



Friday, May 19, 2023

## 2023 Regional Project Pre-application

# 2023 Upper Columbia Regional Project Pre-Application

- \* Pre-applications due March 10, 2023 (COB)
- \* Complete applications due in PRISM April 20, 2023 (COB)
- \* Revised proposals due in PRISM May 19, 2023 (COB)
- \* Final revised applications due in PRISM June 26, 2023 (noon)

### Project Title

Upper Methow Design RM 61.75-62.75

### Contact Information

#### Sponsor

Methow Salmon Recovery Foundation

#### Primary Contact

Jessica Goldberg

#### E-Mail Address

jessica@methowsalmon.org

### Budget Request

#### Anticipated Request - SRFB (standard round)

240,042

#### Anticipated TOTAL Budget

240,042

### Project Location

#### Briefly describe the location of the project

This project is located along the Methow River in reaches Fawn 6-7 at RM 61.75-62.75

Latitude (decimal degrees)

48.5499

**Longitude (decimal degrees)**

-120.3307

**Project subbasin**

Methow

**Methow Assessment Unit(s)**

Methow River-Fawn Creek

**Reach(es) Name**

Methow River - Fawn 06 and 07

**Identify the reach(es) priority/ reach ranking. Note: If the project involves work in multiple reaches, select "Multiple" and include details in the text box that will appear below. Please reference the Prioritization Web Map: <https://prioritization.ucsrb.org/>.**

Rank 1

Rank 2

Multiple reaches (provide details below)

**Please detail the reach-ranking of the reaches below**

For restoration, Methow-Fawn Reach 6 is Rank 1 and Reach 7 is rank 2. The Assessment Unit is Tier 1 for restoration

**Project Information**

**1. What are the project objectives? Objectives support and refine biological goals, breaking them down into small steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound). Note: This exact question is included in the PRISM application. Example format: The project seeks to address [specify limiting factor(s)] for [limiting life stage(s)] by [specific actions proposed] to create an estimated [include specific target metrics, as described below] upon implementation in [estimated year].**

Within two years the Project will produce conceptual and preliminary designs for a habitat restoration project that will provide cover and complexity in and around the cold-water seeps found in the project area. This preliminary design project would develop an instream habitat complexity project in the Upper Methow River on two MSRF-owned parcels, several adjacent private properties with willing landowners, and adjacent state-owned aquatic lands. The project builds on the findings of the Wells Tributary Committee funded "Methow Thermal Refugia Restoration Assessment" prepared by John Crandall and published in December 2022 by Methow Salmon Recovery Foundation (MSRF). The assessment documents multiple cold-water pockets in the project area. As the benefits of these cold-water seeps is limited by lack of depth and habitat complexity, the project will produce preliminary designs for habitat restoration actions to provide cover and complexity for ESA-listed Upper Columbia Spring Chinook Salmon, UCR Steelhead, and Bull Trout in and around these sources of cold- water in the project area.

**2. What species will the project benefit?**

Spring Chinook

Steelhead

Bull Trout

**3. Select the project's objectives and the associated tracking metrics**

Design, Monitoring or Assessment

**4. Does this project already exist in Salmon Recovery Portal or PRISM?**

No

**5. Has this project been submitted previously for funding through the SRFB and/or other process(es)?**

No

**6. What category is the project?**

Design

## Design and Restoration Proposals

**7. What project phase(s) are proposed for completion?**

Conceptual Design

Preliminary Design

**8. Is your project within a completed (or soon-to-be completed) Reach Assessment or other type of assessment (e.g., Rapid Site Assessment, other)?**

Upper Methow Reach Assessment (2015)

**9. Which limiting factors does the project propose to address?**

Cover - Wood

Temperature - Adult Holding

Temperature - Rearing

**10. Which life stages will the proposed project address?**

Spawning and Incubation

Summer Rearing

**11. Freshwater Benefits - Describe how will your project improve survival, capacity and/or distribution for target species at the reach scale?**

This project will design a habitat restoration project that will provide cover and complexity in and around existing cold water upwelling areas. Cold water springs are important features on the landscape to provide habitat that fish use to optimize growth and improve survival. By providing complex cover near these features, this project will increase the quantity and quality of available habitat in the reach, allowing more fish access to these features. We anticipate the project will increase the capacity of the project reach to support rearing juvenile fish. Scour associated with the wood structures can provide cover for migrating adults moving into and through the reach.

**12. Temporal Effect - Briefly describe how and to what extent the project would promote natural stream/watershed process consistent with the geomorphology of the stream?**

This project will be designed to be consistent with natural processes and site and reach scale geomorphology. The project will be designed to support sediment retention and routing, and trap mobile wood, but is not intended to promote reach scale channel migration.

**13. Temporal Effect - How long will it take for the project to achieve its intended response?**

1-10 years

#### 14. Temporal Effect - How long will the restoration action and its benefits persist?

Less than 10 years

10-50 years

50+ years

#### 15. Temporal Effect - What level and/or interval of maintenance is anticipated? What is the plan for any anticipated maintenance?

The project will produce designs for a restoration project that would increase in-channel complexity by constructing multiple engineered logjams / wood complexity structures and by expanding access to hyporheic seeps through bank secured complexity features. Engineered structures are expected to provide habitat benefits for several decades following project construction. Wood structures are designed to be self-maintaining for the first 10-20 years, when they require periodic inspection and evaluation to ensure they continue to function as intended, but generally do not require frequent maintenance. Wood structures are designed to initiate process through scour, recruitment, and riparian vegetation establishment so that benefits persist beyond the initial wood piece life span.

#### 16. Methods - Briefly describe the potential (for design) or proposed restoration methods and how they will achieve project objectives.

This project team will identify opportunities to design multiple features designed to interact with the thermal inputs identified previously. These opportunities would be expected to include engineered logjams / wood complexity structures intended to provide rearing habitat in close proximity to the identified existing cold-water sources and bank complexity and excavated alcoves. Wood features would be designed to capture mobile wood and directly provide cover for rearing juvenile fish.

