



Assessment of hatchery origin Summer-run Chinook Salmon in the Spokane River watershed

Rick Raymondi, Spokane
Tribe of Indians

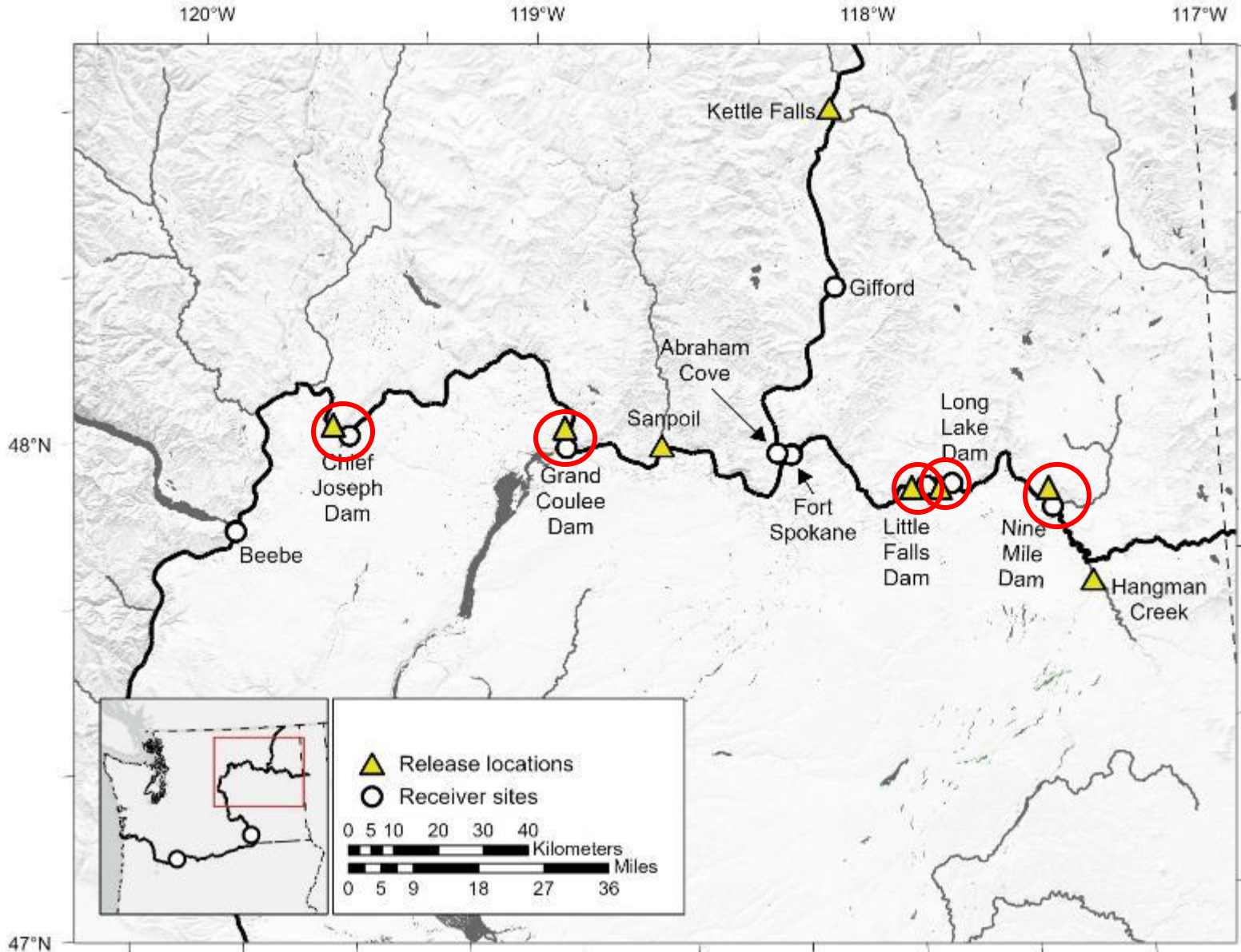
Spokane River Forum 2025
April 22, 2025



Background - Upper Columbia Blocked Area



- 1908 - Nine Mile Falls Dam (NMD)
- 1911 - Little Falls Dam (LFD)
- 1915 - Long Lake Dam (LLD)
- 1941 - Grand Coulee Dam (GCD)
- 1955 - Chief Joseph Dam (CJD)



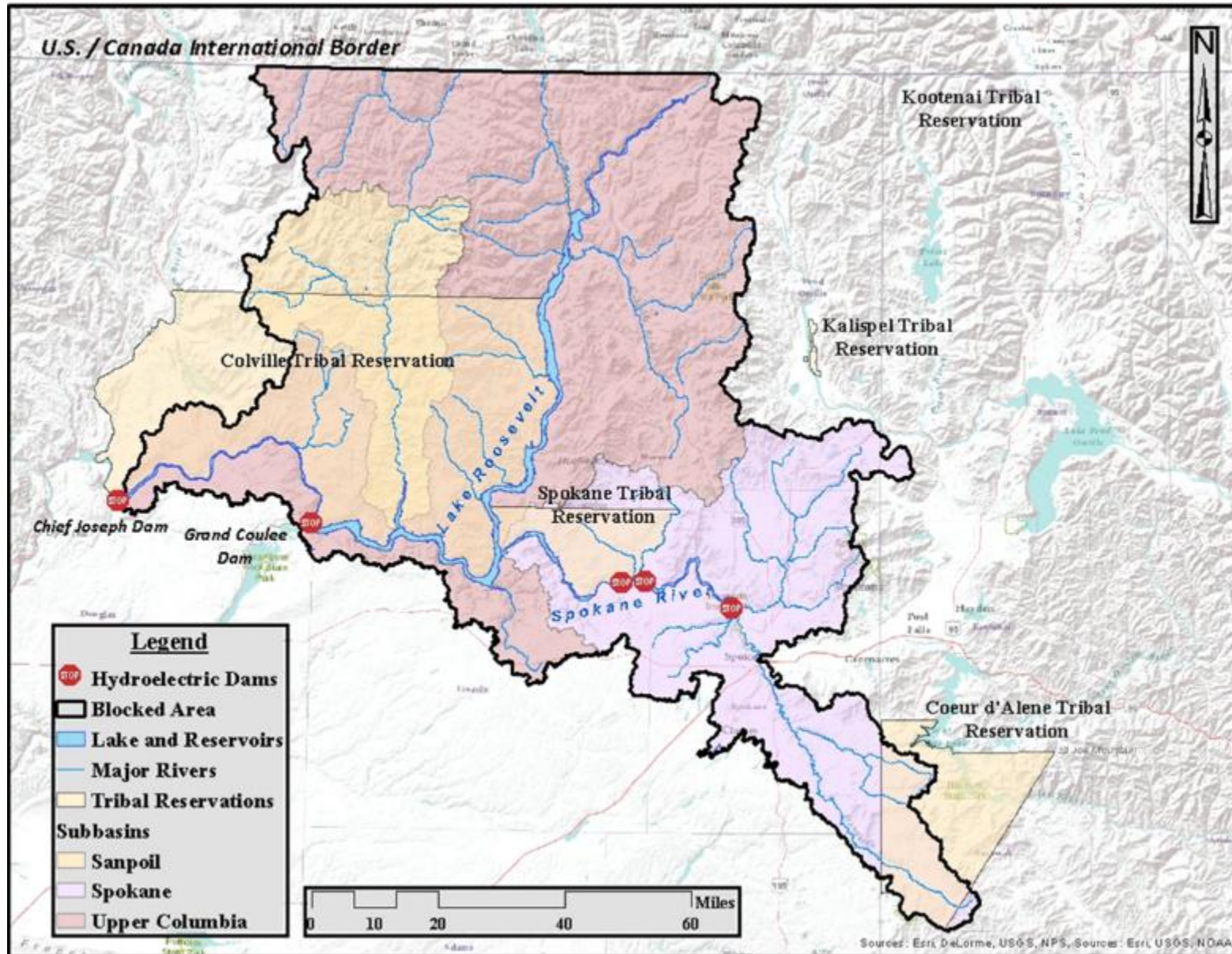
Introduction - Phase 2

UCUT Phase 1 Report (2019)

