

Program Title: Grand Marais Creek Outlet Restoration

**Request for Funding Form
Lessard-Sams Outdoor Heritage Council
Fiscal Year 2011**

Program or Project Title: #26 Grand Marais Creek Outlet Restoration

Date: October 30, 2009

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	Council Funding Request	Out-Year Projections of Needs		
Funds Requested (\$000s)	FY 2011	FY 2012	FY 2013	FY 2014
Outdoor Heritage Fund	\$4,740,000	0	0	0

A. Summary

Many rivers and streams in the Red River Basin were straightened or cutoff and rerouted in the past 100 years to improve drainage. Watershed districts in collaboration with conservation interests, landowners, and local, state, and federal agencies are interested in restoring some straightened channels and their corridors to provide quality fish and wildlife habitat, increase connectivity, reduce erosion, and reduce flood damages. This habitat restoration project will complete the restoration and reconnection of about six miles of the Grand Marais Creek channel and 470 acres of river corridor habitat to the Red River of the North and will stabilize the existing cutoff channel. With SLOHC funding, this habitat restoration project will be completed in 2011.

B. Background Information

1. What is the problem or opportunity being addressed?

Six miles of natural sinuous channel of Grand Marais Creek were bypassed with a ditch in the early 1900s. This action resulted in the loss of the six miles of aquatic habitat and diminished

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opportunities for fish passage to and from the Red River and Grand Marais creek. The watershed district, landowners, and local, state, and federal agencies are ready to restore water flow to these six miles of disconnected aquatic habitat. Preliminary engineering is complete, environmental review is complete, and all land acquisition is complete. Aside from the Mustinka River channel project (8.8 miles), this six mile restoration is the greatest opportunity to directly restore stream habitat in the Red River basin.

2. What action will be taken?

- Restore the original Grand Marais creek channel and corridor. A water control structure will be built to divert flows to the six miles of the Grand Marais Creek channel bypassed in the early 1900s. The water control structure will be designed to allow flows down the reconnected channel and flood flows down the existing diversion channel.
- Stabilize the existing diversion channel to reduce erosion and improve aquatic habitat conditions in the Red River.
- The watershed district will maintain 470 acres of stream corridor habitats already acquired through RIM that will be seeded into native perennial vegetation.

3. Who will take action and when?

The Red Lake Watershed District will continue to lead a collaborative effort with members of a “project team” including the Polk County Soil and Water Conservation District, the Natural Resource Conservation Service, MN DNR, MPCA, and landowners to complete this project. Construction could be complete in 2011 if full funding is secured.

4. How will you coordinate this program with the other Constitutional Funding?

Similar to wetland and prairie restorations, this stream restoration project is primarily a habitat restoration project with incidental clean water benefits. Grand Marais Creek is listed as an impaired water (303d list). BWSR and MPCA have been members of the watershed based project team that helped develop this project. The watershed district will consider preparation of grant applications for BWSR clean water assistance and BWSR shoreland improvement grants that are due December 1, 2009. RIM has already been used to acquire the land needed for this habitat restoration project.

5. What specific habitat changes will occur if this item is funded? Be specific about and list multiple benefits if they exist.

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1. Six miles of river channel and 470 acres of riverine corridor habitat which was abandoned and mostly farmed for the past 50+ years will be returned to a functional riverine habitat. This will create permanent and seasonal habitats for a variety of fish species and will provide a more functional connection to more than 30 miles of upstream riverine and wetland habitats in the Grand Marais Creek.
2. The existing diversion channel will be stabilized to reduce sediment loading to the Red River.
3. This project is part of a much larger effort in the entire Grand Marais watershed to reduce flood damages, enhance natural resources, and improve water quality. These other efforts have been completed upstream of this project.

6. When do you expect to see these habitat changes?

The project's substantive habitat changes will be evident immediately after construction of the project. The newly created habitats will improve over time as the stream corridor vegetation matures and the stream channel stabilizes.

7. Will your Outdoor Heritage Fund dollar request complete the planned accomplishments?

Yes, assuming that Clean Water related grant funds are also awarded this funding will complete the project.

