

**Environment and Natural Resources Trust Fund
2010 Request for Proposals (RFP)**

LCCMR ID: 092-C

Project Title:

Reconnecting Minnesotas Fragmented Prairie Landscapes

LCCMR 2010 Funding Priority:

C. Habitat Restoration, Enhancement, and Acquisition

Total Project Budget: \$ \$983,189

Proposed Project Time Period for the Funding Requested: 3 years, 2010 - 2013

Other Non-State Funds: \$ \$0

Summary:

This project: builds local capacity for large-scale conservation, restoration, and economic development in five prairie landscapes (~300,000 acres); guides conservation investments across 2,000,000 acres more; and creates detailed implementation plans.

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Sponsoring Organization: The Nature Conservancy

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Location:

Region: Regional

County Name: Statewide

City / Township:

_____ Knowledge Base	_____ Broad App.	_____ Innovation
_____ Leverage	_____ Outcomes	
_____ Partnerships	_____ Urgency	_____ TOTAL

MAIN PROPOSAL

PROJECT TITLE: Reconnecting Minnesota’s Fragmented Prairie Landscapes

I. PROJECT STATEMENT

Tallgrass prairie is the most fragmented major habitat in Minnesota (<1% remaining). Society currently lacks the capacity for the large-scale conservation and restoration needed to secure the future of this critical resource, especially in the face of a warming climate. Reconnection requires focusing conservation in areas with concentrations of native prairie remnants. These places sustain critical ecosystem services ranging from wildlife habitat and water quality to opportunities for renewing local economies. This proposal develops ready-to-implement designs, guidance, and large-scale projects that tap the economic potential of native perennial landscapes.

The Minnesota County Biological Survey (MCBS) mapped nearly all remaining native prairie and identified landscapes with high concentrations of prairie (Map 1). These prairie landscapes represent the greatest opportunities to sustain local economies centered on native perennials. However, native prairie constitutes <5% of these landscapes on average. Reconnection to ensure resilience in the face of a changing climate demands large-scale restoration.

Through the Glacial Ridge Project, The Nature Conservancy (TNC) and partners have demonstrated that high quality habitat restoration can be conducted at a large scale. This unprecedented restoration is one of the largest in the world, reconnecting 13 prairie remnants, mitigating flooding, and protecting drinking water for the City of Crookston. In all, Glacial Ridge boasts 22,000 acres of restored habitat and is a model for reconnecting Minnesota’s prairies.

Based on experience at Glacial Ridge, we will design community-based plans to build capacity for large-scale conservation and restoration within five MCBS prairie landscapes (Map 1), directly impacting ~300,000 acres and creating guidance for an additional 2,000,000 acres. Connectivity plans will integrate renewal of local economies within native perennial landscapes.

The Minnesota Statewide Conservation & Preservation Plan recommends restoring “ecoregion-appropriate landscape-scale complexes of habitat centered on concentrations of existing remnant habitats.” The proposed project advances this work and guides investments in native perennial landscapes (e.g., Lessard Outdoor Heritage Council, Habitat Corridors Partnership).

II. DESCRIPTION OF PROJECT RESULTS

Result 1: Prairie Reconnection Landscape Design Plans

Budget: \$ 371,413

Five landscapes will be selected based on varying land use and environmental conditions (Map 1). In cooperation with local residents and landowners, we will identify priorities for conservation, opportunities to connect and buffer remnant prairies, and compatible economic ventures such as native seed production, sustainable grazing, or haying for bioenergy. Funding proposals for conservation and restoration work will be developed, and a system for tracking progress toward landscape-level goals will be designed.

Deliverable	Completion Date
1. Landscape analysis of 5 prairie landscapes; maps displaying priority lands for restoration, preservation, and economic development.	Spring, 2012
2. Funding proposals for specific projects in each landscape.	Spring, 2012
3. Evaluation and tracking system for each landscape.	Summer, 2012

Result 2: Glacial Ridge Evaluation and Assessment**Budget: \$ 162,555**

We will produce a comprehensive assessment of lessons learned from Glacial Ridge. Although early recovery of vegetation, hydrology, water quality and wildlife has been tracked at fine and medium scales, we lack a full assessment reflecting all 22,000 acres. We will analyze existing data sets, fine-tune large-scale monitoring protocols, and implement a final round of vegetation monitoring to maximize learning from this project.

