

WDFW Summer Steelhead Program Reviews



LSRCP ISRP Steelhead Program Review
Michael Herr-WDFW

1/23/2025



Acknowledgements:

- LFH and TFH Staff



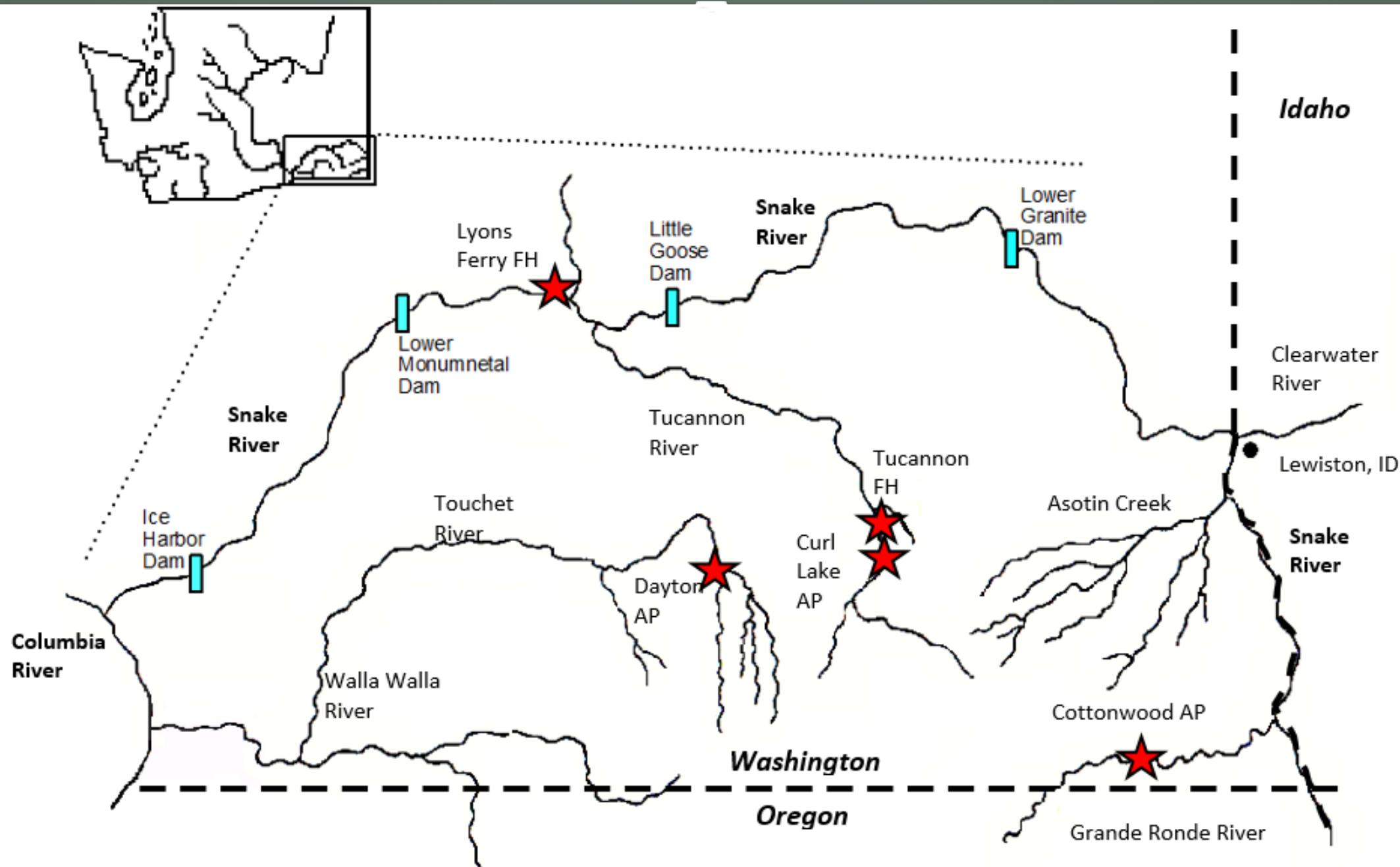
- DFW Ageing and Genetics Lab Staff

- DFW Fish Management Staff



- Partners in the Snake River Basin





Wallowa Stock Broodstock History

- ODFW Grande Ronde Releases
- Cottonwood Cr. Trap completed in 1992
- Harvest Mitigation

LFH Stock Broodstock History

- Snake Basin (Wallowa Stock)
- Columbia Basin (Wells Stock)
- On-station trapping
- Harvest Mitigation

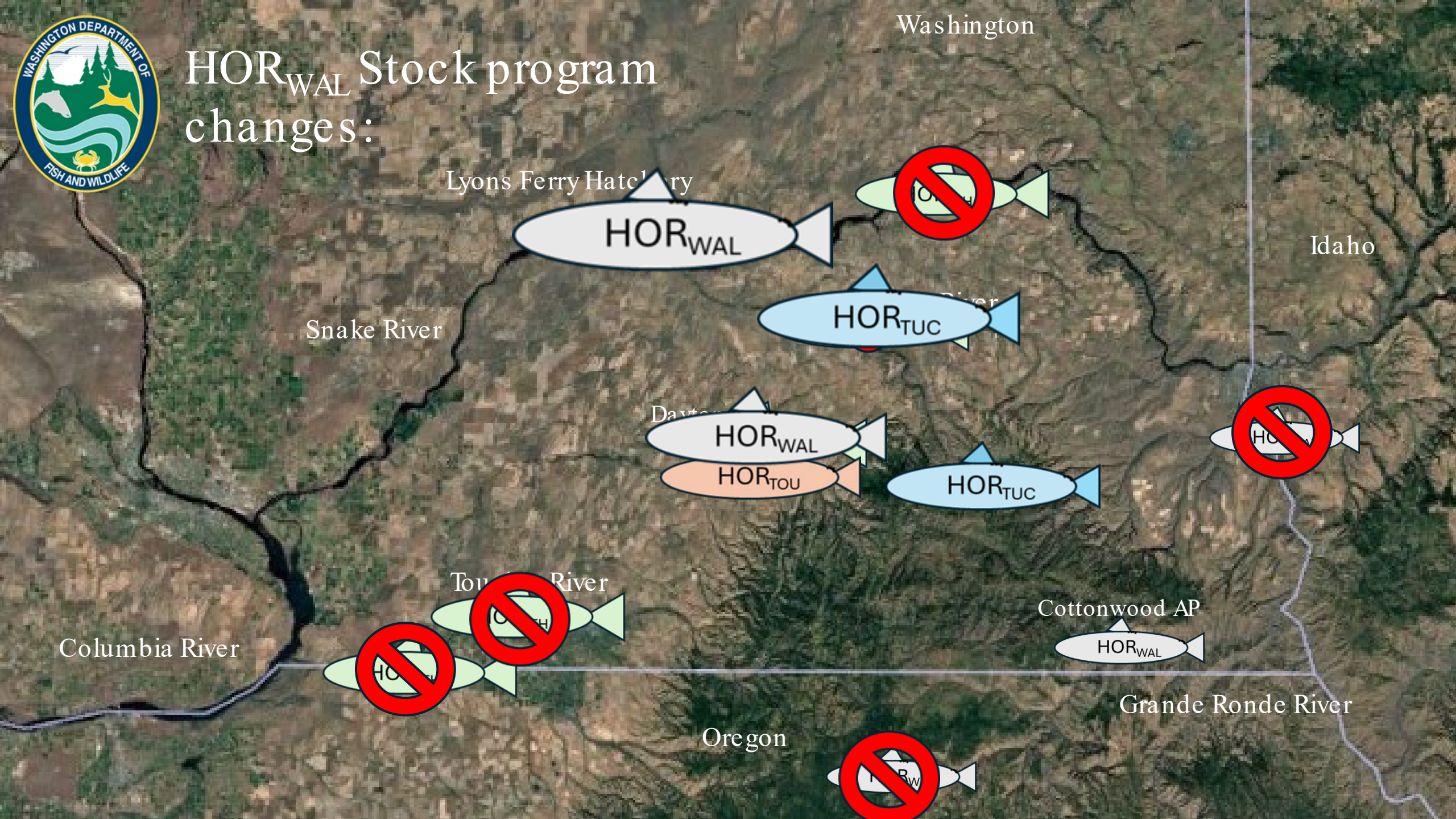
Historical Segregated Stocks: Lyons Ferry/Wallowa

[illegible]

	Walla Walla River Basin			Snake River	Tucannon River			Grande Ronde R.
	Touchet R. Dayton AP		WW River	LFH On-station	In-River Releases		Curl Lake AP	Cotttonwood AP
RY	WAL/LF	TOUCHET	WAL/LF	WAL/LF	LF	TUC MIT	TUC CON	WAL
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008								
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018								
2019								
2020								
2021								
2022								
2023								



HOR_{WAL} Stock program changes:



Washington

Idaho

SNAKE RIVER

Lyons Ferry Hatchery

Dayton

Cottonwood AP

Columbia River

Touche River

Grande Ronde River

Oregon

HOR_{WAL}

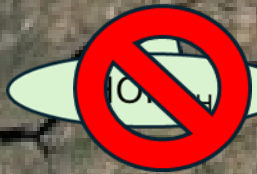
HOR_{TUC}

HOR_{WAL}

HOR_{TOU}

HOR_{TUC}

HOR_{WAL}



HOR_{LFH/WAL} Stock Summary

RY	Walla Walla River Basin		Snake River	Tucannon River	Grande Ronde R.
	Touchet R. Dayton AP	WW River	LFH On-station	In-River Releases	Cottonwood AP
	WAL/LF	WAL/LF	WAL/LF	LF	WAL
2010					
2011					
2012					
2013					
2014					
2015					
2016					
2017					
2018					
2019					
2020					
2021					
2022					
2023					

RY	Walla Walla River Basin	Snake River	Grande Ronde R.
	Touchet R. Dayton AP	LFH On-station	Cottonwood AP
	WAL/LF	WAL/LF	WAL
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022			
2023			



HOR_{LFH/WAL} Program Management Goals

- Adult Returns-Harvest Mitigation
 - Below Project Area (Columbia River)
 - Project Area (Snake River)
- Monitor status and trends of natural steelhead populations affected by LSRCP hatchery production
- Maintain ESA compliance and WDFW policies to protect and recover natural stocks
- Coordinate actions with co-managers

