

2010 Project Abstract

For the Period Ending June 30, 2012

PROJECT TITLE: Minnesota's Habitat Conservation Partnership Phase VI I Shallow Lake Assessment (2d), DNR – Section of Wildlife

PROJECT MANAGER: Ray Norrgard

AFFILIATION: DNR – Division of Fish and Wildlife

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FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: ML 2010, Chap. 362, Sec. 2, Subd. 4(f)

APPROPRIATION AMOUNT: \$45,000

Overall Project Outcome and Results

The Minnesota Department of Natural Resources (DNR) is working with Ducks Unlimited (DU) and other partners in a focused, strategic approach to assess, improve and protect the aquatic ecology and water quality of shallow lakes for waterfowl and other wildlife. Shallow lakes are a critical component of the wetland habitat complexes once common to Minnesota landscapes. These lakes provide the migration, brood rearing, and hibernacula critical for shorebirds, waterfowl, water birds, turtles and amphibians. Through this grant, and the existing shallow lake program, DNR will provide the predesign habitat assessment and monitoring of shallow lake structural enhancements accomplished by DU through bioengineering. There were 15 shallow lake assessments planned to be completed with this grant. There were actually 11 shallow lake habitat assessments completed with a combination of DNR and ENRTF funding. All of the assessments were completed within the Habitat Conservation Partnership Project Area 3. The information collected will be used to inform lake management strategies including DU lake structure enhancements and DNR accelerated management activities. Assessments included data collection on water depths, aquatic vegetation, water clarity, and water chemistry. Lakes were selected from a priority list developed by the MN DNR shallow lakes program. The reason for the shortfall was related to the conversion of the state accounting system to SWIFT and the consequent difficulty in locating and coding to the proper account.

Project Results Use and Dissemination

Accomplishment Reports and press releases will be made available at

<http://www.mnhabitatcorridors.org>

Environment and Natural Resources Trust Fund (ENRTF) 2010 Work Program Final Report

Date of Report: September 14, 2012

Final Report: Dec. 1, 2011

Date of Work Program Approval: May 15, 2010

Project Completion Date: June 30, 2012

I. PROJECT TITLE: Minnesota's Habitat Conservation Partnership Phase VI I
Shallow Lake Assessment (2d), DNR – Section of Wildlife

Project Manager: Ray Norrgard

Affiliation: DNR – Division of Fish and Wildlife

Mailing Address: 500 Lafayette Rd, Box 20

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Location: The primary emphasis will be in Habitat Conservation Partnership projects areas 1, 2, 3, 4, 6, 7, 8, 9, 10 although some minor assessment work may occur in other areas.

Total ENRTF Project Budget:	ENRTF Appropriation	\$45,000
	Minus Amount Spent:	\$ 445
	Equal Balance:	\$ 44,555

Legal Citation: ML 2010, Chap. 362, Sec. 2, Subd. 4(f)

Appropriation Language: \$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants.

II. and III. FINAL PROJECT SUMMARY: The Minnesota Department of Natural Resources (DNR) is working with Ducks Unlimited (DU) and other partners in a focused, strategic approach to assess, improve and protect the aquatic ecology and water quality of shallow lakes for waterfowl and other wildlife. Shallow lakes are a critical component of the wetland habitat complexes once common to Minnesota landscapes. These lakes provide the migration, brood rearing, and hibernacula critical for shorebirds, waterfowl, water birds, turtles and amphibians. Through this grant, and the existing shallow lake

program, DNR will provide the predesign habitat assessment and monitoring of shallow lake structural enhancements accomplished by DU through bioengineering. There were 15 shallow lake assessments planned to be completed with this grant. There were actually 11 shallow lake habitat assessments completed with a combination of DNR and ENRTF funding. All of the assessments were completed within the Habitat Conservation Partnership Project Area 3. The information collected will be used to inform lake management strategies including DU lake structure enhancements and DNR accelerated management activities. Assessments included data collection on water depths, aquatic vegetation, water clarity, and water chemistry. Lakes were selected from a priority list developed by the MN DNR shallow lakes program. The reason for the shortfall was related to the conversion of the state accounting system to SWIFT and the consequent difficulty in locating and coding to the proper account.

IV. OUTLINE OF PROJECT RESULTS:

RESULT 1: On-site shallow lake assessment and monitoring for 15 lakes.

Description: 15 shallow lake assessments, including both pre and post project lake monitoring, will be completed to provide the information necessary to design and implement lake management strategies including DU lake structure enhancements and DNR accelerated management activities. Assessments include data collection on water depths, aquatic vegetation, water clarity, and water chemistry. Lakes are selected from a priority list developed by the MN DNR shallow lakes program.

Summary Budget Information for Result 1:	ENRTF Budget:	\$45,000
	Amount Spent:	\$ 445
	Balance:	\$ 44,555

Deliverable/Outcome	Completion Date	Budget
1.15 shallow lakes habitat assessments	June 30, 2012	\$ 45,000

Result Completion Date: June 30, 2012

Final Report Summary: 11 shallow lake habitat assessments were completed in Project Area 3 with a combination of DNR and ENRTF funding. The information collected was used to inform lake management strategies including DU lake structure enhancements and DNR accelerated management activities. Assessments included data collection on water depths, aquatic vegetation, water clarity, and water chemistry. Lakes were selected from a priority list developed by the MN DNR shallow lakes program. The reason for the shortfall was related to the conversion of the state accounting system to SWIFT and the consequent difficulty in locating and coding to the proper account.

V. TOTAL ENRTF PROJECT BUDGET:

Personnel: 5 interns and specialists \$ 34,000

Equipment (Sampling equipment for surveys such as secchi disks, vegetation hooks, etc.): \$ 500

Travel (food, lodging): \$1,000

Vehicle Fleet Costs: \$ 9,500

TOTAL ENRTF PROJECT BUDGET: \$ 45,000

Explanation of Capital Expenditures Greater Than \$3,500: None

VI. PROJECT STRATEGY:

A. Project Partners: This proposal is part of the Habitat Conservation Partnership Phase VII Proposal. Please see the main proposal for a complete list of partners involved.

B. Project Impact and Long-term Strategy: This proposal is directly tied to the Shallow lakes that are a critical component of the wetland habitat complexes once common to Minnesota. These lakes provide the migration, brood rearing, and hibernacula critical for shorebirds, waterfowl, water birds, turtles and amphibians. Although these lakes physically remain on the landscape their ecological condition has been degraded by watershed changes and invasive species. However, many of these lakes can be restored with management investments. The shallow lake assessments completed with this grant are the first step towards restoration and meet the requirements for post project monitoring.

C. Other Funds Proposed to be Spent during the Project Period: The Section of Wildlife spends approximately \$300,000 from Game and Fish Fund annually to provide technical assistance and assessment to support shallow lake management projects around the state.

D. Spending History: Past ETF Spending: Habitat Conservation Partnership Phase I: \$350,000; Phase II: 98,300; Phase III: \$98,000; Phase IV: \$98,000; Phase V: \$73,500; Phase VI is in progress.

VII. DISSEMINATION: Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than December 1 and June 1 of each year. A final work program report and associated products will be submitted between June 30 and August 1, 2012 as requested by the LCCMR.

IX. RESEARCH PROJECTS:

Attachment A: Budget Detail for 2010 Projects				
Project Title: Minnesota’s Habitat Conservation Partnership Phase VII– Shallow Lake Assessment (2d), DNR – Section of Wildlife				
Project Manager Name: Ray Norrgard				
Trust Fund Appropriation: \$ 45,000				
1) See list of non-eligible expenses, do not include any of these items in your budget sheet				
2) Remove any budget item lines not applicable				
2010 Trust Fund Budget	Result 1 Budget:	Amount Spent (date)	TOTAL BUDGET	TOTAL BALANCE
	<i>On-site shallow lake assessment and monitoring</i>			
BUDGET ITEM				
PERSONNEL: 5 temporary seasonal interns and specialists wages and benefits	34,000	445	34,000	33,555
Non-capital Equipment / Tools: Sampling equipment for surveys such as secchi disks, vegetation hooks, etc.	500	0	500	500
Travel expenses in Minnesota (food, lodging, fleet)	10,500	0	10,500	10,500
COLUMN TOTAL	\$45,000	\$445	\$45,000	\$44,555
Funds were not spent due to difficulties encountered as the state accounting system was converted to SWIFT				

2010 Project Abstract

For the period ending: June 30, 2012

PROJECT TITLE: Shallow Lake Habitat Enhancement and Wild Rice Enhancement and Monitoring to Assess Relationship to Waterfowl Abundance

Project Manager: Steve Mortensen

Affiliation: Leech Lake Band of Ojibwe, Division of Resource Management

Mailing Address: 115 6th St. NW, Suite E

City / State / Zip: Cass Lake, MN 56633

Telephone Number: 218-335-7421

E-mail Address: smortensen@lldrm.org

FAX Number: 218-335-7430

Web Site Address: <http://www.lldrm.org>

Funding source: Environmental and Natural Resources Trust Fund

Legal Citation: ML 2010, Chap. 362, Sec. 2, Subd. 4f-2f

Appropriation Amount: \$50,000

Overall Project Outcome and Results

The goal of this project was to improve habitat for waterfowl and other species that utilize wetlands on the Leech Lake Reservation in addition to analyzing a long term wild rice data set to determine if waterfowl numbers are influenced by rice abundance. A number of techniques were utilized to accomplish this work.

Waterfowl habitat enhancements, over the period of this grant, were conducted on seven impoundments that are located throughout the reservation and covered approximately 300 acres. On these impoundments water levels were managed and dike and control structures were repaired and maintained. Beaver plugging is also an issue on many of these impoundment so dam material was removed as needed, Clemson Levelers were installed, and in some cases beaver removal was utilized to control the problem. Water draw downs were also accomplished on two impoundments to restore aquatic vegetation.

A second aspect of this project was to enhance waterfowl food supply by planting wild rice. Wild rice has been degraded in some locations due to inappropriate water levels, damage from wind storms, and human activities. Two hundred acres of water was reseeded with rice during the course of this grant period.

The third aspect of this project was to scan, and rectify the first seventeen years of aerial wild rice bed images that have been taken of major rice beds on the Reservation. A subset of this data was then analyzed and compared to waterfowl abundance data provided by the MN DNR to see if a positive correlation between rice abundance and waterfowl numbers could be identified. The work thus far completed has not been able to detect a significant relationship between rice abundance and waterfowl numbers, but we will continue this work on a larger data set looking at more parameters to see if one exists. The largest benefit from this work has been the development of the methodology to analyze rice distribution and abundance from aerial photographs that will be helpful for us and other resource personnel to manage wild rice into the future.

Project Results Use and Dissemination

The methodology and techniques used to quantify wild rice beds from aerial photographs will be available to other resource managers if they would like to use them to evaluate their rice beds.

Trust Fund 2010 Work Program
Environmental and Natural Resources Trust Fund 2010 Work Program Final Report

Date of Report: June 30, 2012

Final Report

Date of Work Program Approval: June 18, 2010

Project Completion Date: June 30, 2012

I. PROJECT TITLE: Shallow Lake Habitat Enhancement and Wild Rice Enhancement and Monitoring to Assess Relationship to Waterfowl Abundance

Project Manager: Steve Mortensen
Affiliation: Leech Lake Band of Ojibwe, Division of Resource Management
Mailing Address: 115 6th St. NW, Suite E
City / State / Zip: Cass Lake, MN 56633
Telephone Number: 218-335-7421
E-mail Address: smortensen@lldrm.org
FAX Number: 218-335-7430
Web Site Address: <http://www.lldrm.org>

Location: Leech Lake Reservation in north-central Minnesota, including portions of Cass, Itasca, Beltrami and Hubbard Counties (map included)

Total ENRTF Project Budget:	ENRTF Appropriation	\$ 50000
	Minus Amount Spent:	\$ 50000
	Equal Balance:	\$ 0.00

Legal Citation: ML 2010, Chap. 362, Sec. 2, Subd. 4f-2f

Appropriation Language: Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks

Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The

United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this

appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07.

The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III Final Project Summary:

This project improved shallow lake and impoundment habitat for waterfowl on the Leech Lake Reservation (LLR). Waterfowl production in this area has been impacted by habitat degradation, invasive species competition, dams, and extreme weather. Waterfowl habitat was improved through water level control, beaver management, impoundment management and Maintenance and seeding of wild rice to reestablish degraded beds.

This project also building on recent work of the LLR Division of Resource Management (LLDRM), with ENRTF support, we compiled an 18-year-long dataset of natural wild rice acreage on LLR. We interpreted wild rice on aerial imagery acquired annually by Pro-West and Associates since 1991. We also implement long-term monitoring. We partnered with MNDNR to analyze duck counts for the same 18-year period on selected waters where data is available. Through these analyses, we investigated relationships between waterfowl and wild rice abundance. It was the goal of this project to look for relationships between wild rice abundance and waterfowl numbers. This project is a direct result of the statewide Wild Rice Study of 2008. This project furthers strategic objectives of the Habitat Conservation Partnership (HCP) by leveraging investments of the Leech Lake Band of Ojibwe (LLBO) and the US Forest Service (USFS) in managing forested habitat for waterfowl. This project also advances efforts of interagency collaborative to bring conservation benefits to a variety of stakeholders.

IV. OUTLINE OF PROJECT RESULTS

RESULT 1:

Description: Water level control and management on forested impoundments and water ways. The goal of Activity 1 was to provide better habitat for reproducing waterfowl by controlling seasonal water levels, controlling beaver activity, and conducting summer drawdowns. Much of this work will be conducted on forested impoundments. This project helped to address the decline in waterfowl habitat in the northern forested region of Minnesota. Continued maintenance of these sites will be provided through a cooperative agreement between the LLBO and USFS.

Summary Budget Information for Result 1:	ENRTF Budget:	\$10364
	Amount Spent:	\$10364
	Balance:	\$0

Deliverable	Completion Date	Budget
1. Waterfowl habitat management and improvement	Nov 1, 2011	\$ 10364

Final Report Summary:

Result 1

We conducted work on seven impoundments that are managed to benefit waterfowl and other species that use this type of habitat. This work has included keeping the water controls operational and clear of beaver debris, conducting maintenance on the controls and dikes. Beaver bafflers have been installed and maintained where needed. Heavy equipment was used at several sites. We initiated water drawdowns on two impoundments to help restore desired vegetation and to reduce competition. The purpose of this work is to make

RESULT 2:

Description: Wild rice reseeded on 200 acres. The goal of Activity 2 is to restore natural wild rice in sites that historically supported rice production. Several locations on the LLR will be reseeded with native wild rice (approx. 200 acres total). This will enhance habitat for waterfowl cover and foraging. Wild rice habitat has been degraded due to high water levels at sensitive times of plant development and land use practices that include clearing of vegetation. Beaver control efforts are currently underway across the LLR, so now is an appropriate time to reseed historic wild rice beds. Once the newly seeded plants are established, and with continued management of water levels and protection of shallow lake vegetation, we anticipate that the wild rice will propagate and total acreage will expand.

Summary Budget Information for Result 2:	ENRTF Budget:	\$3347
	Amount Spent:	\$3347
	Balance:	\$0

Deliverable	Completion Date	Budget
2. Wild rice reseeded and management	Nov 1, 2011	\$ 3347

Final Report Summary:

We purchased 1500 lbs of local wild rice in early September of 2010 and seeded it into an approx. 200 acre area of Steamboat Bay. Although this area historically produced natural wild rice, the beds have been non-productive for years.

RESULT 3:

Description: Monitoring wild rice acreage and the relationship between wild rice and waterfowl abundance. The goal of Activity 3 is to understand the variability of natural wild rice on the LLR and its relationship to waterfowl abundance. Natural wild rice is an important cover and food source for waterfowl in the northern forested region of Minnesota. The LLR is in the heart of wild rice country in Minnesota. Climate change models suggest that this region may be increasingly important for waterfowl. By gaining a better understanding of historical trends of wild rice and waterfowl, we will be better able to maintain these resources into the future.

We analyzed changes in acreage of natural wild rice on the LLR from aerial imagery acquired annually the past 18 years. Data collected by the MN DNR on waterfowl abundance was then compared to rice abundance on selected waters to see if relationship exist. Details of this work is outlined in a separate report. Analysis thus far has not produced any clear relationship, but we would like to continue this work to get a larger data set.

Summary Budget Information for Result 3:	ENRTF Budget:	\$36289
	Amount Spent:	\$36289
	Balance:	\$0.00

Deliverable	Completion Date	Budget
3. Wild rice monitoring and relationship to waterfowl abundance	June 30, 2011	\$ 36289

Result Completion Date: June 30, 2011

Final Report Summary:

We investigated advances in methodology for high-resolution aerial imaging and processing to analyze rice abundance. We worked with Pro-West and Associates to obtain aerial imagery of twelve natural wild rice beds on Leech Lake in August 2010. Using GPS and ground-based photography, we conducted field verification of a subset of these sites during the same period. We also developed methodology for classify rice from other vegetation using ARC GIS Software. A total of four bandwidths were developed and overlaid into one image that allowed for rice beds to be separated from other vegetation. Using these techniques along with waterfowl abundance numbers provided by MN DNR we were able to make some comparisons. Results of this effort have not yet identified any clear connection so we plan to continue these efforts and develop a larger data set.

V. TOTAL ENRTF PROJECT BUDGET

Personnel: \$ 39902

- 1 Plant Ecologist (0.07 FTE for 1.5 yrs)
- 1 GIS Technician (0.38 FTE for 1.5 yrs)
- 2 Field Technicians for Results 1 & 2 (0.05 FTE x 2 for 1.5 yrs)
- 2 Field Technicians for Result 3 (0.05 FTE x 2 for 1.5 yrs)

Contract: \$ 1000

USDA Wildlife Service - beaver trapping

We did not utilize Wildlife Service's this year for beaver control, but we did use heavy equipment to remove beaver debris from impoundment water controls. As a consequence we would like to use this funding for this purpose.

Equipment/Tools/Supplies: \$ 8098

Clemson leveler kits (3-5@\$549 ea), stop logs for water controls (\$200), road and dike culverts (2-4@\$303 ea), water control parts and hardware (\$541), gasoline (\$400), local natural wild rice seed (1500 lbs @\$2/lb)

Travel to LLR sites: \$ 1000

TOTAL ENRTF PROJECT BUDGET: \$50,000

VI. PROJECT STRATEGY

A. Project Partners:

1. LLBO DRM Fish, Wildlife, and Plant Resources Department - Steve Mortensen, LLDRM Wildlife Biologist, Project Lead on Results 1 and 2; Rebecca Knowles, PhD, LLDRM Plant Ecologist, Project Lead on Result 3 Ryan Anderson, GIS Technician, data analysis for result 3. (LLDRM to receive entire funds budgeted except for up to \$1000 for USDA contract; LLDRM to contribute \$12998 in-kind).

2. USFS Chippewa National Forest - impoundment management, including water level and beaver control (USFS to receive no funds from this proposal; USFS to contribute up to \$40000 through Cooperative Agreement).
3. BIA Circle of Flight Program - waterfowl and wild rice habitat enhancement (BIA to receive no funds from this proposal; BIA to contribute up to \$25000 for habitat management).
4. MNDNR - waterfowl abundance data (MNDNR to receive no funds from this proposal).
5. USDA Wildlife Services - beaver trapping (USDA to receive up to \$1000 for contract).

B. Project Impact and Long-term Strategy: This project advances ongoing efforts to manage forested wetlands and shallow lakes on the Leech Lake Reservation for the enhancement of natural wild rice and waterfowl habitat. This type of habitat is critical for successful nesting of waterfowl in the northern forested region of Minnesota. Through analysis of historic trends and relationships between wild rice and waterfowl productivity, and through implementation of long-term monitoring, we and our resource management partners will be able to identify changes over time and adapt our management practices to better assure sustainability of these highly valued resources.

C. Other Funds Proposed for the Project Period:

BIA Circle of Flight Program	\$25,000
USFS Cooperative Agreement	\$40,000
MNDNR Waterfowl Research	\$ 3,200 plus \$ 2,200 in-kind
LLDRM in-kind	\$12,998

D. ENRTF Spending History:

2001 HCP Phase I	\$ 76,910
2003 HCP Phase II	\$ 34,700
2005 HCP Phase III	\$ 28,000
2007 HCP Phase IV	\$ 30,000
2008 HCP Phase V	n/a

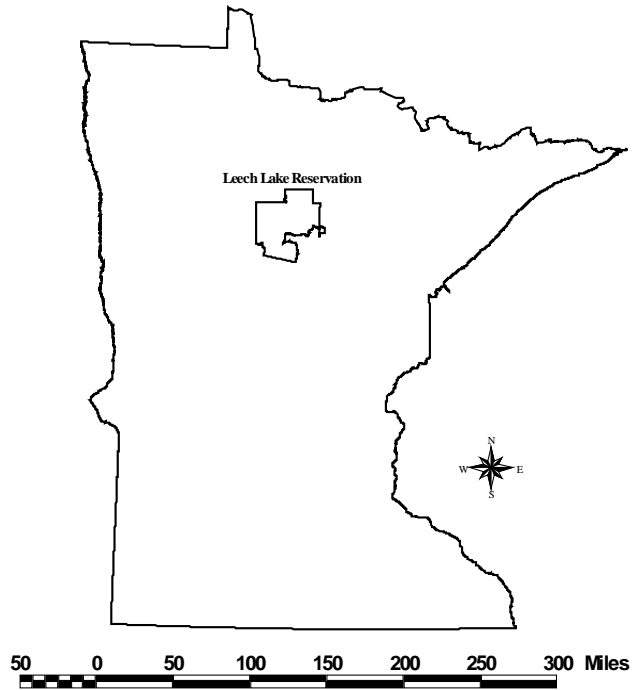
VII. DISSEMINATION:

Information will be disseminated through the HCP web site and related publications.

VIII. REPORTING REQUIREMENTS: Work Program Progress Reports were submitted by May 1 and November 1 of each year. A Final Work Program Report and associated products were submitted by August 15, 2012 as requested by the LCCMR.

IX. PROJECT LOCATION:

Location of the Leech Lake Reservation in Minnesota



Comparison of Wild Rice Data and Waterfowl Surveys

Ryan Anderson – GIS Technician, Leech Lake DRM

Dr. Jeff Ueland – Associate Professor of Geography, Bemidji State University

Dr. Jeff Lawrence – Wetland Wildlife Research Group Leader, MN DNR

Steve Cordts – Waterfowl Staff Specialist, MN DNR

Methods

The purpose of this study was to compare wild rice abundance to waterfowl numbers in an effort to determine if there is a correlation. Many species of waterfowl are known to feed heavily on wild rice so it is reasonable to assume that more rice would equate to higher duck usage. In order to complete this analysis the Leech Lake Band of Ojibwe has had ProWest & Associates take aerial photographs of the major wild rice beds on the reservation. From 1993 to 2009, excluding 1997, all of the major wild rice beds on the reservation had aerial imagery capture for their respective locations. The wild rice bed locations that were flown that coincide with areas that the Minnesota DNR have done waterfowl surveys resulted in a data set with ten wild rice beds that will be part of this analysis. These sites are Pigeon Dam, Natures Lake, Rice Lake, Bowstring River/Cow Bay, Muskrat Bay, Mudd Lake, Raven Creek/Rabbit Lake, Third River Flowage, Boy Bay, and Headquarters Bay.

The Leech Lake Division of Resource Management received each year's aerial images on compact discs in a JPEG format. The images themselves needed to be geo-referenced, that is their existence had to be defined in physical space. The images were referenced utilizing a combination of Farm Service Agency and United States Geological Survey photos through the MNGEO Web Mapping Server. Since photos were not available from every year that could be used as a point of reference, the closest year photos were used if the same year did not exist. The software used to rectify the aerial images was ArcGIS 10 utilizing the geo-referencing tool set. The aerial images were converted to .tiff file when the geo-rectification took place.

Each of these geo-rectified aerial images was put into a mosaic dataset, a new feature with ESRI newest version of ArcGIS. A file geodatabase was created for each individual year that photos were taken for, and within the geodatabase an individual mosaic dataset was created for each wild rice bed. The reasoning for putting the photos into the mosaic dataset is that once all images for a given year are

placed into this feature, they will be treated as a single image instead of having to perform analysis on each individual photo. Once the images are all added to the mosaic dataset, statistics were calculated for the dataset and footprints were built for a seamless image appearance. From there, the color balancing mosaic dataset tool was applied to each dataset, using histogram as the balancing method. This ensures that the pixels from all images will be changed to match a target histogram, in this case, the image that covered the most area of the wild rice bed. By doing so, the analysis can be run on the entire image because all features will be represented by the same pixel value.

The next step in preparing the aerial images was to build a mask, in this case, a buffer around all bodies of water on the reservation, and extract just that portion of each mosaic dataset. The reason for this is twofold, one; wild rice grows in the water so it doesn't make sense to analyze areas outside of water, and two; it cuts down on the amount data that the software needs to process. These areas that were queried out are where the analysis takes place.

In order to ensure the best possible result from our existing datasets, an additional band was created from the original aerial image in order increase the variation in the reflectance values from pixel to pixel, thus allowing for more accurate classification. This band was created using the Principal Components Tool, found in the ArcGIS tool set. This tool is used to transform data from input bands from a raster dataset from the input multivariate attribute space to a new multivariate attribute space whose axes are rotated with respect to the original space, with the resulting attributes in the new space being uncorrelated. What this new dataset will do is create three new bands from original three band image, with the first band showing the greatest variation in the image, thus that being the fourth band that is added to existing dataset.

After creating this fourth band, the Composite Band tool is used to combine this band with the original three band image that is represented by the mosaic dataset. The result is a four band image of the rice beds. After combining the four bands together, classification of the images was the next step. This was done using the Maximum Likelihood Classification Tool. The tool runs an algorithm and assigns each pixel to a class which it has the highest probability of being a member. It determines this based

upon signature files that the user defines based upon the aerial image. The classes, in this case, rice or no rice, were defined at this time.

