



Environment and Natural Resources Trust Fund

2025 Request for Proposal

General Information

Proposal ID: 2025-069

Proposal Title: Native Forages: Growing Drought and Climate Resiliency

Project Manager Information

Name: Sabrina Claeys

Organization: Ducks Unlimited Inc

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Project Basic Information

Project Summary: Increasing ecosystem function and landscape resiliency by collaborating with the grazing community to establish and enhance native forages on working lands to improve ecological, economical, and climate resiliency.

ENRTF Funds Requested: \$3,020,000

Proposed Project Completion: June 30, 2031

LCCMR Funding Category: Methods to Protect or Restore Land, Water, and Habitat (F)

Project Location

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

Region(s): NW, Central,

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

Region(s): Central, NW,

When will the work impact occur?

During the Project and In the Future

Narrative

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

With the ever-changing climate, drought continues to impact Minnesota's natural resources and farming community. Western Minnesota was once covered in tallgrass prairies and pothole wetlands, providing essential ecosystem services to Minnesota's natural resources. The landscape has now been converted to row crop agriculture and introduced cool season grasses, unable to provide the benefits that native grasslands once did. The loss of these ecosystems comes with the price of losing invaluable wildlife populations, such as the Monarch Butterfly, whose estimated overwintering populations are down 59.6% from 2022-2023's estimate. Additionally, Northern Pintails, a grassland nesting duck, has seen a 43% decrease in their long-term average population. The loss of native grasslands has not only removed habitat for a large suite of pollinators and birds but also negatively affected water quality, soil erosion and sediment loading in streams and wetlands by removing native plants. The loss of these drought resilient grasslands has also made livestock producers rely heavily on feeding additional hay in times of even moderate drought, digging into industry profitability. By incorporating diverse native grasslands back into Minnesota's working farms, livestock producers can improve drought resilience while simultaneously providing habitat to critical species and making Minnesota's landscape more climate resilient.

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.

Native Forages (NFs) deliver multiple benefits to Minnesota's natural resources. By establishing NFs, we are growing our drought and climate resilience in Minnesota, sequestering more carbon, and increasing water infiltration to reduce runoff and sediment loading in wetlands and streams. Livestock are the management tool necessary for maintaining grasslands on the landscape. Integrating NFs into livestock operations creates a win-win situation for conservation and the grazing community. To address this urgent climate issue and avoid any further undesirable consequences, Ducks Unlimited (DU) is proposing to use LCCMR funds to convert degraded pastures or marginal cropland into NF pastures. DU would like to take this innovative approach to effectively and efficiently address climate change and grassland habitat loss. To ensure success, interested producers would work with DU staff to establish a grazing plan and coordinate site preparation and seeding by utilizing conservation contractors. The producer will exclude livestock from the establishing pasture, making it unprofitable for a short window. DU plans to provide the producer with a deferment payment to offset the cost of deferment. Producers will maintain these practices in their own interest of increased profit margins for their operation, making these practices have a lasting longevity on the landscape.

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?

Incorporating NFs into working livestock operations will improve grassland wildlife diversity, climate and drought resiliency, and enhance soil health and water quality. NFs are adapted to Minnesota and in turn, Minnesota's wildlife is adapted to NFs. Native grasslands are a dynamic system and require management, historically accomplished through bison grazing and fire, to be functional for the wildlife that depend upon them. Working with livestock producers to establish NFs through this project will ensure that best management practices will be used to increase native grasslands and manage them to provide long-term benefits to Minnesota's natural resources and grassland wildlife habitat.

Activities and Milestones

Activity 1: Establish and restore 2,500 acres of native forages into working livestock operation to improve climate and drought resilience.

Activity Budget: \$2,260,000

Activity Description:

Incorporating NFs on working lands is part of the climate change solution in Minnesota. As stewards of the land, livestock producers will voluntarily convert marginal land to NFs to build Minnesota’s climate resiliency, restore native grasslands, and provide operational flexibility. Livestock producers normally would not voluntarily convert, due to the time and cost involved. The combination of site preparation and seed cost alone can cost upwards of \$800, not including the cost of infrastructure needed. Additionally, producers sacrifice these pastures for nearly 3 years, adding forgone income. DU plans to address these barriers by providing technical assistance and financial assistance to integrate NF into pastures, accomplishing conservation goals, and improving livestock operations. DU sees this as an opportunity to work with the grazing community to restore native grasslands and protect them in the future. DU will work with producers one-on-one to identify producer objectives, develop a grazing management plan and coordinate with contractors to complete site preparation and seeding. Producers will also receive a deferment payment for the 3 years of lost income. Once established, producers will manage these pastures as part of their rotational system, creating wildlife habitat, building climate resiliency, improving soil health and water quality.

