

# **Department of Natural Resources**

DIVISION OF PARKS AND OUTDOOR RECREATION DESIGN AND CONSTRUCTION

550 West 7<sup>th</sup> Avenue, Suite 1340 Anchorage, AK 99501-3565 Main: 907.269.8731 Fax: 907.269.8917

August 27, 2018

Ms. Elise Hsieh EVOS Trustee Council 4210 University Drive Anchorage, Alaska 99508

Re: Department of Natural Resources, Division of Parks and Outdoor Recreation 2018 Habitat Restoration/Protection Project Proposals

Dear Ms. Hsieh:

Attached are two project proposals that the Department of Natural Resources, Division of Parks and Outdoor Recreation (DNR-DPOR) is submitting for funding under the Exxon Valdez Oil Spill (EVOS) Restoration Program. Listed in order of descending priority, the projects are:

- 1. Kenai River Special Management Area: Funny River Riverbank Protection; and
- 2. Kenai River Special Management Area: Morgan's Landing Riverbank Restoration.

DNR-DPOR manages the facilities at which the projects above are listed and is responsible for maintaining the balance of resource protection and public recreational access. The projects listed above specifically aim to address fish habitat restoration and protection of spill area ecosystems that support numerous species affected by EVOS. The primary goal of each project is to restore fish habitats that have been adversely impacted by human activity and to provide continuing habitat protection into the future. These projects will achieve that primary goal while still accommodating human activities, such as recreational use. These projects are consistent with Restoration Project 96180/99180 and Habitat Project 17170116, which were previously approved and funded by the Exxon Valdez Oil Spill Trustee Council (EVOSTC). Additionally, these projects are also aligned with DNR-DPOR management documents or development plans such as the Kenai River Comprehensive Management Plan.

DNR-DPOR is constantly pursuing funding to meet the needs identified in those management documents and developmental plans. In many cases, state funds secured for projects are used to leverage federal funds through matching grants and partnerships. The projects listed above, however, do not have state funding nor are there viable federal grants applicable to those projects. Those projects will unlikely advance to design and construction without funding from the EVOS program, resulting in continued unmanaged recreational access and fish habitat deterioration at their respective sites.

The expected design life of the proposed projects is 25 years. DNR-DPOR will design the elevated light-penetrating (ELP) walkways to have structural steel framing and the river access stairs will consist of structural aluminum. Structural steel and aluminum are the current standard for DNR-DPOR's ELP walkways and river access stairs because they offer longer service life and reduced maintenance needs when compared to timber structures. More specifically, steel ELP walkways are more favorable because they perform better at resisting ice forces commonly experienced by riverside structures and are also less buoyant making them more stable during flood events. The revegetation components will follow the industry manual "Streambank Revegetation and Protection: A Guide for

Ms. Elise Hsieh EVOS Trustee Council August 27, 2018 Page 2

Alaska" and will be self-maintaining after the construction period. DNR-DPOR will assume all maintenance responsibilities upon completion of the projects. Signs will be posted to educate the public about the need to permanently protect stream-and-estuarine-edge habitats to aid multiple species injured by the spill.

The attached spreadsheet summarizes the proposed projects and the benefits each afford to spill injured species. The separate proposal worksheet for each individual project includes a narrative, preliminary engineer's estimate, proposed site plan, and other supporting documents. These projects have been developed to a concept level, which is reflected on the proposed site plan and confidential preliminary engineer's estimate.

The preliminary engineer's estimate consists of the following five major line items:

