

# UC Davis Salmon Monitoring

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# Putah Creek Fyke Net

Installed 2/21/25



- 50 CHN caught
- 6.32 miles apart
- Removed 4/24/25

# Rotary Screw Trap

Installed 4/24/25

★ = Kilkenny Property



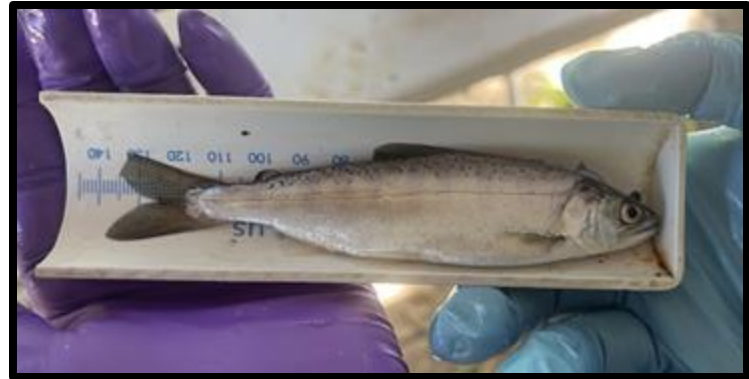
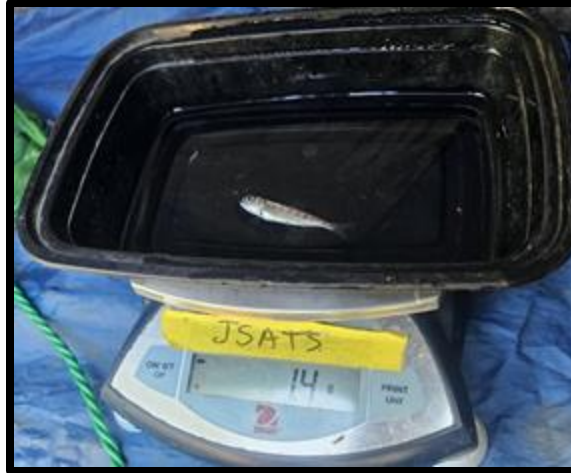
# Rotary Screw Trap Installation

Year	2017	2019	2021	2022	2023	2024	2025
Date Installed	5/1	5/6	3/22	3/24	4/11	4/24	4/24