Activity Milestones:

Description	Approximate Completion Date
Contract out site preparation for 2,500 acres through chemical, burning, and light disking methods.	June 30, 2027
Plant prepared sites with native grassland mixes using broadcast seeders or no-till drills through contractors.	June 30, 2027
Allow adequate rest for natives to establish. Provide producers with 2-3 years of deferment payments.	October 31, 2029
Allow livestock grazing on established native grasslands as a maintenance tool.	October 31, 2030

Activity 2: Development of targeted outreach and adding technical capacity to write 100 grazing plans for enrolled livestock producers.

Activity Budget: \$670,000

Activity Description:

DU grazing specialists will meet with livestock producers one-on-one, to create a grazing management plan that improves drought tolerance, addresses resource concerns, and aligns with the operators’ goals. Grazing and managing NFs will likely be a new type of management for many of these producers, therefore having a written plan in place to follow step-by-step instructions will be crucial. Additionally, having a technical expert, i.e. DU grazing specialists, will be necessary for when questions or concerns arise. Prior to any NF establishment, we will conduct targeted outreach to encourage landowner signup and education. This may include, written educational documents, public workshops, webinars, and field tours. The success of this project will rely on DU specialists to communicate effectively with livestock producers and contractors. Currently, DU employs two grazing specialists in MN, however with the funding of this project, we would like to hire an additional specialist to focus on the delivery and coordination to ensure on-the-ground success of each project. That specialist will correspond with contractors, producers, and other specialists to efficiently deliver this project.

Activity Milestones:

Description	Approximate Completion Date
Hire 1 grazing specialist to assist in the contractor management and grazing plan development.	December 31, 2025
Develop strategic outreach materials and events to educate about native forages.	February 28, 2026
Enroll 2,500 acres into agreements to be converted to native forages.	December 31, 2026
Develop 100 written grazing plans for livestock producers.	June 30, 2028
Attend and present at various conferences across MN and one out of state conference.	June 30, 2031

Activity 3: Collection of data through Integrated Monarch Monitoring Protocol (IMMP) and remote sensing monitoring on selected project sites.

Activity Budget: \$90,000

Activity Description:

Monarch and pollinators are excellent indicators of grassland health. By monitoring monarch populations and tracking shifts in their habitat utilization we gain valuable insights into the impacts of practice changes on grasslands. MJV will conduct monitoring activities utilizing the POLLi remote sensing habitat evaluation platform and the Integrated Monarch Monitoring Protocol to collect data about monarch nectar resources, milkweed stems, and monarch use of the project sites before and after native forage establishment. MJV will work with DU and enrolled landowners to select sites and receive appropriate permissions and access. A minimum of 250 acres will be selected for monitoring across at least 5 separate project locations. Baseline monitoring will begin as soon as project sites are enrolled. Follow-up monitoring will occur in 2027 to capture initial changes in monarch use, nectar plant, and milkweed availability. Data processing and analyses will be conducted between field seasons and at project completion. Data summaries will be provided to landowners for each site surveyed and will be aggregated into a summary report for broader consumption. Site reports will include metrics like measures of common milkweed (*Asclepias syriaca*), percent coverage of blooming nectar resources, and additional monarch use data gathered by IMMP.

Activity Milestones:

Description	Approximate Completion Date
Select 250 acres to be monitored throughout the length of the project.	December 31, 2025
Conduct Pre-NF establishment site monitoring utilizing some combination of remote sensing and IMMP.	October 31, 2026
Post-NF establishment monitoring utilizing some combination of remote sensing and IMMP.	October 31, 2029
Post grazing monitoring utilizing some combination of remote sensing and IMMP.	October 31, 2030
Final reports created and distributed to professionals and livestock producers.	June 30, 2031

