Environment and Natural Resources Trust Fund

2027 Request for Proposal

General Information

Proposal ID: 2027-051

Proposal Title: Precision Grazing – Virtual Grazing for Ecological Outcomes

Project Manager Information

Name: Josh Pommier

Organization: Pheasants Forever Inc

Office Telephone: (320) 292-5860

Email: jpommier@pheasantsforever.org

Project Basic Information

Project Summary: Evaluate how grazing paddock size influences the effectiveness of virtual fencing for prescribed targeted grazing of invasive species, protecting sensitive habitat and optimizing ecological outcomes.

ENRTF Funds Requested: $686,000

Proposed Project Completion: June 30, 2030

LCCMR Funding Category: Land (F)

Project Location

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

Region(s): NW, SW, SE, Central,

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

Statewide

When will the work impact occur?

During the Project

Narrative

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

Mitigating encroaching woody species on state held easements, and federal easements in Minnesota is essential for protecting grasslands and optimizing long term ecological outcomes. Across the state, grasslands, savannas, and wetlands have evolved with disturbance regimes such as fire and grazing that historically limited woody plant expansion. When shrubs and trees encroach unchecked, these systems can rapidly lose their structural diversity and ecological function. In Minnesota, woody encroachment and invasive cool season grasses threaten prairie remnants, grassland bird nesting habitat, pollinator resources, and rare plant communities that depend on open conditions and sunlight availability.

Woody species expansion alters hydrology, nutrient cycling, and plant community composition, often favoring invasive or generalist species over native flora. This shift reduces habitat quality for species of greatest conservation need while increasing management costs. On working landscapes, encroachment diminishes forage availability and flexibility for landowners, creating ecological and economic tradeoffs.

Proactively managing grassland supports landscape resilience by maintaining habitat heterogeneity, sustaining biodiversity, and preserving ecosystem services such as carbon storage, water regulation, and soil stability. Coordinated approaches across private and public lands are particularly important in Minnesota, where fragmented ownership patterns mean that ecological outcomes depend on management at meaningful spatial scales.

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.

Our proposed solution is to deploy livestock (cattle and/or small ruminants like sheep/goats) managed by virtual fence collars to rotationally graze throughout easement lands without needing interior fence, or in-person labor.

Virtual Fence offers a flexible tool for precision livestock management, enabling targeted grazing.

While virtual fence has demonstrated potential to influence animal distribution, vegetation structure, and habitat protection, paddock size may critically mediate its efficacy. Our proposal stretches the limits of traditional stocking density by creating smaller paddocks which may increase animal–fence interactions and behavioral learning, whereas larger paddocks may dilute control precision and reduce targeted grazing effectiveness.

Understanding how paddock size interacts with virtual fence performance is essential for:

- Maximizing control of target plant species. (e.g. Invasive or encroaching woody species and non-native cool season grasses.)
- Manage sensitive habitat (e.g. nesting cover for grassland birds),
- Improving adoption confidence among private landowners and learning opportunities for private and public land managers.

If conservation easements do not have permanent exterior fence, we will install a smooth or barbed wire permanent fence. The permanent exterior fence is needed to ensure animals don't escape in the event of collar malfunction.

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?

This project aims to evaluate applied field research to advance sustainable management on 600 acres of permanently protected grasslands held in state (e.g. Re-Invest in Minnesota), federal (e.g. Wetland Reserve Easements), and NGO (e.g. Minnesota Land Trust) easements in MN. The outcomes of the project include refining the use of virtual fence for targeted grazing strategies to mitigate woody species encroachment in grasslands, protecting sensitive habitat for wild species and optimizing ecological outcomes on private and public grasslands. These outcomes will be shared with stakeholders through four in person field days, and one peer-reviewed research paper.

Activities and Milestones

Activity 1: Easement and Livestock Producer Selection

Activity Budget: $41,688

Activity Description:
State, Federal, and NGO easements within the farmland region of western and southern (Prairie Pothole) region of Minnesota are eligible for this project. Selection of exact easements will be done through a Request for Proposal (RFP) sent to eligible easement holders and livestock producers.

