



## Environment and Natural Resources Trust Fund

M.L. 2026 Draft Work Plan

### General Information

**ID Number:** 2026-500

**Staff Lead:** Mike Campana

**Date this document submitted to LCCMR:** November 3, 2025

**Project Title:** Supporting Implementation of Large-Scale Moose Habitat Management

**Project Budget:** \$1,054,000

### Project Manager Information

**Name:** Lindsey Shartell

**Organization:** MN DNR - Fish and Wildlife Division

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### Project Reporting

**Reporting Schedule:** April 1 / October 1 of each year.

**Project Completion:** June 30, 2029

**Final Report Due Date:** August 14, 2029

### Legal Information

**Legal Citation:**

**Appropriation Language:**

**Appropriation End Date:** June 30, 2029

## Narrative

**Project Summary:** Provide the capacity needed to support and monitor the implementation phase of an effort undertaken to identify challenges, develop strategies, and conduct large-scale moose habitat management across diverse land ownerships.

**Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

The enhancement of moose habitat is a key strategy for sustaining moose in Minnesota. Efforts to improve moose habitat have been undertaken opportunistically, scattered across a large landscape. Large-scale moose habitat management (10,000+ ac) presents challenges for implementation. The Moose Habitat Collaborative has been successful at enhancing moose habitat on more than 25,000 unique acres since 2013 but has struggled with the barriers and capacity needed to organize coordinated habitat management in large blocks across many different land ownerships. In 2023, partners from state, county, federal, Tribal, and conservation organizations initiated a large-scale moose habitat planning project funded by the America the Beautiful Challenge aimed at identifying challenges hampering moose habitat management, developing strategies to address these challenges, and creating an implementation plan to enhance moose habitat within targeted large project areas. The project identified challenges within five over-arching themes: coordination, economics/operations, support, environmental, and information. The Moose Habitat Implementation Plan is being finalized as of March 2025 and the project team will transition from a planning to an implementation phase over the next year. Developing and implementing solutions to address challenges is needed to enable the large-scale habitat management necessary to sustain moose in Minnesota.

**What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.**

Building on the America the Beautiful funded planning phase, this grant will support the implementation phase, address challenges identified using strategies developed in the plan, and establish a monitoring system to evaluate success. Habitat treatments will be funded through traditional and supplemental funding sources such as agency and partner funds, Outdoor Heritage Funds, and Conservation Partners Legacy grants.

All partners feel strongly that a project coordinator is essential to the success of large-scale coordinated habitat management across diverse land ownerships and organizations. Without clear leadership and capacity to address the challenges identified, large-scale moose habitat management has been difficult to accomplish. The project coordinator will facilitate the complex work of cross-organization project teams and advance conversations and solutions that breakdown the barriers to implementing moose habitat management.

The plan also identifies the need to develop monitoring to evaluate effectiveness. The existing research and monitoring team will develop a monitoring plan that will guide the long-term monitoring of forest composition, habitat treatments, and moose response to inform ongoing management. This project will fund a monitoring lead who will, under the direction of the research and monitoring team, design protocols and collect pre-treatment vegetation data necessary for evaluating effectiveness.

**What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

Maintain momentum built and investment made by partners during the America the Beautiful Challenge planning phase (grant award of \$402,204 plus partner and in-kind contributions) to move into the implementation phase where strategies to address challenges and enable on-the-ground habitat management will be developed and implemented for the enhancement of habitat and conservation of moose in Minnesota. Establish a monitoring system to evaluate the effectiveness of the work and inform habitat needs. Build long-term support and solutions for future habitat management that is critical for sustaining healthy moose populations and the ecosystems they rely on.

## Project Location

**What is the best scale for describing where your work will take place?**

Region(s): NE

**What is the best scale to describe the area impacted by your work?**

Statewide

**When will the work impact occur?**

During the Project and In the Future

## Activities and Milestones

### Activity 1: Coordination of the Moose Habitat Implementation Plan

**Activity Budget:** \$238,000

**Activity Description:**

The primary product of the America the Beautiful Challenge planning phase is a Moose Habitat Implementation Plan. Project coordination is identified as an essential need to successfully implement large-scale moose habitat management across diverse land ownerships. The plan is highly collaborative with many partners expected to contribute time and resources (outside the value of this proposed support aspect of the work). A project coordinator will be hired to fill the capacity needed to organize efforts and address complex challenges. Coordination will include facilitation of the cross-organization implementation project team, three habitat area coordination teams, and the research and monitoring team; communication across teams and partnering organizations; writing of project updates and reports; tracking of habitat treatments; documentation of accomplishments related to challenges; identification of funding needs and funding opportunities; and developing grant proposals. These activities will account for 75% of the project coordinator's time.

