



Chehalis Basin Board Meeting

- Updated EDT modeling for Skookumchuck Dam, Dam Removal Option

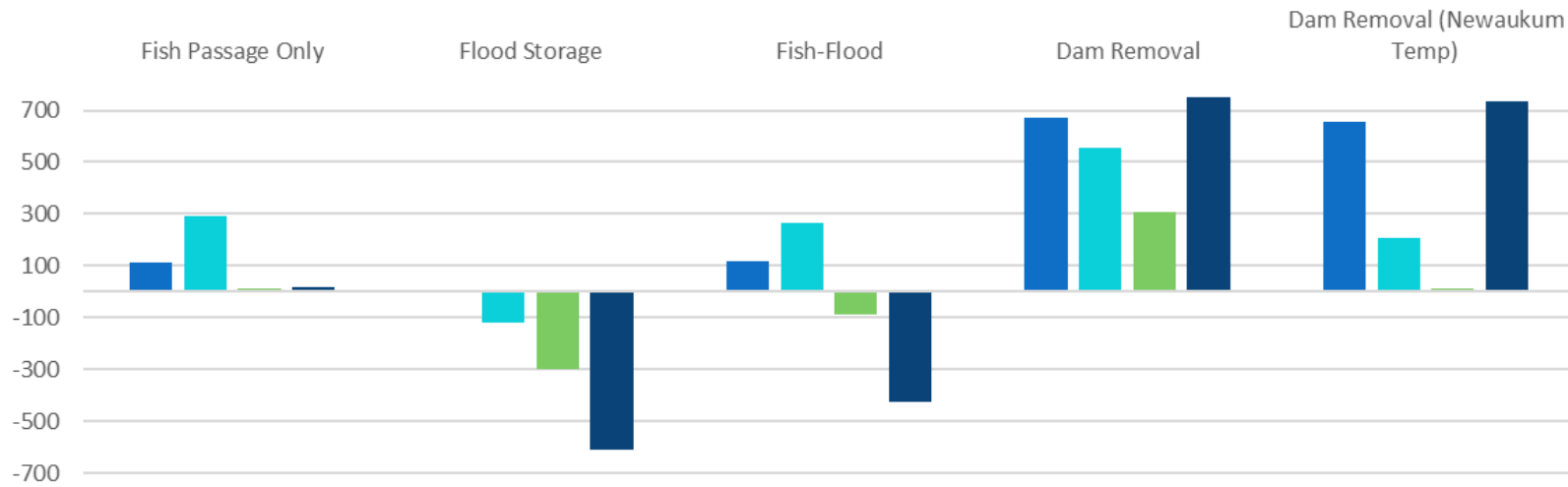
May 4, 2023



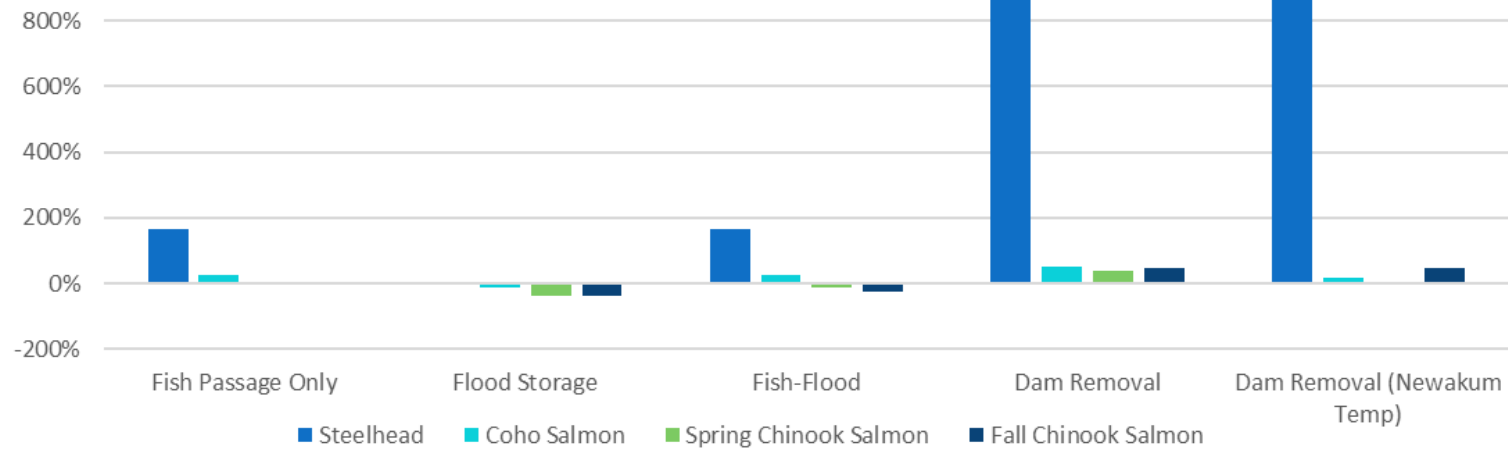
UPDATED EDT MODELING FOR DAM REMOVAL

- Used Thermalscape temperature data for Newaukum River at similar elevation as Skookumchuck Dam
