

2017 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: Evans Bend – Missouri River Cottonwood Tree Restoration

Date: October 28, 2021

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

License Article 423 requires the development of a plan to monitor and enhance native plants and wildlife populations on the lands and waters associated with the project. The current 5-year plan (2017-2022) states restoration and enhancement of riparian lands and wetlands in the project area has been a primary goal of the wildlife and vegetation enhancement plan since the establishment of the program and the Wildlife TAC in 2000. The program has funded several projects to monitor and restore cottonwood forests along the Missouri River and in the Missouri River Breaks National Monument downstream from Fort Benton, MT.

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

This is a priority 1 project dealing with wildlife habitat enhancement on the mainstem Missouri River.

Project Sponsor (submitted by): Jesse Hankins, BLM & NorthWestern Energy

Location of Proposed Project: Evans Bend

Narrative: The project is located on Evans Bend, which is a 37-acre cottonwood forest on BLM land adjacent to the Missouri River, approximately 5 miles downstream of Fort Benton on river right (Figure 1).

Geocode (in decimal degrees ex 46.89743) Lat; 47.844786 Lon: -110.576418

Total Project Cost: \$60,012

TAC Funds (Cost-Share) Requested for Project: \$45,700

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

In 2015, an approximately 37-acre cottonwood forest at Evans Bend was destroyed by a wildland fire. Most noticeable was the loss of hundreds of mature cottonwood trees. Since the fire, cottonwood and chokecherry trees have begun to resprout. However, browsing by livestock and deer is hindering many of these plants from developing beyond browse height. The purpose of this project is to exclude domestic and wild herbivory on cottonwood and chokecherry trees to restore viable stands of both tree species on the landscape at Evans Bend.

One of the great challenges with restoring cottonwood trees along the Missouri River has been finding locations where plants are close enough to the river to reach ground water yet far or high enough to avoid ice shear. Moving tree planting sites away from the river's edge means water is less available to help developing roots. Given, Evans Bend has large scale resprouting where species are utilizing an existing root structure, protecting them from browsing is a relatively simple method of helping these trees develop to maturity.

Also, Evans Bend has hundreds of dead cottonwood trees that provide habitat for many species of birds, bats and small land mammals. Biennial monitoring studies conducted by the University of Montana Bird Ecology Lab in 2019, and funded, in part, by Northwestern Energy reported "...significant changes in riparian habitat conditions since 2004, are likely influencing habitat suitability for bird populations. Those changes include aging cottonwood forests, declining shrub cover, and increases in some invasive species..." (Noson et al. 2019). The report also described the importance of snag (dead tree) habitat for several bird species.

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

Restore viable cottonwood and chokecherry trees along the Missouri River at Evans Bend.

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

Protect existing cottonwood and chokecherry trees from browsing by installing protective fences around them. One enclosure fence approximately 10 acres in size (4 corners) and another approximately 1 acre in size (5 corners) are proposed to protect existing trees. Fences will remain in place until trees are mature enough to withstand the influence of both domestic and wild herbivory. We estimate 7-10 years will be required for these trees to grow past the stage of vulnerability after which time the fences will be removed.

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

The project will begin in early 2022 and depends largely on the availability of fencing materials.

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

BLM will perform the following duties: facilitate the addition of enclosure fences with the permittee, obtain access to the site across private land for the purpose of installing enclosures, secure all necessary permits, and conduct/ensure federal compliance necessary to implement this project, and clear fence paths of dead material prior to fence construction. BLM will monitor cottonwood and chokecherry tree development utilizing tree height and abundance as a measure of success. BLM will also perform annual fence maintenance, should it be necessary.

NorthWestern Energy will administer contracts for fencing and arrange to have the site added to the bird monitoring program conducted by UofM Bird Ecology Lab.

VI. Project budget must include amounts for the following:

Direct Labor

Travel and Living

Materials

Other Direct Expenses

Direct Overhead

All cost-share sources and amounts, including estimation of "in-kind" contributions

A bid for fencing provided by Great Falls based S&K Custom Fencing did not itemize materials, equipment and labor. The amount S&K estimated to install this fence is \$40,600 for materials, labor and equipment, plus \$5,100 for mobilization to the site. The contractor's bid noted uncertainty in materials (steel posts and mesh) availability and prices. Updated prices and availability can be provided if/when a contract is initiated.

BLM is providing in-kind cost share for NEPA analysis, CRM review, and SHPO concurrence estimated at \$3,000.

BLM is providing annual vegetation monitoring and enclosure maintenance by range, wildlife, and recreation staff.

Salary - $\$35 \times 16 \text{ hrs} = \$560.00/\text{employee}$

3 employees = \$1,680.00

Mileage - $\$0.58 \times 204 \text{ mi.} = \$118/\text{trip}$

2 trips/year = 236.00

Total BLM in-kind contribution is \$16,412.00 over 7 years.

NorthWestern Energy is providing funding for bird monitoring estimated to be \$3,850 (1 visit by UofM on odd years over a 7 year period). This value was NOT added to the total project amount because it is funded under article 423 monitoring.

