

Alaska Sustainable Salmon Fund Statement of Work

I. Project Title: Kasilof River SRS Riverbank Restoration

II. Project Number: 44156

III. Principal Investigator

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IV. Project Period: 3/1/15 - 9/30/16

V. AKSSF Objective: 1B-2 **PCSRF Objective:** HP&R

VI. Project Description

1. Synopsis

This project will restore natural riparian function along 30.5 meters of heavily impacted riverbank on the Kasilof River through revegetating and stabilizing techniques employing root wads, brush layering, and vegetative mat. The existing and restored riverbank will be protected by constructing a pathway along an already-developed corridor to localize foot traffic by recreational users. The project is located within the Kasilof River State Recreation Site (SRS), a facility managed by the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation (DNR-DPOR). DNR-DPOR will use in-house design professionals to develop plans (drawings and specifications) for the restoration effort and contract for the construction work.

2. Introduction

The Kasilof River SRS facility is popular with sport fishing guides and fishermen and is home to one of the few public boat launches along the Kasilof River. The riverbank within the facility is deteriorating due to unstructured boat loading/unloading

activities and unmanaged sport fishing access. This project will restore a 30.5-meter section of the impacted bank to a more natural riparian state while also protecting salmon habitat by providing managed river access for boaters and sport fishermen.

The restoration component of this project will use proven riverbank revegetation and stabilization techniques found in the *Streambank Revegetation and Protection Guide* published by the Alaska Department of Fish and Game (ADF&G). DNR-DPOR will tailor the riverbank restoration to the project site. Preliminary investigation reveals that a system consisting of root wads, brush layering, and vegetative matting is suitable for this site.

The riverbank protection component will provide easily assessable, directed access to the river for launching boats and sport fishing. The shoulder of the facility's existing boat ramp currently contains large, round armor rock, which is very difficult to walk on, thus forcing foot traffic onto the more easily traversable riverbank. This project will replace the armor rock with a hardened pathway to redirect foot traffic away from the sensitive riverbank. Articulated concrete matting was selected for the pathway because of its ability to maintain a smooth, level walking surface robust enough to serve as armoring for the boat ramp structure.

The public process for this project was completed and a site plan produced in 2013/2014. Public approval was obtained through the Kenai River Special Management Area Community Advisory Board which has jurisdiction over the Kasilof River SRS.

3. Location

Site: Kasilof River State Recreation Site

Latitude: 60.316867 N

Longitude: 151.258617 W

VII. Objectives

- Restore a 30.5-meter section of impacted riverbank at the Kasilof River SRS to a natural riparian state through revegetation and stabilization
- Protect salmon habitat at the Kasilof River SRS by redirecting foot traffic through construction of an articulated, concrete-matting path for river access

VIII. Methods

DNR-DPOR will manage a team of design professionals including a landscape architect, an engineer, and an environmental impact analyst to develop a set of plans for construction. The team will work closely with the Kasilof River SRS facility managers to develop plans consistent with project objectives.

The landscape architect and project engineer will perform a ground survey to capture key site features (e.g., topography, existing structures, ordinary high water elevations, etc.), and develop a base map for the design work. The environmental impact analyst will conduct wetlands delineation; assess the overall project site for potential environmental considerations; and research agency databases (e.g., Alaska Office of History and Archaeology, ADF&G, Kenai Peninsula Borough, DNR/DPOR, U.S. Army Corps of

Engineers) to assess any potential impacts to environmental, historical, or cultural resources within the project limits. The landscape architect will then finalize the site plan based on findings from the fieldwork and the database research.

Project Design

The project engineer, with direct guidance from project investigators, will develop the plans to four distinct design milestones: 35%, 65%, 95%, and 100% As-Advertised. An internal review will be conducted at each of the first three milestones to ensure compliance with the project objectives and to ensure a sound design. The design will conform to DNR-DPOR design standards as well as applicable federal, state, and local requirements.

The plans will be developed enough at the 65% milestone to begin applying for the various construction permits. The environmental impact analyst will take the lead in that effort with technical input from the project engineer. The 100% As-Advertised plans will be packaged with bid documents and advertised publicly for competitive sealed bids.

Construction Procurement/Contracting

State of Alaska statute (AS 35.15.010) limits the use of in-house labor for construction projects and mandates contracting out construction work as much as possible. Construction procurement will be by competitive sealed bids in accordance with the State of Alaska Procurement Code (AS 36 and 2 AAC 12). The lowest, responsive and responsible bidder will be awarded the construction contract.

Construction

The construction contract will be administered at the project site by a resident engineer (project engineer) on a full-time basis to ensure complete contract compliance by the contractor. The project engineer will document daily work progress, respond to field questions, approve completed work, address unforeseen conditions, issue change orders, recommend progress payments, track the project budget, and perform all other duties necessary to ensure project compliance and success. Upon substantial completion of the project, the project engineer will schedule a final inspection in which the entire project team will tour the project and ensure that the finished product meets the project objectives.