- Pre-assessment planning for reintroduction

UCUT Phase 2 Report (2021)

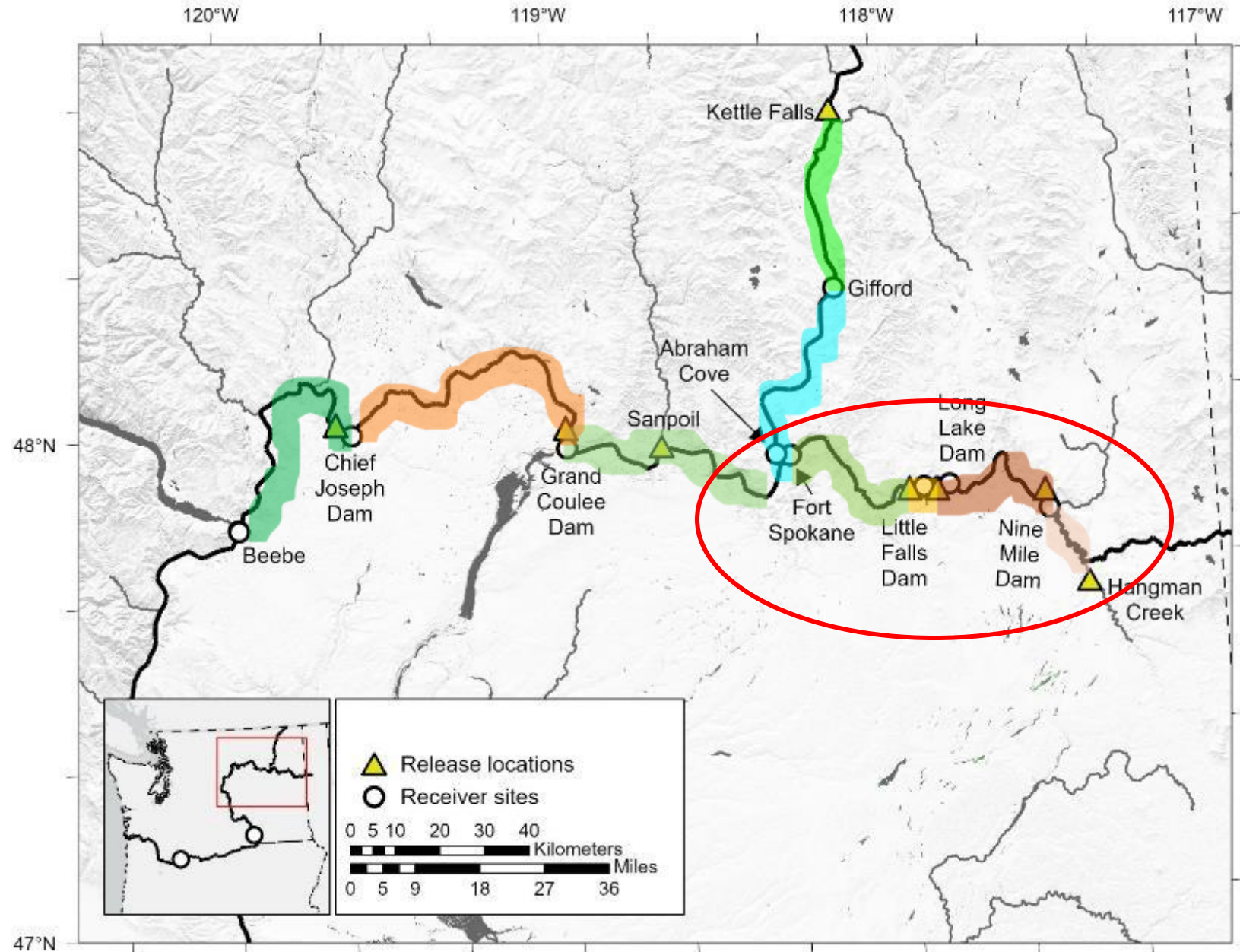
- Testing feasibility
- 20-year stepwise approach
- Currently testing survival and migration behavior



Background - Pilot Study cont.