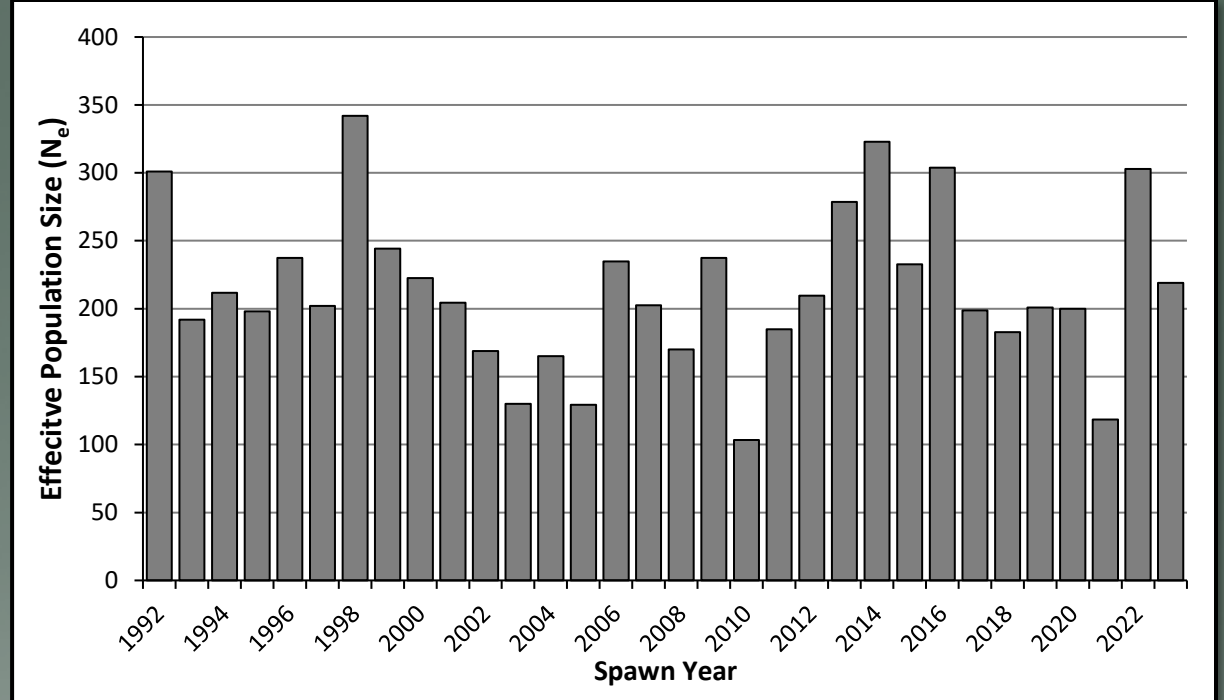
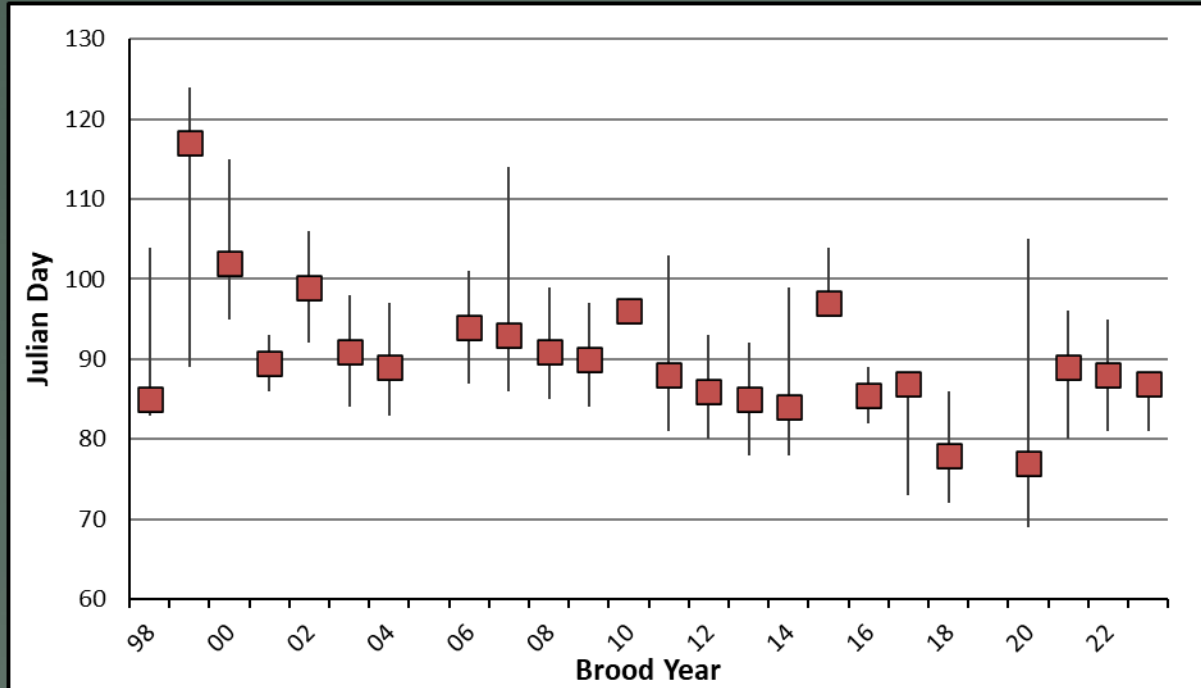
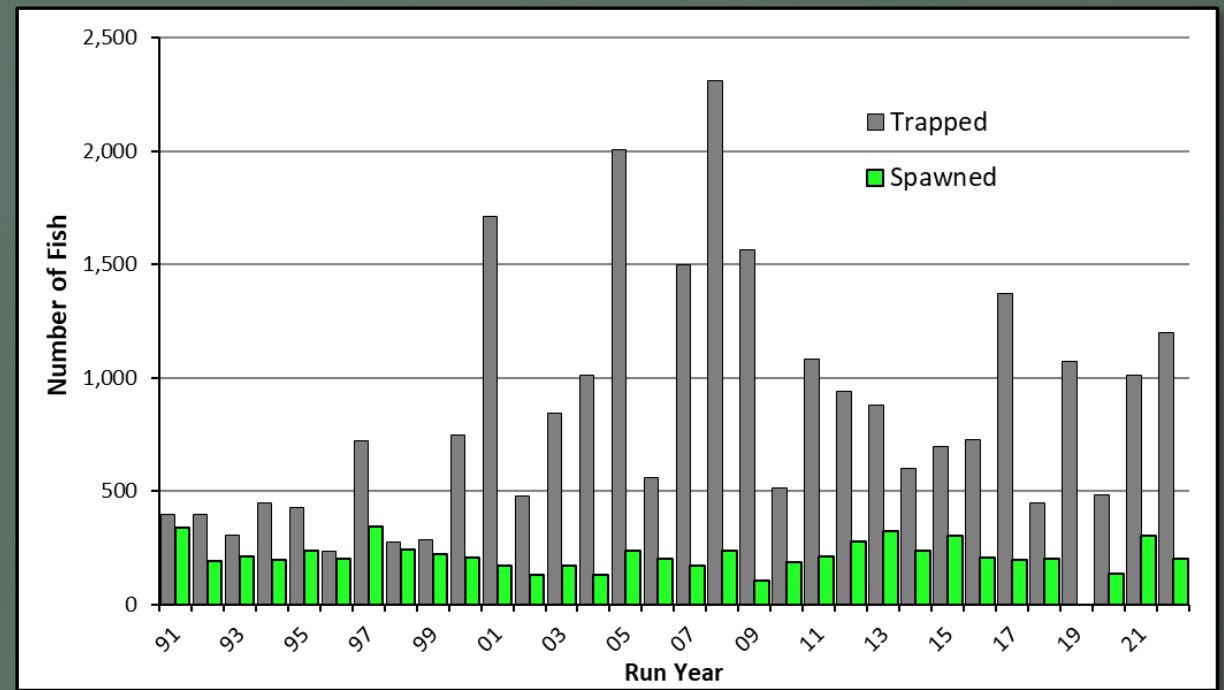


Presentation Outline:

- Brood Collection
- Hatchery Production
- Juvenile Survival
- Adult Returns
- Overshoot/Straying
- Productivity
- Harvest
- Summary

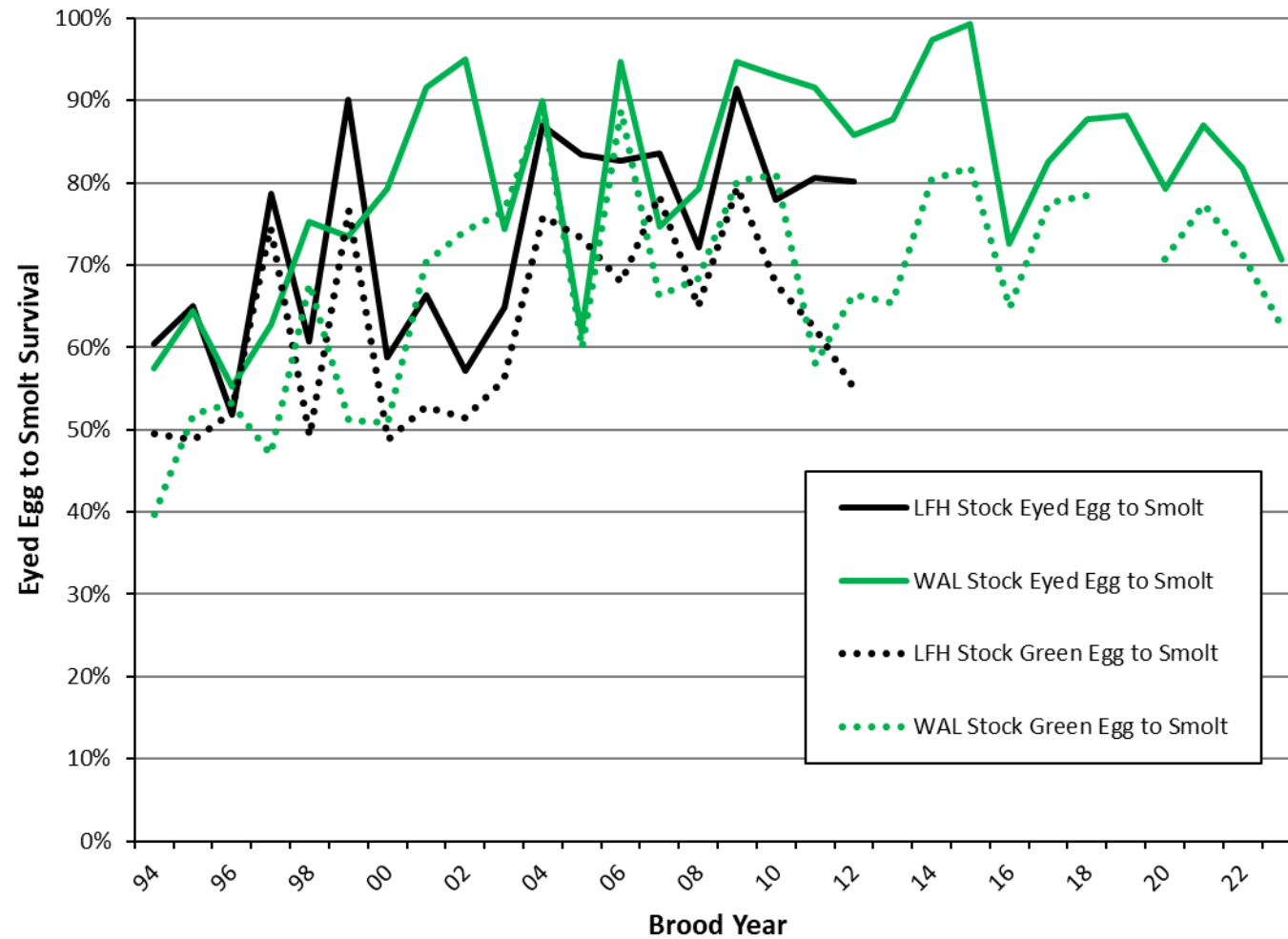


HOR_{WAL}



In-hatchery performance:

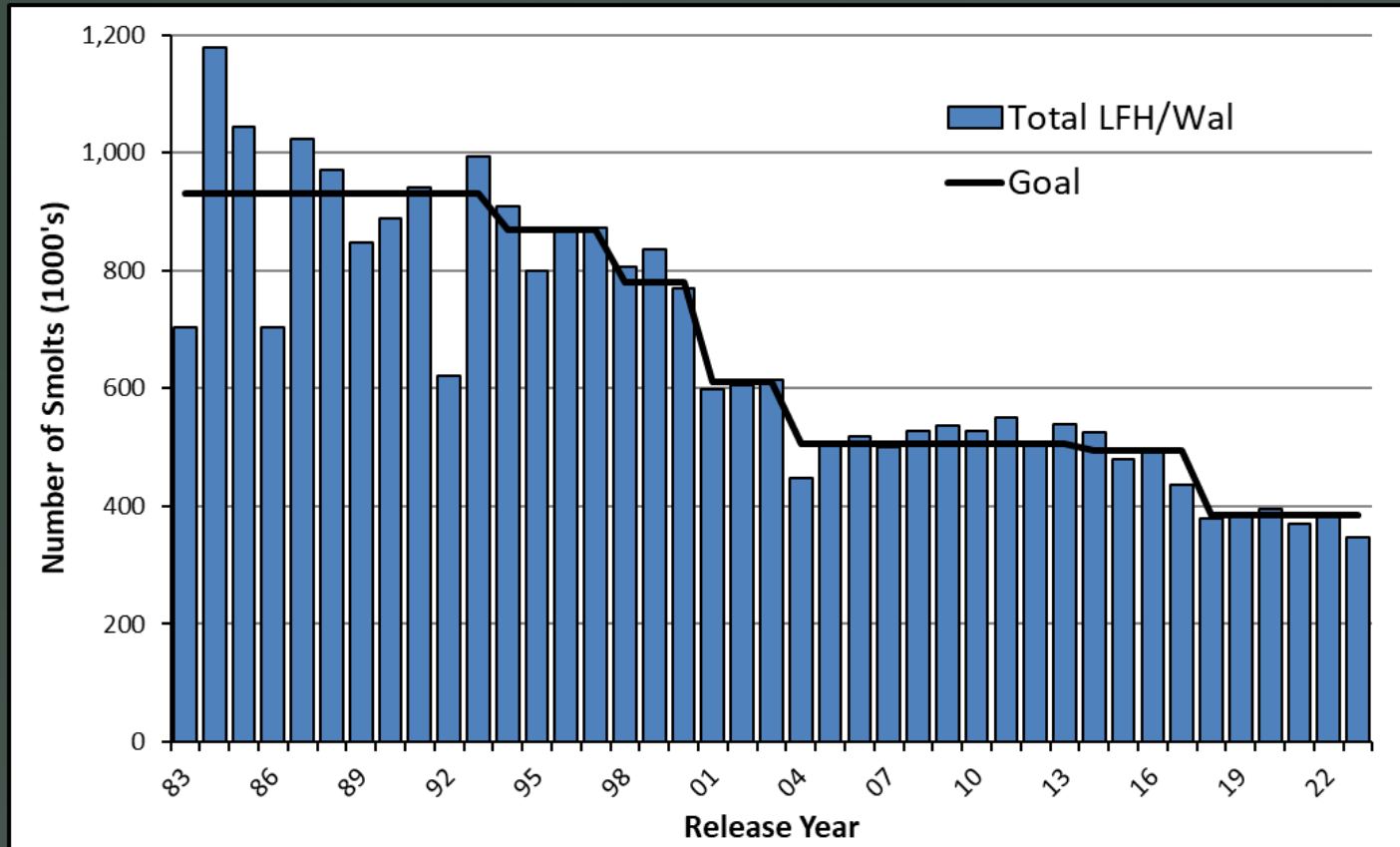
- 2019 Wallowa Hatchery
- Meeting green/smolt
- Disease issues minimal:
 - IHN
 - Coldwater disease