Creating the signature files was done using ten classes per each site for the two classes, rice or no rice. Ten areas in the image that did not have rice were identified as such with the signature file tool as well as ten sites that contain rice. The ability to identify the areas that contained wild rice was the result of several meetings with Lee Westfield at ProWest & Associates. Mr. Westfield has a strong natural resources background, particularly in analyzing aerial imagery, and is a valuable asset for this project. He is an avid ricker from the Leech Lake area, and therefore knows where the rice beds are and what they look like, both from the air and the water. After identifying the different classes, the signature file was built for each site for every year. From there, the Maximum Likelihood Classification Tool was run using the signature file, creating an output that represented rice and no rice for each site. There were instances where the initial signature files did not accurately define rice or no rice in the resulting output, so reclassification was necessary for certain locations.

As each site was being classified, another tool, the Probability Classes Tool, was also being run. This tool requires the same set up as Maximum Likelihood Classification, with signature files being built, and it gave a similar output file, only in this case, each pixel was given a probability. This output will be used to identify density of wild rice in each location, as the resulting output shows what percent of that pixel is appropriated as wild rice, based upon the signature files. For this instance, since field testing of this hypothesis has not been done, the density was broken into two classes, high density and low density. The cutoff for the groups was 75, anything above was high density and anything below was low density. The cutoff for the bottom of the bracket is 50 percent, since if the pixel is less than 50 percent likely to be composed of rice characteristics based on the signature files, it will be placed in the non-rice category from the Maximum Likelihood Classification Tool. The wild rice identified from this method will be tabulated for each site and compared against waterfowl data from the Minnesota Department of Natural Resources.

Waterfowl surveys were flown in Minnesota Department of Natural Resources fixed-wing aircraft (Cessna 185) with a DNR pilot and waterfowl biologist observer. Cruise surveys were flown at altitudes of 150-300 feet above ground level and ocular estimates of numbers and species of waterfowl were recorded. The surveys provide a general index to waterfowl abundance, but counts on individual basins can be influenced by several factors; for example, wind which may influence altitude of flight and wave action, light conditions may influence how well the observer can detect the birds, or disturbance by hunters, boaters, or eagles may move the birds.

The time frame for when these surveys are conducted were scheduled the week before the duck hunting season opened and week following the opening in all years. Duck season opened the Saturday nearest October 1st (from 28 Sept – 4 Oct) in all years except 2003 and 2004; when it opened the Saturday near September 24th (27 Sept 2003, 25 Sept 2004). From 1993-2002, 2 additional surveys were scheduled at 2 week intervals, typically for mid-October and late-October or early November. Beginning in 2003, Minnesota DNR staff attempted to count waterfowl numbers weekly. The goal was to survey each of the basins on these schedules; however, weather, aircraft maintenance, and other factors contributed to incomplete or canceled surveys. Especially from 1993-2002, when fewer surveys were scheduled, missed counts resulted in sparse data for determining waterfowl use.

Mallards (*Anas platyrhynchos*), ring-necked ducks (*Aythya collaris*), and coots (*Fulica Americana*) were generally the most abundant species and are species that use wild rice for both food and cover; thus, DNR staff examined counts of these species relative to wild rice abundance. When determining waterfowl abundance, DNR waterfowl staff considered 2 measures:

1. The number of each species on the basin the week immediately prior to waterfowl opening.
2. The number of duck use days from the week prior to waterfowl opening through the end of October. Duck use days were calculated as $7 * (\text{the number of ducks counted})$ for each week of the period. If there was no survey that week, the number was inferred from an average of the counts before and after that week.

From the data set that was provided by the Minnesota DNR, the number of duck days were calculated for mallards, ring-necked ducks, coots, and Canada geese for a four week window in October for each year, using the methods described above to tabulate duck days.

Results

Wild Rice Acreage Calculated by Leech Lake Division of Resource Management

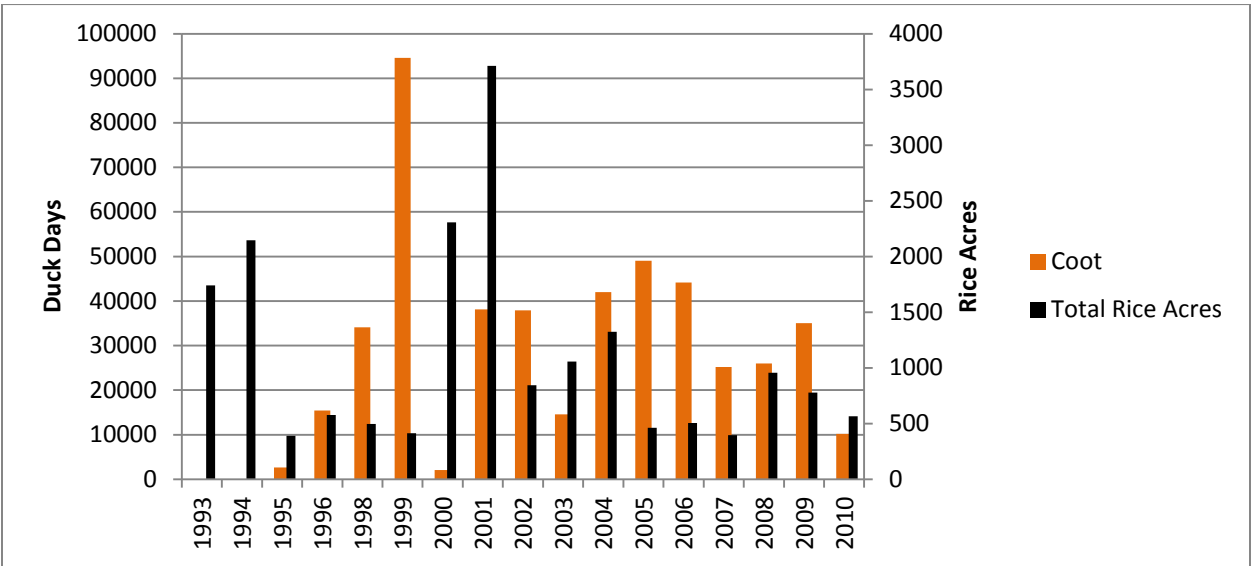
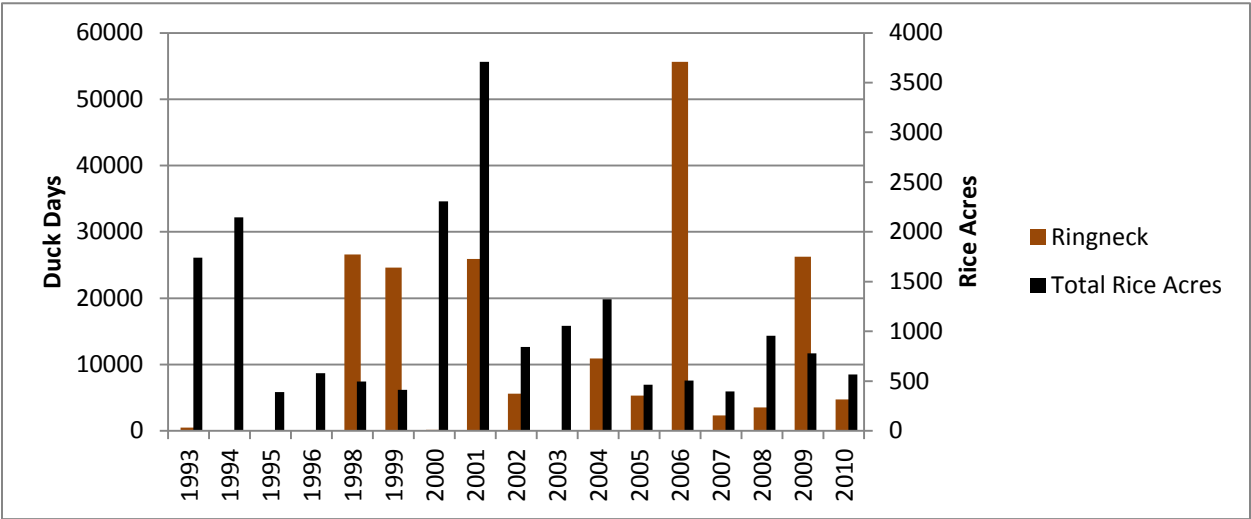
	Pigeon Dam	Natures/S. Lake	Rice Lake	Bowstring River/Cow Bay	Muskrat Bay	Mudd Lake	Raven/Rabbit	Third River Flowage	Boy Bay	Headquarters Bay
1993										
Total Rice Acres	256.851	411.584	605.242	787.898	327.951	899.203	310.841	308.63	1740.008	564.298
Density - High	202.651	96.854	165.521	594.852	197.684	797.195	208.548	126.665	1043.23	189.842
Low	54.2	314.73	439.721	193.046	130.267	102.008	102.293	181.965	696.778	374.456
1994										
Total Rice Acres	239.684	728.306	571.425	993.076	429.607	754.219	217.642	269.578	2144.232	389.596
Density - High	123.854	278.596	257.516	272.599	239.413	435.684	131.234	124.833	1857.256	123.65
Low	115.83	449.71	313.909	720.477	190.194	318.535	86.408	144.745	286.976	265.946
1995										
Total Rice Acres	288.954	1247.721	646.176	999.645	538.854	1229.129	252.407	265.905	389.587	402.65
Density - High	254.237	876.942	386.273	502.583	360.76	1065.828	203.11	170.164	159.634	268.516
Low	34.717	370.779	259.903	497.062	178.094	163.301	49.297	95.741	229.953	134.134
1996										
Total Rice Acres	227.548	1320.08	628.976	838.384	475.28	1113.012	295.722	224.891	578.236	789.546
Density - High	125.984	924.614	340.76	480.905	305.443	893.041	171.89	168.357	307.85	384.564
Low	101.564	395.466	288.216	357.479	169.837	219.971	123.832	56.534	270.386	404.982
1998										
Total Rice Acres	241.598	1013.222	670.212	938.102	487.016	1150.956	261.629	297.842	495.073	448.351
Density - High	139.548	689.589	384.463	476.115	246.41	954.8	110.142	201.854	312.765	142.711
Low	102.05	323.633	285.749	-1414.217	240.606	196.156	151.487	95.988	182.308	305.64
1999										
Total Rice Acres	215.671	235.91	404.736	523.951	133.228	968.572	298.323	198.564	412.456	489.234
Density - High	86.957	92.719	91.509	168.464	12.924	694.295	149.577	78.568	352.64	271.658
Low	128.714	143.191	313.227	355.487	120.304	274.277	148.746	119.996	59.816	217.576
2000										
Total Rice Acres	234.821	922.979	681.594	831.981	499.15	1266.195	378.147	343.856	2307.333	685.359
Density - High	164.351	419.549	337.635	319.32	242.457	964.44	247.407	246.514	1752.498	486.24
Low	70.47	503.43	343.959	512.661	256.693	301.755	130.74	97.342	554.835	199.119
2001										
Total Rice Acres	189.957	676.198	632.82	811.109	286.02	1099.749	248.02	204.375	3710.197	602.365
Density - High	96.284	465.297	273.196	191.497	131.145	788.177	109.888	86.947	2764.294	456.21
Low	93.673	210.901	359.624	619.612	154.875	311.572	138.132	117.428	945.903	146.155
2002										
Total Rice Acres	236.842	1071.163	675.013	1056.17	326.784	1123.414	417.284	348.924	844.02	635.291
Density - High	179.354	549.281	336.33	699.268	74.697	688.981	272.418	254.371	713.156	359.684
Low	57.488	521.882	338.683	356.902	252.087	434.433	144.866	94.553	130.864	275.607
2003										
Total Rice Acres	294.856	1547.006	713.773	1021.391	504.314	831.543	429.935	398.294	1056.38	705.642
Density - High	202.497	1064.863	555.413	514.579	319.222	626.542	360.834	285.647	678.846	584.214
Low	92.359	482.143	158.36	506.812	185.092	205.001	69.101	112.647	377.534	121.428
2004										
Total Rice Acres	272.814	1201.661	684.269	1093.955	453.727	1060.874	308.192	349.758	1322.922	934.624
Density - High	215.874	879.594	518.123	838.206	340.156	820.156	176.952	279.634	842.61	654.824
Low	56.94	322.067	166.146	255.749	113.571	240.718	131.24	70.124	480.312	279.8
2005										
Total Rice Acres	236.849	320.628	690.834	874.468	239.752	984.863	268.145	175.964	463.107	896.517
Density - High	105.375	129.365	281.802	376.094	104.197	658.039	165.743	86.594	329.23	546.834
Low	131.474	191.263	409.032	498.374	135.555	326.824	102.402	89.37	133.877	349.683
2006										
Total Rice Acres	249.159	888.15	690.257	994.717	493.157	808.405	323.492	198.357	504.829	789.684
Density - High	158.956	395.279	258.573	420.394	302.344	588.22	121.772	126.384	141.979	465.951
Low	90.203	492.871	431.684	574.323	190.813	220.185	201.72	71.973	362.85	323.733
2007										
Total Rice Acres	281.184	1489.731	634.231	1085.249	491.37	1025.975	441.113	202.384	396.945	968.254
Density - High	172.954	1103.921	370.513	760.552	401.17	759.946	343.573	124.674	158.65	658.251
Low	108.23	385.81	263.718	324.697	90.2	266.029	97.54	77.71	238.295	310.003
2008										
Total Rice Acres	223.558	887.582	708.106	938.437	213.859	1084.03	422.399	248.951	956.188	1384.482
Density - High	96.524	351.943	415.065	572.713	178.282	625.694	295.722	185.674	686.27	857.125
Low	127.034	535.639	293.041	365.724	35.577	458.336	126.677	63.277	269.918	527.357
2009										
Total Rice Acres	189.842	265.382	534.597	983.552	272.043	1029.645	351.341	236.954	779.052	1724.914
Density - High	72.891	63.399	155.977	259.939	97.837	594.776	220.749	97.569	568.7	1485.89
Low	116.951	201.983	368.62	723.613	174.206	434.869	130.592	139.385	210.352	239.024

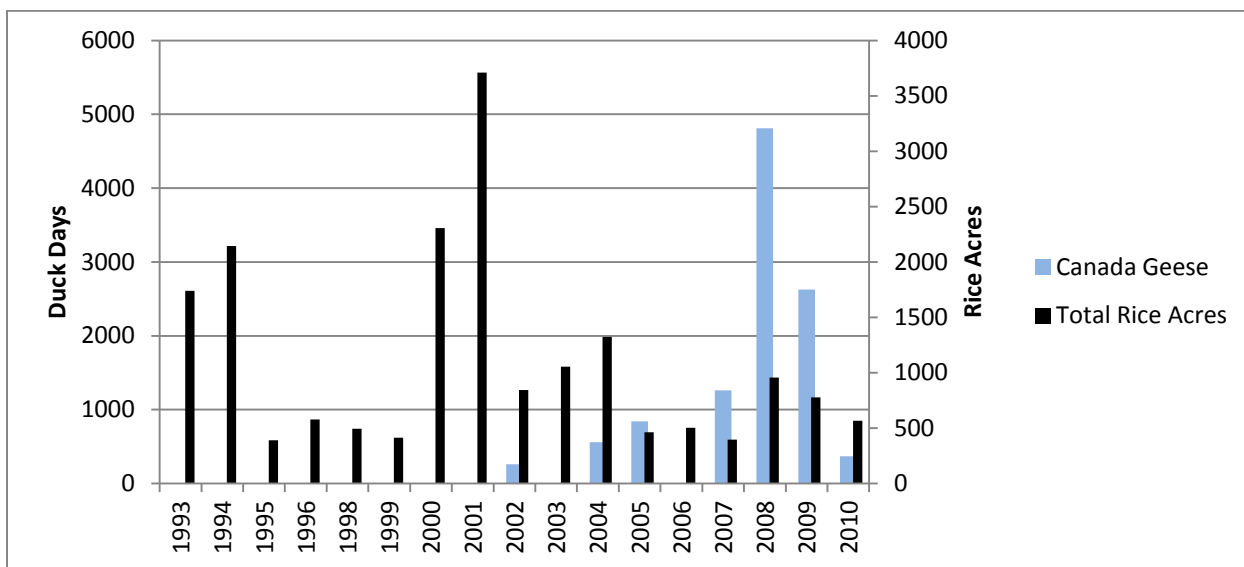
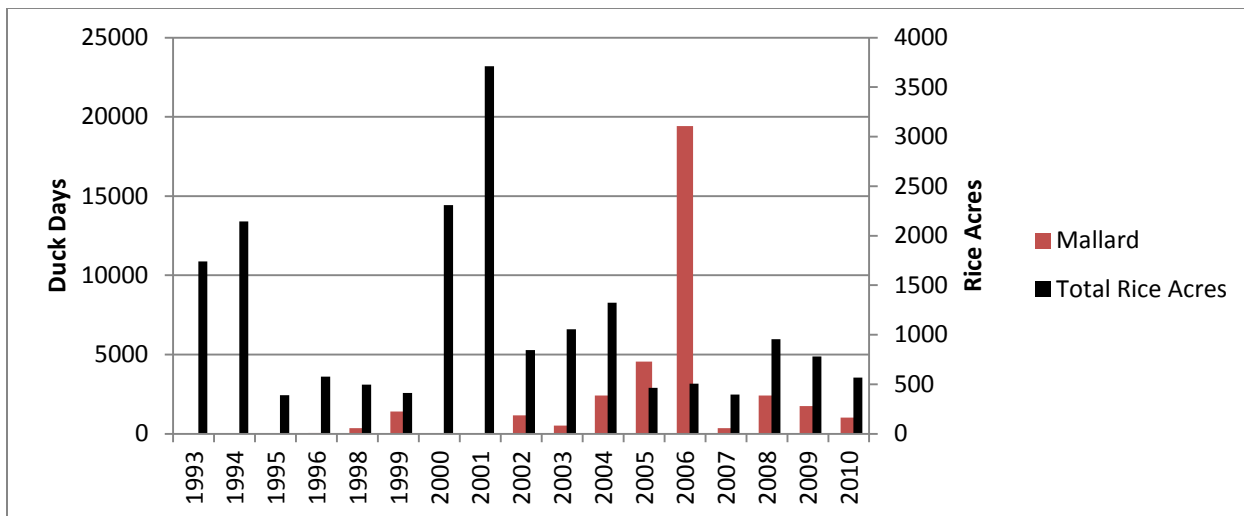
Duck Days Calculated From MN DNR Waterfowl Surveys

	Waterfowl Days (Headquarters Bay)			
	Canada Geese	Mallard	Ringneck	Coot
1993	0	0	0	0
1994	0	0	0	0
1995	0	700	600	0
1996	0	1575	0	21000
1998	0	87.5	0	8225
1999	0	0	0	5250
2000	0	70	0	0
2001	84	182	1463	47950
2002	0	1732.5	16852.5	4742.5
2003	70	6503	171.5	16117.5
2004	0	721	8204	21455
2005	14	1680	1421	49000
2006	3500	55125	18900	40040
2007	1050	0	5180	2800
2008	1015	4830	12232.5	34055
2009	437.5	0	0	19250
2010	507.5	613	3867.5	19950

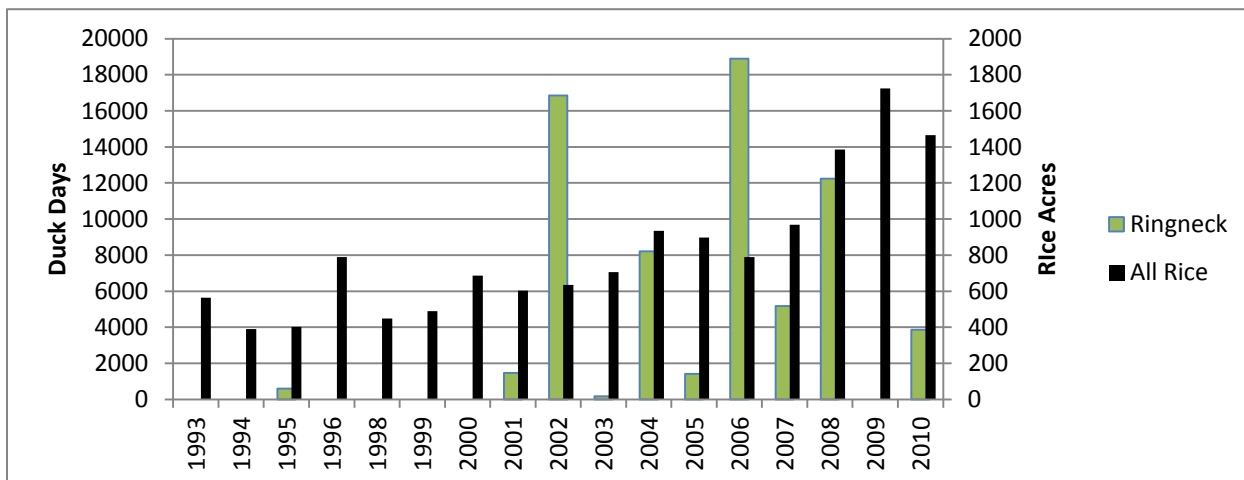
	Waterfowl Days (Boy Bay)			
	Canada Geese	Mallard	Ringneck	Coot
1993	0	0	472.5	0
1994	0	0	0	0
1995	0	0	0	2625
1996	0	52.5	0	15400
1998	0	350	26600	34125
1999	0	1400	24601.5	94587.5
2000	0	28	170	2100
2001	0	0	25900	38150
2002	262.5	1172.5	5582.5	37887.5
2003	0	525	30.5	14560
2004	560	2415	10920	42000
2005	840	4550	5320	49035
2006	0	19425	55650	44135
2007	1260	350	2310	25200
2008	4812.5	2420	3500	25970
2009	2625	1750	26250	35000
2010	367.5	1015	4725	10150

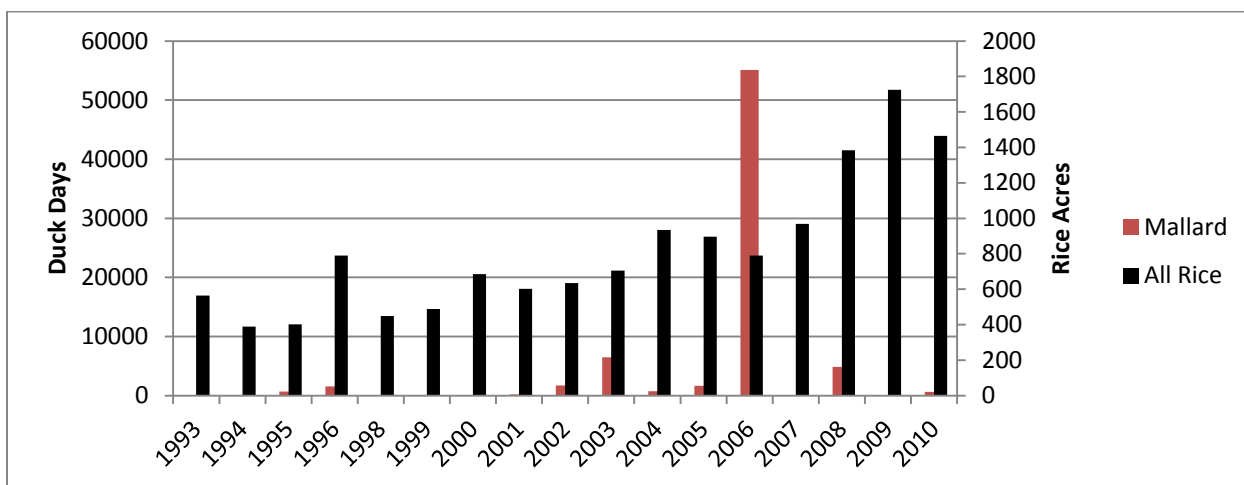
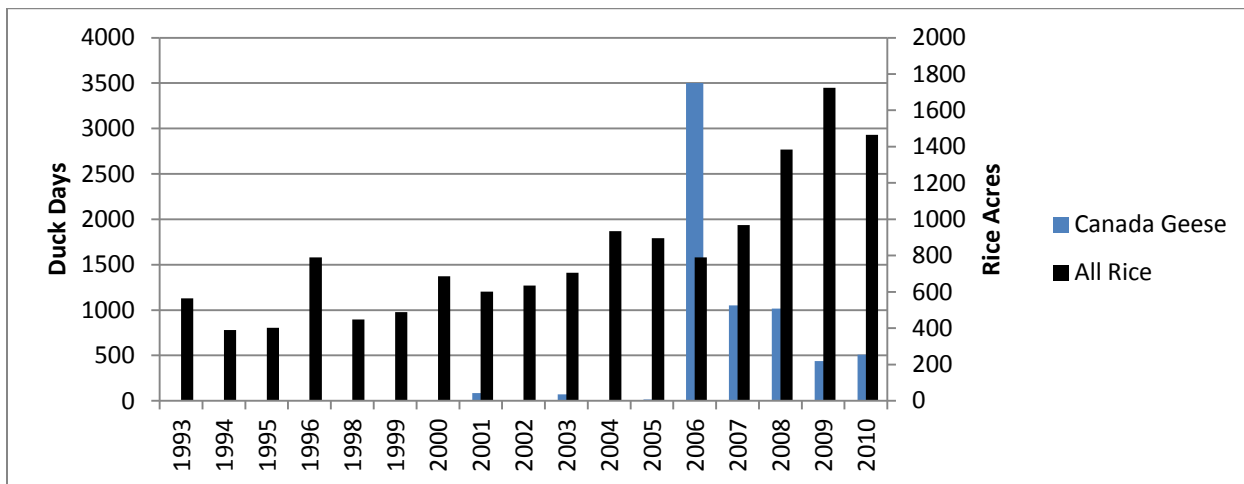
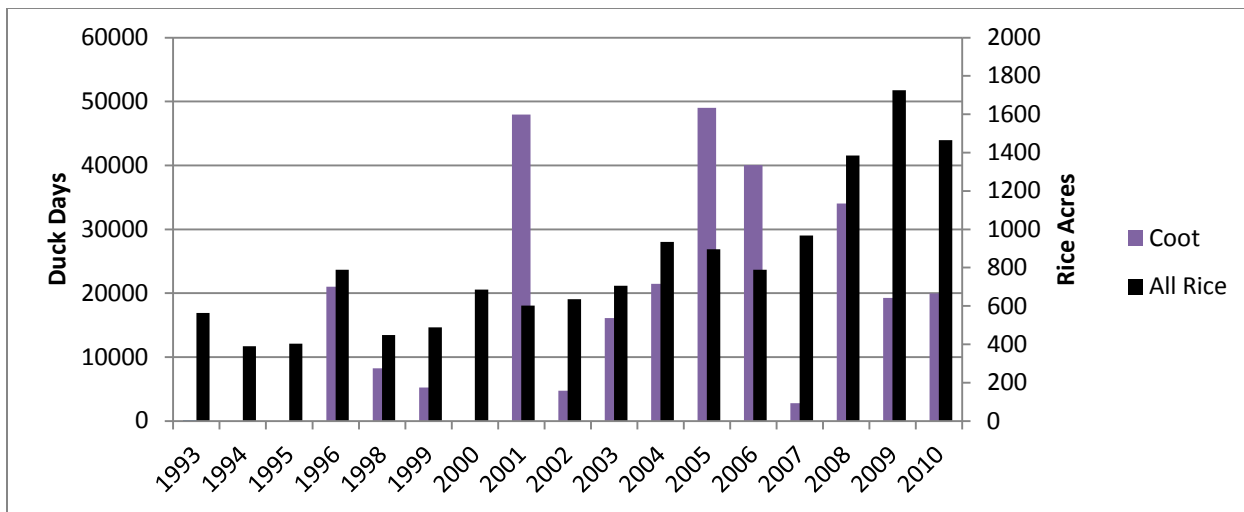
Boy Bay Wild Rice Data vs. Waterfowl Days