 X YES NO
If not, how will you finance completion?

8. How will you pay for the maintenance of the accomplishments?

The Red Lake watershed district in cooperation with landowners will be responsible for long term maintenance of this project. The district has led the land acquisition, project development, and engineering of this project with full cooperation of a "project team" composed of landowners and representatives of local, state, and federal agencies. The district initiated this project by action of their board under watershed district law (Minnesota Statutes 103D). Long term project maintenance is thus authorized through established watershed district construction and maintenance funds. Maintenance of vegetation along the newly created stream corridor is required under the rules in Reinvest in Minnesota (RIM) easement contracts.

9. How does this action directly restore, enhance, or protect prairies, wetlands, forests or habitat for fish, game, and wildlife?

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This project will directly restore six miles of riverine habitat and 470 acres of river corridor habitat. These habitats do not function today. Once water flow is returned to the channel, these habitats will be protected and maintained to benefit a variety of fish and wildlife communities.

The project will also stabilize an existing diversion channel that has significant erosion problems and is detrimental to riverine habitat in the Red River of the North.

10. If you are restoring or enhancing property, is the activity on permanently protected land?

☒ **YES**

☐ **NO**

If yes briefly describe the kind of protection.

The river channel and 470 acre corridor were acquired with RIM funding and are now in a permanent easement. The existing diversion channel which will be stabilized as part of this project was constructed in the early 1900's and is presently maintained by the Polk County ditch authority district under provisions of drainage law (Minnesota Statutes 103D and 103E).

11. How will you ensure transparency and provide information about your work and use of Outdoor Heritage Fund dollars.

The Red Lake River Watershed district has acquired land, developed, and engineered this project through a public "project team" process. Over the past 2 years, more than 10 project team meetings have been held to move this project forward. The watershed board initiated and is pursuing this project as an official watershed district project that must follow administrative procedures outlined in Minnesota Statute 103D. Under provisions of the law, a public hearing is required to finalize the project. The completed and approved Environmental Assessment Worksheet (EAW) for this project is available on the watershed district website ([://www.redlakewatershed.org/PDF_Files/Grand%20Marais%20Creek%20EAW](http://www.redlakewatershed.org/PDF_Files/Grand%20Marais%20Creek%20EAW).) and the development of this project is fully described in the Red Lake Watershed District 2008 annual report ([://www.redlakewatershed.org/Annual%20Reports/2008%20Annual%20Report](http://www.redlakewatershed.org/Annual%20Reports/2008%20Annual%20Report).)

The watershed district will provide information about this project and it's completion through its watershed newsletter and website, through the Red River Water Management Board newsletter and website ([.rrwmb.](http://www.rwmb.org)) , and through engagement in a variety of public venues including the Minnesota association of watershed districts, the red river basin commission, the international water institute, and regional newspapers.

The watershed district is experienced in administering, accounting for, and implementing complex land and water projects with a variety of funding sources including state grant funds from BWSR, MN PCA, and MN DNR.

12. Why will this strategy work?

This strategy will work because this project is the result of careful planning and engineering by an interdisciplinary project team of resource professionals and landowners dedicated to reducing flood damages and enhancing natural resources in the Grand Marais Creek subwatershed of the Red Lake watershed. Under the leadership of the watershed district the advice of the project team has resulted in building numerous successful projects in this subwatershed including two multipurpose impoundments, rehabilitation of ditches into natural sinuous channels, and almost 1,000 acres of lands enrolled in various conservation programs (CREP, CRP, WRP, CCRP). The restoration of the Grand Marais outlet will complete this comprehensive project. Lands have been acquired. Environmental review is complete. Preliminary engineering is complete. Landowner and agency support is secure and the project is consistent with the Red Lake Watershed District plan.

13. Who might make decisions that assist or work against achieving the expected impact program?

This project is in the final stages of implementation. Landowner support is secure. Polk County Board of Managers have approved a resolution in support of the project. Land has been acquired through RIM. Environmental review is complete (approved EAW). All necessary permits (e.g., DNR protected waters, PCA 404, U.S. Army Corps of Engineers) are in the process of application and no significant issues have been identified in direct discussions with permitting agency representatives during project team meetings. The project has been approved by the Red River Water Management Board for funding. A project readiness form has been completed by the project team and approved by the flood damage reduction work group.