Proposal applications will receive higher points for; close proximity to other permanently protected lands, existing perimeter fence, knowledge of a willing a livestock producer to graze the easement, willing to contribute cash or in-kind work towards the project, presence of undesirable vegetation in need of management within the easement, located in a MN Pollution Control Agency Environmental Justice Areas, or other area of special concern, but not limited to these ranking priorities. RFP's with the highest points will be selected for funding and project implementation.

If easement holders don't have their own livestock, we will work with grazing specialists, and agency/NGO partners to locate livestock producers for their easements. If we can't attract enough conservation easements for the project, we will open the RFP to public lands. The RFP will be sent to SWCD/NRCS offices, USFWS staff, NGO's, MN Cattlemen's and other groups letting them know this program exists and of our RFP.

Activity Milestones:

Description	Approximate Completion Date
Selection of easement and livestock (cattle and/or small ruminants like sheep/goat) producers	January 31, 2027
RFP sent to easement holders for eligible easements, and livestock producers interested in participating.	October 31, 2027
Host virtual and/or in-person meeting discussing this project to solicit sites and producers.	November 30, 2027

Activity 2: Perimeter Fence Installation and Virtual Fence Collar Selection

Activity Budget: $378,083

Activity Description:
Perimeter fence is needed for livestock within Minnesota. Within our ranking, easements with existing perimeter fencing will receive more points to help reduce project cost. Easements selected without a perimeter fence will need to be fenced with a smooth or barbed wire fence. We anticipate selecting 2 or 3 properties with perimeter fence already installed. Fences will be installed to NRCS fencing standards and exact material will be chosen by landowner and livestock producer. Procurement of fencing contractors will follow the DNR Pass-Through Grants Reimbursement Manual and Pheasants Forever's internal procurement policy. Virtual fence collars will be purchased by Pheasants Forever using this grant and loaned to livestock producers at no cost throughout this grant period. Virtual Fence collars will come from NoFence as they are a project partner. Training livestock to the collars will take time, and to be ready for easement grazing, training of livestock to the collars will need to be done prior to livestock arriving on the easement. Training time will be considered in-kind towards the project cost and purchasing of the collars. Once this project is complete, the presence of a strong perimeter fence will incentivize the landowner to continue easement management with livestock.

Activity Milestones:

Description	Approximate Completion Date
Request for Quotes sent to fencing contractors. Review and award project to contractors.	March 31, 2028
Livestock producers and livestock begin training on virtual fence collars	May 31, 2028
Perimeter fences are installed on easements and easement management begins	July 31, 2028
Grazing management is completed	June 30, 2030

Activity 3: Outreach and education

Activity Budget: $42,088

Activity Description:
We will host four outreach events throughout this project to educate land managers and the general public on our experiences using virtual fence collars. The livestock producer and landowner will be present at each of the events to talk about their experiences and results of the management activities. Other speakers at the events will be, but not limited to, U of MN Extension researchers, Pheasants Forever Grazing Specialists, and virtual fence representatives.

Each event will be publicly announced and open to the general public. Co-mingling resource professionals, livestock producers, and the public will foster collaboration amongst everyone. This collaboration will lead to other projects and increase management of permanent easements throughout the state of Minnesota.

Activity Milestones:

Description	Approximate Completion Date
Host 2 outreach events for resource professionals and general public	October 31, 2028
Host 2 outreach events for resource professionals and general public	October 31, 2029

Activity 4: Field trial assessing paddock size effect on VF interactions with beef cattle.

Activity Budget: $67,242

Activity Description:
Conducting field trials to assess the effect of paddock size on beef cattle boundary interactions, boundary breach frequency and duration, time to learning curve stabilization, animal spatial distribution and animal welfare indicators. Although domestic ungulate herbivores exist that may be better suited to addressing encroachment of undesirable woody vegetation and non-native grass species (i.e., sheep or goats), beef cattle are the only domestic livestock species available that can realistically address these issues on a landscape scale in Minnesota. Some field trial data exists concerning the effect VF technology has on beef cattle behavior however, reported trials are limited to large scale landscape settings in the western U.S. and are applied at moderate stocking densities. In order for VF to be successfully implemented to achieve precision grazing objectives, users need to better understand the effect of paddock size and increasing stocking density on beef cattle behavior, learning curve stabilization and animal welfare indicators. Outcomes will be used to generate realistic application parameters of VF technology to assist private and public land managers in addressing undesirable vegetation within the private-public lands matrix.