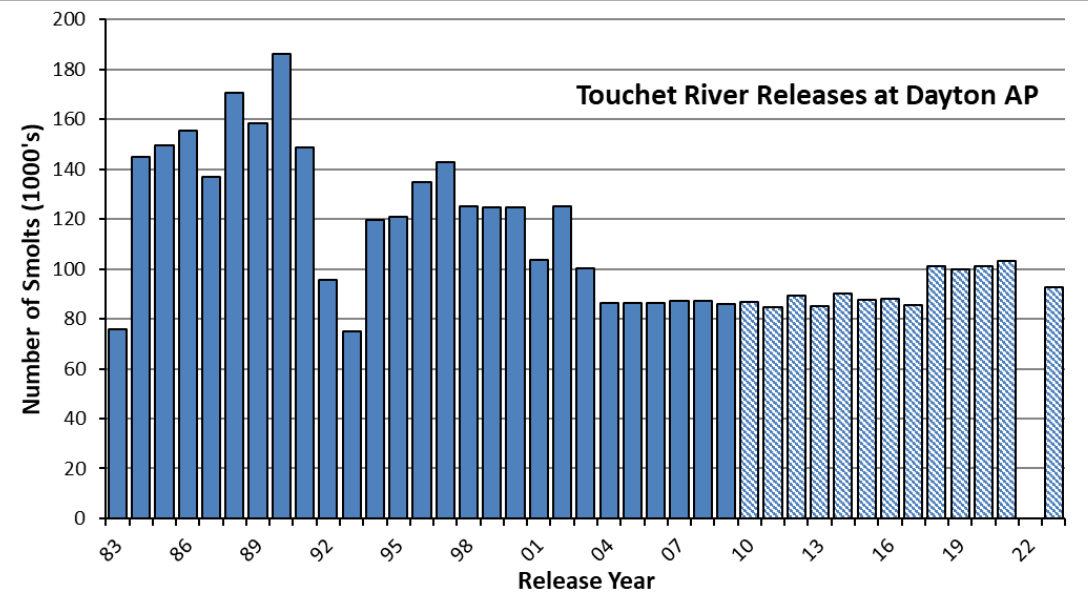
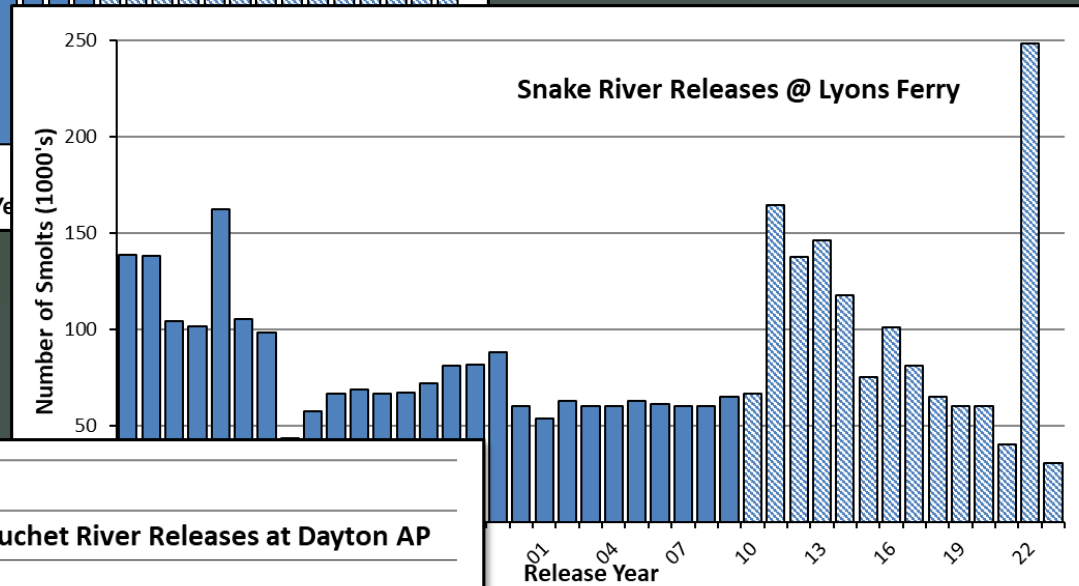
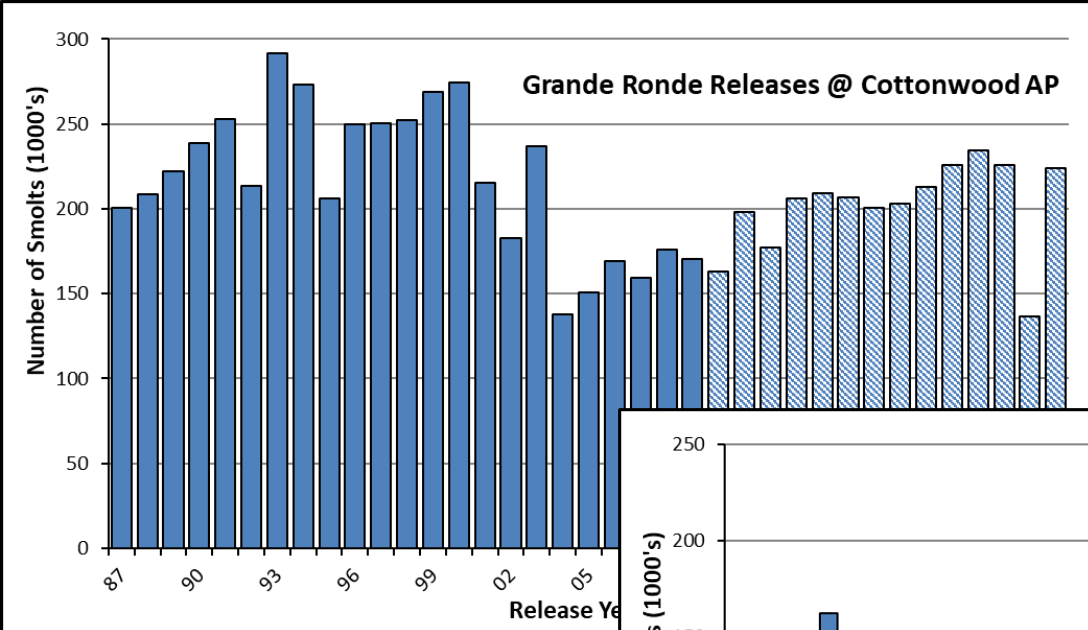




Smolt release goals:

- Reduced due to realized SARs vs. expected
- Ecological concerns (BiOPs)
- Current goal of 385K





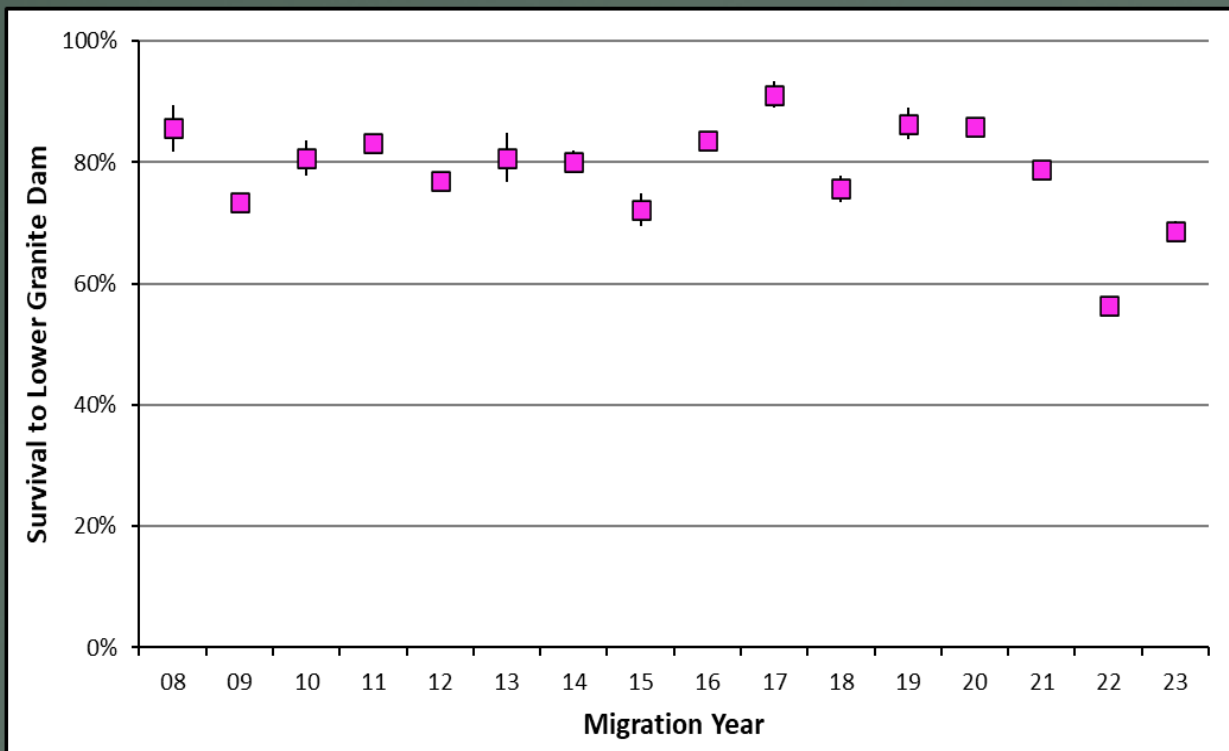
Current smolt releases:

- Cottonwood Cr. AP – 225,000
- LF On-station Snake River 60,000
- Dayton AP, Touchet River – 100,000