- Adjusted temperatures moving downstream (e.g. temperature increase) at same rate as occurs with existing Skookumchuck River temperatures
- Reran EDT model to compare fish benefits with likely increased water temperatures with dam removal

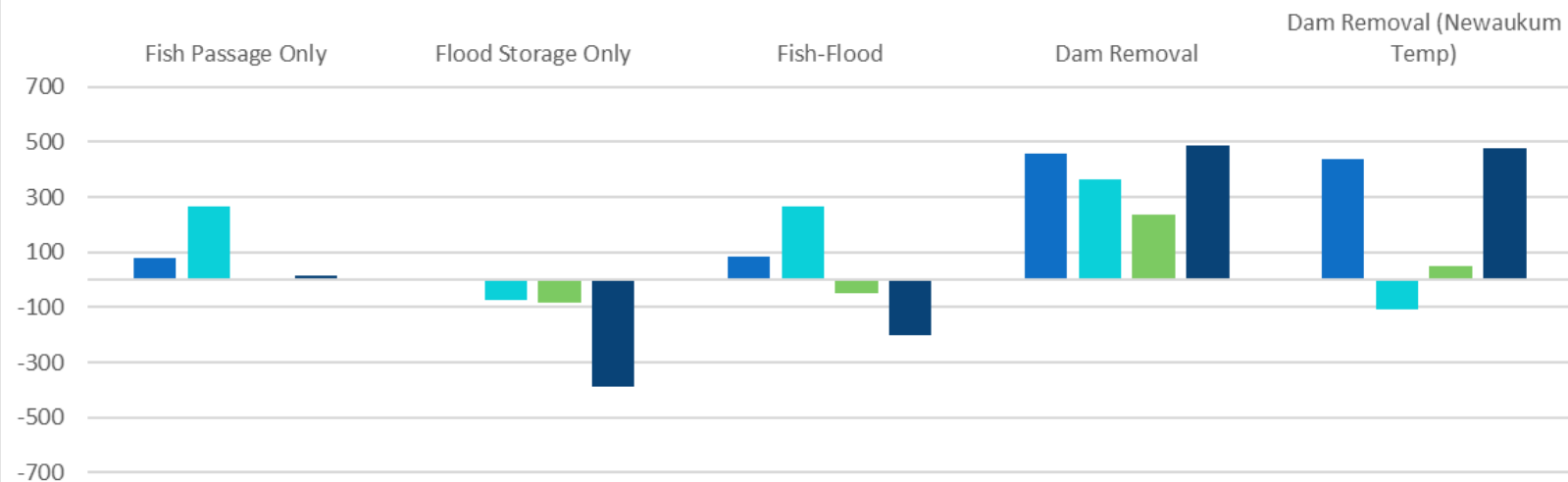
Change in Equilibrium Abundance Current Climate