A lack of funding is the only known obstacle that would delay completion of this project.

14. If this is acquisition of land, has the local government formally approved the acquisition?

Land acquisition is complete with RIM easements.

☒ **YES**

☐ **NO**

15. If this is fee simple acquisition of land, is the land free of any other permanent protection such as a conservation easement?

☐ **YES**

☐ **NO**

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16. If this is an easement acquisition, will the eased land be open for public use?

 YES

 X NO

NOTE: The land was acquired through RIM easement.

17. If easement acquisition, will the easement be a permanent conservation easement as described in MS 2009, Chapter 84C.01, specifically protecting the natural resource values of real property forever?

 X YES

 NO

18. If you are proposing funding for a new or ongoing program how long into the future do you expect this program to operate?

 NA Years

19. Which planning sections will you work in? Check all that apply in the list below.

 Northern Forest

 Forest/Prairie Transition

 Southeast Forest

 X Prairie

 Metropolitan Urbanizing Area

20. Does the request address an urgent conservation opportunity that will be lost if not immediately funded?

 X YES

 NO

If yes, please explain.

The watershed district has lead efforts to reduce flood damages and enhance natural resources in the Grand Marais Creek subwatershed for more than five years. This work has resulted in numerous projects and land use changes. Substantial time, money, and resources have been invested in this habitat restoration project. If the channel restoration is not complete within the next year or two the project will be at risk of never being completed. Current landowners support the project and it is important to finish

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the project at this time. Failure to complete the project at this time could stall completion for many years.

21. Does the request restore and/or enhance habitat on existing state-owned Wildlife or Aquatic Management Areas or Scientific and Natural Areas?

_____ YES

___X___ NO

If Yes, list the names of the AMAs, WMAs and/or SNAs and the acres to be restored and/or enhanced.

22. Is this request based on assessment through a science based strategic planning and evaluation model similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model?

_____ YES

___X___ NO

If yes explain the model briefly.

23. Explain the scientific foundation for your project, and the benefits it will produce.

This project is based on the principles of natural channel design, hydrology, and fluvial geomorphology. Use of these scientific principles will restore a range of water flows to six miles of river channel habitat and 470 acres of corridor habitat. The river channel habitats will provide seasonal spawning and juvenile habitat to northern pike and a variety of other species. The restored channel will also provide a better connection from the Red River to more than 20 miles of upstream habitat.

24. How do you set priorities? (Be sure to list the criteria you use and the weight you give each one.)

The watershed district initiates projects based on priority problems identified in the watershed district plan ([://www.redlakewatershed.org/planupdate](http://www.redlakewatershed.org/planupdate)). The restoration of the Grand Marais Creek channel is a final component of a larger project known as Project 60. Project 60 was Governor's Clean Water Cabinet pilot project which included upstream land use changes, targeted buffering of watercourses, creation of multipurpose impoundments, and ditched channel restoration. These other components have already been completed.

C. Relationship to the *Minnesota Conservation and Preservation Plan* and Other Published Resource Management Plans

Minnesota Statewide Conservation and Preservation Plan

Proposed projects are consistent with "*Habitat recommendation 6: protect and restore critical in-water habitats of lakes and streams*".

In particular, it is consistent with the recommendations on page 82: "*A priority for former prairie zones of Minnesota is to reverse the negative effects of stream channelization on in-stream habitats for fish and other aquatic organisms.....*"

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Lessard – Sams Outdoor Heritage Council Preliminary Goals and Objectives 25-Year Targets, Prairie Section, August 27, 2009

This planning document includes a table on page 11 that identifies stream habitat restoration and protection goals and objectives. This proposed project is consistent with this plan and will help achieve year one goals for channel restoration and riparian restoration.

Red Lake Watershed District Plan (2006)

This proposed restoration project is consistent with flood damage reduction, natural resource enhancement, and water quality goals and objectives in the Red Lake Watershed District Plan.

