

**MISSOURI-MADISON RIVER FUND
RECREATION PROJECT
APPLICATION FORM FY2018**

Project Name: Madison Powerhouse Road Repair

Reservoir or River Segment: Ennis Lake County(ies): Madison

Site Name (or legal location if no site name): Near Trail Creek, on the road in the Upper Bear Trap Canyon

Applicant Name and Agency Chris McGrath, BLM – Dillon Field Office – Ennis Duty Station
 Position (if applicable) Outdoor Recreation Planner
 Address PO Box 765, Ennis MT 59729
 Telephone # 406-682-4082 E-mail cmcgrath@blm.gov

Project Sponsor:

A Project Sponsor is required in order to submit an application to the River Fund. Project sponsors serve as active members of Missouri-Madison Regional Working Groups, and include representatives of the U.S. Forest Service; Bureau of Land Management; Montana Fish, Wildlife & Parks; local government; Madison, Gallatin, Broadwater, Chouteau, Lewis and Clark, or Cascade Counties; NorthWestern Energy and the Bureau of Reclamation. Visit www.missourimadison.com for a list of current Regional Working Group members.

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Complete the financial section below by providing total project cost, contributions by applicant and cooperators, request for NorthWestern Energy match of agency funds (see detail on page 2 of this application), and River Fund Grant request. Document in-kind contributions by public agencies for determination of NorthWestern Energy match request. A description of funding sources and in-kind contributions should be included in the Project Description.

Financial Support

Total Project Cost: \$ 125,500

Applicant Contributions: \$ 25,500 (in kind)

Other Contributions - Please list by source:

<u>Montana FWP</u>	\$ <u>To be determined</u>
<u>NorthWestern Energy</u>	\$ <u>15,000 (in-kind)</u>
<u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>

NorthWestern Energy Match Request: \$ 10,500

River Fund Grant Request: \$ 74,500

Proposed Project Implementation Period: Spring/Summer 2018

**MISSOURI-MADISON RIVER FUND
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APPLICATION FORM FY2017**

1. Has this project been previously submitted for funding consideration by the River Fund Board, either as a separate project or part of another project? Yes No

If yes, please identify which years the application was submitted and, if the project was previously funded, list the amount funded by year.

2. Is the proposed project at one of the Project 2188 license sites identified in the Missouri-Madison MOU and listed on page A2-2 of the Comprehensive Recreation Plan? Yes No

3. **Project Description:**

In June 2017 the Madison Powerhouse Road, which provides vehicle access to the Madison Dam and Powerhouse as well as public recreation sites contained in the 2188 license, developed a substantial crack on the side of the road adjacent to the waterway which threatened to slump into the water. The location of the crack is roughly half way between the bridge on North Ennis Lake Road and the Madison Dam. The crack is roughly two feet into the road surface and runs parallel to the road for a significant distance. It is estimated that up to 100 feet of the road has been compromised and could need to be rebuilt and/or stabilized. To immediately mitigate effects of the crack and halt slumping for the short term, NorthWestern Energy funded a temporary repair of the crack. This temporary repair was to ensure continued access to the canyon for the duration of the summer.

The temporary repair funded by NorthWestern Energy (at a cost of \$1,100) in June placed subsurface granite boulders and compacted backfill to get the road functional again. While the repair is holding for the time being, the anticipated lifespan of the repair is questionable and no significant rain events have occurred. It is unknown whether the repair will withstand the freeze-thaw and rain events that will occur in the coming winter and spring. This project aims to prepare the BLM and NorthWestern Energy to repair the road in spring or early summer 2018 in the event that the current repair does not hold through the wet season and greatly limits access to public recreation areas and hydro facilities.

For the repair project, NorthWestern Energy would provide roughly 30 gabion baskets to help stabilize about 100 linear feet of the roadside that is likely to begin slumping into the lake. While the exact cause of this crack is unknown, it is probably tied to poor drainage on the road, freeze-thaw patterns of the area, and the extreme head-to-toe ratio of the road and hillside in this area. This road didn't thaw out until mid-May 2017, just prior to when the crack appeared.

