Cost-Share Proposal Form for NorthWestern Energy (NWE) Project 2188 TAC Funds

Project 2188 (Madison-Missouri River) License Protection, Mitigation and Enhancement (PM&E) projects are required to offset impacts to river resources from the continued operation of one or more of NWE's nine hydro developments (Hebgen, Madison, Hauser, Holter, Black Eagle, Rainbow, Cochrane, Ryan and Morony Dams). PM&E projects need to be prioritized toward in-river or on-the-ground measures that directly benefit fisheries and/or wildlife populations and their habitats:

Priority 1: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats within the main stem Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir)

Priority 2: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats in primary tributaries or on adjacent lands and, in doing so, provide PM&E for Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir) resources.

Priority 3: 2188 License PM&E projects which meet License Article requirements by providing scientific or other tangible PM&E benefits to Madison-Missouri River fisheries or wildlife populations or their habitats. These projects must be located in the greater Missouri River drainage upstream from Fort Peck Reservoir, but not necessarily located on the main stem Madison River or Missouri River or their adjacent lands or primary tributaries.

All TAC project proposals must include the following information:

Project Title: **2188 Operations and Personnel (33005/3300500)**

Date: **November 2025**

Explain how this Project addresses a specific Project 2188 License Article(s): **Funding is for the wages and operations of FWP 2188 project personnel that identify, develop, assess, monitor, and implement projects that meet the FERC 2188 license conditions.**

Provide justification for Priority 1, 2 or 3 (above) that you selected: **Montana Fish, Wildlife & Parks 2188 Project Personnel will include activities within all three priority levels.**

Project Sponsor (submitted by): **Montana Fish, Wildlife & Parks**

Location of Proposed Project: **Ennis, Madison River drainage**

Narrative **The Ennis Field Office was established to identify, develop, assess, and implement fisheries monitoring and enhancement projects as described in the 6/29/2018 MOA between NorthWestern Energy and FWP and in the FERC 2188 license. This proposal will fund staff time and operations required to comply with 2188 Articles 404, 408, 409, 412, 413, and 412. FWP 2188 project personnel Travis Lohrenz and Jenna Sirmon will conduct monitoring, enhancement, and reporting activities under the direction of FWP R3 Hydropower Program Supervisor Matt Jaeger.**

NorthWestern Energy, FWP, and partners are presently pursuing several large-scale projects to improve spawning and recruitment habitat for Brown and Rainbow Trout in the Madison River. The aforementioned FWP staff will be responsible for project development, implementation, monitoring, and data analysis and reporting. FWP will additionally continue with monitoring specified by the 2188 license, monitoring of ongoing projects, such as the recovery and protection of native fish species in the Madison Drainage, and the continued fisheries

monitoring related to the Hebgen Dam failure in the fall of 2021.

Geocode (in decimal degrees ex 46.89743) Lat; _____ Long: _____

Total Project Cost: **$219,055.15**

TAC Funds (Cost-Share) Requested for Project:

I. Introduction; brief statement of project to be completed with pertinent background information.
This proposal will fund staff time and operations required to comply with 2188 Articles 404, 408, 409, 412, 413, and 412 as described in the 6/29/2018 MOA between NorthWestern Energy and FWP.

II. Objectives; explicit statement(s) of what is intended to be accomplished.
This proposal will fund staff time and operations required to comply with 2188 Articles 404, 408, 409, 412, 413, and 412 as described in the 6/29/2018 MOA between NorthWestern Energy and FWP.

III. Methods; description of how Project objectives will be accomplished.
FWP 2188 project personnel Travis Lohrenz and Jenna Sirmon will conduct monitoring and enhancement activities required to comply with Articles 404, 408, 409, 412, 413, and 412 under the direction of Matt Jaeger FWP R3 Hydropower Program Supervisor.

IV. Schedule; when the Project work will begin and end.
Jan 1, 2026- June 30, 2027

V. Personnel; who will do the work? Identify Project leader or principal investigator.
FWP 2188 project personnel Travis Lohrenz and Jenna Sirmon will conduct the monitoring and enhancement activities specified in the 6/29/2018 MOA between NorthWestern Energy and FWP under the direction of Matt Jaeger FWP R3 Hydropower Program Supervisor.

VI. Project budget must include amounts for the following:

- Direct Labor
- Travel and Living
- Materials
- Other Direct Expenses
- Direct Overhead*
- All cost-share sources and amounts, including estimation of “in-kind” contributions

Staff	Item	FTE	Hours	Pay rate including benefits	Amount	Amount
Monitoring & Enhancement Activities						
TL - 37331	F&W Tech	1.00	2088	$ 40.67		$ 84,918.96
JD - 37322	F&W Tech	1.00	2088	$ 34.02		$ 71,033.76
	Travel				$ 4,000.00	
	Operations				$15,000.00	
	Subtotal	2.00	4176		$19,000.00	$155,952.72
12.23%	Indirect					$ 19,073.02
	Subtotal	2.00	4176		$19,000.00	$175,025.74
Native Species Management & Hydropower						
MJ	Program Supervisor	0.17	356	$57.64		$ 20,519.84
	Travel				$ 2,000.00	
12.23%	Indirect					$2,509.58
	Subtotal	0.17	356		$ 2,000.00	$ 23,029.42
	Subtotal of	2.17	4532.00		$21,000.00	$198,055.15
	Total					$219,055.15

***NorthWestern Energy TAC funds will not be used for agency overhead on projects that do not fund personnel. Applications for materials and equipment should not contain overhead.**

VII. Deliverables; describe work product (reports, habitat restoration, etc.) which will result from this Project. How will "success" for this project be monitored or demonstrated?

Preparation and submission of an annual report to NWE describing the previous year's activities as described in the 6/29/2018 MOA between NorthWestern Energy and FWP and how they meet FERC article requirements. Additional reporting and presentation of data related to the Hebgen gate failure will also occur as needed.

VIII. Cultural Resources. Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NWE as a condition of any TAC grant. TAC funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Agency applicants must submit a copy of the proposed project to a designated Cultural Resource Specialist for their agency. Private parties or non-governmental organizations are encouraged to submit a copy of their proposed project to a CRM consultant they may have employed. Private parties and non-governmental organizations may also contact the NWE representative for further information or assistance. Applications submitted without this section completed, will be held by the TAC, without any action, until the information has been submitted.

Summarize here how you will complete requirements for Cultural Resource Management:

There are no ground breaking activities associated with fisheries monitoring.

IX. Water Rights. For projects that involve development, restoration or enhancement of wetlands, please describe how the project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities", issued by the Water Resources Division on 9 March 2016.

Summarize here how you will comply with Montana water rights laws, policies and guidelines:

There is no water rights impact or compliance associated with fisheries monitoring.

All TAC Project proposals should be 7 pages or less and emailed (as a WORD file) to each of:

- Andrew.Welch@NorthWestern.com
- Jon.Hanson@Northwestern.com
- Grant.Grisak@Northwestern.com

Further questions about TAC proposals or Project 2188 license requirements or related issues may be addressed to:

Andy Welch
Manager, Hydro License Compliance
Andrew.Welch@NorthWestern.com
O 406-444-8115
C 406-565-7549
208 N. Montana Ave
Suite 205
Helena, MT 59601

Cost-Share Proposal Form for NorthWestern Energy (NWE) Project 2188 TAC Funds

Project 2188 (Madison-Missouri River) License Protection, Mitigation and Enhancement (PM&E) projects are required to offset impacts to river resources from the continued operation of one or more of NWE's nine hydro developments (Hebgen, Madison, Hauser, Holter, Black Eagle, Rainbow, Cochrane, Ryan and Morony Dams). PM&E projects need to be prioritized toward in-river or on-the-ground measures that directly benefit fisheries and/or wildlife populations and their habitats:

Priority 1: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats within the main stem Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir)

Priority 2: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats in primary tributaries or on adjacent lands and, in doing so, provide PM&E for Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir) resources.

