



Environment and Natural Resources Trust Fund

2025 Request for Proposal

General Information

Proposal ID: 2025-281

Proposal Title: Linking Health Benefits of Nature to Conservation Mindedness

Project Manager Information

Name: Carol Strecker

Organization: Minnesota Zoological Garden

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Project Basic Information

Project Summary: Diverse patients of Children’s Minnesota health system will experience the health benefits of connecting to nature, increasing families’ affinity for nature and laying the foundation for a lifelong conservation ethic.

ENRTF Funds Requested: \$298,000

Proposed Project Completion: June 30, 2027

LCCMR Funding Category: Environmental Education (C)

Project Location

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

Statewide

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

Narrative

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

Nature experiences provide mental and physical health benefits, as well as establish a connection to nature that helps establish a conservation ethic. To preserve Minnesota's natural resources for future generations we must strengthen diverse communities' connection to nature by removing barriers, especially for those with lower income, transportation limitations, language barriers, mental health and sensory challenges, and disabilities. A small pilot program to address these barriers provided patients and families at Children's Minnesota with nature prescriptions to experience nature at the Minnesota Zoo at no cost.

The Minnesota Zoo is an accessible, contained, and controlled environment that can be utilized as a first step into nature. Results indicated that families were overwhelmingly positive about receiving the prescriptions and visiting the Zoo for a nature experience. Children's providers also increased the frequency of discussing the benefits of nature in health visits.

Recommendations for expansion of the program outlined the need to reach additional lower income and diverse families, to reduce the transportation barriers, and to include additional urban and rural clinics across the Children's network.

This proposal creates a healthcare system-state partnership to bring multiple sectors into the cause of protecting our planet and improving health outcomes for families 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.

To expand access to nature-based experiences, we will apply lessons learned from a small self-funded Prescription for Nature pilot co-designed and delivered by Children's Minnesota and the Minnesota Zoo.

We will train providers in 11 primary care and mental health clinics within the Children's Minnesota network statewide to help patients and families understand the connection between nature experiences and health outcomes, and how to issue nature prescriptions during routine, mental health and specialty clinic visits, which include free passes to the Minnesota Zoo. For patient families with language and/or transportation barriers, translated materials and transportation options will be provided. Children's Minnesota will also work with the Zoo to co-design and deliver public programs at the Zoo, featuring providers sharing their expertise on the value of nature connection to health outcomes during the Zoo's annual wellness events and programming.

To ensure the success of the program, we will work to integrate the Prescription for Nature procedure and documentation into the Children's Minnesota electronic medical record system and an evaluator will develop a framework to measure the effectiveness of all activities, as well as the impact of the prescriptions and nature experiences on patients and their families to inform further expansion.

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?

Engaging youth and families in nature can have positive health impacts while also promoting lifelong stewardship of Minnesota's natural resources. When people recognize the benefits of nature to their health, they are more likely to want to care for and preserve nature.

As a result of the proposed project,

- Diverse patients of 11 Children's Minnesota clinics will experience the health benefits of nature at the Minnesota Zoo and report an increased affinity for nature

- Children’s Minnesota providers will report an increase in including nature-based experiences in treatment plans and report an increased affinity for conserving Minnesota’s natural resources.

Activities and Milestones

Activity 1: Develop, Create Systems to Support, and Deliver Prescriptions for Nature

Activity Budget: \$83,000

Activity Description:

Based on the initial pilot, Children’s Minnesota and the Minnesota Zoo will revise the Prescription for Nature documentation and procedures. Input from pilot providers suggested including an easy-to-follow checklist on the health benefits of nature to give to families, and integrating the nature prescriptions into the patients’ electronic medical record. We will also revise and improve the training for providers including practical tips, networking and sharing best practices for delivery and follow-up. A contracted evaluator will develop and implement an evaluation plan to measure the effectiveness and long-term feasibility of this program to inform future expansion, as well as test providers’ contribution to our theory of change—measuring providers’ affinity for conserving Minnesota’s natural resources before, during, and after implementation.

Activity Milestones:

Description	Approximate Completion Date
Design, translate, and produce Prescription documents.	September 30, 2025
Integrate Prescription for Nature documentation into Children’s Minnesota electronic medical record system.	January 31, 2026
Train providers on health benefits of nature and implementing Prescriptions for Nature with patients.	March 31, 2026
Providers deliver Prescriptions for Nature during clinical visits.	May 31, 2026
Evaluate provider experience - effectiveness of training, Prescription protocol, and affinity for conserving natural resources.	September 30, 2026

Activity 2: Facilitate Nature Experiences at the Minnesota Zoo and Evaluate Program Outcomes and Effectiveness

Activity Budget: \$215,000

Activity Description:

Patients and their families will be provided with passes to the Minnesota Zoo to experience nature-based programming throughout the spring, summer, and fall of 2026. In order to facilitate access, we will first investigate and develop transportation solutions such as rideshare vouchers, public transit options, or shuttle buses.