This River Fund request for \$74,500 will fund construction efforts of a repair in 2018, if needed. The project cost is based on estimates received from Williams Civil Construction Inc. and Titan Construction Inc., in summer 2017. The estimated cost of the repair, based on project estimates received, is \$85,000. BLM engineers were not available to provide an estimate or design for the project as it occurred during the field season and they are booked out with contracts through late fall or early winter. The BLM has committed that the engineering staff will provide a final design for this project as needed, but time is not available in their schedule until the winter of 2017/2018. NorthWestern Energy does not have engineers available to work on projects of this nature. NorthWestern Energy would administer the construction contract using the BLM's design. Funding from this request would go directly to NorthWestern Energy. To mitigate cost overages once a final design is complete, NorthWestern Energy can provide additional contingency funding in the event the actual project costs exceed the estimated cost of \$85,000.

Recognizing that this road has ongoing issues related to drainage and stability that are larger than this proposal, BLM and NorthWestern Energy along with Montana Fish, Wildlife and Parks will begin

working toward a road improvement plan that will improve drainage and improve upon maintenance tasks in the future. There is very little drainage throughout the length of the road. The lack of drainage leads to blow outs and to saturated soils that are vulnerable to slumping. The nature of this very steep canyon makes it difficult to make any improvements to the road especially with regards to drainage. For the length of the road the lake or river is on one side and the other side is a steep canyon wall, often times held up with gabion baskets on either side of the road.

The BLM and NorthWestern Energy both acknowledge that this proposal is likely not the long-term final solution for this road. Both also recognize the importance of planning for road upgrades and identifying sources of funding other than the River Fund for those future upgrades, and the importance of maintaining public recreation access into the area and having a functional road for the NorthWestern Energy hydro facility staff to operate their facilities. To maintain public access we need to ensure that the road is safe.

4. Cultural Resource Management:

The BLM Dillon Field Office Archeologist would review the site and the project and submit the required paperwork to the State and NorthWestern Energy as well as complete the federal requirements that Cultural Resource Management involves.

5. Scoring Criteria

5.1 Project is for operation and maintenance of an existing recreation site or an existing Project 2188 license site.

This project is to maintain public access by repairing an existing road. The road provides access to BLM managed public lands and is the only access for NorthWestern Energy to operate the Madison Dam and Powerhouse. This project is above and beyond the financial capabilities of the BLM and NWE for operation and maintenance of the existing Project 2188 recreation sites of Trail Creek and Fall Creek Recreation Areas.

5.2 Project involves collaboration with other agencies or organizations.

This project involves the Bureau of Land Management, NorthWestern Energy, and Montana Fish, Wildlife and Parks.

BLM will contribute the engineering work for the design of the project. It is estimated that it will take three work-month's for the engineering staff at \$8,500 per work-month.

NorthWestern Energy will administer the construction contract, estimated at \$15,000. In addition, the NorthWestern Energy matching funds program will provide \$10,500, bringing the total NorthWestern Energy contribution to \$25,500, equal to the BLM contribution. NorthWestern Energy will also provide roughly 30 gabion baskets to stabilize the area. If the cost of the project exceeds the amount in this request, NorthWestern Energy has agreed to reasonable overages from their operations budget.

Montana Fish, Wildlife & Parks, the third party to the cooperative management agreement for maintenance of the Madison Powerhouse Road, has tentatively agreed to provide up to \$5,000 in materials or supplies toward the road construction project, with final values to be determined.

5.3 Project provides a benefit to public recreation in the Project Area and addresses specific issues and goals of the Missouri-Madison Comprehensive Recreation Plan (CRP).

Access Roads

This is the only road into the Upper Bear Trap Canyon, which includes several popular recreation sites and two recreation sites listed in the Project 2188 license. It is also the only road into the Madison Dam and Powerhouse.