Priority 3: 2188 License PM&E projects which meet License Article requirements by providing scientific or other tangible PM&E benefits to Madison-Missouri River fisheries or wildlife populations or their habitats. These projects must be located in the greater Missouri River drainage upstream from Fort Peck Reservoir, but not necessarily located on the main stem Madison River or Missouri River or their adjacent lands or primary tributaries.

All TAC project proposals must include the following information:

Project Title: **Ennis Office Rent**

Date: **October, 2025**

Explain how this Project addresses a specific Project 2188 License Article(s):
Provides office, shop and storage for the FWP 2188 Madison Fisheries program

Provide justification for Priority 1, 2 or 3 (above) that you selected:
Provides office, shop, and storage for 2188 operations, which addresses all three priority levels.

Project Sponsor (submitted by): **MFWP**

Location of Proposed Project: : **Ennis**

Narrative: **The office will provide a local base of operations for MFWP 2188 fisheries personnel in the Madison Drainage.**

Geocode (in decimal degrees ex 46.89743) Lat; _____ Long: _____

Total Project Cost: **$9,600**

TAC Funds (Cost-Share) Requested for Project: **$9,600**

I. Introduction; brief statement of project to be completed with pertinent background information.
One year office and shop space for MFWP Madison 2188 fisheries personnel

II. Objectives; explicit statement(s) of what is intended to be accomplished. **Provide a local base of operations for 2188**

III. Methods; description of how Project objectives will be accomplished.
Normal billing and payment

IV. Schedule; when the Project work will begin and end.
2026 billing cycle

V. Personnel; who will do the work? Identify Project leader or principal investigator.
FWP 2188 project personnel

VI. Project budget must include amounts for the following:

- Direct Labor
- Travel and Living
- Materials
- Other Direct Expenses
- Direct Overhead*
- All cost-share sources and amounts, including estimation of "in-kind" contributions

***NorthWestern Energy TAC funds will not be used for agency overhead on projects that do not fund personnel. Applications for materials and equipment should not contain overhead.**

VII. Deliverables; describe work product (reports, habitat restoration, etc.) which will result from this Project. How will "success" for this project be monitored or demonstrated?

VIII. Cultural Resources. Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NWE as a condition of any TAC grant. TAC funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Agency applicants must submit a copy of the proposed project to a designated Cultural Resource Specialist for their agency. Private parties or non-governmental organizations are encouraged to submit a copy of their proposed project to a CRM consultant they may have employed. Private parties and non-governmental organizations may also contact the NWE representative for further information or assistance. Applications submitted without this section completed, will be held by the TAC, without any action, until the information has been submitted.

Summarize here how you will complete requirements for Cultural Resource Management:

IX. Water Rights. For projects that involve development, restoration or enhancement of wetlands, please describe how the project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities", issued by the Water Resources Division on 9 March 2016.

Summarize here how you will comply with Montana water rights laws, policies and guidelines:

All TAC Project proposals should be 7 pages or less and emailed (as a WORD file) to each of:

- Andrew.Welch@NorthWestern.com
- Jon.Hanson@Northwestern.com
- Grant.Grisak@Northwestern.com

Further questions about TAC proposals or Project 2188 license requirements or related issues may be addressed to:

Cost-Share Proposal Form for NorthWestern Energy (NWE) Project 2188 TAC Funds

Project 2188 (Madison-Missouri River) License Protection, Mitigation and Enhancement (PM&E) projects are required to offset impacts to river resources from the continued operation of one or more of NWE's nine hydro developments (Hebgen, Madison, Hauser, Holter, Black Eagle, Rainbow, Cochrane, Ryan and Morony Dams). PM&E projects need to be prioritized toward in-river or on-the-ground measures that directly benefit fisheries and/or wildlife populations and their habitats:

Priority 1: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats within the main stem Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir)

Priority 2: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats in primary tributaries or on adjacent lands and, in doing so, provide PM&E for Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir) resources.

Priority 3: 2188 License PM&E projects which meet License Article requirements by providing scientific or other tangible PM&E benefits to Madison-Missouri River fisheries or wildlife populations or their habitats. These projects must be located in the greater Missouri River drainage upstream from Fort Peck Reservoir, but not necessarily located on the main stem Madison River or Missouri River or their adjacent lands or primary tributaries.

All TAC project proposals must include the following information:

Project Title: 2026 Beaverhead-Deerlodge Staff and Technician Funding Request

Date: 10/31/2026

Explain how this Project addresses a specific Project 2188 License Article(s):

This project would partially fund a USFS Fisheries Biologist and Technician to assist MTFWP biologists and NorthWestern Energy staff on multiple projects and monitoring efforts in field season 2026. Dedicated funds for the biologist and technician would prioritize work and data collection on the Madison over other non-essential work elsewhere on the Beaverhead-Deerlodge. Specific goals to achieve include: compiling data points and creating a stream restoration plan along the lower West Fork Madison for a future constructed high-water overflow channel project. Other goals include continuing assessment of streams for future Westslope cutthroat expansion, identifying and assessing road/stream crossings that inhibit aquatic organism passage, as well as identifying sites along FS roads that are major contributors of sediment into stream systems and impacting habitat quality. Other general duties that address the following articles include: population monitoring for species of special concern (population estimates, presence/absence surveys, nonnative removals, collection of genetic material); fish barrier site identification, reconnaissance, and barrier maintenance; and assist NWE & MFWP fisheries personnel with their 2026 program of work (monitoring and project) as needed in the upper Madison River drainage.

Provide justification for Priority 1, 2 or 3 (above) that you selected:

Priority 2: The USFS biologist and technician will collect data for ongoing and future priority work while also assisting with projects which meet License Article requirements and PM&E for fisheries populations and their habitats in primary tributaries and provide PM&E for Madison River resources, as directed by USFS, MTFWP and NWE fisheries personnel.

Project Sponsor (submitted by): Jennifer Mickelson, USFS Beaverhead-Deerlodge Watershed Program Manager & Patrick Luckenbill, USFS Fisheries Biologist

Location of Proposed Project: Upper Madison River and associated tributaries (Madison Ranger District)
Narrative

Geocode (in decimal degrees ex 46.89743) Lat; _45.346323___ Long: __-111.742144_____

Total Project Cost: Total Project Cost: $17,711.40

TAC B-D GS/9 Fisheries Biologist: $359.12/day x 15 days	=$5,386.80
B-D GS/9 Fisheries Biologist: $359.12/day x 15 days	=$5,386.80
TAC B-D GS/7 Fisheries Technician: $282.24/day x 15 days	=$4,233.60
B-D GS/7 Fisheries Technician: $282.24/day x 15 days	=$4,233.60
TAC Field Gear for Biologist and Technician:	=$1000
TAC Funds (Cost-Share) Requested for Project:	=$10,620.40

I. Introduction; brief statement of project to be completed with pertinent background information.

The USFS Region 1 continues to have considerable budget reductions and modifications with an unclear funding future. Additionally, no temporary seasonal staff will be hired in the watershed program in FY 26 and no permanent seasonal staff will be returning this field season. This will ultimately limit the ability of local resources to dedicate time to a specific project area. The requested funding would dedicate a USFS Fisheries Biologist and a USFS Fisheries Technician to a minimum of 15 days of work within the Madison drainage by offsetting costs that would be incurred by the USFS. This funding method ensures the focus for 15 days is solely within the Madison and dedicated to MADTAC related work.

