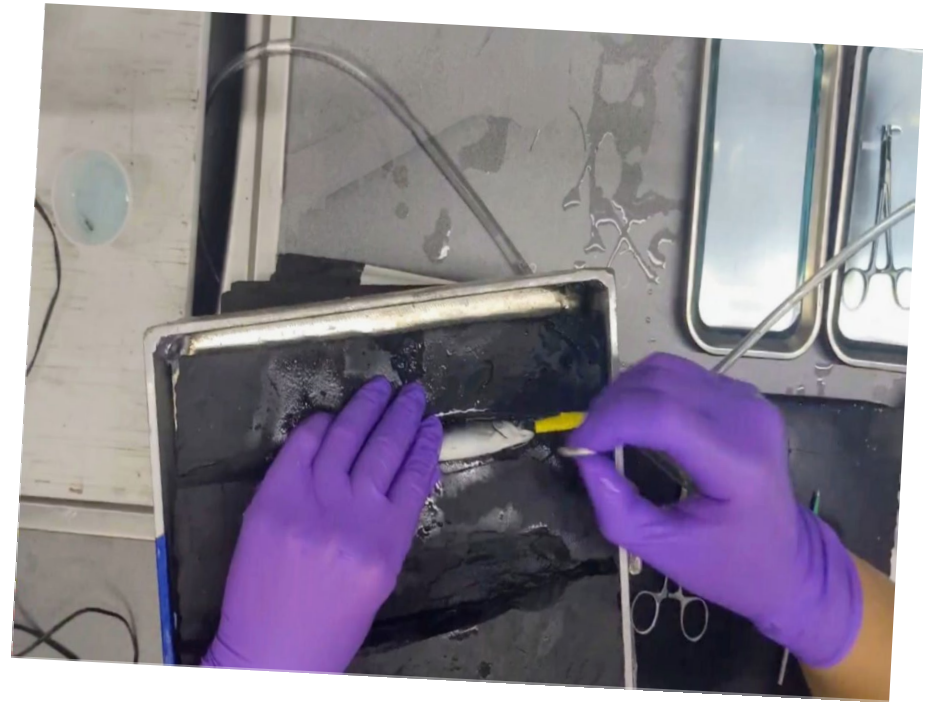


Fish and Wildlife Quarterly Update April 18, 2022



Why we're here today

- 2022 Subyearling Fish Evaluation

Lance Keller

- Home Water Preserve Update

Von Pope

Current Project Survival Results

Project	Species	Juvenile Survival	Adult Survival	Combined
Rock Island	Steelhead	96.75%	99.31%	96.08%
	Spring Chinook	93.75%	99.89%	93.65%
	Sockeye	93.27%	98.37%	91.75%
Rocky Reach	Steelhead	95.79%	98.93%	94.77%
	Spring Chinook	92.37%	99.90%	92.28%
	Sockeye	93.59%	98.92%	92.58%

But what about subyearling fish survival??

Why is it so difficult to study subyearling fish?

- Multiple life histories expressed
 - Protracted, variable outmigration (if at all)
- Active tag limitations – size and battery life
- Biases in current statistical models

Benefits of studying behavior

- Holding true to HCP commitment
- Ongoing evaluation of changing technology and methodologies
- The only way to ensure we're spilling the "right" amount of water for subyearlings in the summer is to understand how they behave and survive through the project

What did we do in 2021?

- Used existing equipment installed for yearling study at Rock Island
- Tagged 606 fish from June 28 to August 6, 2021

What did we learn?

- Results
 - All tagged subyearlings migrated through the Rock Island reservoir
 - Route specific passage (RSP) proportions were similar to those of yearling Chinook
- Uncertainties
 - Are behavior and RSP driven by operations, river/environmental conditions, or both???
 - Is predation occurring in the immediate tailrace and below RI dam???

What are we proposing in 2022?

