



Icicle Workgroup Presentation

IPID Pump Exchange Fatal Flaw Evaluation

December 6, 2013

Mike Kaputa



CHELAN COUNTY
Natural Resources Department

Dan Haller

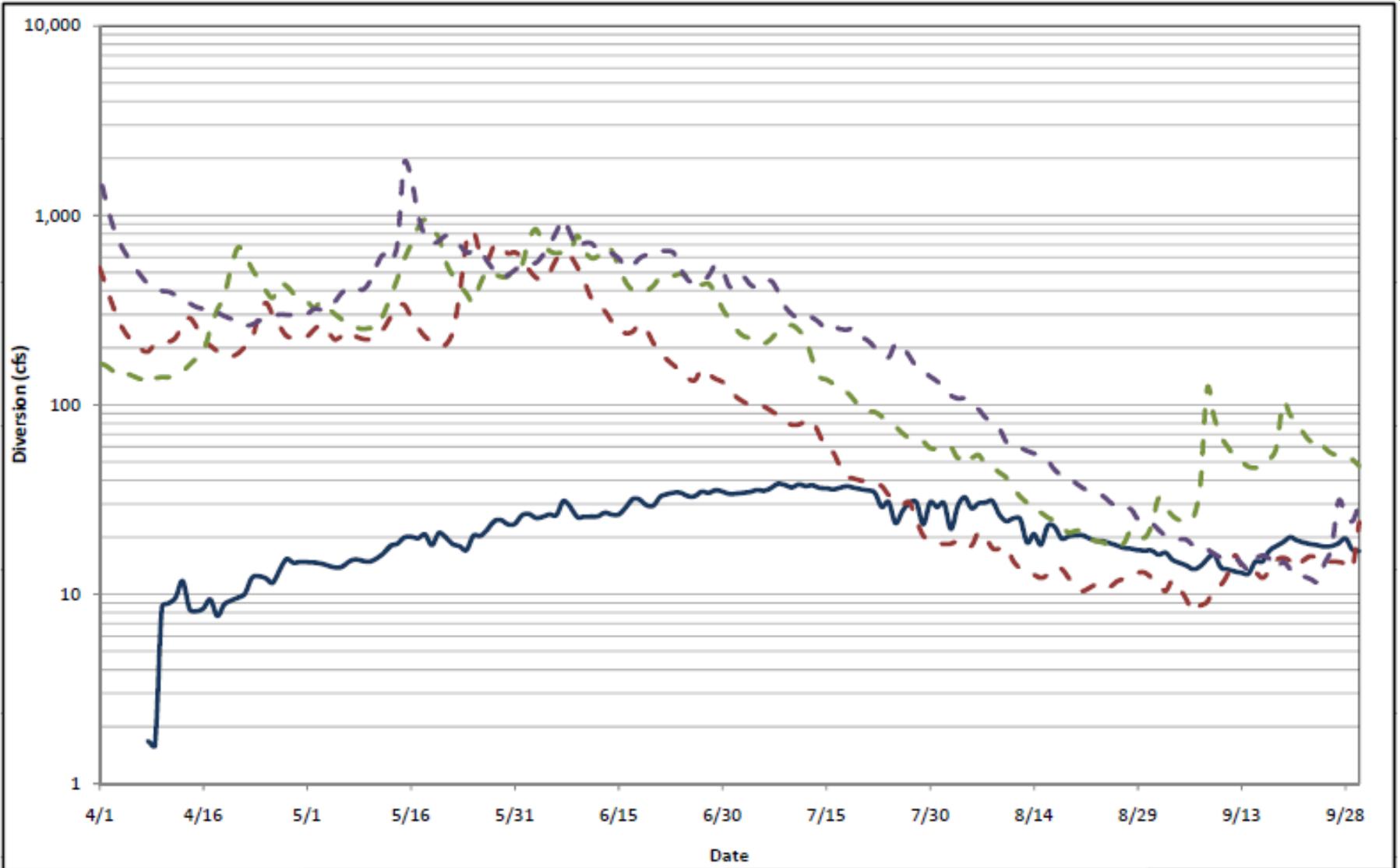


Dave Rice



2012 Appraisal Study Overview

- Started with OCR Grant for Campbell Creek Reservoir
- 5 Alternatives studied with varying benefits to Peshastin and Icicle Creeks
- Alternative 1 (Dryden) alternative move to fatal flaw investigation (pre-feasibility)
 - Location – Dryden, approx. RM 17.9
 - \$3.9 M project implementation cost (\$7.6 M 50-year life cycle) for 40 cfs pump station
 - Could benefit Peshastin by up to 40 cfs and Icicle by up to 15 cfs (40 cfs combined total)