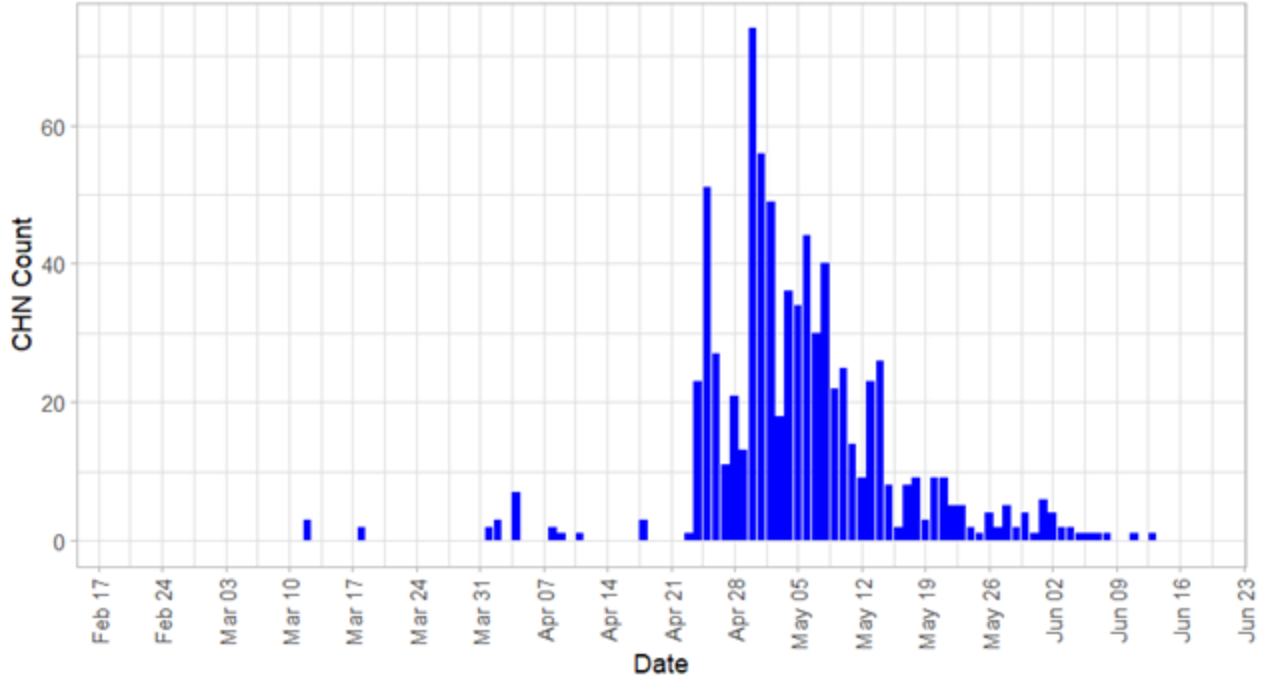
# Data Collected

- Species
- Fork Length
- Mass
- Genetic Samples
- Dissolved Oxygen
- Water Temperature
- Condition of trap
- Metadata
- General notes and observations





Daily Total Chinook salmon Catch



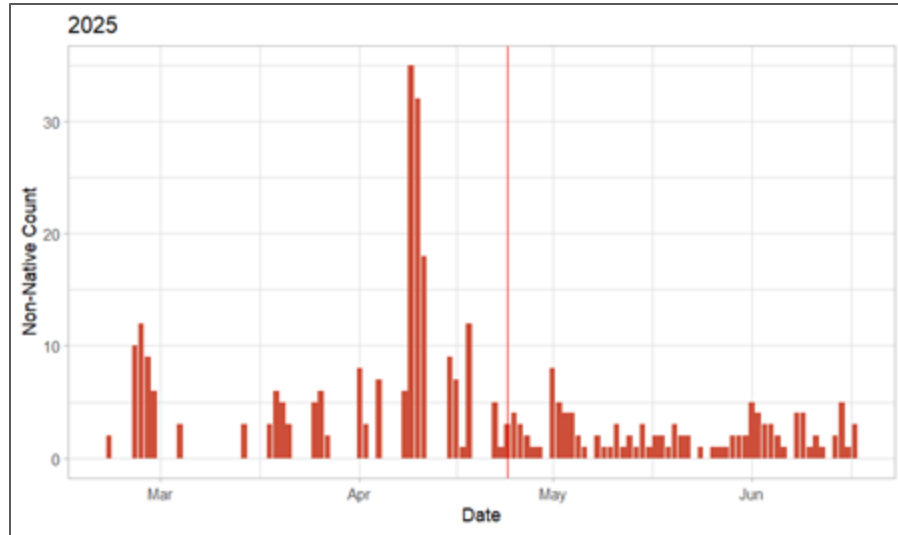
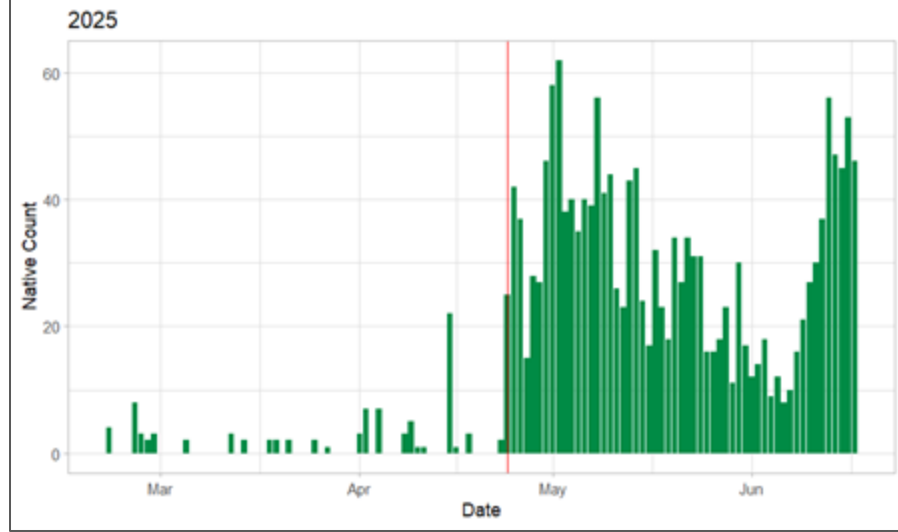
# Rotary Screw Trap Data