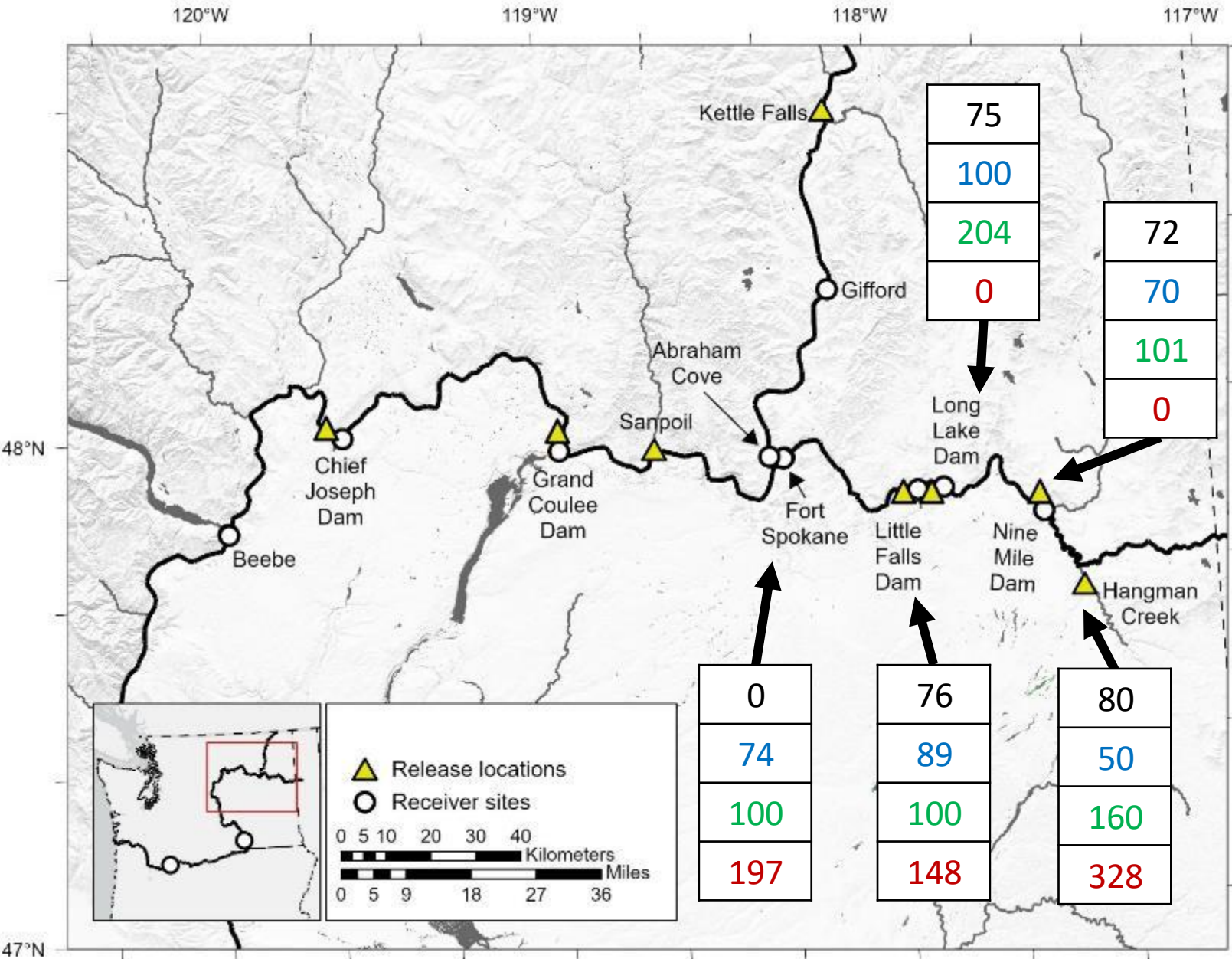
Goals

- Investigate reach and project survival
- Travel timing and duration
- Travel and forebay behavior
- Project passing behavior and preference

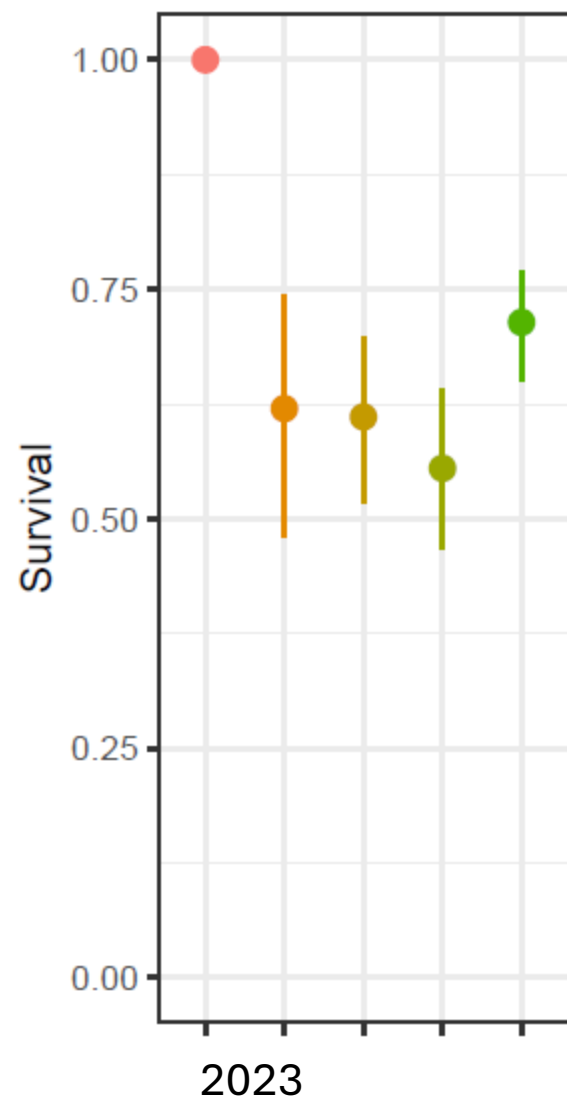
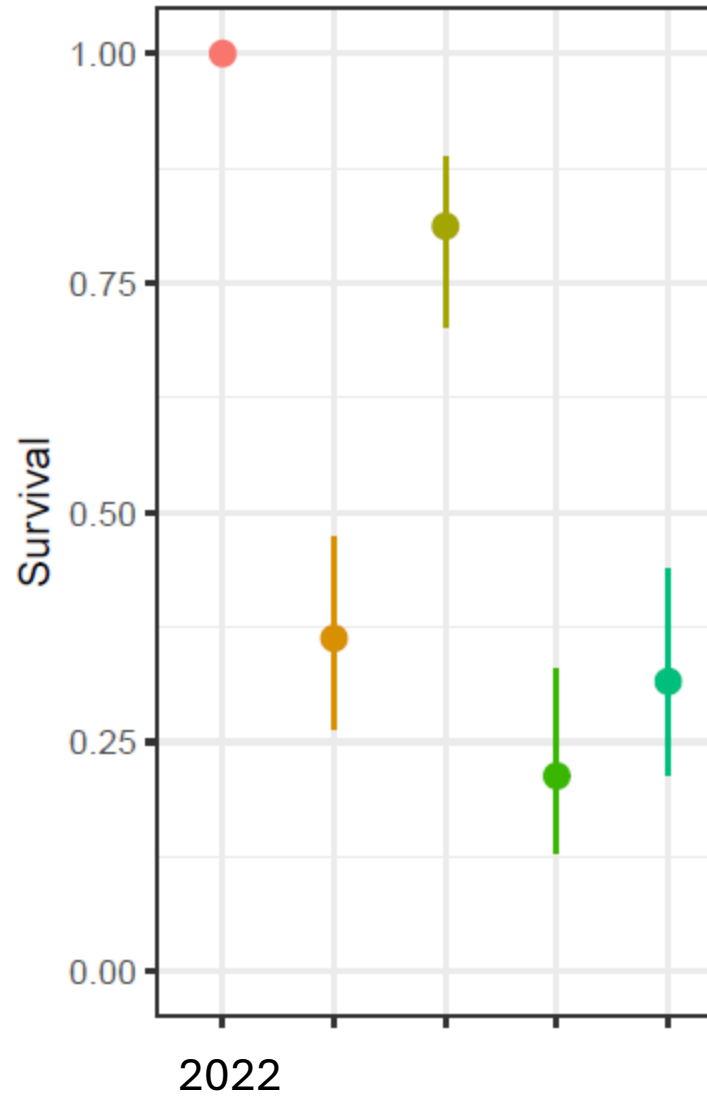