Project Close Out

The project engineer will perform project close out activities after the construction work has been completed and accepted. Close out activities include completing administrative paperwork to close out the construction contract, preparing As-Built drawings, and writing a construction completion report.

IX. Benefits

This project will restore and protect 30.5 meters of riparian habitat at the Kasilof River State Recreation Site. A healthy riparian system plays an important role in maintaining healthy salmon populations, providing food, shelter, regulated water temperatures, low flow velocity waters, and resting areas that are beneficial to juvenile salmon.

X. Products, Milestones, and Timelines

- May 2015: Survey project area (landscape architect and project engineer)
- June - August 2015: Collect environmental data for design and permitting activities
- September 2015: Begin design work
- October 2015: Complete 35% plans (drawings and specifications)
- December 2015: Complete 65% plans; submit construction permit applications
- January 2016: Complete 95% plans; prepare bid documents; secure construction permits
- February 2016: Complete 100% As-Advertised plans and bid documents
- February - March 2016: Advertise construction project; award construction contract
- April - July 2016: Construct project
- July 2016 - September 2016: Prepare As-Built drawings; close out project
- September 2016: Submit As-Built drawings and construction completion report

XI. Budget

DNR-DPOR	Total
100 Personnel	\$0
200 Travel	\$0
300 Contractual	\$144,490
400 Supplies	\$0
500 Equipment	\$0
Total	\$144,490

DNR-DPOR Budget Narrative:

Line 300: Contractual (\$144,490)

Construction cost for riverbank protection and restoration including excavation, installation, and restoration supplies (contractor to be determined): \$144,490

XII. Match Budget

DNR-DPOR Match (35%)	Total
100 Personnel	\$34,577
200 Travel	\$9,280
300 Contractual	\$400
400 Supplies	\$101
500 Equipment	\$0
Subtotal	\$44,358
Expenses subject to indirect	\$34,577
600 Indirect @17.97%	\$6,214
Total	\$50,572

DNR-DPOR Match Budget Narrative:

Line 100: Personnel (\$34,577)

The State of Alaska salary calculator was used to estimate personnel costs.

- Rys Miranda, Engineer IV (Section Chief), will manage and oversee the project including participation in plans review and final inspection: 1 week @ \$2,200/week = \$2,200
- Jacob Gondek, Engineer II (Project Manager), will manage the project and oversee day-to-day activities related to project development and advancement: 2.5 weeks @ \$1,862/week = \$4,655
- Lucy Baranko, Engineering Assistant II, will perform site survey work and provide landscape architecture support to the design engineers:
 - Design: 1 week @ \$1,526/week = \$1,526
 - Construction: 1 week @ \$1,526/week = \$1,526
- Project Engineer, Edgar Tinajero Engineering Assistant II, will participate in site survey work, technical design of the project, plans development for construction, construction administration, and construction contract close out:
 - Design: 6 weeks @ \$1,278/week = \$7,668
 - Construction: 10 weeks @ \$1,278/week = \$12,780
 - Construction close out: 1 week @ \$1,278/week = \$1,278
- Chet Fehrmann, Environmental Impact Analyst, will perform environmental tasks and submit permit applications necessary for construction: 2 weeks @ \$1,472/week = \$2,944

Line 200: Travel (\$9,280)

Rys Miranda will travel to the project site during the final inspection (dates TBD):

- Airfare: 1 ticket @ \$200/ticket = \$200

Lucy Baranko will travel to the project site for the site survey work, intermediate inspection, and final inspection (dates TBD):

- Airfare: 3 tickets @ \$200/ticket = \$600
- Ground transportation (rental car): 3 days @ \$50/day = \$150
- Short-term per diem: 1 day @ \$60/day = \$60

Project Engineer, Edgar Tinajero will travel to the project site for the site survey and construction administration work (dates TBD):

- Airfare: 1 ticket @ \$200/ticket = \$200
- Ground transportation (office fleet): 2 months @ \$500/month = \$1,000
- Lodging: 2 months @ \$2,500/month = \$5,000
- Short-term per diem: 1 day @ \$60/day = \$60
- Long-term per diem: 60 days @ \$25/day = \$1,500

Chet Fehrmann will travel to the project for the site environmental impact analysis and final inspection (dates TBD):

- Airfare: 2 tickets @ \$200/ticket = \$400
- Ground transportation (rental car): 1 day @ \$50/day = \$50
- Short-term per diem: 1 day @ \$60/day = \$60

Line 300: Contractual (\$400)

Survey equipment rental (e.g., data collector, rod, tripod): 2 days @ \$200/day = \$400

Line 400: Supplies (\$101)

Survey supplies (e.g., survey book, rebar, flagging, caps, laths, nails/spikes): \$101

Line 600: Indirect (\$6,214)

DNR's federally negotiated indirect rate through June 30, 2015, is 17.97% on total direct salaries and wages including fringe benefits.