

2016 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: Two Teton River water leases.

Date: October 2018

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

This is a priority 1 project. Article 417 item 4 of the 5 year plan states "...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...One federally listed endangered species (pallid sturgeon) and several aquatic species of special concern are found in the Missouri River below Morony Dam. The sicklefin chub, sturgeon chub, blue sucker, paddlefish, and sauger are listed as fish species of special concern by the State of Montana. Sauger have been introduced into Cochrane, Ryan and Morony reservoirs. Spiny softshell turtles (*Apalone spinifer*) are also listed as a Montana species of special concern and are commonly found in the river between Morony Dam and Fort Peck Reservoir. Measures to protect and provide for the recovery of these species will be evaluated on a case-by-case basis..."

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

The Teton River provides habitat for many of these species. Reversing the chronic dewatering of the Teton River through instream flow water leases would provide interconnected habitat with Missouri River and aid in the maintenance of these species.

Project Sponsor (submitted by): Luke Holmquist

Location of Proposed Project: Teton River from RM 58 to RM 7 and then from RM 7 to the mouth.

Total Project Cost: \$10,698 per year up to 10 years.

TAC Funds (Cost-Share) Requested for Project: \$ 6,198 (\$5,490 plus 12.9% (\$708) overhead) per year up to 10 years.

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

In 2018, the MoTAC approved the leasing of water in the Teton river for instream flow (2018-25). The lower Teton River has a history of complete dewatering over the past 25 years. In March 2017 Judge Robert Olson upheld his July 2016 ruling from the 9th Judicial District Court that water users in the lower Teton River drainage held water rights senior to several rights in the upper basin. For many years junior water users were diverting water from the upper basin effectively denying legal access to senior right holders in the lower basin. Judge Olson's decision established the need to appoint water commissioners to evaluate the effectiveness of delivering water to the lower river to fulfill legal rights. Given the lack of irrigation infrastructure in the lower basin due to no available water, two right holders (T&K Farms and Andy Taylor) in the lower basin have expressed interest in leasing water for instream flow. These two rights would be used in concert between RM 58 and RM 7 to maintain a base instream flow at the mouth of about 2.5 cfs during July and August. T&K Farms rights are between 2-5.9 cfs and Andy Taylor's rights are between 2.5 and 4.47 cfs.

The benefit is an improvement in flow in the lower Teton that preserves connectivity during critical times of the year. It is also important that the leases help the water commissioners justify maintaining flow in the Teton through the entire river. Due to flooding from ice jams, rain and snow pack creating exceptionally high water in 2018, there was no need for leasing.

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

Lease two water rights to maintain instream flow in the Teton River to the mouth during periods of normal (past 25 years) dewatering.

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

The rights would be used in a pattern approximating historic irrigation based the number of irrigations, crop irrigation demand and estimated system efficiency. Like many irrigation systems, they were not likely operated continuously. The use of the leased water rights would be staggered to provide about 90 days of protected flow.

Taylor

236 acres of irrigation
1897 and 1901 priority dates – senior to water users in lower 8 miles of Teton
4.23-4.47 cfs protected down to diversion (~rm 8)
~2.5 cfs protect to mouth of Teton
Flow protected for 5 10-day blocks (50 days total)
~430 ac-ft maximum volume at diversion (\$2580 at \$6 per ac-ft)

T&K

206 acres of irrigation
1890 and 1901 priority dates
5.9 cfs protected down to diversion (~rm 107)
~3 cfs protected below diversion
~2 cfs protect to mouth of Teton with 1/3 loss based on review of Dutton and Loma USGS gages.
Flow protected for 5 8-day blocks (41 days total)
~485 ac-ft maximum volume at diversion (\$2910 at \$6 per ac-ft)

Because the water commissioners would know in advance we plan to demand water at Taylor's near the mouth, they would need to keep the river watered for the full length at all times in order to be able to deliver the water requested. FWP discussions with the water commissioner indicate he recognizes that they will need to keep the river from being dewatered in order to effectively manage the river and meet requests for water. So even though water will not be requested at all times, the water leases will help keep the river from being dewatered even when they are not technically requesting water.

Data from 2017 with the water commissioners operating should help refine information with respect to the losses between T&K Farms (RM 58) and the mouth.

The priority date of the water rights is considered somewhat "middle of the pack" for the Teton and they are junior the most senior rights above Choteau. They are relatively senior in the Teton below Choteau. Even being junior to rights above Choteau, these rights will likely be able to draw water down Muddy Creek and Spring Coulee that collected return flow from the Burton Bench. There are several large junior water rights in these areas including the Brady Irrigation District. The water commissioner has concurred with FWP that this would probably be the situation. Also, the current commissioner operations that are maintaining flow through the Springhill reach maintains flow below Choteau. This will further assist with water moving into the river below Choteau where it can be leased and protected.

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

The Montana Fish & Wildlife Commission gave approval in April and June 2017 for FWP to negotiate the leases. FWP presented the lease agreements and valuation to DNRC in June/July 2017 to determine if the proposed plan is truly a beneficial use of the two water rights. The leases would commence as soon as DNRC makes a final determination and the need for leasing arises.

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

Montana FWP has;

1. negotiated the lease concepts with T&K Farms and Taylor.
2. Prepared calculations, analyses, valuation and strategies for maintaining instream flows with the right holders and the water commissioner.
3. Gained permission from the Montana Fish & Wildlife Commission to pursue the leases.
4. filed for a change in right with DNRC.

Montana FWP will;

1. negotiate with DNRC the aforementioned strategies, valuation and benefits to secure DNRC approval.
2. file change documents with DNRC to record the proposed action as beneficial use of the respective water rights.
3. Follow the progression of the water lease/use to ensure the project is meeting desired benchmarks for instream flow.
4. Monitor the fish species (and turtle) composition in the Teton River, PIT tag fish in the Teton River, monitor tagged fish at the Marias PIT station at Loma.

Andy Brummond and three FWP fisheries workers.

VI. Project budget must include amounts for the following:

\$6,198 (\$5,490 plus 708 overhead) – \$5,490 estimated value of the two water rights per year up to 10 years.

FWP would make payment directly to Taylor each year for \$2,580 for value of leased water. \$400 per year of this will be paid to the water commissioner for monitoring.

FWP would make payment directly to T&K Farms each year for \$2,910 for value of leased water. \$500 per year of this will be paid to the water commissioner for monitor.

Cost Share from Montana FWP is estimated to be approximately \$2,500 for salaries from Andy Brummond for negotiations, calculation, filings and monitoring. The approximate annual contribution by FWP-Brummond would be similar. There is an estimated \$2,000 annual cost of salaries, materials and equipment for fish population monitoring by FWP Region 4 fisheries staff.

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 to maintain instream flow of 2.5 cfs at the Teton Loma gage during the critical times of the year. This will be confirmed by water commissioner reports and stream gage data collected at the USGS Teton- Loma gage site. Additional deliverables will be evidence of interchange of fish between the Missouri River and Teton River as determined by surveys and tag returns at the Marias PIT station.

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-breaking activities.

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:

All water use and value will be approved by DNRC. A court-appointed water commissioner through the 9th Judicial District Court will monitor, make calls for water and enforce the court ruling. These water leases will be part of the entitled water granted to the downstream users by the court ruling. The water rights would be put to beneficial use through instream flow leases approved by DNRC.