Background - Pilot Study

Year	# Released
2022	288
2023	358
2024	809
2025	673



Results – Reach Survival*

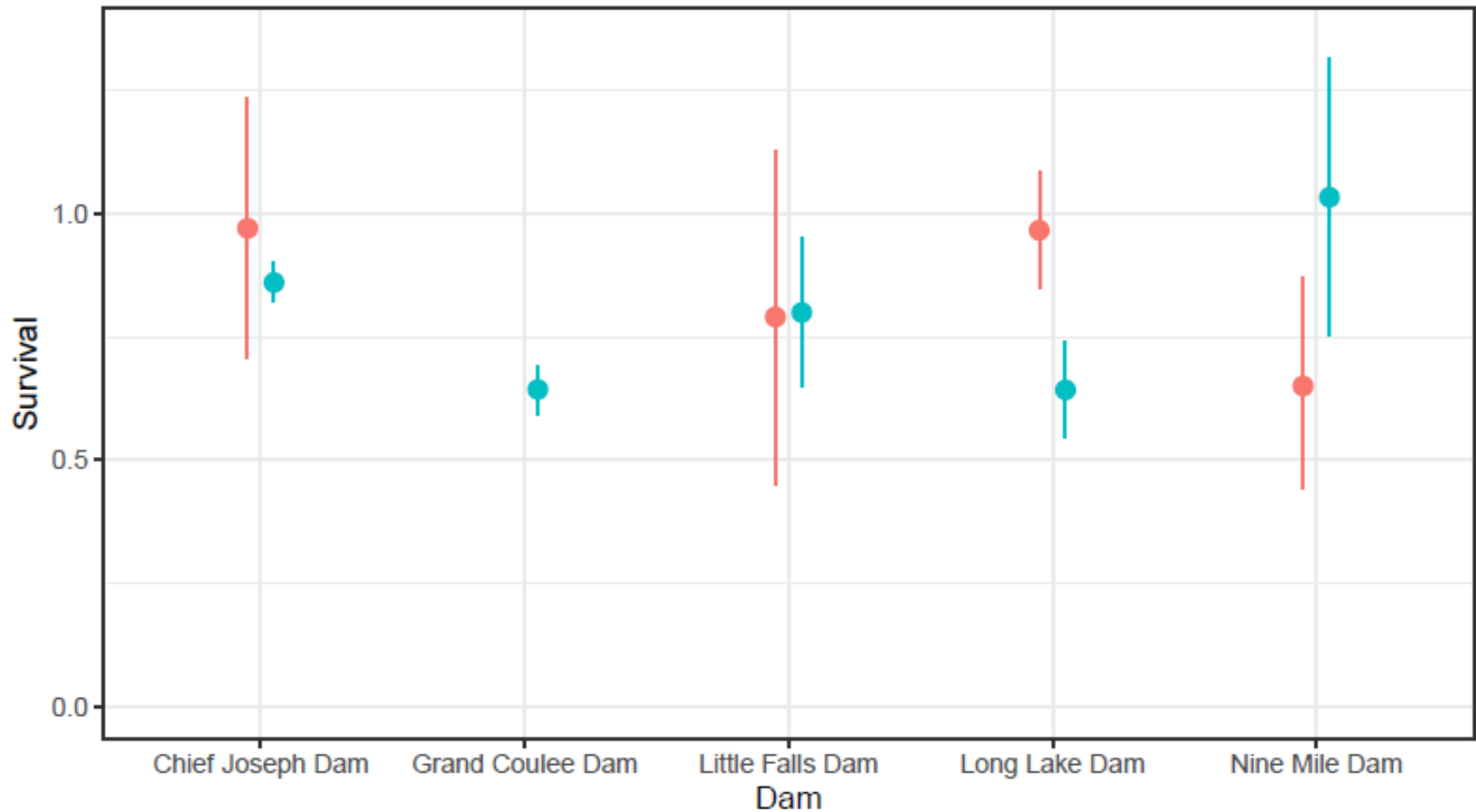


Reach

- Hangman Cr. to Nine Mile Forebay
- Nine Mile Forebay to Long Lake Forebay
- Long Lake Forebay to Little Falls Forebay
- Little Falls Forebay to Ft. Spokane
- Ft. Spokane to Grand Coulee Forebay

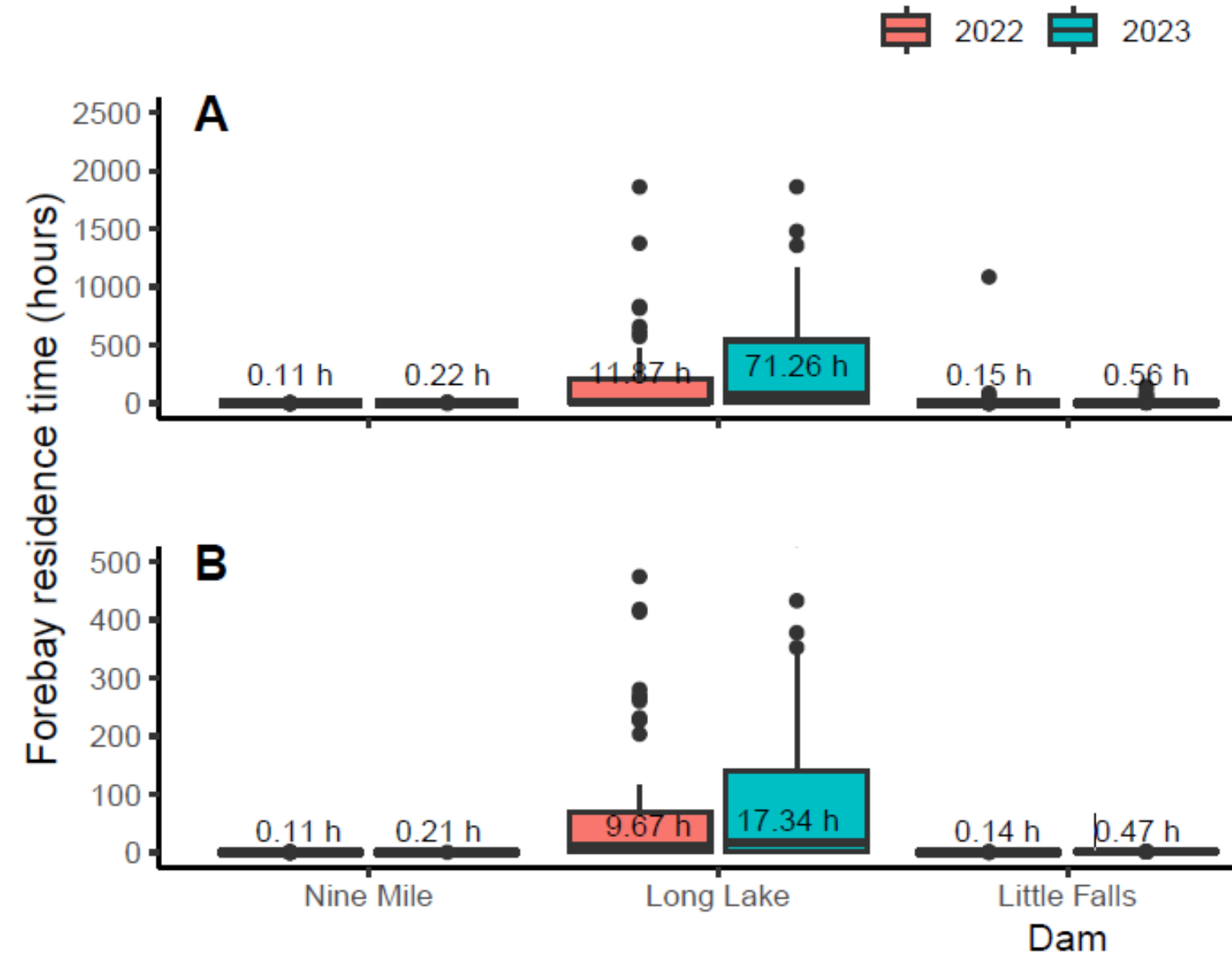


Results – Project Survival*



Little Falls Dam	Survival Est.
2022	79% [45%, 113%]
2023	80% [65%, 95%]
2024	90% [82%, 98%]
Long Lake Dam	Survival Est.
2022	96% [85%, 109%]
2023	64% [54%, 74%]
2024	34% [21%, 47%]
Nine Mile Dam	Survival Est.
2022	65% [44%, 87%]
2023	103% [75%, 131%]
2024	NA