Public Safety

If/when slumping re-occurs this road may not be safe for the public to access the area.

Inter-relationship between Recreation Uses and Other Resources

This issue could deposit a significant amount of sediment into the lake if it is not repaired correctly. The sediment would likely have a short-term negative impact on the fishery and water quality.

User Demands/Desires for Various Uses and Experiences

This road provide access to a wide variety of recreational opportunities. The Upper Bear Trap Canyon is home to several developed recreation sites as well as numerous dispersed recreation opportunities. It provides the only boat launch for the Bear Trap Canyon unit of the Lee Metcalf Wilderness, which is the only whitewater destination in the entire Madison-Missouri Corridor.

Condition and Capacity of Recreation Sites and Use Areas

This project is well aligned with the goal: “To provide safe and well-managed recreation sites and dispersed use areas that provide enjoyable user experiences across a spectrum of opportunities and seasons.” The road repair would well to provide safe access to a wide spectrum of opportunities and seasons. Many locals fish this stretch of river year round as it provides a location to keep fish. This road provides access to developed launch sites and dispersed wade-fishing sites.

5.4 Project responds to a clearly identified need.

This proposal is to repair a slump and associated crack in the road. This road provides for a wide array of recreation opportunities. The use levels of the area have increased over the past few years, with 2015 and 2016 being the highest use years the area had recorded (2016 Missouri-Madison Visitor Use Count Report). BLM, NorthWestern Energy and FWP will continue to provide the Long-term costs and post project maintenance of the road. NorthWestern Energy regularly spends around \$15,000 annually maintaining the road. The BLM grades the road twice a year and provides additional road mix to the site as needed. There is a long-standing cost share agreement on the road between NorthWestern Energy, BLM and FWP.

5.5 Project design options have been considered, estimated, and a preferred design selected.

There is currently not a final design for this project as the issue developed during field season for the BLM engineers. NorthWestern Energy received two estimates to repair the slump and crack in the road. The estimates came in around \$30,000 and \$104,000. NorthWestern Energy believes that the actual repair will come in around \$85000, and have agreed to be the safety net in case the project ends up costing more. BLM engineers will provide a design over the winter and NorthWestern Energy would administer the contract.

5.6 Project supports or protects other resources and is consistent with or supports resource plans in the Project Area.

This project would keep the road functional, safe and open to the public. Repairing/rebuilding the road in the compromised area could potentially keep a large amount of sediment from entering the lake, which would have a negative impact to the fishery and water quality.

This project is consistent with several of the goals of the BLM-DFO Resource Management Plan (Amended 2016).

Transportation and Facilities Management, Goal 1: “Manage facilities, including roads and trails, to provide for public access or administrative needs, while maintaining or protecting resource values and in

coordination with other federal agencies, state and local governments, and private landowners.” This project would help to ensure safe public access while protecting resource values.

Recreation, Goal 1: “Provide a diverse array of quality, resource based recreation opportunities while protecting and interpreting the resource values, providing educational opportunities, minimizing user conflicts, and promoting public safety.” This project promotes public safety as well as ensures access to an array of quality resource based recreation opportunities while protecting the resource values.

6. Attach map(s) showing the location of the proposed project, drawings and design work related to the project, and photos (as available) at the end of the application.