## Assessment Proposals

## Protection Proposals

## Monitoring Proposals

## Project Risk and Economic Benefits

### 1. What is the landownership?

Private

### 2. Have you secured landowner participation in or acceptance for this project?

Yes

#### Please explain

Methow Salmon Recovery Foundation owns two key properties in the project area. The MSRF properties abut common ownership properties managed by a homeowners association (Edelweiss Maintenance Commission). The Edelweiss Board of Directors is supportive of the MSRF's restoration and protection efforts has committed to assist in landowner coordination efforts. The Association is currently collaborating with MSRF on a side channel beaver study in the reach and with outreach efforts to address trespass issues that have historically impacted shorelines in the reach. MSRF has also initiated conversations with the Methow Conservancy, which manages Conservation Easements on multiple parcels within the reach and has

expressed support for this effort. The only unprotected parcel within the project reach is less than 1/2 acre and is located between the two MSRF parcels. The property cannot be developed for residential use, but can be cleared for recreational use. MSRF had reached out to the previous landowner to negotiate protections, but unfortunately the property was recently sold. MSRF has initiated outreach to the new owner. Regardless of the new landowner's interest in participation, no actions are proposed on the parcel and its ownership/protection is not necessary for the design project objectives.

### **3. Describe any land owner requirements (e.g., design elements, right-of-ways, access agreements, liability waivers, etc.) and if/how they could affect the project**

The project area is on the edge of the active floodplain, and is bounded by the county road. Projects will be designed to not increase risk to the existing infrastructure. We anticipate that in-channel work can be designed to avoid impacts to the existing infrastructure without compromising project objectives. The majority of the upstream and downstream properties are currently protected and would be supportive of restoration actions.

### **4. Will the project raise potential concerns for interest groups (e.g., recreational users) or the community at large (including upstream/ downstream/ adjacent landowners)?**

Understanding recreation use in the Methow Valley is a component of all in-stream restoration projects. This project will be designed in compliance with adopted recreational risk guidelines (Reclamation) to not increase recreational risk over existing conditions. The site affords excellent line of sight visibility for rafters and tubers and is located upstream of the nearest recreational access points (Weeman Bridge). Because the majority of the adjacent properties are currently protected under development restrictions (Conservation Easements), restoration is not anticipated to raise concerns with neighbors or adjacent landowners.

### **5. Who will have the responsibility to manage and maintain the project? What is the responsibility of current or future landowners?**

The project will be designed to minimize long-term maintenance requirements. The project features will be designed to become part of the river system and should not increase responsibilities of current or future landowners beyond those required by existing conditions. Existing property protections are managed by Methow Salmon Recovery Foundation or the Methow Conservancy for the majority of the restoration reach.

### **6. Are other projects being proposed immediately upstream or downstream of worksite?**

Yes

### **7. Please describe the risk of failure associated with this project.**

This project carries a low risk of failure. By owning much of the underlying property, much of the risk associated with changing landowner requirements is mitigated. The project will be designed with wood structures intended and designed primarily to provide habitat by promoting hydraulic diversity and directly providing cover. This type of work carries a lower risk of failure than projects intended to promote significant geomorphic change.

### **8. Is there any public outreach planned during and/or after implementation? Does the project build community support for salmon recovery efforts?**

This project will require outreach and coordination with neighboring owners in the Edelweiss community to maintain support. MSRF has been working directly with the Edelweiss Board for several years to expand on current protections and to implement a side channel habitat study aimed at promoting beaver coexistence. The majority of the adjacent properties not located within Edelweiss

are protected by Conservation Easements held by the Methow Conservancy. MSRF and the Methow Conservancy have a well-developed relationship for review and approval of restoration actions consistent with CE protections. This combination of relationships helps reduce the need for a larger public outreach effort.

**9. Does the project represent an opportunity for economic benefit? How much benefit does the project create for the dollars invested?**

Yes, this project will directly employ local and regional contractors to complete most aspects of the project assessment, design, and future development. MSRF has built an approved roster of qualified local and regional contractors and weights bidding review to prioritize local contractor preference when possible. MSRF has implemented restoration actions in the Methow Valley for more than 20 years and the majority of our awarded contracts have been awarded to local and regional contractors with consistently high quality results. Our findings are supported by an economic analysis completed by UCSRB that showed that funds spent on restoration projects cycle through the local community 4 to 7 times, significantly multiplying the local economic benefit.

Targeting existing cold-water sources, which are relatively scarce, will increase habitat benefits for the dollars invested.

**10. Describe any partnerships, their experience, and types of contributions supporting the project.**

This project will be led by MSRF staff who bring a breadth and depth of strengths to the project, including expertise in restoration ecology, community outreach and engagement, permitting, and project management. MSRF will hire a design engineer with expertise in restoration design and hydraulic engineering. MSRF's established long-term relationships with both the local HOA Board and the Methow Conservancy provide a solid foundation for building support for restoration actions identified in the assessment. MSRF has been actively engaged in habitat restoration in the Methow Valley since 2001 and has successfully served as a project sponsor for many restoration projects in the watershed.

## **Optional Section - Preparation for PRISM**

**Do you want to review and/or pre-populate PRISM questions?**

No

Supporting Documents

Upper Columbia Process Guide 2022 (updates anticipated January 2023)  
SRFB Manual 18 (2023)  
RCO Application Resources (2023)

**Does the proposed project span multiple assessment units?**

No

PROJECT: 23-1276 PLAN, UPPER METHOW PRELIMINARY DESIGN RM 61.75-62.7

Sponsor: Methow Salmon Recovery Found Program: Salmon State Supplemental Sm Status: Active

## Parties to the Agreement

### PRIMARY SPONSOR

Methow Salmon Recovery Foundation

**Address** PO Box 755

**City** Twisp **State** WA **Zip** 98856-0755

**Org Type** Non-Gov-Nonprofit

**Vendor #** SWV0091539-00

**UBI** 602134958

**Date Org created**

**Org Notes**

[link to Organization profile](#)

Org data updated

### QUESTIONS - PRIMARY SPONSOR

#1: What date was your organization created?

#2: Is your organization registered as a non-profit with the Washington Secretary of State?

Yes

#2a: Please confirm the Unified Business Identifier (UBI) shown above is correct or provide if blank.

#3: How long has your organization been involved in salmon and habitat conservation?