Total catch of 2025

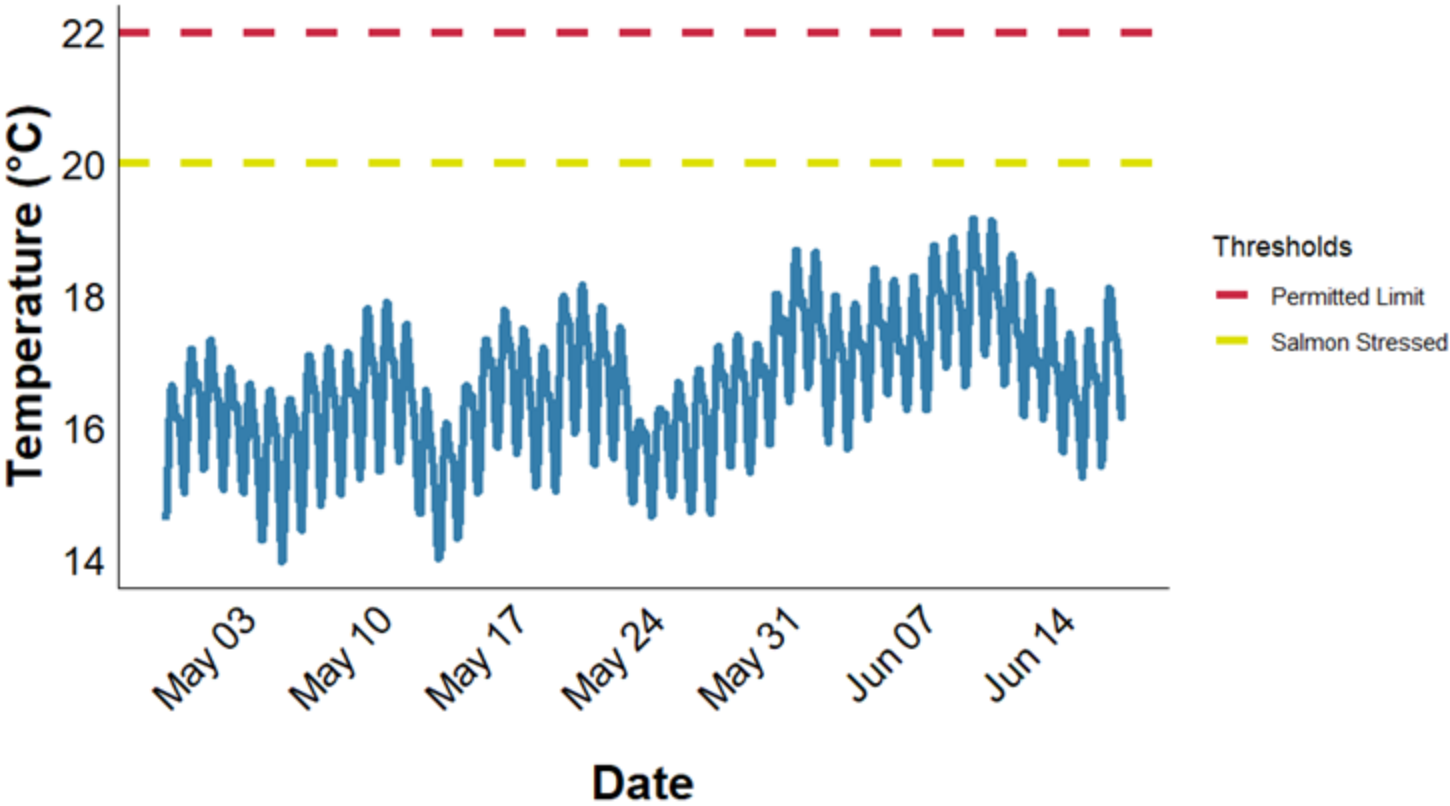
Fish	Total Number
Chinook salmon	602
Native cypriniformes	640
Tule perch	129
Threespine stickleback	233
<i>Cottus spp.</i>	65
<i>Lepomis spp.</i>	90
Lampetrinae	6
Rainbow trout	32
<i>Micropterus spp.</i>	12
Threadfin shad	1
<i>Menidia spp.</i>	8
Non-native cyprinids	24
Bigscale logperch	0
Ictaluridae	5