Activity Milestones:

Description	Approximate Completion Date
Evaluate the response of beef cattle parameters to VF as paddock size increases and decreases.	November 30, 2029
Adjust and evaluate stocking density parameters within VF capabilities	November 30, 2029
Generate stock density information on learning curve stabilization and boundary interactions.	November 30, 2029
Establish and evaluate animal welfare indicators in relationship to VF telemetry.	November 30, 2029

Dissemination of field trial results through field days, reports and peer-reviewed manuscripts	November 30, 2029

Activity 5: Field trial using VF to implement precision grazing strategies to control encroaching woody species and non-native grasses in grasslands.

Activity Budget: $100,864

Activity Description:
Conducting field trials to determine the efficacy of VF for implementing precision grazing strategies to control encroaching woody species, non-native herbaceous vegetation in grasslands to improve management of state-held easements and public lands in Minnesota. Data exists demonstrating effective VF use for general grazing objectives. However, assessing the ability of VF technology, specifically for precision grazing to achieve control of undesirable vegetation has not been tested. This proposed field trial will be the first of its kind in the emerging field of VF technology application. The field trials will be used to determine the effect of precision grazing strategies on reducing woody vegetation and non-native grass species density, improving native vegetation frequency and assessing habitat quality indicators. Outcomes will be used to generate realistic application parameters of VF technology to assist private and public land managers in addressing undesirable vegetation within the private-public lands matrix in Minnesota.

Activity Milestones:

Description	Approximate Completion Date
Evaluate precision grazing capabilities of VF to target encroaching woody species in grasslands.	November 30, 2029
Evaluate impact of precision grazing on woody vegetation density in grasslands.	November 30, 2029
Evaluate precision grazing impact on native and non-native herbaceous vegetation in grasslands.	November 30, 2029
Assess landscape evaluation of habitat structure and quality in response to precision grazing application.	November 30, 2029
Dissemination of field trial results through field days, reports and peer-reviewed manuscripts	November 30, 2029

Activity 6: Field trial to evaluating VF capability to protect and enhance sensitive habitat

Activity Budget: $56,035

Activity Description:
Field trials will be conducted to determine the efficacy of VF for excluding livestock from sensitive habitat areas. Although much of this proposal focuses on decreasing the density of undesirable vegetation on state-held easements and public lands, an equally important component of vegetation management with grazing livestock is protecting sensitive habitat areas from over-use by domestic livestock. Water, high quality grasses and shade are the primary drivers of land over-use by grazing livestock. Often times, the intersection of these resources is found in the most sensitive habitat areas in the management unit. Wildlife also rely on these resources to successfully feed, avoid predation and reproduce. Prior to the advent of VF technology, the high stocking density, short duration nature of precision grazing techniques using physical fence often leaves critically sensitive habitat areas exposed to significant degradation. A critical component of VF technology is the potential to exclude livestock from sensitive areas while concurrently incentivizing them to graze targeted areas more. Data concerning the efficacy of VF as a tool to protect sensitive habitat areas while implementing precision grazing strategies does not exist. This trial will generate data for managers to incorporate into their overall management strategies.

Activity Milestones:

Description	Approximate Completion Date

Conduct assessments of precision grazing strategy capabilities to protect key indicator vegetation species.	November 30, 2029
Conduct field assessments on effect of precision grazing on soil compaction, disturbance and overall quality.	November 30, 2029
Conduct field assessments on VF capabilities to control access to surface water and riparian areas.	November 30, 2029
Dissemination of field trial results through field days, reports and peer-reviewed manuscripts	November 30, 2029

