Cost-Share Proposal Form for NorthWestern Energy (NWE) Mystic Project 2301 Technical Advisory Committee (TAC) Funds

Mystic Lake Hydroelectric Project 2301 Protection, Mitigation, and Enhancement (PM&E) projects are implemented to offset impacts from the continuous operation of the hydroelectric facility. The Memorandum of Understanding (MOU) provides that NorthWestern Energy (NorthWestern) will uphold responsibilities for PM&E of the fisheries and aquatic habitats. NorthWestern is responsible for verifying that PM&E funds are authorized and spent for appropriate actions that comply with the intent and scope of the FERC license, the current Fisheries Monitoring Plan, and the MOU. PM&E projects must prioritize measures that directly benefit the fish and aquatic habitats in the Project area including West Rosebud Creek, Mystic Lake, West Rosebud Lake, and Emerald Lake. Proposed PM&E projects will be evaluated and prioritized by location to the Project and the overall benefit to fish and habitats to ensure minimization or offset of any adverse effects from the operations of the Mystic Lake Project.

All TAC project proposals must include the following information:

Project Title: 2024 Custer Gallatin NF's Seasonal Technician Funding

Project Sponsor (proposal submitted by): Clint Sestrich

Location of Proposed Project: Mystic Lake inlet downstream to Forest Boundary on West Rosebud Creek

Total Project Cost: $17,989

TAC Funds (Cost-Share) Requested for Project: $10,891 plus $108.91 overhead = $11,000

Geocode (in decimal degrees ex 46.89743) Lat: _45.22261_____ Long: __-109.80776_____ to

Lat: _45.28021_____ Long: __-109.63642_____

All proposals must include the following information:

I. Introduction; brief statement of proposed project with pertinent background information.

This project would fund one intern for the Custer Gallatin National Forest to assist NWE, MFWP, and USFS biologists with multiple projects including scheduled Mystic fisheries monitoring (Project No. 2301 4(e) condition No. 16) and design of a habitat enhancement project during the 2025 field season. General duties that address these articles include: a) assisting NWE and MFWP with planned fish population monitoring activities outlined in the 2022-2027 6-Year Monitoring Plan for the Mystic Lake Hydroelectric Project Number 2301 and b) and assisting biologists with design, implementation, and monitoring of fish habitat enhancement projects intended to improve the amount and quality of spawning and rearing habitat in West Rosebud Creek.

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

Objective 1): Assist FWP personnel with fish population monitoring activities specified in the 2022-2027 6-Year Monitoring Plan.

Objective 2): Assist Forest Service fisheries biologist with collection of channel morphology data to inform the design of side channel habitat enhancement project(s) on West Rosebud Creek.

Objective 3): Assist the Forest Service fisheries biologist with collection of fish habitat inventory data in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring).

Objective 4): Assist FWP personnel with fish population surveys in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring).

How does this project meet the intent of the Interagency Memorandum of Understanding to implement conservation measures of the Mystic Hydroelectric Project?

The four objectives outlined in the proposal were developed in accordance with MOU General Provision B whereby parties to the MOU agree to cooperate in conducting studies and monitoring activities implemented pursuant to the FERC License (Condition No. 16 Fisheries Management). The MOU states that "the FERC License provides that NorthWestern will have responsibilities for protection, mitigation and enhancement (PM&E) of the fisheries and ***aquatic habitats*** in relation to the FERC License. The following four project objectives address PM&E Measures for fisheries and aquatic habitats on West Rosebud Creek:

Objective 1): Assist FWP personnel with fish population monitoring activities specified in the 2022-2027 6-Year Monitoring Plan: PM&E Measure D. Monitoring of fish populations in West Rosebud Creek downstream of Emerald Lake will occur every third year using electrofishing equipment.

Objective 2): Assist Forest Service fisheries biologist with collection of channel morphology data to inform the design of West Rosebud Creek side channel habitat enhancement project(s).

Objective 3): Assist the Forest Service fisheries biologist with collection of fish habitat inventory data in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring).

Objective 4): Assist FWP personnel with fish population surveys in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring). PM&E Measure D. Monitoring of fish populations in West Rosebud Creek downstream of Emerald Lake.

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

Objective 1): Forest Service intern will assist FWP personnel with monitoring fish populations in West Rosebud Creek downstream of Emerald Lake using electrofishing equipment per the 2022-2027 6-Year Monitoring Plan.