Total Native Catch = 1,707

Total Non-native Catch = 140



# Temperatures in the Rotary Screw Trap during Spring 2025



# Rotary Screw Trap 2026

- Began trapping fish on 3/31/26
- Average water temperature 13.5 °C
- Caught 15 lamprey, 7 rainbow trout, and over 3,000 salmon to date (4/14)
- Trap efficiency with PIT-tagged salmon
  - 74/243 (30.5%) of first release group caught





Adult Pacific lamprey (*Entosphenus tridentatus*)



Tule perch (*Hysteroecarpus traskii*)



Rainbow trout (*Oncorhynchus mykiss*)



Chinook salmon (*Oncorhynchus tshawytscha*)



Ictaluridae



Riffle sculpin (*Cottus gulosus*)



*Canis familiaris*

# Monitoring Juvenile Chinook Out-Migration:

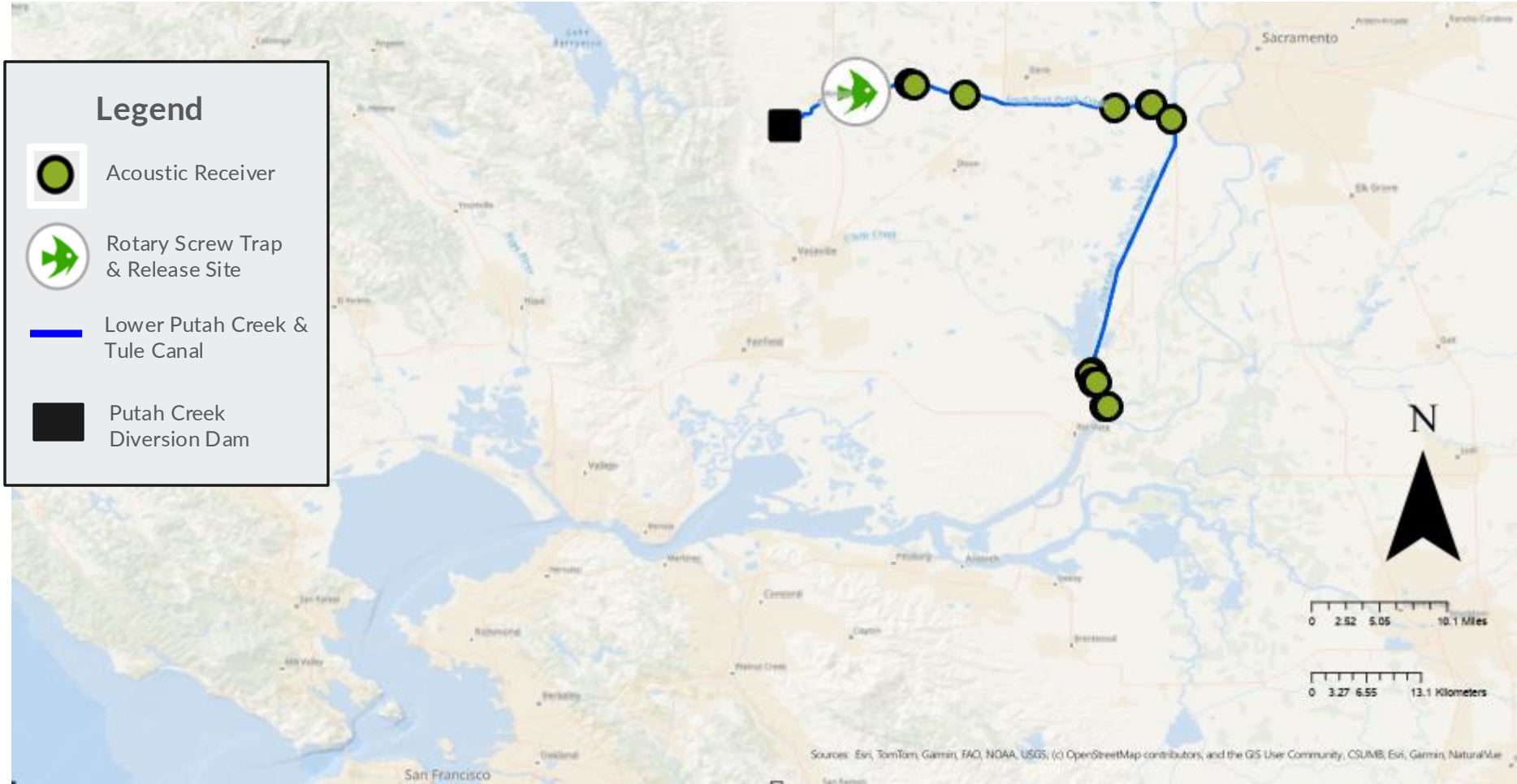
## Juvenile Salmon Acoustic Telemetry Systems(JSATs)