#4: Do your organizational documents (charter, bylaws, or articles of incorporation) include the authority for the protection or enhancement of natural resources or related activities?

Yes

#5: Do your organizational documents (charter, bylaws, or articles of incorporation) provide for an equivalent successor organization in case the nonprofit dissolves?

No

### SECONDARY SPONSORS

No records to display

### MANAGING AGENCY

Recreation and Conservation Office

### LEAD ENTITY

Upper Columbia Salmon Rcy Bd L

### QUESTIONS

#1: List project partners and their role and contribution to the project.

## External Systems



# Project Application Report - 23-1276

## SPONSOR ASSIGNED INFO

Sponsor-Assigned Project Number

Sponsor-Assigned Regions

## EXTERNAL SYSTEM REFERENCE

Source	Project Number	Submitter
HWS	23-1276	DHecker

## Project Contacts

Contact Name Primary Org	Project Role	Work Phone	Work Email
<u>Amee Bahr</u> Rec. and Conserv. Office	Project Manager	(360) 867-8585	<a href="mailto:Amee.Bahr@rco.wa.gov">Amee.Bahr@rco.wa.gov</a>
<u>Doran Lower</u> Rec. and Conserv. Office	MAgy Fiscal Contact	(360) 902-3007	<a href="mailto:doran.lower@rco.wa.gov">doran.lower@rco.wa.gov</a>
<u>Jessica Goldberg</u> Methow Salmon Recovery Found	Project Contact		<a href="mailto:jessica@methowsalmon.org">jessica@methowsalmon.org</a>
<u>Brian Fisher</u> Methow Salmon Recovery Found	Alt Project Contact	(509) 429-4928	<a href="mailto:brian@methowsalmon.org">brian@methowsalmon.org</a>
<u>Deb Nickell</u> Methow Salmon Recovery Found	Alt Project Contact	(509) 996-2787	<a href="mailto:deb@methowsalmon.org">deb@methowsalmon.org</a>
<u>Chris Johnson</u> Methow Salmon Recovery Found	Agreement	(509) 429-1232	<a href="mailto:Chris.J@methowsalmon.org">Chris.J@methowsalmon.org</a>
<u>David Hecker</u>	Lead Entity Contact	(208) 869-9446	<a href="mailto:dave.hecker@ucsr.org">dave.hecker@ucsr.org</a>
<u>Katy Williams</u> Methow Salmon Recovery Found	Billing	(509) 433-8880	<a href="mailto:katy@methowsalmon.org">katy@methowsalmon.org</a>

## Worksites & Properties

### # Worksite Name

#1 Upper Methow Right Bank RM 61.75-62.7

### Planning Property Name

- ✓ MSRF Fawn 1
- ✓ MSRF Fawn 2

# Project Application Report - 23-1276

## Worksite Map & Description

### Worksite #1: Upper Methow Right Bank RM 61.75-62.7

#### WORKSITE ADDRESS

**Street Address** Goat Creek Road  
**City, State, Zip** Winthrop WA 98862

## Worksite Details

### Worksite #1: Upper Methow Right Bank RM 61.75-62.7

#### SITE ACCESS DIRECTIONS

From Winthrop, head NW on State Route 20 for approximately 8 miles. Turn right onto Goat Creek Road. The project is along Goat Creek Road on the southwest side between the road and the river for approximately 1.8 miles.

#### TARGETED ESU SPECIES

Species by ESU	Egg Present	Juvenile Present	Adult Present	Population Trend
Chinook-Upper Columbia River Spring, Methow River, Endangered	✓	✓	✓	Stable
Steelhead-Upper Columbia River, Methow River, Threatened	✓	✓	✓	Stable

#### Reference or source used

NMFS 2016

#### TARGETED NON-ESU SPECIES

Species by Non-ESU	Notes
Bull Trout	Migratory adults and juveniles; population trend declining. USFWS designated FMO habitat.
Lamprey	Pacific lamprey ammocoetes, potentially adults and eggs. Population possibly declining.

#### Questions

#1: Give street address or road name and mile post for this worksite if available.

No street address available. The project is on the southwest side of Goat Creek Road approximately 1/2 mile northwest from the intersection with State Route 20.

# Project Application Report - 23-1276

## Project Location

### RELATED PROJECTS

#### Projects in PRISM

##### PRISM

Number	Project Name	Program Name	Current Status	Relationship Type	Notes
--------	--------------	--------------	----------------	-------------------	-------

No related project selected

#### Related Project Notes

### Questions

#1: Project location. Describe the geographic location, water bodies or habitat types, and the location of the project in the watershed, i.e. nearshore, tributary, main-stem, off-channel, etc.

The project is located in the Methow Watershed in Okanogan County on the right bank of the Upper Methow River in reaches Fawn 6-7 at RM 61.75-62.75.

#2: How does this project fit within your regional recovery plan and/or local lead entity's strategy to restore or protect salmonid habitat? Cite section and page number.

The Biological Strategy for restoring habitat for Upper Columbia Spring Chinook and Steelhead (last updated 2017), prioritizes actions that address identified limiting factors and prioritized ecological concerns in high priority reaches. This project spans reaches 6 and 7 of the Methow Fawn Assessment Unit (AU). The Assessment Unit is prioritized as Tier 1 for restoration of both Spring Chinook and Steelhead according to the Prioritization Framework (RTT 2021). Reaches 06 and 07 are identified as Rank 1 and Rank 2, respectively, for restoring reach function within the AU according to the same framework. The Methow EDT model considers this area to be an important reach for protection (#3/49) and a moderate priority for restoration (#28/49) and identifies projects that improve complexity as having a medium effect to abundance and productivity.

The project will address limiting factors identified as unacceptable or at risk by the Prioritization Framework and EDT. Cover from large wood, floodplain connectivity and pool quantity and quality are all identified as limiting factors currently functioning at unacceptable levels. Restoring functional banks and improving instream complexity are recommended actions in these reaches. This project will design and construct features intended to increase instream complexity, support hyporheic exchange, and increase the area of accessible cold water refugia. These actions will address priority limiting factors and increase habitat capacity in this important reach.

#3: Is this project part of a larger overall project?