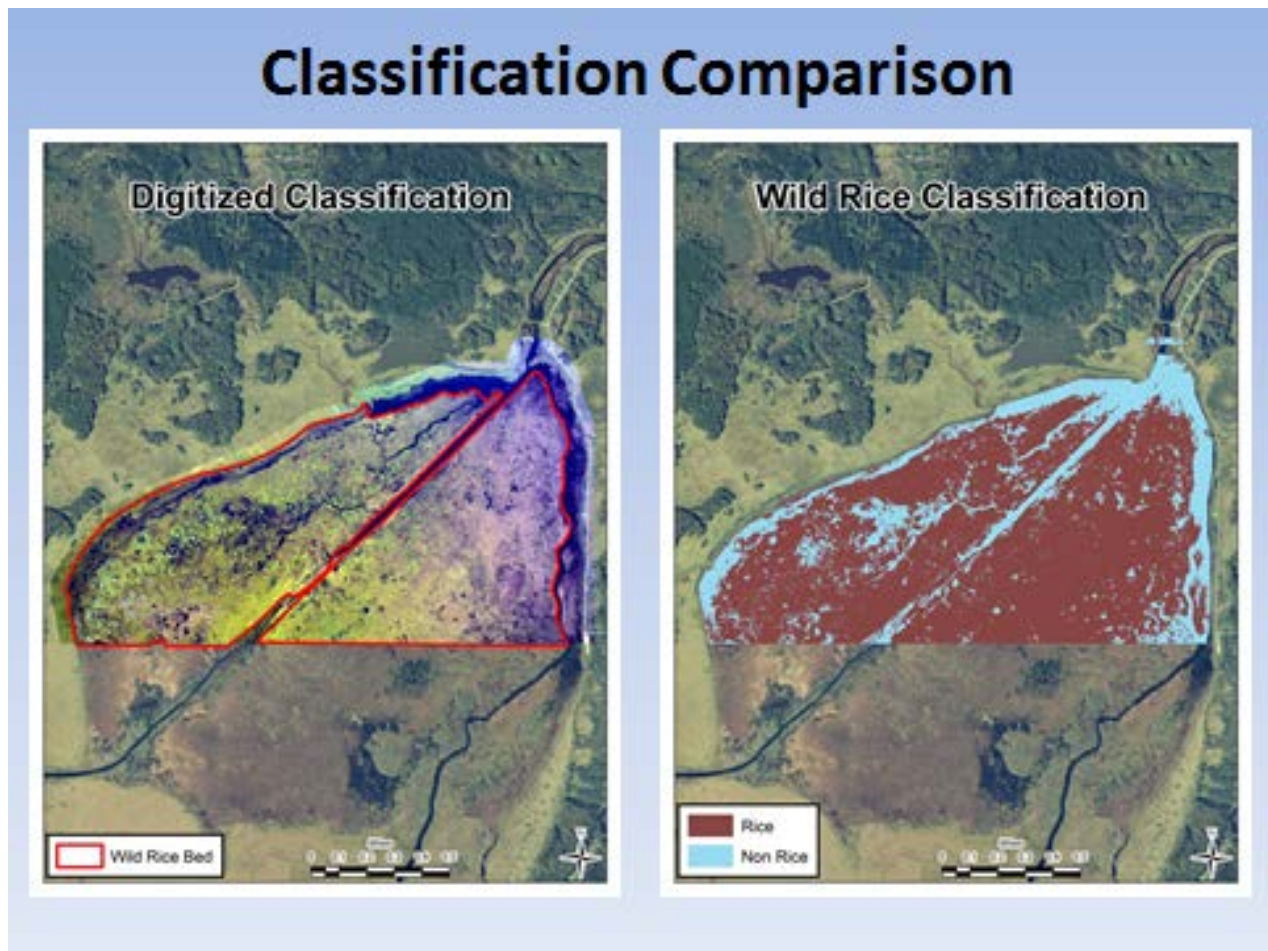


Headquarters Bay Wild Rice Data vs. Waterfowl Days





The following image represents the differences between a basic classification, in this case, digitizing wild rice beds (left hand image) based upon visual interpretation of the image. The classification of wild rice based upon utilizing ArcGIS software is on the right, and the differences are apparent when the images are placed side by side.



Discussion

Since there is no way to field test the methods that were used to acquire these results that will be the first issue to address. Since the photos are from the past, there is no way to assess the accuracy of the classification other than visual interpretation of the photos themselves. The same goes for the density classification, in theory and based upon other's research, the idea is sound, but field testing needs to be done in order to assess the accuracy.

With the classification and assessment of aerial photos flown for this year, now that this process has been mapped out, it will be possible to acquire the photos, run the classification and designate sample sites that can be tested in the field. A boundary can be placed around what is classified as wild

rice bed and then placed on a GPS unit and can be ground trothed in the field to see how well the classification performed. The same will be done for the density classification, with plots in each class identified, and then perform either a stem count for the plots or a simple visual assessment to determine if the density classification has classified the rice correctly.

These initial numbers are rough interpretation of what the aerial images are showing; there are several techniques that in can improve these numbers. In order to improve on the classification, an additional band is to be constructed, this one created from using the Band Ratio Tool, which takes the individual bands within an image and divides one by the other. In this case, the red and green bands will be used, based upon the fact that these bands are responsible for the reflectance off of vegetation, in this case wild rice. Once that band has been created, it will be added to the Band Composite tool to be added to the mosaic datasets and create a five band image. The goal being that the greater the variation that can be demonstrated in the reflectance of the image, the better the classification will be as a result of these differences.

Initially this band was going to be created for this part of the analysis, but due to lack of processing time as well as limited storage capabilities, this was not possible. The first initial runs of this tool created data sets that were 150 to 200 gigabytes worth of data. In order to create this band ratioing effect, one of the bands, red or green, has to be converted into a floating point, which creates a copy of the data set. The reason for this is that when dividing two integer formatted data sets, a decimal is possible, but integer by integer division will not allow for a decimal answer. This is solved with a floating point raster data set. When a substantial storage system is acquired this will be the first improvement added to the datasets to hopefully improve the classification of wild rice from the images.

The next step to improve classification will be to add addition metrics to the model, in the hopes that it will “weed out” excess data that does not need to be sampled, and thus reduce the misclassification of wild rice. The datasets can be further trimmed down by the use of bathymetric data, since wild rice will only grow in a certain water depth. By adding this data set to the original mask that was created, the areas that won’t support wild rice can be removed.

The final step that can be taken to hopefully improve classification is to see if for the 2012 aerial photographs that ProWest & Associates will be flying, if they can take infrared imagery. The reason for this is that actively growing plants, in this case wild rice, exhibit a high near infrared reflectance (approximately six times stronger than a plant's reflectance of visible green light). As a result, actively growing vegetation will show up prominently on an aerial image as bright red. This would be very beneficial as the water around which wild rice grows in would appear very dark, in contrast to the bright red wild rice. This would be very beneficial in classifying wild rice, not just from a visual standpoint, but by also supplying another band in the image.

Again, these results are a rough first cut of a model that is an ongoing process, with new datasets and techniques in the process to be applied. Even though it is a rough cut, it holds weight over digitizing of aerial imagery, in that there is some statistical certainty behind the values in the results table. By no means are they 100 percent accurate, but for now they represent the base of an impressive data set that when finished will represent 18 years' worth of valuable data pertaining to wild rice.

Conclusions

A correlation test was run to determine if there were any patterns or relationships between the data sets that weren't obvious from the graphs. The following tables are the results from a correlation test, with the correlation co-efficient highlighted in yellow:

Headquarters Bay

	<i>Canada Geese</i>	<i>Mallard</i>	<i>Ringneck</i>	<i>Coot</i>	<i>All Rice</i>
Canada Geese	1				
Mallard	0.918165399	1			
Ringneck	0.675616471	0.638174858	1		
Coot	0.372854739	0.385572739	0.289009397	1	
All Rice	0.249463312	0.005570842	0.186644614	0.358501761	1
	<i>Canada Geese</i>	<i>Mallard</i>	<i>Ringneck</i>	<i>Coot</i>	<i>Proportion High Density/Total Rice</i>
Canada Geese	1				
Mallard	0.918165399	1			
Ringneck	0.675616471	0.638174858	1		
Coot	0.372854739	0.385572739	0.289009397	1	
Proportion High Density/Total Rice	0.084836779	0.03982997	0.063329633	0.309681603	1

Boy Bay

	<i>Canada Geese</i>	<i>Mallard</i>	<i>Ringneck</i>	<i>Coot</i>	<i>Total Rice Acres</i>
Canada Geese	1				
Mallard	0.001734963	1			
Ringneck	-0.059336871	0.734370944	1		
Coot	0.060969739	0.304294881	0.575660833	1	
Total Rice Acres	-0.165795493	-0.253291775	-0.058411269	-0.25644554	1
	<i>Canada Geese</i>	<i>Mallard</i>	<i>Ringneck</i>	<i>Coot</i>	<i>Prortion High Density/Total Rice</i>
Canada Geese	1				
Mallard	0.001734963	1			
Ringneck	-0.059336871	0.734370944	1		
Coot	0.060969739	0.304294881	0.575660833	1	
Prortion High Density/Total Rice	0.099650459	-0.501082284	-0.248281924	0.201117806	1

The correlation co-efficient is highlighted in yellow for each site. Each site is evident in showing there is a weak correlation, whether it be a straight correlation or inverse correlation, between the wild rice numbers and the waterfowl surveys. A value close to -1 or 1 would show a strong correlation between the two variables, a value that is close to zero shows that the two variables are independent of one another. Since the correlation values are not zero, there is a weak correlation between the two variables, but there is a far greater chance that there are other variables that can explain the occurrence of waterfowl at the given locations.

Since there were only two instances where the data sets from Leech Lake and the Minnesota DNR overlapped, it would be unfair to make any claims or assumptions based upon analysis of two sites. Once the Leech Lake Division of Resource Management completes its own analysis of wild rice imagery, remaining sites that coincide with Minnesota DNR's waterfowl survey can be analyzed to identify possible correlations between wild rice acreage and waterfowl counts.

2010 Project Abstract

For the Period Ending June 30, 2011

PROJECT TITLE: HCP6 supplement-2h- Fish Habitat

PROJECT MANAGER: Linda Erickson-Eastwood

AFFILIATION: MN-DNR, Division of Fish & Wildlife

MAILING ADDRESS: 500 Lafayette Road,

CITY/STATE/ZIP: St Paul, MN 55155

PHONE: 651-259-5206

FAX: 651-297-4916

E-MAIL: linda.erickson-eastwood@state.mn.us

WEBSITE: <http://www.mnhabitatcorridors.org/>

FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2010, Chp. 362, Sec. 2, Subd. 4f2h

APPROPRIATION AMOUNT: \$100,000

Overall Project Outcome and Results

Citizens of the state of Minnesota benefit from this project by having a better fish community structure in Hartley and Long Lake that is sustainable by natural reproduction. This then creates better fishing and recreation available in high priority waterbodies. The project was completed on June 30, 2011. The project consisted of seven step-pools that started at the dam and went down stream approximately 230 ft. In addition four stop-log bays on the dam were modified to allow fish passage. The public have reported seeing fish using the pools to move into Hartley Lake and Long Lake. In July 2011, heavy rains created high waters and resulted in some of the organic fill being washed out. The lake association is going to work with staff to repair the damage. Long term maintenance of this project is going to be shared with the local lake association.

Project Results Use and Dissemination

Information on HCP project results have been shared and disseminated through all partner organizations. The Environmental Trust Fund provides information to the general public on how the lottery funds are spent for natural resource activities.

2010 Environment and Natural Resources Trust Fund (ENRTF)
Work Program Amendment/Update

Date of Report: Sept. 9, 2011

Date of Next Progress Report: This is a final report

Date of Work Program Approval:

Project Completion Date: 06/30/2011

I. Project Title: HCP Phase VI Supplemental - Fisheries Habitat Improvement (2h)

Name: Linda Erickson-Eastwood
Organization: MN DNR – Fish and Wildlife
Address: 500 Lafayette Rd, Box 20, St. Paul, MN 55155
Telephone: 651 259-5206
Email: linda.erickson-eastwood@state.mn.us
Fax: 651 297-4916
Web: <http://www.dnr.state.mn.us>

Location of Potential Projects: Grand Rapids Area

Name	County	Acres	Shoreline Feet
Hartley Lake	Itasca		230

Total ENRTF Project Budget:	ENRTF Appropriation	\$100,000
	Minus Amount Spent	<u>\$ 100,000</u>
	Equal Balance:	<u>\$ 0.0</u>

Legal Citation: M.L. 2010, Chp. 362, Sec. 2, Subd. 4f4b

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. PROJECT SUMMARY AND RESULTS: The implementation of the design went out for bid last August. The project was completed on June 30, 2011. The project consisted of seven step-pools that started at the dam and went down stream approximately 230 ft. In addition four stop-log bays on the dam were modified to allow fish passage. The public and staff have reported seeing fish using the pools to move into Hartley Lake and Long Lake. In July 2011, heavy rains created high waters and resulted in some of the organic fill being washed out. The lake association is going to work with staff to repair the damage. Long term maintenance of this project is going to be shared with the lake association.

III. PROGRESS SUMMARY AS OF June 30, 2011

Trust Acres	Trust Miles	Trust \$	Other St. \$	Other \$	Other St. Acres	Other St. Miles	Other Acres	Other Miles	Total Acres	Total Miles
	0.04	\$100,000	\$16,663		530				530	0.04

Program Result **Trust Dollars Spent** **Trust Accomplishments**

IV. OUTLINE OF PROJECT RESULTS:

RESULT/ACTIVITY 1: Fisheries Habitat Improvement: Monies are slated for one project to open up fish passage to Hartley Lake.

ENRTF Appropriation **\$100,000**
Amount Spent **\$117,000**
Balance: **\$0**

Deliverable/Outcome	Completion Date	Budget
1. Hartley Lake	June 31 2011	\$100,000
Description of Deliverable – Walleye and northern pike migration have been limited and unable to get to key spawning areas. By restoring fish passage through the West fork of the Prairie River it will open up approximately 280 acres of the Hartely Lake and approximately 250 acres of Long Lake in Itasca County. Long Lake has historically had walleye but the dam has not allowed walleye migration. By creating this fish passage it will open up critical habitat areas and help re-establish the Long lake fishery. This project is supported by the lake association and we are doing the project in cooperation with them.		

Result Status as of: Nov, 2010 – Design was completed and the project was out for bid.

Result Status as of: June, 2011 – Project has been completed as designed.

V. Final Report Summary: June 30, 2011 Citizens of the state of Minnesota benefit from this project by having a better fish community structure in Hartley and Long Lake that is sustainable by natural reproduction. This then creates better fishing and recreation available in high priority waterbodies. The project was completed on June 30, 2011. The project consisted of seven step-pools that started at the dam and went down stream approximately 230 ft. In addition four stop-log bays on the dam were modified to allow fish passage. The public have reported seeing fish using the pools to move into Hartley Lake

and Long Lake. In July 2011, heavy rains created high waters and resulted in some of the organic fill being washed out. The lake association is going to work with staff to repair the damage. Long term maintenance of this project is going to be shared with the local lake association.

VI. TOTAL ENRTF PROJECT BUDGET

Habitat Improvement - \$ 85,000

Additional Budget Items: \$ 10,000- Professional Services for installation oversight
\$5,000 seasonal labor which was not utilized.

VII. Project Strategy:

- A. Project Partners:** The local lake association provided input and will be assisting on the maintenance of this project.
- B. Project Impact and Long-term Strategy:** These projects are part of a long-term habitat improvement strategy identified in "Fisheries Long Range Plan" and will complement projects funded with other State dollars.
- C. Other Funds Proposed to be Spent during the Project Period:** Project will likely require additional State funds including game and fish or water recreation dollars, as well as some donations of time.

D. Spending History:

<u>Year</u>	<u>Funding Source</u>	<u>DNR- FAW - Fisheries</u>
2007	ETF – Outstate	\$ 200,000
2008	ETF – Outstate	\$ 100,000
2009	ETF – Outstate	\$ 100,000

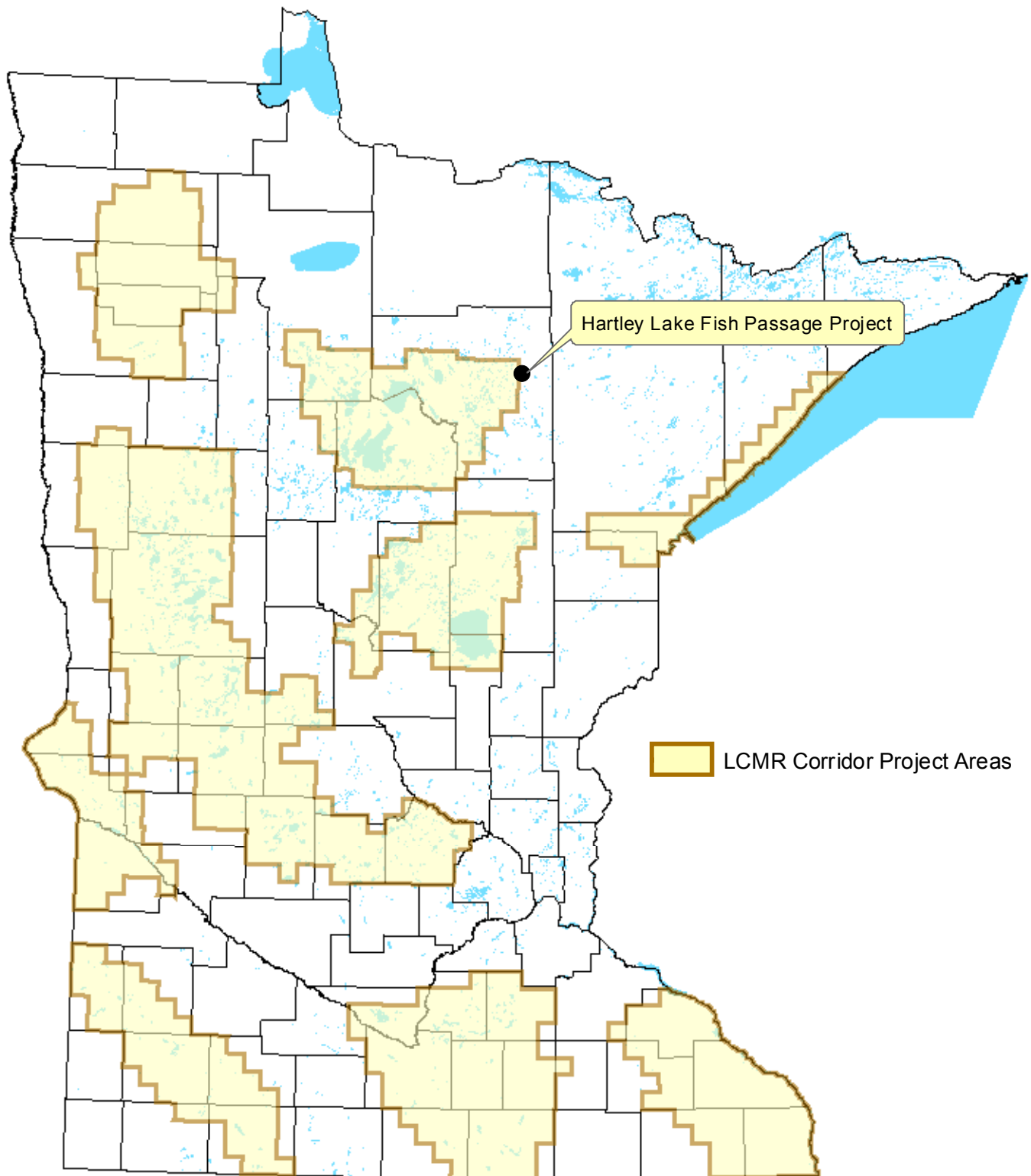
DISSEMINATION: Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org> Information on HCP project results have been shared and disseminated through all partner organizations. The Environmental Trust Fund provides information to the general public on how the lottery funds are spent for natural resource activities

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than December 1, 2010, June 1, 2011, and December 1, 2011. A final work program report and associated products will be submitted between June 30 and August 1, 2011 as requested by the LCCMR. All reports will be generated using the HCP online reporting system.

IX. RESEARCH PROJECTS: NA

Attachment A: Budget Detail for 2010 Project					
Project Title: Phase VI Supplement - Fish Habitat Improvement (2H) Minnesota's Habitat Conservation Partnership					
Project Manager Name: Linda Erickson-Eastwood					
Trust Fund Appropriation: \$ 100,000 (VERSION July 2011 final)					
1) See list of non-eligible expenses, do not include any of these items in your budget sheet					
2) Remove any budget item lines not applicable					
2009 Trust Fund Budget	<u>Result 1 Budget:</u>	Amount Spent (date)	Balance (date)	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	Habitat Improvement				
PERSONNEL: for seasonal staff to be hired as needed (approx. ..15 FTE) --- We did not utilize any of our habitat crew's time to do this project as originally planned due to work load schedules		0			
Contracts					
Professional/technical? legal services, engineering, signage, fleet	15,000	15,000	0	15,000	0
Other contracts; low bid for habitat design or installation work being done or materials needed for fish habitat work	85,000	85,000	0	85,000	0
Other direct operating costs (for what? – be specific)					
Non-capital Equipment / Tools (what equipment? Give a general description and cost)					
Office equipment & computers - NOT ALLOWED unless unique to the project					
Capital equipment over \$3,500 (list specific items)					
Land acquisition					
Easement acquisition					
Professional Services for Acq.					
Printing					
Supplies (list specific categories)					
Travel expenses in Minnesota					
Travel outside Minnesota (where?, for what purpose?)					
Other (Describe the activity and cost) be specific					
COLUMN TOTAL	\$100,000	\$100,000	\$0	\$100,000	\$0

LCCMR Phase 6 Supplemental Habitat Corridors



2010 Project Abstract

For the Period Ending June 30, 2012

PROJECT TITLE: HCP Phase VI Supplemental – Prairie Management (2k)
PROJECT MANAGER: Jason Garms
AFFILIATION: MN DNR – Ecological Resources
MAILING ADDRESS: 500 Lafayette Rd Box 25
CITY/STATE/ZIP: Saint Paul, MN 55155
PHONE: 651-259-5130
E-MAIL: jason.garms@state.mn.us
WEBSITE: www.dnr.state.mn.us
FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: M.L. 2010, Chp. 362, Sec. 2, Subd. 4f2k

APPROPRIATION AMOUNT: \$63,000

Overall Project Outcome and Results

A total of 127 acres of invasive species were controlled during the project (69 acres of woody removal, 58 acres of herbaceous invasive species treatments). Invasive tree species controlled includes Buckthorn, Siberian elm, Red cedar and Boxelder. Herbaceous invasive species treated include Spotted Knapweed, Leafy Spurge, and Crown-vetch. Projects were implemented by both private contractors and DNR crews. A total of 197 acres were burned on 2 SNA's and 2 Native Prairie Banks during the reporting period. All burns were completed by DNR crews as it remains difficult to hire qualified prescribed fire contractors. A total of 15 acres were reconstructed on the Langhei SNA and Mickelson Native Prairie Bank. All seeds were collected on the projects sites, and every attempt was made to collect a diversity of seeds. Both reconstructions are adjacent to native prairie; one reconstruction was a former row-crop field, and the other a site previously disturbed by installation of underground utilities. Data collection occurred on 4 different management projects. The data was loaded into the SNA Program's Adaptive Management Spatial Database (AMSD) for analysis and permanent documentation. Projects monitored included invasive species treatments and prescribed burning. As additional SNA management actions are implemented, and the data sets grow larger, AMSD will prove to be a valuable tool for continuous improvement of management methods.

Project Results Use and Dissemination

Accomplishment Reports and press releases will be made available at
<http://www.mnhabitatcorridors.org>

Environment and Natural Resources Trust Fund 2010 Work Program Final Report

Date of Report: August 13, 2012
Final Report
Date of Work Program Approval:
Project Completion Date: June 30, 2012

I. PROJECT TITLE: HCP Phase VI Supplemental – Prairie Management (2k)

Project Manager: Jason Garms
Affiliation: MN DNR – Ecological Resources
Mailing Address: 500 Lafayette Rd Box 25
City / State / Zip: Saint Paul, MN 55155
Telephone Number: 651-259-5130
E-mail Address: jason.garms@state.mn.us
Fax Number: 651-296-1811
Web Site Address: www.dnr.state.mn.us

Location: Areas of native prairie and associated grasslands on public and private land within Project Areas 1, 3, 6, 9, 10, & 11. See map of Scientific & Natural Areas and Native Prairie Bank easements in the project areas.