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Dale Gentry	Audubon Society	Audubon Society is in support of this project as it aligns with their Conservation Ranching Program. We foresee some producer overlap looking to enroll into both programs. Audubon has agreed to provide outreach support as applicable.	No
AnnMarie Krmpotich	United States Fish and Wildlife Service	USFWS will be providing 10,000 dollars of in-kind match for technical assistance with seed mix development, project delivery, and landowner outreach.	No
Kaitlyn Root	Minnesota State Cattlemen's Association	MSCA is an organization that represents MN cattle producers and its industry. They are in support of this project, as is it aims to improve natural resources and cattle operations. They will assist with outreach to producers when staff is available.	No
Josh Pommier	Pheasants Forever and Quail Forever. Inc.	PF/QF's mission aims to conserve upland habitat for wildlife, which aligns with our project. Additionally, they have grazing specialist staff that will help advocate for this program.	No
Brittany Smith	Monarch Joint Venture	MJV will be assisting with ecological monitoring of this project. Native, well-managed grasslands are important habitat for pollinators, such as the monarch butterfly. MJV will be collecting data on monarch nectar sources, which benefit pollinators and livestock.	Yes

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?

Aside from the documented, long-term benefits NFs have on the landscape, through the delivery of this project, DU will strive to raise awareness of the benefits that grazing NFs have on climate resiliency and nesting waterfowl populations. After this project is complete, DU will encourage producers to share the benefits of these NF plantings. Furthermore, DU plans to continue funding these efforts through a Regional Conservation Partnership Program with NRCS converting more acres to NFs, building landscape connectivity and ecosystem resilience. It would also provide opportunities for producers to enroll in easements ensuring these grasslands stay on the landscape.

Project Manager and Organization Qualifications

Project Manager Name: Sabrina Claeys

Job Title: Regional Grazing Biologist

Provide description of the project manager's qualifications to manage the proposed project.

B.S. Wildlife Ecology Research and Management – University of Wisconsin – Stevens Point, Stevens Point, WI. 2019 Sabrina has experience working directly with private landowners through partnerships with NRCS since 2020. Previously, she worked for Pheasants Forever and Quail Forever Inc, in Louisiana as a Farm Bill Biologist, writing management plans and delivering habitat management through voluntary conservation programs. She started working as a Grazing Biologist for Ducks Unlimited in November of 2022. Over the past year, she has established strong partnerships with various state, federal, other non-government organizations and livestock producers across the state. She has written dozens of grazing plans over the last year, totaling up to nearly 10,000 acres of improved grazing management in the state of Minnesota. With her current and previous experience, she is equipped to writing grazing management plans and provide technical assistance to livestock producers in Minnesota. Sabrina will be working in collaboration with Mae

Petrehn, DU Grazing Biologist in Long Prairie, and Ryan Diener, DU Grazing and Grassland Coordinator to deliver this project.

Organization: Ducks Unlimited Inc

Organization Description:

Ducks Unlimited (DU) is a 501c3 non-profit conservation organization dedicated to the restoration and management of wetlands and associated habitats for North America's waterfowl. The ecological goods and services that these habitats provide also provide immense benefit for other wildlife and as well as people. Waterfowl conservation is facing important challenges as wetlands and other habitats continue to decline across the continent. Ducks Unlimited has a vision to reverse this trend. DU's vision is wetlands sufficient to fill the skies with waterfowl today, tomorrow and forever. DU's goal is to achieve our shared vision through diverse public and private partnerships to address these challenges on a landscape level. DU's vision is to work in partnership with farmers, ranchers, landowners, cooperatives and commodity groups, financial institutions, corporations, municipalities, and policy makers to achieve sustainable agricultural landscapes that provide economic prosperity and healthy communities for people while growing our conservation impact in the highest priority landscapes for North America's waterfowl. DU has collaborated with multiple partners within the grazing space to support and assist in the delivery of conservation programs and initiatives that support practices that provide benefit to grasslands and grazing operations.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
New Grazing Biologist		New hire to coordinate with contractors, provide technical assistance and outreach opportunities to producers.			20%	3		\$388,800
Grazing Biologist		Delivery of technical assistance to private landowners within the project area.			20%	6		\$194,400
Grazing Program Coordinator		Supervision of field staff and project coordination			20%	3		\$21,360
							Sub Total	\$604,560
Contracts and Services								
TBD	Professional or Technical Service Contract	This contractor will assist with site preparation of this project for all native forage establishment. They will likely use a combination of herbicides, prescribed burning, and disking if necessary. We expect this to cost roughly \$150 per acre between labor, chemical, and equipment cost.				0		\$375,000
TBD	Professional or Technical Service Contract	This contractor will assist with the seeding of the native forages, likely using large no-till drill or broadcast equipment, which is not accessible to all producers. We expect competitive bids to be roughly \$50 per acre.				0		\$125,000
Monarch Joint Venture	Sub award	MJV will provide monitoring services to quantify the work implemented in this project. They will be completing pre establish and post establishment monitoring.				3		\$90,000
							Sub Total	\$590,000
Equipment, Tools, and Supplies								
	Tools and Supplies	Grazing Sticks (127 sticks)	Design and purchase of "grazing sticks", which are used to assist in grazing management decisions. Additionally,					\$1,270

