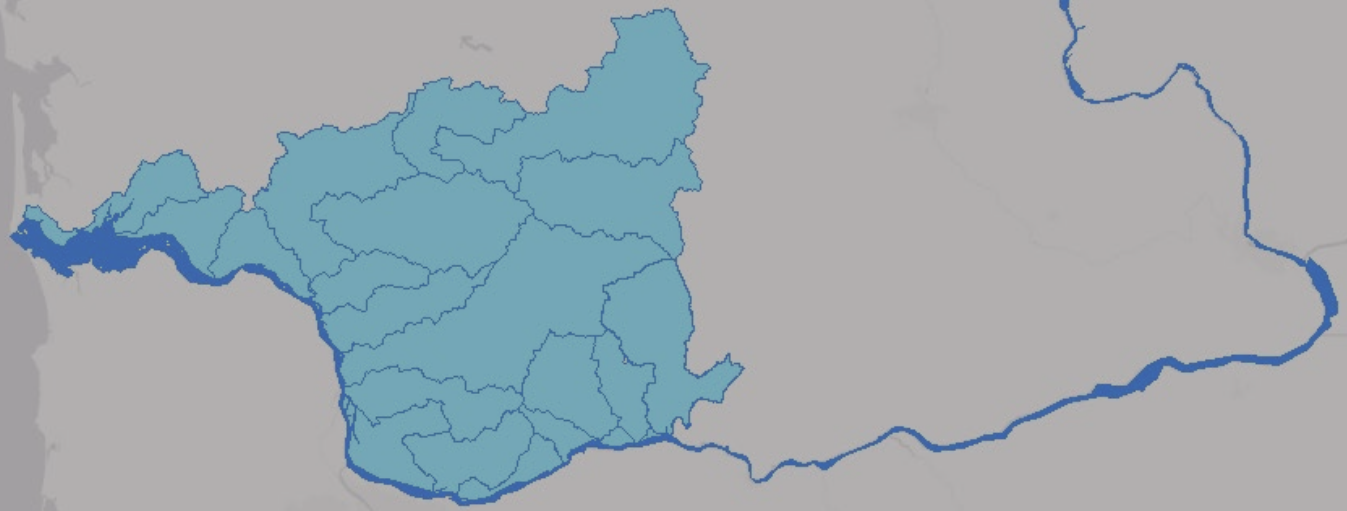
Conservation and Sustainable Fisheries Plan

Progress Report Update

April 1, 2022

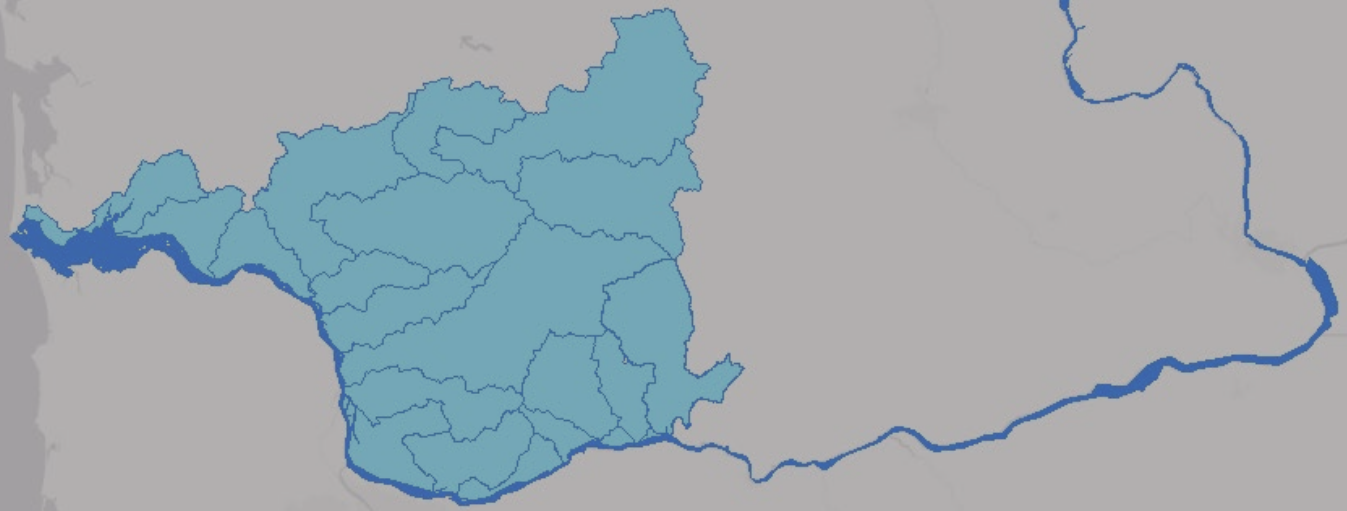
Conservation and Sustainable Fisheries Goal

Support recovery of natural origin Lower Columbia salmon and steelhead to healthy and harvestable levels while sustaining important fisheries