II. Objectives; explicit statement(s) of what is intended to be accomplished.

-Data collection and a stream restoration plan for a constructed high-water channel in the lower West Fork Madison.
-Culvert assessment and fish passage at Freezeout Creek on FS Road 209
-Road sediment delivery along Lower West Fork
-Identify BMP locations along FS Road 209
-Range improvements in Upper Fox Creek and throughout West Fork Madison
-Population and barrier location assessments for identified WCT candidate streams within Madison drainage
-Assist MTFWP with 2026 field work in the Madison River drainage

III. Methods; description of how Project objectives will be accomplished.

A Forest Service biologist and technician will work to collect data and outline stream rehabilitation plans for the Lower West Fork Madison while also working cooperatively with NWE, MTFWP crews, and other NGO partners throughout the FY26 field season to accomplish PM&E projects in the Madison River drainage.

IV. Schedule; when the Project work will begin and end.

Present - November 2026

V. Personnel; who will do the work? Identify Project leader or principal investigator.

Project lead is a USFS Fisheries Biologist with assistance from USFS Fisheries Technician

VI. Project budget must include amounts for the following:

- Direct Labor =$9,620.40
- Travel and Living
- Materials =$1000
- Other Direct Expenses
- Direct Overhead*
- All cost-share sources and amounts, including estimation of "in-kind" contributions

***NorthWestern Energy TAC funds will not be used for agency overhead on projects that do not fund personnel. Applications for materials and equipment should not contain overhead.**

VII. Deliverables; describe work product (reports, habitat restoration, etc.) which will result from this Project. How will "success" for this project be monitored or demonstrated?

With the completion of the *West Fork Madison and Elk River Watershed Restoration Action Plan*, the Beaverhead-Deerlodge National Forest plans to begin coordinating and implementing, where feasible, identified improvements that will benefit stream and riparian habitats. Field work to continue evaluating and collecting data for future WCT expansion streams will be submitted to MTFWP. Additionally, the forest, along with relevant NGO partners, will begin evaluating the feasibility of a constructed high-water channel through a dispersed camping site along the lower West Fork Madison to mitigate further head cutting, channel instability, and other resource damage.

VIII. Cultural Resources. Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NWE as a condition of any TAC grant. TAC funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Agency applicants must submit a copy of the proposed project to a designated Cultural Resource Specialist for their agency. Private parties or non-governmental organizations are encouraged to submit a copy of their proposed project to a CRM consultant they may have employed. Private parties and non-governmental organizations may also contact the NWE representative for further information or assistance. Applications submitted without this section completed, will be held by the TAC, without any action, until the information has been submitted.

Summarize here how you will complete requirements for Cultural Resource Management:

Not Applicable-cultural resource management is not as part of this proposal.

IX. Water Rights. For projects that involve development, restoration or enhancement of wetlands, please describe how the project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities", issued by the Water Resources Division on 9 March 2016.

Summarize here how you will comply with Montana water rights laws, policies and guidelines:

Not Applicable.

2026 Cost-Share Proposal Form for NorthWestern Energy (NWE) Project 2188 TAC Funds

Project 2188 (Madison-Missouri River) License Protection, Mitigation and Enhancement (PM&E) projects are required to offset impacts to river resources from the continued operation of one or more of NWE's nine hydro developments (Hebgen, Madison, Hauser, Holter, Black Eagle, Rainbow, Cochrane, Ryan and Morony Dams). PM&E projects need to be prioritized toward in-river or on-the-ground measures that directly benefit fisheries and/or wildlife populations and their habitats:

Priority 1: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats within the main stem Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir)

Priority 2: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats in primary tributaries or on adjacent lands and, in doing so, provide PM&E for Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir) resources.

Priority 3: 2188 License PM&E projects which meet License Article requirements by providing scientific or other tangible PM&E benefits to Madison-Missouri River fisheries or wildlife populations or their habitats. These projects must be located in the greater Missouri River drainage upstream from Fort Peck Reservoir, but not necessarily located on the main stem Madison River or Missouri River or their adjacent lands or primary tributaries.

All TAC project proposals must include the following information:

Project Title: Emergency/contingency fund

Date: 11/14/2025

Explain how this Project addresses a specific Project 2188 License Article(s): Priority 1: This fund will be used for, but not be limited to, emergency purchasing of equipment, scoping potential stream rehab proposals, and support of 2024 approved proposals.

Provide justification for Priority 1, 2 or 3 (above) that you selected: During ongoing operations and proposal work there are times when this approved proposal would allow for immediate funding of equipment, stream restoration assessments or other conditions that may require immediate attention. This proposal will eliminate (within the $10,000 limit) the need for TAC approval of a new proposal for spending of TAC funds.

Project Sponsor (submitted by): Jon Hanson

Location of Proposed Project: Within TAC approved proposals.

Total Project Cost: $10,000

TAC Funds (Cost-Share) Requested for Project: $10,000

I. Introduction; Contingency funding to be used in emergency situations

II. Objectives; To have TAC approved funding for emergency situations as noted above.

III. Methods; Funding will used for situations as noted above.

IV. Schedule; Used when needed during 2026

V. Personnel; NWE will determine and report usage of funding.

VI. Project budget must include amounts for the following:

Direct Labor
Travel and Living
Materials…yes
Other Direct Expenses…yes
Direct Overhead
All cost-share sources and amounts, including estimation of "in-kind" contributions

VII. Deliverables; describe work product (reports, habitat restoration, etc.) which will result from this Project. Spending will be reported at annual meeting.

VIII. Cultural Resources. Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NWE as a condition of any TAC grant. TAC funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Agency applicants must submit a copy of the proposed project to a designated Cultural Resource Specialist for their agency. Private parties or non-governmental organizations are encouraged to submit a copy of their proposed project to a CRM consultant they may have employed. Private parties and non-governmental organizations may also contact the NWE representative for further information or assistance. Applications submitted without this section completed, will be held by the TAC, without any action, until the information has been submitted. Generally NA but maybe used for this if needed

Summarize here how you will complete requirements for Cultural Resource Management: NA

IX. Water Rights. For projects that involve development, restoration or enhancement of wetlands, please describe how the project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities", issued by the Water Resources Division on 9 March 2016. NA

Summarize here how you will comply with Montana water rights laws, policies and guidelines:
NA

All TAC Project proposals should be 7 pages or less and emailed (as a WORD file) to each of:

- Andrew.Welch@Northwestern.com
- Jon.Hanson@northwestern.com
- Grant.Grisak@Northwestern.com

Further questions about TAC proposals or Project 2188 license requirements or related issues may be addressed to: Andy Welch, Leader Hydro License Compliance, NorthWestern Energy, 1315 N Last Chance Gulch, Helena, MT 59601; 406-444-8115 (office); 406-565-7549 (cell); Andrew.Welch@northwestern.com.

Project Title: ***Madison River Side Channel Restoration - Hyde Creek***

Date: November 12, 2025

Applicability to Project 2188 License Article(s)

The reconnection of the historic side channel at Hyde Creek on the Madison River will offset impacts to river resources associated with Project 2188 (Madison-Missouri River). This project meets the purpose and intent of License Article 409, items 2 and 3 which requires: 2) river bank enhancements in the upper and lower Madison River to enhance brown trout habitat, and 3) fish habitat enhancement both in main stem and tributary streams for all life stages of fish. This project will create and enhance spawning and rearing habitat in addition to increasing vegetated river bank cover.

Justification for Priority 1 Classification

This project classifies as a Priority 1 2188 license project. The project is located on the mainstem Madison River between Palisades and Varney Bridge. This project will address limiting factors related to spawning and rearing habitat and overall channel complexity on the Upper Reach of the Madison River.

Project Sponsors: Madison River Foundation (MRF)
NorthWestern Energy (NWE)
Montana Fish, Wildlife & Parks (FWP)
Geum Environmental Consulting (Geum)

Location of Proposed Project

This project is located in Madison County, Montana, approximately 23 miles south of the town of Ennis. The project is located on the Madison River approximately 27 miles downstream of Hebgen Dam. Legal description of the project area: Section 25, Township 9 South, Range 1 West.

