

## Alaska Sustainable Salmon Fund Statement of Work

**I. Project Title:** Rapids Student Data Collection 2011-2013

**II. Project Number:** 44527                      **PCSRF Objective:** RM&E

**III. Principal Investigator**

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**IV. Project Period:** 5/15/11 – 11/30/13

**V. Project Description**

1. Synopsis

This project will collect Chinook salmon sex, length, weight, and girth data (SLWG) and *Ichthyophoniasis* disease prevalence data from salmon caught in subsistence fisheries near Rampart Rapids (Rapids). This information will provide baseline data for future use by fishery managers. In addition, genetic tissue sampling will be conducted to help managers reconstruct the Canadian component of the run, and a visual inspection of changing flesh color and fat content in chum salmon will help develop a fall chum arrival date in the mid and upper Yukon River. *This project continues work begun in AKSSF project 45124 (700).*

2. Introduction

Yukon River Chinook salmon is listed as a stock of yield concern by the state of Alaska. There is a lack of consistent sex, size, disease, and genetic information on Yukon River Chinook salmon bound for the upper Yukon River and Canada. In the Rampart Rapids area, located at river mile 731 approximately 40 miles upstream of the village of Tanana, student technicians have been trained to collect this data since 2001. This data was chosen because of its importance to fishermen and in response to concerns voiced at numerous Federal Regional Advisory Council meetings, annual and special Yukon River Drainage Fisheries Association meetings, numerous State Advisory Committee meetings, and all AYK Board of Fisheries meetings since 2001.

Sex, size, genetic, and Ichthyophonus disease data has been a major source of full season data since 2004. It has been widely distributed and used at all of the meetings listed above, is readily available inseason by email to all requesting parties, and is posted online postseason. Fall chum arrival data has been used by past U.S. Fish and Wildlife Service (USFWS) projects for fall chum start times and by Canadian biologists for run timing and is currently the determining method for the start of fall chum counting by the Yukon River Panel funded test fish wheel at Rapids.

Sampling activities at Rapids have been funded since 2001 by the USFWS Office of Subsistence Management, Yukon River Panel Restoration and Enhancement monies through the Yukon River Drainage Fisheries Association (YRDFA), ADF&G, private funds, the AYK SSI through AKSSF project 45124 (700), and with continued support from the local community, Tanana Tribal Council, and Rapids Research Center.

Tanana Tribal Council and Stan Zuray have shared project management over the years. All previous work was accomplished through a collaborative effort between researchers and biologists, Tanana Tribal Council, older, more experienced youth, and younger, inexperienced students. Local area fishermen are completely supportive of the students' work, which is essential to obtaining the large sample size needed for this study.

3. Location

Latitude: 65.3333 N      Longitude: 151.0667 W

4. AKSSF Objective

AYK: 3A-2

## VI. Objectives

1. Project Objectives

- Continue building a database of full season SLWG and genetic tissue data on Chinook salmon
- Determine the arrival of the fall chum salmon run
- Continue building a database of full season Ichthyophonus disease prevalence data on Chinook salmon

2. Methods

The Principal Investigator (PI) will oversee student technician training, inseason data collection, and all administrative duties. PI time will be contributed on a volunteer basis, and the project will fund no administrative costs. Tanana Tribal Council will continue to be in charge of younger student selection, transportation, and safety on a volunteer basis. A science teacher and local fisherman from the Nenana School District will be employed to supervise and work with techs all season. This presence is needed to work successfully with the new, younger students, as a new set of younger students will arrive each of the six weeks of the project.

Three younger students below grade 11 will be brought to the camp each week. In addition, two experienced technicians will be drawn from a group of older students selected for past leadership and data collection abilities. Some may have USFWS project training and all have years of work experience in this specific area. Their function is to ensure the continuity of quality data collection. The project will average two workers at this level depending on the point in the run and on sampling needs.

Each day the students will assemble and collect data from fish caught in the local subsistence fishery. Trips will be made to multiple camps in order to collect enough samples, especially during periods of low run strength. Data collection will begin at times appropriate to local subsistence fishing schedules. Local fishermen have expressed willingness to work with the students, and this type of support is essential

to obtaining a large number of samples. As in the past, area fishermen and fish buyers will help students obtain samples by coming to the main camp to coordinate sampling times or by putting up signs at their camps to signal sampling opportunities. Fishermen have expressed that the help the students have provided in handling the fish actually made their job easier. This type of support is key to obtaining a large number of samples, as no one fish camp could normally provide consistent sampling of the run throughout the season.

Data from paper forms will be entered electronically in season as time allows. An ADF&G Fish Resource permit will be obtained to live net, weigh, and immediately release up to 300 Chinook in the event there is a run failure (as in 2009) and subsequent subsistence fishery closure.

All protocol and methods used in the samplings are the result of consultations with the biologists and researchers involved over the years. Many have personally trained students themselves on site. Sampling protocols for any related volunteer work is always supplied by the agencies involved, including ADF&G and USFWS.