Conservation and Sustainable Fisheries Goal

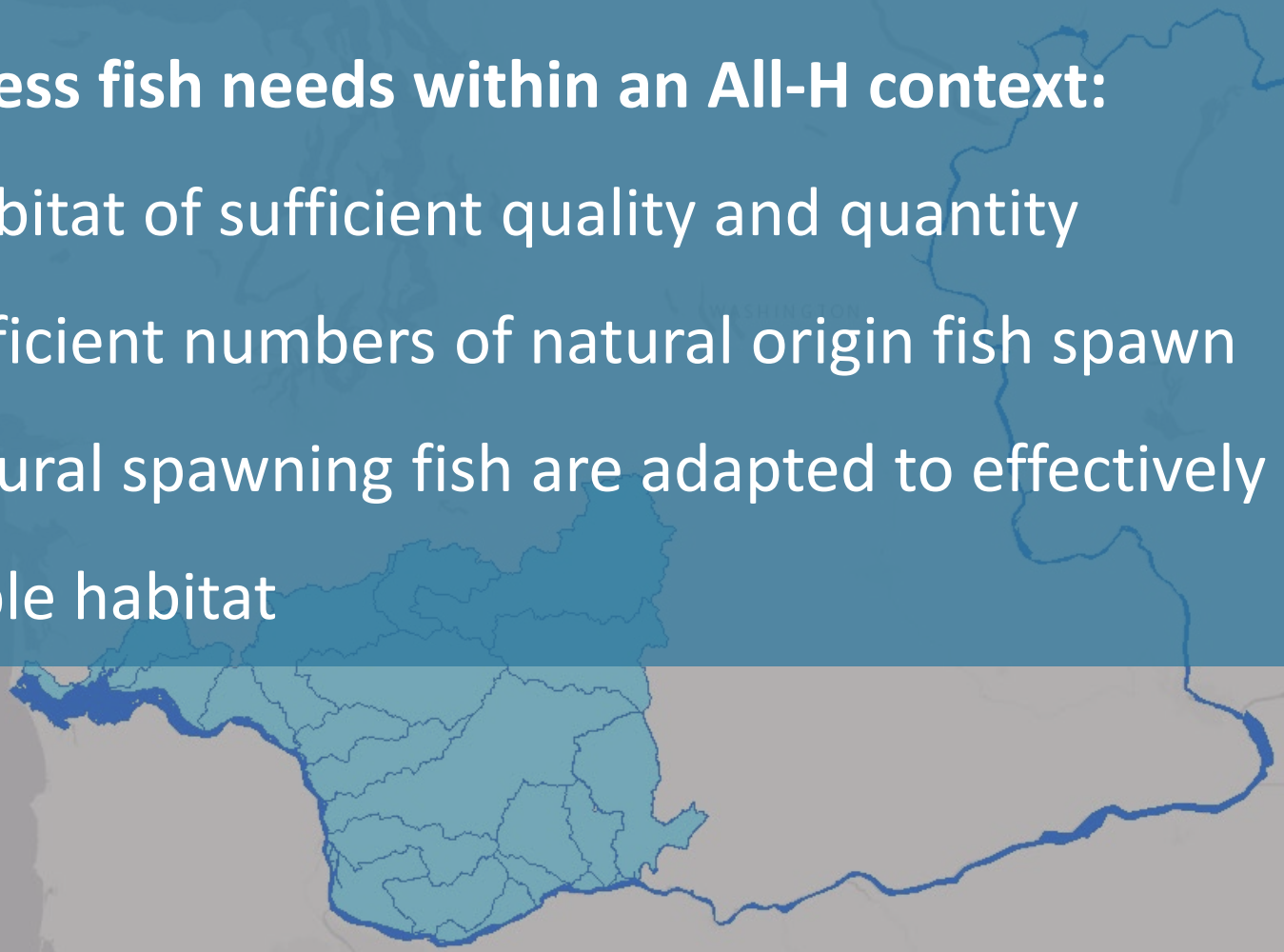
Identifies strategies, actions and management practices to for Lower Columbia hatcheries and related fisheries.



