Project Title: Moore Creek Rare plant survey and wildlife habitat assessment

Date: October 10, 2026

Project 2188 License Article: The proposed project is a **Priority 1 and 2**: 2188 License project, and meets License Article requirements and PM&E for fisheries or wildlife populations and their habitats within the main stem within the main stem of the Madison River (Hebgen Dam to Fort Peck Reservoir). The proposal addresses hydro-dam mitigation requirements and directly benefits and enhances wildlife populations and their habitat within the main stem of the Madison River (**Priority 1**) and its primary tributaries **(Priority 2).**

-Justification for Priority 1 and 2 project proposal

Project Sponsor: Tara Luna (Rocky Mountain Botany)

Location: Moore Creek and Madison River Floodplain, Private Lands, Madison County, Montana

Geo Code: 45°20'10.10"N 111°46'19.37"W

TAC Funds Cost-Share Requested for Project: $ 9,083.68

I. Introduction

Moore Creek is a primary tributary on the west bank on the Middle Madison River floodplain. The primary goals of this project are to monitor and assess wildlife habitats present at Moore Creek, determine vegetation response to restored hydrology and other restoration work and monitor any rare plant populations found at this site. Project results will meet Project License requirements for improving wildlife habitat by vegetation monitoring and assessment of habitats and rare species found at this site.

Numerous populations of rare plant species have been found in association with previous restoration work phases at Upper and Lower O'Dell Creek on private landownerships. Initial review of habitat and physical site features at Moore Creek indicates high potential to locate and monitor additional rare plant populations, and in areas of recent restoration work that has enhanced and restored hydrology. Although the Federally Threatened Species Ute's lady tresses orchid *(Spiranthes diluvialis*) has not been located during previous project work, other populations are known from Madison County and southwestern Montana, and in similar habitats present at Moore Creek. Approximately 15 rare wetland plant species may be present at this site. Vegetation types present will be monitored to determine restoration recovery and response, successional status, composition and wildlife use, to meet all license requirements. Wildlife observations per habitat and community type will be documented during field work.

II. Objectives

-Provide recommendations to TAC Program and landowners based on monitoring results and trends;
-Collaborate with landowner and manager on strategies to enhance, preserve or protect existing rare plant populations;
-Provide landowner(s) with all rare plant GPS points and wildlife habitats present on their property for future conservation easement planning and implementation;
-Summarize all results into NWE TAC rare plant and wildlife habitat monitoring and assessment report.

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

GPS and photo-points will be collected to document the range and condition of wildlife habitats present at the Moore Creek sites. Any rare plant species encountered will also be documented with GPS points and photos. Non-permanent, 30 to 50 square meter rectangular monitoring plots used to assess condition, composition of wildlife habitats and where rare plant species are encountered. Vegetation canopy cover and total bryophyte, standing water and bare ground cover will be recorded in each monitoring plot (minimum of 5 plots/transect). All vascular plant species will be identified using regional floras; including Manual of Montana Vascular Plants, Lesica (2022), Flora of North America (1993-2024) and Flora of the Pacific Northwest, Hitchcock and Cronquist (2017). Data will be analyzed to determine plant communities present.

IV. Schedule:

Rare plant species known from the Madison River floodplain typically reach full anthesis during mid-May, late May and early July, requiring a total of three trips to the Moore Creek site. The contractor will contact the landowner(s) and/or their land managers prior to and upon arrival of scheduled work trips. During each work trip, the contractor will contact the landowners and land manager to inform of arrival, access point and travel route through the property, estimated time at each site and departure. Specific activities performed during each site visit and completion of deliverables are shown below:

Activity	**Month**
Initial survey for rare plants at Moore Creek; initial assessment of wildlife habitats and site parameters (hydrology, soils, river flood/ice frequency; physical site features	May 2027
Second survey for additional rare plant species; establish vegetation monitoring plots in habitat types present at Moore Creek	Early July 2027
Third survey for additional rare plant species and specifically Threatened *Spiranthes diluvialis*; establish vegetation monitoring plots in habitat types present at Moore Creek	Late August 2027
Deliver final report to NWE TAC Program	September 30 2027

V. Personnel

Tara Luna (Rocky Mountain Botany) will conduct all field work, data analysis and report preparation for the proposed project.

VI. Project budget with line items amounts:

Project Costs	Estimated Cost	Description
Direct Labor	$7,000.00	Field data collection, rare plant surveys, data analysis and report preparation (140 hours total @ 50.00/hr
Travel and Living Expenses	$ 2,083.68	Mileage=1668 miles (3 trips) (0.76/mile) and per diem rate (816.00 7 meals/ 3 days lodging)
Materials	$0.00	
Other Direct Expenses	$0.00	
Direct Overhead	$0.00	
Cost-Share Amounts- in-kind contributions	$0.00	
Total	**$ 9,083.68**	

VII. Deliverables:

A monitoring report will be delivered that includes rare plant populations located during this project, habitat types and monitoring plots where creek restoration has resulted in enhanced wildlife habitats. The monitoring report will summarize habitat condition and successional status of plant communities following restoration work at Moore Creek, and to determine project progress and successful mitigation requirements required for enhanced and restored wildlife habitat.

VIII. Cultural Resources.

No ground disturbing activities are proposed for this monitoring project that would disturb any cultural resources and archeological sites at this site.

1X. Water Rights.

There is no field work or ground disturbing activity associated with this monitoring project proposal. The project does not impact any State of Montana water rights, existing laws or policies and Northwestern Energy Company water rights guidelines.