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Kevin Roth	Board of Water and Soil Resources	Direct connection to Reinvest in Minnesota Easements and program information. Collaborate on easement selection and locations.	No
Eric Mousel	University of Minnesota Extension	Lead researcher for the project. Eric will be leading the field research component of this project. He will work with the livestock producers, easement holders and Pheasants Forever to ensure the projects goals and objectives are being met.	Yes
Greg Hoch	Minnesota Department of Natural Resources	Assisted in the background research for livestock grazing effects on grassland management. Reviewed the proposal for accuracy	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.
Dissemination will happen in multiple forms throughout the duration of this project. By the conclusion of the project, the project team will successfully execute one field day to disseminate project results to landowners, producers, local state and federal agency personnel. The project team also will develop a project results report for dissemination at the field day and for general use by private and public land managers and the public at-large. Additionally, the research team will generate one peer-reviewed journal article. The project team also will provide annual reports to the ENRTF LCCMR. We will place the ENRTF logo on all our promotional materials relating to our outreach events, and meetings, hang a metal logo sign at the outreach events, tag ENRTF is social media posts, as well as giving credit to ENRTF within all written articles and interviews.

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?
A peer-reviewed research paper will be shared with landowners and USDA, NRCS, SWCD's, NGO's, MN DNR, USFWS, and other agencies to guide their management recommendations. Future funding for virtual fence collars may come from USDA through their EQIP program. Ongoing management of the 204,000 acres of other easements within the state will be positively impacted by the disseminated project results. Perimeter fence on the study sites still exists beyond this project and will be utilized for ongoing management to maintain habitat diversity.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Minnesota Bee and Beneficial Species Habitat Enhancement II	M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 08a	$876,000
Conservation Cooperative for Working Lands	M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 08k	$2,611,000

Project Manager and Organization Qualifications

Project Manager Name: Josh Pommier

Job Title: Private Lands Manager

Provide description of the project manager's qualifications to manage the proposed project.
Prior to joining Pheasants Forever in 2013, Josh spent seven years in the private sector working for prairie companies installing and managing prairie's across central Minnesota. His first 9.5 years with Pheasants Forever was spent working with landowners throughout central Minnesota helping then navigate the USDA farm bill programs, RIM easements, and other voluntary conservation programs as a Farm Bill Biologist. During that tenure he helped 34 landowners enroll in BWSR's RIM easement program. He also helped to enroll/re-enroll over 15,000 acres into various CRP contracts scattered throughout 11 counties. As MN Private Lands Manager, he is in charge of managing 3 Grants/Agreements totaling over $10.5 million and helping to employ 34 private lands focused Farm Bill Biologists, Grazing Specialists, Precision Ag and Conservation Specialists, Prescribed Fire Coordinators, Area Wildlife Biologists, as well as 7 seasonal interns. Since graduation from Iowa State University in 2006 with a bachelor's in landscape architecture, each position and company laid the groundwork for his ability to manage this grant proposal. He has been in the field physically putting the seed into the ground, holding the drip torch performing prescribed fire, and walking side-by-side with the landowner discussing the alphabet soup of government programs helping them choose the best option for their family farms legacy. Every component of this proposal, he has experience and will be able to help others in its successful completion.

Organization: Pheasants Forever Inc

Organization Description:
Pheasants Forever's mission is to conserve pheasants, quail, and other wildlife through habitat improvements, public access, education, and conservation advocacy.
Habitat Project and Programs - The Organization conducts various habitat management and protection projects designed to benefit pheasants, quail and other wildlife. These projects consist of permanent land protection through fee-title and easement projects, establishment of nesting cover, food plots and woody cover, restoration of wetlands, and various maintenance and management practices aimed at maximizing the benefits to wildlife species. The Organization also employs a team of over 300 wildlife biologists, range conservationists, precision agriculture specialists, and habitat specialists that provide technical assistance to private landowners interested in improving the wildlife benefits on their land as well as habitat management assistance to state and federal land management agencies.

Chapter, Volunteer and Member Services - The Organization provides training, support and services to its more than 760 chapters and thousands of volunteers that are critical to its conservation and education programs as well as support for its 154,000 members.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	$ Amount
Personnel								
Pheasants Forever Field Staff		Assists livestock producer with project implementation			26%	1.5		$144,129
Pheasants Forever Grant Administration		Complete necessary budgeting, reporting and overall coordination of grant requirements.			26%	0.54		$48,000
PF Project Supervision		Supervisor time to meet with staff and ensure project is on track for completion.			26%	0.06		$12,000
							Sub Total	**$204,129**
Contracts and Services								
University of Minnesota Extension	Subaward	To research the livestock effectiveness of precision grazing. To assist producer training livestock to virtual collars. To create the lessons learned document post project. Assist in presenting at field days.				2.4		$224,141
Fencing Contractors - TBD	Service Contract	Hire up to six different contractors to purchase fencing supplies and to install up to 60,000 lineal feet of perimeter fence around up to 8 different easements/public lands according to NRCS/USDA Specifications. (approximately $4/LF).				0.3		$228,000
							Sub Total	**$452,141**
Equipment, Tools, and Supplies								
	Tools and Supplies	Virtual fence collars (100 collars)	To determine if virtual fence collars can be used to graze easements with precision, targeting invasive species, woody tree/shrub encroachment, and/or non-native aggressive species. (approximately 100 collars x $225 each). Pheasants Forever will purchase the collars from NoFence and loan them to the livestock producer for	X				$22,500