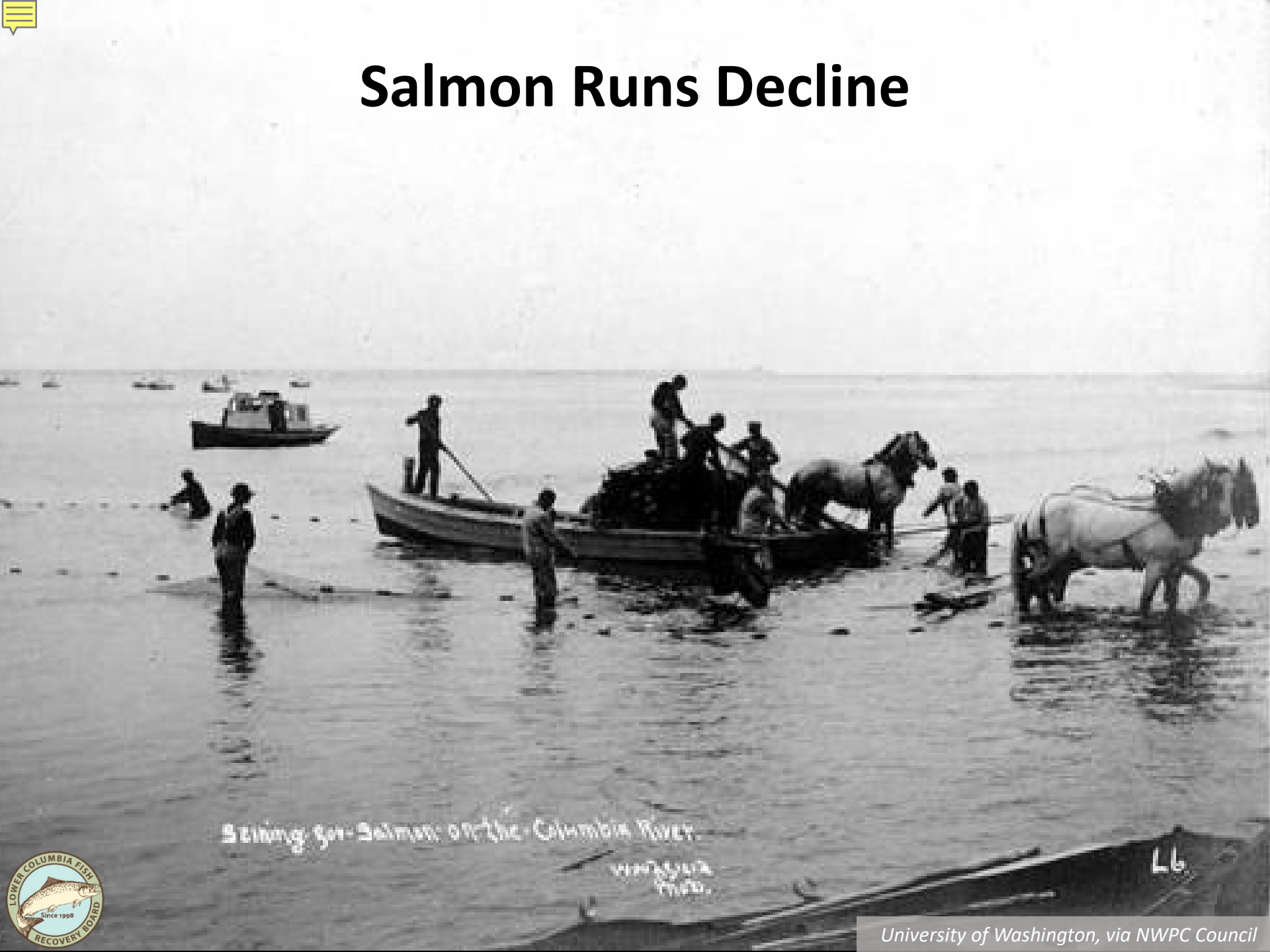
Conservation and Sustainable Fisheries Goal

Address fish needs within an All-H context:

1. Provide habitat of sufficient quality and quantity
2. Ensure sufficient numbers of natural origin fish spawn
3. Ensure natural spawning fish are adapted to effectively use available habitat



Salmon Runs Decline



University of Washington, via NWPC Council

1938 Mitchell Act

"An Act to provide for the conservation of the fishery resources of the Columbia River, establishment, operation, and maintenance of one or more stations in Oregon, Washington, and Idaho, and for the conduct of necessary investigations, surveys, stream improvements, and stocking operations for these purposes."

Endangered Species Act Listings

WDFW

Hatchery Reform Project

Danny Warren, WDFW

Hatchery Reform Project

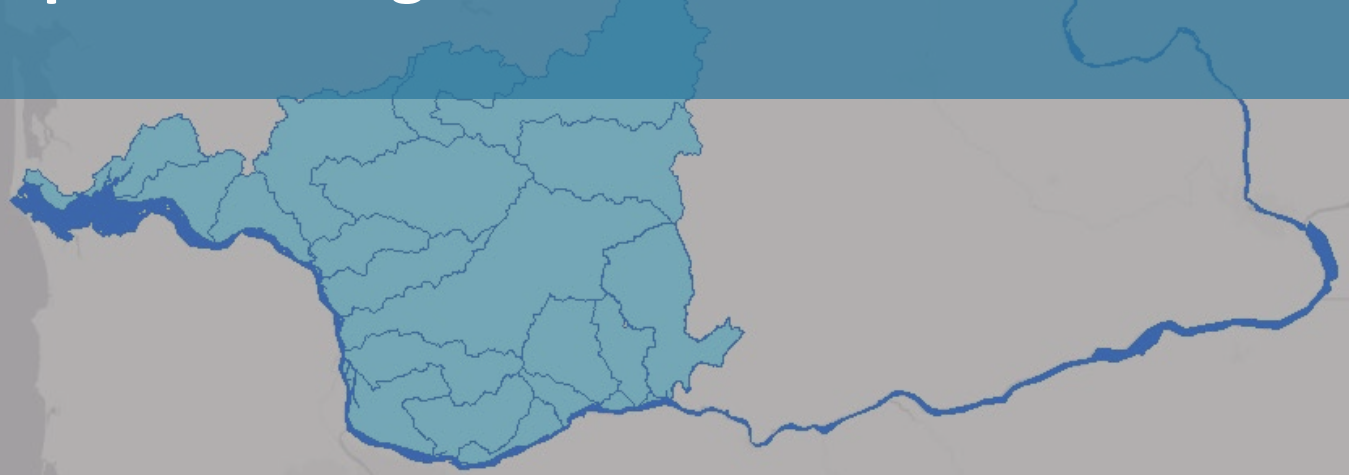
Proportion hatchery origin spawners (pHOS)