Prior to commencement of project activity, PI will obtain ADF&G Fish Collection, Fish Resource, Fish Transport, and/or other required permits, as appropriate.

## **VII. Benefits**

Project results will contribute to the improved management of Yukon River Chinook and chum salmon, important subsistence resources, by contributing baseline information and run timing data. In addition, genetic tissue sampling will assist fishery managers in determining whether the treaty-mandated harvest-sharing agreement with Canada has been met.

## **VIII. Products, Milestones, and Timelines**

The following timeline will be followed in 2011-2013:

- May 15 - 30: Obtain required permits, shop for camp supplies
- June 1 - 10: Set up camp and move supplies from Tanana
- June 15 - August 15: Collect Chinook and fall chum data
- June 6 - Sept 15: Enter data electronically and output to web and by email
- October 1, 2011 - January 30, 2011: Write project report
- March 1, 2013: Provide final report to AKSSF

PI will submit PCSRF performance metrics, semiannual, and project completion reports according to the AKSSF schedule, as well as copies of any other report/product/deliverable produced with this funding.

All invoices will be submitted for payment within 30 days of the project end date in accordance with the current AKSSF invoicing P&P. Invoices will be sent to:

Alaska Department of Fish and Game  
Alaska Sustainable Salmon Fund  
Box 115526

Any report or product developed as a result of this funding will include the following language: *This [report/video/website] was prepared by [recipient/author name] under award NA09NMF4380373 from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, administered by the Alaska Department of Fish and Game. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration, the U.S. Department of Commerce, or the Alaska Department of Fish and Game. Any displays produced (e.g., signs, interpretive displays, posters) must include logos from both the National Oceanic and Atmospheric Administration and the Alaska Department of Fish and Game (please contact AKSSF staff for graphics).*

**IX. Partners**

Tanana Tribal Council, ADF&G, USFWS Fairbanks Field Office

**X. Project Budget**

<b>Stan Zuray</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>Total</b>
100 Personnel	\$0	\$0	\$0	\$0	\$0
200 Travel	\$0	\$0	\$0	\$0	\$0
300 Contractual	\$325	\$16,926	\$16,926	\$16,926	\$51,103
400 Supplies	\$1,300	\$2,418	\$2,418	\$2,418	\$8,554
500 Equipment	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,625</b>	<b>\$19,344</b>	<b>\$19,344</b>	<b>\$19,344</b>	<b>\$59,657</b>

Budget Narrative:

Line 300: Contractual (\$51,103)

The Project Supervisor (PS) will act as chaperone to younger students and ensure proper data collection, training, housing, and safety requirements are met for young and older techs. PS will provide a boat, motor, gas, and equipment.

- FY12: 5.2 weeks @ \$1,000/week = \$5,200
- FY13: 5.2 weeks @ \$1,000/week = \$5,200
- FY14: 5.2 weeks @ \$1,000/week = \$5,200

Inexperienced students selected prior to and inseason will work at data collection and all chores related to remote camp life as needed. Over the course of the six weeks of sampling, three different students each week will work five days a week. Students will supply all camping, personal, and sleeping gear.

- FY12: 117 hrs @ \$10/hr x 3 students = \$3,510
- FY13: 117 hrs @ \$10/hr x 3 students = \$3,510
- FY14: 117 hrs @ \$10/hr x 3 students = \$3,510

Over the course of eight weeks of sampling, two experienced technicians will work six days a week. These technicians will be selected from previous students who have trained on past projects. They will work at data collection, all chores related to remote camp life as needed, and will train and help younger students. They will supply all camping, personal, and sleeping gear and transportation.

- FY12: 218.4 hrs @ \$15/hr x 2 techs = \$6,552
- FY13: 218.4 hrs @ \$15/hr x 2 techs = \$6,552
- FY14: 218.4 hrs @ \$15/hr x 2 techs = \$6,552

A carpenter/laborer will construct two small plywood cabins for student housing prior to the season:

- FY11: \$325

Boat and captain: this duty will be shared between local area people depending on availability; each contractor will provide their own boat, motor, and gas. This project requires a large boat for a minimum of four people and camp supplies for the following trips:

- one camp set up trip each spring
- one camp breakdown trip each fall
- transportation of students from Tanana to the Rapids camp and back each week of the six week season
- transportation of weekly supplies needed by the camp

FY12: \$120 fuel + \$80 boat charter + \$120 boat captain x 5.2 wks = \$1,664

FY13: \$120 fuel + \$80 boat charter + \$120 boat captain x 5.2 wks = \$1,664

FY14: \$120 fuel + \$80 boat charter + \$120 boat captain x 5.2 wks = \$1,664

Line 400: Supplies (\$8,554)

Camp food:

- FY12: 195 days @ \$6/day = \$1,170
- FY13: 195 days @ \$6/day = \$1,170
- FY14: 195 days @ \$6/day = \$1,170

Camp fuel (gas for generator, Colman cook stoves, and the sampling boat that travels each day to subsistence camps):

- FY12: 8 gallons/day @ \$6/gallon x 26 days = \$1,248
- FY12: 8 gallons/day @ \$6/gallon x 26 days = \$1,248
- FY12: 8 gallons/day @ \$6/gallon x 26 days = \$1,248

Building materials to construct two small plywood cabins for student housing including lumber, metal roofing, paint, and nails:

- FY11: \$1,300

*Budget adjustments between line items are allowed for amounts equal to or less than 10% of the total award without prior AKSSF approval; any amount above 10% requires*

prior AKSSF approval. All costs in lines 100-500 must represent actual cash expenditures.