Red River Basin Mediation Agreement (1998)

This habitat restoration project is consistent with the flood damage reduction and natural resource goals and objectives in the mediation agreement including:

1. *Manage streams for natural characteristics.*
2. *Enhance riparian and in-stream habitats.*
4. *Provide connected, integrated habitat including compatible adjacent land uses.*
6. *Provide recreational opportunities.*

Campaign for Conservation – Fifty Year Vision

This habitat restoration project is consistent with the recommended actions in the fifty year vision for the Red River Valley planning region as follows:

C. Lakes, Rivers, Wetlands and Groundwater

2. *Return watercourses to semi-natural hydrology and morphology.*

D. Fish and Wildlife

1. *Develop incentives and regulations for enhanced protection of shoreline and stream restoration in both Minnesota and North Dakota.*
4. *Ensure that suitable habitat for species of concern is primary focus of land and water conservation efforts.*
5. *Expand private landowner stewardship incentive programs. Provide ongoing funding to entice landowners to idle (plant grass or trees) acres in sensitive wetland, riparian, and prairie areas.*
6. *Create habitat corridor connections for prairie chickens and other grassland species across the Red River Valley from the Agassiz Beach Ridges prairies in the east to the Sheyenne National Grasslands in the west. Corridors are needed to provide dispersal routes and prevent genetic isolation.*

State AMA Acquisition Plan

This project is consistent with the following recommendations from the Red River Prairie Ecoregions needs section of the plan:

“The recreational demand on this area of the state will likely outpace the projected population change and additional public access to fishing lakes and streams is a priority. Permanent angling and management easements on streams, while maintaining private ownership, draw anglers to the area, bring additional dollars into the local economy, and provide the inroad to create permanent protection to shoreline habitat, which insures

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clean water for future generations. Additional lake and warmwater shoreline should still be acquired when extraordinary opportunities arise and County approval is obtained. There may be opportunities for Non-Government Organizations to acquire critical shoreline parcels in this area, to either be managed by them or turned over to the DNR as AMAs or other Outdoor Recreation Units."

Tomorrow's Habitat for the Wild and Rare- Minnesota's Comprehensive Wildlife Conservation Strategy

This project is consistent with the following goals and strategies.

Goal 1: Stabilize and increase SGCN populations

3. Nonforested wetlands and floodplain forests

c. manage habitats adjacent to wetlands and floodplain forests to enhance SGCN values

4. Stream habitats

a. maintain good water quality, hydrology, geomorphology, and connectivity in priority stream reaches

b. Maintain and enhance riparian areas along priority stream reaches

National Fish Habitat Action Plan

These projects in this proposed *program* are consistent with the goals and objectives of this plan.

- *Reverse declines in the quality and quantity of aquatic habitats to improve the overall health of fish and other aquatic organisms.*
- *Increase the quality and quantity of fish habitats that support a broad natural diversity of fish and other aquatic species.*

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D. Budget

Budget Item	Fiscal Year 11	Fiscal Year 12	Fiscal Year 13
Personnel	40,000		
Contracts	4,000,000		
Equipment/Tools/Supplies			
Fee Acquisition			
Easement Acquisition	Already Acquired		
Easement Stewardship			
Professional Services	700,000		
Travel			
Additional Budget Items			
TOTAL	4,740,000		

E. Personnel Details *In the space below list the names, titles and anticipated program funds to be paid by this recommendation. If you will need to fill a position just list the title and amount.*

Title	Name	Amount.
Contractor	Construction	\$4,000,000
Engineer	Professional Services	\$700,000
Project Coordination	Red Lake Watershed District	\$40,000

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F. All Leverage In the table below list the sources and amounts of leverage you anticipate by fiscal year you anticipate receiving it. Include state and non-state leverage.