Proportion of natural origin spawners (PNI)

Danny Warren, WDFW

Progress Report

1. Update WDFW hatchery metric reporting methods
2. Complete a viability assessment
3. Report on hatchery and harvest reform progress
4. Identify adaptive management needs

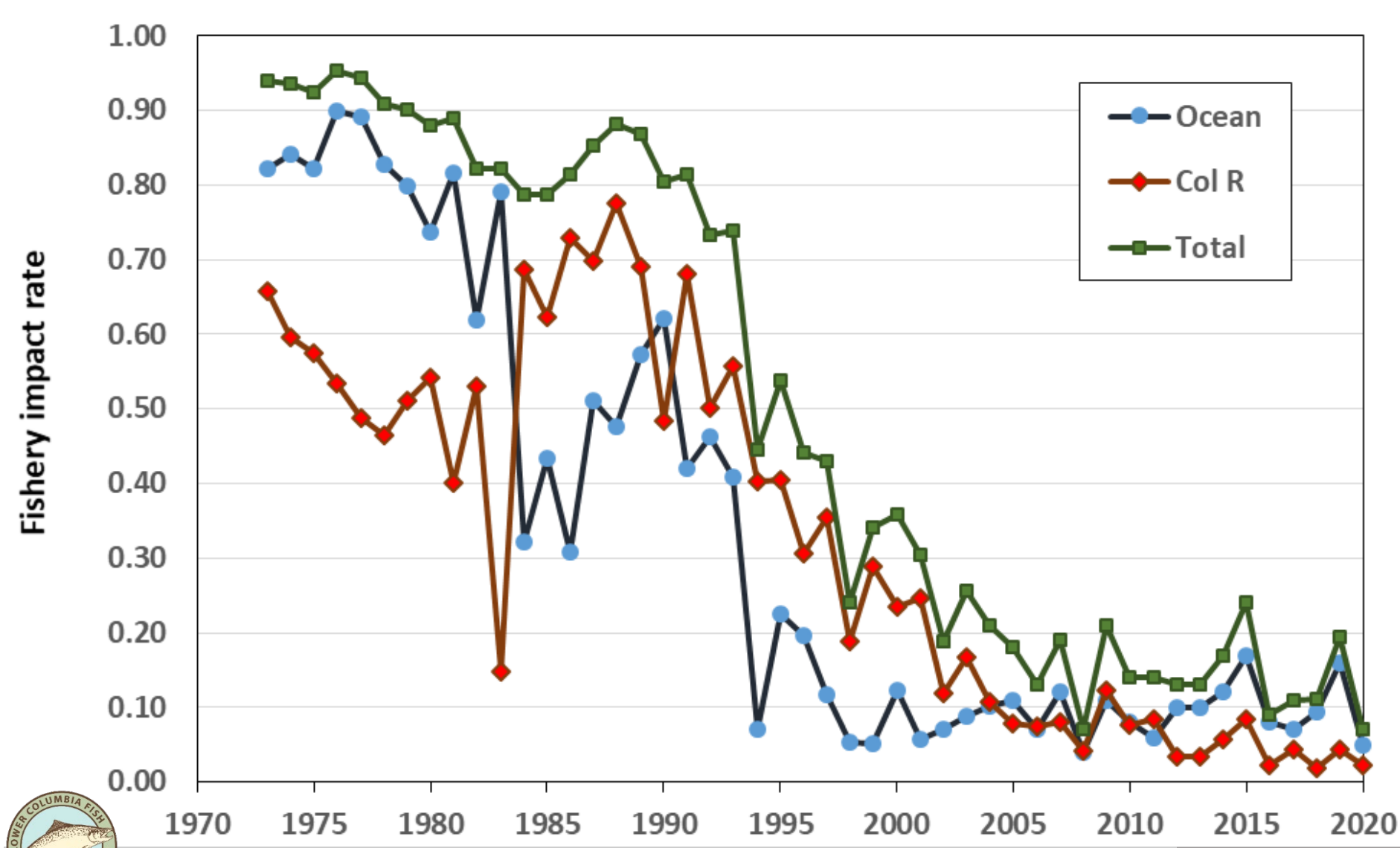


Progress Report - Viability

		Chinook			Chum		Steelhead		Coho
		Fall	L Fall	Spring	Fall	Sum	Winter	Sum	
Coast	Grays/Chinook	VL	--	--	M/VH	--	M	--	VL
	Eloch./Skam.	VL	--	--	VL/L	--	M	--	VL
	Mill/Aber./Ger.	VL	--	--	VL	--	M	--	VL
Cascade	Lower Cowlitz	VL/M	--	--	VL	VL	L	--	VL/H
	Coweeman	VL/L	--	--			L/M	--	VL/H
	SF Toutle	VL	--	VL			M	--	VL/M
	NF Toutle		--				VL/M	--	VL/L
	Upper Cowlitz	VL/L	--	VL	--		VL	--	VL
	Cispus		--	VL	--		VL	--	VL
	Tilton		--	VL	--	--	VL	--	VL/L
	Kalama	VL	--	VL	VL	--	L/H+	M	VL
	NF Lewis	VL/M	VH	VL	VL	--	VL	VL	VL/L
	EF Lewis		--	--		--	M	VL/M	VL/L
	Salmon	VL	--	--	VL	--	VL	--	VL/M
	Washougal	VL/L	--	--	VL/H	--	L	M/H	VL
Gorge	Lower Gorge	VL	--	--	H	--	L	--	VL
	Upper Gorge	VL	--	--	VL	--	L	H	VL
	White Salmon	VL	--	VL		--		--	