- 1. Basic Bid. The basic bid item is the estimated construction contract cost. That amount is broken out into specific contract components, (shown at the upper portion of the estimate) which encompass the full extent of the proposed construction work. This amount is an estimate and is based on quantities derived from the concept site plan and unit prices from historical bid data and general knowledge of construction practices at the project location. "All Req'd" is used as a quantity for lump sum and contingent sum items and means to capture all work associated with that pay item. Variation in unit prices from site to site is a product of economy of scale or unique circumstances at a specific location that may affect the cost of construction. Final unit prices will vary depending on the low bid determined during the bidding process and final quantities will vary through the course of construction.
- 2. <u>Project Contingency</u>. The project contingency is intended to cover unforeseen costs as the project develops. Those unforeseen costs may include things such as contractor bids coming in higher, increases in final quantities, and change orders during construction. This cost is calculated at 15% of the basic bid, which is typical of projects of these sizes and complexity.
- 3. <u>Design Services</u>. Design services represent the work associated with developing the conceptual plans into a bid-ready, engineered document for construction. Activities include surveying, site planning, engineering, environmental impact analysis, permitting, and publicly advertising the plans for construction. This cost is estimated at 15% of the basic bid on most of the projects, which is typical of projects of these sizes and complexity.
- 4. <u>Construction Administration</u>. Construction administration work entails supervising the construction project as required by AS 35.10.030. Construction administration activities include documenting daily work progress, resolving field questions, inspecting and approving completed work, addressing unforeseen conditions, issuing change orders, tracking the project budget, and performing all other duties necessary to ensure project compliance and success. This cost is estimated at 15% of the basic bid, which is typical of projects of these sizes, location, and complexity.
- 5. <u>Interpretation and Education</u>. Interpretation and education captures the costs associated with producing interpretive panels. These costs include research work, graphic development, panel design, and panel procurement. This cost is calculated at \$7.5k per panel and is based on

Ms. Elise Hsieh EVOS Trustee Council August 27, 2018 Page 3

historical and current pricing data. Opportunity exists to save on costs if multiple projects with the same or similar panels are funded.

Development of each project will follow the following general phases and will typically run over a course of approximately three years:

### Data Collection

Data collection work is needed to properly advance the projects through design, permitting, and construction. Data collection work includes topographic surveying, aerial imagery, historical/cultural survey, wetlands delineation, and hydrology data.

## Project Design and Permitting

The project engineer, under direct guidance from the project manager, will develop plans to three distinct design milestones: 35%, 65%, 95%/100% As-Advertised. An internal review will be conducted at each of the milestones to ensure compliance with the project objectives and a sound design. The design will conform to DNR-DPOR 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.

Interpretive panels will also be developed during this phase in coordination with the development of the project plans. DNR-DPOR's interpretive professionals will design and fabricate EVOSTC objective-specific panels appropriate for their respective location. Each panel will be reviewed by the EVOSTC Executive Director at each of the panels' review stage prior to finalizing.

## Construction Procurement/Contracting

Construction procurement will be by competitive sealed bids in accordance with the State of Alaska Procurement Code (AS 36 and 2 AAC 12). DNR-DPOR will award the construction contract to the lowest, responsive and responsible bidder.

### 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 in accordance with AS 35.10.030 (state requirements) and 2 CFR Part 200.328 (federal requirements). The resident engineer will document daily work progress, resolve field questions, approve completed work, address unforeseen conditions, issue change orders, recommend progress payments, track the project budget, and all other duties necessary to ensure project compliance and success. This level of oversight is necessary for preserving accountability and credibility in expending public funds.

Ms. Elise Hsieh EVOS Trustee Council August 27, 2018 Page 4

Upon substantial completion of the construction, the resident engineer will schedule a final inspection at which time the entire project team will tour the project site 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 administrative paperwork to close out the construction contract, and preparing As-Built drawings. Once those tasks are completed then the project is officially complete. All records will be retained for three years after which they will be archived electronically and the hardcopies destroyed.

Below is the anticipated development schedule for the two projects.

**Establish Funding Structure** 

Data Collection

35% Design

65% Design

Permitting

95%/100% Design

Advertise Project for Construction

Construction

Project Close Out

Construction 1-Year Warranty Period

July 2019

July 2019 – December 2019

January 2020 – March 2020

April 2020 – June 2020

June 2020 - August 2020

 $September\ 2020-November\ 2020$ 

December 2020 - January 2021

February 2021 – July 2021

August 2021 - October 2021

July 2021 – July 2022

A project manager will be assigned to each project who will manage a team of design professionals to complete this project. The design group will consist of civil engineers, environmental impact analyst, and interpretive specialists and will be responsible for developing plans and specifications for construction of the project.

Please let me know if you need additional information regarding any of these projects.

Sincerely,

Řys Miranda, P.E.