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?

Success will be measured by the increase in size and abundance of cottonwood and chokecherry trees within the enclosures. Biennial bird monitoring will determine changes in bird community as habitat develops.

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:

BLM archaeologists will summarize the known resources at the site, avoidance methods and likely impacts from installing a fence at the site. BLM will file a report with SHPO and obtain a letter of concurrence that will be provided to NWE.

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: This is not applicable.

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.

REFERENCES;

Noson, A. C., A. D. Flesch, and M. M. Blake. 2019. Trends in populations of breeding birds and habitat conditions in riparian areas along the Madison and Missouri Rivers, Montana 2004-2019. Report to Northwestern Energy Wildlife TAC. University of Montana Bird Ecology Lab, Missoula, MT. 41 pp.

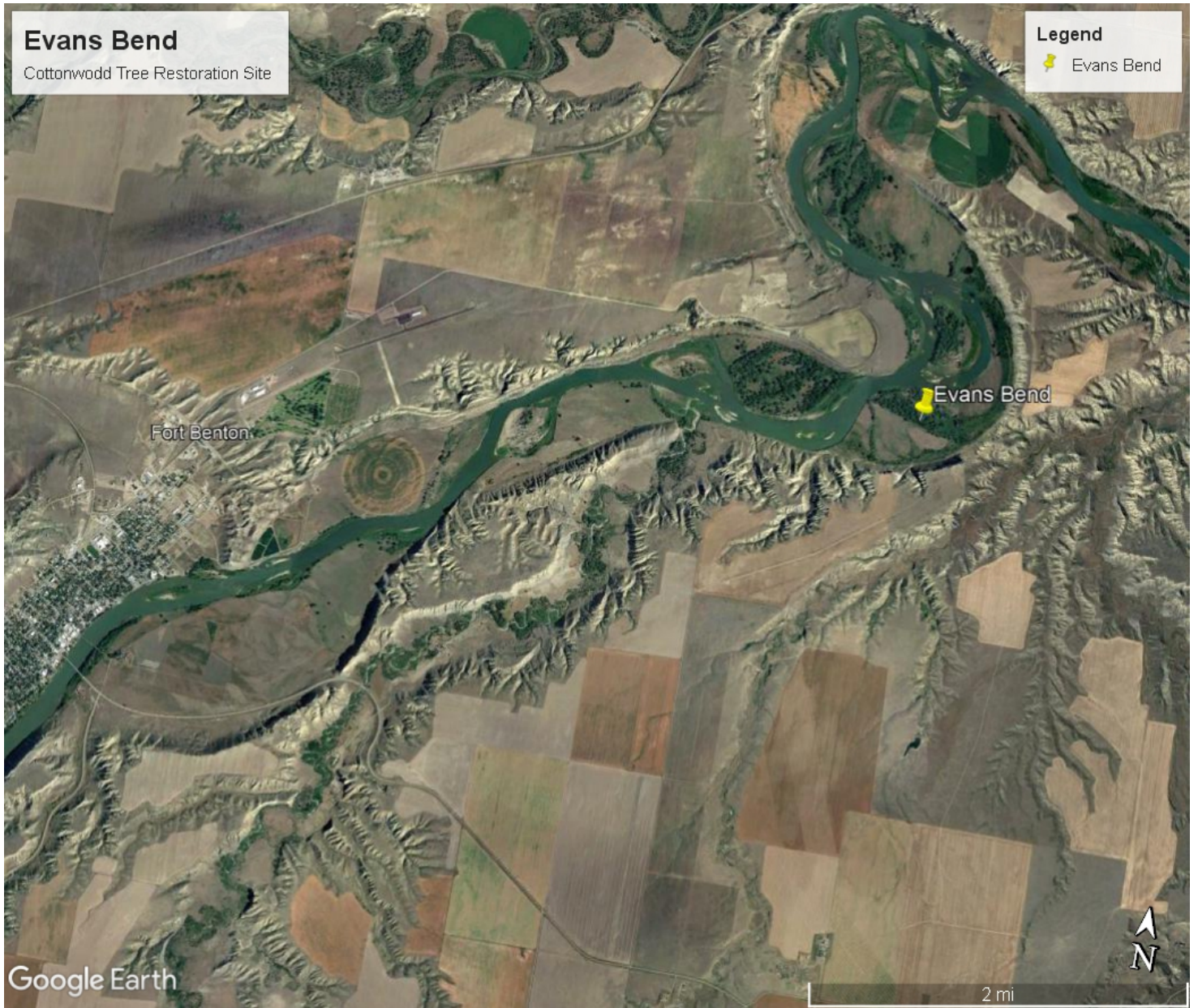


Figure 1. Evans Bend proposed tree restoration site. Missouri River. Montana.



Figure 2. Relic cottonwood trees at Evans Bend. Missouri River, Montana.



Figure 3. Relic cottonwood trees with young trees volunteering at Evans Bend. Missouri River, Montana.



Figure 4. Proposed 10 acre and 1 acre exclosures at Evans Bend. Missouri River, Montana.