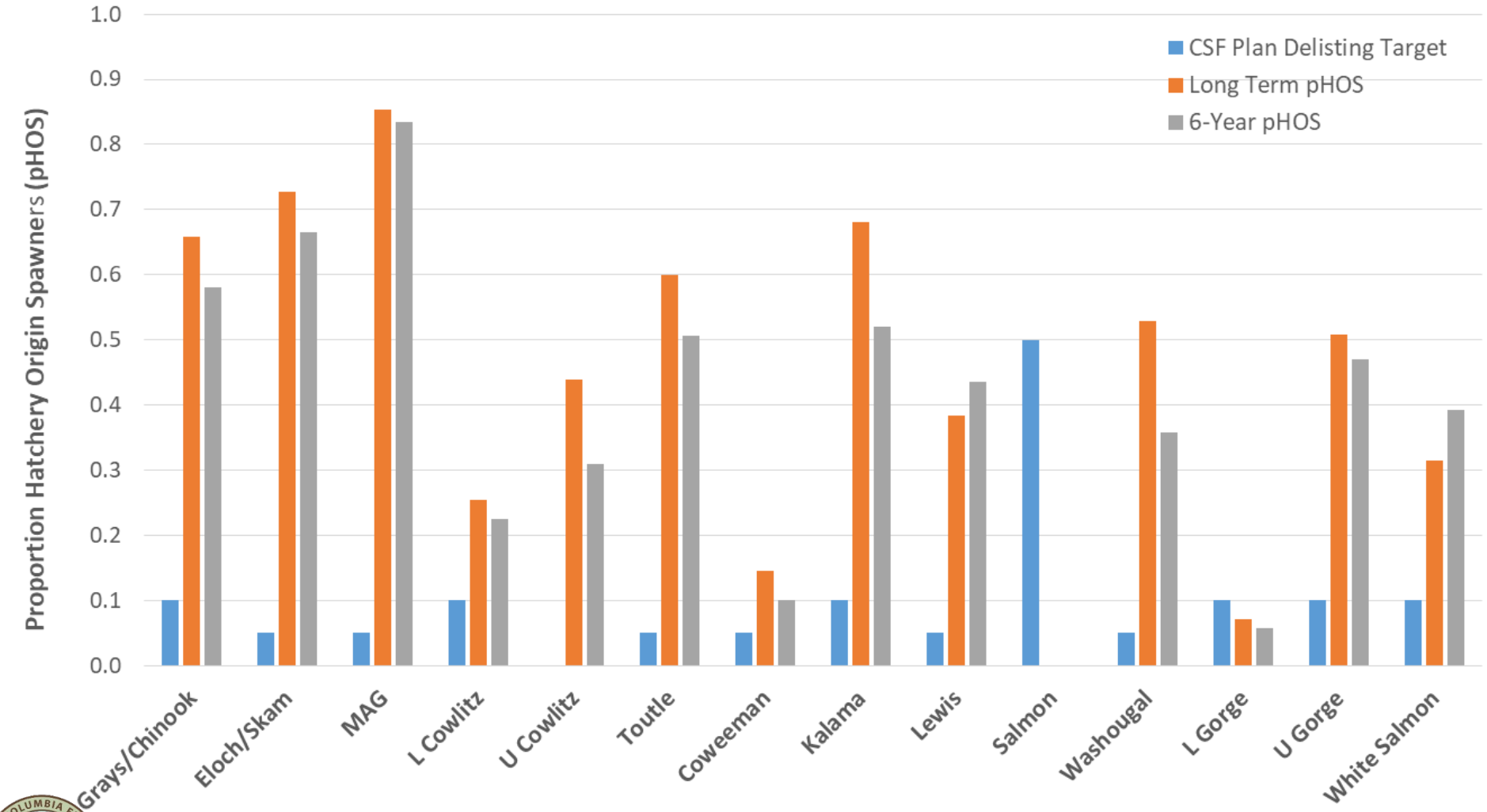
No. @ Very High	0	1	0	1	0	0	0	0
No. @ High	0	0	0	2	0	1	2	2
No. @ Moderate	2	0	0	0	0	7	2	2
No. @ Low	3	0	0	1	0	4	0	4
No. @ Very Low	9	0	7	6	1	5	1	9
Average Viability	L-	VH	VL	L+	VL	L+	M	L

Progress Report – Coho Harvest



Draft Information

Progress Report –
Fall Chinook Hatchery Fish Competition



Progress Report - Next Steps

Done!