All invoices shall be adequately documented with both documentation of expense and proof of payment for both direct and match expenses. Examples of expense documentation include copies of invoices, pay stubs, and receipts. Examples of proof of payment documentation include copies of checks, check numbers, and credit card receipts. Match documentation for expenses equal to or greater than 33% of the reimbursable expenses must be submitted with each invoice.

All invoices will be submitted for payment within 30 days of the project end date in accordance with the current AKSSF invoicing P&P. Invoices submitted after that deadline will not be reimbursed. Expenses incurred after the project end date will not be reimbursed.

## XI. Match Budget

Stan Zuray	FY11	FY12	FY13	FY14	Total
100 Personnel	\$0	\$0	\$0	\$0	\$0
200 Travel	\$0	\$0	\$0	\$0	\$0
300 Contractual	\$175	\$9,114	\$9,114	\$9,114	\$27,517
400 Supplies	\$700	\$1,302	\$1,302	\$1,302	\$4,606
500 Equipment	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$875</b>	<b>\$10,416</b>	<b>\$10,416</b>	<b>\$10,416</b>	<b>\$32,123*</b>

\* Match budget shows more match than is required for this project.

**Total required match (33%): \$19,687**

### Match Budget Narrative:

#### Line 300: Contractual (\$27,517)

The Project Supervisor (PS) will act as chaperone to younger students and ensure proper data collection, training, housing, and safety requirements are met for young and older techs. The PS will provide a boat, motor, gas, and equipment.

- FY12: 2.8 wks @ \$1,000/wk = \$2,800
- FY13: 2.8 wks @ \$1,000/wk = \$2,800
- FY14: 2.8 wks @ \$1,000/wk = \$2,800

Inexperienced students selected prior to and inseason will work at data collection and all chores related to remote camp life as needed. Over the course of the six weeks of sampling, three different students each week will work five days a week. They will supply all camping, personal, and sleeping gear.

- FY12: 63 hrs @ \$10/hr x 3 students = \$1,890
- FY13: 63 hrs @ \$10/hr x 3 students = \$1,890
- FY14: 63 hrs @ \$10/hr x 3 students = \$1,890

Over the course of eight weeks of sampling, two experienced technicians will work six days a week. These technicians will be selected from previous students who have trained on past projects. They will work at data collection, all chores related to remote camp life as needed, and will train and help younger students. They will supply all camping, personal, and sleeping gear and transportation.

- FY12: 117.6 hrs @ \$15/hr x 2 techs = \$3,528
- FY13: 117.6 hrs @ \$15/hr x 2 techs = \$3,528
- FY14: 117.6 hrs @ \$15/hr x 2 techs = \$3,528

A carpenter/laborer will construct two small plywood cabins for student housing prior to season:

- FY11: \$175

Boat and captain: this duty will be shared between local area people depending on availability; each contractor will provide their own boat, motor, and gas. This project requires a large boat for a minimum of four people and camp supplies for the following trips:

- one camp set up trip each spring
- one camp breakdown trip each fall
- transportation of students from Tanana to the Rapids camp and back each week of the six week season
- transportation of weekly supplies needed by the camp

FY12: \$120 fuel + \$80 boat charter + \$120 boat captain x 2.8 wks = \$896

FY13: \$120 fuel + \$80 boat charter + \$120 boat captain x 2.8 wks = \$896

FY14: \$120 fuel + \$80 boat charter + \$120 boat captain x 2.8 wks = \$896

Line 400: Supplies (\$4,606)

Camp food:

- FY12: 105 days @ \$6/day = \$630
- FY13: 105 days @ \$6/day = \$630
- FY14: 105 days @ \$6/day = \$630

Camp fuel (gas for generator, Colman cook stoves, and the sampling boat that travels each day to subsistence camps):

- FY12: 8 gallons/day @ \$6/gallon x 14 days = \$672
- FY13: 8 gallons/day @ \$6/gallon x 14 days = \$672
- FY14: 8 gallons/day @ \$6/gallon x 14 days = \$672

Building materials to construct two small plywood cabins for student housing including lumber, metal roofing, paint, and nails:

- FY11: \$700

**Approved by AKSSF:** \_\_\_\_\_ **Date:** \_\_\_\_\_