Objective 2): Forest Service intern will assist the Forest Service fisheries biologist with the collection of channel morphology data to inform the design of a West Rosebud Creek pilot side channel habitat enhancement project (One or more side-channels to be selected jointly by FWP and USFS biologists). A laser level and tape will be used to map channel elevations along cross sections and the channel thalweg. These elevation data will be used to inform the spacing, location, and configuration of instream log/rock structures. Channel cross sections and upstream and downstream survey start and end points will be recorded with a GPS and monumented with rebar. This will allow the survey to be repeated after project implementation to evaluate changes in channel morphology.

Objective 3): Forest Service intern will assist the Forest Service fisheries biologist with collection of West Rosebud Creek side channel habitat enhancement monitoring data including pool size and frequency, amount of spawning gravel, and large woody material, frequency, configuration and size (pre-project monitoring). Data will be collected using a modified R1R4 habitat inventory protocol.

Objective 4): Forest Service intern will assist FWP personnel with backpack electrofishing to determine fish species abundance and size structure in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring). Data collection protocols will be designed specifically for evaluating pre-to-post project changes in fish species abundance and size structure. A two or three pass depletion electrofishing survey

will occur at the same time period and at similar discharge from year to year. To ensure that the sample population is closed, block nets will be placed at the upstream and downstream end of the sample reach. To ensure that the survey is repeatable, block nets will be placed at the monumented start and end locations used for the habitat inventory and channel morphology survey. This will also permit changes in fish abundance to be evaluated relative to modifications in fish habitat quantity/quality.

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

Fieldwork will occur in summer 2025 when flows are conducive to safe wading in side channels. Fieldwork will be completed by August 31st 2025. Accomplishment report preparation will occur thereafter.

V. Personnel; provide details of the personnel responsible for implementing and completing the project objectives using the allocated TAC funds. Identify the project leader and principal investigator. Additionally, please justify how the allocated TAC funds will be utilized to ensure successful implementation and completion of the project objectives.

Objective 1): Project leader Bryan Giordano FWP fisheries biologist. Project TAC funds will be used for Forest Service intern to assist with electrofishing surveys.

Objective 2): Project leader Clint Sestrich USFS fisheries biologist. Project TAC funds will be used for Forest Service intern to assist with channel morphology data collection.

Objective 3): Project leader Clint Sestrich USFS fisheries biologist. Project TAC funds will be used for Forest Service intern to assist with side channel habitat inventory.
Objective 4): Project leader Bryan Giordano FWP fisheries biologist. Project TAC funds will be used for Forest Service intern to assist with side channel electrofishing surveys.

VI. Project budget must include amounts for the following:

- Direct Labor $12,500
- Travel and Living $5,311
- Materials NA
- Other Direct Expenses:

Direct Overhead* $10,891 + $108.91 (1% overhead) = $10,999.91

- All cost-share sources and amounts, including estimation of "in-kind" contributions
- GS-11 Fisheries Biologist Contribution $450 x 7 days = $3150
- Waders $400.00

***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; **all funded projects are required to submit an annual report by March 1 of the year following the project start. Annual reports will be prepared that summarize the previous year's work and the proposed plan for the next year. The annual reports will be submitted to the TAC and posted on the Mystic Lake Project Coordination website (mysticlakeproject.com).**

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

The Forest Service will provide an annual report outlining 2025 accomplishments under each of the following four objectives.

Objective 1): Assist FWP personnel with fish population monitoring activities specified in the 2022-2027 6-Year Monitoring Plan.

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Objective 3): Assist the Forest Service fisheries biologist with collection of fish habitat inventory data in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring).

Objective 4): Assist FWP personnel with fish population surveys in West Rosebud Creek side channels selected for habitat enhancement (pre-project monitoring).

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:

The proposed work does not include any ground disturbing activities that may affect cultural resources or require concurrence from the Montana State Historic Preservation Office (SHPO). Any ground disturbing activities associated with future habitat enhancement projects would be evaluated by a qualified archaeologist and permitted by SHPO prior to implementation.

All TAC Project proposals should be 5 pages or less and emailed (as a WORD file) to each of:

- Andrew.Welch@NorthWestern.com
- Jon.Hanson@Northwestern.com
- Joe.Hagengruber@Northwestern.com

Further questions about TAC proposals or Project 2301 license requirements or related issues may be addressed to:

Andy Welch
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