Results – Forebay Residence Time

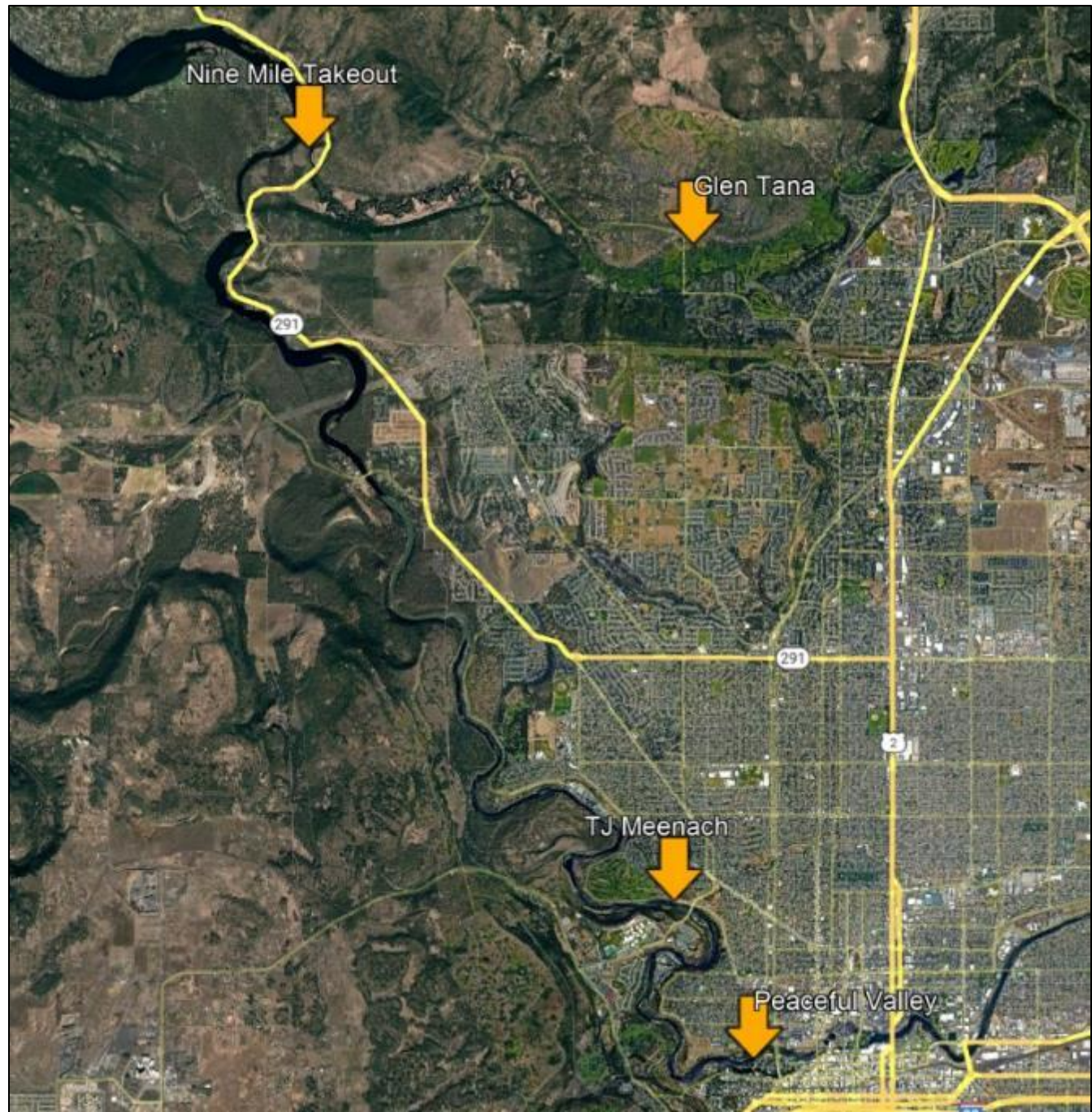


Adult Transportation

- Access to surplus adult CHK from Wells Dam and Chief Joseph fish hatcheries
- Spokane Tribe of Indians, Confederated Tribes of the Colville Reservation, and the Coeur d'Alene Tribe all transport adult CHK into the blocked area
- Pathogen testing before any fish are released
- Parentage Based Tagging for all transported adults



