



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: Marsh Creek Stream Restoration

Date: November 6th 2025

Bute. Nevember 6, 2020
Explain how this Project addresses a specific Project 2188 License Article(s): Provide justification for Priority 1, 2 or 3 (above) that you selected:
FERC License 2188, Article 416 (3), states NorthWestern Energy should "Propose additional measures to minimize fish loss and to mitigate for avoidable and unavoidable impactsThese measures may include but will not be limited to: 1. Spawning and rearing habitat enhancement projects in the reservoir and in tributaries to the reservoir and tailwaters' This is a Priority 2 project as it is a primary tributary to the Missouri River.
Project Sponsor (submitted by): Nathan Jaksha, Helena Area Fisheries Biologist (FWP)
Location of Proposed Project: Marsh Creek, tributary to Little Prickly Pear Creek, near Canyon Creek, MT Narrative
Geocode (in decimal degrees ex 46.89743) Lat;46.8029 Long:112.37348

Total Project Cost:

Phase 1 (2026) - \$47,000 Phase 2 (2027) - \$86,370.99

TAC Funds (Cost-Share) Requested for Project:

Phase 1 (2026) - \$42,000

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

This project aims to improve stream habitat and flow, install a center pivot irrigation system, and to eventually secure water rights on Marsh Creek, a tributary to upper Little Prickly Pear Creek. This project would be in the immediate vicinity of two recently completed restoration projects on the Grady Ranch property (Little Prickly Pear Creek). Stream modifications will include channel realignment and stream restoration to reduce erosion and improve streambank habitat in the meadow stretch below the upstream diversion structure, and replacement of a culvert with a bridge with a cattle crossing built downstream of the current culvert location (Figures 1 and 2). A new side channel will also be constructed at the point of diversion for future irrigation installation.

Current water use practices by the Grady Ranch operation involves damming the entirety of Marsh Creek to flood irrigate the pasture below. The lower stretches of Marsh Creek have seen low to non-existent flows in the river channel because of this practice. Providing a better irrigation system for the property will ensure spring and summer flows on lower Marsh Creek. The amount of water diverted to flood irrigate currently can be about 4 or 5 cfs. Conversion to a pivot would use less than 0.5 cfs, leaving several cfs in Marsh Creek and subsequently Little Prickly Pear Creek. Restoration includes replacing the existing diversion structure that diverts Marsh Creek with an improved structure that regulates the flow diversion, and plugging and restoring a diversion downstream that will ensure the saved water reaches Little Prickly Pear Creek (Figures 1 and 2).

FWP is looking into the feasibility of acquiring water rights at this particular POD, but regardless of the outcome, we believe the project is worthwhile as there will be substantial water savings on the ground.



Figure 1. Map of project area. Blue dots represent the two diversion structures to be addressed.

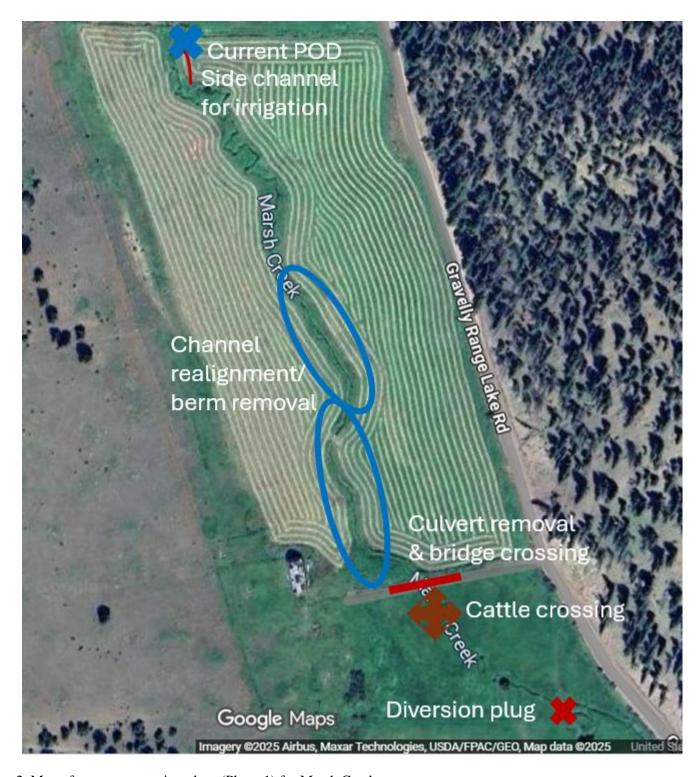


Figure 2. Map of stream restoration plans (Phase 1) for Marsh Creek.

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

Restore stream habitat, improve the current irrigation infrastructure, and provide annual stream flows on Marsh Creek. This project will greatly benefit the current fishery as lower Marsh Creek has been completely diverted for over a century.

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

A center pivot irrigation system will be installed at the current Marsh Creek POD location (Attachment A). Installation of the irrigation system will be completed by Watson Irrigation. Materials needed for the project (e.g. rock, willows, trees etc.) will be provided in-kind by the landowner. FWP will provide bridge stringers for construction of pivot stream crossings. Other specifics about the project (e.g. stream profile, cross section, etc.) can be found in Attachment B.

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

Spring 2026 to Fall 2027. Phase 1 (2026) will be focused on the stream restoration portion of the project. Phase 2 (2027) will include the installation of the center pivot irrigation system.

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

Nathan Jaksha (FWP Biologist) - Liaison between MFWP, Northwestern Energy, the landowner and the consultant. Allen McNeal (McNeal Resources) – Project Lead, Consultant

Contractor – Stream Restoration

Watson Irrigation – Pivot Installation

Todd Grady (Landowner) – In kind materials.

VI. Project budget must include amounts for the following:

Phase 1 - \$47,000

- **Stream Restoration:** includes channel realignment, berm-removal, side channel construction, cattle crossing, downstream diversion plug, and step-pool construction in Marsh Creek (B channel stream) \$40,000
 - o Culvert removal & bridge crossing for equipment \$7,000

Phase 2 - \$86,370.99

- Center Pivot Irrigation: includes center pivot irrigation infrastructure, installation, and appropriate crossings on stream.
 - o Pivot infrastructure and installation \$62.965.59
 - o Diversion and spring box installation, crossings \$23,405.40

Total project cost: \$133,370.99

- All cost-share sources and amounts, including estimation of "in-kind" contributions
 - o Pat Barnes Chapter of Trout Unlimited \$5,000 towards Phase 1.
 - o Todd Grady (In-kind) rock, willows, trees
 - o Montana Fish, Wildlife and Parks bridge stringers

*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?

Deliverables will be a properly functioning stream that maintains water and connection to Little Prickly Creek made possible by an updated irrigation system. MFWP will submit a report to Northwestern Energy documenting the project. Report will consist of a narrative description of activities accomplished and conditions before and after the project.

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:

Cultural Resource Management requirements will be completed by Northwestern Energy prior to the start of ground disturbance.

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:

FWP is looking into the feasibility of leasing water rights on Marsh Creek. If FWP pursues leasing water rights, it will go through the Water Court (DNRC) to ensure compliance with existing water rights.

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

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