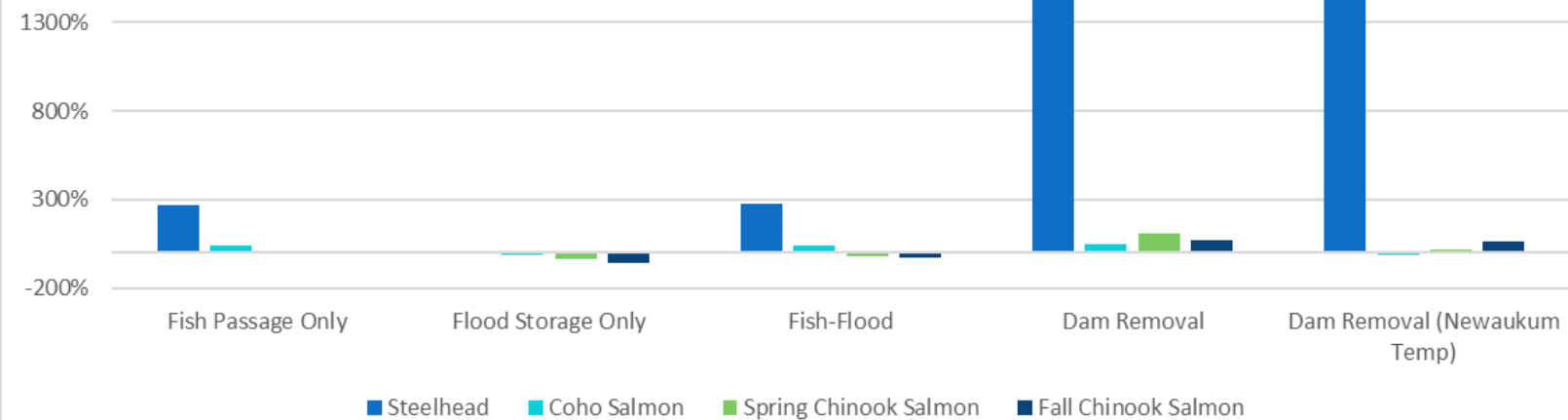
Change in Percent Abundance Current Climate



Change in Equilibrium Abundance Late-Century Climate



Change in Percent Abundance Late-Century Climate



QUESTIONS ABOUT TEMPERATURE?

REQUESTED BOARD DIRECTION

Direct OCB Staff to obtain a scope of work from Anchor QEA
to complete high- and possibly medium-priority next steps.

SKOOKUMCHUCK OPTIONS AND DIRECTION

- Fish Only
 - Flood Only
 - Fish-Flood
 - Dam Removal
-
- Fish-Flood with Direct Piping
 - Dam Removal with Off Channel Storage

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PROPOSED ACTIONS (HIGH PRIORITY)

- Reporting
- Stakeholder Dialog
- Water Rights Accounting
- Upstream Habitat Assessment
- Upstream Temperature Sensor(s)
- Off-Channel Feasibility
- Direct Piping Costs
- Geotech (Dam Stability)

PROPOSED ACTIONS (MEDIUM PRIORITY)

- Geotech (Methodology and Cost)
- Fish Sluice Design
- Reservoir Predation

PROPOSED ACTIONS (LOW PRIORITY)

- New Outlet Design
- Out-migration Timing
- Out-migration Survival
- Low Flow Monitoring
- Flow Timing Analysis
- Big Hanaford Flow Monitoring
- Downstream Geomorphology
- Structures Database
- Turbidity Tracing
- Control Upgrades

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Direct OCB Staff to obtain a scope of work from Anchor QEA to complete high- and possibly medium-priority next steps.

QUESTIONS OR DISCUSSION