Chief of Design and Construction

Division of Parks and Outdoor Recreation

Attachments as stated

CC: Ethan Tyler, DNR-DPOR Director

Matt Wedeking, DNR-DPOR Chief of Field Operations

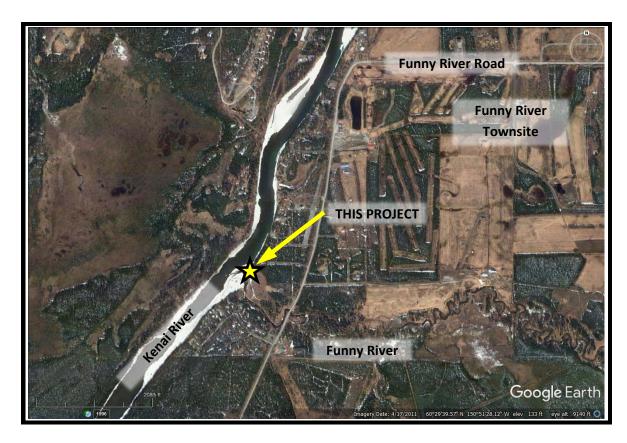


# ALASKA STATE PARKS CAPITAL PROJECT WORKSHEET

**Project Title:** KRSMA Funny River Riverbank Protection

Project Location: Funny River, Alaska

**Latitude:** 60°29'30.48"N **Longitude:** 150°51'51.60"W



### **Project Description:**

The Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation (DNR-DPOR) is proposing to construct approximately 105 linear feet of elevated light-penetrating (ELP) walkway at the Funny River unit of the Kenai River Special Management Area (KRSMA) to replace previous walkway that had outlived its intended useful life and was removed for public safety. Two sets of river access stairs will also be constructed in addition to the ELP walkway. The combination of ELP walkway and river access stairs will allow foot traffic to travel above the sensitive habitat and into the river without impacting riparian resources. The ELP walkway will be designed and constructed in accordance with Kenai Peninsula Borough Ordinance 21.18 for light penetration.

This project will also install three interpretive signs intended to facilitate redirecting human impact and to promote public participation in the long term success of the project and project objectives.

August 27, 2018 Page 1 of 3

# **Project Justification:**

This project is located at the confluence of the Kenai River and Funny River. The Funny River KRSMA Unit is located at the south bank of the Kenai River where very few public river access opportunities exist. As such, this park unit experiences heavy use during peak sport fish season by anglers seeking to catch King, Silver, Red, and Pink salmons, Dolly Varden, and Rainbow trout. In response to a need for habitat protection and managed river access, an elevated walkway structure was funded by the EVOSTC in 1996 (Restoration Project 99180) and constructed at the site in 1997. Over the years, the structure performed very well and accomplished what it was intended to do. Around 2013, after almost two decades of heavy use, the structure started exhibiting signs of age and wear and tear beyond minor repair. By 2015, a section of the walkway had fallen into disrepair and was removed for public safety. A 20-year design life is typical of timber-frame structures similar to those at Funny River SRA.

The removal of nearly 100 feet of walkway reduced the sites river access abilities. This project is necessary to provide managed river access for anglers, protect habitat, and prevent future deterioration of riparian resources at this recreation facility. Without this project, anglers will trample over riparian resources to gain river access which will deteriorate fish habitat along the riverbank. Degradation of the riverbank habitat affects more than the area that is directly impacted. Overhanging vegetation is lost as banks slough which can decrease areas of cooler water in time of high heat, in addition the sediment transfer of degraded banks can cause an increase in turbidity downstream of the impacted area making the effects of the habitat degradation larger than the localized area. Creating infrastructure may deter user groups from creating many paths to a destination and decrease the overall footprint of impact.



Figure 1 - Location of Previous Elevated Walkway (November 9, 2017)

This project will address injured resources Dolly Varden (recovered), Pink Salmon (recovered), and Sockeye Salmon (recovered) and the injured human service Recreation and Tourism (recovering). The referenced injured resources are listed as recovered (2014 Injured Resources and Services Update), however, this project seeks to provide long term habitat protection which plays a critical role in ensuring that the recovered status of those resources are sustained.

# **Project Support:**

This proposed project is consistent the objectives of the Exxon Valdez Oil Spill Restoration Plan to restore the environment, specifically, through habitat restoration and protection. Additionally, this project is in support of DNR-DPOR's mission to provide outdoor recreation opportunities and conserve and interpret natural, cultural, and historic resources for the use, enjoyment, and welfare of the people. This project is further supported by the following groups:

- Kenai River Special Management Area Advisory Board and
- Kenai River Sportfishing Association.