Total Trust Fund Project Budget:	ENRTF Appropriation	\$	63,000
	Minus Amount Spent:	\$	60,996
	Equal Balance:	\$	2,004

Legal Citation: M.L. 2010, Chp. 362, Sec. 2, Subd. 4f2k

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be

perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY:

A total of 127 acres of invasive species were control during the project (69 acres of woody removal, 58 acres of herbaceous invasive species treatments). Invasive tree species controlled includes Buckthorn, Siberian elm, Red cedar and Boxelder. Herbaceous invasive species treated include Spotted Knapweed, Leafy Spurge, and Crown-vetch. Projects were implemented by both private contractors and DNR crews. A total of 197 acres were burned on 2 SNA's and 2 Native Prairie Banks during the reporting period. All burns were completed by DNR crews as it remains difficult to hire qualified prescribed fire contractors. A total of 15 acres were reconstructed on the Langhei SNA and Mickelson Native Prairie Bank. All seeds were collected on the projects sites, and every attempt was made to collect a diversity of seeds. Both reconstructions are adjacent to native prairie; one reconstruction was a former row-crop field, and the other a site previously disturbed by installation of underground utilities. The habitat management projects came in a little under budget, which is the explanation for the \$2K that remains in the project budget. Date collection occurred on 4 different management projects. The data was loaded into the SNA Program's Adaptive Management Spatial Database (AMSD) for analysis and permanent documentation. Projects monitored included invasive species treatments and prescribed burning. As additional SNA management actions are implemented, and the data sets grow larger, AMSD will prove to be a valuable tool for continuous improvement of management methods.

IV. OUTLINE OF PROJECT RESULTS:

Result/Activity 1: Prairie Management and Restoration

Description:

The following prairie management and restoration activities will be targeted at Scientific and Natural Areas and Native Prairie Bank conservation easements as shown on the attached map.

Woody encroachment and Invasive species control – (\$32,000 for at least 45 acres of surrounding grassland/prairie benefited). Invasive woody species have invaded a significant number of native prairie tracts over the past 60+ years and is accelerating. Cutting scattered trees, fencerows, or small groves in prairies and grasslands can substantial improve areas of habitat for open grassland flora and fauna. Woody encroachment removal projects will be implemented by private contractors and DNR management crews.

Herbaceous invasive species threaten many of the few remaining native prairies, and new invasive species continue to emerge. Species such as Spotted Knapweed, Birdsfoot Trefoil, Leafy Spurge, and Crown Vetch quickly invade grassland, reducing diversity and habitat quality. Funds will be used to implement 'best management practices' for control and elimination of exotic species on remnant prairies and other priority grasslands

Prescribed burning – (\$19,000 for at least 170 acres burned) The importance of fire for keeping prairies healthy is widely recognized. However, limited spring and fall burn seasons, and the need for specialized training and equipment, make it challenging to meet all fire management needs. This activity builds on the success of past LCCMR accelerated prairie burning projects. DNR trained burn crews will implement prescribed fire projects, or certified private contractors when available.

Restoration/reconstruction – (\$9,000/up to 10 acres reconstructed) Today prairie remnants and other grasslands existing as fragments. Reconstruction efforts are needed to expand functionality of existing habitat, and buffer native plant communities from surrounding activities. Funds will be used to harvest and process seed, and plant native prairie species. Restoration projects will use only local ecotype seeds and plants.

Adaptive Management Monitoring – (\$3,000 to monitor and evaluate 3 project sites) The SNA program is starting to accelerate the use of adaptive management which requires ecological monitoring of managed sites to continuously inform and improve methods. Monitoring methods used will be those being developed in the LCCMR project "Accelerated Prairie Management, Survey, Acquisition and Evaluation" (ML 2008, Chap. 367, Sec.2, Subd. 3m).

Summary Budget Information for Result/Activity 1:

ENRTF Budget:	\$ 63,000
Amount Spent:	<u>\$ 60,996</u>
Balance:	\$ 2,004

Deliverable/Outcome	Completion Date	Budget	Spent	Balance
1. 45 acres of woody and invasive species control	June 30, 2012	\$32,000	\$32,000	\$0
2. 170 acres prescribed burning	June 30, 2012	\$19,000	\$18,216	\$784
3. 10 acres of restoration/reconstruction	June 30, 2012	\$9,000	\$9,000	\$0
4. 3 projects monitored for adaptive management	June 30, 2012	\$3,000	\$1,780	\$1,220

Final Report Summary:

Woody encroachment and Invasive species control – (69 acres of woody removal, 58 acres of herbaceous invasive species treatments) A total of 127 acres of invasive species were control during the reporting period. Invasive tree species controlled includes Buckthorn, Siberian elm, Red cedar and Boxelder. Herbaceous invasive species treated include Spotted Knapweed, Leafy Spurge, and Crown-vetch. Projects were implemented by both private contractors and DNR crews.

Prescribed burning – (197 acres burned) A total of 197 acres were burned on 2 SNA's and 2 Native Prairie Banks during the reporting period. All burns were completed by DNR crews as it remains difficult to hire qualified prescribed fire contractors.

Restoration/reconstruction – (15 acres restored) A total of 15 acres were reconstructed on the Langhei SNA and Mickelson Native Prairie Bank. All seeds were collected on the projects sites, and every attempt was made to collect a diversity of seeds. Both reconstructions are adjacent to native prairie; one reconstruction was a former row-crop field, and the other a site previously disturbed by installation of underground utilities.

Adaptive Management Monitoring – (4 sites monitored) Data collection occurred on 4 different management projects. The data was loaded into the SNA Program's Adaptive Management Spatial Database (AMSD) for analysis and permanent documentation. Projects included invasive species treatments and prescribed burning. As additional SNA management actions are implemented, and the data sets grow larger, AMSD will prove to be a valuable tool for continuous improvement of management methods.

V. TOTAL ENRTF PROJECT BUDGET:

<u>Budget Item</u>	
*Personnel: DNR staff: NR Specialists, NR Technicians, NR laborers	\$33,500
Contracts: Competitive bid contracts with private vendors and cost-share grants to landowners for prescribed burning, prairie reconstructions, woody encroachment, etc	\$21,000
Equipment/Tools/Supplies: project supplies, vehicle fleet costs (e.g. ATV, Pick-up, ASV tracked vehicle)	\$8,500
Acquisition: none	\$0
Travel: none	\$0
Additional Budget Items: none	\$0
TOTAL ENRTF PROJECT BUDGET:	\$63,000

***Explanation of Personnel costs:**

- For classified and unclassified SNA program & other DNR staff paid almost exclusively with special project funds: up to ~ 0.4 FTE specialists and technicians; and ~ 0.3 FTE laborers and seasonal crews

- Only time spent on approved projects will be charged to these funds. Without these funds, none of the projects in this work program would be completed. They are an acceleration of related initiatives.
- To implement projects in the work program, specialized skills (prescribed burning, knowledge of sites and management implications) are often required. DNR employees with the training, experience and certifications required to do these specialized tasks are used to directly implement these projects, and work with landowners and contractors to design, direct and certify completion of projects they carry out.
- Contracts with outside vendors are used when possible, but contractors are not available for some projects.

TOTAL ENRTF PROJECT BUDGET: \$ 63,000

Explanation of Capital Expenditures Greater Than \$3,500: *none*

VI. PROJECT STRATEGY:

A. Project Partners: While SNA staff will coordinate the management activities of this project, DNR staff from other programs and divisions will also assist with implementation. External partners that help by adding additional resources to implement activities include The Nature Conservancy and the U.S. Fish and Wildlife Service (e.g. sharing specialized equipment or access to restoration plant materials).

B. Project Impact and Long-term Strategy: This project will help protect and perpetuate rare species, Species of Greatest Conservation Needs, and natural features of state significance within the Conservation Partnership project areas because of their importance and strategic value in protecting these rare resources. As a part of the State Outdoor Recreation system, all of these sites are managed as state SNAs that provide public access and opportunities to the public for nature observation and study. The SNA Long Range Plan has a goal of protection through SNA designation within each ecological subsection of five occurrences of each native plant community (NPC) and three occurrences of each natural heritage element found in that subsection. The Division of Ecological Resources is in the process of using the recently revised Native Plant Community Classification system to assess the extent of protection for each NPC per subsection - looking at both numbers of occurrences (NPC polygons) and acreage protected. This demonstrates a substantial need for more SNA land acquisition and habitat restoration for at least the next 2 decades. Towards this end, the program could readily utilize support from the Environment and Natural Resources Trust fund and/or the Lessard Outdoor Heritage Council of \$2M to \$8M per biennium over this timeframe. Also see main proposal for Habitat Conservation Partnerships impacts and long-term strategy.

C. Other Funds Proposed to be Spent during the Project Period:

An estimated \$1,250 in-kind directly related to this project (e.g. general fund-supported project manager and Prairie Biologist staff time) is expected to be contributed to this project (but not tracked for reporting purposes). Approximately \$8,820 in Department Operations and Division Support charges accruing to this project will be covered by Division general funds or other eligible Division funds (see Attachment B.)

In addition, this Environment and Natural Resource Trust Fund appropriation will be supplemented by other state funding (e.g. bonding and potentially L-SOHC, invasives species, heritage enhancement, and RIM match) and non-state funds (e.g. federal SWG, private funds, and partial landowner donations) as needed to complete prairie stewardship work during this project time frame. This additional funding is to accomplish acres, etc. not included in the deliverables listed in this work program.

D. Spending History: Past HCP spending; 2001: \$36,250 / 2003: \$0 / 2005: \$133,000 / 2007: \$75,000 / 2008: \$75,000

VII. DISSEMINATION: Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>

VIII. REPORTING REQUIREMENTS:

Periodic progress reports are due December 1, 2010, June 1, 2011, and December 1, 2011 and the final work program report is due between June 30 and August 1, 2012. All reports will be generated using the HCP online reporting system.

IX. RESEARCH PROJECTS: NA

Attachment A: Budget Detail for M.L. 2010, Chp. 362, Sec. 2, Subd. 4f2k					
Project Title: 2k - Prairie Management – Habitat Conservation Partnership					
Project Manager Name: Jason Garms					
Trust Fund Appropriation: \$63,000					
2010 Trust Fund Budget	<u>Result 1 Budget:</u>	Amount Spent (6/30/12)	Balance (date)	TOTAL BUDGET	TOTAL BALANCE
	Prairie Management and Restoration				
BUDGET ITEM					
PERSONNEL: wages and benefits (DNR NR Specialists, NR Technicians, NR laborers; a detailed personnel information is included in the Work Program - pg 3)	33,500	31,798	1,702	33,500	1,702
Contracts					
Other contracts (contracts for prescribed burning, prairie reconstructions, woody encroachment, etc. Also includes cost-share agreements for private land projects)	21,000	21,000	0	21,000	0
Non-capital Equipment / Tools (vehicle fleet costs (e.g. ATV, Pick-up, ASV tracked vehicle)	7,500	7,493	7	7,500	7
Supplies (herbicide, safety supplies, etc)	1,000	705	295	1,000	295
COLUMN TOTAL	\$63,000	\$60,996	\$2,004	\$63,000	\$2,004

2010 Project Abstract

For the Period Ending June 30, 2012

PROJECT TITLE: HCP Phase VI Supplemental – Campaign for Conservation (2n-4f)

PROJECT MANAGER: Rich Johnson

AFFILIATION: The Nature Conservancy

MAILING ADDRESS: 1101 West River Parkway, Suite 200

CITY/STATE/ZIP: Minneapolis, MN 55415-1291

PHONE: 612-331-0790

E-MAIL: rich_johnson@tnc.org

WEBSITE: www.nature.org

FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2010, Chap. 362, Sec. 2, Subd. 2n/4f

APPROPRIATION AMOUNT: \$ 164,000

Overall Project Outcome and Results

The Nature Conservancy's (TNC) 2010 Work Program focused on habitat restoration/enhancement in critical corridors and landscapes identified by TNC and the Habitat Conservation Partnership. This program allowed us to significantly accelerate our work to maintain and enhance Minnesota's prairies, savannas, and wetlands using prescribed fire and surveying/treating invasive species. Other efforts focused on restoring sand prairies and long-lived conifers in landscapes where these are threatened. Our goal in this phase was to restore 2,415 acres. We were able to complete work on 3,178 acres, including: 1) 2,529 acres of prescribed fire was planned/implemented at 15 sites in the Northern Tallgrass Prairie and prairie-forest transition areas of Minnesota. 2) 533 acres of invasive species were treated at 15 sites in the same areas. 3) 75 acres of white pine and other long-lived conifers were replanted in forests along the North Shore. 4) 41 acres of sand prairie were restored in Southeast Minnesota. Not included in these totals, but still valuable, were preparations for future prescribed burns on 240 acres and surveys for invasive species on over 7,000 further acres. Both will contribute to future conservation results. In addition, this support from the Environment and Natural Resource Trust Fund allowed TNC to bring an additional \$54,284 in private and non-state public dollars for conservation work in these critical places.

Environment and Natural Resources Trust Fund 2010 Work Program Final Report

Date of Report: November 2, 2012

Final Report

Date of Work Program Approval: November 18, 2010

Project Completion Date: June 30, 2012

I. PROJECT TITLE: HCP Phase VI Supplemental – Campaign for Conservation (2n-4f)

Project Manager: Rich Johnson

Affiliation: The Nature Conservancy

Mailing Address: 1101 West River Parkway, Suite 200

City / State / Zip: Minneapolis, MN 55415-1291

Telephone Number: 612-331-0790

E-mail Address: rich_johnson@tnc.org

FAX Number: 612-331-0790

Web Site Address: www.nature.org

Location: The Nature Conservancy (TNC) will work in several Habitat Conservation Partnership Project Areas. Restoration work is proposed for 1 – Aspen Parklands, 3/7/8 – Border Prairie Transition Zone, 4 – Central Lakes, 5 – Lower St. Louis River Area, 10 – Southern Lakes, and 11- Mississippi Bluff Lands. Different activities will be undertaken in each of these areas. Please see the Campaign for Conservation project map.

Total ENRTF Project Budget:	ENRTF Appropriation	\$ 164,000
	Minus Amount Spent:	\$ <u>164,000</u>
	Equal Balance:	\$ <u>0</u>

Legal Citation: M.L. 2010, Chap. 362, Sec. 2, Subd. 2n/4f.

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this

appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY:

The Nature Conservancy's (TNC) 2010 Work Program focused on habitat restoration/enhancement in critical corridors and landscapes identified by TNC and the Habitat Conservation Partnership.

This program allowed us to significantly accelerate our work to maintain and enhance Minnesota's prairies, savannas, and wetlands using prescribed fire and surveying and treating invasive species. Other efforts focused on restoring sand prairies and long-lived conifers in landscapes where these are threatened.

Our goal in this phase was to restore 2,415 acres. We were able to complete work on 3,178 acres, including: 1) 2,529 acres of prescribed fire was planned/implemented at 15 sites in the Northern Tallgrass Prairie and prairie-forest transition regions of Minnesota. 2) 533 acres of invasive species were treated at 15 sites in the same areas. 3) 75 acres of white pine and other long-lived conifers were replanted in forests along the North Shore. 4) 41 acres of sand prairie were restored in Southeast Minnesota.

Not included in these totals, but still valuable, were preparations for future prescribed burns on 240 acres and surveys for invasive species on over 7,000 further acres. Both will contribute to future conservation results.

In addition, this support from the Environment and Natural Resource Trust Fund allowed TNC to bring an additional \$54,284 in private and non-state public dollars for conservation work in these critical places.

Amendment Request November 2, 2012:

The Nature Conservancy (TNC) is requesting a modification to the budget for the Environment and Nature Resources Trust Fund (ENRTF) appropriation completed on June 30, 2012. We are requesting permission to transfer \$1,811 from the Personnel budget to Professional/Technical.

The final report for this phase of the project was submitted on August 14, 2012. The approved budget shown for Personnel was \$84,930. The final amount spent was \$83,119. The unspent balance was \$1,811. The approved budget for

Professional/Technical was \$51,000. The amount spent was \$52,811. The budget was exceeded by \$1,811.

The requested budgets for these categories were based on estimates from the staff managing these restoration projects. For each project, staff evaluated whether the work could be done most efficiently using TNC or contract staff. If they thought these numbers were changing, TNC would pro-actively request a modification to the budget. Unfortunately, it gets harder for staff to make these adjustments as the grant deadline approaches.

The \$1,811 discrepancy in the budget occurred in the closing phases of the Prairie Forest Border Restoration project. This project was very successful. The original goal was restoring or enhancing 1,305 acres. The final total was 2,376 acres. This was possible due to a very successful relationship with Conservation Corps Minnesota. One consequence, however, was that this project spent more on contracts than was originally expected.

Amendment Approved November 2, 2012

IV. OUTLINE OF PROJECT RESULTS:

RESULT 1: Restoration

Description:

The Conservancy will restore 1,605 acres of existing Conservancy and public-protected prairie, wetlands, savanna, and forest habitat with ENRTF funds. An additional 810 acres will be restored with Other Funds. A total of 2,415 acres will be improved.

Proposed restoration work includes four projects that continue work started in previous appropriations and one new project. The continuing projects are:

The Prairie Forest Border Restoration project will restore and enhance 1,060 acres with ENRTF funds and 245 acres with Other Funds. These funds will allow the collection and sowing of native seed and use prescribed fire and vegetation control to restore and enhance native prairie, forest and wetlands on Conservancy- and public-protected lands.

The Sand Prairie Restoration project will restore and enhance 20 acres with ENRTF funds and 15 acres with Other Funds of sand prairie on Conservancy-protected lands in the Weaver Dunes area through site preparation, the collection and sowing of native seed, prescribed fire, vegetation control, and gate installation.

The Western Minnesota Invasives Control and Prescribed Fire project will restore and enhance 465 acres with ENRTF funds and 535 acres with Other Funds. These funds will be used to identify areas most impacted by harmful invasive species, determine strategies for treatment, and treat these areas using herbicides, mechanical means and prescribed fire. Prescribed fire will also be used to restore and enhance other native prairie and wetland areas on additional Conservancy-protected lands.

The NE Minnesota Conifer Forest Restoration project will restore and enhance 60 acres with ENRTF funds and 15 acres with Other Funds. These funds will be used to do site preparation, plant tree seedlings, provide fencing or tree shelters for browse protection, control competing vegetation, and prune to discourage blister rust.

Restoration work will be accomplished by both Conservancy and contract staff. Conservancy staff may include Landscape/Project Managers, Field Stewards, Burn Bosses and seasonal work crews

Work on each of these projects will be guided by ecological restoration plans including a timetable for implementation, identifying long-term maintenance/management needs, and verifying that any plantings originate from sources of native ecotypes in Minnesota, preferably of the local ecotype, using a high diversity of species originating as close to the restoration site as possible. These restoration plans will be completed before any ENRTF funds are expended.

TNC's science staff continually reviews restoration projects to ensure that the best available science and techniques are being applied.

Summary Budget Information for Result 1:	ENRTF Budget:	\$ 164,000
	Amount Spent:	\$ <u>164,000</u>
	Balance:	\$ <u>0</u>

Deliverable	Completion Date	Budget
1. The Prairie Forest Border Restoration Project will restore 1,060 acres with ENRTF funds	June 30, 2012	\$82,700
2. The Sand Prairie Restoration Project will restore 20 acres with ENRTF funds	June 30, 2012	\$26,250
3. Western Minnesota Invasives Control & Prescribed Fire Project will restore 465 acres with ENRTF funds	June 30, 2012	\$35,050
4. The NE Minnesota Conifer Forest Restoration project will restore 60 acres with ENRTF funds	June 30, 2012	\$20,000

Final Report Summary:

TNC's goal was to restore 2,415 acres of critical habitat. We were able to significantly exceed this target, completing work on 3,178 acres. The field managers responsible for this work attributed this success to favorable field conditions, experienced crews, and good cooperation with contractors like Conservation Corps Minnesota. For more detailed information on the specific projects, see below.

Deliverable 1: Prairie Forest Border Restoration

Description: The Prairie Forest Border Restoration project will restore and enhance 1,060 acres with ENRTF funds and 245 acres with Other Funds. These funds will allow the collection and sowing of native seed and use prescribed fire and vegetation control

to restore and enhance native prairie, forest and wetlands on Conservancy- and public-protected lands.

Summary Budget Information:

<i>Funding Type</i>	<i>Funds Use</i>	<i>Funding Amount</i>
ENRTF	Restoration	\$85,110.02
Other Funds	Restoration	\$18,724.20

Management was completed on 1,448 acres. Fire preparation and invasive survey work was done on an additional 928 acres. Restoration was done at a total of 8 sites, including Kellogg-Weaver Dunes SNA, Lake Alexander Preserve, Ordway Prairie Preserve, Ottawa Bluffs Preserve, Paul Bunyan Savanna, Regal Meadow Preserve, Sheepberry Fen, and Weaver Dunes Preserve.

Restoration activities included: 1) Prescribed fire was planned/implemented on 969 acres. 2) An additional 240 acres were prepared for future burns. 3) Invasives were treated on 465 acres of the most severely affected lands. Cow vetch at Weaver Dunes was a particular target. 4) Surveys for invasive species were carried out on an additional 688 acres. 5) Buckthorn and honeysuckle were removed on 14 acres. Cooperation with Conservation Corps Minnesota was instrumental in this work.

Deliverable 2: Sand Prairie Restoration

Description: The Sand Prairie Restoration project will restore and enhance 20 acres with ENRTF funds and 15 acres with Other Funds of sand prairie on Conservancy-protected lands in the Weaver Dunes area through site preparation, the collection and sowing of native seed, prescribed fire, vegetation control, and gate installation.

Summary Budget Information:

<i>Funding Type</i>	<i>Funds Use</i>	<i>Funding Amount</i>
ENRTF	Restoration	\$24,725.11
Other Funds	Restoration	\$6,995.20

41 acres of sand prairie were restored on two tracts at Weaver Dunes Preserve.

Restoration activities included: 1) Hand and mechanical seed harvesting/preparation using seed from the adjoining native prairie. The source prairie is rated as outstanding by the County Biological Survey. 2) Site preparation/sowing. 3) Follow-up mowing and invasives monitoring. Volunteers made a crucial contribution to this effort.

Deliverable 3: Western Minnesota Invasives Control

Description: The Western Minnesota Invasives Control and Prescribed Fire project will restore and enhance 465 acres with ENRTF funds and 535 acres with Other Funds. These funds will be used to identify areas most impacted by harmful invasive species, determine strategies for treatment, and treat these areas using herbicides, mechanical means and prescribed fire. Prescribed fire will also be used to restore and enhance other native prairie and wetland areas on additional Conservancy-protected lands.

Summary Budget Information:

<i>Funding Type</i>	<i>Funds Use</i>	<i>Funding Amount</i>
---------------------	------------------	-----------------------

ENRTF	Restoration	\$35,418.75
Other Funds	Restoration	\$24,032.90

With two very successful field seasons, we were able to treat 1,614 acres. Invasive surveys were done on over 6,400 additional acres. The largest share of this work was done at Bluestem Prairie SNA. Additional restoration was completed at ten other sites: Anna Gronseth Prairie, Blazing Star Prairie SNA, Pankratz Memorial Prairie, Pembina Trail Preserve SNA, Seven Sisters Prairie, Staffanson Prairie, Strandness Prairie, Town Hall Prairie, Twin Valley Prairie SNA, and Zimmerman Prairie.

Restoration activities included: 1) Prescribed fire was planned/implemented on 1,560 acres. 2) Invasives were treated on 54 acres of the most severely affected lands. Aspen control at Pankratz Memorial Prairie and Pembina Trail Preserve SNA were highlights. 3) Surveys for invasive species were carried out on more than 6,400 additional acres. The availability of skilled seasonal crews was a key factor in allowing this project to far exceed its goals.

Deliverable 4: NE Minnesota Conifer Forest Restoration

Description: This project will focus on restoring long lived conifers such as white pine and important hardwoods such yellow birch and paper birch along the North Shore of Lake Superior. 60 acres will be restored with ENRTF funds and 15 acres with Other Funds. These funds will be used to do site preparation, plant tree seedlings, provide fencing or tree shelters for browse protection, control competing vegetation, and prune to discourage blister rust.

Summary Budget Information:

<i>Funding Type</i>	<i>Funds Use</i>	<i>Funding Amount</i>
ENRTF	Restoration	\$20,601.10
Other Funds	Restoration	\$4,532.24

Conifer restoration work was completed on 75 acres. Restoration work was done at two sites: Split Rock Lighthouse State Park, and Lake County lands in the Castle Danger area.

Activities included: 1) Site preparation, 2) Planting 31,000 trees, 3) Installing single tree deer exclosures for browse protection.

Additional summary information about projects that are underway is available through the Habitat Conservation Partnership online reporting system.

V. TOTAL ENRTF PROJECT BUDGET:

Personnel: \$83,119 (salaries and benefits). This includes \$31,069 for 3 seasonal, short-term Preserve Management Assistants (1.35 FTE) working on the Prairie Forest Border Restoration project. It also includes \$35,050 for 3 seasonal, short-term Preserve Management Assistants (1.85 FTE), 1 seasonal, short-term Stewardship Ecologist (0.35 FTE), 1 seasonal, short-term Spring Burn Crew (0.15 FTE), and 1 seasonal, short-term

Fall Burn Crew (0.10 FTE) working on the Western Minnesota Invasives Control and Prescribed Fire project. \$17,000 is also budgeted for seasonal, short-term Preserve Management Assistants (0.70 FTE) working on the Sand Prairie Restoration project. Figures for these seasonal positions include overtime when deemed necessary and approved by supervisors.

Contracts: \$52,811. This work will be done by vendor contractors to be determined. These contracts will be awarded on a competitive basis. \$5,000 is included for the continuing Sand Prairie Restoration project. Work here may include collecting/sowing native seed, using prescribed fire and herbicides to control competing vegetation, and gate installation. It also includes \$40,311 for the Prairie Forest Border Restoration project. These funds will be used for prescribed fire, brush control and weed removal. We've worked successfully with the Conservation Corps Minnesota (CCM) on projects such as these in the past and we will seek to work with them again.

Equipment/Tools/Supplies: \$28,070. This includes \$11,320 for the Prairie Forest Border Restoration project. A preliminary, estimated breakdown of these costs includes \$4,000 for fuel for drip torches, chain saws, and vehicles dedicated 100% to the project, \$5,500 for herbicides, and \$1,820 for maintenance supplies/repairs, protective gear/spray equipment, and herbicides. \$4,250 is included for the Sand Prairie Restoration project for herbicides and harvest/brush removal supplies. \$12,500 is included for the NE Minnesota Conifer Forest Restoration project. \$12,300 of this will be for fencing materials needed for deer exclosures and \$200 for tree seedlings. The detailed breakdown provided above is preliminary and only for planning purposes. The final actual expenditures within the Equipment/Tools/Supplies line item may vary from these specific estimates.