In Progress

Publication in Fall 2022

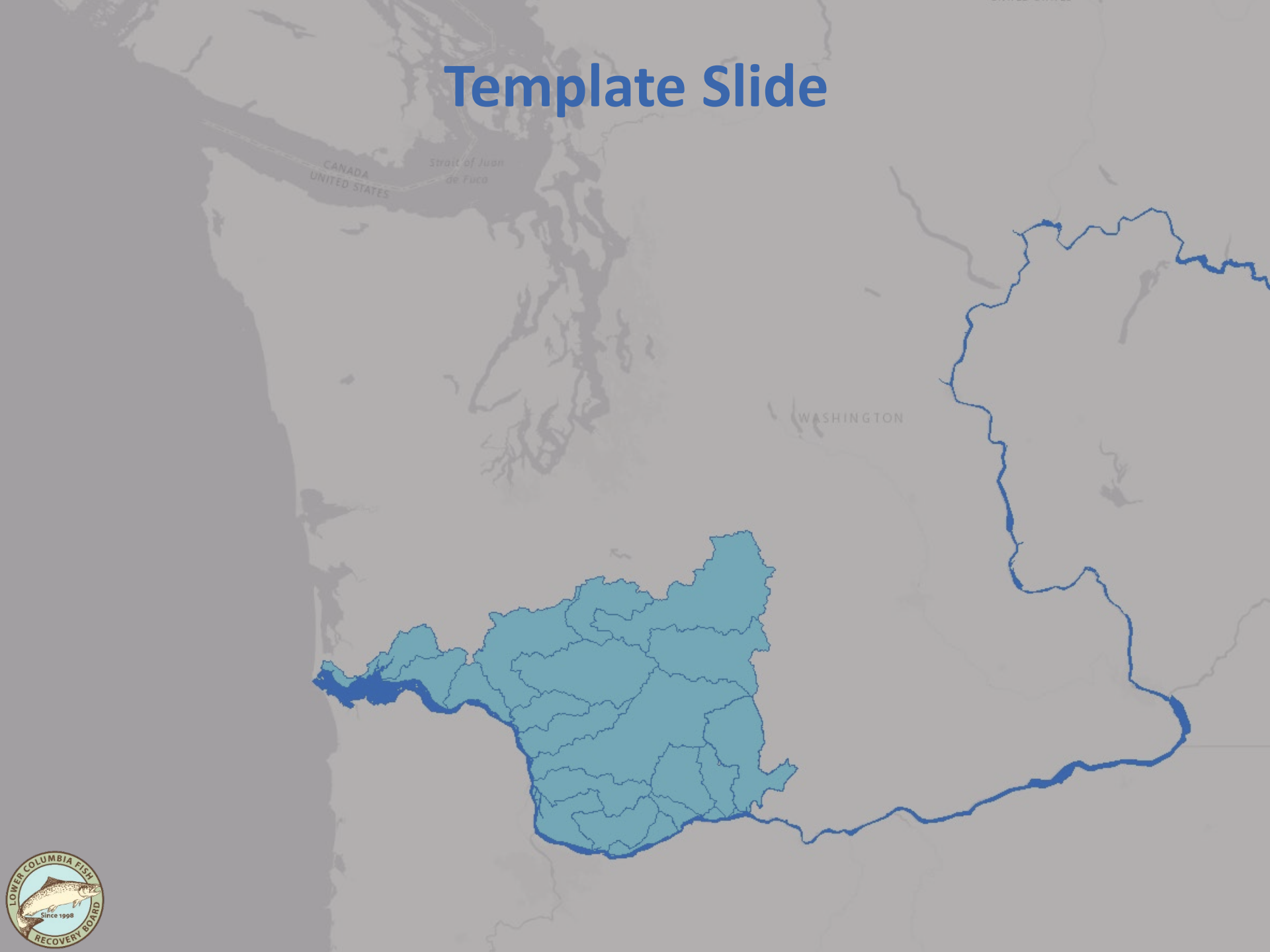
Next Steps

State of the Salmon in Watersheds 2022

NOAA 2025 Status Review

Recovery Plan Update Proposal

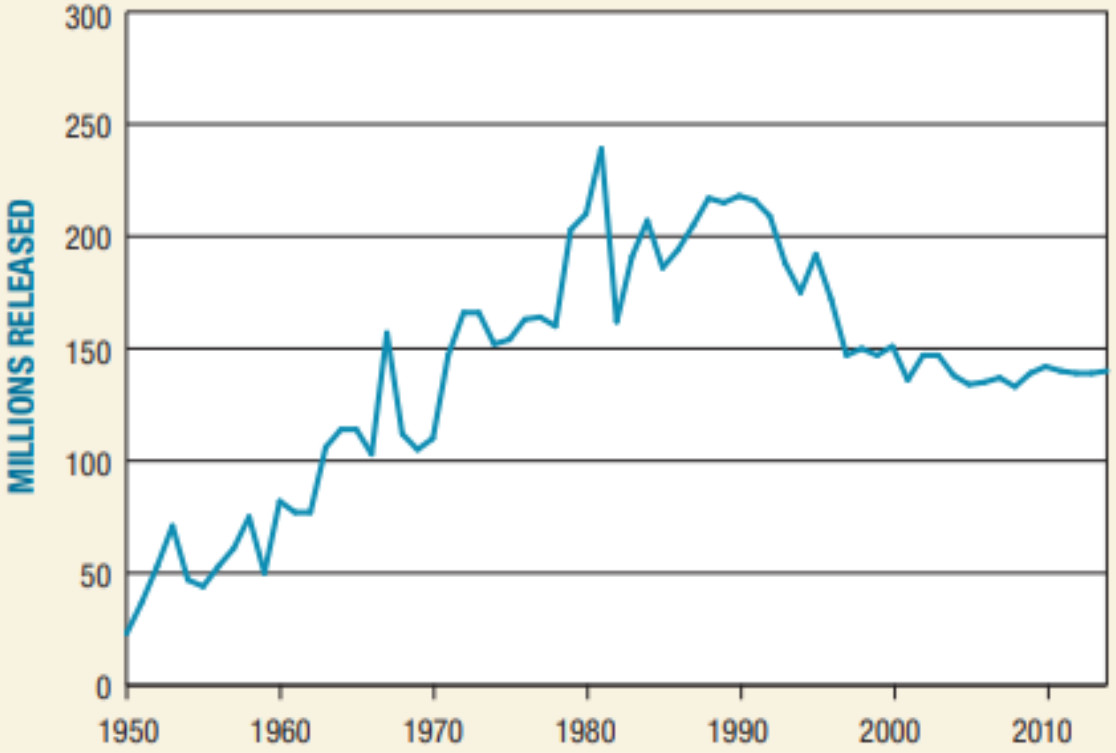
Template Slide

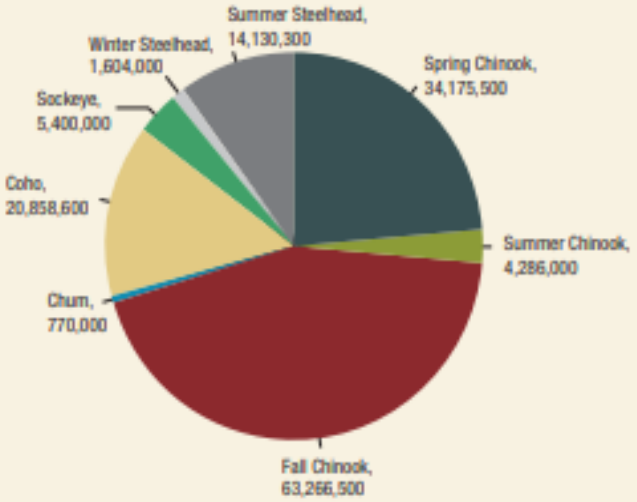


Adaptive Management Considerations

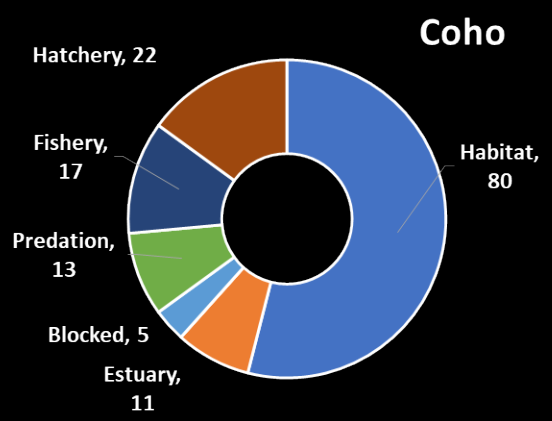
1. Work with WDFW and NOAA to prioritize hatchery production priorities.
2. Identify a long-term data sharing strategy with WDFW for harvest information.
3. Identify any updates to LCFRB policy perspectives regarding hatchery and harvest practices.

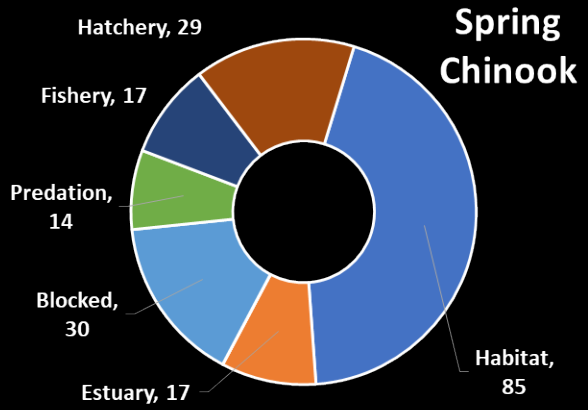
FIGURE 8. Hatchery juvenile production trends and current production by species of Columbia Basin salmon and steelhead.