**Estimated Project Cost:** \$248,525

Estimate Year: 2018
Estimate Type: Preliminary

### **Attachments:**

- 1. Concept Site Plan
- 2. Letters of Support





"Working together...for the river"

ADVISORY BOARD

June 8, 2018

Exxon Valdez Oil Spill Trustee Council 4210 University Drive Anchorage, AK 99508-4626

Dear EVOS Trustee Council Members:

The Kenai River Special Management Area (KRSMA) Advisory Board supports two proposed habitat projects Alaska State Parks has applied for Exxon Valdez Oil Spill Trustee Council funding on the Kenai River.

The first project includes rehabilitating 700' of river bank and installing one new elevated light penetrating (ELP) walkway and stairways at Morgan's Landing. This section of the Kenai River Special Management Area provides important habitat for fish and wildlife populations and provides public access. The restoration project will include bioengineering techniques such as brush layering and cabled spruce trees. The ELP walkway will also provide infrastructure that will provide public access while protecting resources.

The second project includes installing 105' of ELP walkway at the Funny River state campground, which is located at the confluence of the Kenai River and Funny River. This is one of the few public access sites along Funny River Road and it will provide critical public access while protecting resources.

The KRSMA Advisory Board endorses these two projects and urges the EVOSTC to fund these important projects.

Sincerely,



Kenai Area Office, PO Box 1247, Soldotna, AK 99669, 907-262-5581 Kenai Peninsula Borough, 144 N. Binkley, Soldotna, AK 99669 907-262-4441 Gilman River Center 514 Funny River Road, Soldotna, AK 99669, 907-260-4882 Alaska Division of Parks and Outdoor Recreation, Departme





June 6, 2018

Exxon Valdez Oil Spill Trustee Council 4210 University Drive Anchorage, AK 99508-4626

**Dear EVOS Trustee Council Members:** 

Kenai River Sportfishing Association (KRSA) is a nonpartisan, nonprofit fishery conservation organization that works to ensure the long-term health and sustainability of fish resources in the Kenai River, through advocacy of sport and personal use fisheries and the promotion of science-based fish management. KRSA supports the two project proposals, at Funny River and at Morgan's Landing, from the Alaska State Parks to the Exxon Valdez Oil Spill Trustee Council (EVOSTC).

The Funny River project includes the installation of 105 feet of elevated light-penetrating (ELP) walkway and two angler access stairs at the Funny River Campground, Kenai River Special Management Area (KRSMA). Located at the confluence of the Funny and Kenai Rivers on Funny River Road, the project will provide improved angler access to primarily sockeye and silver salmon fisheries while also protecting the riparian fish habitat. The Funny River Campground is one of the few public access locations for bank anglers on the south side of the Kenai River along Funny River Road, and the proposed improvements will be an important upgrade to the facility.

The Morgan's Landing project includes restoration of 700 feet of riparian fish habitat and installation of a new EPF walkway and angler access stairway at the Morgan's Landing State Recreational Area in KRSMA. This section of the Kenai River provides important high value rearing habitat for juvenile salmon and is popular for bank anglers fishing for sockeye and silver salmon. The proposal incorporates proven restoration techniques for fish habitat with cabled spruce trees and brush layering, and the ELP design for anglers provides important public access while protecting riparian fish habitat.

KRSA supports these two projects and recommends that the EVOSTC fund them in the upcoming cycle.