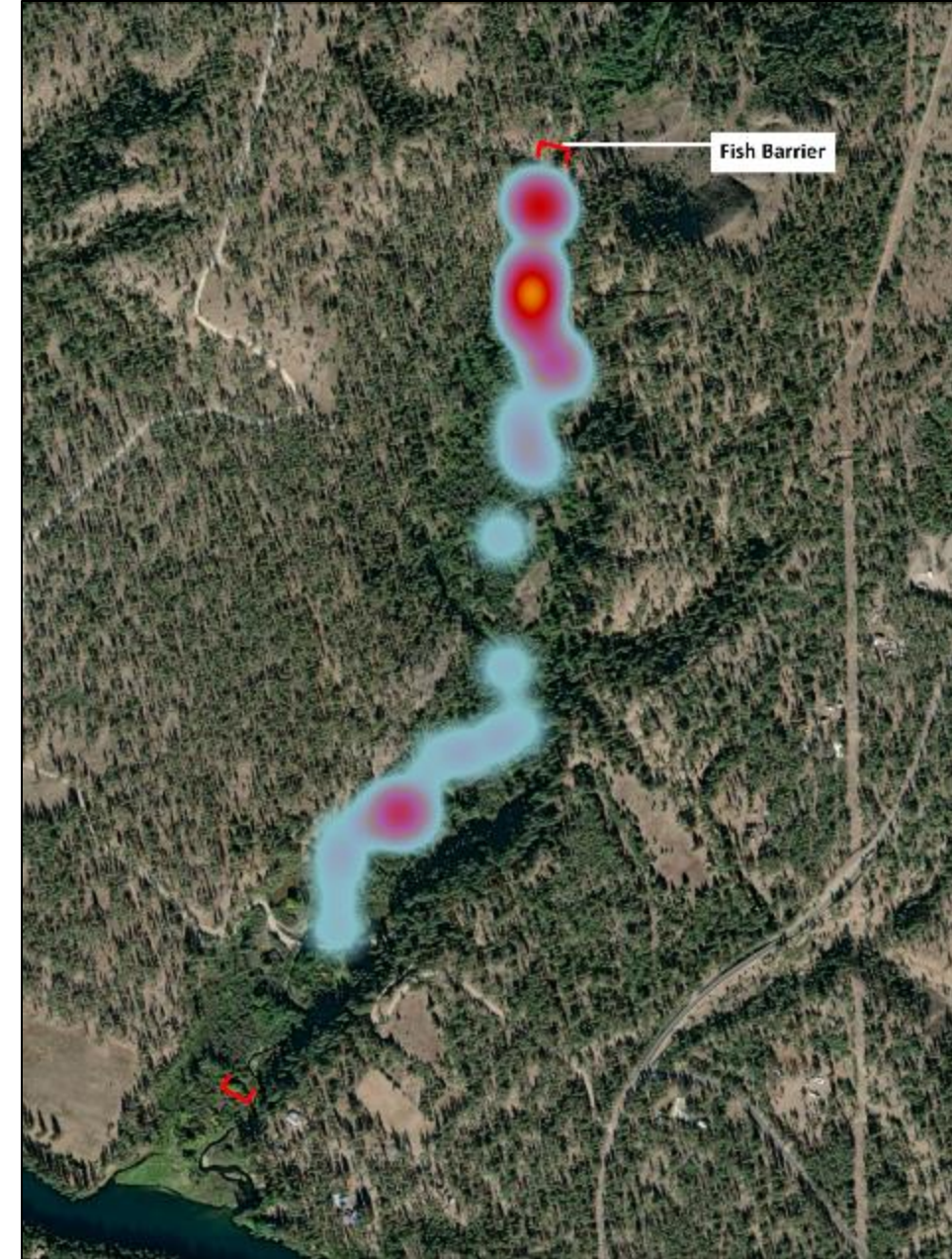
Adult Transportation



Redd Surveys – Tshimikain Creek

2021: 63 CHK released, 17 redds

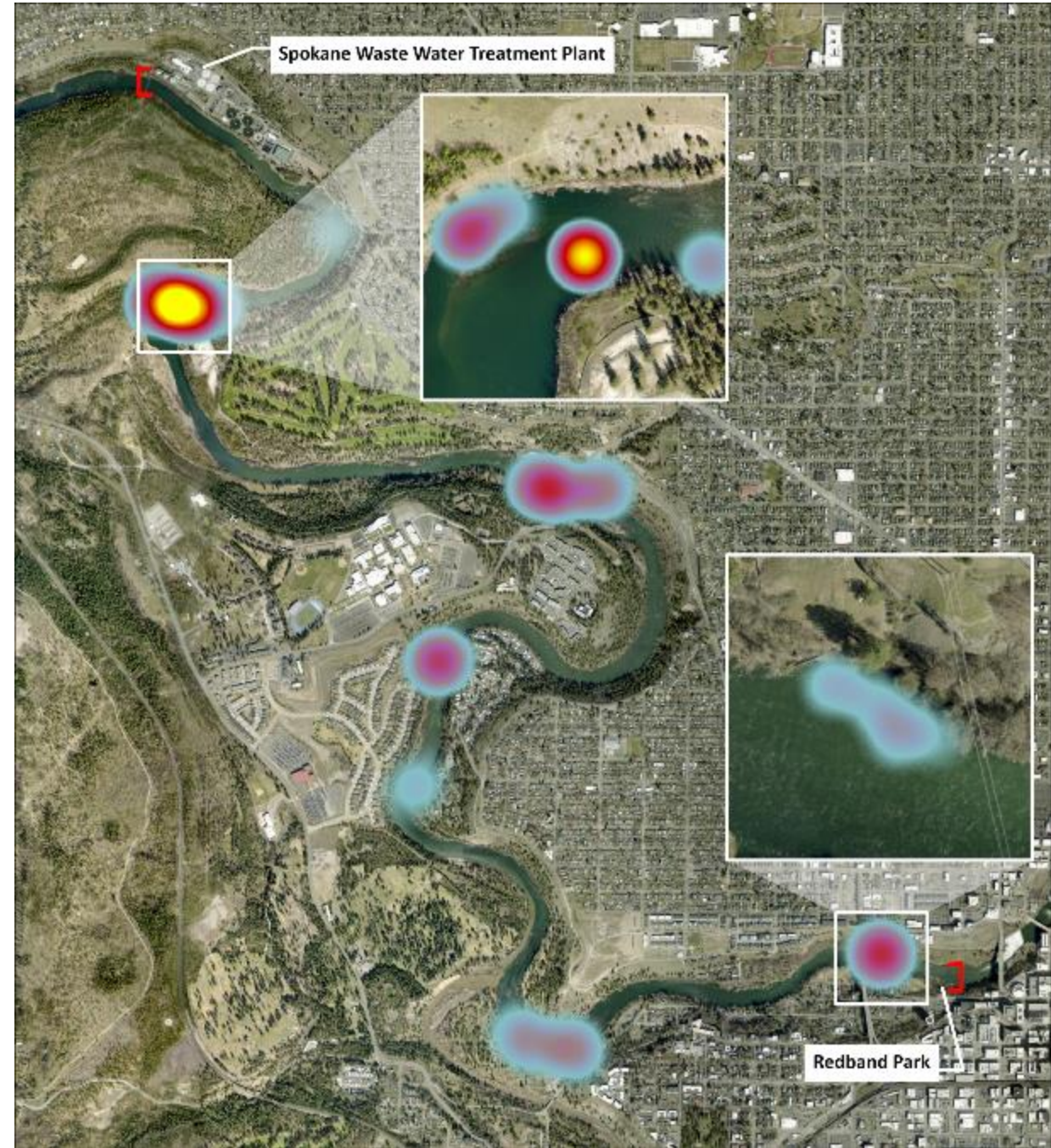
2024: 167 CHK released, 19 redds



Redd Surveys – Spokane River

2022: 150 CHK released, 32 redds

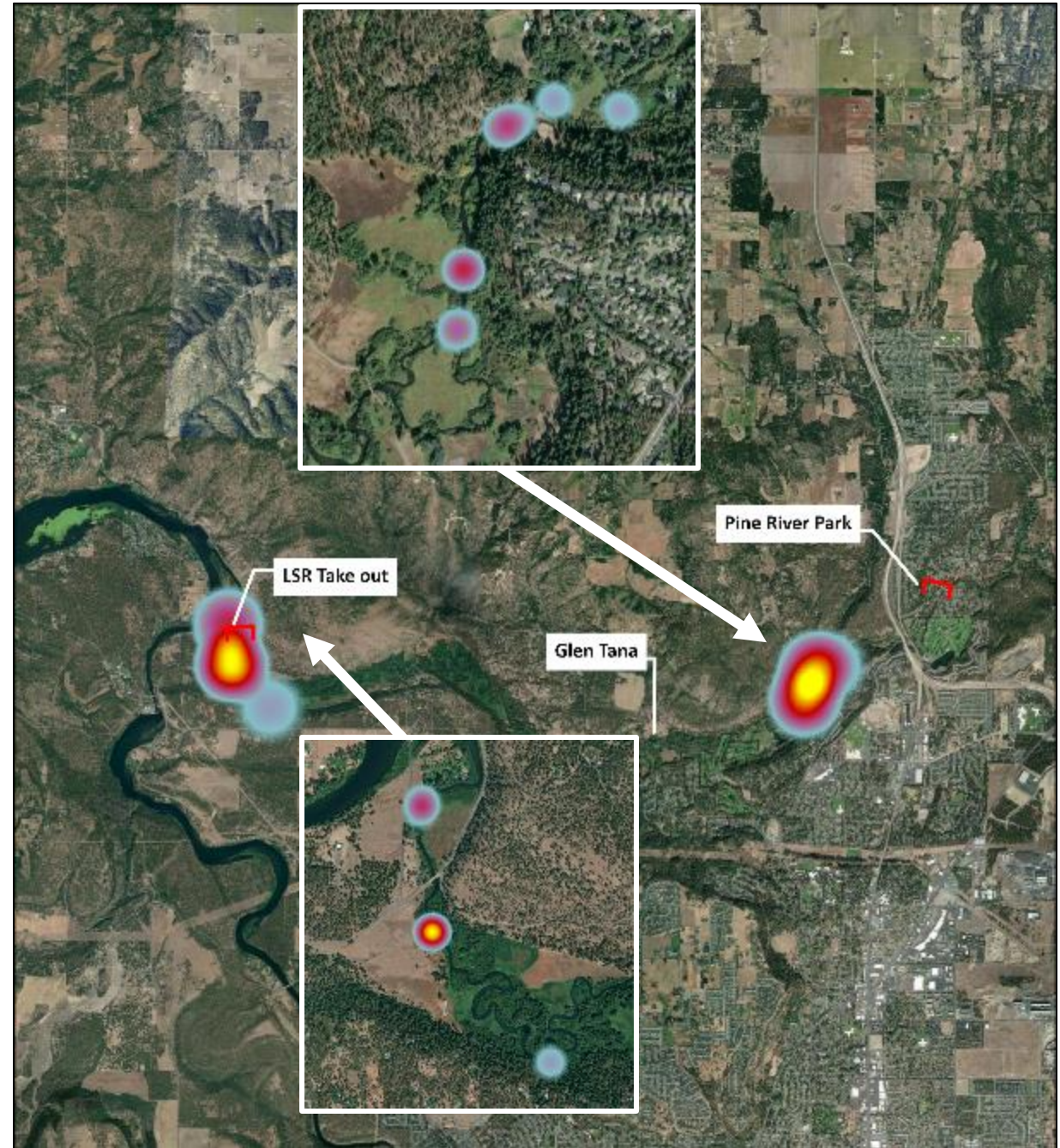