Geocodes: Not applicable (Madison River)

Latitude: 45.02649; **Longitude:** -111.66963

Total Project Cost: $321,497.01

TAC Funds (Cost-Share) Requested for Project: $75,000.00

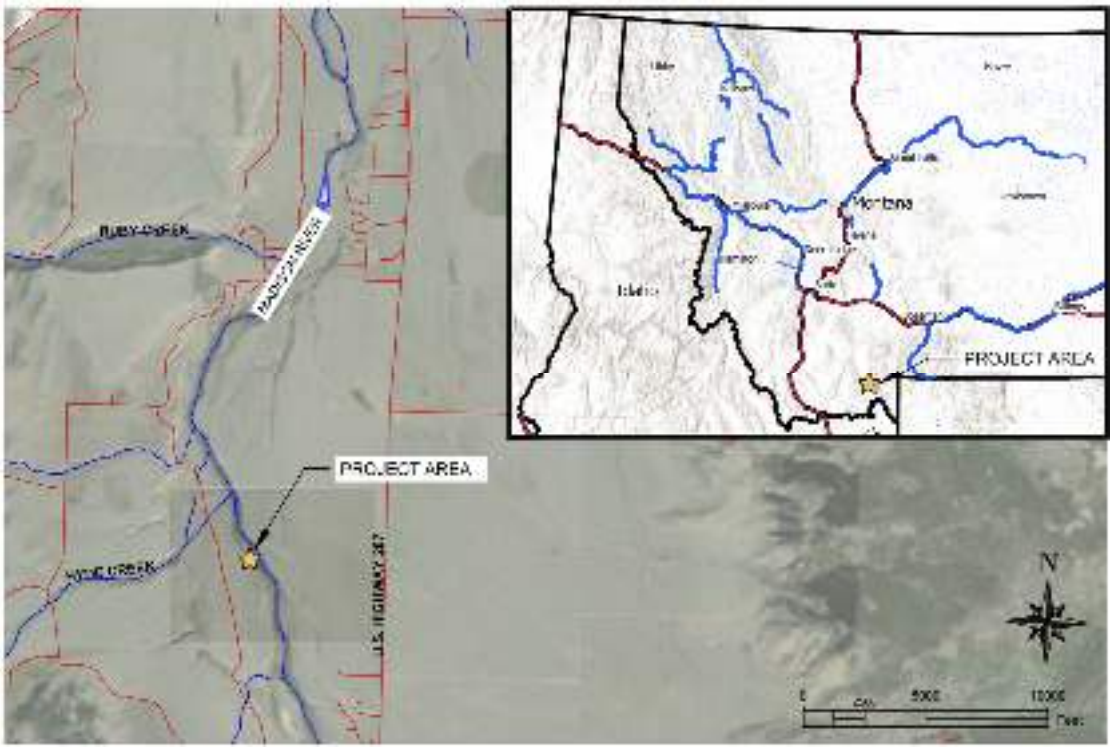

Figure 1. Madison River Side Channel Restoration - Hyde Creek project vicinity map.

I. INTRODUCTION

Hyde Creek is a historical side channel of the Madison River that once supported cool-water habitat, riparian wetlands, and diverse aquatic life. Channel abandonment and hydrologic isolation over time have left the channel mostly dry, with limited ecological function and connectivity to the mainstem river. The Hyde Creek restoration project represents one of the most promising opportunities along the upper Madison to re-establish floodplain connection and recover lost side-channel habitat.

The Madison River Foundation, in partnership with NorthWestern Energy, Montana Fish, Wildlife & Parks, and Geum Environmental Consulting, will restore perennial flow to approximately 5,300 feet of historic side channel and enhance aquatic and riparian conditions through natural channel design and revegetation. This project was initiated as part of a comprehensive effort to enhance mainstem spawning and rearing habitat, including:

- Re-establishing flow in approximately 5,300 feet of historical side channel, reconnecting it to the Madison River during baseflow and seasonal high-flow conditions. Side channel will be constructed where gravels and cobbles exist at an appropriate elevation and size gradation to support spawning and rearing habitat.
- Creating high-quality spawning and rearing habitat for trout through increased channel complexity, instream structure, and cooler thermal refugia.

- Stabilizing new channel features with brush banks, native riparian vegetation and existing large rock to promote bank strength, natural recruitment, vegetative cover and spawning gravel retention.
- Restoring floodplain and wetland hydrology to improve groundwater exchange, nutrient cycling, and late-season flow stability.
- Enhancing riparian and wetland vegetation communities that support fish, amphibians, birds, and pollinators, contributing to long-term ecological resilience.

Preliminary design drawings were completed by Geum in October 2025 and reviewed and approved by MRF. Geum also developed a construction cost estimate.

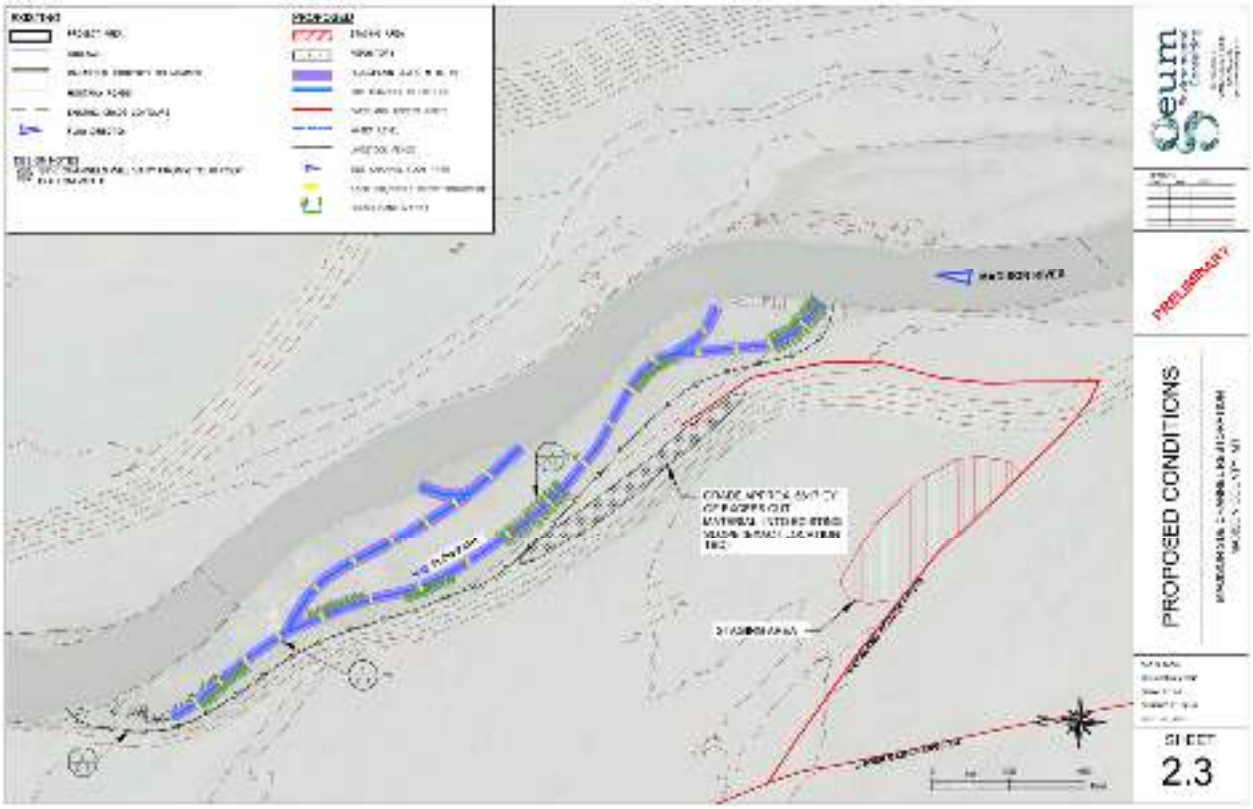

Figure 2. Preliminary Design Concepts for Hyde Creek Restoration.