Source of Non-State Leverage	Fiscal Year 11	Fiscal Year 12	Fiscal Year 13
To date, RIM Easements valued at \$529,537 have been used to acquire 470 acres of land associated with this project.			
To date, the Red Lake watershed district has earmarked or spent \$346,759 to oversee project development, land acquisition, environmental review, and preliminary engineering of this project.			
To date, local, state, and federal agency staff have contributed more than 500 hours of in-kind support for development of this project.			
TOTAL			

G. Outcomes:

- 1) *In the first table below, quantify the outcomes you plan to achieve with the recommended funds.*
- 2) *In the second table show list the sections where outcomes will occur.*
- 3) *In the third table, allocate your recommended funds to each cell with outcomes listed in table 1.*
- 4) *In the fourth table show the leverage to be applied to each cell with outcomes listed in table 1. and*
- 5) *If you have any outcomes listed in the “protect” row in table 1, account for them according to the type of acquisition and PILT status in table 5*

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Table 1 Accomplish- ments	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore				<i>Restore 6 miles of stream habitat, 470 acres of river corridor habitat</i>
Protect				
Enhance				<i>20 miles of habitat through increased upstream connectivity</i>

Table 2 Sections Impacted and Impact Quantifier	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore				<i>Prairie</i>
Protect				
Enhance				

Table 3 Recommend Fund Allocation	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore				<i>4,740,000</i>
Protect				
Enhance				

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Table 4 Leverage \$	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore				876,400
Protect				
Enhance				

Table 5 Acquisition Data	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Acquired in Fee with State PILT Liability				
Acquired in Fee without State PILT Liability				
Permanent Easement				\$529, 537 Already completed 470 acre with RIM easements.

H. Accomplishment Time Table Using the headings below, include a clear statement of how much of what is being accomplished and when. Attach a map showing where accomplishments are anticipated. Accomplishments should clearly restore, enhance or protect forests, wetlands, prairies and habitat for fish, game and wildlife.

Milestone	Date	Measure
Conduct Public Meetings	2008-2009	Complete
Prepare Preliminary Engineering Report	April 2008	Complete
Formation of Joint Board Managers for the Project	February 2009	Complete
Complete Environmental Assessment Proceedings	June 2009	Complete
Land Acquisition (RIM)	July 2009	80% Complete
Conduct Detailed Engineering/Design	Fall 2010	
Conduct Final Hearing	March 2011	
Acquire Environmental Permits	March 2011	
Prepare Final Plans and Specifications	April 2011	
Conduct Bidding Process	June 2011	
Begin Construction	July 2011	
Grand Marais Channel Restoration	Fall 2011/Summer 2012	
Diversion Structure Construction	Fall 2011	
Cutoff Ditch Grade Stabilization	Fall 2011	
Finalize Construction	Summer 2012	

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I. Relationship to Your Current Budget

The Red Lake Watershed District is a unit of local government, a political subdivision of the State. The Red Lake Watershed's 2009 General Fund budget is \$177,300 and our 2009 Capital Project Budget is projected to be \$1,172,569 which is approximately 25% of the funding request of the OHF. This grant will not affect the current budget and will not replace our customary or established patterns of funding as we budget for these types of projects on a yearly basis. In the last four years, the District has executed upwards of 6 millions dollars of matching grants from various state agencies to administer and construct various flood damage reduction and natural resource enhancement projects throughout the Red Lake Watershed District.

J. How Will the Habitat Improvements Be Sustained?

The Red Lake watershed district in cooperation with landowners will be responsible for long term maintenance of this project. The watershed district has led the land acquisition, project development, and engineering of this project with full cooperation of a "project team" composed of landowners and representatives of local, state, and federal agencies. The Red Lake Watershed district initiated this project by action of their board under watershed district law (Minnesota Statutes 103D). Long term project maintenance is thus authorized through established watershed district construction and maintenance funds. Maintenance of vegetation along the newly created stream corridor is provided as part of Reinvest in Minnesota (RIM) permanent easement contracts.