No

#4: Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. [Aquatic Districts and Managers](#)

Yes

## Property Details

Property: MSRF Fawn 1 (Worksite #1: Upper Methow Right Bank RM 61.75-62.7)

✓ Planning

LANDOWNER

CONTROL & TENURE

# Project Application Report - 23-1276

Name Methow Salmon Recovery Foundation  
Address PO Box 755  
City Twisp  
State WA Zip 98856-0755  
Type Private

Instrument Type Sponsor owned property (deed)  
Timing Existing  
Term Length Perpetuity  
# Yrs  
Expiration Date  
Note

## Property: MSRF Fawn 2 (Worksite #1: Upper Methow Right Bank RM 61.75-62.7)

✓ Planning

### LANDOWNER

Name Methow Salmon Recovery Foundation  
Address PO Box 755  
City Twisp  
State WA Zip 98856-0755  
Type Private

### CONTROL & TENURE

Instrument Type Sponsor owned property (deed)  
Timing Existing  
Term Length Perpetuity  
# Yrs  
Expiration Date  
Note

## Project Proposal

### Project Description

This preliminary design project would develop an instream habitat complexity project in the Upper Methow River on two MSRF-owned parcels, several adjacent private properties with willing landowners, and adjacent state owned aquatic lands. The project builds on the findings of the Wells Tributary Committee funded "Methow Thermal Refugia Restoration Assessment" prepared by John Crandall and published in December 2022 by Methow Salmon Recovery Foundation (MSRF). The assessment documents multiple cold water pockets in the project area. As the benefits of these cold-water seeps is limited by lack of depth and habitat complexity, the project will produce preliminary designs for habitat restoration actions to provide cover and complexity for ESA-listed Upper Columbia Spring Chinook Salmon, UCR Steelhead, and Bull Trout in and around these sources of cold- water in the project area.

### Project Questions

#1: Problem statement. What are the problems your project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.

Early logging practices in the Upper Methow River removed much of the instream wood and targeted mature riparian trees.

Subsequent residential and recreational development and road construction have reduced floodplain connectivity and limited channel migration. This has resulted in a less complex and connected riverscape that provides less habitat. Like many rivers in the northwest, temperatures in this reach are increasing due to loss of riparian shading, decreases in hyporheic exchange, and a warming climate. This project seeks to increase the extent of accessible habitat at existing cold water patches and to improve the quality of habitat around them by designing structures that increase habitat complexity and bed form variability. Structures will be designed to provide hydraulic shadows around the cold water inputs and enhance hyporheic exchange within the channel and off-channel locations.

## Project Application Report - 23-1276

#2: Describe the limiting factors, and/or ecological concerns, and limiting life stages (by fish species) that your project expects to address.

Limiting factors in this reach of the Methow include in-stream complexity/large wood, floodplain connection, and elevated temperatures. This project seeks to increase the amount of thermal refugia and provide cover from large wood (unacceptable) and improve pool quantity and quality (at-risk). We will also look for opportunities to increase floodplain connectivity (unacceptable) through structure placement. Reach scale limiting factors are identified in the Methow EDT report cards, and in the Upper Columbia Prioritization Strategy.

Project designs will seek to develop structures in locations that increase the extent of cold water refugia and the complexity of habitat around them. Structures will be designed to slow the flow of water through existing cold water areas, reducing mixing and expanding the footprint of cold water. Structures will also be designed to scour pools within the cold water plumes, increasing the volume of the cold water patches and increasing the amount of accessible cold water refugia. Project designs will also seek to tap into existing cold hyporheic water by creating scour pools with cover in areas with shallow hyporheic flow. Recent work by Jim Helfield at Western Washington University provides evidence that this can be effective at creating cold water refugia if structures are located in areas with cold, shallow hyporheic flows. Improving cold water refugia addresses an identified limiting factor and these refuge habits are becoming increasingly vital as summer river temperatures increase as a result of climate change, as forecast by the UW Climate Impacts Group.

In addition to increasing cold water refugia, project designs will seek to increase the quantity and quality of pools in the reach by forcing pool scour and increasing the hydraulic complexity by placing instream large wood. Complex habitat is used by rearing juvenile salmonids as hiding cover and to establish feeding stations. Increasing the quantity and quality of pools with deep cover is expected to increase the capacity of the habitat to support rearing juvenile fish during their fresh-water life stage. Deep pools with cold water are also used by holding adults on their way to their spawning grounds.

#3: What are the project goals? The goal of the project should be to solve identified problems by addressing the root causes. Then clearly state the desired future condition. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized. **Example Goals and Objectives**

The project goal is to develop conceptual and preliminary designs for a habitat restoration project that takes advantage of the density of identified cold-water patches in the project area and the protected status of the majority of properties in this reach. The project will also evaluate opportunities for lateral floodplain activation across lands owned by MSRF and others. MSRF began acquire properties in this reach in 2004 to ensure against further clearing and/or development of recreational lots within the floodplain.

This proposal seeks to build on the dense group of thermal refuge areas identified adjacent to the MSRF properties in the "Methow Thermal Refugia Restoration Assessment (Assessment)" published December 2022 by Methow Salmon Recovery Foundation (MSRF). The Assessment documents multiple cold water pockets within the Fawn Reach of the Upper Methow that lie adjacent to properties acquired by MSRF and other protected properties. The benefits of these cold-water seeps is limited by lack of depth and habitat complexity.

## Project Application Report - 23-1276

#4: What are the project objectives? Objectives support and refine biological goals, breaking them down into smaller steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound). [Example Goals and Objectives](#)

The unifying design goal is to increase habitat quality and capacity around identified cold-water areas to create additional high quality habitat for ESA-listed salmonids. The design project will use a combination of approaches to achieve desired habitat outcomes of increasing quantity, quality, and accessibility of cold-water refugia in the project reach. The project will develop conceptual designs with an overarching strategy for the project reach, and preliminary designs to for initial implementation within two years. Structure placement will be designed to avoid adverse impacts to existing high-value areas, and minimize risk to existing infrastructure.

Primary Project Objectives for this proposal:

- Develop conceptual designs with a unified design strategy for the 1.84-mile project reach to select preferred alternative by March 2025.
- Develop preliminary designs for selected preferred alternatives by Sept. 2025.