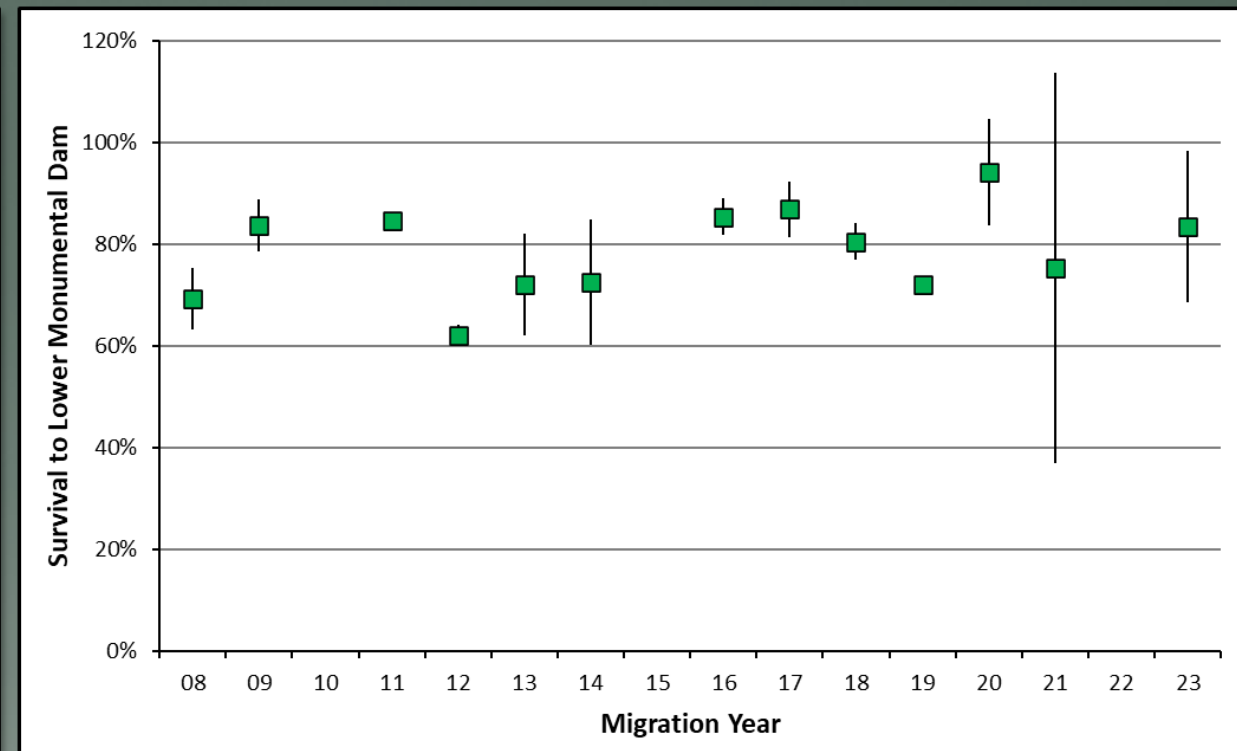


Juvenile outmigration survival

Cottonwood Cr. Release 6K PIT to LGR
 HOR_{WAL}



LF On Station Release 5K PIT to LOMO
 $HOR_{LFH/WAL}$

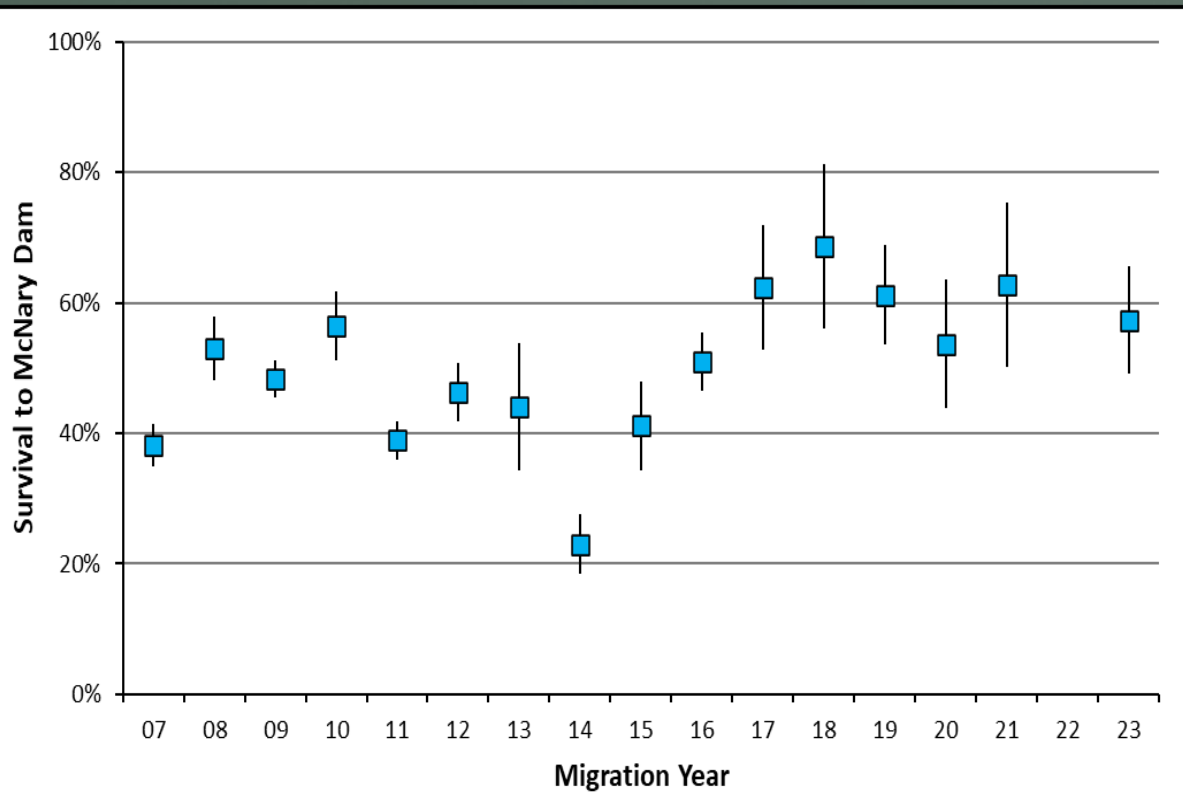




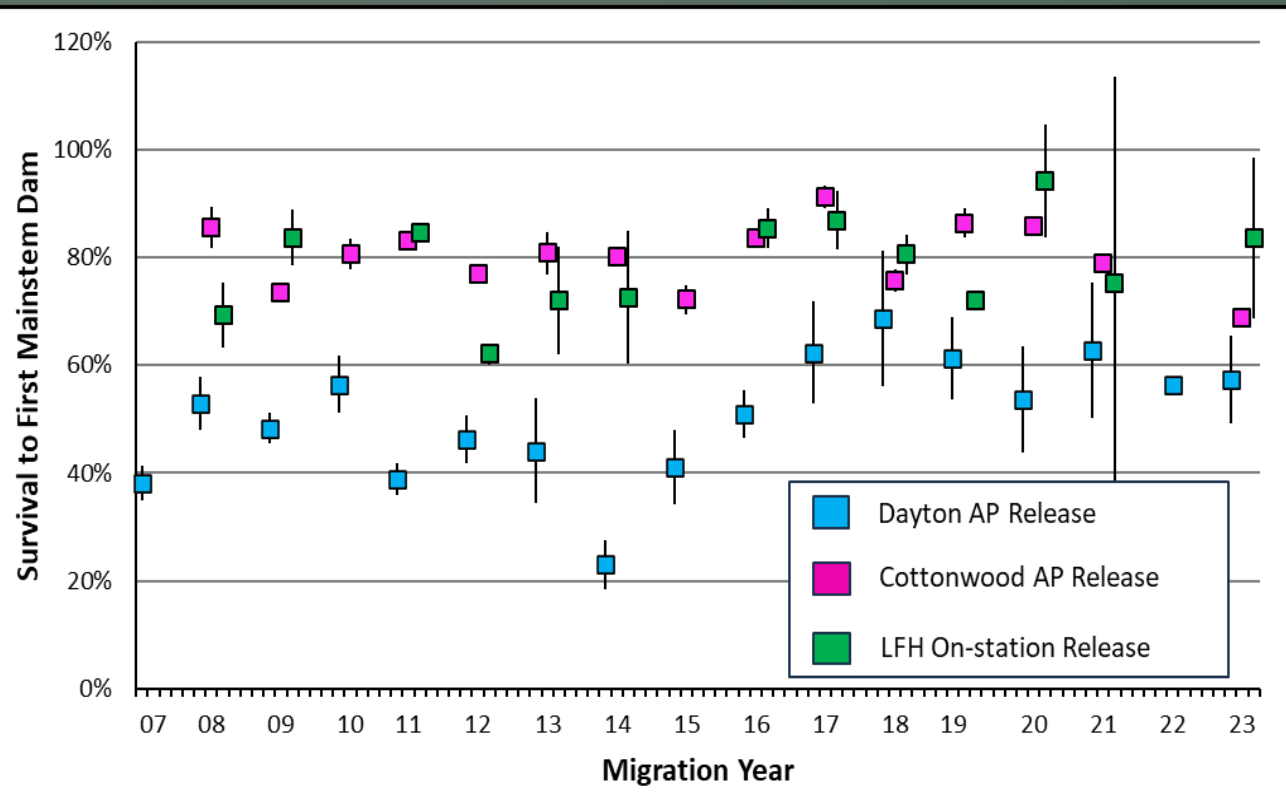
Juvenile outmigration survival

Dayton AP Release 5K PIT to MCN

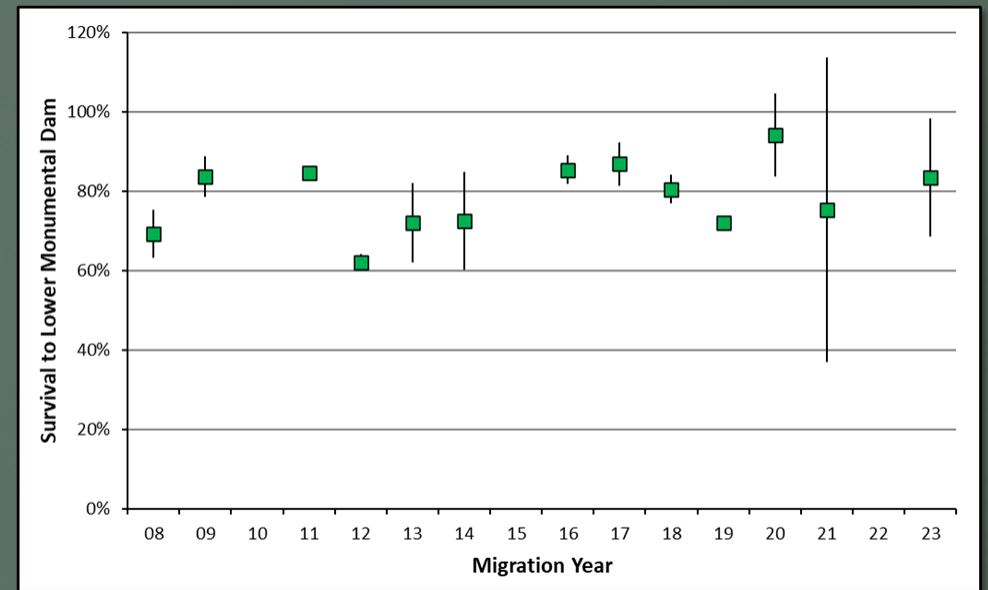
$HOR_{LFH/WAL}$



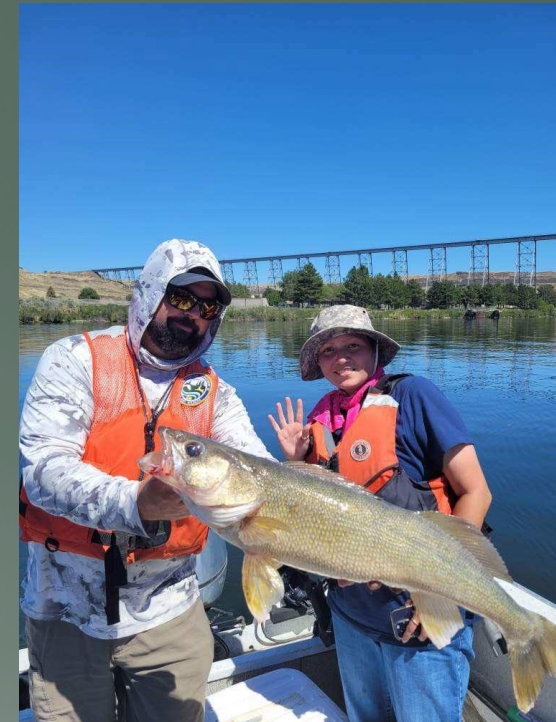
Comparison of $HOR_{LFH/WAL}$ stock releases



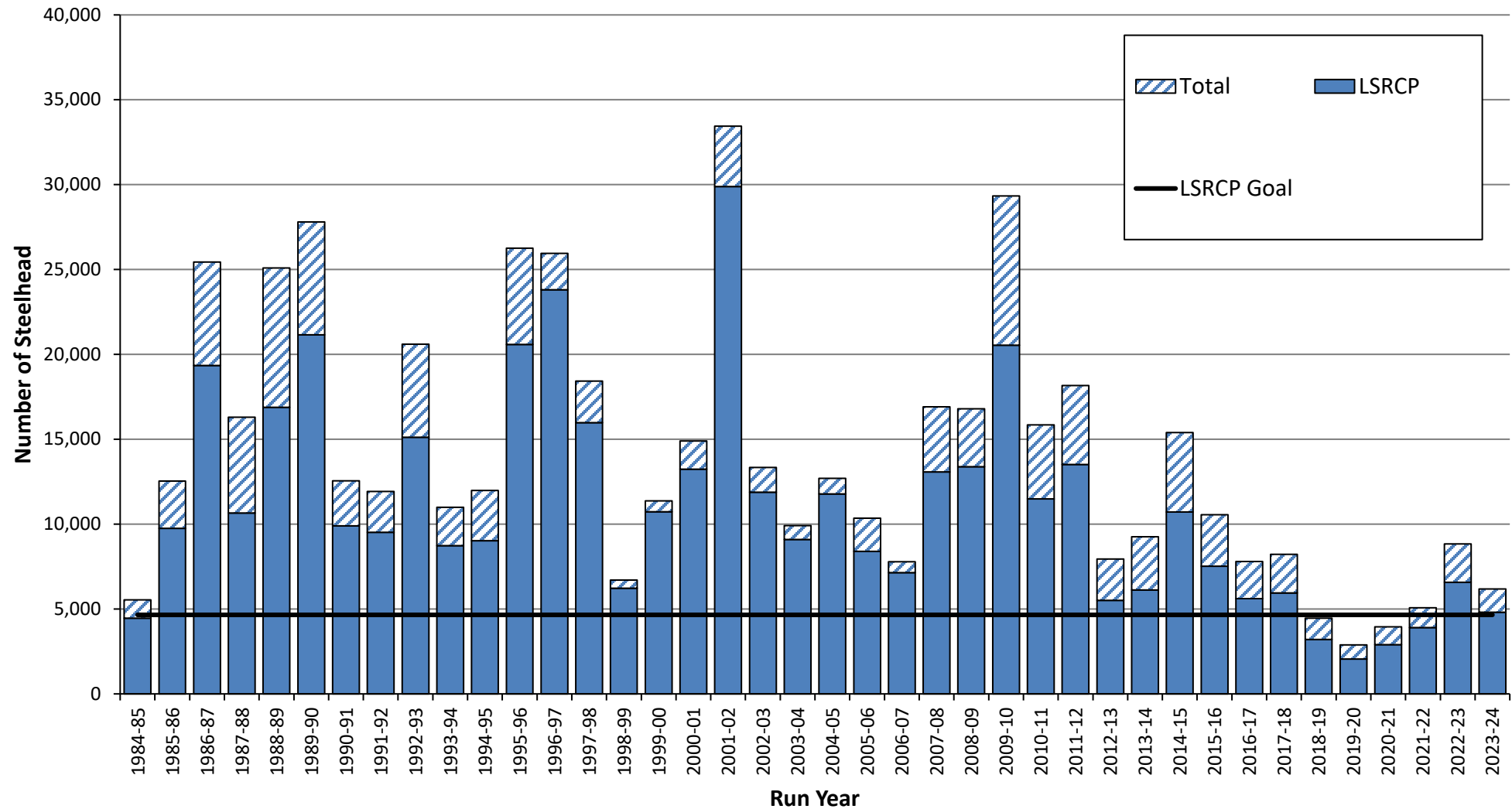
Juvenile outmigration survival



WDFW
Walleye diet
analysis study



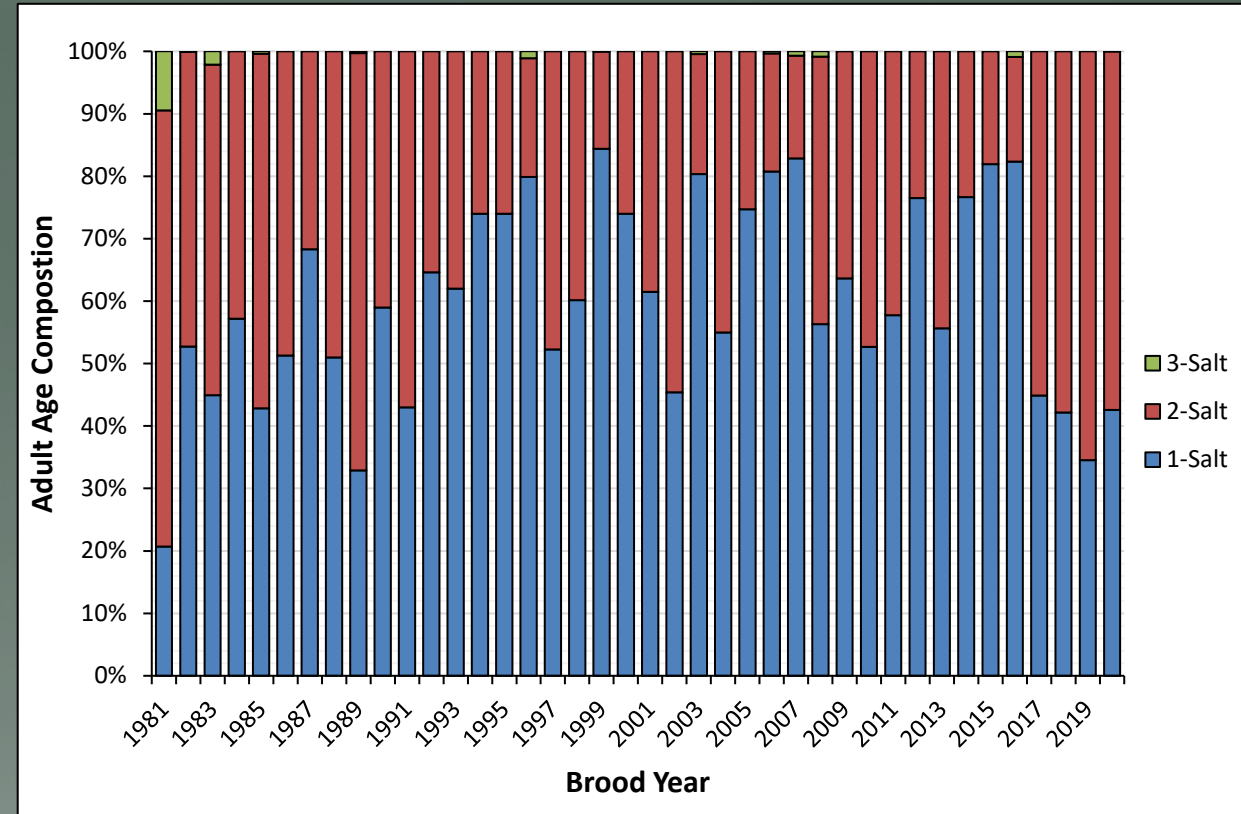
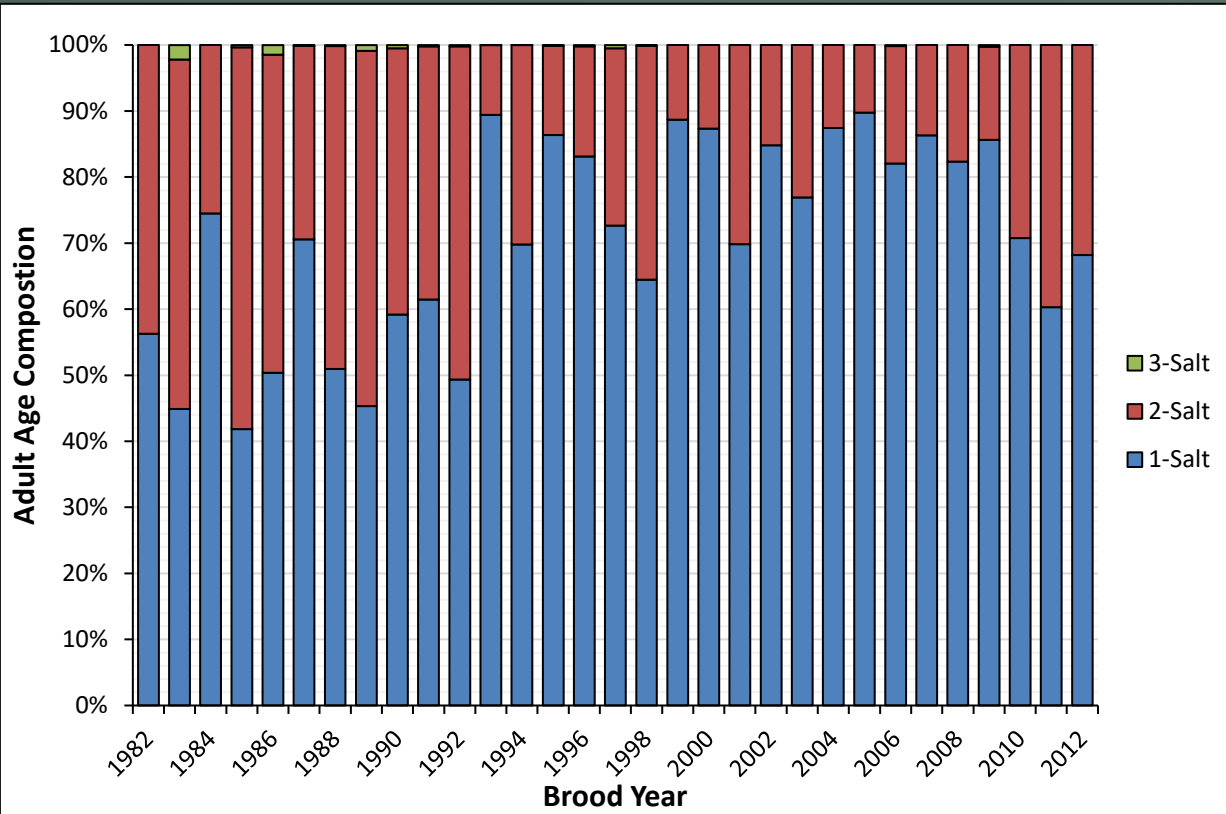
Adult Returns-Project Goals



