2024 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: Big Coulee Fish Barrier Construction

Date: 10/08/2024

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

Project addresses Article 417, #4. Protect and provide for the recovery of threatened and endangered fish species and other aquatic species of special concern in the Great Falls reservoirs and below Morony Dam.

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

Priority 3 - This project aims to protect native westslope cutthroat trout (WCT) located in Big Coulee, which is part of the Highwood Creek drainage. Highwood Creek enters the Missouri River downstream of Moroney Dam. Highwood Creek and its tributaries were historically connected to the Missouri River. This project would mitigate for the loss of WCT across their range, which were historically present in the Missouri River. The project to build a barrier to isolate the WCT would prevent competition and hybridization from nonnative species.

Project Sponsor (submitted by): Alex Poole, Montana Fish, Wildlife & Parks (FWP)

Location of Proposed Project: Big Coulee is a small 2nd order stream that enters Highwood Creek approximately 14 miles southeast of Highwood, MT. The proposed barrier site is located on Lewis and Clark National Forest land approximately 0.4 miles upstream of the Highwood Creek confluence (47.42910, -110.57413).

Geocode (in decimal degrees ex 46.89743) **Lat:** 47.42910 **Lon:** -110.57413

Total Project Cost: $313,800*

*Preliminary cost estimate with 15% construction cost contingency provided by design consultant

TAC Funds Requested for Project: $100,000

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

Big Coulee, a tributary of Highwood Creek, contains a nonhybridized WCT population that has been intensively managed since the late 1990s. A future fisheries project enhanced a bedrock feature on Big Coulee by blasting in 2002 and 2004 to create a barrier to fish movement. From 1997-2008, brook trout were removed to protect the remaining WCT found above the barrier. The reach upstream of the barrier was thought to be devoid of brook trout by 2008 and the WCT population was monitored annually from 2009-2015. In 2015, brook trout were discovered above the barrier during annual monitoring efforts. It is thought that brook trout bypassed the blasted bedrock barrier in the high runoff year of 2011. Annual nonnative trout removals were initiated again in 2015. Brook trout were once again thought be eliminated from the reach above the barrier in 2023 after two consecutive years of no brook trout detection. During annual monitoring efforts in 2024 a single brook trout and brown trout (first ever detection above barrier) were

found in the reaches immediately upstream of the barrier. Enhancements to the blasted barrier are needed to ensure fish passage is prevented under high flow conditions in the future.

FWP is requesting MoTAC approve $100,000 for the construction of a fish barrier on Big Coulee. Additional funds for this project will potentially come from FWP Future Fisheries Improvement Program, FWP State Wildlife Grant, and the MaltEurope Water lease Fund.

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

Hire a contractor to construct a fish barrier thereby protecting the native westslope cutthroat trout from invasion by nonnative species.

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

A contractor will construct a fish barrier following the design provided by Pioneer Technical Services, Inc.

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

The goal is to construct the fish barrier in 2025. A request for bids and the hiring of a contractor for construction would be conducted by May 2025 and the project would be completed by December 2025. FWP will work to secure additional funds.

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

FWP (Alex Poole – Project Lead) will coordinate with the design/construction oversight engineer, contractor, and US Forest Service
FWP will acquire funding for construction, and FWP Design & Construction Bureau would be responsible for construction bid packages and contracting.
FWP (Alex Poole) will coordinate with Ranger District personnel on NEPA compliance and other USFS requirements (if needed) related to construction of a fish barrier.

Project Administration Contact: Jannice Richardson, Helena, FWP (jarichardson@mt.gov; 406-444-7319)

VI. Project budget must include amounts for the following:

Big Coulee Fish Barrier - Construction Cost Estimate*				
Item #	Bid Item	Quantity	Unit	Unit Price
1	Mobilization	1	LS	$ 57,000.00
2	Clearing and Grubbing	1	LS	$ 36,700.00
3	Water Management	1	LS	$ 38,600.00
4	Structure Construction	1	LS	$ 117,600.00
5	Final Grading and Site Revegetation	1	LS	$ 22,900.00
			Subtotal	$ 272,800.00
			15% Contingency	$ 41,000.00
			Grand Total	$ 313,800.00

*Provided by Design Consultant

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?

Work product will be summarized in an annual report. Construction of the enhancements to the existing fish barrier is the goal of this project. Additional intensive monitoring of the aquatic resources in Big Coulee will continue (eDNA, backpack electrofishing) until nonnative trout are confirmed to be absent from the reach above the barrier.

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:

A cultural survey of the site selected for barrier construction will be completed by an independent contractor prior to any construction activities if needed. A previous cultural resource review performed in 2003 determined that the site probability for cultural deposits was very low.

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 Montana or Northwestern Energy water rights laws, policies, or guidelines apply for 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.