**Activity Milestones:**

Description	Approximate Completion Date
Host annual implementation team, three habitat area team, and research and monitoring team meetings.	December 31, 2026
Complete annual project update/report including tracking of habitat treatments.	January 31, 2027
Host annual implementation team, three habitat area team, and research and monitoring team meetings.	December 31, 2027
Complete annual project update/report including tracking of habitat treatments.	January 31, 2028
Host annual implementation team, three habitat area team, and research and monitoring team meetings.	December 31, 2028
Complete annual project update/report including tracking of habitat treatments.	January 31, 2029
Final report and map of habitat treatments.	June 30, 2029

### Activity 2: Address Challenges Limiting Habitat Management for Moose

**Activity Budget:** \$134,000

**Activity Description:**

The project coordinator will work with implementation team partners to advance efforts to address the barriers to moose habitat management at a large-scale that were identified in the planning effort. Tasks include: Work with contractors to develop outreach materials to raise awareness and understanding of moose habitat needs, importance of habitat to moose population stability, and challenges facing habitat management. Promote moose habitat-related messaging by giving educational presentations to interested audiences. Build support for moose habitat by developing partnerships and engaging with a diversity of existing groups. Communicate the additional benefits of moose habitat management (e.g., forest diversity and resilience, revenue production, tourism, reduced wildfire risk). Advance conversations related to organizational support including staff capacity, funding, and current policies and objectives that create barriers. Improve the current tools available to implement habitat management. Engage with loggers and contractors to create and implement solutions to address contractor shortages, build capacity, and promote local labor forces. Work with partners to brainstorm new and diverse timber market developments. These activities will account for 25% of the project coordinator's time. ENRTF funds will be used for educational purposes only, not for any lobbying for recommended policy changes.

**Activity Milestones:**

Description	Approximate Completion Date
Outreach materials developed (e.g. factsheet, brochure, interpretive display, website, ArcGIS Story Map).	December 31, 2027
Led educational presentations and webinars to increase understanding of moose habitat needs and management.	April 30, 2029
Engaged with diverse groups at local meetings/events to build support for moose habitat management..	April 30, 2029
Advanced conversations on organizational and operational support within partner organizations.	April 30, 2029
Worked with loggers and contractors to brainstorm solutions for implementing moose habitat management.	April 30, 2029
Final report on accomplishments and continued challenges.	June 30, 2029

### Activity 3: Establish Monitoring to Evaluate Effectiveness

**Activity Budget:** \$682,000

#### Activity Description:

Evaluating the impact of habitat management activities on vegetation and subsequent moose response is necessary. A vegetation and moose monitoring plan will be developed by the research and monitoring team to guide this activity. Vegetation monitoring will assess components of habitat as they relate to the Moose Habitat Configuration Guidelines developed in the planning phase. A monitoring lead, under the direction of the research and monitoring team, will design pre- and post-treatment vegetation assessment protocols that are compatible with traditional forest inventories and include measurements that assess habitat quality for moose such as forage availability and landscape configuration. Vegetation data will be combined with existing remotely sensed data, forest inventory, moose surveys, and future moose response data to provide a rich dataset for research and monitoring. The research and monitoring team will work with the monitoring lead to develop protocol to assess moose response and identify opportunities to fund future monitoring. The monitoring lead will oversee collection of vegetation data by two field crews of two staff at a minimum of 15 treatment sites per field season. Travel expenses include mileage for one 4WD truck, trailer, 2 ATVs, and lodging and meals for the monitoring lead and field technicians.

#### Activity Milestones:

Description	Approximate Completion Date
Vegetation monitoring protocols developed and procedures documented.	February 28, 2027
Year 1 of pre-treatment vegetation data collected at treatment sites.	October 31, 2027
Moose monitoring methodology developed by the research and monitoring team.	February 28, 2028
Year 2 of pre-treatment vegetation data collected at treatment sites.	October 31, 2028
Final vegetation database available and data report completed.	June 30, 2029

## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Scott Johnson	Ruffed Grouse Society	Project collaborator with oversight of the monitoring component of this proposal.	Yes
Moose Habitat Implementation Plan Partners	Various	A diverse group of partner organizations are anticipated to participate in the implementation project team, habitat area coordination teams, and research and monitoring team guiding the work within this support proposal and of the larger project as a whole. Letters of support are provided from many of these partners.	No

## Dissemination

**Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.**

Outreach efforts will occur throughout this project. Accomplishments will be shared with partners and stakeholders in a variety of ways.