Deliverable	Completion Date
1. Preliminary analysis of existing data; refinement of monitoring protocol.	Fall, 2010
2. Strategic collection of additional vegetation recovery field data.	Summer, 2011
3. Scientific publication on restoration monitoring at Glacial Ridge.	Spring, 2012

Result 3: Large-scale Restoration Guidelines**Budget: \$ 242,636**

Customized restoration guidelines, modeled on Glacial Ridge, will be developed for each of five prairie landscapes; a generalized framework will also be provided. Specific guidance will focus on building local capacity (e.g., for adequate native seed sources and invasive species management). Guidelines will include cost-effective monitoring approaches at large scales, currently lacking due to inherent costs of gathering detailed information across large areas.

Deliverable	Completion Date
1. Restoration needs assessment for priority areas in each landscape.	Fall, 2011
2. Implementation plan for all priority restorations (with cost estimates).	Spring, 2012
3. Landscape-level analysis of current restoration capacity.	Summer, 2012
4. Monitoring plans for all priority restorations.	Fall, 2012
5. Generalized framework for large-scale prairie restorations.	Spring, 2013

Result 4: Native Perennial Economic Development Frameworks**Budget: \$ 206,586**

We will generate economic development plans identifying economic barriers to large-scale conservation and restoration for each landscape. Strategies will focus on removing obstacles to sustainable agriculture and explore innovative business solutions such as: grass-fed beef, grazing collaboratives, native seed production, second-generation bioenergy, carbon markets.

Deliverable	Completion Date
1. Economic development framework and map for each of five landscapes.	Winter 2011/2012
2. Report on enhancing conservation business capacity.	Fall, 2012

III. PROJECT STRATEGY**A. Project Team/Partners**

The Nature Conservancy (Project lead); University of Minnesota (Restoration expertise, monitoring oversight, economic development models); DNR – Div. Ecological Resources; DNR – Sec. of Wildlife; U.S. Fish and Wildlife Service (Glacial Ridge National Wildlife Refuge); Board of Water and Soil Resources (RIM easements).

B. Timeline Requirements: This project will be conducted over a three-year period.

C. Long-Term Strategy

This proposal addresses fundamental planning needs and guidelines for a long-term prairie landscape conservation and restoration initiative. Funding for acquisition, easements and restoration will be requested from Minnesota Capital Investment funds (bonding), the Lessard Outdoor Heritage Council, and federal and private sources.

Project Budget (Reconnecting Minnesota's Fragmented Prairie Landscapes)

IV. TOTAL PROJECT REQUEST BUDGET (3 years)

BUDGET ITEM	AMOUNT
Personnel:	
Project Manager (0.5 FTE (73% salary, 27% benefits) over 3 years; Responsible for Project Oversight and Res. 1- Landscape Plans	\$ 122,850
Landscape Outreach Coordinator (0.5 FTE (73% salary, 27% benefits) over 3 years) Responsible for identifying protection and restoration funding opportunities and developing proposals (Res. 1, 3)	\$ 92,138
Prairie Ecologist (0.5 FTE (73% salary, 27% benefits) over 3 years; Technical support for Res. 1 (Evaluation system), Res. 2 (Glacial Ridge Evaluation/Assessment), and Res. 3 (Restoration guidelines)	\$ 122,850
Contracts:	
University of Minnesota (Galatowitsch) Glacial Ridge Evaluation and Assessment; Large-scale restoration Guidelines (Res. 3)	\$ 303,765
University of Minnesota (Polasky) Native Perennial Economic Development Models (Res. 4)	\$ 186,586
Equipment/Tools/Supplies:	
Acquisition (Fee Title or Permanent Easements):	
Travel:	
For relevant staff members over 3 years and across the 5 landscapes	\$ 90,000
Additional Budget Items:	
Eight quarterly partner meetings x 5 landscapes (total of 40 sessions)	\$ 40,000
Publication costs	\$ 25,000
TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$ 983,189