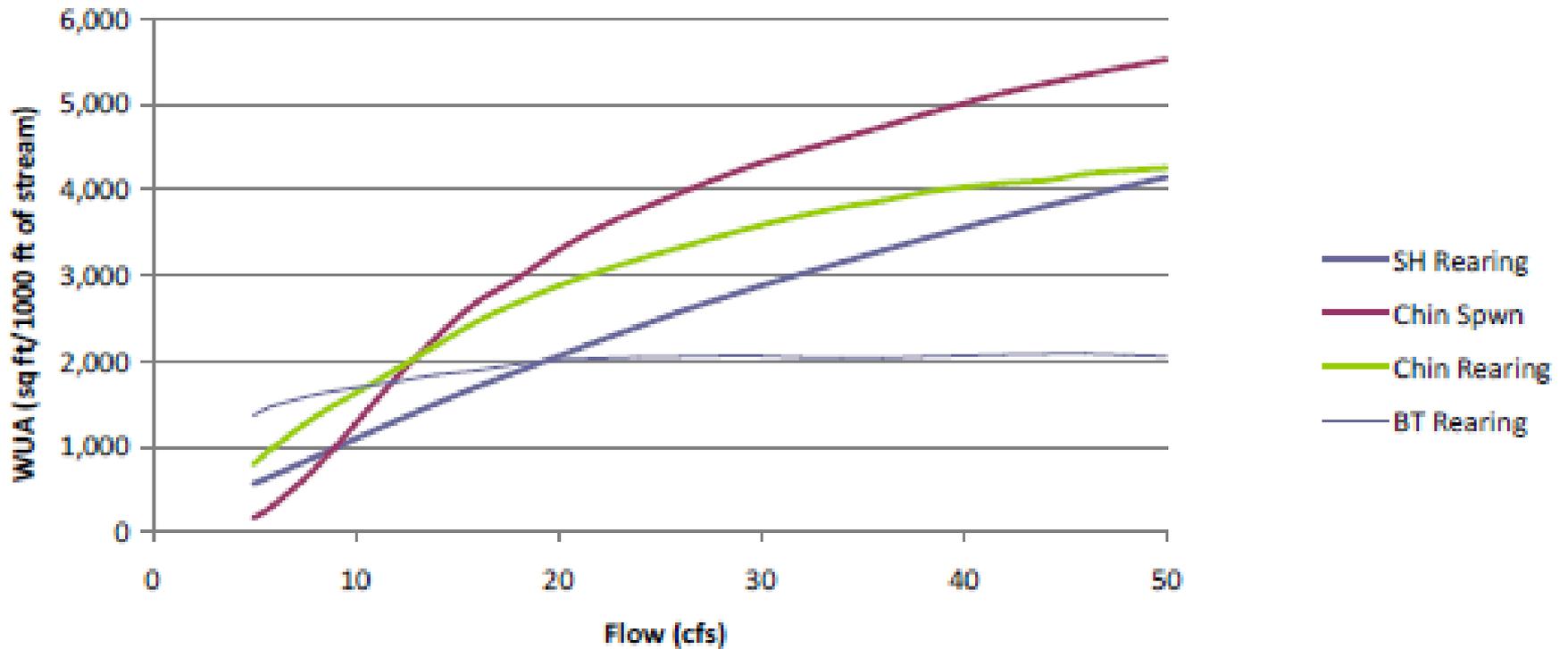


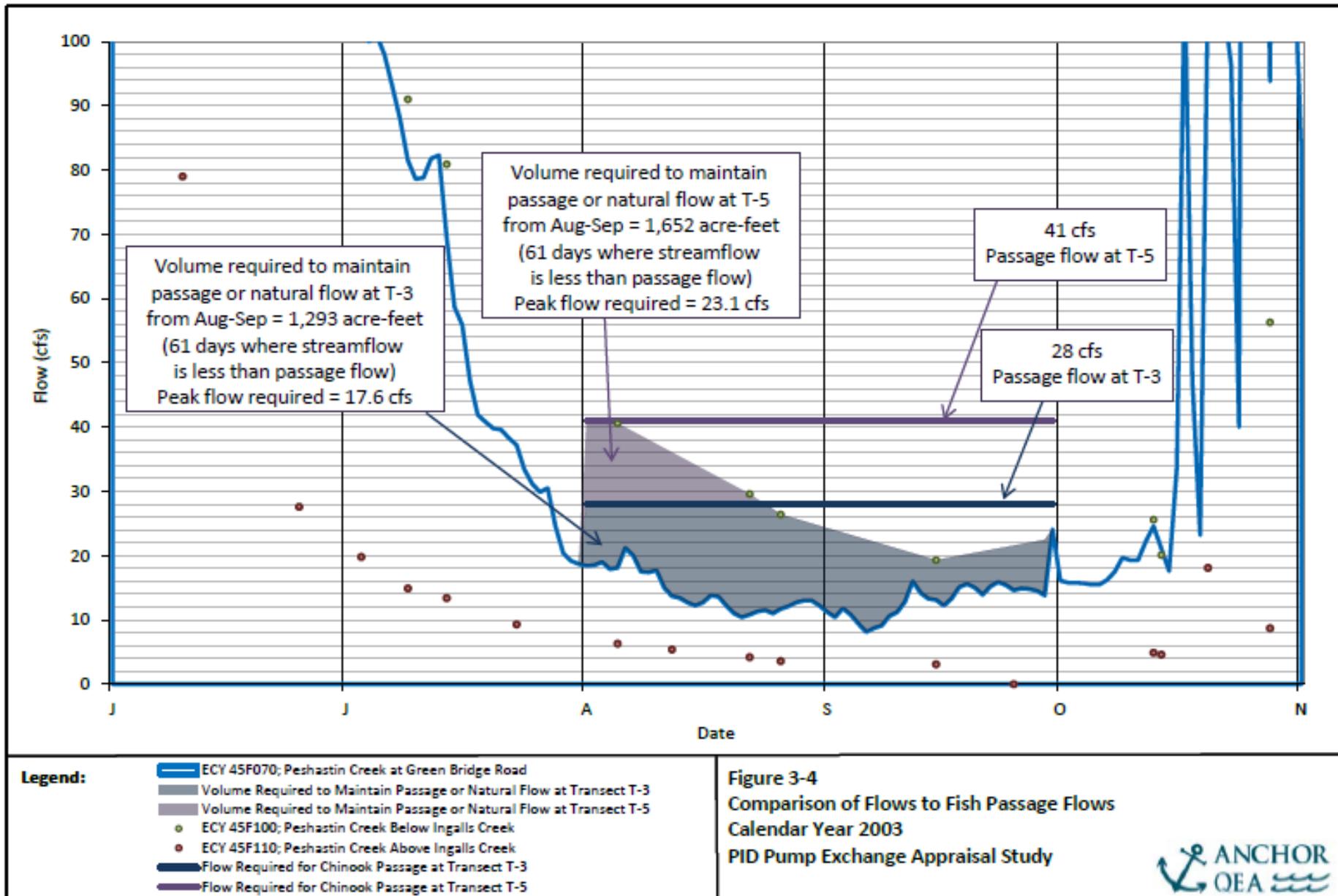
- Average PID Diversion from Peshastin Creek (2002, 2003, 2010, 2011)
- - Peshastin Creek Flow at Green Bridge Road (2003)
- - Peshastin Creek Flow at Green Bridge Road (2010)
- - Peshastin Creek Flow at Green Bridge Road (2011)