Projected Habitat Objectives/Outcomes:

- Designs will support construction of features that reduce flow velocities through at least 2 existing cold water patches to expand available refugia upon project completion.
- Designs will support construction of features that create scour extending into at least 1 exiting cold water patch within 1 year of project completion.
- Designs will support construction of project features that provide complex cover within 100 feet of at least 2 existing cold water patches upon project construction

## Project Application Report - 23-1276

#5: Scope of work and deliverables. Provide a detailed description of each project task/element. With each task/element, identify who will be responsible for each, what the deliverables will be, and the schedule for completion.

1. Assemble project team: MSRF will solicit and award to a qualified design consultant with qualified stream engineering and geomorphology specialists who have relevant experience in the Upper Columbia. MSRF staff with expertise in project management, permitting, GIS mapping, field data collection, fisheries biology, and riparian restoration will form the core project team with the design consultant. Project partners with subject matter expertise may also participate on the project team. Target date: December 2023
2. Identify alternatives: Project team will identify and describe design alternatives. Target date: December 2024
3. Data Collection Plan: Project engineer will outline and assign responsibility for data collection. Target date: March 2024
4. Data Collection: MSRF and engineering staff will collect data to support design and feasibility analysis. Target date: October 2024
5. Description of restoration alternatives: Project engineer will complete conceptual designs of identified alternatives. Target date: December 2024
6. Hydraulic modeling: Project engineer will provide hydraulic model results. Target date: February 2025
7. Alternative evaluation: Design consultant will provide a summary of alternative outcomes. Target date: February 2025
8. Select Alternative: Project team will select preferred alternative. Target date: March 2025
9. Draft preliminary design: Design consultant will develop preliminary design of preferred alternative. Target date: June 2025
10. Design Review: Project team will provide review and feedback on draft preliminary designs. MSRF will seek review and comment from landowners, stakeholders, and permitting and funding agencies on draft preliminary designs. Target date: July 2025
11. Final preliminary design: Design consultant will incorporate feedback and develop and submit final preliminary designs. Target date: September 2025
12. Project complete: Final preliminary designs completed and submitted to stakeholders and funders. Target date: September 2025
13. Final report and invoices to RCO leading to final approval and payment. Target date: September 2025

## Project Application Report - 23-1276

#6: What are the assumptions and physical constraints that could impact whether you achieve your objectives?

Assumptions and constraints are external conditions that are not under the direct control of the project, but directly impact the outcome of the project. These may include ecological and geomorphic factors, land use constraints, public acceptance of the project, delays, or other factors. How will you address these issues if they arise?

MSRF currently owns the majority of lands along the left bank through the reach. We have secured permission and support from the other largest landowners and have reached out to the Methow Conservancy, which holds easements on several adjacent properties. Implementation of developed actions will require expanding key landowner support as the project advances. MSRF is including time for community outreach and engagement to potentially expand the project benefits by securing additional landowner support.

The project reach is located immediately up-stream from the State Route 20 crossing (Weeman Bridge). While the project must be designed to not increase risk to the bridge, the highway currently overtops during larger flood events. We expect project designs can accomplish their goals without compromising the bridge. Because of the location, structures will likely need to be designed for stability.

The MSRF properties lie between the Methow River and a public road (Goat Creek) maintained by Okanogan County. MSRF anticipates that we will be able to design a suite of project actions that will not expand the constraints imposed by either the county road or State Route 20 crossing at the Weeman Bridge. MSRF plans to engage with both the state and county throughout the design to ensure continued support.

#7: How have lessons learned from completed projects or monitoring studies informed this project?

Lessons learned from completed projects and monitoring efforts are highlighted below:

- Communication early and often is essential to successful project implementation.
- No such thing as one and done – All projects require monitoring; most require adaptive adjustments.
- Don't expect the river to do the work for you – Modelling may suggest that sediment transport or high flows will occur within a period of time. But models do not suffer from the lack of patience that adjacent landowners do.
- Public/stakeholder tolerance for lengthy assessment/development/design/construction processes is very limited and requires continual engagement.
- Land ownership is key - Identifying opportunities to strategically acquire properties in priority reaches is the best way to increase certainty of success.

#8: Describe the alternatives considered and why the preferred was chosen.

The project includes conceptual design development, and alternative identification and selection is included in the project scope. While alternatives have not yet been considered or chosen, the project site was selected based on the findings of the "Methow Thermal Refugia Restoration Assessment" published December 2022 by Methow Salmon Recovery Foundation (MSRF) with funding support from the Wells HCP Tributary Committees. The Assessment documents multiple cold water pockets within the project area, but the benefits of these cold-water seeps are limited by lack of depth and habitat complexity. This design project will produce designs for a habitat restoration project that will provide cover and complexity in around the cold-water seeps found in the project area.



## Project Application Report - 23-1276

#9: How were stakeholders consulted in the development of this project? Identify the stakeholders, their concerns or feedback, and how those concerns were addressed.

Methow Salmon Recovery Foundation owns the majority of properties within the project area. The second largest property ownership is a common area managed by a homeowner's association (Edelweiss Maintenance Commission). The Edelweiss Board of Directors is supportive of MSRF's efforts and has committed to assist in restoration and protection efforts. The Association is currently collaborating with MSRF on a side channel Beaver study in the reach and with outreach efforts to address trespass issues that have historically impacted shorelines in the reach. MSRF has also initiated conversations with the Methow Conservancy, which manages Conservation Easements on multiple parcels within the reach and has expressed support for this effort. The only unprotected parcel within the project reach is less than 1/2 acre and is located between the two MSRF parcels. The property cannot be developed for residential use, but can be cleared for recreational use. MSRF had reached out to the previous landowner to negotiate protections, but unfortunately the property was recently sold. MSRF has initiated outreach to the new owner. Regardless of the new landowner's interest in participation, no actions are proposed on the parcel and its ownership/protection is not necessary for the design project objectives.

#10: Does your project address or accommodate the anticipated effects of climate change?  
Yes

#10a: How will your project be climate resilient given future conditions?

This project will be designed to provide increased resilience to instream habitat and floodplain features in the face of changing environmental conditions by enhancing the amount of hyporheic exchange in the project area and expanding the amount of thermal refugia available, and encouraging increased lateral floodplain connection into well-developed riparian forest stands. Proposed project actions will be designed to extend both the quantity and quality of accessible habitat in and around the cold water patches. This is intended to provide fish opportunities to mitigate expected higher water temperature.