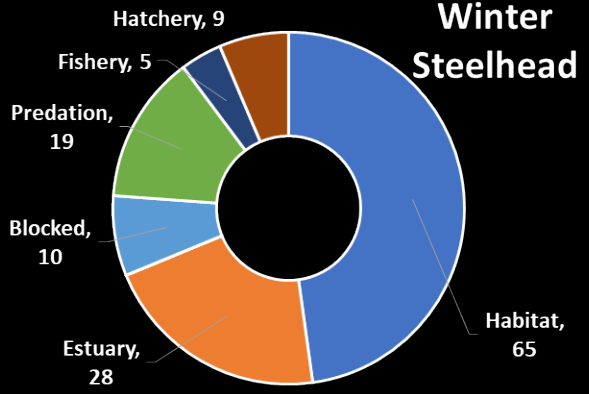


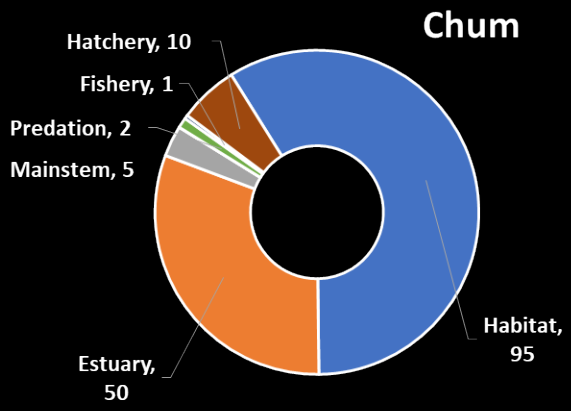


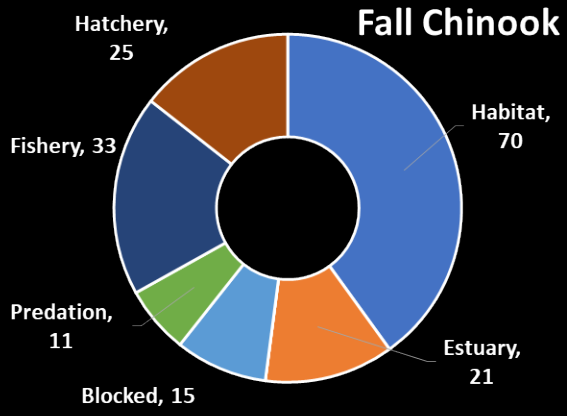
All-H Impacts Today

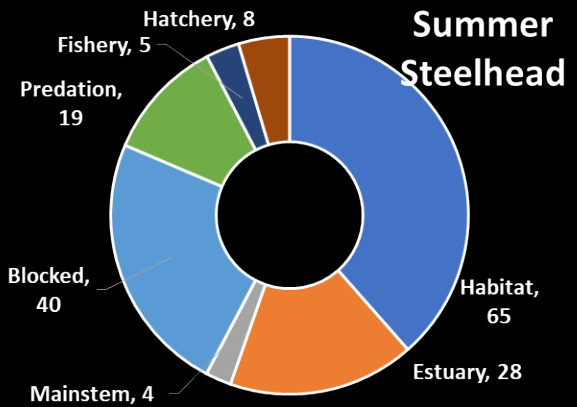




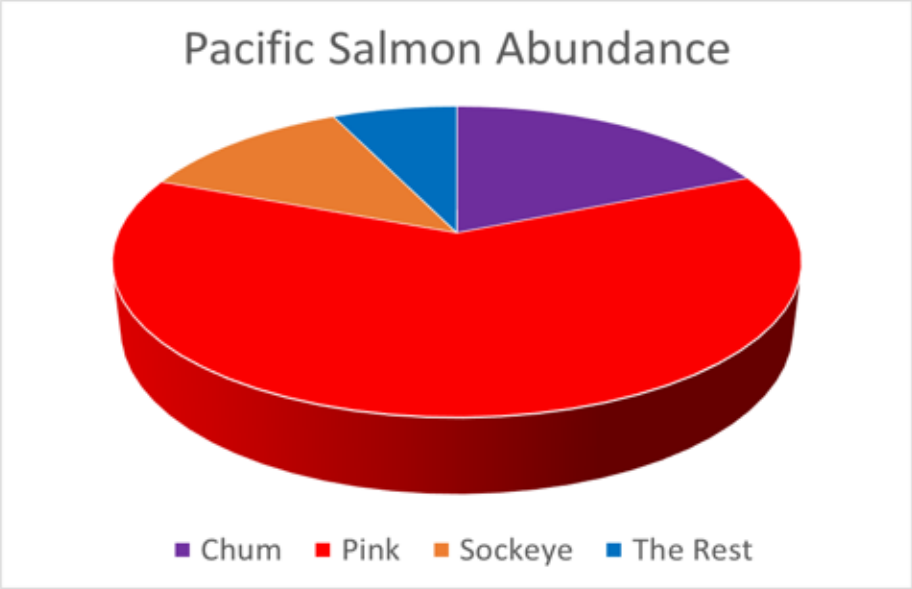








More salmon than ever!



Salmon numbers up

- True of both adult and juveniles
- True by abundance and biomass
- 2015 was 36% more than peak in 30s

93% Pinks, Chum & Sockeye

40% Hatchery Fish

<7% Chinook, Coho and Steelhead

See Ruggerone and Irving 2018 at https://afspubs.onlinelibrary.wiley.com/doi/full/10.1002/mcf2.10023

What's up in the Pacific?

1) Variable ocean conditions with increasing warming
2) Increasing overall salmon abundance
3) Strong pink/chum hatchery component
4) Possible density dependence impacting chinook and steelhead
5) Increase in overall harvest (human and marine mammal)
6) All above leading to smaller adult sizes