Acquisition (Fee Title or Permanent Easements): NA

Travel: NA

Additional Budget Items: NA

TOTAL ENRTF PROJECT BUDGET: \$164,000

Explanation of Capital Expenditures Greater Than \$3,500: NA

VI. PROJECT STRATEGY:

A. Project Partners: TNC is part of the Habitat Conservation Partnership Phase VI Supplemental work program. Please see main work program for complete partner list.

B. Project Impact and Long-term Strategy: Founded in 1958, the Minnesota Chapter of The Nature Conservancy is the largest non-government conservation organization in the state and the only one dedicated specifically to the conservation of biological diversity. TNC currently has 23,000 members and owns and manages over 70,000

acres of grassland, forest and freshwater habitat in Minnesota. Working with our partners, we have helped to protect almost 300,000 additional acres.

TNC's Conservation by Design and Conservation Area Planning processes focus these efforts in the areas most important for preserving diversity. They also guide the long-term restoration and management of the lands where we work. The Minnesota chapter recently completed a ten-year strategic plan. This plan called for acceleration in the work already underway in these critical areas.

LCCMR's six-year strategic plan, adopted in January, 2009, calls for us to work together to, "...preserve, protect, restore and enhance both the bountiful and the threatened natural resources that are the collective heritage of every Minnesotan."

This work program will help achieve the goals of both the Conservancy and the LCCMR. ENRTF and Other Funds will allow us to maintain and enhance the quality of the natural habitat on 1,895 acres of currently protected land and build on restoration work initiated in earlier appropriations

TNC's proven ability to raise funds from private individuals and foundations ensure that the work accomplished with ENRTF funds can be leveraged to accomplish even more. In addition, our dedicated stewardship endowment provides for the long-term care of the lands restored with ENRTF funding.

C. Other Funds Proposed to be Spent during the Project Period:

The Conservancy will leverage ENRTF investments with a minimum of \$82,000 of Other Funds. The sources for these funds will be private contributions and other, non-state public funding raised by the Conservancy. Projected uses for these funds include: 1) Additional salary, benefits, and supply expenses for restoration projects, and 2) Paying unrecovered indirect costs of restoration projects. For additional information, see the spreadsheet titled, 'Other Funds Detail for 2010 Projects'.

D. Spending History:

This proposal includes funding for three projects receiving ENRTF dollars in previous appropriations. The Prairie Forest Border Restoration project received \$7,900 in M.L.2008, Subd. 3(c)2n and \$65,014 in M.L. 2009, Chap 143, Sec 2, Subd. 4. The Sand Prairie Restoration project received \$47,884 in M.L. 2009, Chap 143, Sec 2, Subd. 4. The Western Minnesota Invasives Control & Prescribed Fire project received \$35,050 in M.L. 2009, Chap 143, Sec 2, Subd. 4. The NE Minnesota Conifer Forest Restoration project received \$22,598 in M.L.2008, Subd. 3(c)2n and \$20,000 in M.L. 2009, Chap 143, Sec 2, Subd. 4.

VII. DISSEMINATION:

Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>.

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than December 1, 2010, June 30, 2011, and December 1, 2011. A

final work program report and associated products will be submitted between June 30 and August 1, 2012 as requested by the LCCMR. Reports will be provided as updates to the Work Program, Project List, and Attachment A. Additional summary information will be generated using the Habitat Conservation Partnership online reporting system.

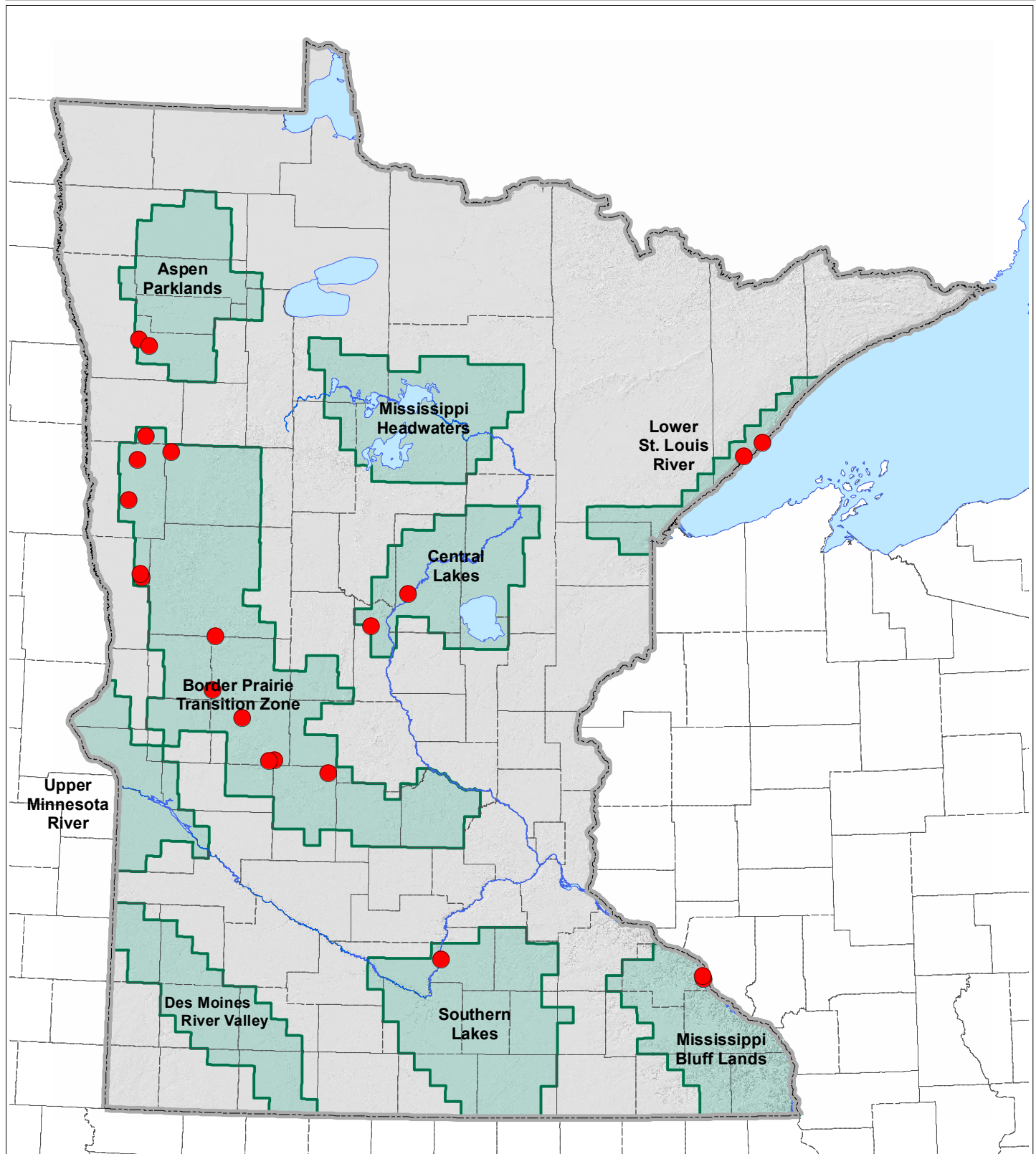
IX. RESEARCH PROJECTS:

NA

Attachment A: Budget Detail for 2010 Projects							
Project Title: Campaign for Conservation 2n, Minnesota's Habitat Conservation Partnership							
Project Manager Name: Rich Johnson							
Trust Fund Appropriation: \$164,000							
1) See list of non-eligible expenses, do not include any of these items in your budget sheet							
2) Remove any budget item lines not applicable							
2010 Trust Fund Budget	<u>Result 1 Budget</u> <u>Revision Approved</u> <u>11/2/2012</u>	Amount Spent <i>(as of</i> 6/30/2012)	Balance	TOTAL BUDGET	TOTAL BALANCE		
BUDGET ITEM							
PERSONNEL: Wages and Benefits Result 1 - This item includes work on four projects: \$31,069 for 3 seasonal, short-term Preserve Management Assistants (1.35 FTE) working on the Prairie Forest Border Restoration project; \$35,050 for 3 seasonal, short-term Preserve Management Assistants (1.85 FTE), 1 seasonal, short-term Stewardship Ecologist (0.35 FTE), 1 seasonal, short-term Spring Burn Crew (0.15 FTE), and 1 seasonal, short-term Fall Burn Crew (0.10 FTE) working on the Western Minnesota Invasives Control and Prescribed Fire project; \$17,000 for seasonal, short-term Preserve Management Assistants (0.70 FTE) working on the Sand Prairie Restoration project. Figures for these seasonal positions include overtime when deemed necessary and approved by supervisors.	83,119	83,119	0	83,119	0		
Professional/Technical Result 1 - This work will be done by vendor contractors TBD. \$5,000 is included for the continuing Sand Prairie Restoration project. Work here may include collecting/sowing native seed, using prescribed fire and herbicides to control competing vegetation, and gate installation. It also includes \$40,311 for the Prairie Forest Border Restoration project. These funds will be used for prescribed fire, brush control and weed removal. \$7,500 is included for the NE Minnesota Conifer Forest Restoration project for activities including tree planting and building/placement of browse protection.	52,811	52,811	0	52,811	0		
Non-Capital Equipment / Tools Result 1 - This includes \$11,320 for the Prairie Forest Border Restoration project. Estimated costs include \$4000 for fuel for drip torches, chain saws, and vehicles dedicated 100% to the project, \$5,500 for herbicides, and \$1,820 for maintenance supplies/repairs, protective gear/spray equipment, and herbicides. \$4,250 is also included for the Sand Prairie Restoration project for herbicides and harvest/brush removal supplies. \$12,500 is included for the NE Minnesota Conifer Forest Restoration project. \$12,300 of this will be for fencing materials needed for deer enclosures and \$200 for tree seedlings. The detailed breakdown provided above is preliminary and only for planning purposes. The final allocation within each project is subject to change.	28,070	28,070	0	28,070	0		
COLUMN TOTAL	\$164,000	\$164,000	\$0	\$164,000	\$0		0

Campaign for Conservation

Habitat Conservation Partnership
2010 Appropriation (Phase 6 Supplemental) Accomplishments

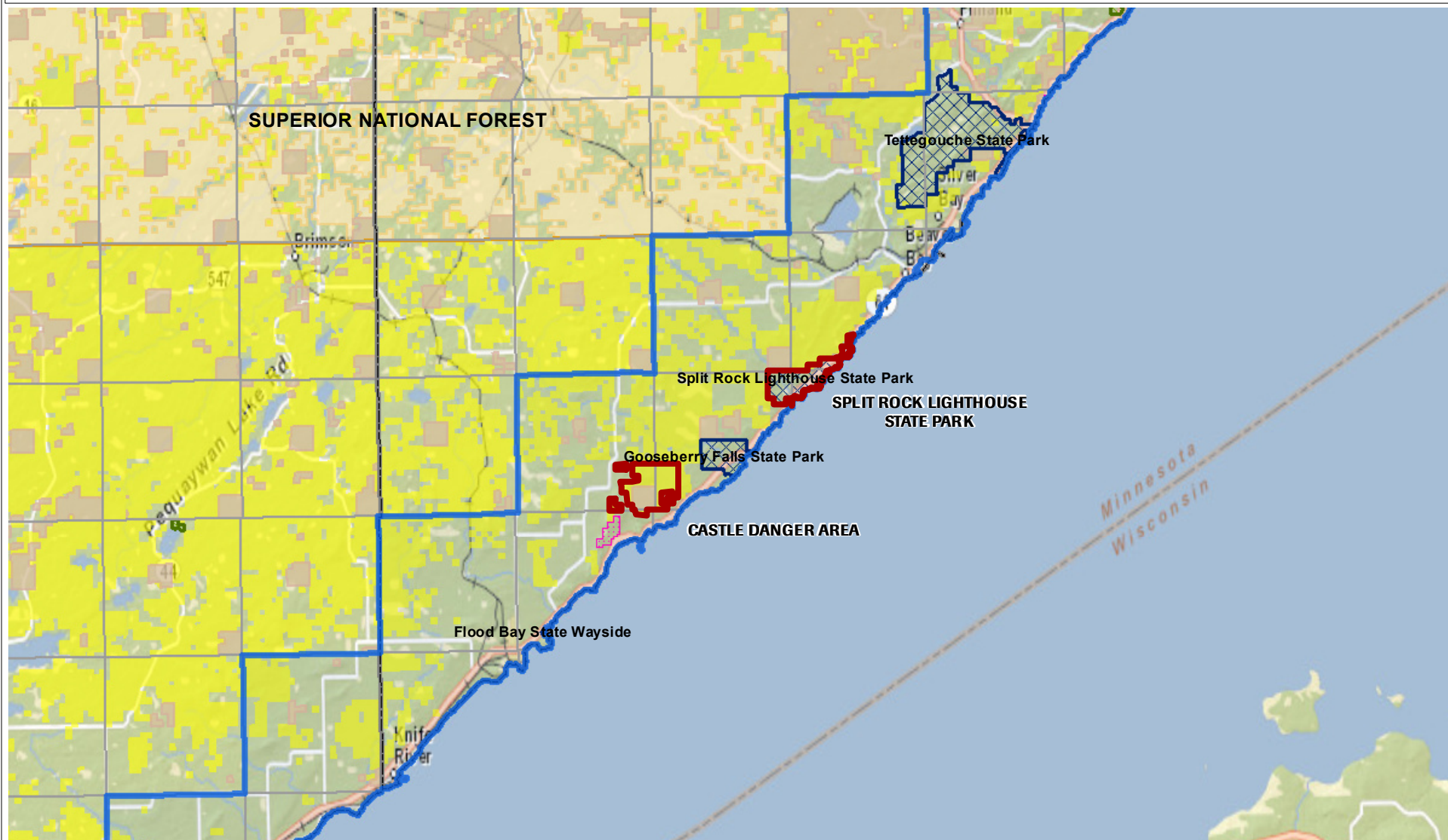


Legend

- Restoration Project Locations
- Habitat Conservation Partnership Project Areas

NE Minnesota Conifer Forest Restoration

Lake County, MN



- | | | |
|--------------------------|--------------------------------------|---|
| HCP Action Areas | Wildlife Management Area - DNR, 2009 | US Forest Service (Ownership) - DNR |
| Restoration Project | State Forest (Ownership) - DNR | Permanent Conservation Easement - Various |
| TNC Preserve - TNC, 2010 | County Ownership - DNR | County |
| State Park - DNR, 2009 | National Forest (Authorized) - USFS | Township |

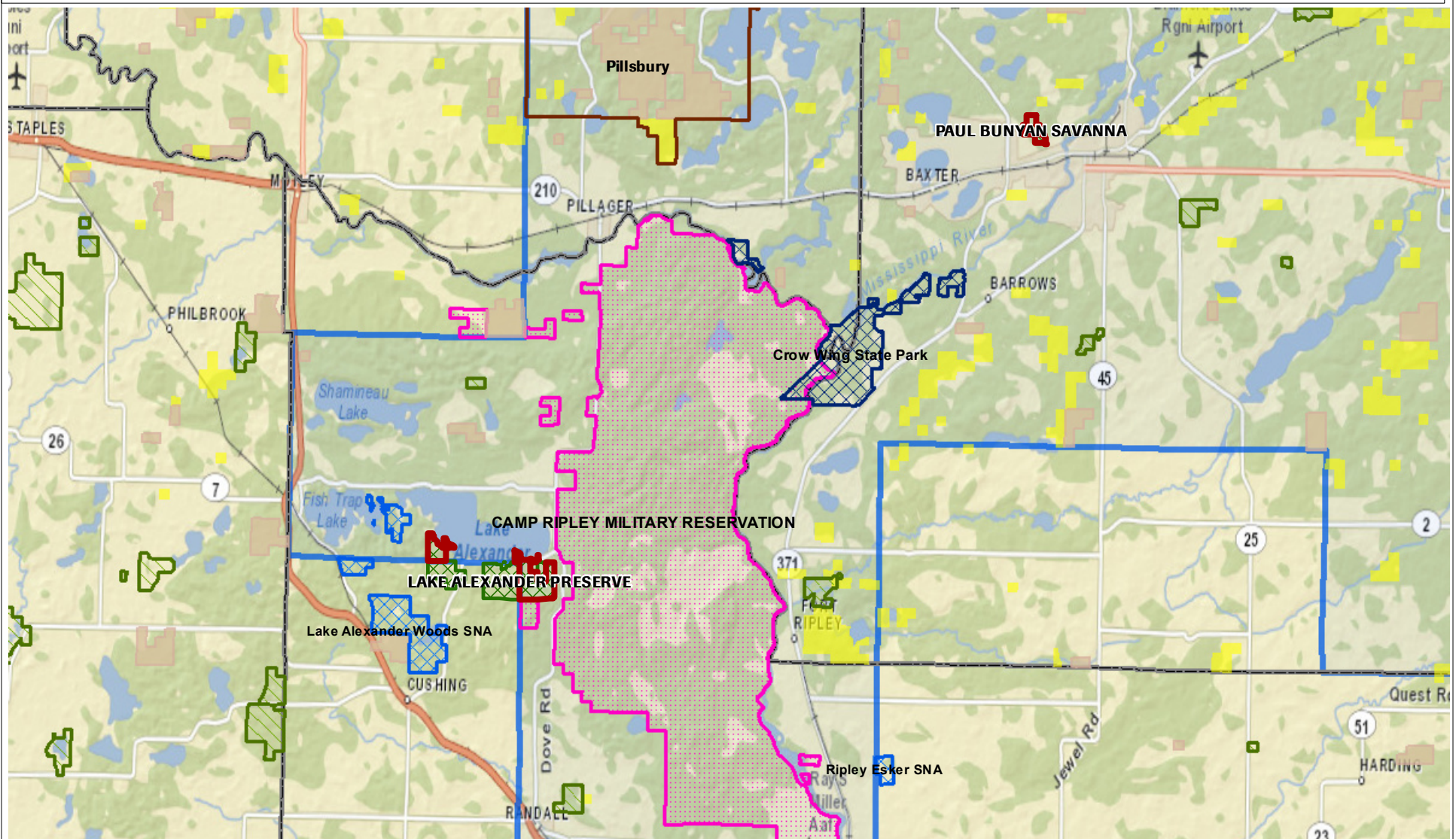
4 2 0 4 Miles

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 Map created by: RCJ/TNC in MN\ND\SD, 2012/8/14



Prairie Forest Border Restoration - 1 of 4

Crow Wing & Morrison Counties, MN



- | | | |
|--------------------------|---------------------------------------|----------------------------------|
| HCP Action Areas | Scientific & Natural Area - DNR, 2009 | Camp Ripley Military Reservation |
| Restoration Project | Wildlife Management Area - DNR, 2009 | Other Conservation Ownership |
| TNC Preserve - TNC, 2010 | State Forest (Authorized) - DNR | County Ownership - DNR |
| State Park - DNR, 2009 | State Forest (Ownership) - DNR | |

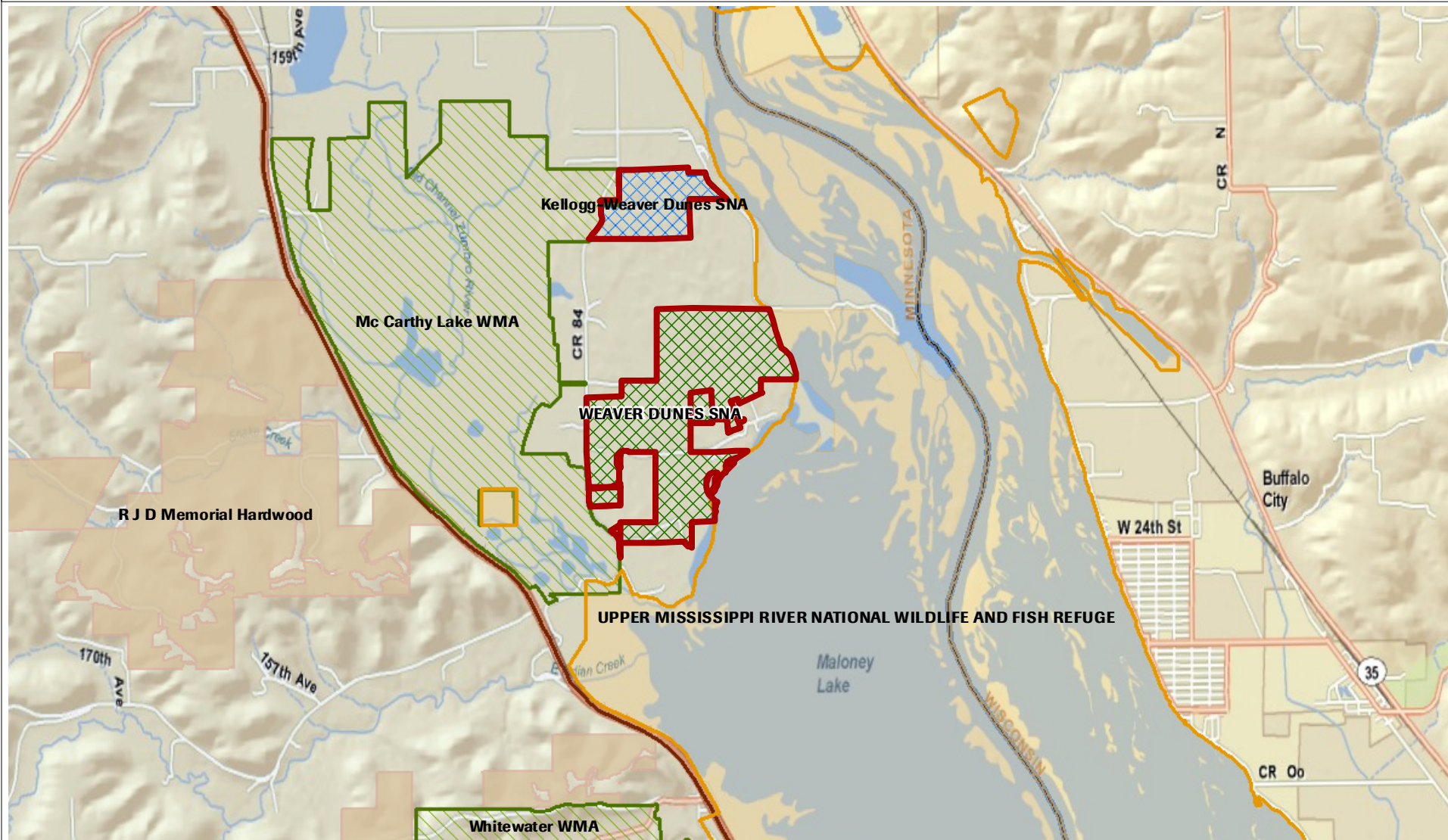
3 1.5 0 3 Miles












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Prairie Forest Border Restoration - 1 of 4 - 2010.mxd
Map created by: RCJ, TNC in MN/ND/SD, 2010/8/14

Prairie Forest Border Restoration - 2 of 4

Wabasha County, MN



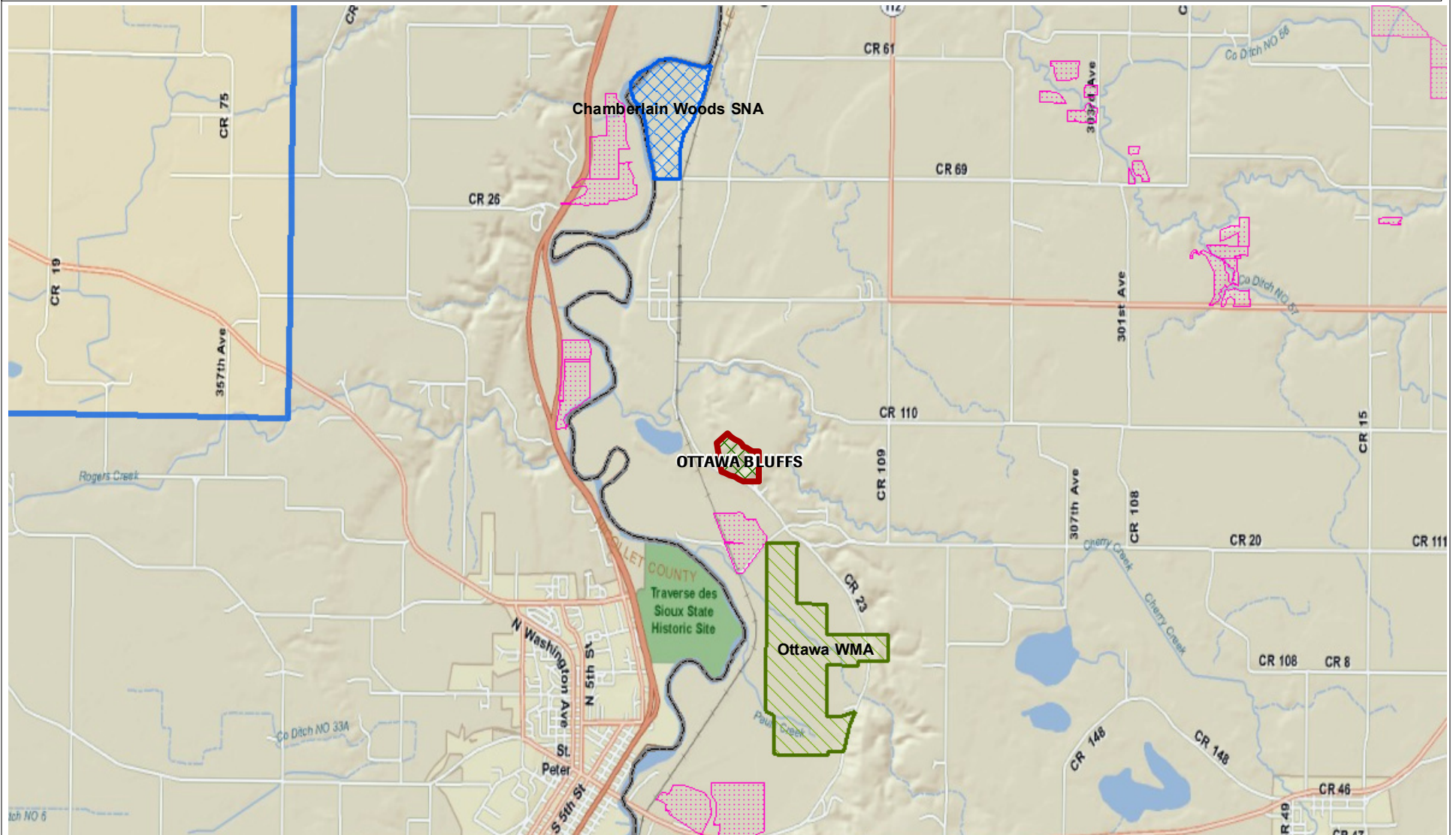
- | | |
|---|--|
|  HCP Action Areas |  State Forest (Authorized) - DNR |
|  Restoration Project |  State Forest (Ownership) - DNR |
|  TNC Preserve - TNC, 2010 |  National Wildlife Refuge - FWS, 2008 |
|  Scientific & Natural Area - DNR, 2009 |  USFWS Ownership - FWS, 2008 |
|  Wildlife Management Area - DNR, 2009 | |