V. OTHER FUNDS

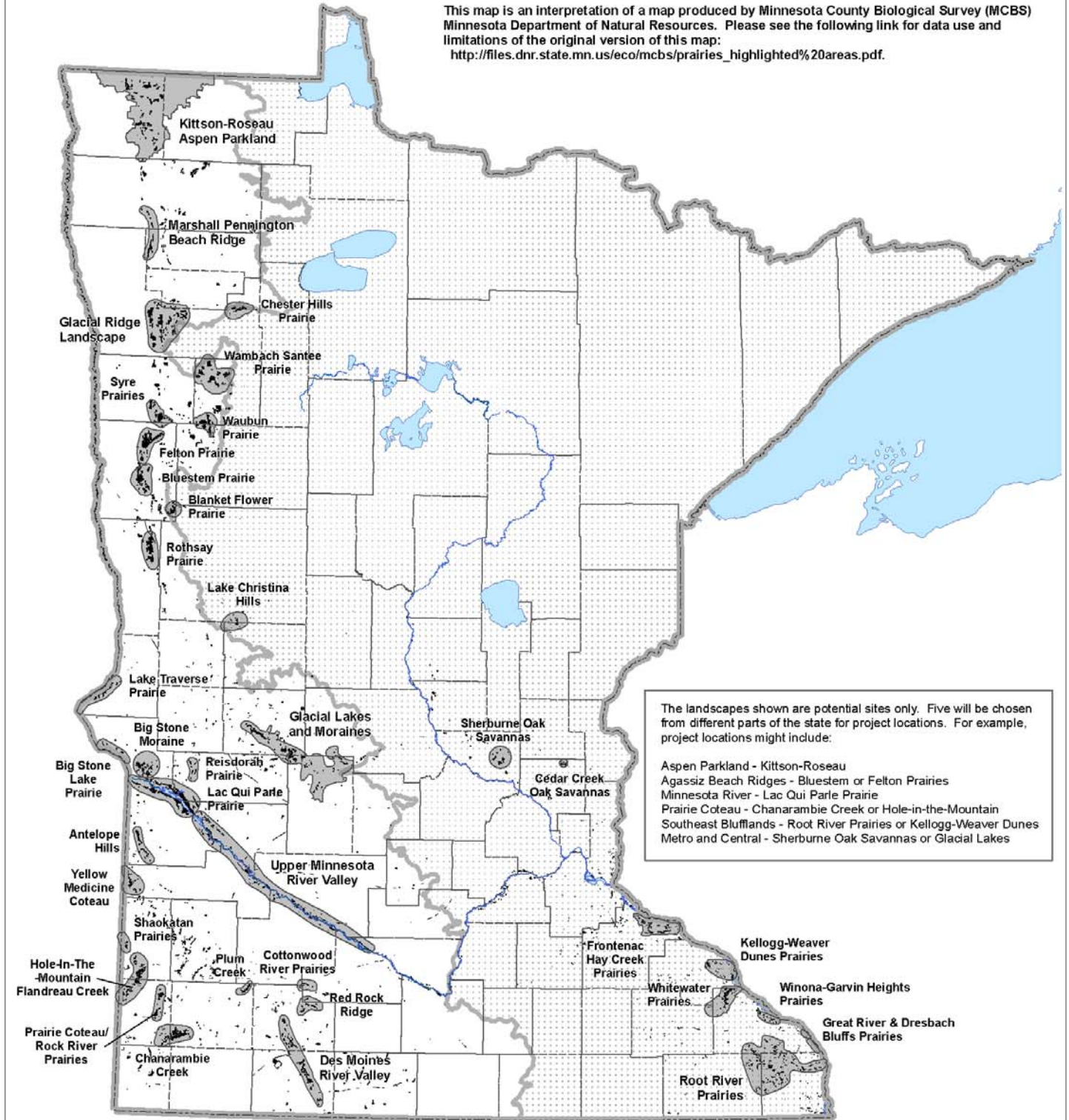
SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ Being Applied to Project During Project Period: The Nature Conservancy will also contribute privately raised funds in the form of unrecovered indirect costs using the Conservancy's federally approved negotiated indirect cost recovery rate of 23.05% of total project cost totaling \$226,625. In addition, TNC State Science Director will contribute approximately \$39,926 in staff time (0.15 FTE, 73% salary, 27% benefits) over 3 years.	\$ 266,551	Secured
Other State \$ Being Applied to Project During Project Period: N/A	\$ -	-
In-kind Services During Project Period: N/A	\$ -	-
Remaining \$ from Current Trust Fund Appropriation (if applicable): N/A	\$ -	-
Funding History: N/A	\$ -	-