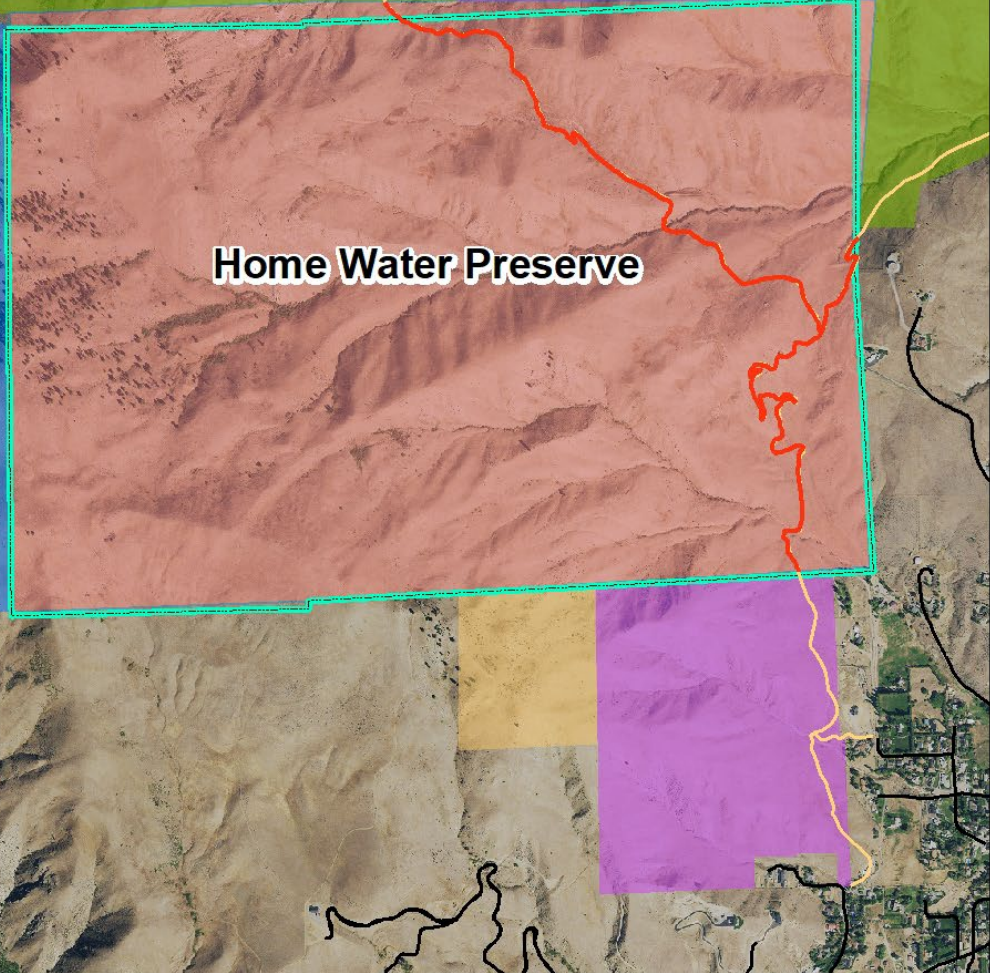
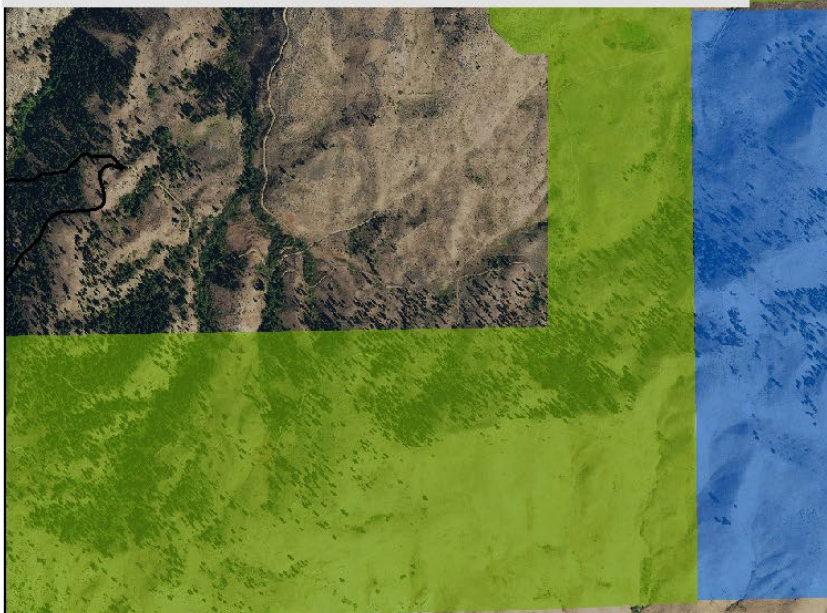
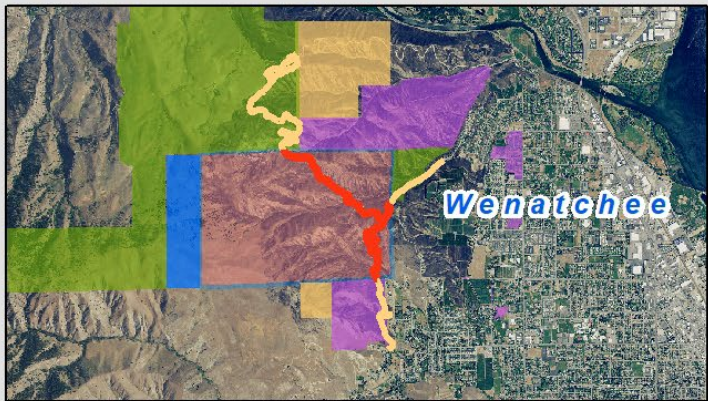
- BOC approval on March 7, 2022
- Hypothesis: subyearling Chinook behavior and passage is directly correlated to RI dam operations
- Collect, tag, release, and observe subyearling Chinook (900 RR tailrace, 400 RI tailrace)
- Why isn't this a HCP "Survival Study"?
 - Not initiating formal HCP Phase Designation study