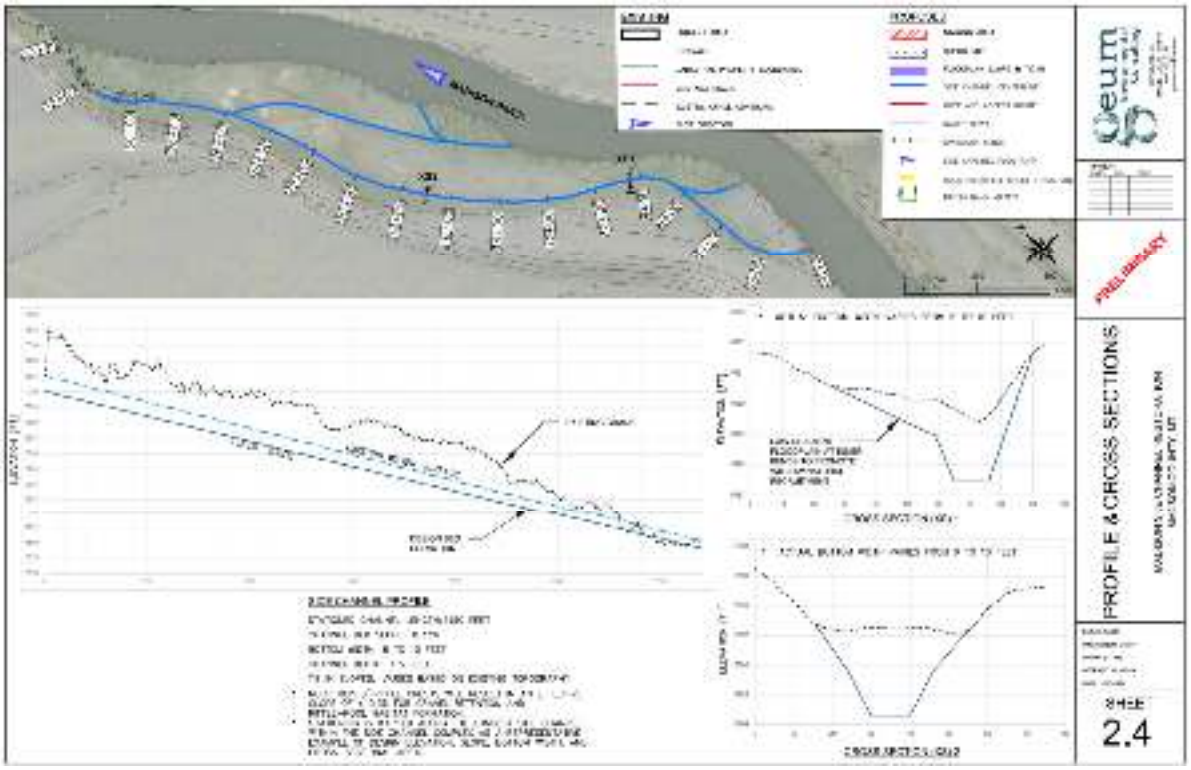

Figure 3. Preliminary Profiles & Cross Sections for Hyde Creek Restoration.

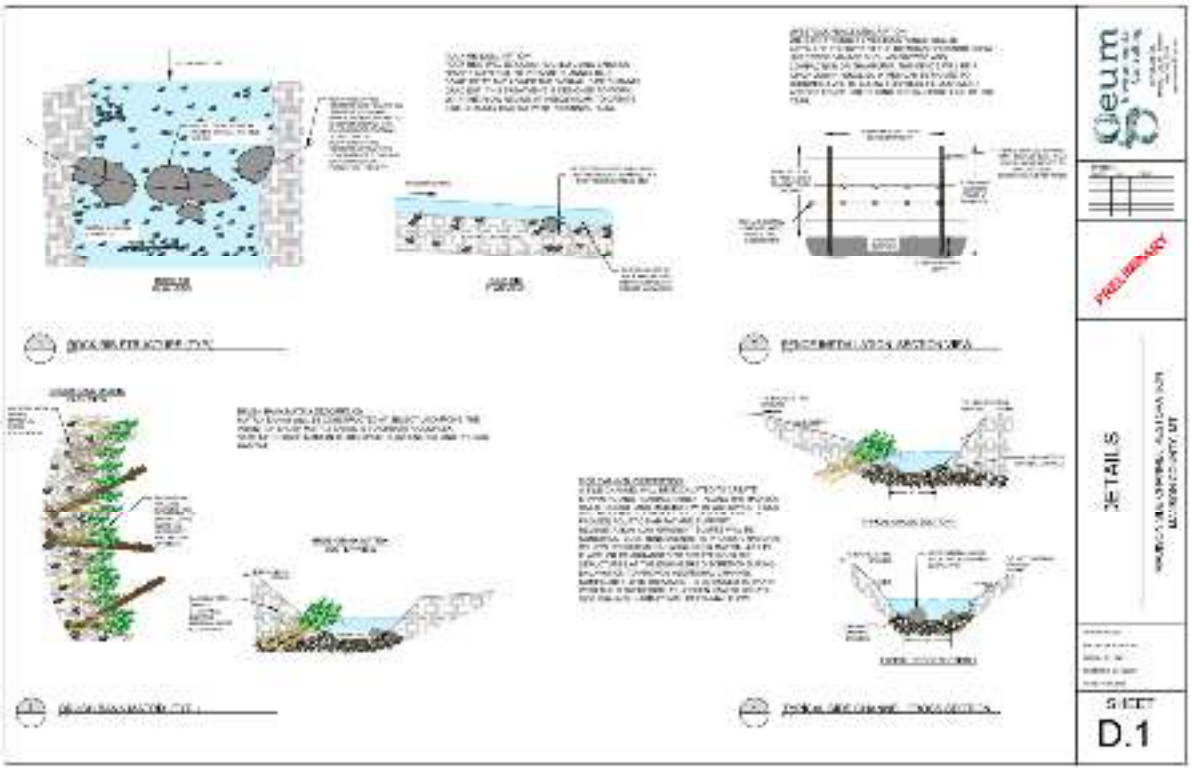

Figure 4. Preliminary Design Details for Hyde Creek Restoration.

II. **Objectives**

The following objectives will guide development of this project:

1. Create spawning and rearing habitat connected to the Madison River
2. Increase aquatic habitat complexity
3. Provide cool-water refugia and thermal cover
4. Increase riparian corridor width and woody vegetation cover
5. Promote primary production and food-web support
6. Increase biodiversity and habitat complexity to support long-term ecosystem resilience

III. **Methods**

Geum will produce design drawings in coordination with NWE, FWP and MRF; regulatory permits will be applied for (USACE, MT DEQ, Madison Conservation District); and a wetland delineation with mapping will illustrate net lift to aquatic resources. Construction will begin in fall 2026 and actions include: excavate a side channel complex consisting of approximately 5,300-feet of channel approximately 6-10 foot wide along the existing floodplain swales, utilize native gravels (10-35 mm) and scattered boulders that exist at an appropriate depth to create spawning and rearing habitat, install brush bank matrix structures with willow cuttings along portions of both banks, construct rock rib structures incorporating existing boulders to maintain a gradient ≤0.3 % and promote riffles/pools, ensure flow velocities of 1-2 ft/s to keep gravels clean and discourage aquatic vegetation; establish perennial connection upstream and downstream to the Madison River; place excess material in an upland repository adjacent to terrace; ensure equipment is washed pre-construction to prevent weed seed import; identify access routes and repository with BLM to limit weed spread; coordinate livestock fencing or grazing regime with BLM and FWP.

