



Skookumchuck Dam 23-25 Biennium Activities

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TWO REQUESTED ACTIONS

1. Confirm Skookumchuck Dam Options
2. Approve Anchor QEA Scope of Work

SKOOKUMCHUCK DAM OPTIONS

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

SKOOKUMCHUCK DAM POTENTIAL ACTIONS

Modify Operations

Improve Fish Collection

Improve Fish Sluice

Install New 2,000 CFS Piping

Direct Pipe to Customers

Remove Dam

Build Off-channel Storage

OPTION 1: LOWER IMPACT MODIFICATIONS

Modify Operations

Modest fish benefits

Improve Fish Collection

Minimal flood damage benefits

Improve Fish Sluice

Minimal impact to water rights

~~Install New 2,000 CFS Piping~~

~~Direct Pipe to Customers~~

~~Remove Dam~~

~~Build Off-channel Storage~~

OPTION 2: EXPANDED MODIFICATIONS

Modify Operations

Improve Fish Collection

Improve Fish Sluice

Install New 2,000 CFS Piping

Direct Pipe to Customers

~~Remove Dam~~

~~Build Off-channel Storage~~

Moderate fish benefits

Significant flood damage benefits

Minimal impact to water rights

Potential spring chinook benefit

OPTION 3: OFF-CHANNEL STORAGE

~~Modify Operations~~

~~Improve Fish Collection~~

~~Improve Fish Sluice~~

~~Install New 2,000 CFS Piping~~

~~Direct Pipe to Customers~~

Remove Dam

Build Off-channel Storage

Significant fish benefits

Moderate flood increases

Potential impact to water rights

BOARD DIRECTION: ARE THESE THE RIGHT OPTIONS?

Option 1 mostly benefits anadromous fish.

Option 2 benefits anadromous fish and reduced flooding.

Option 3 has greatest unknowns; greatest benefit to fish, likely increase in flooding, possibly retains water right.

OCB can add options, drop options, or pursue different options.

PROPOSED PHASE 3 SCOPE ITEMS

- Stakeholder engagement support
 - Water rights accounting (seasonality/volume of use downstream of dam)
 - Off-channel reservoir conceptual investigation
 - Concept design of direct piping to major water users
 - Conduct Upper Skookumchuck habitat/geomorphic survey
 - Geotechnical data review and site reconnaissance
 - Summary memorandum
- \$295,000**

OPTIONAL PHASE 3 SCOPE ITEMS

- Conceptual design of low-level outlet -- \$60,000
- Juvenile salmon survival study (reservoir and dam) -- \$300,000
- Geotechnical field investigation -- \$100,000 (placeholder)
- Detailed computational fluid dynamic modeling of low-level outlet and fish sluice together -- \$65,000
- Turbidity monitoring of the reservoir -- \$48,000
- Predator study in reservoir -- \$~\$300,000 (placeholder)

QUESTIONS OR DISCUSSION

