



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: Middle Moore Creek Stream and Wetland Restoration Project Comprehensive Design-Engineering Proposal

Date: November 1, 2024

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

This proposal will fund final design and regulatory permitting for restoration of a 2-mile reach of Moore Creek, a tributary to Ennis Lake north of Ennis, Montana (Figure 1). NorthWestern Energy (NWE) is successfully enhancing Project 2188 wildlife habitats through funding aimed to protect, restore, and enhance riparian, wetland, and upland habitats on private lands. This final design and permitting phase will lead to the implementation of on-the-ground restoration projects to help offset impacts to river resources associated with Project 2188 (Madison-Missouri River). The project meets the purpose and intent of License Article 423, which requires development of a vegetation and wildlife monitoring and enhancement plan intended to enhance native plants and wildlife populations on Project 2188 wildlife habitats adjacent to the Madison River. Specifically, NWE is successfully enhancing Project 2188 wildlife habitats through funding aimed to protect, restore, and enhance riparian, wetland, and upland habitats on private lands.

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

The Moore Creek project area classifies as a Priority 2 2188 license project. The project is located on Moore Creek, a snowmelt dominated, cold-water tributary to Ennis Lake located within 0.5 miles of the Madison River. The project will address limiting factors related to degraded wildlife, wetland, and aquatic resources.

Project Sponsor (submitted by):

Madison Conservation District

Location of Proposed Project:

The project is in Madison County north of the town of Ennis, Montana (Figure 1), and is located entirely on privately-owned land. Table 1 includes a landowner list, and associated geocodes and legal descriptions for all parcels in the project area. All landowners have consented to this project and have been in discussion with Colin Threlkeld, Madison Conservation District – Director of Conservation

Table 1. Landownership in the Upper Moore Creek project area.		
Owner Name	Geocode	Legal Description
BADOVINUS FAMILY TRUST AGREEMENT	25051033401050000	S33, T05 S, R01 W, C.O.S. 7/1009, PARCEL B, ACRES 23.768
SJK PROPERTIES LLC	25051028101380000	S28, T05 S, R01 W, C.O.S. 7/843AE, PARCEL 3-A
REYHER AUSTIN	25051028101250000	S28, T05 S, R01 W, C.O.S. 7/119, PARCEL 2, ACRES 30
SJK PROPERTIES LLC	25051028101400000	S28, T05 S, R01 W, C.O.S. 7/119, PARCEL 4
REINHARDT LOINE C	25051028101010000	S28, T05 S, R01 W, C.O.S. 7/2024BA, TR 1B C