III. **Schedule**

Following contract award, Geum and partners will develop final design drawings and complete regulatory permitting. A cultural resources investigation coordinated with NWE, FWP and BLM will be finalized. Contractor solicitation will begin in January/February 2026. Construction mobilization will occur in Fall 2026 with anticipated completion by November 2026. Table 1 includes the proposed schedule.

Table 1. Project Schedule for Side Channel Restoration

Task	December 2025	December-February '25-'26	March-June 2026	June-September '26	September-November '26
Task 1. Project Management					
Task 2. Prepare permit aplications and finalize permit-level design and contractor solicitation					
Task 3. Submit permit applications and select contractor					
Task 4. Coordinate with agencies on project details; complete NEPA and cultural resources; refine project design with contractor's input					
Task 5. Mobilize, stake out, and implement work					

IV. **Personnel**

This project will be managed by a collaborative team of project partners including Madison River Foundation (Project Manager), Montana Fish, Wildlife and Parks (Agency Partner), Bureau of Land Management (Agency Partner) and Geum Environmental Consulting (Design and Engineering, Oversight Support). This team includes representatives from numerous disciplines to ensure the project outcome balances goals and management considerations for the Madison River. Cultural resources investigation will comply with NWE's CRM Plan and will be coordinated by MRF and partners.

V. **Budget**

Table 2 includes a cost estimate to implement the restoration plan for Hyde Creek. The cost estimate is based on consultation with Geum, a reputable, regional environmental consulting firm with experience working on large, multi-phase and multi-year restoration projects. If this proposal is approved, we will solicit cost proposals from multiple stream restoration contractors and select a contractor based on experience, proposed approach and cost. Once selected, we will work with the contractor to identify ways to improve the design and maximize cost-effectiveness of the project.

Table 2. Hyde Creek Side Channel Restoration - Budget Estimate	
Task	**Cost**
1. Pre Construction Services	**$35,877.96**
Project Management	$2,900.00
Survey	$5,091.00
Design	$13,904.56
Regulatory Permitting	$5,010.00
Engineering	$1,150.00
Contingency (25% of pre and post construction, and direct costs)	$7,822.40
2. Implementation	**$282,385.00**
Materials Acquisition, Staging	$69,210.00
Construction	$148,175.00
Mobilization and Demobilization (10% of estimated construction cost)	$21,500.00
Contingency (20% of estimated construction cost)	$43,500.00
3. Post Construction Services	**$1,540.00**
Monitoring	$1,540.00
Direct Costs	**$1694.05**
Mileage	$1,011.50
Per Diem	$242.55
Lodging	$440.00
Estimated Project Cost	**$321,497.01**
Cash Match (Madison River Foundation)	$39,112.01
Match from other sources (not secured)	$195,000.00
Total MadTAC Funds Requested	**$75,000.00**

Table 2. Budget Estimate.

VI. **Deliverables**

- Preliminary and final design plan sets;
- Wetland delineation report including GIS mapping exhibits and field forms;
- Joint Permit Application/Regulatory Permitting Submittals;
- Implementation of Hyde Creek restoration treatments;
- Cultural resources documentation delivered to NWE;
- Monitoring plan.

VIII. **Cultural Resources**

All parties will coordinate required cultural resources investigations per NWE's CRM Plan. The consultation process will be completed during the design/permitting phase anticipated winter/spring 2026.

VII. **Water Rights**

The project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities" (March 9, 2016). Because the design approximates a historic natural side channel and does not expand beyond natural magnitude, no new water right should be required.

Project Title: ***Madison River Side Channel Restoration - Morgan Gulch***

Date: November 12, 2025

Applicability to Project 2188 License Article(s)

The reconnection of the historic side channel at Morgan Gulch on the Madison River will offset impacts to river resources associated with Project 2188 (Madison-Missouri River). This project directly addresses the purpose and intent of License Article 409, Items 2 and 3 which requires: 2) river bank enhancements in the upper and lower Madison River to enhance brown trout habitat, and 3) fish habitat enhancement both in main stem and tributary streams for all life stages of fish. This project will create and enhance spawning and rearing habitat in addition to increasing vegetated river bank cover.

Justification for Priority 1 Classification

This project classifies as a Priority 1 2188 license project. The project is located on the mainstem Madison River between Palisades and Varney Bridge. This project will address limiting factors related to spawning and rearing habitat and overall channel complexity on the mainstem Madison River.

Project Sponsors: Madison River Foundation (MRF)
NorthWestern Energy (NWE)
Montana Fish, Wildlife & Parks (FWP)
Geum Environmental Consulting (Geum)

Location of Proposed Project

This project is located in Madison County, Montana, approximately 14 miles south of the town of Ennis. The project is located on the Madison River approximately 36 miles downstream of Hebgen Dam. Legal description of the project area: Section 10, Township 8 South, Range 1 West.

Geocodes: Not applicable (Madison River)

Latitude: 45.14895; **Longitude:** -111.71111

Total Project Cost: $103,764.55

TAC Funds (Cost-Share) Requested for Project: $74,370.00

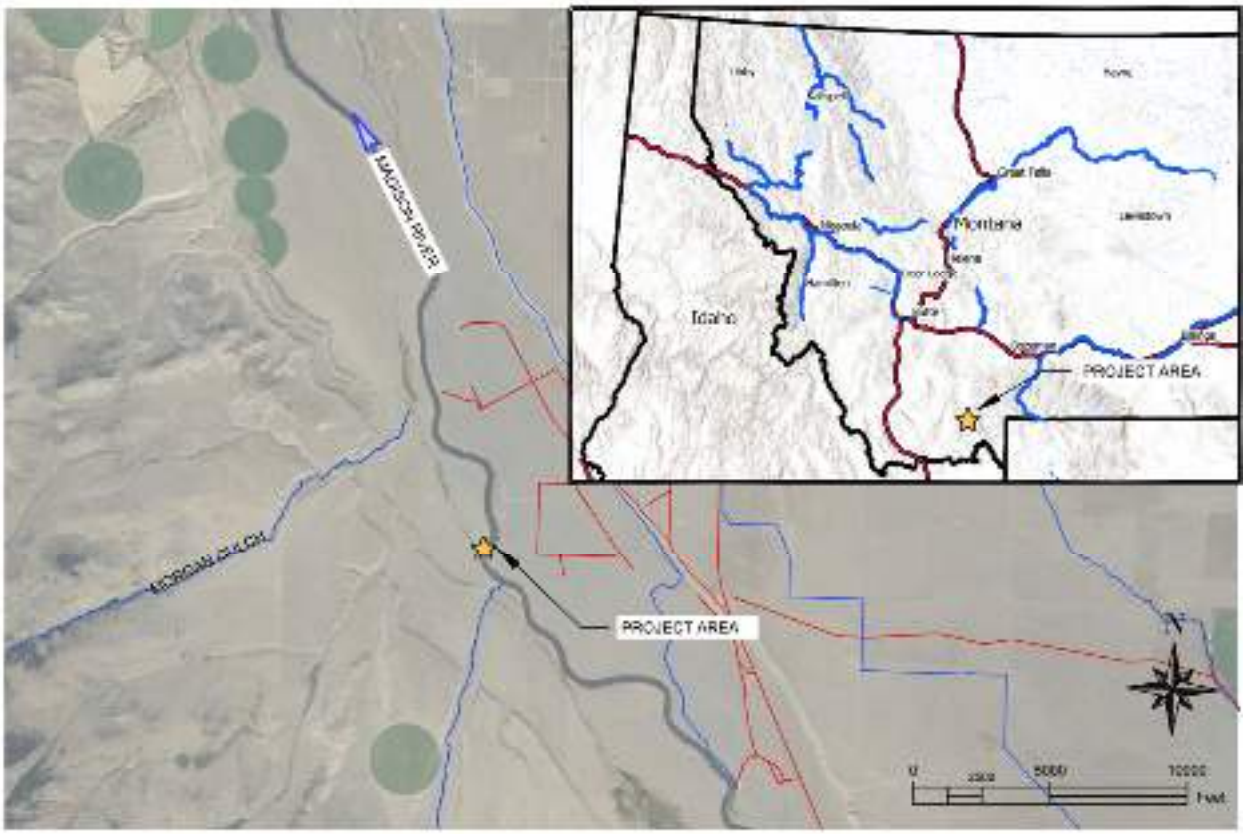

Figure 1. Madison River Side Channel Restoration - Morgan Gulch project vicinity map.