#10b: How will your project increase habitat and species adaptability?

Providing diverse and complex habitat around cold water refugia is anticipated to offer fish opportunities to avoid negative impacts and maximize growth. This should help reduce pre-spawn mortality and allow fish ways to adapt to changing climate.

#11: Describe the sponsor's experience managing this type of project. Describe other projects where the sponsor has successfully used a similar approach.

Methow Salmon Recovery Foundation has more than 20 years of experience planning, developing, implementing, and maintaining complex habitat restoration projects. Some recent similar habitat projects completed by MSRF include the Barkley Bear Phase 1-3 Project (2020-2022), Twisp River Floodplain Habitat Project Phase 1 and 2 (2015-2018), Upper Beaver Creek Channel Relocation (2013), Middle Methow (M2) WDFW Floodplain Project (2013), M2 3R Habitat Restoration Project (2014), M2 Whitefish Island Habitat Project (2012), Upper Beaver Creek Preliminary Design/Upper Beaver Creek Final Design and Restoration (2019-2023), and Sugar Reach Restoration Preliminary Design (Current).

#12: Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.  
No

# Project Application Report - 23-1276

## Planning Supplemental

#1: Is the project an assessment / inventory?

No

#2: Is your project a Barrier / Screening Diversion Inventory Project?

No

#3: Is this a fish passage design / screening design project?

No

#4: Will the project develop a design?

Yes

#4a: Will a licensed professional engineer design of the project?

Yes

#4b: Will you apply for permits as part of the project scope?

No. However, initial coordination with permitting agencies will be a component of the design development process.

# Project Application Report - 23-1276

## Planning Metrics

### Worksite: Upper Methow Right Bank RM 61.75-62.7 (#1)

Area Encompassed (acres) (B.0.b.1)	38.9
Miles of Stream and/or Shoreline Affected (B.0.b.2)	1.84

#### DESIGN FOR SALMON RESTORATION

##### Conceptual Design (B.1.b.11.a RCO)

Total cost for Conceptual design	\$117,555
Project Identified in a Plan or Watershed Assessment. (2457) (B.1.b.11.a)	Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan (UCSRB 2007)
Priority in Recovery Plan (2458) (B.1.b.11.b)	The AU is Tier 1 for restoration and the reaches are priority rank 1 and 2 for restoration.

##### Preliminary design (B.1.b.11.a RCO)

Total cost for Preliminary design	\$103,760
Project Identified in a Plan or Watershed Assessment. (1220) (B.1.b.11.a)	Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan (UCSRB 2007)
Priority in Recovery Plan (1222) (B.1.b.11.b)	The AU is Tier 1 for restoration and the reaches are priority rank 1 and 2 for restoration.

#### AGENCY INDIRECT COSTS

##### Agency Indirect

Total cost for Agency Indirect	\$18,727
--------------------------------	----------

## Overall Project Metrics

#### COMPLETION DATE

Projected date of completion	09/13/2025
------------------------------	------------

## Planning Cost Estimates

### Worksite #1: Upper Methow Right Bank RM 61.75-62.7

Category	Work Type	Estimated Cost	Note
Agency Indirect Costs	Agency Indirect	\$18,727	
Design for Salmon restoration	Conceptual Design (B.1.b.11.a RCO)	\$117,555	
	Preliminary design (B.1.b.11.a RCO)	\$103,760	
	Subtotal:	\$240,042	
	Total Estimate For Worksite:	\$240,042	

#### Summary

Total Estimated Costs:	\$240,042
Total Estimated Planning Costs:	\$240,042

## Cost Summary

	Estimated Cost	Project %	Admin/AA&E %
Planning Costs			

# Project Application Report - 23-1276

	Estimated Cost	Project %	Admin/AA&E %
Planning	\$240,042		
SUBTOTAL	\$240,042	100.00 %	
Total Cost Estimate	\$240,042	100.00 %	

## Funding Request and Match

### FUNDING PROGRAM

Salmon State Projects	\$240,042	100.000000
-----------------------	-----------	------------

### SPONSOR MATCH

## Questions

#1: Explain how you determined the cost estimates

Cost estimates are based on our experience with recently completed and in-process design projects including the Lower Methow, M2 3R, and Upper Beaver Creek projects. The design costs were scaled with the project complexity and scope.

# Project Application Report - 23-1276

## Cultural Resources

### Cultural Resource Areas

#### Worksite #1: Upper Methow Right Bank RM 61.75-62.7

##### Area: Upper Methow Design APE

#1: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

N/A no ground disturbance proposed

#2: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

The project site is within a naturally unconfined valley floor segment with cottonwood riparian gallery forest. Several of the properties on the west side of the river have been cleared for residential or agricultural development. The properties east of the river are undeveloped and are currently managed as open space and active floodplain.

#3: Will a federal permit be required to complete the scope of work on the project areas located within this worksite?  
No

#4: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not.  
No

#5: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?  
No

#6: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.  
No

## Project Permits

Permits and Reviews	Issuing Organization	Applied Date	Received Date	Expiration Date	Permit #
Archaeological & Cultural Resources (EO 21-02)	DAHP				

# Project Application Report - 23-1276

## Attachments

### Required Attachments

6 out of 6 done

- Applicant Resolution/Authorizations
- Cost Estimate
- Landowner acknowledgement form
- Map: Planning Area
- Photo
- RCO Fiscal Data Collection Sheet

- ✓
- ✓
- ✓
- ✓
- ✓
- ✓

### PHOTOS (JPG, GIF)

Photos (JPG, GIF)