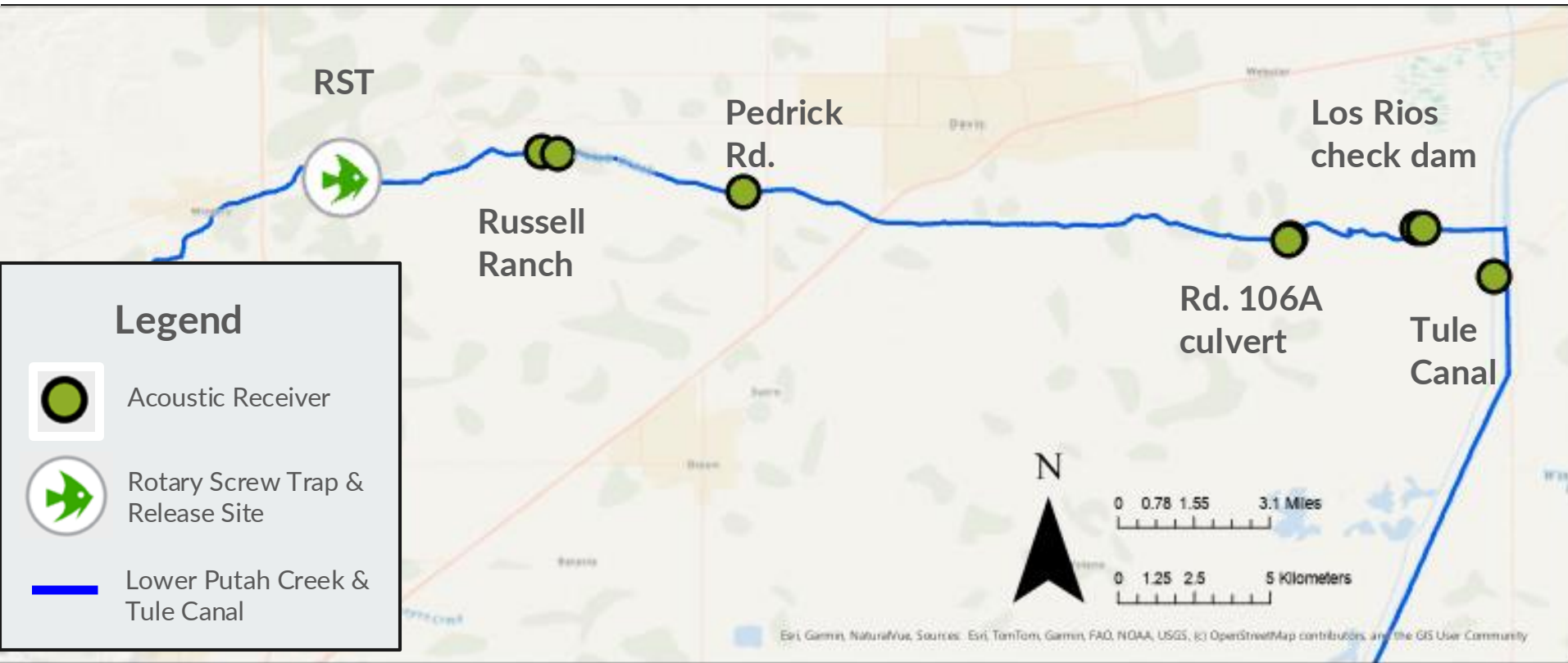
# Monitoring Juvenile Chinook Out-Migration:



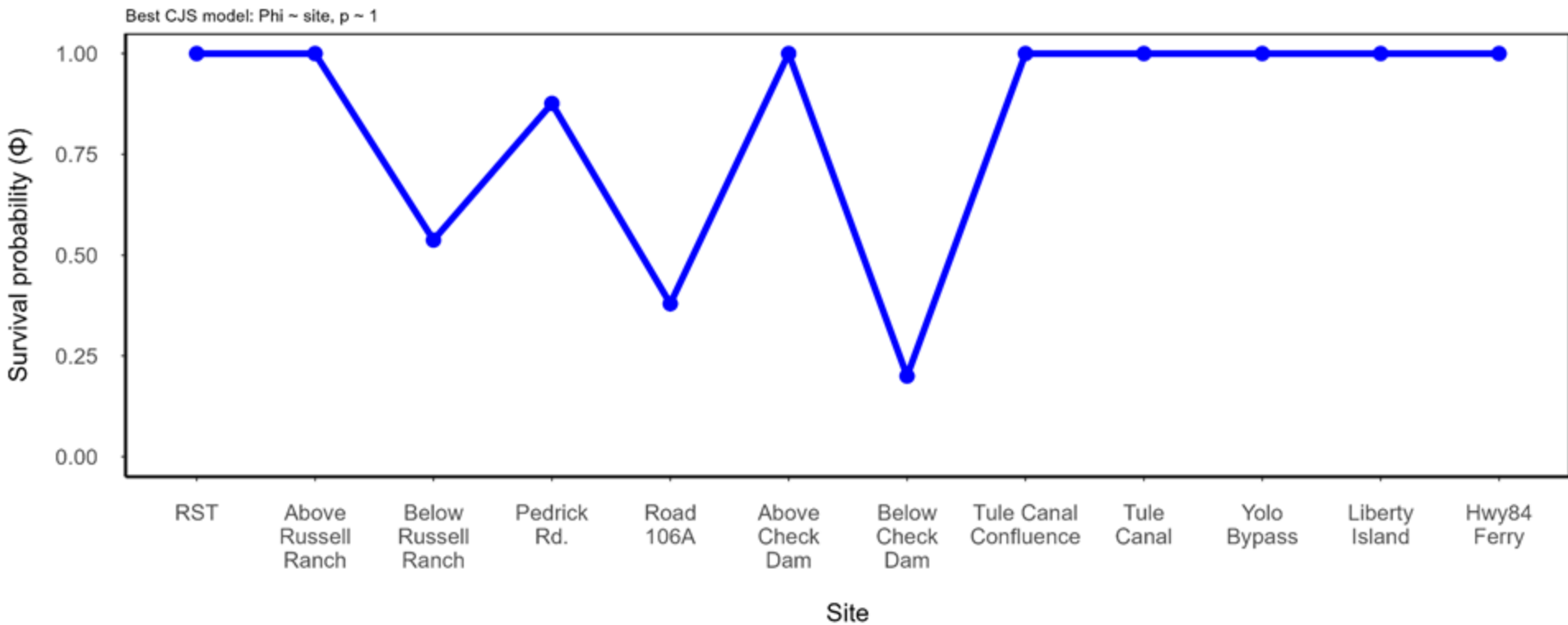
# Monitored migration from Lower Putah Creek



# Monitored migration through Lower Putah Creek



# 2025 Reach-Specific Survival



# Telemetry: Next Steps

1. Analyze durations to identify predation, rearing, mortality sites
2. Integrate flow & temperature data to identify trends and covariates
3. Compare site specific survival to prior study years



