Check #2

Harvest Opportunity with and without Supplementation



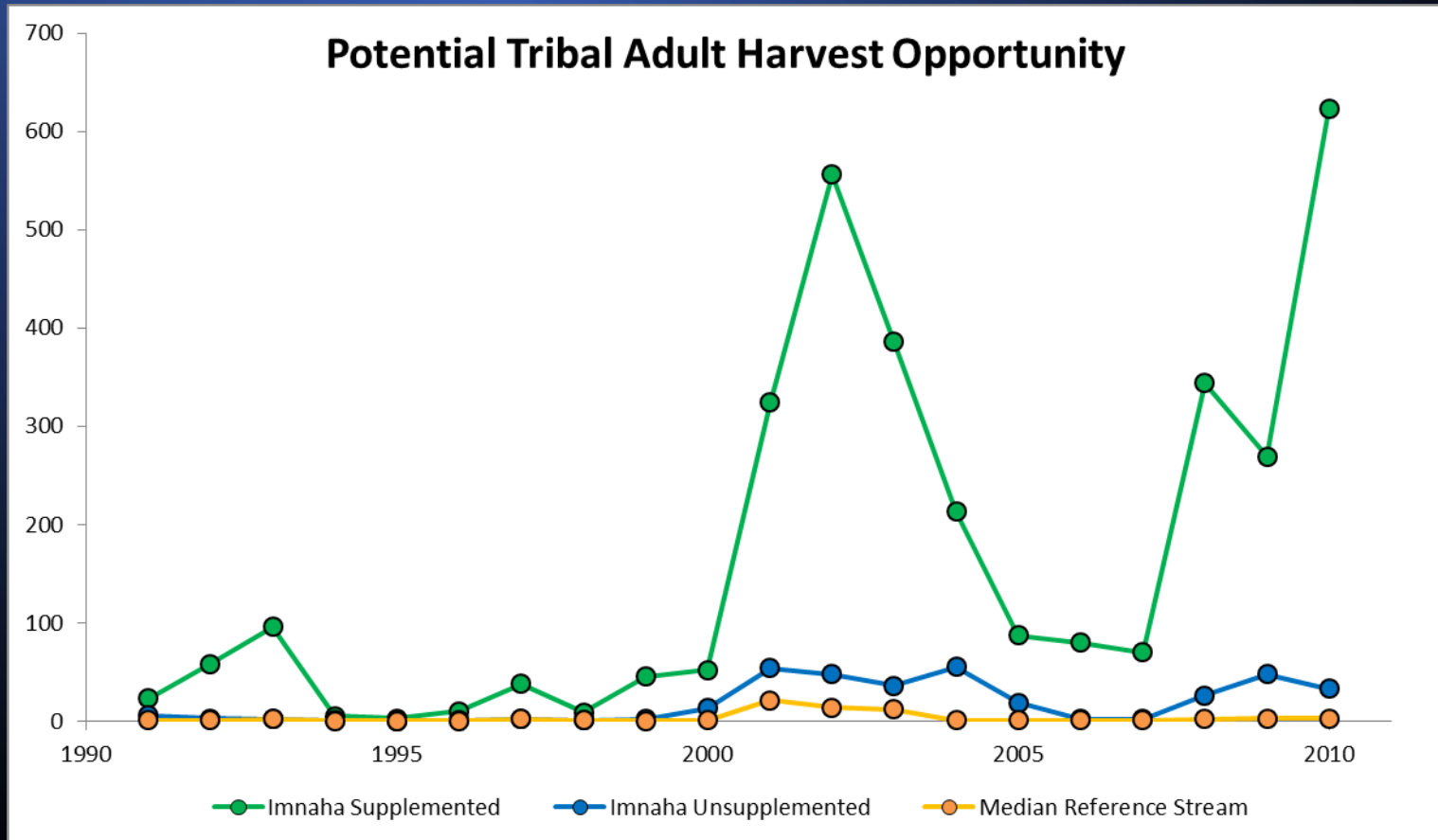
Reality Check #2

Harvest Opportunity with and without Supplementation



Reality Check #2

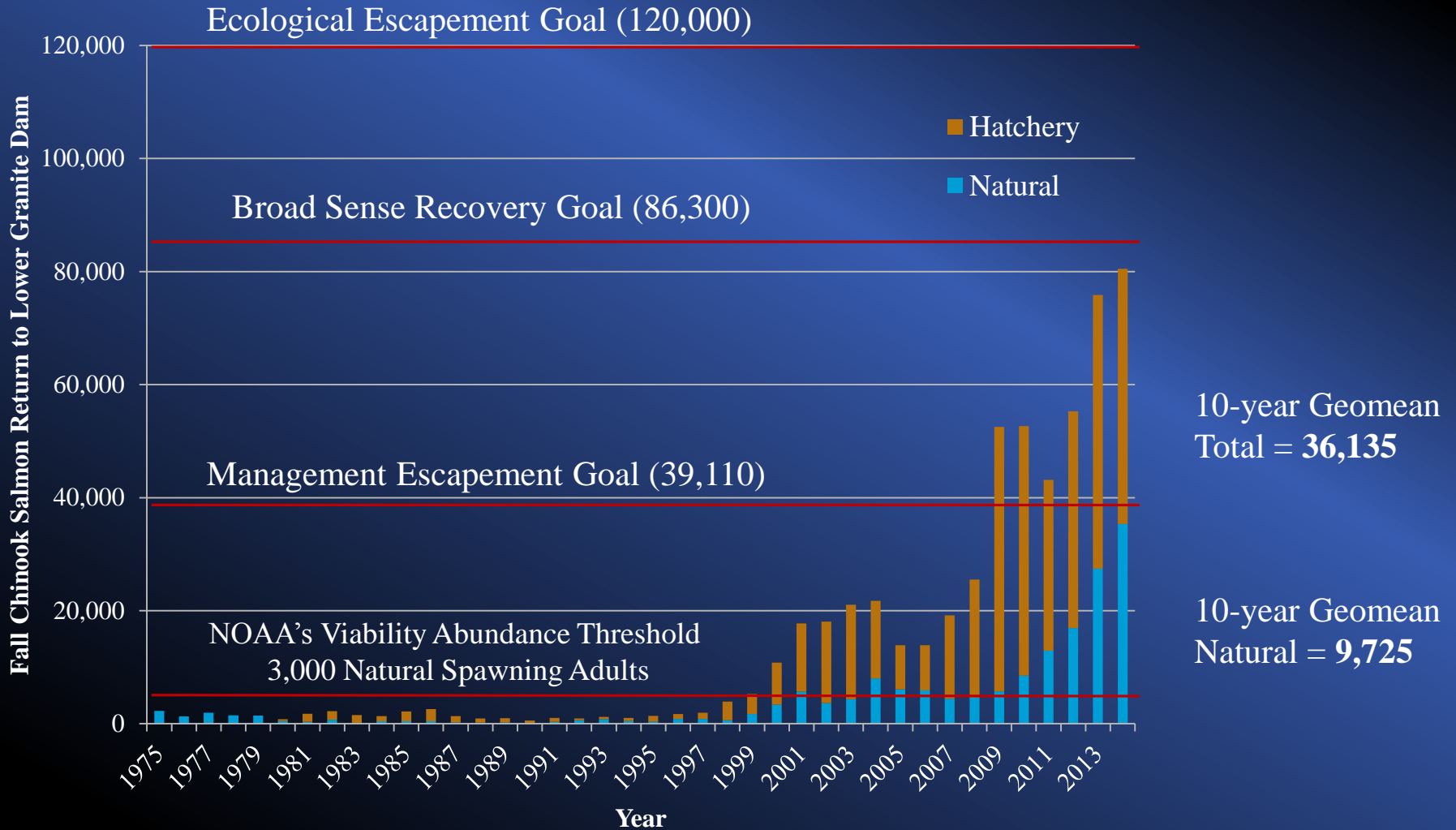
Harvest Opportunity with and without Supplementation



Contemporary ecosystem conditions are such that treaty-right harvest is not sustainable without hatchery programs

Reason for Optimism

Snake River fall Chinook



Robust natural production can co-exist with integrated hatchery program

“Our fate and the fate of the fish are linked.”