# 559308 Primary # 559309 Secondary

### PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

## Project Application Report - 23-1276

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
	11/03/2023	Agreement - State	23-1276 Agreement - Upper Methow Preliminary Design RM 61.75	DeenaR	23-1276 Agreement - Upper Methow Preliminary Design RM 61.75-62.7 - signed.pdf, 584222	✓
	10/18/2023	Land Ownership Certification Form	23-1276 Upper Methow Preliminary Design Landownership Cert	AmeeB	23-1276 Upper Methow Preliminary Design Landownership Cert.pdf, 582429	
	10/06/2023	Map: Area of Potential Effect (APE)	Project APE Report (10/06/23 16:36:35)	MarkJ	Project APE Report - 23-1276 (10-06-2023_16-36-35).pdf, 581462	✓
	10/06/2023	Cultural Resource Screening Report	Project Cultural Resource Screening Report (10/06/23 16:36:3)	MarkJ	Project Cultural Resource Screening Report - 23-1276 (10-06-2023_16-36-34).pdf, 581461	✓
	10/06/2023	Project Application Report	Project Application Report, 23-1276P (sub 10/06/23 16:36:34)	MarkJ	Project Application Report - 23-1276 (submitted 10-06-2023_16-36-34).pdf, 581460	✓
	10/06/2023	Project Review Comments	Proj Review Comments Final, 23-1276P(compl 10/06/23 16:36)	MarkJ	Project Review Comments Report - 23-1276 (compl 10-06-2023_16-36-19).pdf, 581459	✓
	10/06/2023	Project Review Comments	Proj Review Comments LE, 23-1276P(compl 10/06/23 16:36)	MarkJ	Project Review Comments Report - 23-1276 (compl 10-06-2023_16-36-14).pdf, 581458	✓
	10/06/2023	Project Review Comments	Proj Review Comments Initial, 23-1276P(compl 10/06/23 16:36)	MarkJ	Project Review Comments Report - 23-1276 (compl 10-06-2023_16-36-10).pdf, 581457	✓
	07/17/2023	Application Review Report	Grant Manager Comments, 23-1276P(compl 07/17/23 12:45)	AmeeB	Grant Manager Comments Report - 23-1276 (compl 07-17-2023_12-45-22).pdf, 571325	✓
	06/26/2023	Project Application Report	Project Application Report, 23-1276P (sub 06/26/23 11:56:01)	JessicaG	Project Application Report - 23-1276 (submitted 06-26-2023_11-56-01).pdf, 567855	✓
	06/22/2023	RCO Fiscal Data Collection Sheet	MSRF FiscalDataCollectionSheet (2023).pdf	JessicaG	MSRF FiscalDataCollectionSheet (2023).pdf, 567434	
	06/22/2023	Applicant Resolution/Authorizations	Signed MSRF 23-1276 ApplicantAuthorizationResolution (2023)-	JessicaG	Signed MSRF 23-1276 ApplicantAuthorizationResolution (2023)-1.pdf, 567433	✓
	05/24/2023	Application Review Report	Grant Manager Comments, 23-1276P(rtnd 05/24/23 10:56)	AmeeB	Grant Manager Comments Report - 23-1276 (rtnd 05-24-2023_10-56-07).pdf, 563733	✓
	05/19/2023	Application Document	May19_UpdatedJotform Upper Methow Design-RM-61-75-62-75.pdf	JessicaG	May19_UpdatedJotform Upper Methow Design-RM-61-75-62-75.pdf, 563449	✓
	05/19/2023	Visuals	SRFB Cover Sheet UpperMethowDesign.pdf	JessicaG	SRFB Cover Sheet UpperMethowDesign.pdf, 563448	✓
	04/27/2023	Cost Estimate	23-1276 SAL-CostEstimate (Upper Methow Design).xlsx	JessicaG	23-1276 SAL-CostEstimate (Upper Methow Design).xlsx, 560800	✓
	04/21/2023	Project Application Report	Project Application Report, 23-1276P (sub 04/21/23 22:42:28)	JessicaG	Project Application Report - 23-1276 (submitted 04-21-2023_22-42-28).pdf, 559316	✓
	04/21/2023	Application Document	Methow-River-Fawn-06-and-07-Upper-Methow-Design-RM-61-75-62-	JessicaG	Methow-River-Fawn-06-and-07-Upper-Methow-Design-RM-61-75-62-75.pdf, 559313	✓
	04/21/2023	Photo	Upper Methow Design Project Area Photo 2	JessicaG	IMG_0212.jpg, 559309	✓
	04/21/2023	Photo	Upper Methow Design Project Area Photo 1	JessicaG	IMG_0210.jpg, 559308	✓
	04/21/2023	Map: Planning Area	23-1276 Planning Area Map - Upper Methow Fawn Creek.pdf	JessicaG	23-1276 Planning Area Map - Upper Methow Fawn Creek.pdf, 559307	✓
	04/21/2023	Visuals	23-1276 Location Map Upper Methow Fawn.pdf	JessicaG	23-1276 Location Map Upper Methow Fawn.pdf, 559306	✓
	04/21/2023	Landowner acknowledgement form	23-1276 UpperMethow SAL-LandownerAckForm_MSRF.pdf	JessicaG	23-1276 UpperMethow SAL-LandownerAckForm_MSRF.pdf, 559163	
	04/21/2023	Project Review Comments	Project Review Comments Report, 23-1276P (04/21/23 10:51:28)	JessicaG	Project Review Comments Report - 23-1276 (04-21-2023_10-51-28).pdf, 559026	✓
	04/21/2023	Project Application Report	Project Application Report, 23-1276P (04/21/23 10:51:27)	JessicaG	Project Application Report - 23-1276 (04-21-2023_10-51-27).pdf, 559025	✓

# Project Application Report - 23-1276

## Application Status

Application Due Date: null

Status Name	Status Date	Submitted By	Submission Notes
Application Complete	07/17/2023	Amee Bahr	Thanks for addressing comments. Your project is cleared for funding in September. Please let me know if you have any questions.
Application Resubmitted	06/26/2023	Jessica Goldberg	Hi Amee, We have responded to the Grant Manager and SRP comments. Please let us know if you need anything additional. We appreciate the opportunity and look forward to another successful project!
Application Returned	05/24/2023	Amee Bahr	Thanks for submitting you application! It looks like we need a little more information. Please respond to the Review Panel and Grant Manager Comments and resubmit the application by June 26th. Please let me know if you have any questions.
Application Submitted	04/21/2023	Jessica Goldberg	
Preapplication	04/06/2023		

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional documents before evaluation or approval of this project and I agree to provide them. (Jessica Goldberg, 06/26/2023)