# Telemetry: Data Availability

Cal Fish Track

ERDDAP

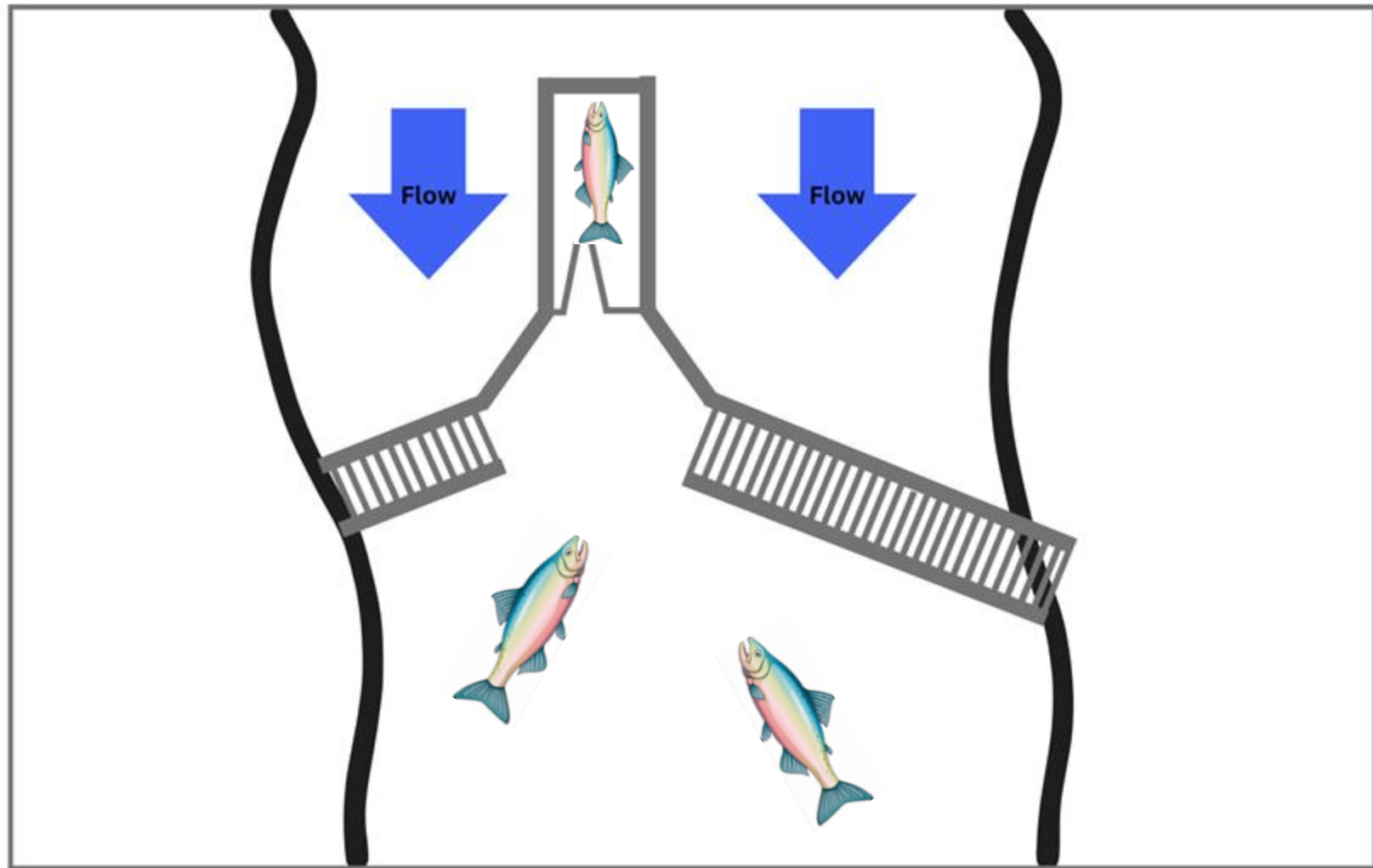
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# Adult Spawning Chinook Salmon

*Live Fish Counting Weir and Carcass Sampling*





# Resistance Panels



# Resistance Panels



2024



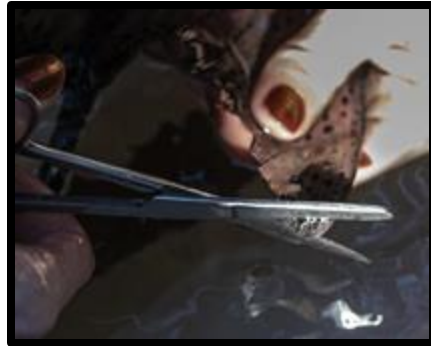
2025



# Data Collection

## Carcass Survey:

- Fin Clips: Genetics
- Fork Length
- Spawning Condition (pre or post)
- Heads for Coded Wire Tags
- Otoliths
- Sex
- Presence/Absence of Adipose Fin



## Weir:

- Fin Clips: Genetics (better quality than carcasses)
- Fork Length
- Sex
- Presence/Absence of Adipose Fin
- Timing relative to flow/temperature/DWR floy tagging
  - Fixed location

# Weir by the Numbers

Number of Salmon Through Weir: 2147

Largest Salmon: 1050 mm (3'5")

Smallest Salmon: 456 mm (1'6")