Reconnecting Minnesota's Fragmented Prairie Landscapes

The Nature Conservancy

May 2009 Proposal

This map is an interpretation of a map produced by Minnesota County Biological Survey (MCBS) Minnesota Department of Natural Resources. Please see the following link for data use and limitations of the original version of this map:
http://files.dnr.state.mn.us/eco/mcbs/prairies_highlighted%20areas.pdf



The landscapes shown are potential sites only. Five will be chosen from different parts of the state for project locations. For example, project locations might include:

- Aspen Parkland - Kittson-Roseau
- Agassiz Beach Ridges - Bluestem or Felton Prairies
- Minnesota River - Lac Qui Parle Prairie
- Prairie Coteau - Chanarambie Creek or Hole-in-the-Mountain
- Southeast Blufflands - Root River Prairies or Kellogg-Weaver Dunes
- Metro and Central - Sherburne Oak Savannas or Glacial Lakes

- Native Prairie Landscapes (MCBS 2009)
- Native Prairie (MCBS 2009)
- Prairie Provinces
- Forest Provinces



0 12.5 25 50 Miles

Map Created by: R.C.J. TNC in MN-ND-SD, 2009/4/28
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Reconnecting Minnesota's Fragmented Prairie Landscapes

Project Manager Qualifications and Organization Description

Project Manager Qualifications

Steve Chaplin is a Senior Conservation Scientist with The Nature Conservancy. For most of his 20 years with the Conservancy, he was Midwest Director of Science with responsibilities for preserve selection and design, ecoregional planning, conservation data systems, and state Heritage Program development. He received an AB from Stanford University and a PhD from Cornell University in Ecology and Evolutionary Biology.

In addition to his science interests, Chaplin has been active at the Minnesota State Legislature for the past six sessions working primarily on conservation budget and bonding issues. He is also currently serving on the Board of the Minnesota Environmental Partnership and Midwest Invasive Plant Network as well as on advisory committees for the Minnesota Department of Natural Resources (SNA, Ecological Resources Budget Oversight).

While working for the Conservancy, Chaplin managed major grant projects on the Great Lakes, Great Plains and others. He also was the author of many conservation and strategic plans and served as the national program chair for the Ecological Society of America. Within the past two years, he worked with the Campaign for Conservation to help develop 50-year visions for five regions in Minnesota (Aspen Parklands, Red River Valley, Prairie Coteau, Peatlands, and Deciduous Transition).

Organization Description

The mission of The Nature Conservancy is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Using a collaborative, science-based approach, the Conservancy identifies those areas that offer the best chance for large-scale preservation of biodiversity and forges partnerships with businesses, governments, landowners, and residents to develop and implement solutions to environmental threats.

The Nature Conservancy was founded in 1951, and we have protected more than 117 million acres of land and 5,000 miles of rivers worldwide. We work in all 50 states, and in more than 30 countries protecting habitats from grasslands to coral reefs. We address threats to conservation involving climate change, fire, fresh water, forests, invasive species, and marine ecosystems. We use a science-based approach, and we pursue non-confrontational, pragmatic solutions to conservation challenges. We partner with indigenous communities, businesses, governments, multilateral institutions, other non-profits, and individuals.

The Nature Conservancy has just completed our celebration of 50 years of conservation success in Minnesota. The Nature Conservancy currently owns and manages 56 preserves in Minnesota, encompassing more than 72,000 acres. We have conserved more than 300,000 acres in the state. We have more than 23,000 members in Minnesota.