Respectfully,

R'ly Lease

Ricky Gease, Executive Director Kenai River Sportfishing Association

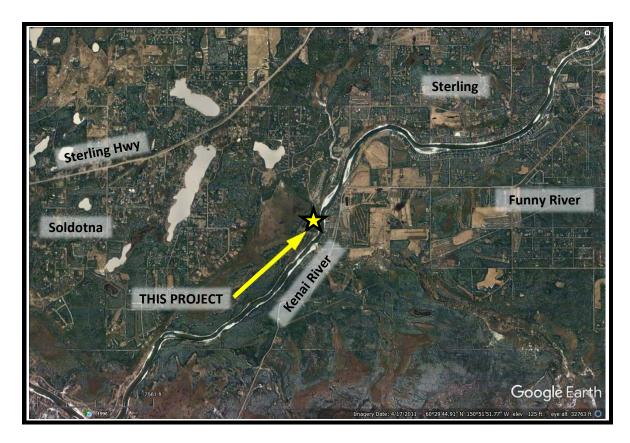


# ALASKA STATE PARKS CAPITAL PROJECT WORKSHEET

**Project Title:** KRSMA: Morgan's Landing Riverbank Restoration

**Project Location:** Sterling, Alaska

**Latitude:** 60°29'53.99"N **Longitude:** 150°51'47.35"W



### **Project Description:**

The Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation (DNR-DPOR) is proposing to restore approximately 700 linear feet of riverbank along a heavily impacted section of the Kenai River located within Morgan's Landing Unit of the Kenai River Special Management Area (KRSMA) and construct approximately 24 linear feet of elevated light-penetrating (ELP) walkway to supplement the existing system of walkways already at the site. One sets of river access stairs will also be constructed in addition to the ELP walkway. The riverbank stabilization will use brush layering and spruce tree revetment as described in the design manual *Streambank Revegetation and Protection: A Guide for Alaska*. The combination of ELP walkway and river access stairs will allow foot traffic to travel above the sensitive riverbank and into the river without impacting riparian resources. The ELP walkway will be designed and constructed in accordance with Kenai Peninsula Borough Ordinance 21.18 for light penetration.

This project will also install three interpretive signs intended to facilitate redirecting human impact and to promote public participation in the long term success of the project and project objectives.

August 27, 2018 Page 1 of 2

# **Project Justification:**

The Kenai River's world class fisheries attract thousands of anglers each year. Morgan's Landing gets its fair share of anglers seeking to catch King, Silver, Red, and Pink salmons, Dolly Varden, and Rainbow Trout. River access at this site has taken its toll and has resulted in damage to riparian resources along the river. This project is necessary to provide managed river access for anglers, restore vegetation to the riverbank, and prevent future deterioration of riparian resources along this section of the Kenai River. Without this project, anglers will continue to trample over the riverbank to gain river access which will inhibit the natural recovery of damaged resources and further deteriorate fish habitat along the riverbank. Degradation of the riverbank habitat affects more than the area that is directly impacted. Overhanging vegetation is lost as banks slough which can decrease areas of cooler water in time of high heat, in addition the sediment transfer of degraded banks can cause an increase in turbidity downstream of the impacted area making the effects of the habitat degradation larger than the localized area. Creating infrastructure may deter user groups from creating many paths to a destination and decrease the overall footprint of impact.

This project will address injured resources Dolly Varden (recovered), Pink Salmon (recovered), and Sockeye Salmon (recovered) and the injured human service Recreation and Tourism (recovering). The referenced injured resources are listed as recovered (2014 Injured Resources and Services Update), however, this project seeks to provide long term habitat protection which plays a critical role in ensuring that the recovered status of those resources are sustained.

# **Project Support:**

This proposed project is consistent the objectives of the Exxon Valdez Oil Spill Restoration Plan to restore the environment, specifically, through habitat restoration and protection. Additionally, this project is in support of DNR-DPOR's mission to provide outdoor recreation opportunities and conserve and interpret natural, cultural, and historic resources for the use, enjoyment, and welfare of the people. This project is further supported by the following groups:

- Kenai River Special Management Area Advisory Board,
- Kenai River Sportfishing Association.

**Estimated Project Cost:** \$507,710

Estimate Year: 2018
Estimate Type: Preliminary

### **Attachments:**

- 1. Concept Site Plan
- 2. Letters of Support





"Working together...for the river"

ADVISORY BOARD

June 8, 2018

Exxon Valdez Oil Spill Trustee Council 4210 University Drive Anchorage, AK 99508-4626

Dear EVOS Trustee Council Members:

The Kenai River Special Management Area (KRSMA) Advisory Board supports two proposed habitat projects Alaska State Parks has applied for Exxon Valdez Oil Spill Trustee Council funding on the Kenai River.

The first project includes rehabilitating 700' of river bank and installing one new elevated light penetrating (ELP) walkway and stairways at Morgan's Landing. This section of the Kenai River Special Management Area provides important habitat for fish and wildlife populations and provides public access. The restoration project will include bioengineering techniques such as brush layering and cabled spruce trees. The ELP walkway will also provide infrastructure that will provide public access while protecting resources.

The second project includes installing 105' of ELP walkway at the Funny River state campground, which is located at the confluence of the Kenai River and Funny River. This is one of the few public access sites along Funny River Road and it will provide critical public access while protecting resources.

The KRSMA Advisory Board endorses these two projects and urges the EVOSTC to fund these important projects.