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
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 Map created by: PCJ, TNC in MN/ND/SD, 2012/8/14

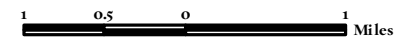


Prairie Forest Border Restoration - 3 of 4
Le Sueur County, MN



Legend

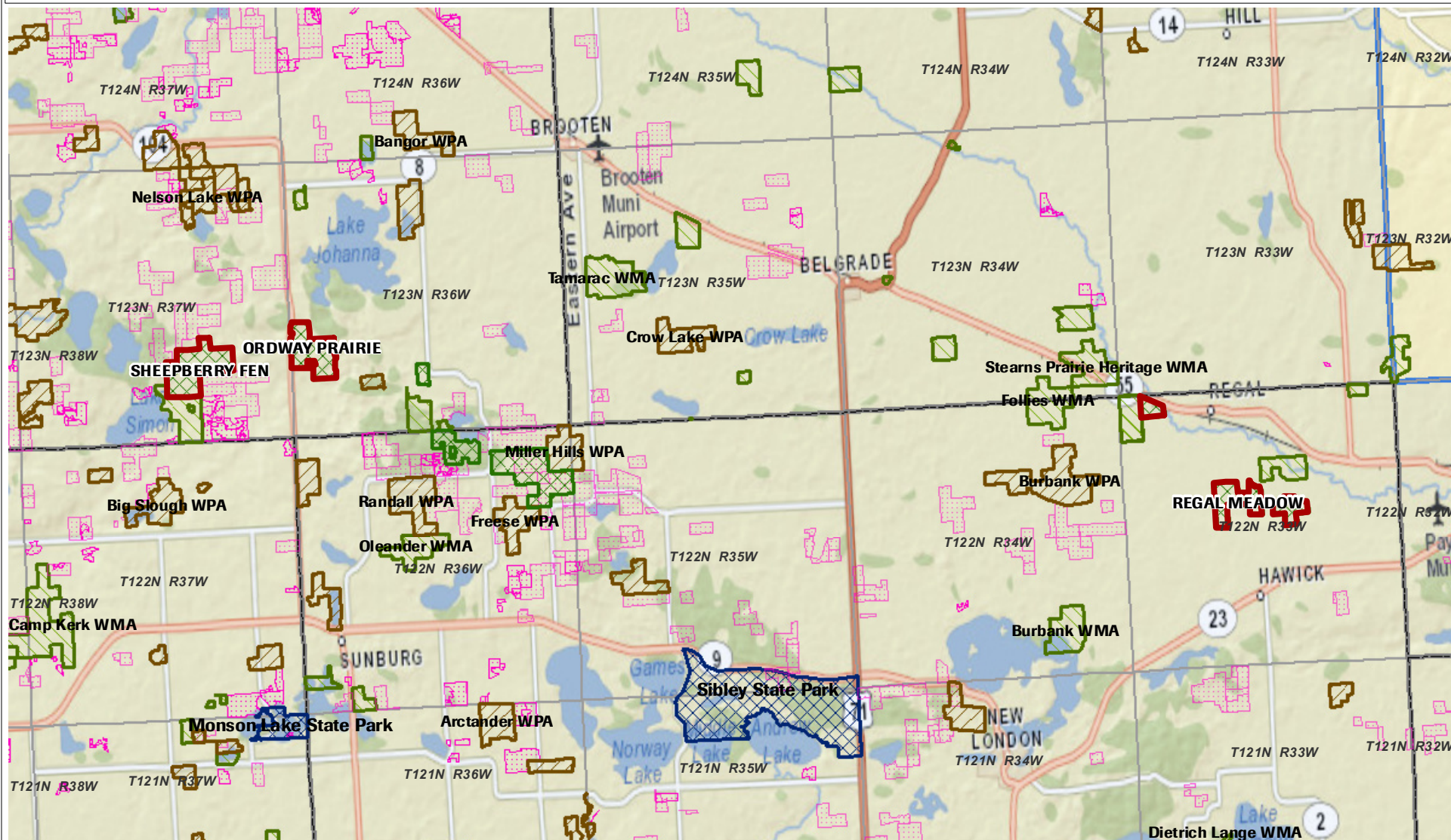
-  HCP Action Areas
  Scientific & Natural Area - DNR, 2009
-  Restoration Project
  Wildlife Management Area - DNR, 2009
-  TNC Preserve - TNC, 2010
  Permanent Conservation Easement



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Prairie Forest Border Restoration - 3 of 4 - 2010.mxd
Map created by: RCJ,TNC in MN/ND/SD, 2012/8/14

Prairie Forest Border Restoration - 4 of 4

Kandiyohi & Pope Counties, MN



- | | |
|--------------------------|---|
| HCP Action Areas | State Park - DNR, 2009 |
| Restoration Project | Wildlife Management Area - DNR, 2009 |
| TNC Preserve - TNC, 2010 | USFWS Ownership - FWS, 2008 |
| | Permanent Conservation Easement - Various |

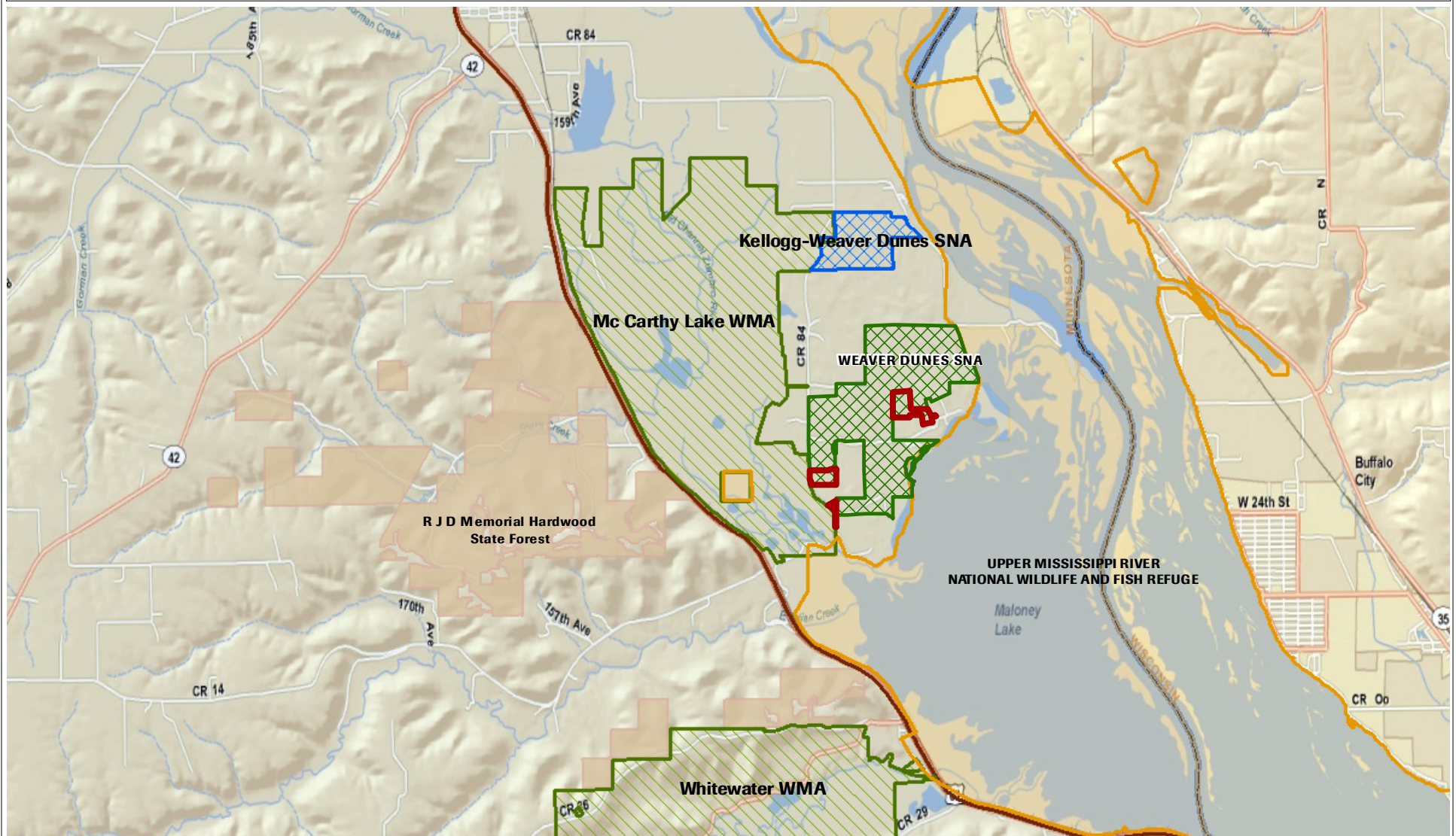
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 Prairie Forest Border Restoration - 4 of 4 - 2010.mxd
 Map created by: RCJ/TNC in MN/ND/SO, 2012/8/14

Sand Prairie Restoration

Wabasha County, MN T109N R9W Sec 8 & 18



- | | | | |
|---|---------------------------------------|---|--------------------------------------|
|  | HCP Action Areas |  | State Forest (Authorized) - DNR |
|  | Restoration Project |  | State Forest (Ownership) - DNR |
|  | TNC Preserve - TNC, 2010 |  | National Wildlife Refuge - FWS, 2008 |
|  | Scientific & Natural Area - DNR, 2009 |  | USFWS Ownership - FWS, 2008 |
|  | Wildlife Management Area - DNR, 2009 | | |

1 0.5 0 1 Miles

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 Sand Prairie Restoration - 2010.mxd
 Map created by: RCL, TNC in MN/ND/SD, 2012/8/14

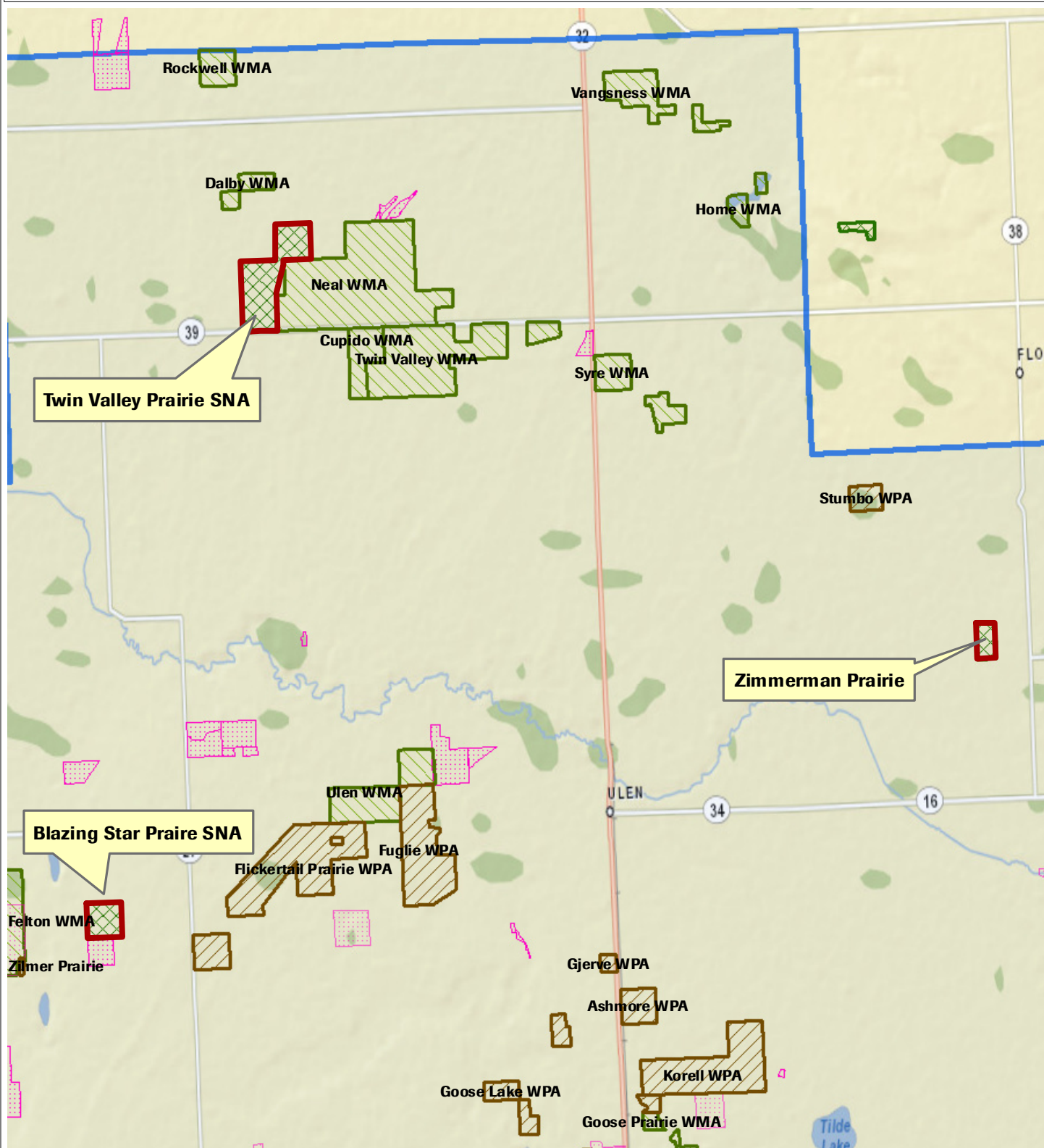




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LCCMR\2010\LCCMR Phase VI - Western MN - 1 of 6.mxd
Map created by: RC L TNC in MN\ND\SD, 2012/8/14

Western MN Invasives & Fire - 2 of 6

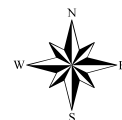
Becker, Clay, and Norman Counties, MN



- | | |
|--------------------------|--|
| HCP Action Areas | Wildlife Management Area - DNR, 2009 |
| Restoration Project | Glacial Ridge National Wildlife Refuge |
| TNC Preserve - TNC, 2010 | USFWS Ownership - FWS, 2008 |

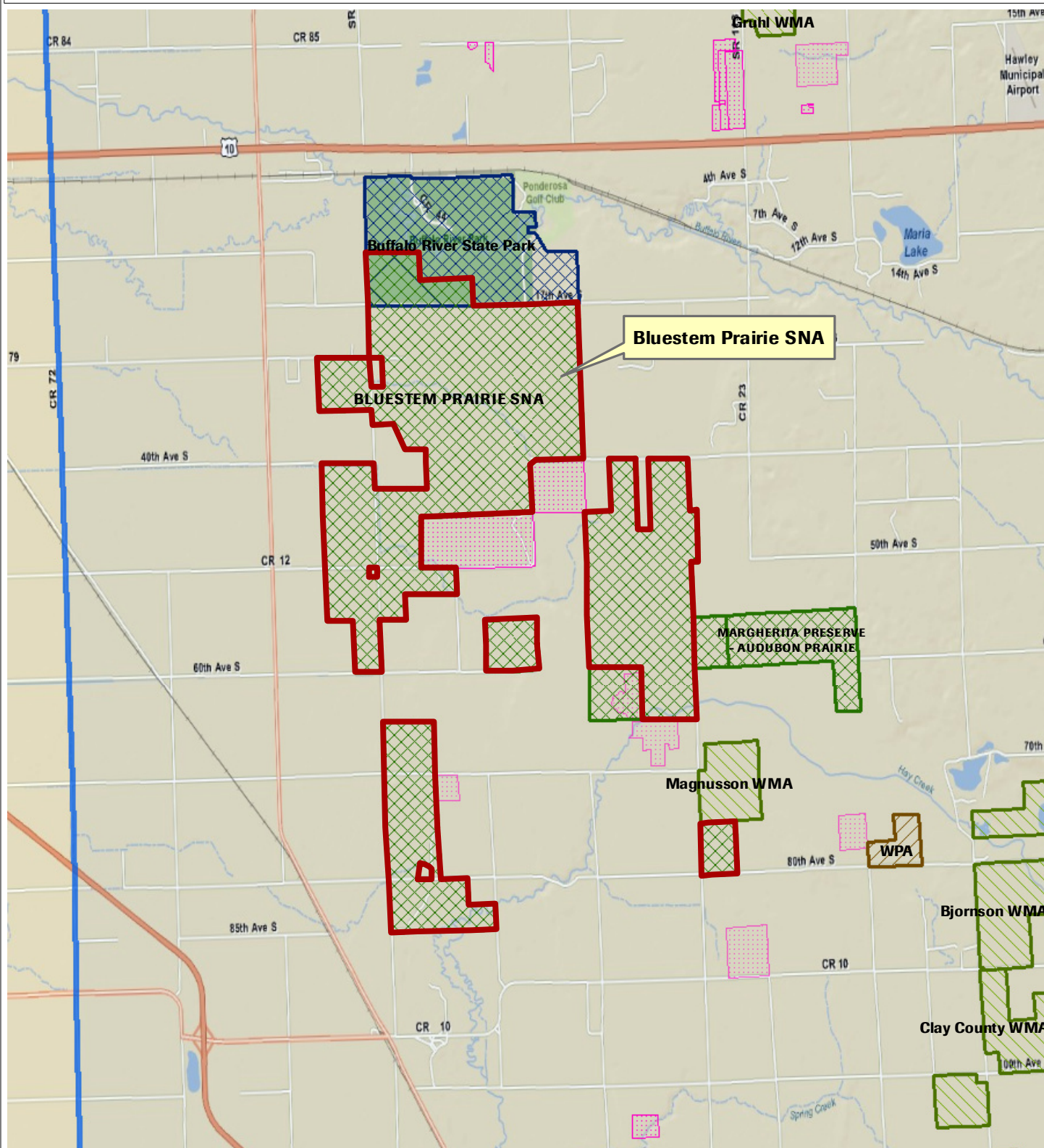
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Minnesota: Tallgrass Prairie Agency Beach Ridge Grant
LCMR2010LCCMR Phase VI - Western MN - 2 of 6.mxd
Map created by: RCJ, TNC in MN/ND/SD, 2012/8/14



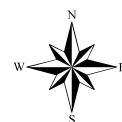
Western MN Invasives & Fire - 3 of 6

Clay County, MN



- | | |
|--------------------------|---|
| HCP Action Areas | State Park - DNR, 2009 |
| Restoration Project | Wildlife Management Area - DNR, 2009 |
| TNC Preserve - TNC, 2010 | USFWS Ownership - FWS, 2008 |
| | Permanent Conservation Easement - Various |

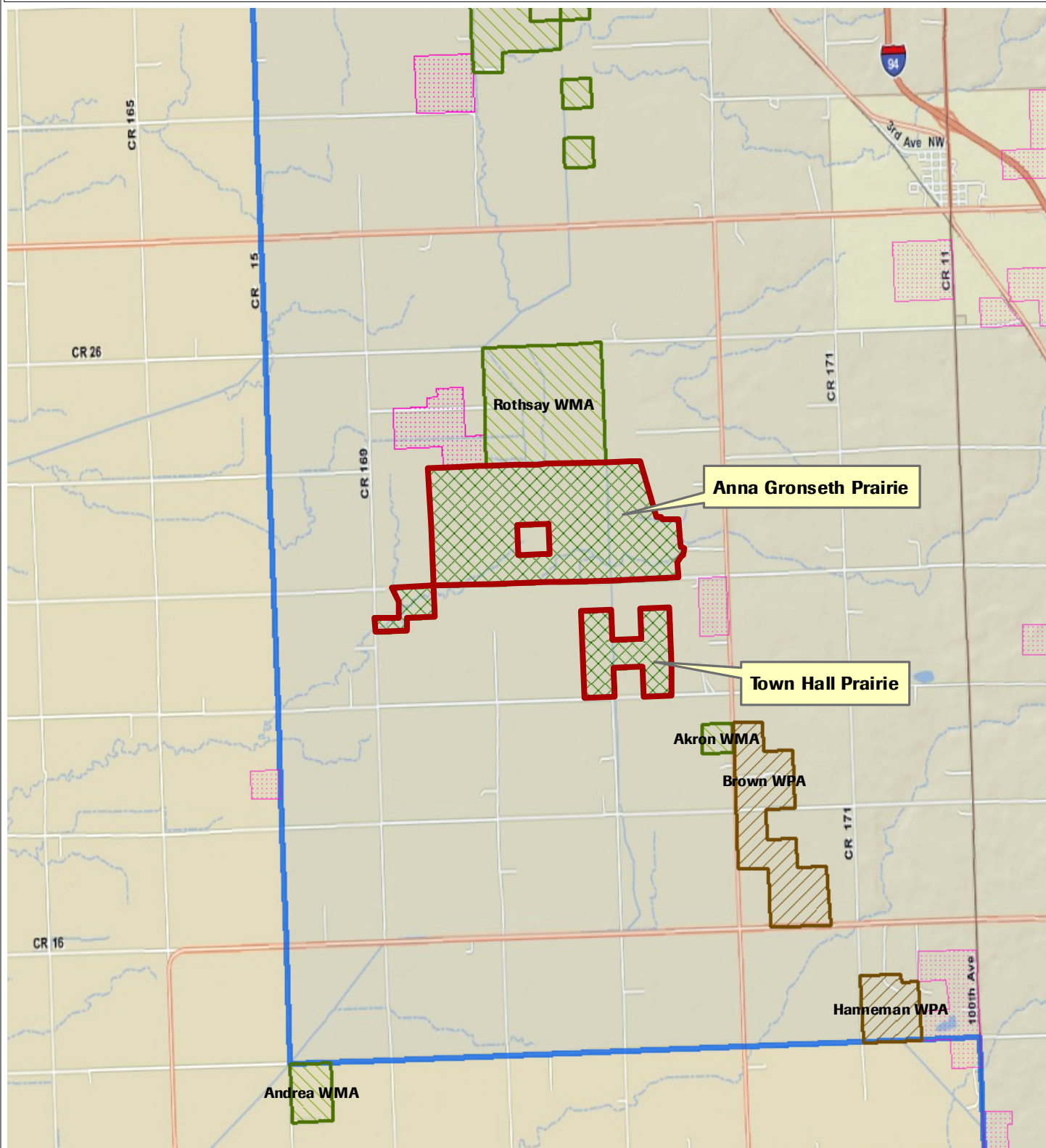
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Municipalities: Tallgrass Prairie, Agassiz Beach, Ridge, Grant, LC, MR, 2010, CCAR Phase VI - Western MN - 3 of 6.mxd
Map created by: RCJ, TNC in MN/ND/SD, 2012/8/14

Western MN Invasives & Fire - 4 of 6

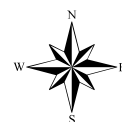
Wilkin County, MN



- | | |
|--------------------------|---|
| HCP Action Areas | State Park - DNR, 2009 |
| Restoration Project | Wildlife Management Area - DNR, 2009 |
| TNC Preserve - TNC, 2010 | USFWS Ownership - FWS, 2008 |
| | Permanent Conservation Easement - Various |

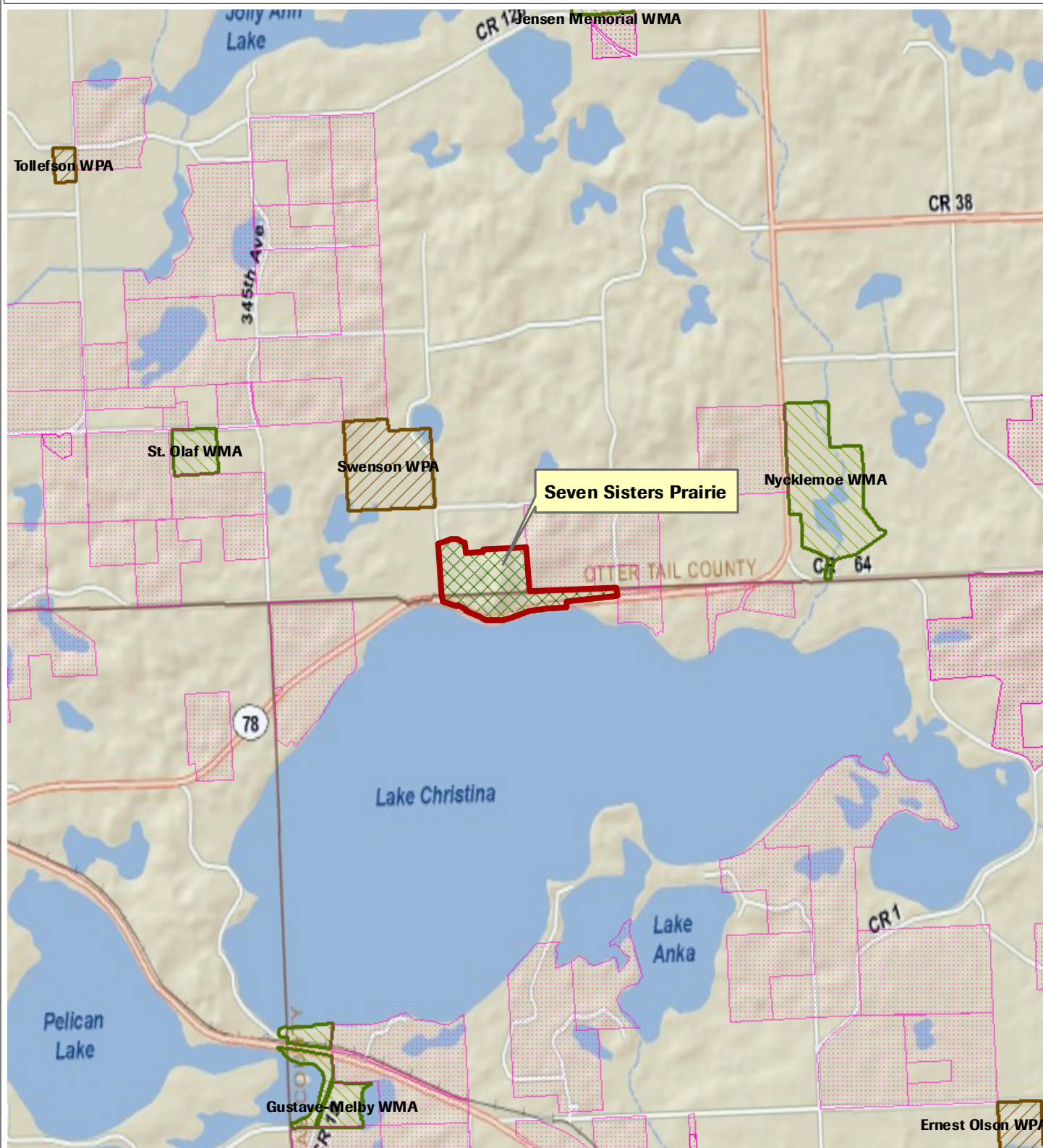
0.85 0.425 0 0.85 Miles

Minnesota Northern Tallgrass Prairie & Grassland Research Project
LCMR2010LCMR Phase VI - Western MN - 4 of 6.mxd
Map created by: RCJ, TNC in MN/ND/SD, 2012/8/14