			free for the duration of this project. Nofence is reducing the cost of the equipment and services well below market value and providing support throughout the project.					
	Tools and Supplies	Field day event supplies	Field day supplies (sanitation unit rental, bottled water, healthy snack/lunch) ($150/sanitation unit, $1/person for bottled water, $15/person for healthy snack/lunch) average field day attendance is 30 people	X				$2,520
							Sub Total	**$25,020**
Capital Equipment								
							Sub Total	**-**
Acquisitions and Stewardship								
							Sub Total	**-**
Travel In Minnesota								
	Miles/ Meals/ Lodging	Personal mileage reimbursement for PF positions per commissioners plan. Current rate of $0.70 per mile will be used (subject to rate changes). 600 miles per year x 3 years, totaling 1,800 miles.	When a USDA government vehicle is not available, personal mileage will be used to visit the easements to check on the status of the fence installation, livestock grazing, and meeting with producer and/or landowner.					$1,260
	Miles/ Meals/ Lodging	Lodging for overnight stays for PF positions per commissioner's plan. An average of 2 nights per year equates to around 6 stays. Meals during work travel over PF positions per commissioner's plan. An average of 6 meals per year equates to around 18 meals.	Easement sites will be scattered throughout the prairie pothole region of MN, and will require travel to monitor and assist the landowners and producers. Travel may be several hours away from the office and require overnight lodging and the position to be on travel status.					$1,050
							Sub Total	**$2,310**

Travel Outside Minnesota								
							Sub Total	**-**
Printing and Publication								
	Printing	Semi-permanent signs will be designed, printed, and installed at the public facing fence line of the easement to inform the public of the management work being performed. Information such as project funders, project purpose, and objectives will be on the sign. Size will be approximately 18”x24”.	The projects goal is to help other easement holders and land managers utilize virtual fence technology to manage grasslands. Signage that can be utilized 24 hours a day, 7 days a week will help achieve that goal.					$2,400
							Sub Total	**$2,400**
Other Expenses								
							Sub Total	**-**
							Grand Total	**$686,000**

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Equipment, Tools, and Supplies		Virtual fence collars (100 collars)	The use of the collars is required in order for this project to be successful **Additional Explanation :** Virtual fence collars have one purpose, to precisely graze livestock. The collars will be utilized by the producer beyond the grant timeline for grassland management.
Equipment, Tools, and Supplies		Field day event supplies	Events will be in remote areas without sanitation facilities. Providing snacks/lunch and water will attract attendees to the event, and keep them engaged.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
In-Kind	University of Minnesota Extension	Financial support for graduate student and supervisor and associated expenses for position support. Existing state funds will be matched against LCCMR funds to make the position whole.	Pending	$60,000
			State Sub Total	**$60,000**
Non-State				
Cash	NoFence - Virtual fence company	NoFence is reducing the cost from $280 to $225 per collar for 100 collars, thus saving our project $10,500 of expenses.	Pending	$5,500
In-Kind	USDA/ Natural Resource Conservation Service	Financial support for staff and associated expenses for position support. We have federal match to leverage the LCCMR funds. We will also seek other federal contributions to match and leverage ENRTF dollars.	Secured	$80,000
In-Kind	Livestock producer in-kind contributions	Livestock producer will work with their livestock to train them to virtual fence collars. Producer will spend time checking on livestock, hauling/piping water, maintaining fence, maintaining collars, health checks, and other management of livestock to ensure they are managing the grasslands appropriately.	Pending	$60,400
In-Kind	NoFence - Virtual Fence Company	NoFence will contribute up to $25,000 of in-kind support, including agency training, field day planning, promotion, and on-site attendance at each of the four proposed field days.	Pending	$25,000
			Non State Sub Total	**$170,900**
			Funds Total	**$230,900**

Total Project Cost: $916,900

This amount accurately reflects total project cost?