			they will be used for landowner outreach and education.					
	Tools and Supplies	Diverse native forages seed cost (2,500 acres at \$300/acre)	Diverse native forage mixes will be purchased by DU and provided to the contractor the day of seeding. Seed design will be completed by DU grazing specialist, with the help of partner organizations.					\$750,000
							Sub Total	\$751,270
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	15,000 miles per year for 3 employees, 20 nights of lodging for \$150/night, 60 meals per year at \$20/meal.	Compensation for overnight travel to landowner site visits and project delivery					\$42,750
	Conference Registration Miles/ Meals/ Lodging	3 conferences per year, 3,000 miles per year, 10 nights of \$150/night, 30 meals at \$20/meal. Conference registration \$200 per conference.	Overnight conference travel and registration to present project results					\$14,130
							Sub Total	\$56,880
Travel Outside Minnesota								
	Conference Registration Miles/ Meals/ Lodging	1 conference per year, 3 nights at \$150/night, 9 meals at \$20/meal, 1 roundtrip airline ticket at \$500, \$500 registration	Out of state conference travel and registration to present project results.	X				\$4,290
							Sub Total	\$4,290
Printing and Publication								

	Printing	1,000 copies of 5 handouts (.40 per copy)	Project outreach and educational materials					\$2,000
	Printing	Grazing plans and agreements (\$10 each, 100 producers)	Written grazing plans and long-term agreements will be printed for producers to follow and keep for their records. Documents included: grazing plan, maps, seed mix, sign agreement, folder, etc.					\$1,000
							Sub Total	\$3,000
Other Expenses								
		Deferment pasture cost	Offset of forgone income to establish the native forages on working lands for up to 3 years.	X				\$760,000
		Infrastructure Cost	The producer will have the option to install permanent or temporary fence around NFs, if it does not already exist. We will cost share the 100% NRCS EQIP rate to help assist with fencing cost. Additionally, if water infrastructure (water trough, livestock pipeline, and HUAPs) is needed, it will also be cost shared to the 100% NRCS EQIP rate for that year.					\$250,000
							Sub Total	\$1,010,000
							Grand Total	\$3,020,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Travel Outside Minnesota	Conference Registration Miles/Meals/Lodging	1 conference per year, 3 nights at \$150/night, 9 meals at \$20/meal, 1 roundtrip airline ticket at \$500, \$500 registration	Conference out of state to present results of this project.
Other Expenses		Deferment pasture cost	This budgeted item is crucial for the delivery of this project to ensure establishment success and producer "buy-in". The budget item is based on the average CRP rental rate for the counties designated for this project. The 2024 average rate in the designated counties is \$135 per acre. We anticipate that each producer will need a minimum of 2 years, possibly 3 to ensure success. 2 years of a deferment for 2,500 acres equal 675,000 dollars. An additional 85,000 is being asked for incase a producer needs a third year of deferment. We expect 25% will need an additional year of deferment.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
In-Kind	United State Fish and Wildlife Service	USFWS will be providing in-kind support to assist with technical assistance, professional consulting on seed mix design, and outreach efforts.	Secured	\$10,000
			Non State Sub Total	\$10,000
			Funds Total	\$10,000

Total Project Cost: \$3,030,000

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
Private Landowners in MN	Becker, Clay, Douglas, Grant, Kittson, Mahnomen, Marshall, Wilkin, Wright, Traverse, Todd, Stevens, Stearns, Sherburne, Roseau, Red Lake, Pope, Polk, Pennington, Otter Tail, Norman, Morrison, Meeker, Kandiyohi,	Prairie	Restoration	2,500	-	\$2,260,000	Private		Has Not Begun
Totals				2,500	0	\$2,260,000			

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 land to be restored will be on privately owned land. The enrolled private landowner will sign a 10-year agreement with DU as a commitment to protect and maintain the restored area, and not drain or tile any wetlands present. Producers will maintain these practices in their own interest to have drought resiliency and increase profit margins for their operation. These lands have the potential to be enrolled into an easement with USFWS, BWSR, or NRCS, if the producer chooses.