2024: 653 CHK released, 87 redds



Redd Surveys – Little Spokane River

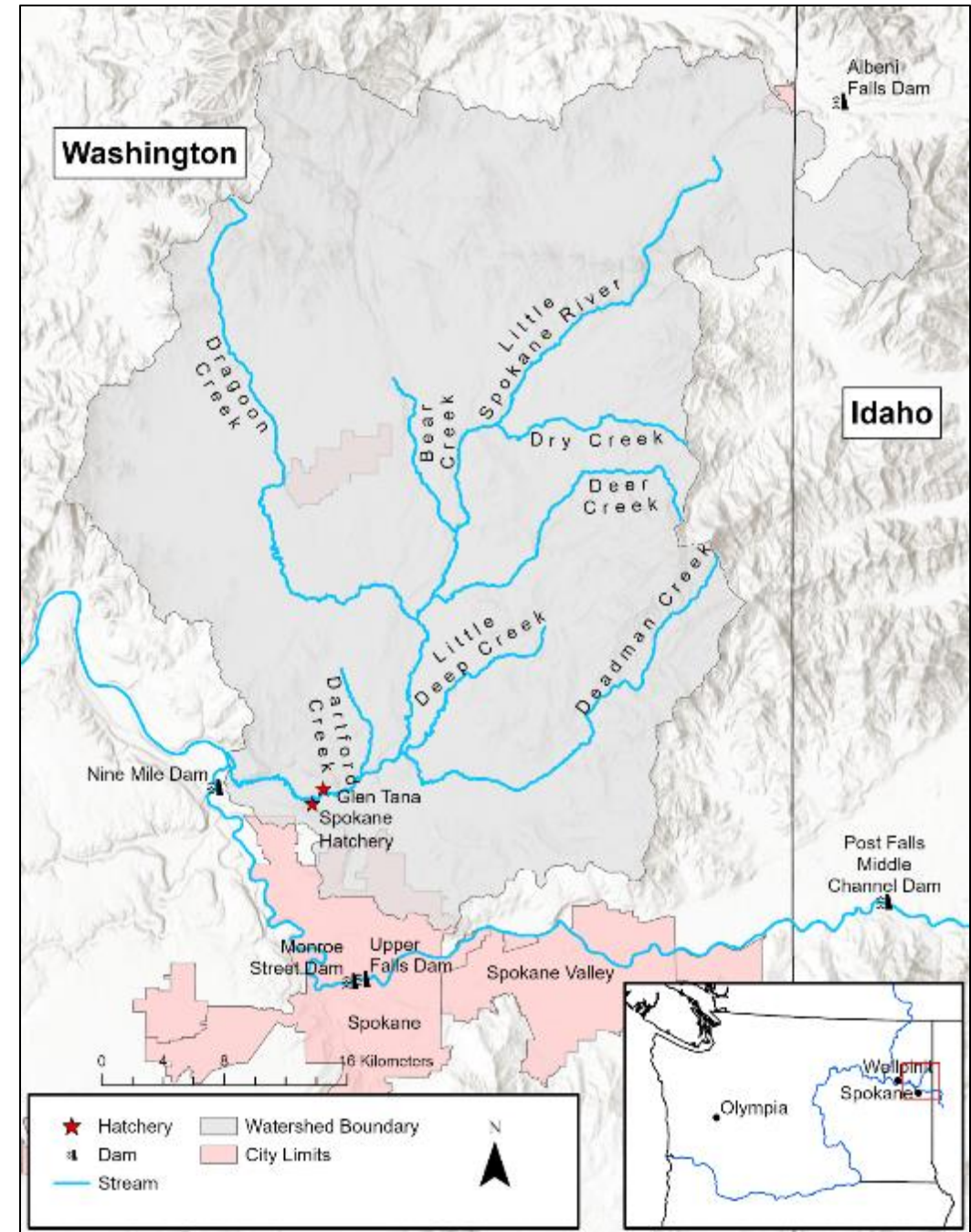
2021: 51 CHK
released, 10
redds

2024: 153 CHK
released, 10
redds



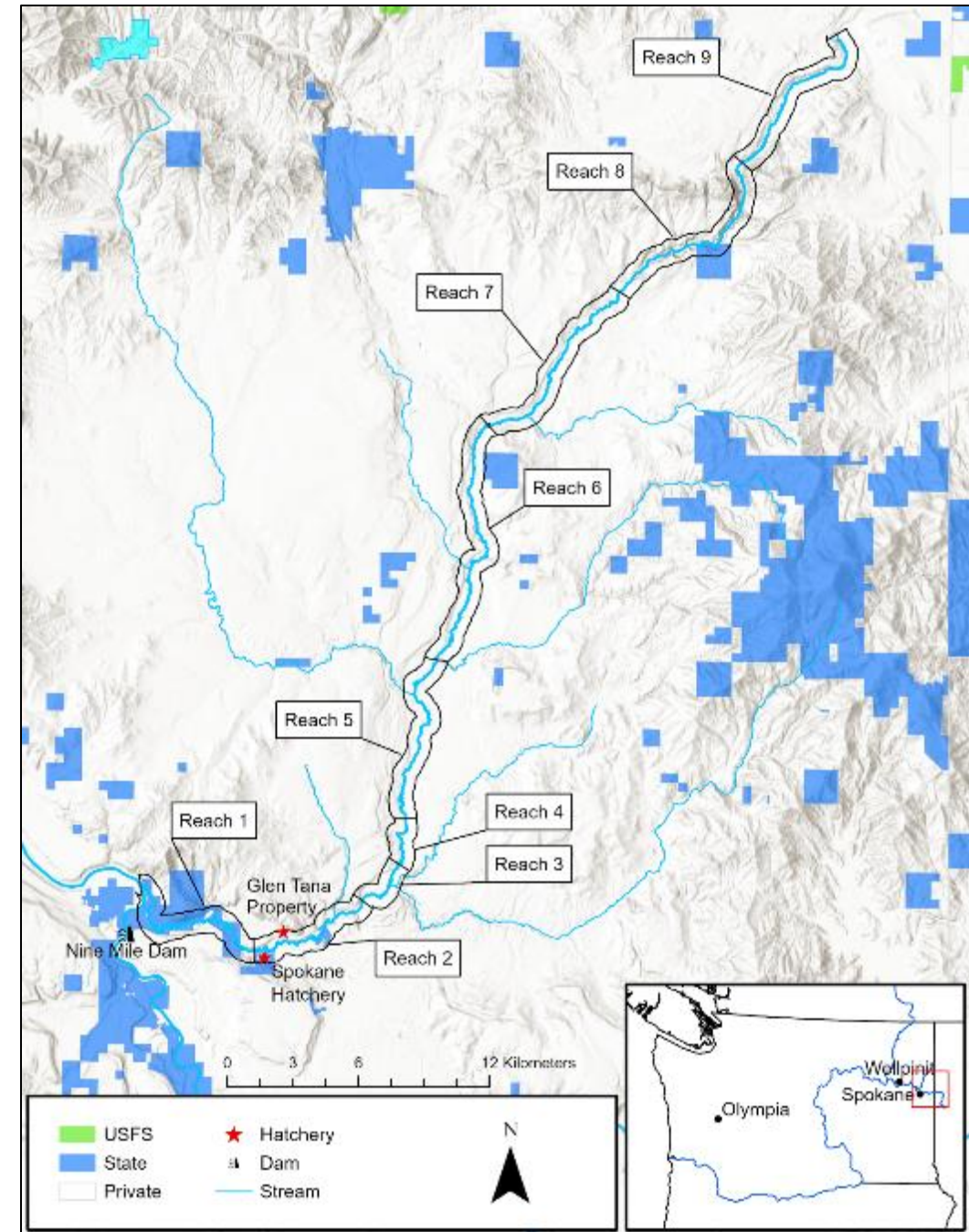
Enhancing the Scope of RM&E

Expand RM&E in the Spokane River watershed