Yes

Acquisition and Restoration

Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
Prairie, Savanna, and Wetland ecosystems on MN DNR Wildlife Management Area or U.S. Fish and Wildlife Service Waterfowl Production Areas	Statewide	Public lands located in the prairie, savanna and wetland ecosystems will be chosen for this project because our effort evaluating virtual fence capabilities in livestock management of grasslands, and the collars ability to keep livestock contained to a specific area to positively or negatively impact the vegetation. Prairie, savanna and wetland ecosystems are grass dominated landscapes whose threats of degradation are from volunteer trees and herbaceous invasive/aggressive species all combine efforts within these ecosystems.	Restoration	200	-	$84,300	Public	MN DNR or US Fish and Wildlife Service	Has Not Begun
Prairie, Savanna, and Wetland ecosystems on RIM Easement, USFWS Easement, WRE Easement, NGO Easement	Statewide	Easements and public lands located in the prairie, savanna and wetland ecosystems will be chosen for this project because our effort evaluating virtual fence capabilities in livestock management of grasslands, and the collars ability to keep livestock contained to a specific area to positively or negatively impact the vegetation. Prairie, savanna and wetland ecosystems are grass dominated landscapes whose threats of degradation are from volunteer trees and herbaceous invasive/aggressive species all combine efforts within these ecosystems.	Restoration	400	-	$168,600	Private	BWSR, USFWS, USDA, NGO	Has Not Begun
Totals				**600**	**0**	**$252,900**			

Restoration

1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.
All research work, perimeter fencing work, and virtual fence collar work funded through this grant will occur on land protected by a conservation easement or under public ownership.

2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.
Pheasants Forever will work with land owner/managers to complete research in accordance with agencies management plans in accordance with accepted best management principles. These plans will likely be housed by both Pheasants Forever and the agency that owns the land or easement on the land. Long term implementation of these plans will be the responsibility of the owner/manager of the property.

3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" in order to ensure ecological integrity and pollinator enhancement.
These research and restoration efforts will follow BWSRs "Native Vegetation Establishment and Enhancement Guidelines" as well as best practices established by MN DNR and USFWS. Since this research will look at new technology to control woody and invasive vegetation, the established guidelines will be followed, but some limits may be pushed for research purposes.

4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.
Long-term maintenance and management of these site will be the responsibility of the owner/land manager. We hope to use this opportunity to work with the owners/managers to develop a long-term grazing management plan that follows the protocols learned during this process.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.
We will notify the Conservation Corps of Minnesota if we are funded and make them aware of the perimeter fencing contracts we will be soliciting quotes to complete.

6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.
Evaluation will be completed on parcels where research and grazing activities were implemented both initially after activity completion and three years later.

Attachments

Required Attachments

Map

File: 432e34a2-94d.pdf

Alternate Text for Map

Map of MN showing work area of projects. Image of potential paddocks within an easement. Livestock being contained by virtual fence....

Financial Capacity

Title	File
Secretary of State - Evidence of Good Standing	aa334cf5-4d7.pdf
Audited Financial Statement	07284953-249.pdf
IRS 990 Short Form - Public Inspection Copy	ab7fe5a7-752.pdf

Board Resolution or Letter

Title	File
PF Authorization Letter	150bbd66-bd6.pdf

Supplemental Attachments

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

Title	File
BWSR Letter of Support	f42cbcc2-02f.pdf
NoFence Letter of Support	ea270d32-350.pdf
Minnesota Grazing Lands Conservation Association	b6be5119-894.pdf
Minnesota State Cattlemen's Association	d7b748b1-6ec.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

Yes: Restoration,

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?

Yes

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 proposal:

Eric Mousel, University of Minnesota Extension; Greg Hoch, Minnesota Department of Natural Resources; Maura Curry, Pheasants Forever; Matt Holland, Pheasants Forever

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