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?**

The implementation plan has a 10-year timeframe, however habitat management will be an ongoing need for sustaining healthy moose populations. Work completed now to address challenges will continue to benefit habitat management. It is our vision that the Moose Habitat Collaborative, a complimentary and parallel effort, will incorporate this plan into their work. This is achievable if barriers to habitat management can be reduced. Initial monitoring data will inform habitat treatments and set a baseline from which to assess impacts on vegetation and moose. Funding for continued monitoring will be pursued through a variety of opportunities.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Project Coordinator		Coordinates the Moose Habitat Implementation Plan across many partners to facilitate habitat work and address identified challenges. Responsible for activities 1 and 2.			25%	2.75		\$284,958
							<b>Sub Total</b>	<b>\$284,958</b>
<b>Contracts and Services</b>								
TBD	Service Contract	Contract(s) for outreach efforts such as fabrication of displays, design of materials, creation of ArcGIS StoryMap, creation/hosting of a website, creation of informational video, signage to identify habitat projects.				0		\$30,000
Ruffed Grouse Society	Subaward	Monitoring fieldwork. Personnel: \$500,000 (Lead: 1 FTE, 2.75yrs, Field Crew: 4 x 0.5 FTE, 2yrs, Oversight: 0.05 FTE, 3yrs); Travel in Minnesota: \$170,000 (Mileage: \$20,000, Trailer and 2 ATVs: \$6000, Lodging/Meals: \$2400/month x 6mo x 5 staff: \$144,000); Equipment/Supplies: \$12000.				6.74		\$682,000
							<b>Sub Total</b>	<b>\$712,000</b>
<b>Equipment, Tools, and Supplies</b>								
							<b>Sub Total</b>	-
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-

<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	\$5000 per year (mileage, lodging, meals)	Expenses for Project Coordinator travel to team meetings (1-5 annually if not virtual), field tours (1+ annually), and stakeholder meetings/events (3+ annually).					\$15,000
							<b>Sub Total</b>	<b>\$15,000</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
	Printing	Flyers, factsheets, brochures, posters	Printing of paper outreach materials					\$5,000
							<b>Sub Total</b>	<b>\$5,000</b>
<b>Other Expenses</b>								
		Space rental estimated at \$500 per meeting for ~10 project team and stakeholder meetings.	Facility rental fees for meeting space					\$5,000
		DNR direct and necessary costs for people support (\$5633), safety (\$893), financial (\$3896), communication (\$1902), IT (\$18,347), and planning (\$1371).	Direct and Necessary Costs					\$32,042
							<b>Sub Total</b>	<b>\$37,042</b>
							<b>Grand Total</b>	<b>\$1,054,000</b>



Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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## Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount
<b>State</b>				
In-Kind	Game and Fish Fund	5% time for 3 years for DNR project manager including oversight of the project coordinator.	Secured	\$22,000
In-Kind	Game and Fish Fund	5% time for 3 years for DNR planner to support planning and engagement.	Secured	\$20,000
			<b>State Sub Total</b>	<b>\$42,000</b>
<b>Non-State</b>				
In-Kind	Ruffed Grouse Society	Unrecovered de minimus indirect costs (10%) for Ruffed Grouse Society subaward.	Secured	\$68,200
			<b>Non State Sub Total</b>	<b>\$68,200</b>
			<b>Funds Total</b>	<b>\$110,200</b>

**Total Project Cost: \$1,164,200**

**This amount accurately reflects total project cost?**

Yes

## Attachments

### Required Attachments

#### *Visual Component*

File: [991444ff-f2a.pdf](#)

#### *Alternate Text for Visual Component*

A map of moose habitat project areas and treatment blocks within primary moose range in northeastern Minnesota. A table of challenges to moose habitat management identified during the planning phase, including coordination, economics & operations, support, environmental, and information. To accomplish habitat management goals, we need to address identified challenges....

### Supplemental Attachments

#### *Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other*

Title	File
LOS Fond du Lac Resource Management Division	<a href="#">d17e5701-540.pdf</a>
LOS USFS Superior National Forest	<a href="#">aecc4fe1-b90.pdf</a>
LOS 1854 Treaty Authority	<a href="#">d715f88e-72b.pdf</a>
LOS The Nature Conservancy	<a href="#">1017256e-256.pdf</a>
LOS Lake County Land Department	<a href="#">6d3cb470-5de.pdf</a>
LOS Izaak Walton League	<a href="#">b5c266a8-a5d.pdf</a>
LOS Ruffed Grouse Society	<a href="#">ed34eb28-267.pdf</a>
LOS Minnesota Forest Industries	<a href="#">b851cee4-f82.pdf</a>
LOS Office of School Trust Lands	<a href="#">8112b949-7cf.pdf</a>

### Difference between Proposal and Work Plan

#### *Describe changes from Proposal to Work Plan Stage*

Reduced budget to meet recommended funding level. Since this is a 3 year project and hiring takes some time, we reduced salary to cover 2.75 years. Added two additional letters of support. Added detail to address comments and revisions. Was limited by word count in some cases. The Moose Habitat Implementation Plan is currently undergoing revisions and approval. A final version will be included when complete (anticipated by end of CY2005).

11/3/2025 - Addressed additional comments and revisions.

## Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

**Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?**

N/A

**Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?**

Yes, I understand the Commissioner's Plan applies.

**Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No

**Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?**

No

**Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?**

No

**Provide the name(s) and organization(s) of additional individuals assisting in the completion of this project:**

NA

**Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements**

Yes, I understand