During the redemption season, Children’s Minnesota and the Minnesota Zoo will collaborate to develop and deliver onsite public programming at the Minnesota Zoo to engage with guests about the benefits of nature to health and the importance of preserving Minnesota’s natural resources to protect these benefits. The partnership will explore and expand on existing strategies already in place through initiatives such as One Health, which seeks to achieve optimal health outcomes recognizing the interconnections between people, animals, plants, and their shared environment, and Planetary Health, which focuses on analyzing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth.

A contracted evaluator will develop and implement an evaluation plan to measure the effectiveness of this program, as well as test patients’ contributions to our theory of change—measuring patient families’ affinity for conserving Minnesota’s natural resources before, during, and after implementation.

Activity Milestones:

Description	Approximate Completion Date
Develop transportation solutions.	January 31, 2026
Patients and families redeem their Prescriptions for Nature by visiting the Minnesota Zoo.	December 31, 2026
Co-design and deliver Zoo public programming regarding health benefits of nature.	December 31, 2026
Evaluate patient experience - effectiveness of Prescription, nature experiences, and affinity for conserving natural resources.	March 31, 2027
Develop broader implementation plan.	June 30, 2027

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Dr. Molly Sajady, DO, MPH	Children's Minnesota	Physician Collaborator: Serve as the main representative of Children's Minnesota to facilitate access to the Children's network of clinic providers and their patients and families. Communicate with administrative leadership regarding grant implementation and processes. Collaborate regularly with project manager and advisors to ensure the proposal is executed as planned.	Yes
Dr. Pam Heggie, retired pediatrician and Master Naturalist	Retired	Advisor: Provide guidance about and participate in provider training, nature prescription content and integration into clinic visits and nature-based activities for children and families	No
Dr. Cathy Jordan, Professor of Pediatrics; Director of Research	University of Minnesota Medical School; Children & Nature Network	Advisor: Provide research-based guidance for training providers and developing public programming at the Zoo	No

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?

Connecting families to outdoor experiences is the foundation for commitment to environmental stewardship. Long-term implementation and dissemination of this project will involve partnerships with additional health systems and organizations across the state. One strategy for expansion that will be investigated is the implementation of nature prescriptions at specific well child visits throughout the state, similar to the Reach Out And Read program model, which integrates the benefits of reading to healthy child development into traditional routine well child visits. Additional ENRTF funding will be sought to enable this broader implementation and to establish additional partnerships to further systematize this initiative.

Project Manager and Organization Qualifications

Project Manager Name: Carol Strecker

Job Title: Director of Learning & Engagement

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

Carol Strecker is the Director of Learning & Engagement at the Minnesota Zoo. Carol has a Bachelor's Degree in Ecology, Evolution, and Behavioral Biology, and a Master's Degree in Science Education from the University of Minnesota and has worked at the Minnesota Zoo since 2009. Carol successfully served as project manager for two previous ENRTF-funded Environmental Education projects awarded to the Minnesota Zoo. Carol has over 30 years of experience connecting people and nature through informal science education in museums, zoos, botanical gardens, and environmental education organizations locally and nationally. In addition to the Minnesota Zoo, her professional experience includes designing and developing the first educational outreach programs for Cedar Creek Ecosystem Science Reserve in East Bethel, MN – an ecological research station for the University of Minnesota; traveling the country for the National Gardening Association as the primary teacher trainer for the NSF-funded Growing Science Inquiry program, which trained teachers in inquiry science education methods using plants and GrowLabs in the classroom; working with educators and community members in Native American reservation communities in northern Minnesota to develop and

implement culturally relevant plant-based science curriculum through the Minnesota Landscape Arboretum; serving as the Assistant Director of Education at the Roger Tory Peterson Institute of Natural History – a national nature education organization that focuses on place-based education through art and nature; and managing the JASON Project and Bell LIVE! through the Bell Museum of Natural History in Minneapolis, MN – national and local programs that utilized distance learning technology to connect students and teachers directly to scientists working in the field.

Organization: Minnesota Zoological Garden

Organization Description:

The Minnesota Zoo is a unique state agency. Established in 1978 to provide Minnesota residents and guests with an opportunity to experience animals in natural habitats, today the Zoo is one of the State’s premier cultural, educational and conservation institutions.

The Minnesota Zoo’s mission is to connect people, animals and the natural world to save wildlife. With 1.3 million guests a year, over 2.7 million website hits annually and state-wide outreach programs reaching thousands more, the Zoo is in an excellent position to strengthen Minnesotans’ awareness and understanding of our State’s commitment to wildlife, science and conservation. The Zoo is the State’s largest environmental educator with more than 500,000 participants in Zoo education programs.