Next Steps

- May
 - Study set-up
- June-August
 - Collect, tag, release, and monitor fish
- September-December
 - Extract receivers
 - Process detection data (expected 1 million+ detections)
 - Report results








Home Water Preserve

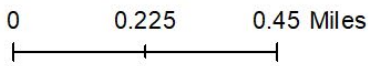
- 960 acres
 - Purchased in 1990
 - Rock Island Project Mitigation
- Primary Purpose
 - Wintering Mule Deer and other Wildlife
- Trail Permitted in 2005
 - Closed December 1 – March 31 annually
- Winter Closure Supported by CDLT



Home Water Preserve

Chelan PUD Home Water Preserve

- | | | |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  Permitted Trail |  Project Lands | Adjacent Ownership |
|  Sage Hills Trail | |  Chelan Douglas Land Trust |
| | |  City of Wenatchee |
| | |  BLM |
| | |  Washington State DNR |



What's new with Home Water

- District staff started meeting with the Chelan-Douglas Land Trust (CDLT) in 2018 to consolidate permitted trail use
- Desire to complete consultation prior to formal Rock Island Relicensing process
- January 2022 application to FERC
- February 2022 approval!

Conditions of new Permitted Use

- CDLT will:
 - **enhance** 4.6 miles of existing use
 - **restore** 4.5 miles of old road and trails to natural conditions
- Cultural assessment for all areas to be disturbed
- Continue winter closure for Mule Deer

Next Steps

- 2022 - CDLT to conduct cultural assessment
- 2023 - CDLT begin rehabilitation of trails
- 2024-2025 - new permit issued to CDLT