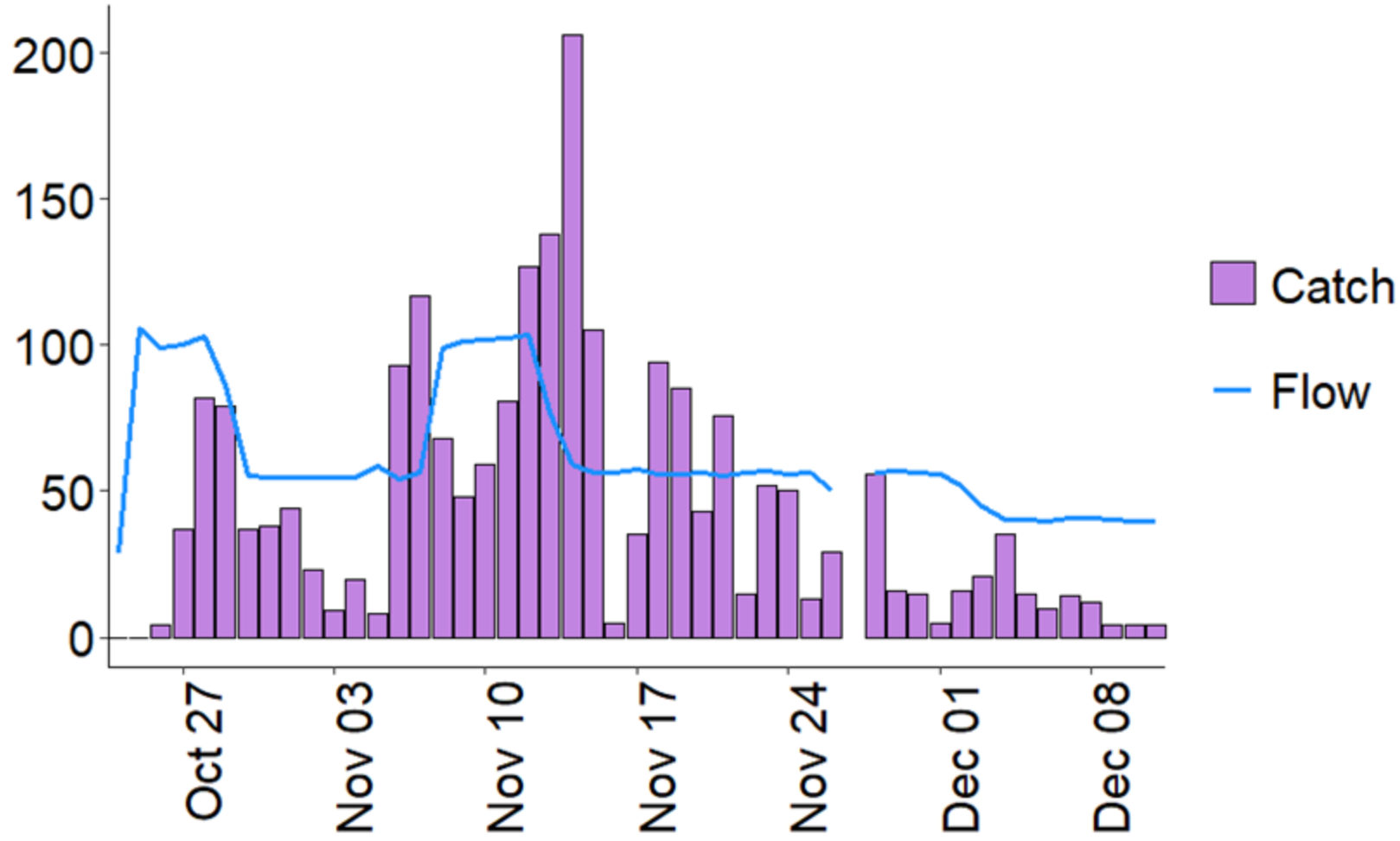
Most Salmon in a Day: 206 (11/14/25)

Carcasses Sampled: 202

Total Number of Helpers: 89



Catch (n) and Flow (cfs)



# Carcass Counts 2025

## Spawning status of recovered carcasses at each carcass sampling site

	Pre-Spawn	Post-Spawn	Unknown	Total
<i>Weir Site</i>	65	47	1	113
<i>Pickrel Property</i>	19	34	21	74
<i>Below Los Rios Check Dam</i>	15	0	0	15



# Adult Salmon Counts

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Count	126	208	211	1	70	81	251	446	151 (w) / 68 (c)	2147 (w) / 202 (c)



# Lessons Learned



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# Thank You!



Putah Creek  
Council



Solano County  
Water Agency

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