The Minnesota Zoo is also a leader in conservation – directing efforts and partnering with others on a variety of conservation programs at the Zoo, in Minnesota and across the globe. Over the past decade, the Zoo has enhanced its efforts to focus on Minnesota wildlife and habitats, including projects to conserve Minnesota’s native pollinators, bison, muskies, and turtles.

The Zoo has a proven record of using its resources efficiently and effectively, matching the State’s investment with private funds and earned income.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
C. Strecker, Project Manager		Manage overall project implementation			26%	0.2	X	\$37,000
Evaluation & Impact Specialist		Monitor and Evaluate Project Outcomes			31%	0.2	X	\$30,000
							Sub Total	\$67,000
Contracts and Services								
Children's Minnesota	Professional or Technical Service Contract	Coordination of provider training and materials distribution to participating Children's Minnesota clinics, dissemination of Prescriptions for Nature to patients and families, programming opportunities by providers at the Zoo, and collection of evaluation data from providers and patients/families.				0.2		\$66,000
							Sub Total	\$66,000
Equipment, Tools, and Supplies								
	Tools and Supplies	Supplies for Wellness Events & Programming at Minnesota Zoo assuming 20,000 participants	To support hands-on activities and giveaways during onsite wellness events and programming co-designed and delivered by Children's Minnesota and Minnesota Zoo on Zoo site. Based on an assumption of \$.50 per participant x 20,000 participants over the two year grant period					\$10,000
							Sub Total	\$10,000
Capital Expenditures								
							Sub Total	-

Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
							Sub Total	-
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
	Printing	1500 Prescriptions for Nature for patients plus additional non-English language options. Based on assumption of 60 providers giving out an average of 25 prescriptions each.	Provide patients and families with printed passport-like guide to fulfilling their Prescription for Nature, highlighting health benefits of nature, and including specific locations to visit and activities to participate in					\$10,000
							Sub Total	\$10,000
Other Expenses								
		Transportation for patients and families to Minnesota Zoo. Based on the cost of renting a shuttle bus \$1250 x 8 days. Actual transportation options may vary in type and cost.	Eliminate transportation barrier by providing busing or rideshare options					\$10,000
		9000 Prescription for Nature Passes for Minnesota Zoo (60 providers x 25 prescriptions x 6 people/family)	Enable patients and their families to participate in nature-based wellness experiences at the Minnesota Zoo as part of their Prescription for Nature	X				\$135,000
							Sub Total	\$145,000
							Grand Total	\$298,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Personnel - C. Strecker, Project Manager		Manage overall project implementation	Classified : This staff person has the necessary expertise required to successfully coordinate project activities and oversee the contractor duties and prescription for nature recipient elements. ENRTF funding will make it possible for this individual to work on the project for the percentage of time reflected in the budget. Without this funding, they would be unable to support the project with their time. Responsibilities for classified staff will be reprioritized and reallocated as necessary to support the project.
Personnel - Evaluation & Impact Specialist		Monitor and Evaluate Project Outcomes	Classified : This staff person has the necessary expertise required to successfully monitor project outcomes and manage the evaluation elements. ENRTF funding will make it possible for this individual to work on the project for the percentage of time reflected in the budget. Without this funding, they would be unable to support the project with their time. Responsibilities for classified staff will be reprioritized and reallocated as necessary to support the project.
Other Expenses		9000 Prescription for Nature Passes for Minnesota Zoo (60 providers x 25 prescriptions x 6 people/family)	One of the largest barriers identified in the previous pilot informing this proposal for the Children's Minnesota diverse patient communities to experiencing nature in institutions like the Minnesota Zoo is economic access. Providing no cost admission for the Prescription for Nature families removes this barrier. Coupled with the transportation options that will also be offered, the intent is ensure patients can act on the prescriptions directed by their physician providers and the partnership will be able to measure the effectiveness of the prescriptions uncomplicated by the known barriers. Admission cost for this project is based on the Zoo's discounted bulk/group rate.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
			Non State Sub Total	-
			Funds Total	-

Total Project Cost: \$298,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [9965f8e7-06a.pdf](#)

Alternate Text for Visual Component

This is English version of the Prescription for Nature form co-designed by the Minnesota Zoo and Children's Minnesota and utilized by Children's Minnesota providers in the original pilot for this program, which informed the development of this project proposal....

Administrative Use

Does your project include restoration or acquisition of land rights?

No

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")?

Yes

Do you certify that background checks are performed for background check crimes, as defined in Minnesota Statutes, section 299C.61, Subd. 2, on all employees, contractors, and volunteers who have or may have access to a child to whom children's services are provided by your organization?

Yes

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

Dr. Mollika Sajady, Children's Minnesota, Dr. Pam Heggie, retired physician, Dr. Cathy Jordan, University of Minnesota Medical School and Children & Nature Network