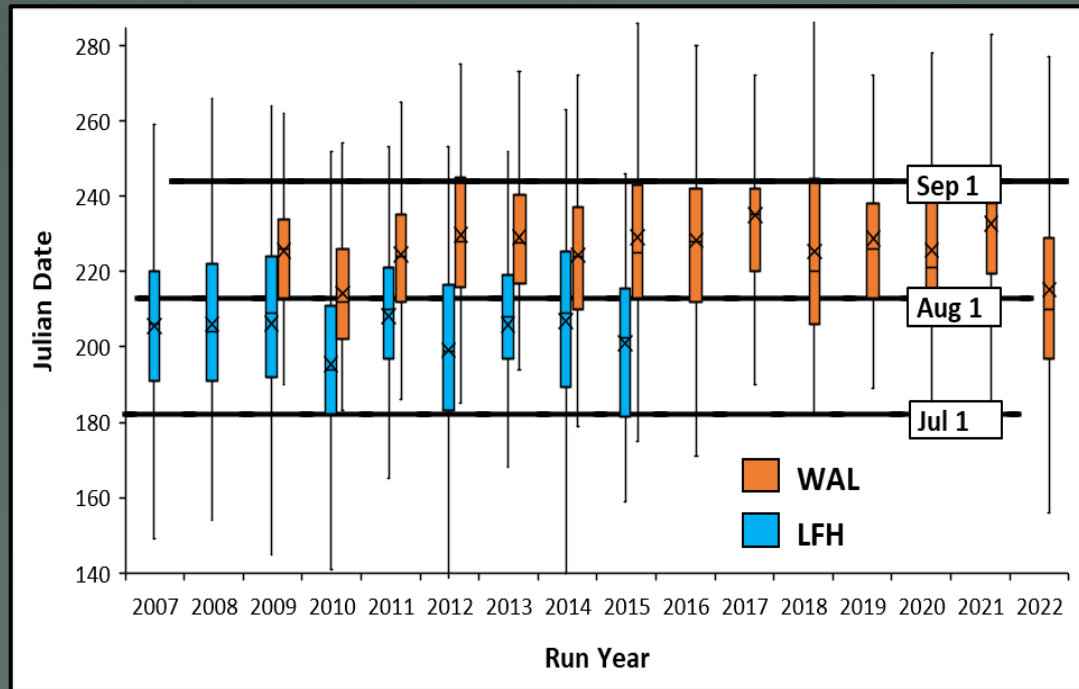
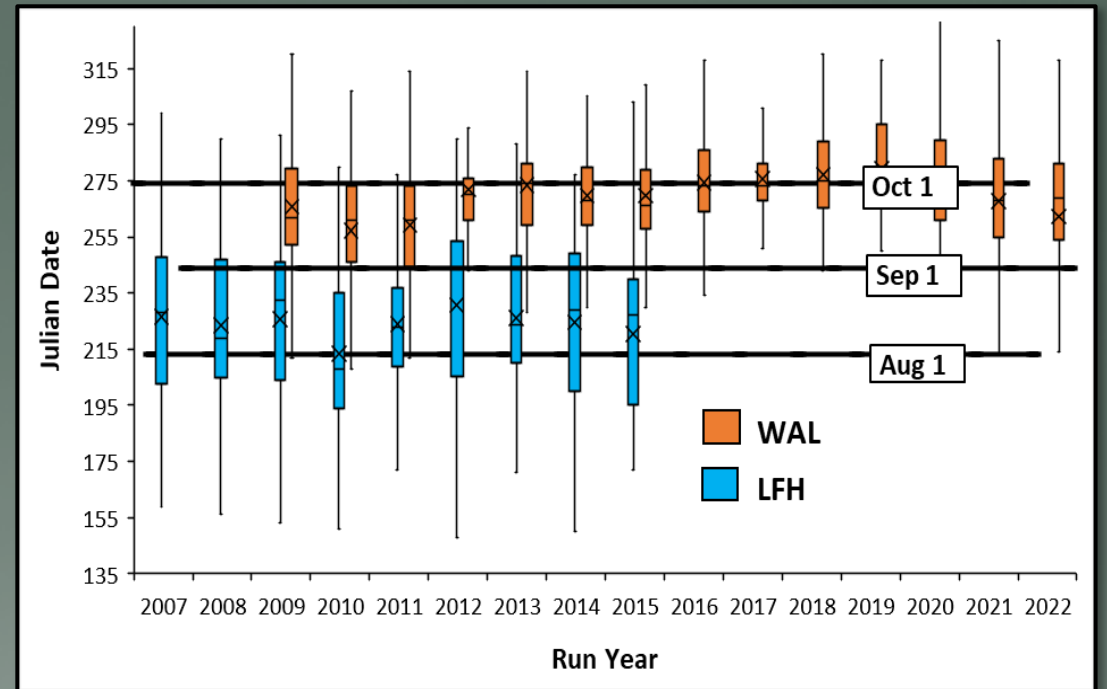
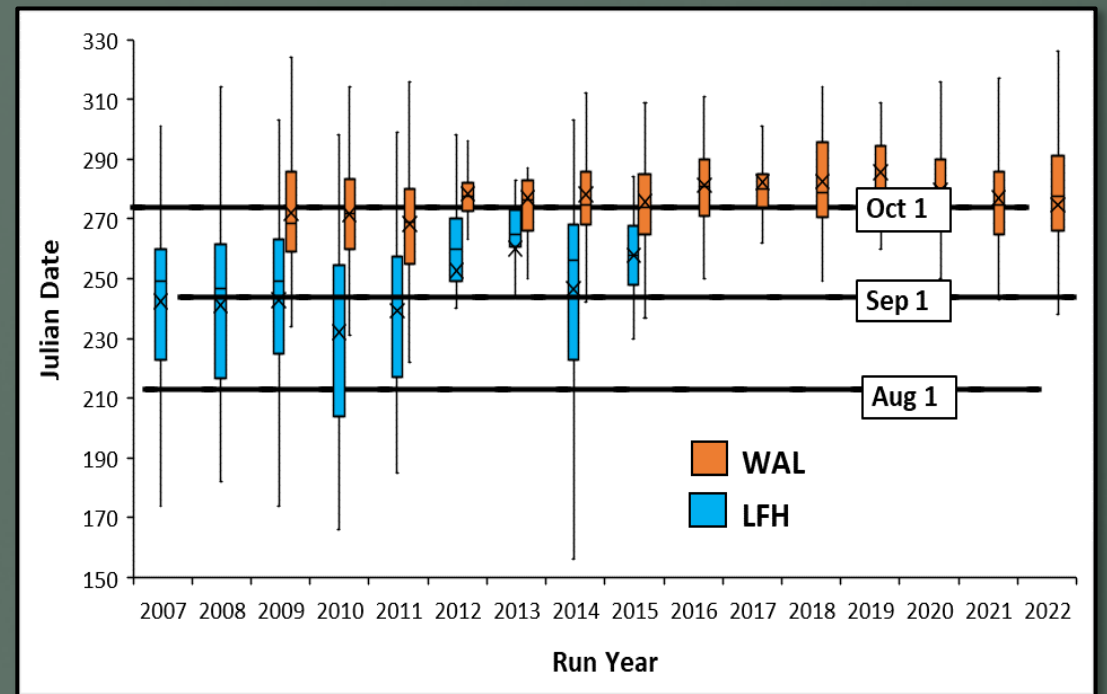
Age at Return