Western MN Invasives & Fire - 5 of 6

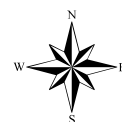
Douglas & Otter Tail Counties, MN



- | | |
|--------------------------|---|
| HCP Action Areas | State Park - DNR, 2009 |
| Restoration Project | Wildlife Management Area - DNR, 2009 |
| TNC Preserve - TNC, 2010 | USFWS Ownership - FWS, 2008 |
| | Permanent Conservation Easement - Various |

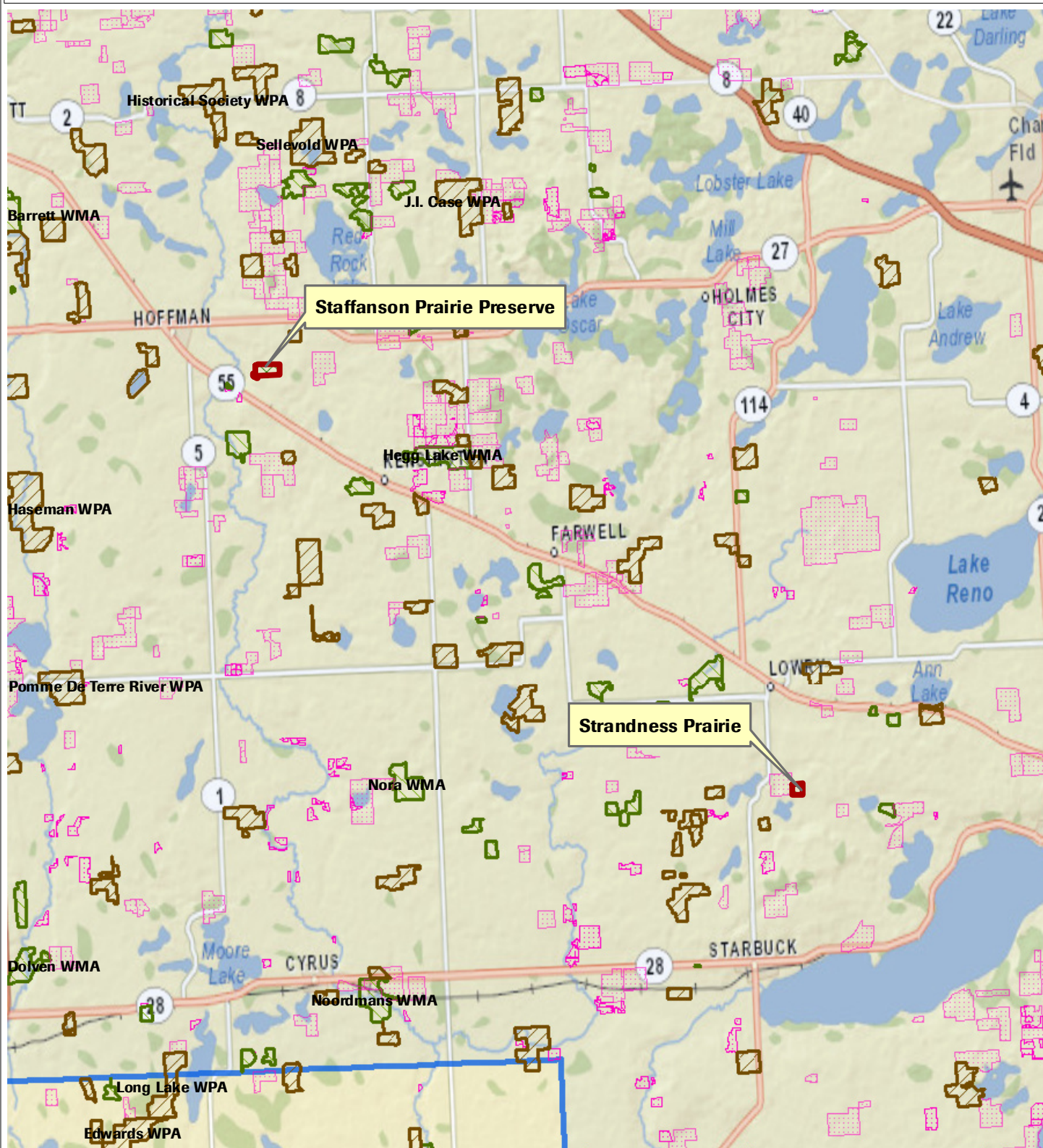
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Minnesota Northern Tallgrass Prairie & Grassland Research Grant
LCMR2010LCMR Phase VI - Western MN - 5 of 6.mxd
Map created by: RCJ, TNC in MN/ND/SD, 2012/8/14



Western MN Invasives & Fire - 6 of 6

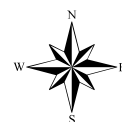
Douglas & Pope Counties, MN



- | | |
|--------------------------|---|
| HCP Action Areas | State Park - DNR, 2009 |
| Restoration Project | Wildlife Management Area - DNR, 2009 |
| TNC Preserve - TNC, 2010 | USFWS Ownership - FWS, 2008 |
| | Permanent Conservation Easement - Various |

2 1 0 2 Miles

Minnesota Northern Tallgrass Prairie Agency for Beach Ridge (Grant/CCMR)
2010/CCMR Phase VI - Western MN - 6 of 6.mxd
Map created by: RCJ, TNC in MN/ND/SD, 2012/8/14



M.L. 2010 Project Abstract

For the Period Ending June 30, 2012

PROJECT TITLE: Wetland Restoration in the Detroit Lakes Wetland Management District

PROJECT MANAGER: Greg Hoch

AFFILIATION: Friends of Detroit Lakes Wetlands

MAILING ADDRESS: 26624 N Tower Rd

CITY/STATE/ZIP: Detroit Lakes MN 56501

PHONE: 218-443-0476

E-MAIL: greghoch1@gmail.com

WEBSITE:

FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2010, Chap. 362, Sec. 2, Subd. 4f2o

APPROPRIATION AMOUNT: \$ 45,000

Overall Project Outcome and Results

This project funded the restoration of thirty-three wetlands totaling approximately seventeen acres on two Waterfowl Production Areas (WPAs) in Becker County. These areas are managed by the USFWS's Detroit Lakes Wetland Management District office. The primary objective was to restore small seasonal wetlands on WPAs. These small wetlands are important because they are the first to melt in the spring, providing critical habitat to early arriving migrating birds. Research has also shown that these types of wetlands have some of the highest invertebrate densities, a critical food source for egg-laying hens and fast-growing ducklings. These wetlands also play a role in flood protection in the Red River Valley. Because they are temporary or seasonal wetlands, they are often dry during the late fall. During snow melt the following spring, they are able to capture their full volume of water. Wetland restoration in western Minnesota is becoming increasingly important under several climate change models. First, these models predict increased flooding in the future. Second, the models predict that the climate of central Dakotas, the duck factory, will shift to western Minnesota. Wetland restoration in Minnesota buffers us against current and future flooding as well as the possible future waterfowl and songbird production in the Central Flyway.

Project Results Use and Dissemination

We are currently drafting a press release for local television and newspapers to discuss all of the grant funded projects in this area, including both ENRTF and LSOHC-CPL funded projects. However, due to the business of the pre-Xmas season, we will probably wait until mid-January before contacting these media. We have had informal conversations with newspapers in the area and they are interested in doing a story on the habitat restoration work in this area.

Environmental and Natural Resources Trust Fund 2010 Work Program Final Report

Date of Report: 12/5/2011

Final Report

Date of Work Program Approval:

Project Completion Date: 11/28/2011

I. PROJECT TITLE: HCP Phase VI Supplemental - Wetland Restoration in Detroit Lakes Wetland Management District (2o)

Project Manager: Greg Hoch
Affiliation: Friends of the Detroit Lakes Wetland Management District
Mailing Address: 26624 N Tower Rd
City / State / Zip: Detroit Lakes MN 56501
Telephone Number: 218-443-0476 (cell)
E-mail Address: greghoch1@gmail.com
FAX Number: 218-847-4156
Web Site Address:

Location: *Becker County MN*

Total Trust Fund Project Budget:	Trust Fund Appropriation	\$	45,000
	Minus Amount Spent:	\$	44,929
	Equal Balance:	\$	71

Legal Citation: M.L. 2010, Chap. 362, Sec. 2, Subd. 4f2o

Appropriation Language:

\$3,375,000 is from the trust fund to the commissioner of natural resources for the sixth appropriation for acceleration of agency programs and cooperative agreements. Of this appropriation, \$770,000 is for the Department of Natural Resources agency programs and \$2,605,000 is for agreements as follows: \$450,000 with Pheasants Forever; \$50,000 with Minnesota Deer Hunters Association; \$895,000 with Ducks Unlimited, Inc.; \$85,000 with National Wild Turkey Federation; \$365,000 with the Nature Conservancy; \$210,000 with Minnesota Land Trust; \$350,000 with the Trust for Public Land; \$100,000 with Minnesota Valley National Wildlife Refuge Trust, Inc.; \$50,000 with the United States Fish and Wildlife Service; and \$50,000 with Friends of Detroit Lakes Watershed Management District to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture-Natural Resources Conservation Service is a cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the

purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement. To the maximum extent practical, consistent with contractual easement or fee acquisition obligations, the recipients shall utilize staff resources to identify future projects and shall maximize the implementation of biodiverse, quality restoration projects in the project proposal into the first half of the 2010 fiscal year.

II. and III. Final Project Summary

This project restored 29 wetlands on Kruger Waterfowl Production Area ranging in size from 0.1 to 4.7 acres, and four wetlands on Seter-Davis WPA ranging in size from 0.1 to 0.3 acres in size. In total, approximately 17 acres were restored. This fall, 2011, the wetlands were excavated by local contractors, any ditches leading to the wetlands were completely filled, and any remaining fill was spread on the surrounding uplands in an effort to mimic the original topography of the site. This summer, volunteers and Friends members hand harvest over sixty species of wildflower seed from nearby WPAs. USFWS staff, working with local contractors, harvested an additional 24,000 pounds of seed, also from native prairies in the area. USFWS staff will seed the bare dirt at these sites in March of 2012.

While these acres seem small, these small, Type I wetlands are the most impacted in western Minnesota's agricultural landscape. They are important for wildlife for two reasons. These small wetlands tend to melt before larger wetlands and lakes in the spring, providing habitat for the earliest arriving wetland dependent species. Second, many studies have shown that these small wetlands have some of the highest densities of invertebrates in the water. These inverts are a critical resource, especially because of their high protein content, for females trying to lay eggs early in the growing season.

IV. OUTLINE OF PROJECT RESULTS:

Result 1: Wetland restorations on Kruger and Seter-Davis WPA

Description:

Summary Budget Information for Result 1:	Trust Fund Budget:	\$ 45,000
	Amount Spent:	\$ 44,929
	Balance:	\$ 71

Deliverable	Completion Date	Budget
1.excavate wetlands	12/2011	\$45,000
2. reseed sites	3/2012	

Final Report Summary: This project continues the wetland work done by the Detroit Lakes USFWS office and NGOs they regularly work with. With next round of ENRTF dollars we think we will be almost caught up on all the small wetland restorations across the five county district on existing WPAs. Staff, Friends members, and contractors continue to experiment with techniques for wetland restorations such as depth and slope of the wetlands. This year we intensively harvested wetland margin seed and look forward to seeing how well these species establish. One major issue with wetlands in general and restored wetlands specifically is that they are immediately overtaken by invasive species, hybrid cattail and reed canary grass, and these species form dense monocultures in the basin. We hope that by using a heavy seeding density of wetland margin seeds, we can minimize or slow down this process. If successful, we will share these techniques with partners such as the DNR and TNC.

V. TOTAL TRUST FUND PROJECT BUDGET:

Personnel: \$

Contracts: \$ 45,000 (Subsurface Contracting will do all wetland restoration work. USFWS staff will reseed the site after construction activities are done.)

Equipment/Tools/Supplies: \$

Acquisition, including easements: \$

Travel: \$

Other: \$

TOTAL TRUST FUND PROJECT BUDGET: \$50,000

Explanation of Capital Expenditures Greater Than \$3,500:

VI. PROJECT STRATEGY:

A. Project Partners: The project is coordinated by the Friends of the Detroit Lakes Wetland Management District.

B. Project Impact and Long-term Strategy: The goal of the project is to provide more habitat for wetland dependent plant and wildlife species, most of which are declining across Minnesota.

C. Other Funds Proposed to be Spent during the Project Period: We recently submitted three small NAWCA grants for work in western Minnesota. These project dollars were used as match on one of those grants for additional wetland restoration work in Clay and Becker Counties.

D. Spending History: We received \$40,000 and \$50,000 ENRTF dollars in the previous phases of ENRTF funding for wetland restoration at nearby Waterfowl Production Areas the Wetland Management District. Additionally, MDHA has spent ENRTF funds on Kruger in recent years. This is part of our overall plan to restore habitats within the district to presettlement vegetation conducive to producing high densities of migratory waterfowl and songbirds.

VII. DISSEMINATION: This winter we plan to approach several newspapers and television stations in the area to discuss the habitat restoration work that has been conducted in recent years through both ENRTF and OHF resources.

VIII. REPORTING REQUIREMENTS:

IX. RESEARCH PROJECTS:

Figure 1. Map of WPA showing wetlands restored under this grant delineated in yellow.

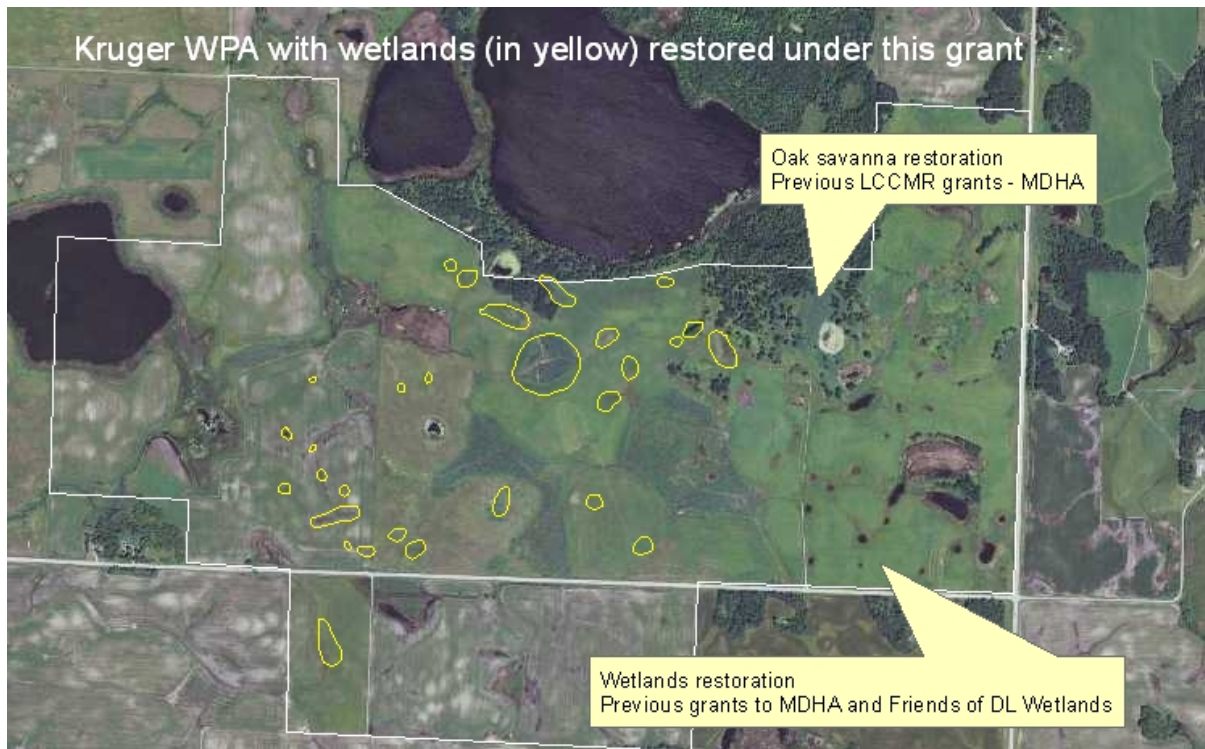


Figure 2. Seter-Davis WPA showing four wetlands restored in this grant. The remaining wetlands at the site will be restored with the next phase of LCCMR funding.



Figure 3. The Process. Contractors use equipment to scrape the silt from the wetland basin and spread this over the surrounding uplands. All bare soil will be reseeded this spring using a diverse mix of local ecotype seed.



Figure 4. The End Product. A flock of mallards flies over a recently restored wetland at a WPA three miles west of Kruger WPA.



Attachment A: Budget Detail for 2010 Projects					
Project Title: Wetland Restoration in the Detroit Lakes Wetland Management District					
Project Manager Name: Greg Hoch					
Trust Fund Appropriation: \$ 45,000					
2010 Trust Fund Budget	Result 1 Budget:	Amount Spent (date)	Balance 1 Dec 2011	TOTAL BUDGET	TOTAL BALANCE
	Wetland Restoration				
BUDGET ITEM					
Contracts					
Professional/technical - Wetlands will be identified and delineated by FWS staff. Contractors will remove fill/silt from wetlands, place fill into ditch, and grade the wetland and ditch to restore as much of the original topography as possible. Once completed, the areas will be seeded with local ecotype seed by FWS staff	45,000	44,929	71	45,000	71
COLUMN TOTAL	\$45,000	\$44,929	\$71	\$45,000	\$71

2010 Project Abstract

For the Period Ending June 30, 2012

PROJECT TITLE: HCP Phase VI Supplemental – Mississippi Bluffland Restoration (2p)
AFFILIATION: National Wild Turkey Federation
MAILING ADDRESS: 37305 Deer Lake Way
CITY/STATE/ZIP: Grand Rapids, MN 55744
PHONE: 218-326-8800
E-MAIL: rhorton@nwtf.net
WEBSITE: www.nwtf.org
FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: M.L. 2010, Chp. 362, Sec. 2, Subd. 4f2p

APPROPRIATION AMOUNT: \$50,000

Overall Project Outcome and Results

This project was part of a long-term bluffland restoration effort by DNR, National Wild Turkey Federation, and private landowners in SE MN. Funds from the Environment and Natural Resources Trust Fund were used to hire contractors to remove Eastern red cedar, buckthorn, honeysuckle, and prickly ash that was growing over former “goat prairies”. The project focused primarily on improving habitat for the timber rattlesnake, three other at-risk snake species (racer, bullsnake, and hognose snake) and numerous at-risk plant species in the Bluffland subsection.

Goat prairies are native prairies found on steep south-facing hills in southeastern Minnesota. They are important to wildlife because the wind prevents deep snowpack, and intense sunlight melts much of what does stick. Animals can then rest and forage on the exposed sites. Nearby rock bluffs hold snakes, which forage in the prairies in summer. These prairies were historically maintained by periodic wildfire, but fire prevention has allowed native red cedar and non-native brushy species to encroach on them. These need to be removed to restore the native habitat. Restoring vegetation through these methods also reduces soil loss and improves water quality within the watershed.

During this grant period we treated 29.2 acres of habitat on private lands by hand cutting the invasive overstory. Stumps were treated with herbicides to prevent re-sprouting. Cut material was piled and burned on-site. A ten-year agreement was required from the landowners before any work began. The level of brush infestation, location and access impacted the contract price, which in turn led to lower than anticipated accomplishment acreage. The treatment area was 28 acres rather than the anticipated “up to 45 acres” as indicated in the initial plan. A second site was added later and an additional 1.2 acres treated. Periodic prescribed burning will be conducted by DNR (non-Trust-Fund monies) and will maintain the site in the desired habitat state.

Project Results Use and Dissemination

Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>

Environment and Natural Resources Trust Fund (ENRTF) 2010 Work Program Final Report

Date of Progress Report: June 18, 2012
Final Report
Date of Work Program Approval: 06/09/10
Project Completion Date: 6/30/12

I. PROJECT TITLE: Mississippi Bluffland Restoration (2p)

Project Manager: Rick Horton
Affiliation: National Wild Turkey Federation
Mailing Address: 37305 Deer Lake Way
City / State / Zip: Grand Rapids, MN 55744
Telephone Number: 218-326-8800
E-mail Address: rhorton@nwtf.net
FAX Number:
Web Site Address: www.nwtf.org

Location: HCP Area 11.

Total ENRTF Project Budget:	ENRTF Appropriation	\$ 50,000
	Minus Amount Spent:	\$ 49.998
	Equal Balance:	\$ 2

Legal Citation: ML 2010, Chap.[362], Sec.[2], Subd. 4(f)2p.

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A

list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY

This project was part of a long-term bluffland restoration effort by DNR, National Wild Turkey Federation, and private landowners in SE MN. Funds from the Environment and Natural Resources Trust Fund were used to hire contractors to remove Eastern red cedar, buckthorn, honeysuckle, and prickly ash that was growing over former “goat prairies”. The project focused primarily on improving habitat for the timber rattlesnake, three other at-risk snake species (racer, bullsnake, and hognose snake) and numerous at-risk plant species in the Bluffland subsection.

Goat prairies are native prairies found on steep south-facing hills in southeastern Minnesota. They are important to wildlife because the wind prevents deep snowpack, and intense sunlight melts much of what does stick. Animals can then rest and forage on the exposed sites. Nearby rock bluffs hold snakes, which forage in the prairies in summer. These prairies were historically maintained by periodic wildfire, but fire prevention has allowed native red cedar and non-native brushy species to encroach on them. These need to be removed to restore the native habitat. Restoring vegetation through these methods also reduces soil loss and improves water quality within the watershed.

During this grant period we treated 29.2 acres of habitat on private lands by hand cutting the invasive overstory. Stumps were treated with herbicides to prevent re-sprouting. Cut material was piled and burned on-site. A ten-year agreement was required from the landowners before any work began. The level of brush infestation, location and access impacted the contract price, which in turn led to lower than anticipated accomplishment acreage. The treatment area was 28 acres rather than the anticipated “up to 45 acres” as indicated in the initial plan. A second site was added later and an additional 1.2 acres treated. Periodic prescribed burning will be conducted by DNR (non-Trust-Fund monies) and will maintain the site in the desired habitat state.

IV. OUTLINE OF PROJECT RESULTS:

RESULT 1: Restored 29.2 acres of “goat prairie” by removing red cedar and other invasive species, exposing native seed bank of prairie species to sunlight, and allowing those species to be rejuvenated.

The MN DNR conducts reptile surveys and habitat assessments on bluff prairies in the Blufflands subsection of SE Minnesota. Survey sites are selected based on an evaluation of Minnesota County Biological Survey (MCBS) native plant community survey data, topographic maps, and aerial photos for the presence of bluff prairies. A second selection criterion is known or potential presence of timber rattlesnakes. Rattlesnake presence or potential is based on evaluation of MCBS reptile survey data, timber rattlesnake observation reports maintained by the Nongame Wildlife Program, historical information from landowners and wildlife managers, and word of mouth

reports. This process allows for targeting survey sites to bluff prairies in timber rattlesnake range. Sites are also selected for survey based on landowner permission for access. Once sites are selected and permission to access is attained, surveys are targeted for the month of May, which is peak emergence time for timber rattlesnakes. During site visits, the bluff prairies are surveyed for the presence of timber rattlesnakes and other reptiles. Sites are also evaluated for their habitat quality for timber rattlesnakes. In addition to reptile surveys, a plant inventory is conducted to document the presence of remnant bluff prairie, and an evaluation of restorability is also conducted, which includes an assessment of the cedar trees and invasive species present on the site. Once surveys are completed, sites are prioritized for restoration. Sites with timber rattlesnakes are of high priority, along with sites adjacent to bluffs with timber rattlesnakes. Once sites are prioritized, landowners are contacted for permission to conduct restoration work. This project only works with willing landowners. NWTF procures a 10 year agreement from participating landowners.

NWTF map the sites using GPS technology. Site-specific restoration plans are then developed and sent to prospective contractors by NWTF. Contractors bid on the sites, and are selected by NWTF. Contractor work is monitored by NWTF as work progresses. NWTF handles the contractor invoices, payments and reimbursement from the Trust Fund. Future prescribed burning and follow-up invasive species work will be conducted by the MN DNR Nongame Wildlife Program because they have an ongoing project on portions of the site included in this grant. This is done on project sites to rejuvenate the prairie plant species and keep out woody plant encroachment.

Project Properties:

Skauge property, Houston County, T102, R7, S8 – 28 acres
Johnson property, Houston County T104, R5, S30 – 1.2 acres

Description: Identified sites, marked boundaries, bid projects, procured landowner agreements, hired contractors, and oversaw work done by contractors on 29.2 acres of bluffland.

