

2022 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: Post Pounder PIT Maintenance - 2022

Date: November 2, 2021

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

Article 417: 1) Monitor the spawning migrations of Threatened and Endangered species, species of special concern, and popular sportfish in the Missouri River downstream of Morony Dam. 2) Protect and provide for the recovery of Threatened and Endangered species and other species of special concern in the Missouri River downstream of Morony Dam. This is priority one (Missouri) and two (Marias) since it evaluates movement between the two systems.

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

The PIT tag arrays in the Marias and Teton allow us to evaluate movement of fish between the Missouri (Priority 1) and these two tributaries (Priority 2).

Project Sponsor (submitted by): Jake Williams, FWP Lewistown

Location of Proposed Project: Missouri River between Morony Dam and Fort Peck Reservoir and the lower Marias River.

The post pounder will be used to maintain 15 PIT arrays that are currently installed in the Marias, Teton, and Judith rivers.

Geocode (in decimal degrees ex 46.89743)

Site: Morony Dam	Lat:47.58159	Lon: -111.05972
Site: Tiber Dam	Lat:47.58159	Lon: -111.09705
Site: Fort Peck Headwaters	Lat:47.55384	Lon: -107.92449

Total Project Cost: **\$2,180.00**

TAC Funds Requested for Project: **\$2,180.00**

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

Pit tag readers were installed in the Marias (2017) and Teton Rivers (2018) to evaluate fish migrations from the Missouri River. These readers were extremely effective at detecting tagged fish in 2020 and 2021. Detection data from 2020 and 2021 provides evidence that stationary PIT readers are an effective method for studying movements of sturgeon and other species of concern in large prairie rivers. Installing additional PIT tag readers further upstream will help us understand how far Shovelnose Sturgeon, Blue Suckers, and all other tagged fish are moving up the Marias River under a range of discharge scenarios.

Additionally, the lower Marias River has seen use by juvenile and reproductive pallid sturgeon in the past few years. In August 2020, a proposal was submitted to the Upper Basin Pallid Sturgeon Tagging and Handling Committee to investigate additional

tagging procedures on Pallid Sturgeon using 134 kHz HDX tags. Moving forward all Pallid Sturgeon captured in 2021 and beyond will be implanted with a 134 kHz HDX tag in addition to a smaller FDX tag that will serve as the primary identifier. In 2021, the lower Marias PIT reader detected one mature HOPS 97 black egg female in the Marias.

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

The post pounder will be used to maintain current arrays and install new arrays throughout tributaries in the middle Missouri River. Installation and maintenance are extremely stressful and time consuming. Installing one array takes approximately 8 hours. With a motorized post pounder rented from a local hardware store we were able to cut installation time to roughly 4 hours. It was also far less stressful on the crew. Adding this piece of equipment will make installing arrays more efficient and also safer for personnel.

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

IV. Schedule; when the Project work will begin and end. Project is ongoing and will continue for at least 10 years.

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

VI. Project budget must include amounts for the following:

Materials Only:	Rhino GPD40 Fence Pro Honda Post Driver		\$2,180.00
		Total:	\$2,180.00
Direct Labor	NA		
Travel and Living	NA		
Other Direct Expenses	NA		
Direct Overhead	NA – Purchase by NWE		
All contribution sources and amounts			

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? NA

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: No ground disturbance associated with this project.

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 9March2016.

Summarize here how you will comply with Montana water rights laws, policies and guidelines: No water rights associated with this project.

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.