HOR_{LFH}

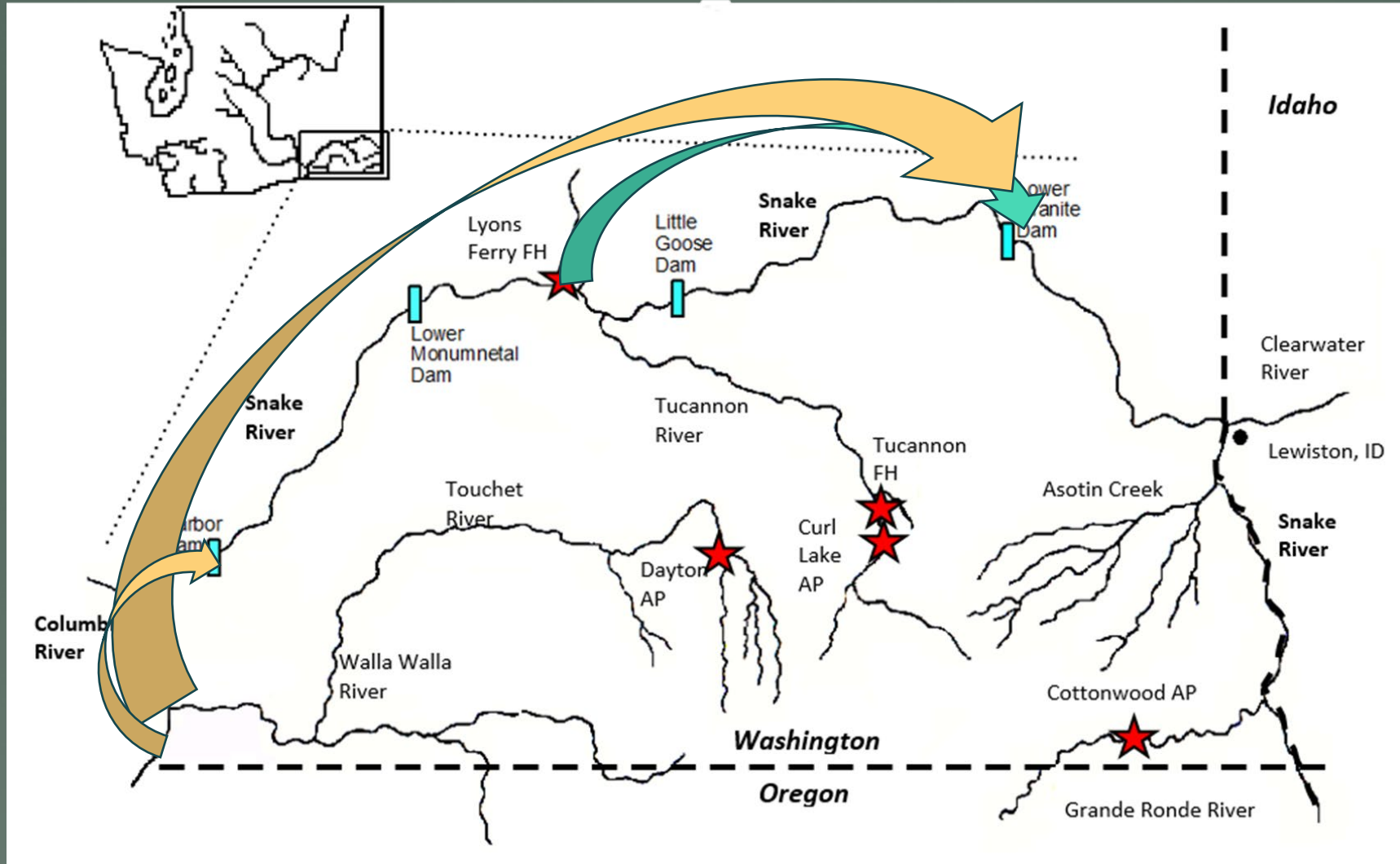
HOR_{WAL}



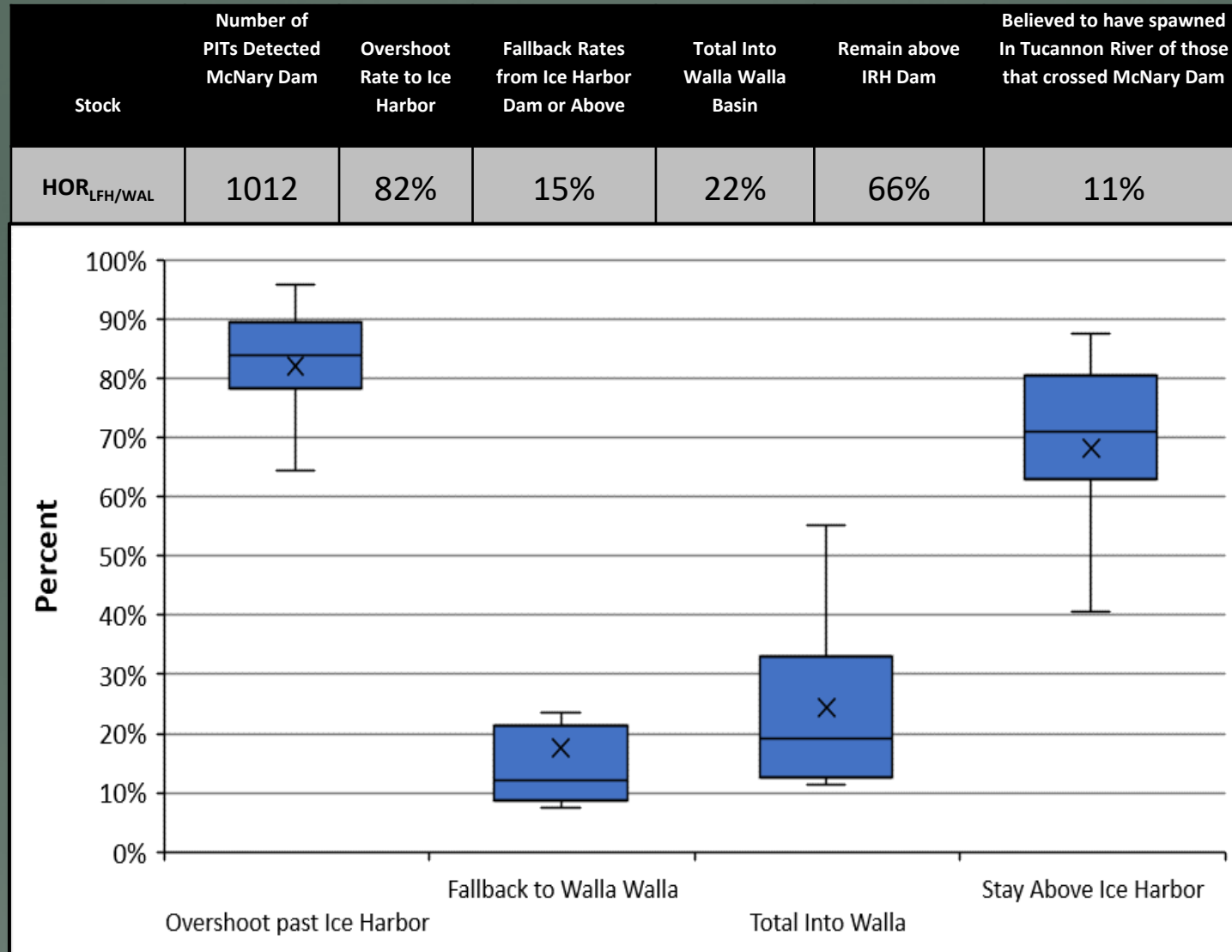
Adult Return Timing



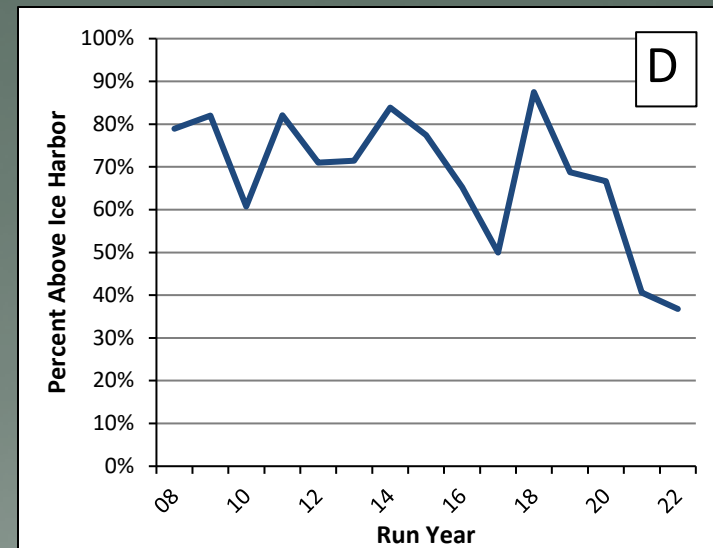
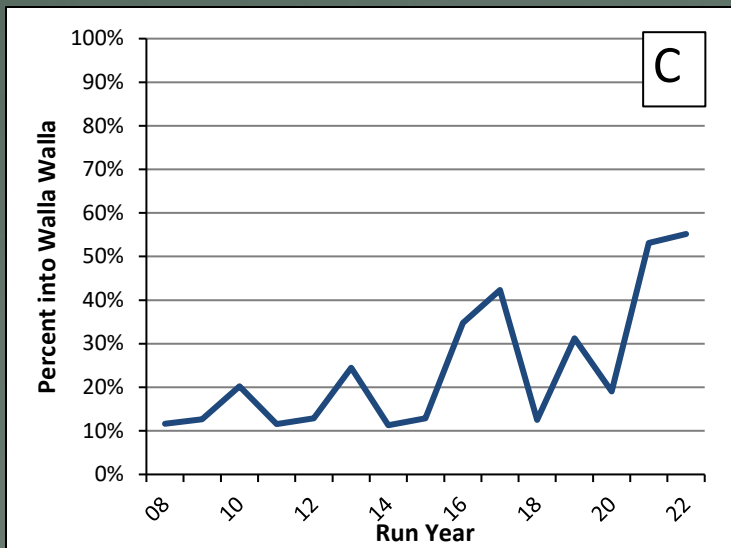
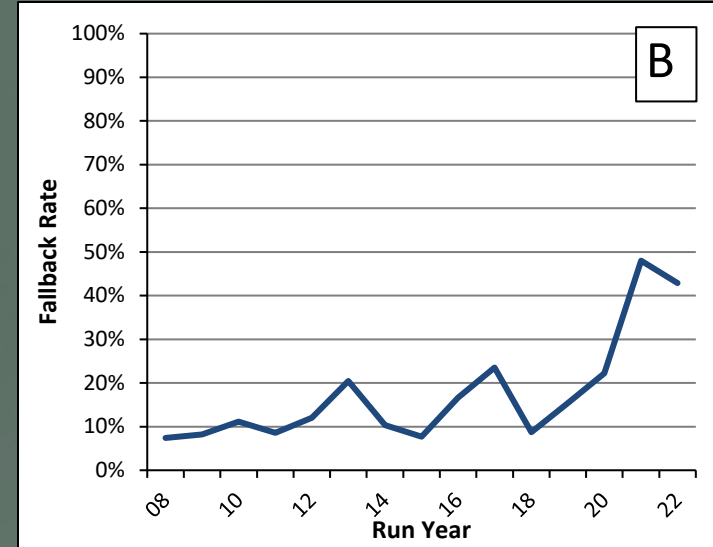
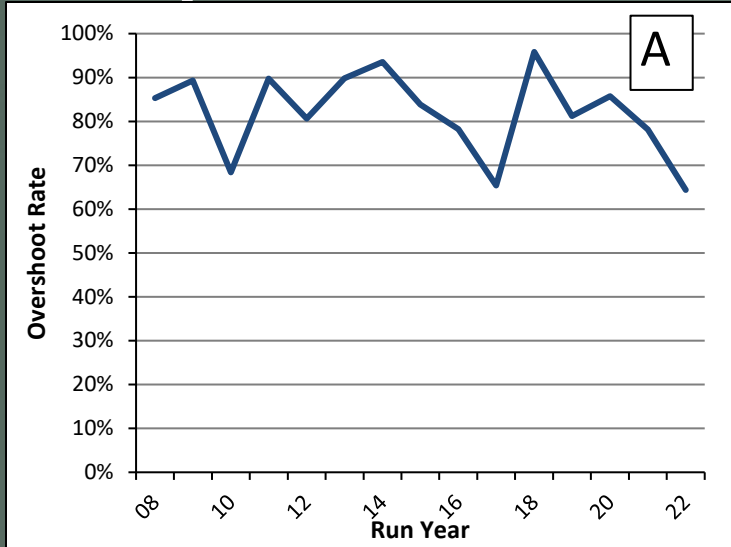
Overshoot/Straying



Dayton AP Releases (Mid-C)

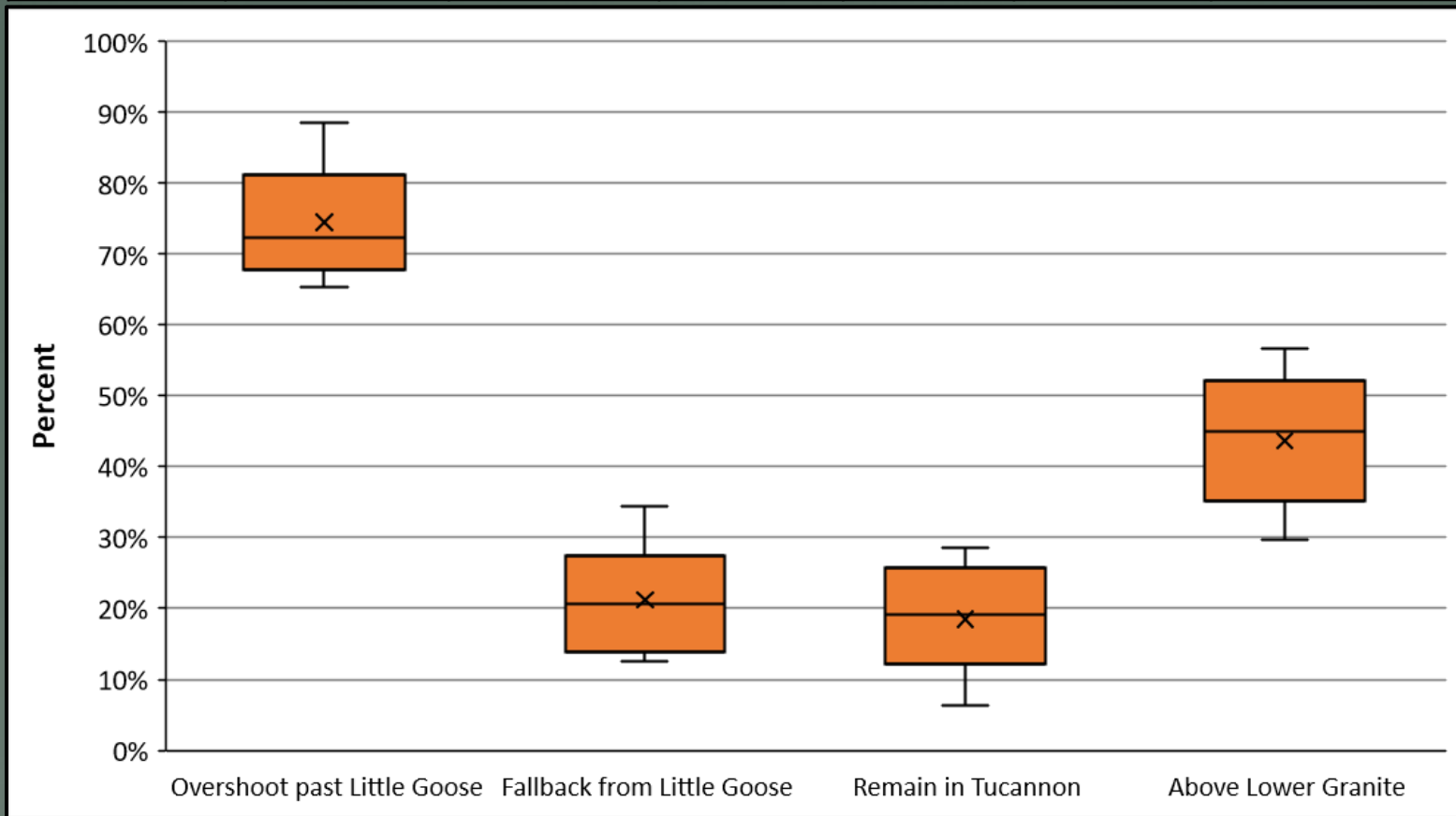


Dayton AP Releases (Mid-C)