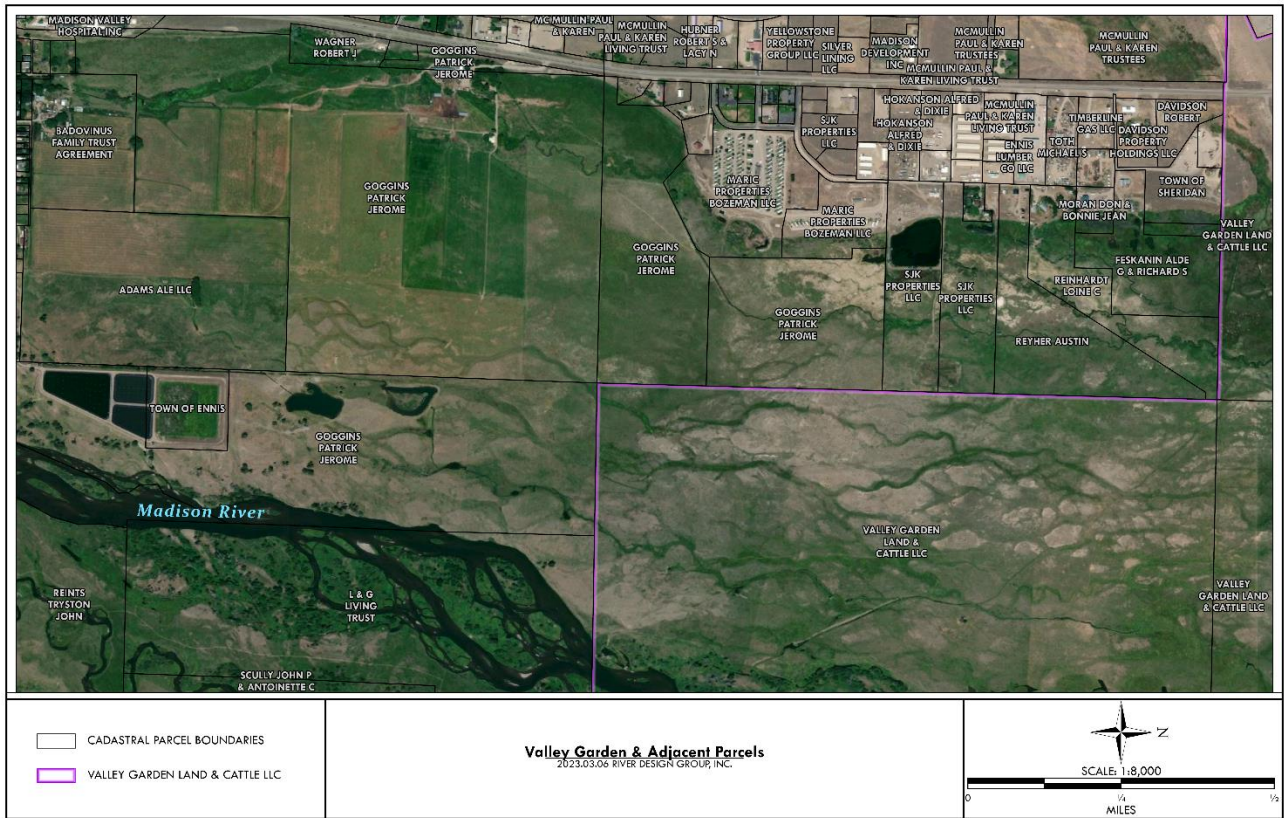


Figure 1. Project area map. The project area includes from the town of Ennis downstream approximately two miles to the Valley Garden Ranch.

Total Project Cost:

\$25,000

TAC Funds (Cost-Share) Requested for Project:

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

Moore Creek is an important cold-water, snowmelt dominated tributary to Ennis Lake. Agencies, landowners and resource managers have recently expressed interest in pursuing restoration actions on Moore Creek to improve water quality and address degraded aquatic, riparian and wetland resources. In 2022, NorthWestern Energy funded final design for a comprehensive restoration plan for middle Moore Creek located on the Valley Garden Ranch. The design will include three to four phases of restoration on Moore Creek focusing on aquatic, riparian, terrestrial and wetland environments. This proposal is requesting funds to perform a geomorphic and limiting factors assessment and final restoration design for Moore Creek starting at the town of Ennis and continuing north approximately 2 miles to the Valley Garden Ranch (Figure 1).

Moore Creek has been impacted by livestock grazing, channelization, ditching, and agricultural practices that have led to stream incision, entrenchment, high rates of bank erosion, and compromised aquatic and wetland habitats. Onstream diversions are unregulated in the upper reach and opportunities to pursue instream water leases will be pursued to benefit fish and wildlife and water quality.

The purpose of this project is to improve aquatic, riparian, terrestrial and wetland habitat conditions across the Moore Creek landscape. We envision this will be accomplished by re-establishing wetland hydrology, establishing site conditions to promote the establishment of diverse riparian and upland vegetation communities, and reconstructing Moore Creek within a diverse, vegetated floodplain corridor. This project will be of direct benefit to middle Moore Creek and planned restoration projects on Valley Garden Ranch and the Goggins sub-reach of Moore Creek that is currently undergoing planned restoration implementation.

Specifically, restoration goals include: 1) improving aquatic, riparian, and terrestrial habitat diversity for fish and wildlife; 2) establishing riffle and pool sequences and reconnecting floodplains; 3) converting areas within the existing upland herbaceous plant communities to emergent and scrub-shrub wetlands by creating new, lower floodplain surfaces adjacent to Moore Creek and tributary channels; and 4) restoring willow and riparian shrub communities in patches along streambanks and within portions of the floodplain.

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

The following objectives have been developed for the middle Moore Creek Stream and Wetland Restoration Project:

1. Complete a detailed geomorphic assessment of middle Moore Creek including reference reach data collection to refine channel and aquatic habitat design criteria;
2. Establish site conditions to support the establishment of diverse riparian and terrestrial vegetation community types;
3. Develop final design drawings and cost estimates for implementation.
4. Coordinate work with ongoing restoration activities on Moore Creek being sponsored by NorthWestern Energy, Madison Conservation District and Montana Fish, Wildlife & Parks (Goggins Reach, Starry Night RV Park Reach, and Valley Garden Ranch).