Date of last change: 03/19/2024





# CUMULATIVE TOTALS

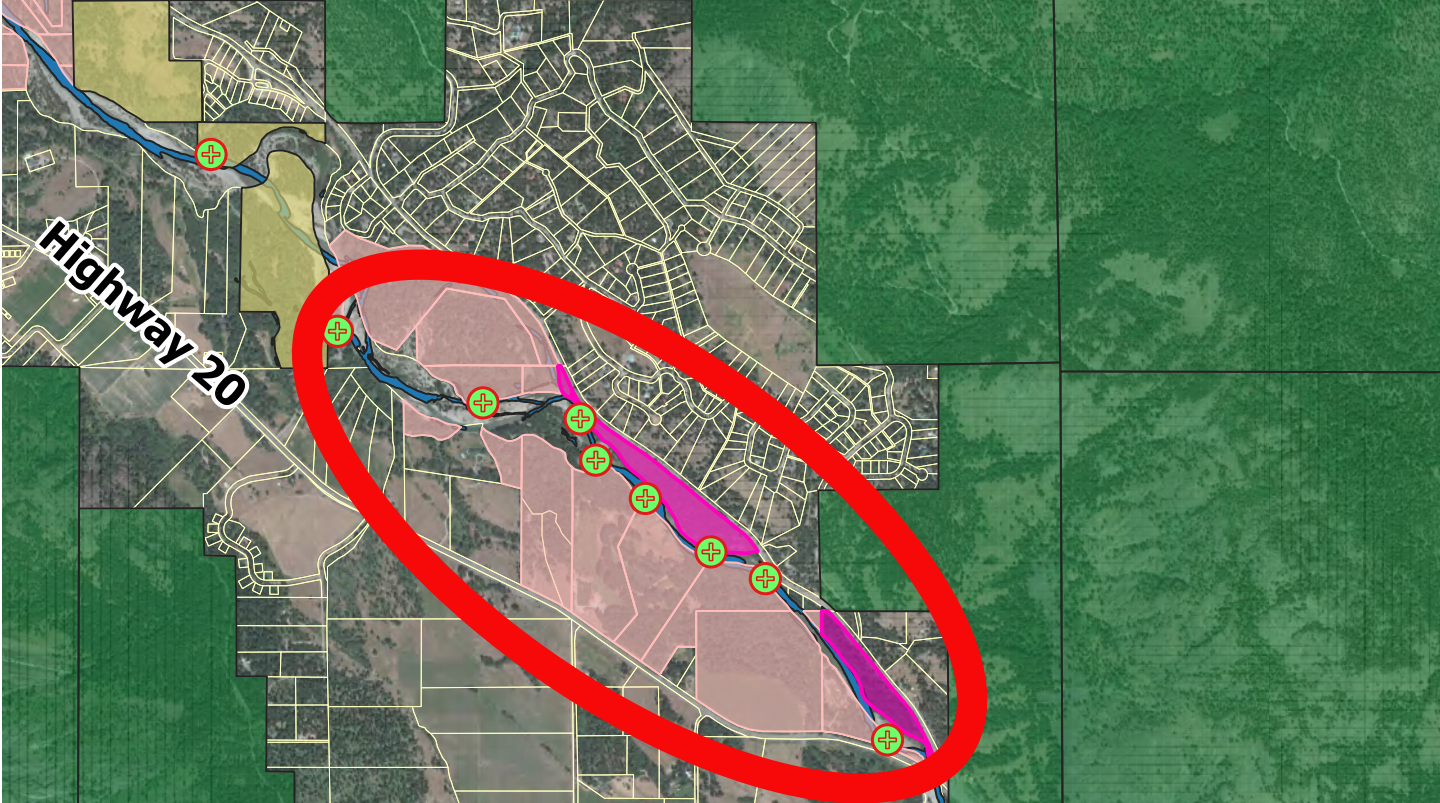
*This sheet contains automatic calculations*

Project Name	Upper Methow Design RM 61.75-62.7
SRFB #	23-1276
Sponsor	Methow Salmon Recovery Foundation







	OVERALL PROJECT Cost	GRANT REQUEST Amount	PRISM MATCH Amount	MATCH NOT IN PRISM Amount	Budget Check
<u>Sheet #1 Acquisition</u>					
Property Costs	\$ -	\$ -	\$ -	\$ -	0
Incidental Costs	\$ -	\$ -	\$ -	\$ -	0
Administrative Costs	\$ -	\$ -	\$ -	\$ -	0
Indirect Costs	\$ -	\$ -	\$ -	\$ -	
STotal	\$ -	\$ -	\$ -	\$ -	0
<u>Sheet #2 Design</u>					
Design Costs	\$ 221,315	\$ 221,315	\$ -	\$ -	
Indirect Costs	\$ 18,727	\$ 18,727	\$ -	\$ -	
STotal	\$ 240,042	\$ 240,042	\$ -	\$ -	0
<u>Sheet #3 Restoration</u>					
Construction Costs	\$ -	\$ -	\$ -	\$ -	0
AA&E	\$ -	\$ -	\$ -	\$ -	0
Indirect Costs	\$ -	\$ -	\$ -	\$ -	
STotal	\$ -	\$ -	\$ -	\$ -	0
<b>Totals</b>	<b>\$ 240,042</b>	<b>\$ 240,042</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0</b>



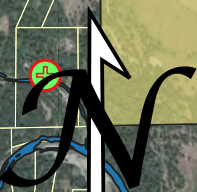
# Upper Methow SRFB #23-1276 Planning Area



## Legend

-  Cold Water Patches
-  Methow Salmon Recovery Foundation
-  US Forest Service
-  Washington Dept. of Fish and Wildlife
-  Conservation Easements
-  Okanogan County Parcel Boundaries (January 2023)

2,000 0 2,000 4,000 6,000 8,000 ft







**Methow Salmon Recovery Found; Upper Methow Preliminary Design RM 61.75-62.7 (#23-1276)**

**Attachment #559308, Upper Methow Design Project Area Photo 1**





**Methow Salmon Recovery Found; Upper Methow Preliminary Design RM 61.75-62.7 (#23-1276)**

**Attachment #559309, Upper Methow Design Project Area Photo 2**