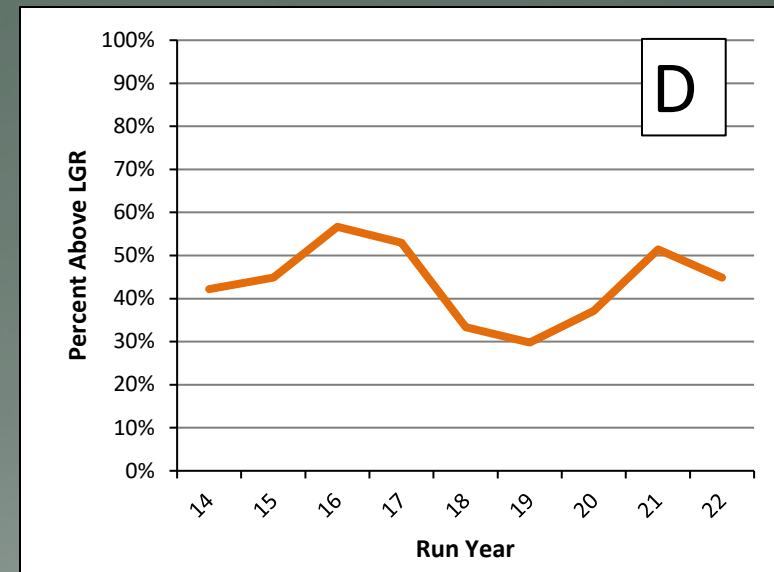
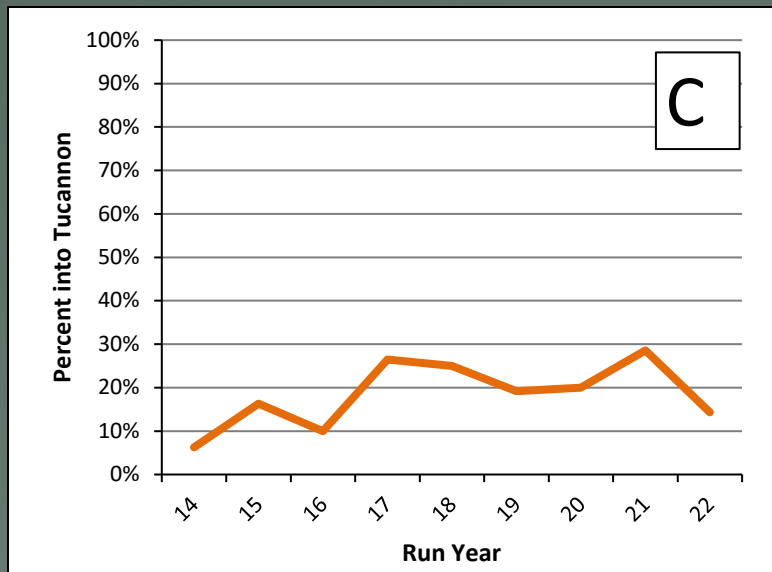
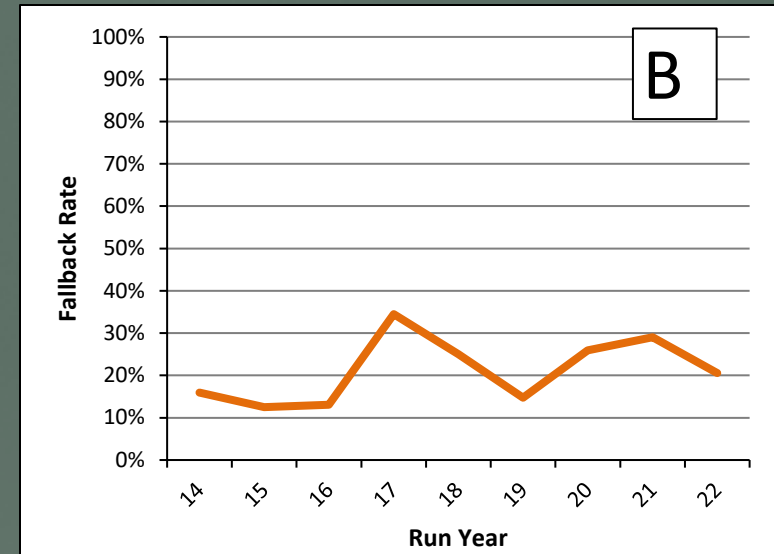
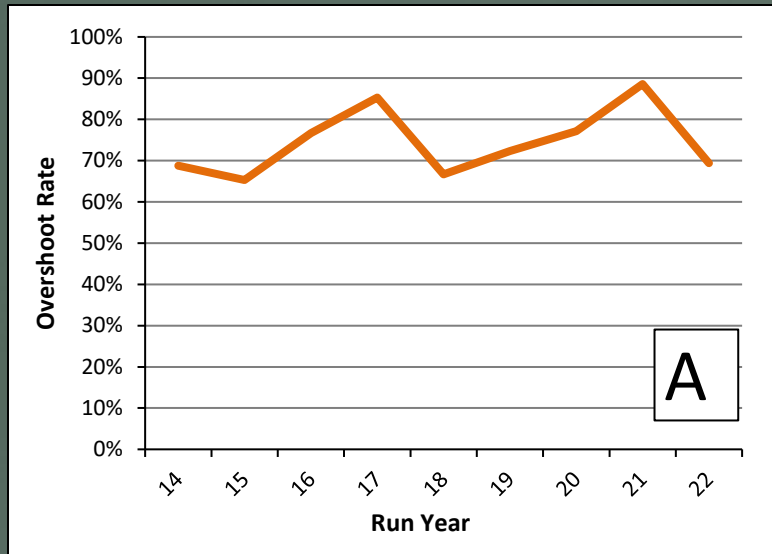


LFH On-station Releases (Snake River)

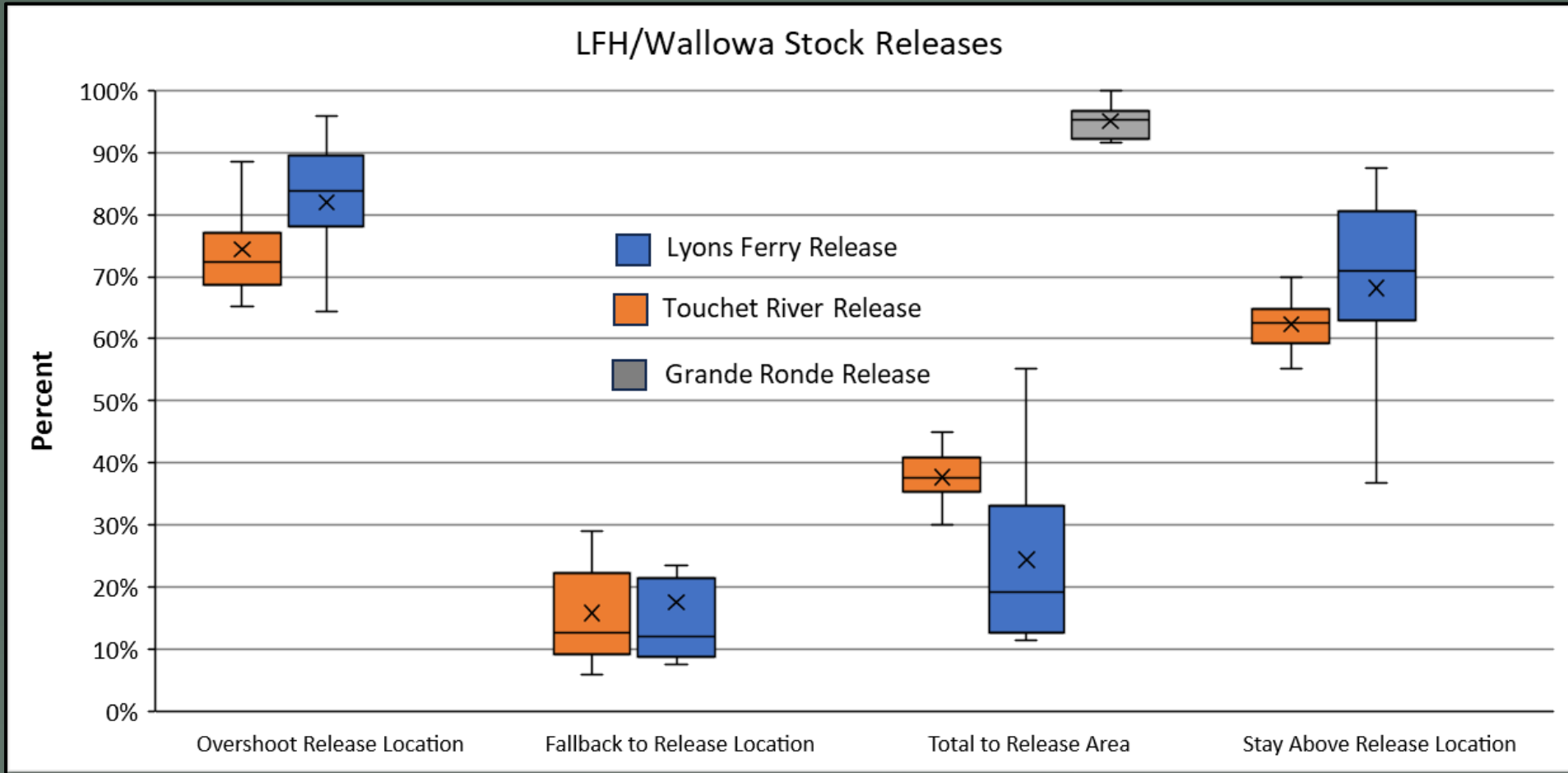
Stock	Number of PITs Detected at IHR Dam (N)	Overshoot Rate to LGO	Fallback Rate from LGO	Total Into Tucannon River	Remain above LGR Dam	Between IHR and LGR
$HOR_{LFH/WAL}$	368	74%	21%	17%	44%	39%



LFH On-station Releases (Snake River)



HOR_{LFH/WAL} release comparison



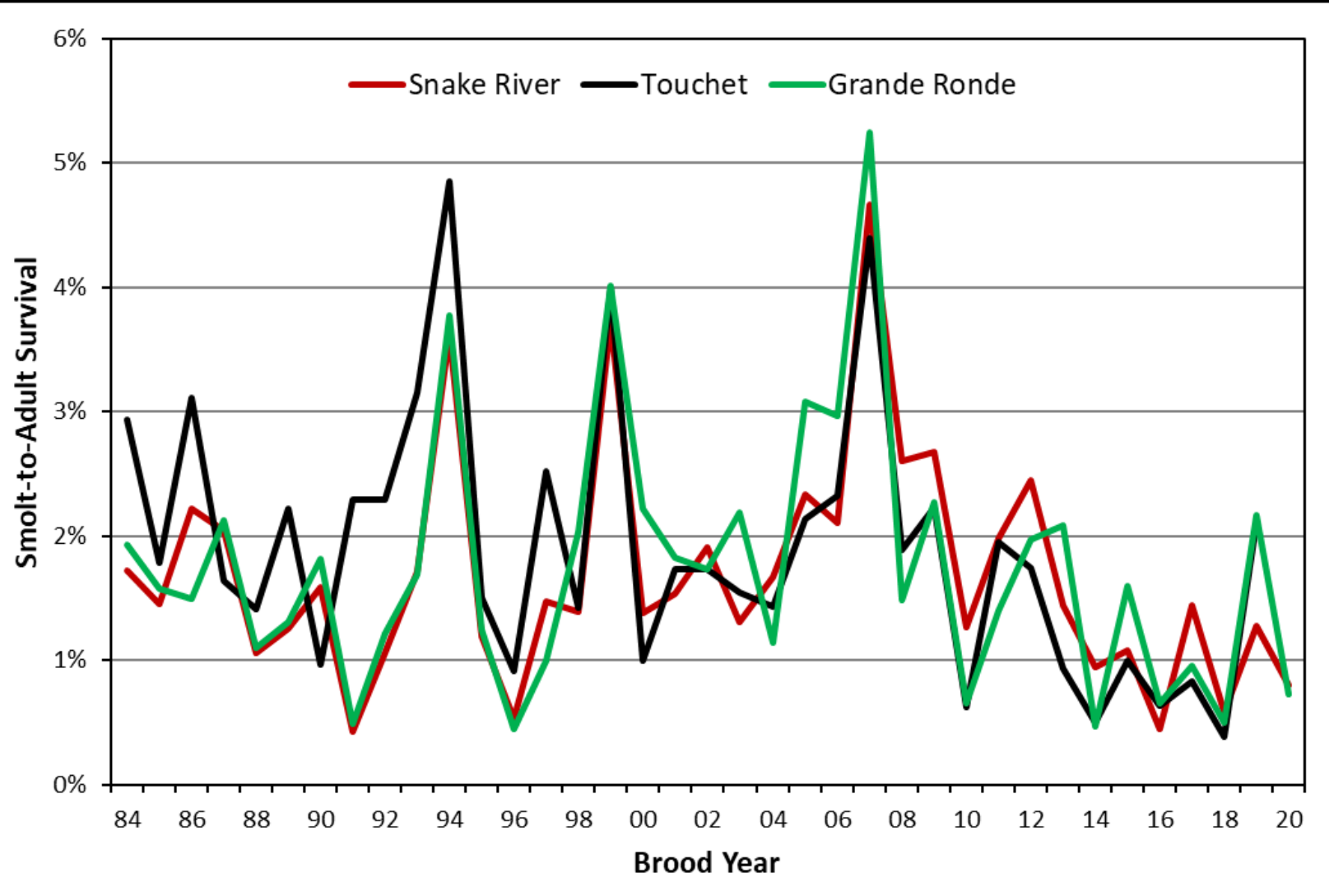
Productivity: SAS

Project Areas:

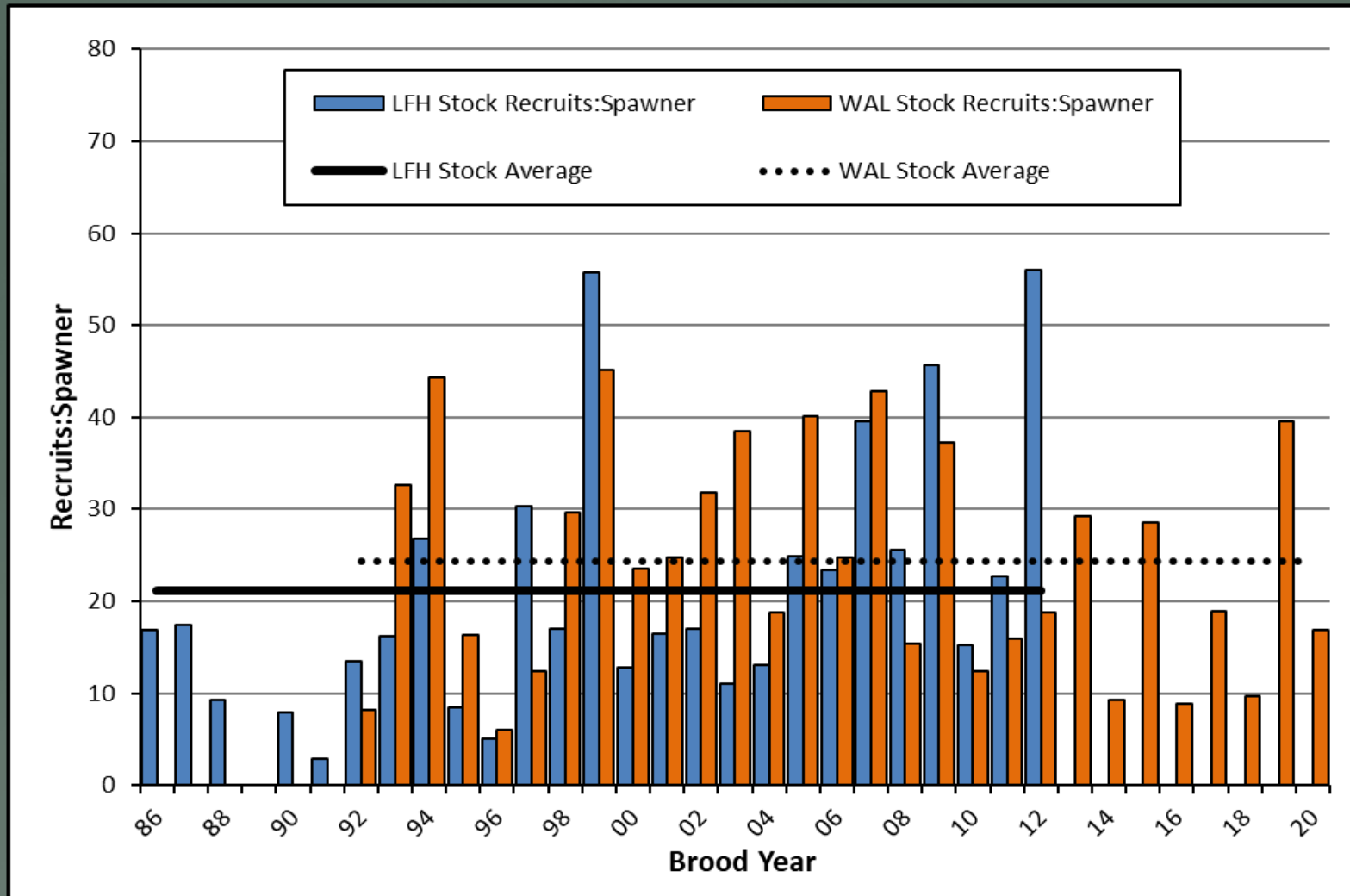
McNary Dam (Touchet R.)