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

Data Collection Tasks

- Calibrate design discharge (Q_{bkf}) and survey existing channel thalweg, water surface and bankfull profile;
- Conduct Bank Erodibility Hazard Index (BEHI) inventory to quantify sediment loading from bank erosion. This information will be used to pursue Clean Water Act Section 319 funding as Moore Creek is listed as impaired for sedimentation and siltation;
- Conduct detailed reference reach surveys to support development of channel design criteria; and
- Prepare preliminary and final design drawings for 2 miles of middle Moore Creek.

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

Work will begin immediately following contract award. The field assessment was completed in the summer of 2024 through funding previously awarded by the WildTAC in 2023. Funding for completion of this project proposal was suspended and redirected to Phase 1 project implementation on the Goggins Reach and Starry Night RV Park Reach in Fall 2024. Uncompleted tasks include:

- 1) Data Processing (Geomorphic Data & BEHI Sediment Load Modeling and Mapping),
- 2) Preliminary Design Plan Set,
- 3) Final Design Plan Set, Specifications, and Cost Estimate.

A draft conceptual plan is estimated to be distributed to project stakeholders for review in April 2025. Based on comments received, a final design plan set and cost estimate will be prepared for project planning and implementation grant funding in September 2025.

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

The project will be guided and implemented by a diverse group of stakeholders including NorthWestern Energy, Madison Conservation District, Montana Fish, Wildlife & Parks, and private landowners. Our continued collaboration and history working in the Madison River Valley underscores the importance we place on offering a team that will continue to be compatible with the community and stakeholders.

SWCA is an approved consultant on NorthWestern Energy's Qualified Vendor's List for stream and wetland restoration services. John Muhlfeld, Principal Restoration Hydrologist with SWCA, will serve as the project manager and technical lead on behalf of the design team. Dakota Whitman and David Busby, fluvial geomorphologists with SWCA, will coordinate field data collection activities. Nate Wyatt, PE and Senior Project Engineer, will prepare design drawings and coordinate SWCA engineering resources.

Colin Threlkeld, Director of Conservation with Madison Conservation District, will serve as the project manager for the Madison Conservation District (project sponsor). Madison Conservation District will coordinate communications and project planning with landowners and partners. Madison Conservation District will utilize the final design plan set and cost estimate to secure grant funding for restoration project planning and implementation.

VI. Project budget must include amounts for the following:

- Direct Labor: \$25,000
- Travel and Living
- Materials
- Other Direct Expenses
- Direct Overhead*
- All cost-share sources and amounts, including estimation of "in-kind" contributions
 - Madison Conservation District-Project management and administration: \$1,000
 - Madison Conservation District intends to utilize the final design plan set produced by this proposal to seek additional funding sources for restoration project planning and implementation from DEQ Section 319, DNRC-CDB, and Missouri-Madison TAC funding sources.

***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?

Project deliverables will include the following:

- BEHI and pre-restoration data summary
- Preliminary and final design drawings and technical specifications.

- Construction cost estimate and phasing plan.

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:

This project does not require any construction or land-disturbance activities. However, in fall 2023, a Cultural Resource Specialist was contracted by the TAC to complete a cultural resource survey and report to the TAC that involved this reach of Moore Creek. In May 2024, the Montana State Historic Preservation Office issued a letter of concurrence that the approximate 5-mile reach and 240-acre project area, from the Badovinus Reach to the Valley Garden Reach, will have no effect on historic properties.

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:

Appropriate analysis will be performed to demonstrate the projects comply with the intent of Montana DNRC’s “*Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities*”, issued by the Water Resources Division on March 9, 2016.

DNRC guidelines state that “any wetland project (restoration) whose final design approximates the natural characteristics of adjacent natural wetlands or approximates something smaller in magnitude does not require a water right”. The guidelines also state that restored wetlands should have characteristics similar to other natural wetlands in the area and should function entirely in the absence of artificial controls and diversions of water that intentionally appropriate water for wetland use.

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

☎ 406-444-8115

☎ 406-565-7549

208 N. Montana Ave

Suite 205

Helena, MT 59601