

Agency: Department of Fish and Game**Project Title:****Project Type: Other**

Water Quality Testing of Cross-Boundary Rivers

State Funding Requested: \$112,900
One-Time Need**House District: Southeast Region (1-5)****Brief Project Description:**

Establish a water quality baseline for up to three salmon-bearing rivers that flow from Canada to Alaska. The limited funding appropriated is intended for the Taku River.
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Funding Plan:

Total Project Cost:	\$112,900
Funding Already Secured:	(\$0)
FY2013 State Funding Request:	<u>(\$112,900)</u>
Project Deficit:	\$0

Detailed Project Description and Justification:

<p>The requested amount would fund a multi-year assessment of the Taku, Stikine, and Unuk Rivers to determine a scientifically sound baseline of the presence and levels of turbidity, alkalinity, suspended solids, dissolved and heavy metals and other potential pollutants.</p> <p>The Department of Fish & Game has staff on these rivers periodically throughout the year. The project will leverage existing staff resources and travel. As industrial activity on the Canadian side of the border increases, this testing will give Alaskans a solid baseline to verify that water quality is protected.</p> <p>Each river would require 1/3 of the total project cost - roughly \$37.0 each. This would be adequate to collect and test two samples per river, twice a year, at high and low water conditions for three years.</p> <p>The Taku River Fact-Finding Task Force final report, dated March 17, 2012, held as its first finding that "there is a gap in baseline data on water quality" for the Taku River. Accordingly, the partial funding of this request is intended to test the Taku River first. If funds remain after baseline data for the Taku River is established, they may be spent on the Unuk or Stikine.</p>

Project Timeline:

Sampling will take place in fiscal years 2013-2016.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Alaska Department of Fish & Game

Grant Recipient Contact Information:

Name:	Juneau Area Office
Title:	Division of Habitat
Address:	P.O. Box 115526 Juneau, Alaska 99811
Phone Number:	465-4275
Email:	

Has this project been through a public review process at the local level and is it a community priority? Yes No

Baseline Water Quality Data Project for Cross-Boundary Rivers

Line Item Budget

Agency		Fish and Game, Habitat	
Personnel: Project Director Admin. Asst.		Field personnel for sample collection, \$15,000 Project Coordination, mapping, administration \$9,000	
Fringe Benefits:		@2.5% \$6,000	
Travel		\$15,000	
Equipment: Field		\$1,660	
Supplies:		\$9,000	
Contractual: Lab Services ¹ Mining Activity Risk Assessment ²		\$22,566 300 hours @\$105/hr \$31,500	
Other: Transportation and shipping of samples		\$3,200	
Total Direct Costs:		\$112,926	
Total Costs:		\$112,926	

Water			TAT: 10_Days (Business Days)		
Matrix	Method	Test Description	Quantity	Unit Price	Extended Price
Water	180.1	Turbidity, Nephelometric	1	\$ 20.00	\$ 20.00
Water	180.2	Solids, Total Suspended (TSS)	1	\$ 20.00	\$ 20.00
Water	SM 2320B	Alkalinity	1	\$ 20.00	\$ 20.00
Water	200.8	Dissolved Metals by ICPMS (As, Ba, Cd, Cr, Cu, Fe, Pb, Se, Ag, Zn)	1	\$ 105.00	\$ 105.00
Water	FILTRATION	Sample Filtration	1	\$ 10.00	\$ 10.00
Water	200.8	Total Recoverable Metals by ICPMS (As, Ba, Cd, Cr, Cu, Fe, Pb, Se, Ag, Zn)	1	\$ 105.00	\$ 105.00
Water	200.7	Dissolved Metals by ICPMS (Ca & Mg) + Hardness	1	\$ 38.00	\$ 38.00
Water	FILTRATION	Sample Filtration	1	\$ 10.00	\$ 10.00
Water	200.7	Total Recoverable Metals by ICPMS (Ca & Mg) + Hardness	1	\$ 38.00	\$ 38.00
Water	245.1	Mercury - Dissolved	1	\$ 35.00	\$ 35.00
Water	FILTRATION	Sample Filtration	1	\$ 10.00	\$ 10.00
Water	245.1	Mercury (CVAA)	1	\$ 35.00	\$ 35.00
Water	300.0	Sulfate	1	\$ 20.00	\$ 20.00
Total Water					\$ 466.00
Total Other Charges					\$ 0.00
Total Analysis Charges					\$ 466.00

¹ Establish Baseline

Sample costs per station per sampling event.

Sampling on the Taku, Stikine and Unuk 3 samples at high water and 3 samples at low water is \$466 for each event x 18 separate events=\$8,308.00 (minus 10% multi-sample discount=\$7477.00).

pH, Temperature and flow would be monitored and recorded in the field

Ongoing Monitoring for 3 years

2 samples twice a year at high and low water conditions for 3 years. \$16,766.00. (minus 10% discount=\$15,089.00)

Total Contract Lab = \$22,566.00

² Mining Activity Risk Assessment Contract

Scope of Work Required:

The Contractor shall:

- summarize historical and proposed mining activities on the Stikine River\
- document all existing baseline data
- review the environmental effects monitoring programs for the proposed Galore and Shaft Creek mines
- verify predictions of the Galore and Shaft Creek environmental effects assessment for compliance with discharge limits
- identify additional data that is needed for ADF&G to detect changes on the Stikine River from the Galore and Shaft Creek mines over time
- design a study plan for future ADF&G Stikine River data collection in US waters
- produce an ADF&G technical report by May of 2010