I. INTRODUCTION

The Morgan Gulch side channel lies along the upper Madison River in an area historically defined by dynamic side channels and seasonally active floodplain habitats. Over time, hydrologic disconnection, altered flow regimes, and reduced floodplain interaction have left the former side channel dry and ecologically diminished. This project seeks to restore flow and habitat function to a remnant channel that once provided valuable rearing, refuge, and spawning habitat for trout and other native aquatic species.

The Madison River Foundation, in partnership with NorthWestern Energy, Montana Fish, Wildlife & Parks, and Geum Environmental Consulting, will restore perennial flow and ecological function to this 600-foot historical side channel. Restoration work will emphasize natural process-based design and habitat enhancement that supports the long-term resilience of the Madison River system. This project was initiated as part of a comprehensive effort to enhance mainstem spawning and rearing habitat, including:

- Reconnecting approximately 600 feet of historical side channel to the Madison River to restore perennial flow and floodplain hydrology. Side channel will be constructed where gravels and cobbles exist at an appropriate elevation and size gradation to support spawning and rearing habitat.

- Re-establishing aquatic habitat complexity through channel grading, pool–riffle sequencing, and woody structure placement.
- Stabilizing constructed channel features using brush banks, native riparian vegetation and existing large rock to promote spawning gravel retention and long-term channel stability.
- Enhancing riparian vegetation and floodplain function to increase habitat diversity and ecosystem resilience.
- Demonstrating a scalable model for restoring small, disconnected side channels along the Madison River.

Preliminary design drawings were completed by Geum in October 2025 and reviewed and approved by MRF. Geum also developed a construction cost estimate.

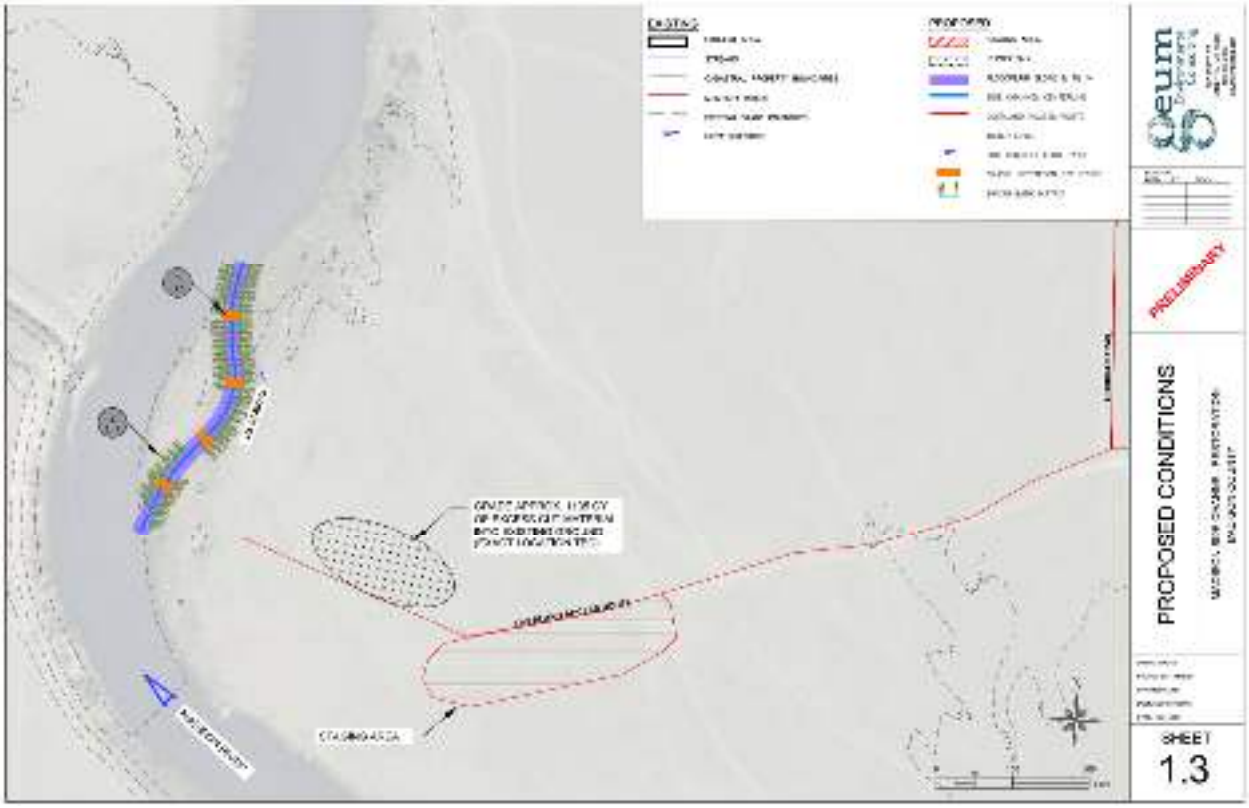

Figure 2. Preliminary Design concepts for Morgan Gulch Restoration.

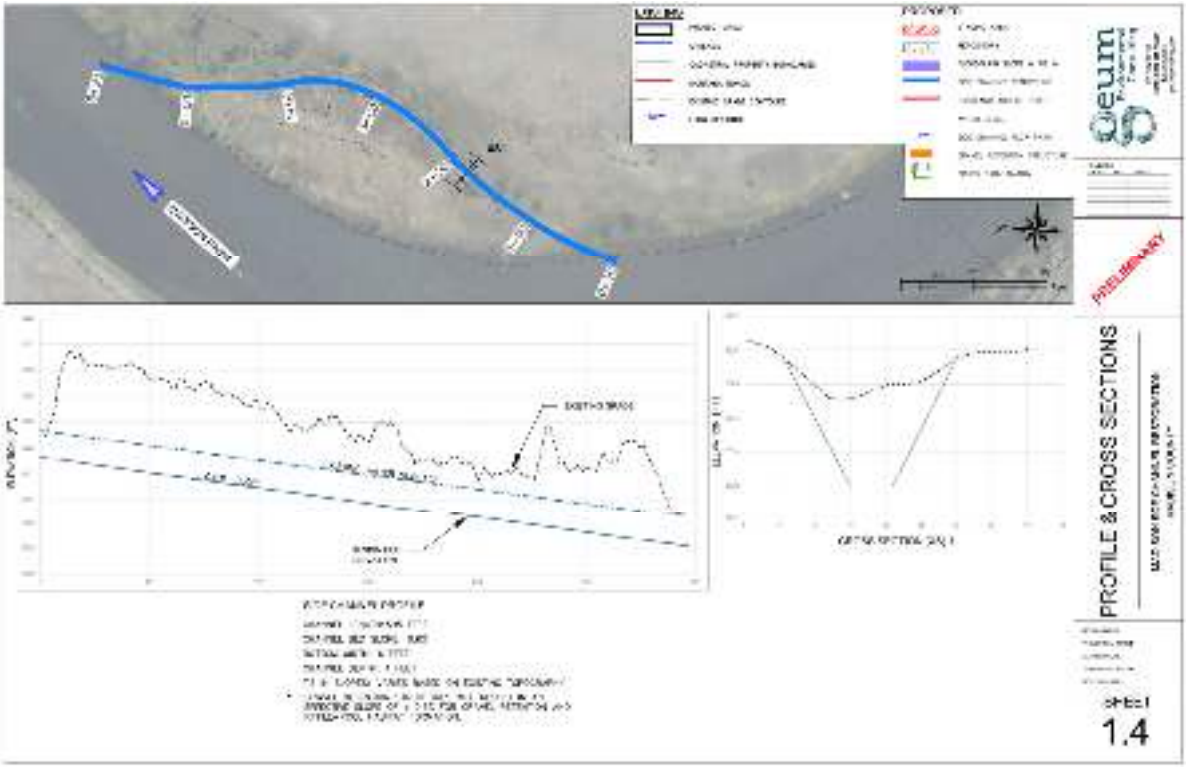

Figure 3. Preliminary Profiles & Cross Sections for Morgan Gulch Restoration.