Sincerely,



Kenai Area Office, PO Box 1247, Soldotna, AK 99669, 907-262-5581 Kenai Peninsula Borough, 144 N. Binkley, Soldotna, AK 99669 907-262-4441 Gilman River Center 514 Funny River Road, Soldotna, AK 99669, 907-260-4882 Alaska Division of Parks and Outdoor Recreation, Departme





June 6, 2018

Exxon Valdez Oil Spill Trustee Council 4210 University Drive Anchorage, AK 99508-4626

**Dear EVOS Trustee Council Members:** 

Kenai River Sportfishing Association (KRSA) is a nonpartisan, nonprofit fishery conservation organization that works to ensure the long-term health and sustainability of fish resources in the Kenai River, through advocacy of sport and personal use fisheries and the promotion of science-based fish management. KRSA supports the two project proposals, at Funny River and at Morgan's Landing, from the Alaska State Parks to the Exxon Valdez Oil Spill Trustee Council (EVOSTC).

The Funny River project includes the installation of 105 feet of elevated light-penetrating (ELP) walkway and two angler access stairs at the Funny River Campground, Kenai River Special Management Area (KRSMA). Located at the confluence of the Funny and Kenai Rivers on Funny River Road, the project will provide improved angler access to primarily sockeye and silver salmon fisheries while also protecting the riparian fish habitat. The Funny River Campground is one of the few public access locations for bank anglers on the south side of the Kenai River along Funny River Road, and the proposed improvements will be an important upgrade to the facility.

The Morgan's Landing project includes restoration of 700 feet of riparian fish habitat and installation of a new EPF walkway and angler access stairway at the Morgan's Landing State Recreational Area in KRSMA. This section of the Kenai River provides important high value rearing habitat for juvenile salmon and is popular for bank anglers fishing for sockeye and silver salmon. The proposal incorporates proven restoration techniques for fish habitat with cabled spruce trees and brush layering, and the ELP design for anglers provides important public access while protecting riparian fish habitat.

KRSA supports these two projects and recommends that the EVOSTC fund them in the upcoming cycle.

Respectfully,

R'ly Lease

Ricky Gease, Executive Director Kenai River Sportfishing Association

# Department of Natural Resources Division of Parks and Outdoor Recreation Habitat Restoration/Protection Projects Summary August 27, 2018

Project Name KRSMA: Funny River Riverbank Protection	Project Description  This project will construct 105 linear feet of ELP walkway at the confluence of the Kenai River and Funny River to replace a previous section of walkway that had outlived its intended useful life and was removed for public safety. Two sets of river access stairs will also be	Estimated Project Cost \$ 248,525	Leveraging  This project currently has no other potential funding sources.
KRSMA: Morgan's Landing Riverbank Restoration	constructed to accommodate managed river access. The original warkway was part of an EVOSTC-funded project from the mid-1990s. This project will also install three interpretive displays to facilitate redirecting human impact and promote public participation in the long term success of the project objectives.  This project will restore 700 linear feet of habitat along the Kenai River; construct 24 linear feet of ELP walkway with one set of river access stairs; and install three interpretive displays to facilitate redirecting human impact and promote public participation in the long term success of the project and its objectives.	\$ 507,710	507,710 This project currently has no other potential funding sources.

# Department of Natural Resources Division of Parks and Outdoor Recreation Habitat Restoration/Protection Projects Summary August 27, 2018

Project Name	EVOS Injured Resource Benefits	EVOS Injured Service Benefits
KRSMA: Funny River Riverbank Protection	This project will benefit the injured resources Dolly Varden, Pink Salmon, and Sockeye Salmon by protecting habitat impacted by foot traffic accessing this fishery. Foot traffic will be kept off of the riparian zone by providing river access via ELP walkway and stairs.	This project will benefit the injured services recreation and tourism by providing access that does not impact riparian resources.
KRSMA: Morgan's Landing Riverbank Restoration	This project will benefit the injured resources Dolly Varden, Pink Salmon, Sockeye Salmon by protecting habitat impacted by foot traffic accessing this fishery. The riverbank will be restored using proven bioengineered systems consistent with standard practices. Foot traffic will be kept off of the riparian zone by providing river access via ELP walkway and stairs.	This project will benefit the injured services recreation and tourism by improving the habitat of the species that support those services.