Ice Harbor Dam (LFH)

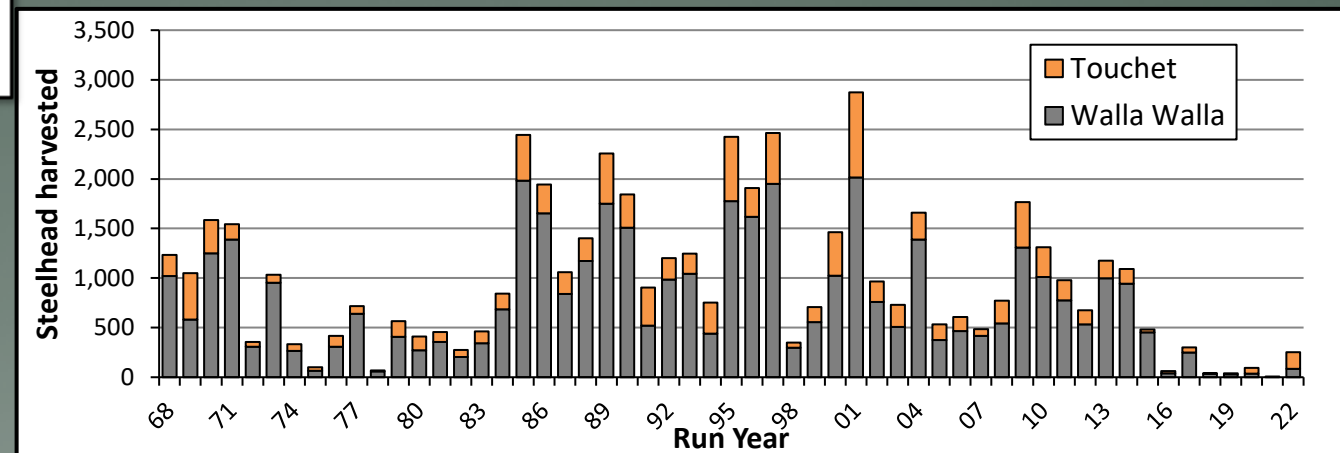
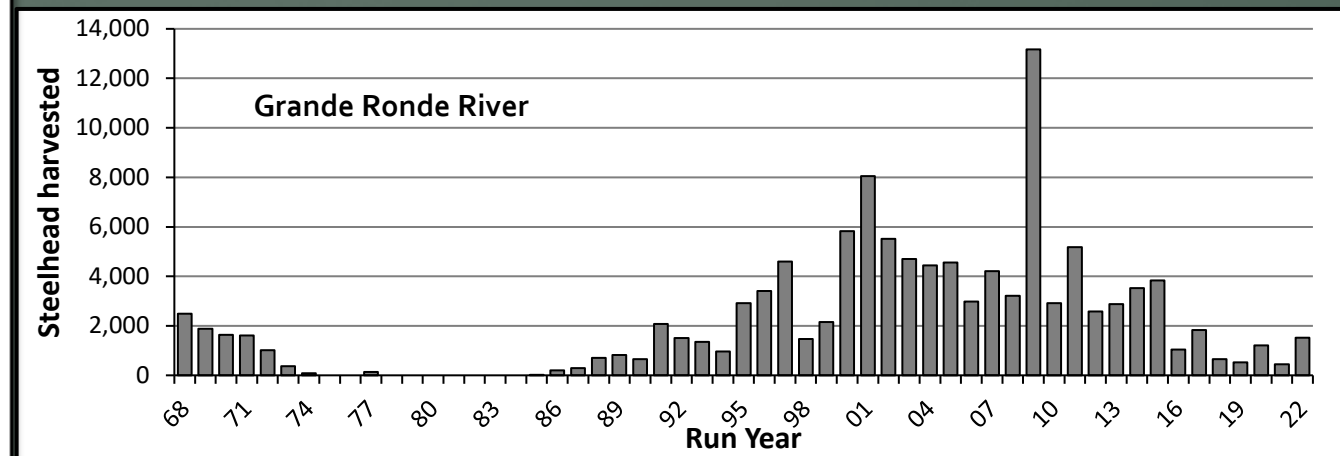
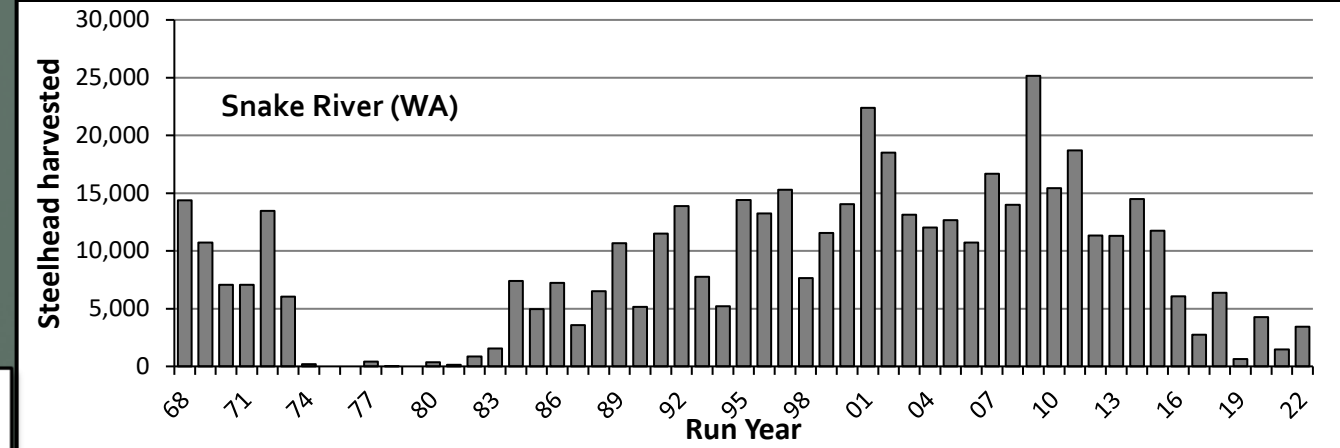
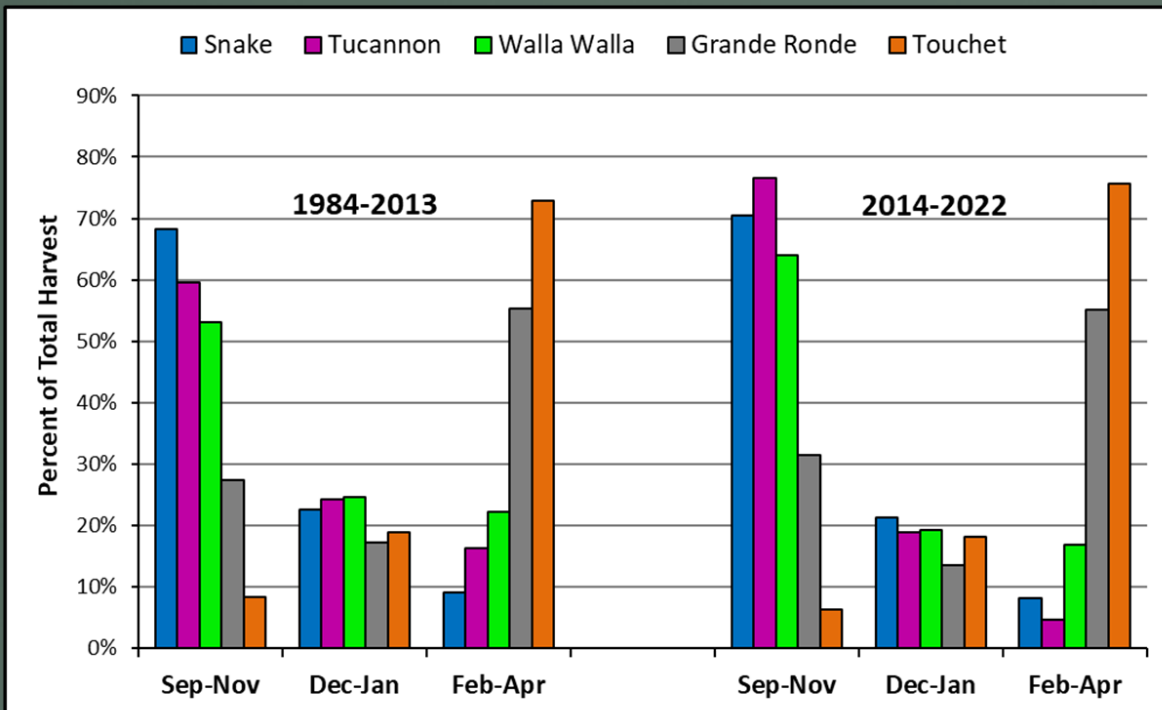
Ice Harbor Dam (COTP)



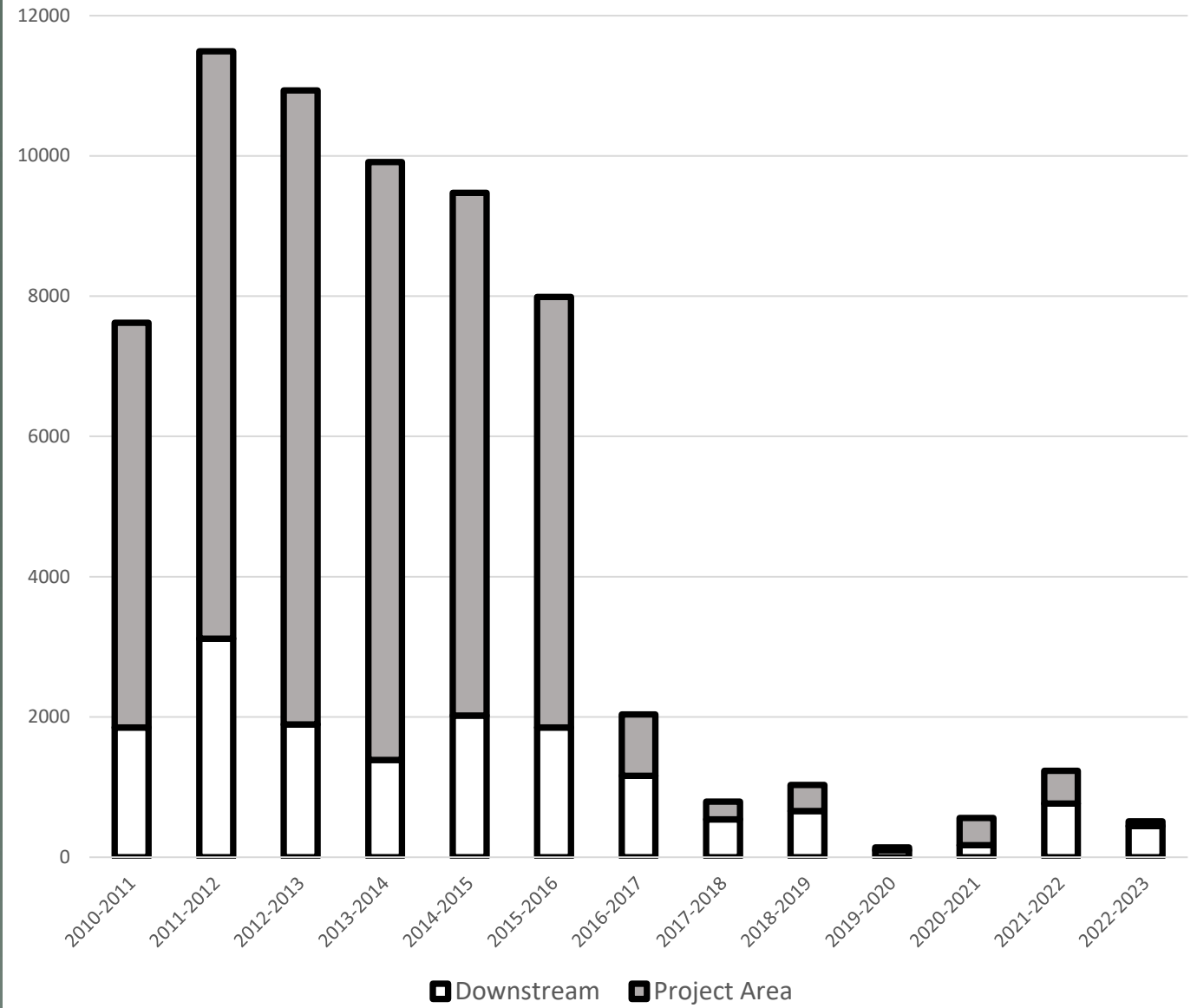
Productivity: R/S



Harvest



Harvest



Adaptive Management Changes:

Phased out HOR_{LFH} and replaced with HOR_{WAL}

Replaced HOR_{LFH} with HOR_{TUC}
mitigation releases in the Tucannon River

Ended Walla Walla R. production,
adjusted release location numbers

Removal of surplus HOR at weirs/traps

Adjusted stream fishing regs to target
residuals



HOR_{LFH/WAL} Summary



The good:

- Adult Return goals
- SARs above project goals
- In-hatchery performance
- Harvest contributions

The not as good:

- Overshoot
- Quantify impacts to NOR
- Harvest Monitoring/PBT



Next steps HOR_{WAL}:

- Replace HOR_{WAL} on-station releases with HOR_{TUC} stock
 - On-station trapping
- Reevaluate Dayton AP releases of HOR_{WAL}
 - Stop
 - Replace with HOR_{TUC}
- Reduction of HOR_{WAL} could yield additional rearing space
 - Expand COTP release
 - Work with ODFW on potential fall brood expansion

Questions?