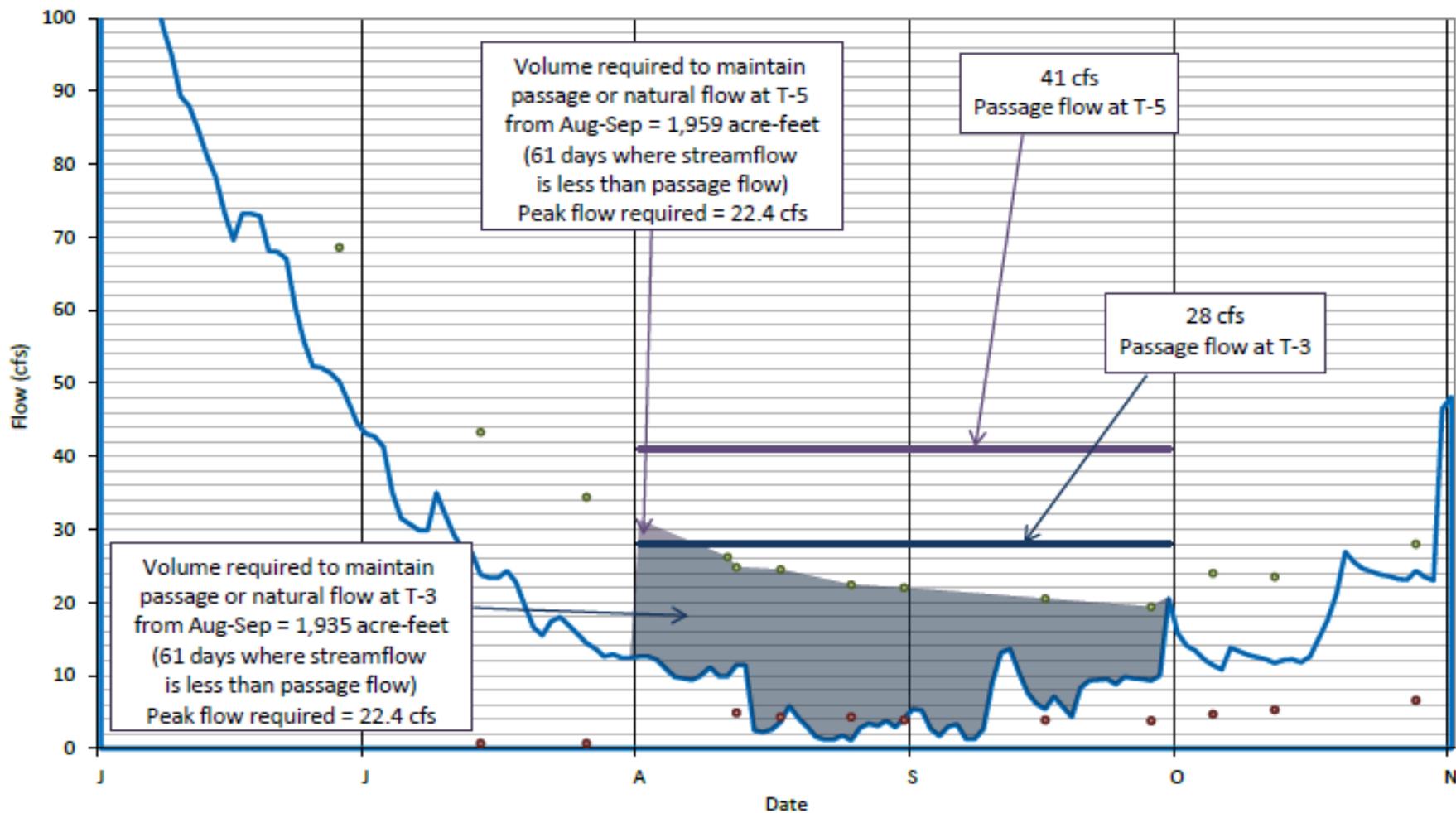
Figure 3-1
 PID Diversions and Peshastin Creek
 Flows at Green Bridge Road
 PID Pump Exchange Appraisal Study



Figure 3
Lower Peshastin Creek WUA







- Legend:**
- ECY 45F070; Peshastin Creek at Green Bridge Road
 - Volume Required to Maintain Passage or Natural Flow at Transect T-3
 - Volume Required to Maintain Passage or Natural Flow at Transect T-5
 - ECY 45F100; Peshastin Creek Below Ingalls Creek
 - ECY 45F110; Peshastin Creek Above Ingalls Creek
 - Flow Required for Chinook Passage at Transect T-3
 - Flow Required for Chinook Passage at Transect T-5

Figure 3-6
Comparison of Flows to Fish Passage Flows
Calendar Year 2005
PID Pump Exchange Appraisal Study



OCR Grant Overview / Next Steps

IPID Pump Exchange (Dryden Location) Fatal Flaw Analysis:

- Build on December 2012 Appraisal Alternatives Study
- Evaluate key issues required for feasibility:
 - Property Owner Coordination
 - Fisheries Coordination (Peshastin and Icicle Benefit)
 - Geotechnical Exploration (soil/rock characterization in pipe alignment / pump station)
 - Topographic Survey (pump station / river stage survey, pipeline alignment)