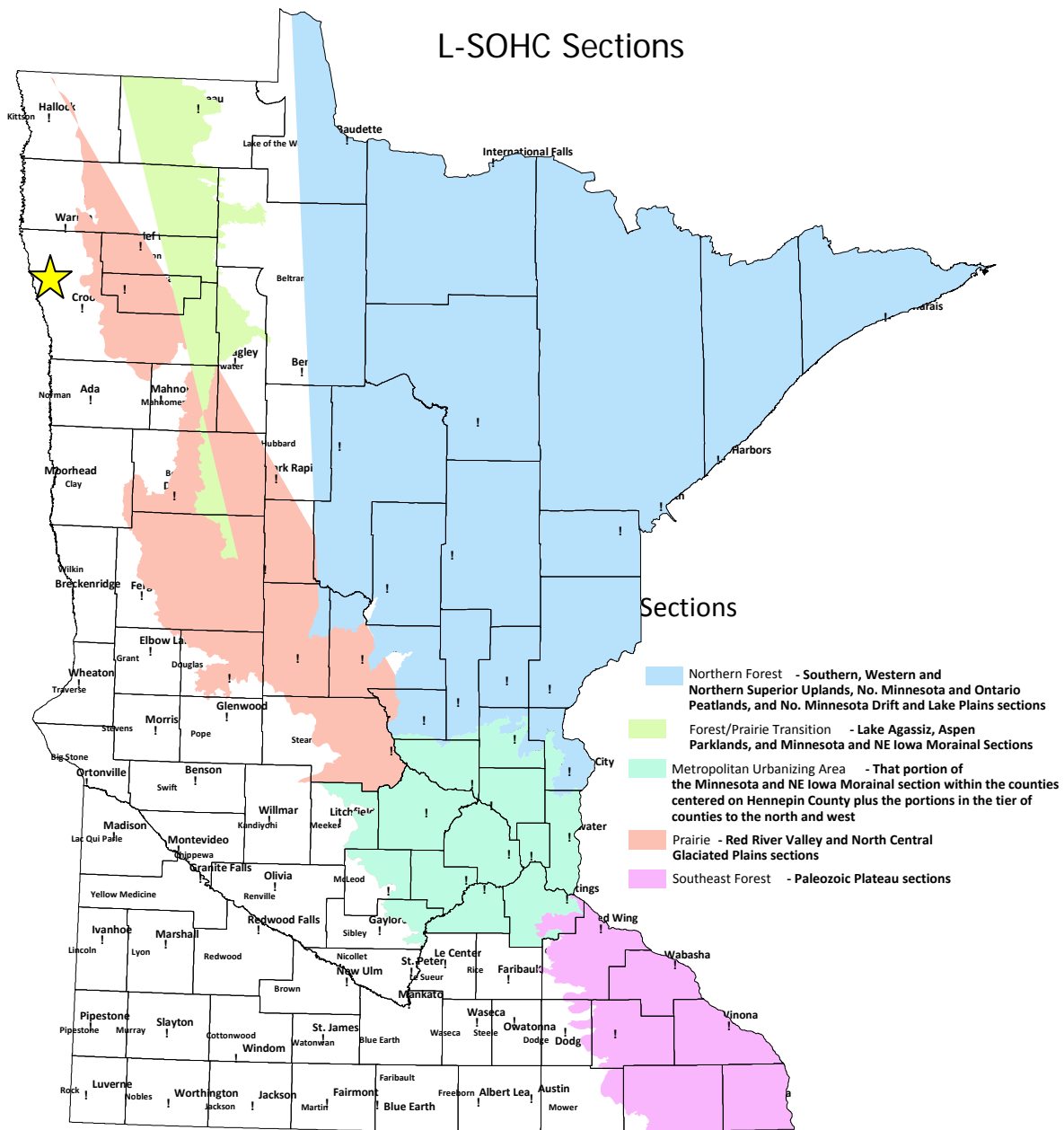
K. Attach a list of your projects listing their county location and edit the map of Minnesota on the next page to show each project as a symbol.

Double left click to bring up the map editor. Symbols should be on the left side of the pop-up banner at the top of your screen or at the bottom left depending on your software.

If you can't bring up the interactive map editor follow these instructions:

1. Make a paper copy of the map,
2. By hand place symbols on the map corresponding to the location of the projects in your proposal,
3. Scan the marked map to a pdf, and
4. Insert the marked pdf map as the last page in your submission.

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