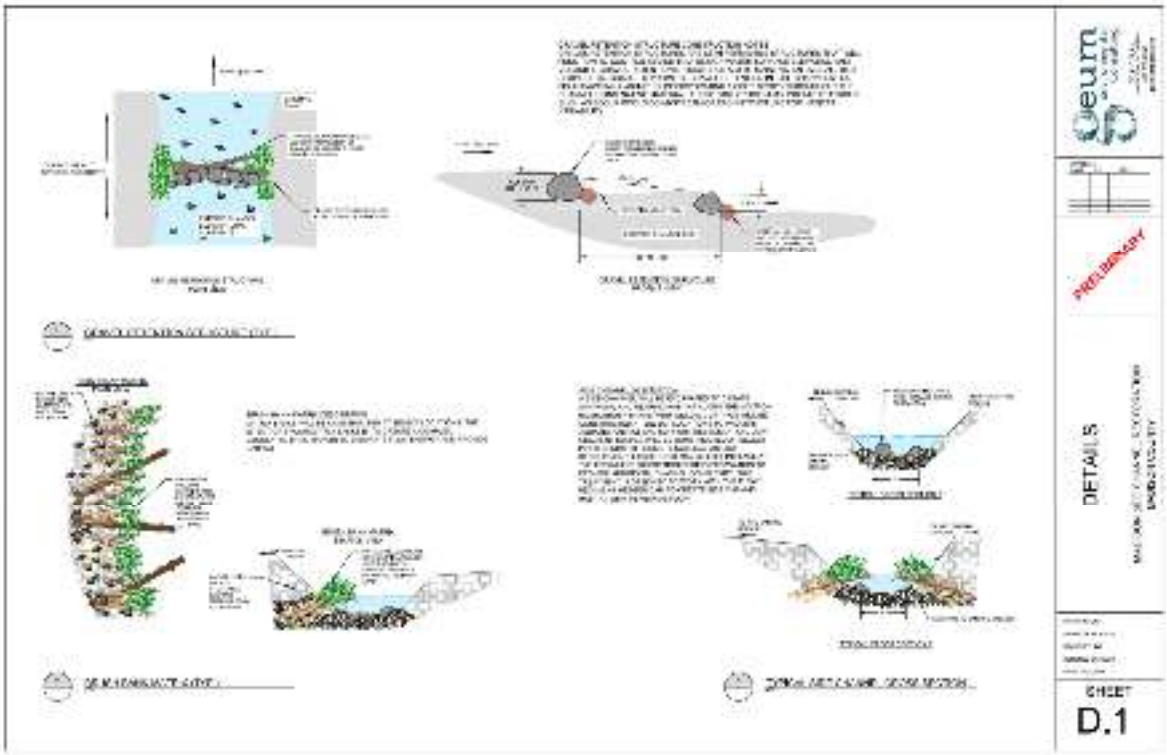

Figure 4. Preliminary Design Details for Morgan Gulch Restoration.

II. Objectives

The following objectives will guide development of this project:

1. Create spawning and rearing habitat connected to the Madison River
2. Increase aquatic habitat complexity
3. Provide cool-water refugia and thermal cover
4. Increase riparian corridor width and woody vegetation cover
5. Promote primary production and food-web support
6. Increase biodiversity and habitat complexity to support long-term ecosystem resilience

III. Methods

Geum will prepare preliminary and final design drawings in coordination with NWE, FWP and MRF. Regulatory permits (USACE, MT DEQ, Madison Conservation District) will be prepared. A wetland delineation with mapping exhibits will support regulatory permitting and illustrate net functional lift. Construction will begin in fall 2026 and actions include: excavate an ~6-foot wide by ~600-foot long side channel in the existing floodplain swale to a depth where native gravels (10-35 mm) and scattered boulders exist, install brush bank matrix structures with willow cuttings along banks, construct gravel retention/large wood structures to maintain gradient ≤0.3 % and velocities of 1-2 ft/s to keep gravels clean and discourage aquatic vegetation; establish perennial connection upstream and downstream to the Madison River; and place excess material in upland repository on adjacent terrace. All equipment will be washed to prevent weed seed import prior to construction; access routes and upland repository location will be identified in cooperation with BLM to limit weed spread; and disturbed areas will be seeded with a native seed mix approved by BLM.

IV. Schedule

Following contract award, Geum and partners will develop final design drawings and complete regulatory permitting. A cultural resources investigation coordinated with NWE, FWP and BLM will be finalized. Contractor solicitation will begin in January/February 2026. Construction mobilization will occur in Fall 2026 with anticipated completion by November 2026. Table 1 includes the proposed schedule.

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VI. Budget

Table 2 includes a cost estimate to implement the restoration plan for Morgan Gulch. The cost estimate is based on consultation with Geum, a reputable, regional environmental consulting firm with experience working on large, multi-phase and multi-year restoration projects. If this proposal is approved, we will solicit cost proposals from multiple stream restoration contractors and select a contractor based on experience, proposed approach and cost. Once selected, we will work with the contractor to identify ways to improve the design and maximize cost-effectiveness of the project.

Table 2. Morgan Gulch Side Channel Restoration - Budget Estimate	
Task	**Cost**
1. Pre Construction Services	**$26,851.50**
Project Management	$2,900.00
Survey	$1,760.00
Design	$10,152.50
Regulatory Permitting	$5,010.00
Engineering	$1,150.00
Contingency (25% of pre and post construction, and direct costs)	$5,879.00
2. Implementation	**$74,370.00**
Materials Acquisition, Staging	$16,870.00
Construction	$40,500.00
Mobilization and Demobilization (10% of estimated construction cost)	$5,500.00
Contingency (20% of estimated construction cost)	$11,500.00
3. Post Construction Services	**$1,540.00**
Monitoring	$1,540.00
Direct Costs	**$1003.05**
Mileage	$689.50
Per Diem	$110.25
Lodging	$203.30
Estimated Project Cost	**$103,764.55**
Cash Match (Madison River Foundation)	**$29,394.55**
Total MadTAC Funds Requested	**$74,370.00**

Table 2. Budget Estimate.

VII. Deliverables

- Preliminary and final design plan sets;
- Wetland delineation report including GIS mapping exhibits and field forms;
- Joint Permit Application/Regulatory Permitting Submittals;
- Implementation of Morgan Gulch restoration treatments;
- Cultural resources documentation delivered to NWE;
- Monitoring plan.

VIII. Cultural Resources

All parties will coordinate required cultural resources investigations per NWE's CRM Plan. The consultation process will be completed during the design/permitting phase anticipated winter/spring 2026.

IX. Water Rights

The project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities" (March 9, 2016). Because the design approximates a historic natural side channel and does not expand beyond natural magnitude, no new water right should be required.