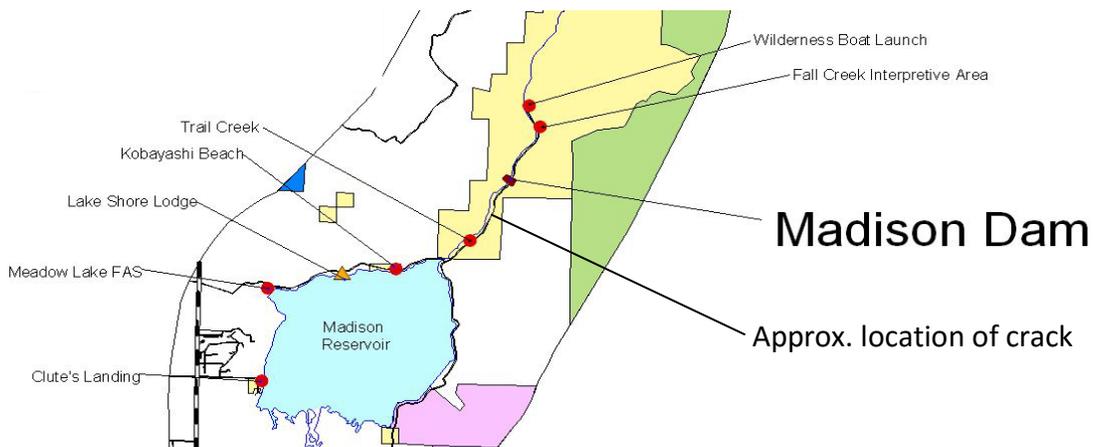
7. Permitting and Planning Acknowledgement:

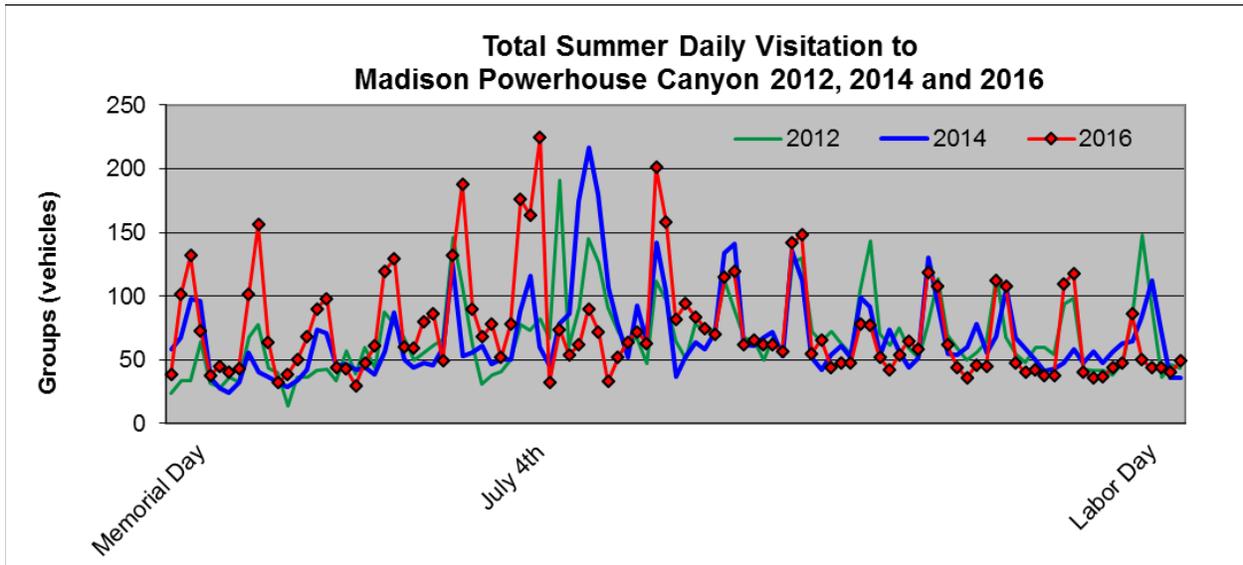
The BLM agrees that all permitting and planning requirements, such as NEPA and cultural resource compliance, will be completed prior to expenditures of awarded funds. Furthermore, all design, layout, and contractual requirements will be completed in a timely manner.

X indicates location of road damage, approximately 1 mile from bridge (B) at start of canyon.



Maps showing the impacted area.





Visitor use data from the 2016 Missouri-Madison Visitor Use Count Report

Summer Recreation Visitation in Madison Canyon (Upper Bear Trap Canyon)*

2012	7,130
2013	6,306
2014	7,190
2015	8,023
2016	7,856

* Does not include non-recreation access by agency staff or NorthWestern Energy staff.