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.

We plan to utilize contractors to complete the restoration work being proposed. Site preparation will be completed using herbicides, prescribed fire, and light disking. Each site will have a separate site preparation plan, as they could change depending on the producer's goals and site conditions. Seeding will be completed by a contractor using either a no-till native seed drill or a broadcast seeder, depending on equipment availability. The restored area will need to be deferred for at least 1 full year, likely 2 or 3 before grazing will commence to properly establish. Each producer that enrolls into the project will follow a prescribed grazing plan for the designated restoration area. In that plan, there will be recommendations for grazing seasonality, longevity, and stock rates. On average, we expect each producer to restore 25 acres, with a minimum of 5 acres. After the grazing plan and agreement is signed, DU will hold and maintain those agreements for the lifetime of the agreement. They will maintain the relationship with the producers and consistently monitor these sights as time progresses. If other long-term management is desired with cost share (prescribed fire, brush management, etc), the producer will need to find that on their own.

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.

DU grazing specialists will write an in-depth restoration plan for each producer that enrolls acres into this project. This plan will include site preparation methods, site history, seed mix, and management requirements and recommendations following the planting. DU grazing specialists will utilize BWSR's guidelines to help make site preparation and seed mix decisions on each individual restoration plan. The intent of these seed mixes will have multiple objectives: increasing diversity, providing pollinator and bird habitat, livestock palatability and forage health. Species selection will all be native to Minnesota and will be based on the ecological sections and subsections. DU specialists will collaborate with other entities, such as MNDNR, BWSR, and USFWS to design these seed mixes.

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.

After the establishment is complete and the producer will maintain that native stand with the use of livestock, haying, and/or burning. These NF pastures will be a part of the producers rotational grazing system, providing them with a drought resilient pasture and operation flexibility. Once established, these pastures will help increase operation profitability and could turn into more NF pastures, when producers see the benefits. Within our agreement with the producer, they will be restricted to not plow, tile, interseed, or intentionally hurt the established stand. Any maintenance needed outside the funded project will be the private landowner's fiscal responsibility. Cost share assistance may be available through NRCS.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.

Our contractors have not been advertised or decided. As we go through that process, we will consider having a Conservation Corp crew conduct our restoration efforts, if they are available.

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.

We've partnered with Monarch Joint Venture to help us conduct monitoring during the project. They will be taking preliminary data on at least 250 acres of the 2,500-acre project. They will then re-survey those sites after establishment and after one year of grazing management. Also, DU specialists will evaluate the success of the planting and identify problems in year 1 and 3 of the establishment. Over the lifetime of the agreement, DU staff will visit these sites, identifying both successes and challenges. These findings will help other practitioners refine their restoration skills in Minnesota.

Attachments

Required Attachments

Map

File: [8c2fc1ea-560.pdf](#)

Alternate Text for Map

This map depicts where our project will be conducted and how it overlaps with the Prairie Pothole Region and DNR native plant communities. The PPR is a high priority for DU as it relates to nesting and migrating waterfowl. Additionally, we want this work to connect to native plant communities....

Financial Capacity

Title	File
DU Financials	a33a76b6-255.pdf
DU 990 - FY22	65c106e0-9df.pdf
Nonprofit Good Standing	2d5246e5-08b.pdf

Board Resolution or Letter

Title	File
Signed Board of Resolution Letter	156e66f9-357.pdf

Supplemental Attachments

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

Title	File
Audubon Society Letter of Support	c5ca2644-5e3.pdf
USFWS Letter of Support	5dccb4b2-f7e.pdf
MN Cattlemen's Association Letter of Support	a172f333-b4e.pdf
Monarch Joint Venture Letter of Support	f5449963-706.docx
Pheasants Forever Letter of Support	686011af-eb9.docx

Administrative Use

Does your project include restoration or acquisition of land rights?

Yes: Restoration,

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 proposal:

Sabrina Claeys and Ryan Diener both with Ducks Unlimited Inc.