Enhancing the Scope of RM&E

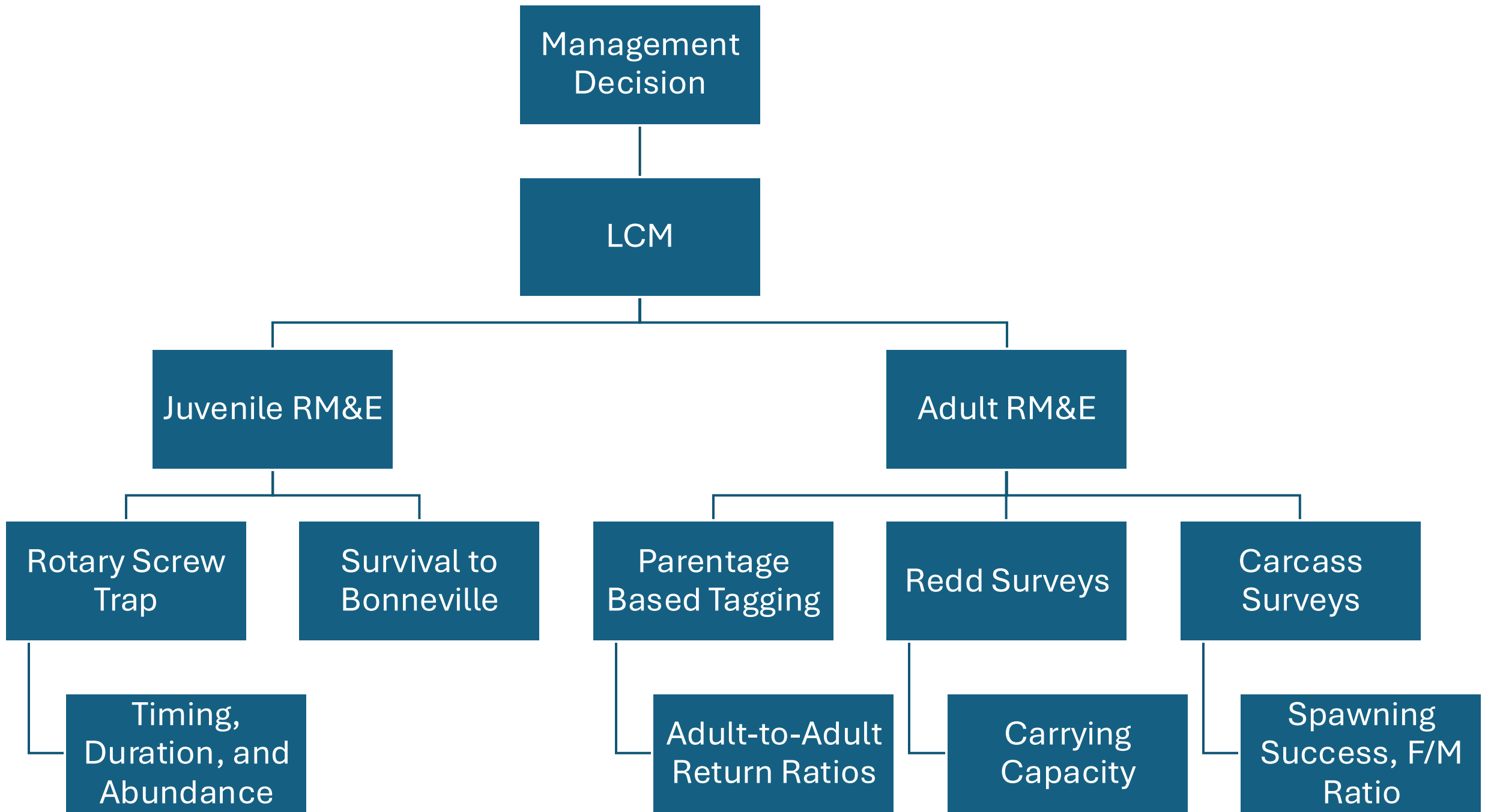
- Landowner collaboration
- Expand monitoring effort and range
- Adult CHK behavior studies



Enhancing the Scope of RM&E

- Outmigration monitoring





Acknowledgements

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