Summary Budget Information for Result 1: ENRTF Budget: \$ 50,000
Amount Spent: \$ 49,998
Balance: \$ 2

Deliverable/Outcome	Completion Date	Budget
1. Restore 29.2 acres of “goat prairie”	June 30, 2012	\$50,000

Result Completion Date: June 18, 2012

Final Report Summary: One 28 acre site on the Skauge property (Houston County, T102, R7, S8) that was heavily infested with red cedar and buckthorn was selected for treatment. Competitive bids were solicited, a contractor selected and a landowner

agreement signed. The contractor cut down the red cedar, buckthorn, honeysuckle, and all other woody vegetation from the site, and applied herbicide to buckthorn stumps in winter 2010/2011. Brush piles will be burned in fall/winter 2011/2012.

The level of infestation, location and access impacted the contract price, which in turn led to lower than anticipated accomplishment acreage. We treated 28 acres rather than the anticipated "up to 45 acres" as indicated in the initial plan.

A couple of accounting errors caused us to request work program amendments which led NWTF to contribute more matching dollars than anticipated. The Minnesota State NWTF Super Fund contributed \$2,640 to pay contractors, and NWTF Headquarters assumed responsibility for an additional \$450 in staff time. This resulted in \$3,090 in matching funds contributed to the project. We have learned to be more diligent in our accounting.

We also amended the work program to transfer unused Travel Funds into the Contracts category and added the Johnson property (Houston County T104, R5, S30) to the treatment list. This allowed us to fund an additional 1.2 acres of treatment.

V. TOTAL ENRTF PROJECT BUDGET:

Personnel: \$ 3,050

Contracts: \$ 46,802

Bid specifications for each site (including scope of work involving cedar removal) will be sent to prospective contractors, contractors will be chosen for each site, and cedar removal will be done on sites by contractors per bid specifications.

Equipment/Tools/Supplies: \$

Acquisition (Fee Title or Permanent Easements): \$

Travel: \$ 148

Additional Budget Items: \$

TOTAL ENRTF PROJECT BUDGET: \$ 50,000

Explanation of Capital Expenditures Greater Than \$3,500:

VI. PROJECT STRATEGY:

A. Project Partners:

The MN DNR Nongame Wildlife Program is a project partner. The DNR representative for this partnership is Jaime Edwards, Nongame Wildlife Specialist. As a project partner, the MN DNR will conduct surveys and habitat assessments of bluff prairies in the Blufflands subsection of SE Minnesota. Sites eligible for restoration will be prioritized based on the survey and assessment data. The MN DNR will work with NWTF to recommend priority sites for restoration as part of this grant project. Restoration of recommended sites will work toward meeting goals laid out in the State Wildlife Action Plan and the Minnesota Timber Rattlesnake Recovery Plan.

In addition to identifying priority sites, the MN DNR will also provide technical assistance to the NWTF on restoration needs, including bid specification review for compliance with management guidelines outlined in the Timber Rattlesnake Recovery Plan. MN DNR will also be available to private landowners receiving restoration work for consultation on habitat and management goals and implementation.

B. Project Impact and Long-term Strategy: This project compliments the Landowner Incentive Program (LIP) run by DNR. It is part of an ongoing effort to restore bluffland habitats in SE MN. The MDNR LIP-funded project on the Upper bluff portion of the Skaug property will involve an experimental management technique of using goats to graze buckthorn over the next several years. As a result, MDNR has agreed to assume all future management and monitoring responsibility for the Skaug property, including the ENTF-funded work on the lower bluff portion, rather than have NWTF and MDNR duplicate efforts. Both the NWTF and MDNR Landowner Agreements with the Skaug family extend for a 10-year term. Both agreements started the same year and are running simultaneously. MDNR will conduct monitoring on both the upper and lower portions of the Skaug bluff as part of their LIP-funded grazing project. Monitoring consists of photo points as well as vegetation plots on both the upper and lower portions of the bluff. Prescribed burning will be conducted by the MDNR using MDNR funds when this management application is feasible on the bluff. Additionally, MDNR will conduct at least one rattlesnake survey and habitat assessment during the second half of the 10-year Landowner Agreement as required by the Timber Rattlesnake Recovery Plan. This effort will be funded by MDNR funds. Copies of these reports will be available from the MDNR Non-Game Specialist Jamie Edwards, (507) 206-2820, Jaime.edwards@state.mn.us.

C. Other Funds Proposed to be Spent during the Project Period:

D. Spending History: State Wildlife Grant 2006 – \$23,510 (matched 100%)

LCCMR -HCP Phase V - \$70,000

LCCMR – HCP Phase VI - \$70,000

VII. DISSEMINATION: Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than November 30, 2010, March 30, 2011, November 30, 2011 and March 30, 2012. A final work program report and associated products will be submitted between June 30 and August 1, 2012 as requested by the LCCMR.

IX. RESEARCH PROJECTS:

Project Title: Mississippi Bluffland Restoration (2i)					
Project Manager Name: Rick Horton					
Trust Fund Appropriation: \$ 50,000					
2010 Trust Fund Budget	Result 1 Budget: (Revised)	<u>Final Amount Spent</u> (June 16, 2012)	<u>Final Balance</u>	<u>TOTAL BUDGET</u>	<u>TOTAL FINAL BALANCE</u>
	<i>Restore 29.2 acres of "goat prairie"</i>				
BUDGET ITEM					
PERSONNEL: wages and benefits NWTF Regional Wildlife Biologist Rick Horton	3,050	3,050	0	3,050	0
Contracts					
Professional/technical - for removal of red cedar and other invasives	46,802	46,800	2	46,802	2
Travel expenses in Minnesota	148	148	0	148	0
COLUMN TOTAL	\$50,000	\$49,998	\$2	\$50,000	\$2

Skauge Property Map
David and Christy Skauge
Houston County, T102, R7, S8







2010 Project Abstract

For the Period Ending June 30, 2012

TITLE: Habitat Conservation Partnership (HCP) – Phase VI Supplemental Shorelands Protection Program – 3A
PROJECT MANAGER: Sarah Strommen
ORGANIZATION: Minnesota Land Trust
ADDRESS: 2356 University Avenue West, Suite 240
St. Paul, MN 55114
WEB SITE ADDRESS: www.mnland.org
FUND: Environmental and Natural Resources Trust Fund
LEGAL CITATION: Minnesota Laws 2010, Chapter 362, Section 2, Subdivision 4(f)

APPROPRIATION AMOUNT: \$102,000

OVERALL PROJECT OUTCOME AND RESULTS

This 2010 grant was supplemental to the sixth phase (2009) of our Shorelands Protection project. This grant provided acquisition capital needed to complete two urgent projects that otherwise we would not have been able to complete. One project protects important shoreline along Lake Superior, while the other project protects shoreline along the Little Pine River. Collectively, these two easements protect 99 acres of critical habitat and protect more than 7,000 feet of fragile shoreline.

Both easements were purchased at significant bargain prices. One of the projects (Lake Superior) also used some 2009 funding, so project details, including the funding breakdown, also were reported in our 2009 (Phase 6) final report.

Additionally, the Land Trust prepared baseline property reports for each easement, detailing the condition of the property for future monitoring and enforcement. To fund this required perpetual obligation, the Land Trust dedicated funds to its segregated Stewardship and Enforcement Fund for several completed projects. For these projects, we estimated the anticipated annual expenses of each project and the investment needed to generate annual income sufficient to cover these expenses in perpetuity – all in accordance with our internal policies and procedures as approved by LCCMR. We will report to LCCMR annually on the status of the Stewardship and Enforcement Fund and the easements acquired with funds from this grant.

An appraised value is known for only one of the easements. The donated value of this easement is \$515,000. Based on the estimate of value for the second easement, we believe the donated value of that easement is approximately \$53,000. Therefore, we were able to leverage significant private donation with the State's small investment in these projects.

Cumulatively, across all phases of the HCP program, the Land Trust has protected 7,549 acres of critical habitat and nearly 224,000 feet of shoreline, at a cost to the State of \$293 per acre.

The Land Trust's work on this project continues to demonstrate the cost effectiveness of working with conservation easements to protect natural and scenic resources along Minnesota's lakes, rivers, and streams, as the cost to the State was well below the cost to purchase land along our increasingly threatened shorelines. This grant continued to generate interest among landowners, and therefore, ongoing funding will be important to sustained success. Additionally, we believe that funds to purchase easements – even a small incentive – will be necessary in the future as work becomes more targeted, selective, and focused on building complexes of protected land.

PROJECT RESULTS USE AND DISSEMINATION

The Land Trust disseminated information about the specific land protection projects completed under this grant through our newsletter, email updates, web site, and press releases. The Land Trust also shared information about conservation easements generally and our experience with our partner organizations, other easement holders, local communities, as well as policy makers including members of the LCCMR and LSOHC.

Environment and Natural Resources Trust Fund (ENRTF)

2010 Work Program Final Report

Date of Report: August 1, 2012

ENRTF 2010 Final Report

Date of Work Program Approval: December 15, 2009

Project Completion Date: June 30, 2012

I. PROJECT TITLE: Minnesota Land Trust: Shoreland Protection Project Minnesota's Habitat Conservation Partnership Phase VI Supplemental

Project Manager: Sarah Strommen

Affiliation: Minnesota Land Trust

Mailing Address: 2356 University Avenue West, Suite 240

City / State / Zip: St. Paul, MN 55114

Telephone Number: 651-647-9590

E-mail Address: sstrommen@mnland.org

FAX Number: 651-647-9769

Web Site Address: www.mnland.org

Location: HCP Project Areas 2, 4, 5, and 3-7-8

Total ENRTF Project Budget:	ENRTF Appropriation	\$102,000
	Minus Amount Spent:	<u>\$100,747</u>
	Equal Balance:	\$ 1,253

Legal Citation: ML 2010, Chap. 362, Sec. 2, Subd. 4f.

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation

must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY:

This 2010 grant was supplemental to the sixth phase (2009) of our Shorelands Protection project. This grant provided acquisition capital needed to complete two urgent projects that otherwise we would not have been able to complete. One project protects important shoreline along Lake Superior, while the other project protects shoreline along the Little Pine River. Collectively, these two easements protect 99 acres of critical habitat and protect more than 7,000 feet of fragile shoreline.

Both easements were purchased at significant bargain prices. One of the projects (Lake Superior – 11 acres) also used some 2009 funding, so project details, including the funding breakdown, also were reported in our 2009 (Phase 6) final report.

Additionally, the Land Trust prepared baseline property reports for each easement, detailing the condition of the property for future monitoring and enforcement. To fund this required perpetual obligation, the Land Trust dedicated funds to its segregated Stewardship and Enforcement Fund for several completed projects. For these projects, we estimated the anticipated annual expenses of each project and the investment needed to generate annual income sufficient to cover these expenses in perpetuity – all in accordance with our internal policies and procedures as approved by LCCMR. We will report to LCCMR annually on the status of the Stewardship and Enforcement Fund and the easements acquired with funds from this grant.

An appraised value is known for only one of the easements. The donated value of this easement is \$515,000. Based on the estimate of value for the second easement, we believe the donated value of that easement is approximately \$53,000. Therefore, we were able to leverage significant private donation with the State's small investment in these projects.

Cumulatively, across all phases of the HCP program, the Land Trust has protected 7,549 acres of critical habitat and nearly 224,000 feet of shoreline, at a cost to the State of \$293 per acre.

The Land Trust's work on this project continues to demonstrate the cost effectiveness of working with conservation easements to protect natural and scenic resources along Minnesota's lakes, rivers, and streams, as the cost to the State was well below the cost to purchase land along our increasingly threatened shorelines. This grant continued to generate interest among landowners, and therefore, ongoing funding will be important to sustained success. Additionally, we believe that funds to purchase easements – even a small incentive – will be necessary in the future as work becomes more targeted, selective, and focused on building complexes of protected land.

IV. OUTLINE OF PROJECT RESULTS:

RESULT 1: Protect Critical Shorelands through Conservation Easements

Description: The Minnesota Land Trust will protect critical riparian habitats by negotiating and completing 1-2 perpetual conservation easements (including documenting property conditions and creating management plans as appropriate) on up to 100-150 acres of land and dedicating funds for long-term monitoring, management and enforcement of the easements.

These acreage and project numbers are estimated based upon the amount of time anticipated to complete the identified potential projects and the approximate acreage of those potential projects. Actual completed project acreages and numbers will vary.

This phase of the project anticipates purchasing easements (likely at a price below market value). We currently have identified three projects, as described on the attached list. One or more of these potential projects may not be completed at all as they are further evaluated by the Land Trust or as landowners choose not to pursue protection options. If other urgent projects are identified, the Land Trust may add them to the list according to the LCCMR list update process. We will continually evaluate all projects to maximize conservation.

Summary Budget Information for Result 1:	ENRTF Budget:	\$102,000
	Amount Spent:	\$100,747
	Balance:	\$ 1,253

Deliverable	Completion Date	Budget
1. Protect up to 100-150 acres of land by: a. completing all components of 1-2 conservation easement projects b. dedicating funds to ensure long-term easement sustainability.	Activity will be ongoing with projects completed by June 2012	\$102,000

Completion Date: June 30, 2012

Final Report Summary:

In the supplement to the sixth phase of our Shorelands Protection project, the Minnesota Land Trust continued to work with landowners to secure permanent conservation easements on quality habitat along or containing critical riparian lands. We completed two conservation easements that preserve 99 acres of land and protect more than 7,000 feet of fragile shoreline. The 11-acre Lake Superior project also used 2009 funds and results were reported in our 2009 final report. Therefore, the total number of new acres completed under this grant is 88 acres. Both easements completed involved significant bargain purchases.

Projects met the following selection criteria:

1. Habitat: quality and quantity of existing habitat on site; protects riparian areas and buffers water resources
2. Context: proximity and relationship to other protected lands
3. Opportunity: cost-benefit ratio: which landowners will participate now
4. Other Benefits: meeting multiple objectives, including visual and physical access, forestry goals, water quality, etc.

Additionally, the Land Trust spent funds for transaction expenses on two projects that will likely be completed with 2011 ENRTF funds. These two projects, Black Lake and Minnesota River, will collectively protect 564 acres of land and more than 16,000 feet of fragile shoreline.

Because many projects span multiple phases of the HCP program, the Land Trust does not allocate professional services expenses to specific conservation easement projects. Funding that is attributable to a specific project is described below and on the attached summary of purchased easements.

Descriptions and Results by Area:

Project Area 4: Central Lakes

Acres protected: 88

Easements completed: 1

Project: Little Pine River, Crow Wing County

Description: Located near the confluence of the Little Pine River and Pine River, this 88-acre property consists of forest, grassland, wetlands, and a large, open water pond. The property contains 3,100 feet of shoreline along Little Pine River and 2,340 feet of shoreline around the pond. The mix of forest, wetland and riparian areas on the property can provide habitat for a variety of species in greatest conservation need, including bald eagle, northern goshawk, Blanding's turtle, and wood thrush.

The easement prohibits division of the property, industrial use, and agricultural use. Residential use is limited.

The Land Trust purchased this easement for a bargain price of \$19,000. In addition, \$15,000 of 2010 HCP ENRTF funds were used to cover stewardship on this project.

Project Area 5: Lower St. Louis River

Acres protected: 11

Easements completed: 1

Project: Lake Superior, Lake County

Description: This 11-acre property lies along the north shore of Lake Superior, immediately to the northeast of the entrance to Split Rock Lighthouse State Park.

It consists primarily of forest and cobblestone beach along Lake Superior. The property is within an area ranked as high biodiversity significance by the Minnesota County Biological Survey for its Aspen-Birch Hardwood Forest and Dry Bedrock Shore native plant communities. There also is a primitive campsite for the Lake Superior Water Trail on the beach area, and the Gitchi-Gami State Trail passes along the property.

The conservation easement was purchased for \$125,000, an amount well below fair-market value of \$640,000. \$78,780 of the purchase price came from the 2009 HCP grant and the remainder of the funds (\$46,120) for the purchase price came from the 2010 HCP grant. \$15,000 of 2010 ENRTF funds were used to cover easement monitoring, management, and enforcement. As stated above, the acreage for this project was counted under the 2009 ENRTF grant, and will not be counted under the accomplishments for the 2010 supplemental grant. Additional detail is provided in the attached Summary of Acquired Easements.

The easement protects the conservation values of the property by prohibiting division of the property, prohibiting agricultural use, and limiting residential use. The easement also requires that the primitive campsite be available to the public as long as the Lake Superior Water Trail continues to exist.

V. TOTAL ENRTF PROJECT BUDGET:

Personnel: \$ 0 from this phase. Consistent with our original proposal and work program, we used 2009 ENRTF dollars to cover personnel for these projects.

Acquisition (Permanent Easements): \$70,747 for the direct cost of acquiring easements for related transaction costs such as for appraisals, surveys, title work, mapping, etc.

Travel: \$0

Easement Stewardship: \$ 30,000 to be dedicated to the Stewardship and Enforcement Fund. Actual amounts committed for stewardship were determined based upon the number and nature of specific projects completed and the availability of other funds. Stewardship fund requests under this grant were 15,000 for each of the two projects.

TOTAL ENRTF PROJECT BUDGET: \$102,000 appropriated; \$100,747 spent

Explanation of Capital Expenditures Greater Than \$3,500: N/A

VI. PROJECT STRATEGY:

A. Project Partners: This program is part of the Habitat Conservation Partnership Phase VI Supplemental. Please see the overall work program for a complete list of partners involved. In addition to these partners, the many private landowners of lands protected by conservation easements completed under this project remain responsible for the use and management of their lands to preserve and protect the identified

conservation values, making these landowners long-term partners in the preservation and protection of these critical areas.

B. Project Impact and Long-term Strategy: The focus of the Minnesota Land Trust's activities under this project was the protection of shorelands—fragile and ecologically important areas that have been recognized in the *Statewide Conservation and Preservation Plan* as among the most threatened natural systems in the State and in need of protection, conservation, and restoration.

This project also is a component of the Minnesota's Land Trust's long-term, strategic conservation agenda which guides the Land Trust's conservation work throughout the State. The conservation agenda sets out the specific conservation focus of the Land Trust which includes, among other things, the preservation of lakeshores, rivers and streams for their importance as habitat, for their relationship to water quality, and for the scenic values that have long been associated with Minnesota's beauty. The conservation agenda also identifies a suite of critical landscapes throughout the State that embody the natural and cultural features that make Minnesota unique. Many of these critical landscapes substantially overlap with the project areas identified by the Habitat Conservation Partnership.

Each individual conservation easement project completed by the Land Trust is evaluated to make sure that there are important conservation features that can be protected in perpetuity through the conservation easement being contemplated and that protection of these features provides significant public benefits. Additionally, the Land Trust places priority on projects that complement existing protected lands and connect important habitat areas, thereby amplifying the ecological value and public benefits achieved by an individual project.

C. Other Funds Spent during the Project Period: By purchasing easements at a bargain sale price, the Minnesota Land Trust was able to protect lands at a fraction of what it would cost to purchase comparable lands in fee. We leveraged more than \$500,000 in donated value from landowners in these two projects.

Because this project was supplemental to the 2009 grant, we used the 2009 grant to cover personnel costs and used the 2010 funds only for easement acquisition costs and easement stewardship. Additional funds were spent from the Land Trust's operating fund to cover costs associated with this project that are not covered by the grant.

D. Spending History: This project is part of the Land Trust's ongoing shoreland program. In addition to Land Trust operating funds spent on the project, we have received previous ENRTF appropriations over the past two years as follows: Minnesota Laws 2008, Chapter 367, Section 2, Subdivision 3(c): \$210,000; Minnesota Laws 2009, Chapter 143, Section 2, Subdivision 4(e): \$210,000.

VII. DISSEMINATION: The Land Trust disseminated information about the specific land protection projects completed under this grant through our newsletter, email updates, web site, and press releases. The Land Trust also shared information about conservation easements generally and our experience with our partner organizations,

other easement holders, local communities, as well as policy makers including members of the LCCMR and LSOHC.

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports were submitted November 1 and May 1 of each year, starting in November 2010. This is the final work program report.

IX. RESEARCH PROJECTS: N/A

Attachment A: Budget Detail for 2010 Projects					
Project Title:					
Minnesota's Habitat Conservation Partnership--Phase 6 Supplemental					
Minnesota Land Trust - Shoreland Protection Project					
Project Manager Name: Sarah Strommen					
Trust Fund Appropriation: \$ 102,000					
2010 Trust Fund Budget	<u>Result 1 Budget</u> <u>Approved May 2012</u>	Amount Spent as of June 30, 2012	Balance as of June 30, 2012	Total Budget	Total Balance
	Protect Critical Shorelands through Conservation Easements				
BUDGET ITEM					
Easement acquisition costs: purchase price of conservation easement(s); title work, title insurance, and closing fees, etc.; maps, GIS (including project mapping by Community GIS); Other, including appraisals and surveys	\$72,000	\$70,747	\$1,253	\$72,000	\$1,253
Travel expenses in Minnesota	\$0	\$0	\$0	\$0	\$0
Easement Stewardship	\$30,000	\$30,000	\$0	\$30,000	\$0
COLUMN TOTAL	\$102,000	\$100,747	\$1,253	\$102,000	\$1,253

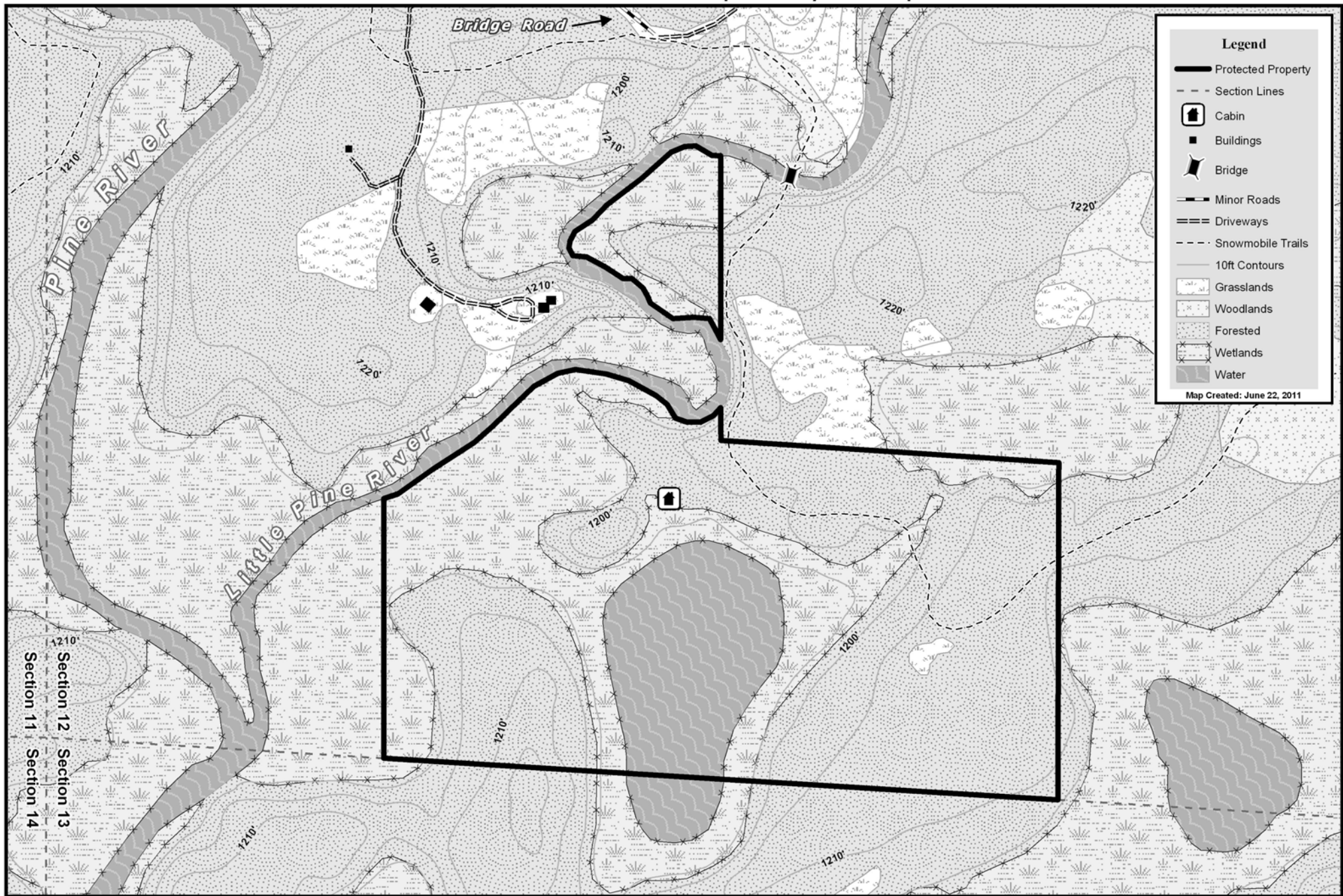
Minnesota Land Trust: Habitat Conservation Partnership –2010 (Phase 6 Supplemental)
Summary of Acquired Easements

PURCHASED EASEMENTS

Project	Acres	Funding Type	Funds Use	Funding Amount
Lake Superior Lake County	11	ENRTF – 2009 Land Trust allocation	Purchase price of conservation easement	\$78,780
		ENRTF – 2010 allocation	Purchase price of conservation easement	\$46,120
		ENRTF – 2010 Land Trust allocation	Stewardship	\$15,000
		Landowner donation	Donated value of conservation easement	\$515,000
Little Pine River Crow Wing County	88	ENRTF-2010 Land Trust allocation	Purchase price of conservation easement	\$19,000
		ENRTF – 2010 Land Trust allocation	Stewardship	\$15,000
		Landowner donation	Donated value of conservation easement	\$53,000

In addition to the expenses listed above, staff time and professional services expenses covering closing costs, title review, etc. were incurred and covered by the Land Trust's 2009 and 2010 Habitat Conservation Partnership allocation. The Land Trust does not allocate staff time or professional services expenses to specific conservation projects.

Exhibit B: Property Map



Map Resource Information

Protected Property, Buildings, Roads, Driveways & Minor Roads, 10-Foot Contours, Grasslands, Forests, Woodlands, Wetlands, and Water created by Community GIS Services Inc.

Users of this map agree and acknowledge that Community GIS Services Inc. and the Minnesota Land Trust cannot be held liable for accuracy of GIS material provided. GIS materials should not be relied upon to establish legal title, boundary lines, or locations of improvements.



Site: Little Pine River - Tract: Phillips

Crow Wing County - Twp. 136 N Rng. 27 W Sec. 12



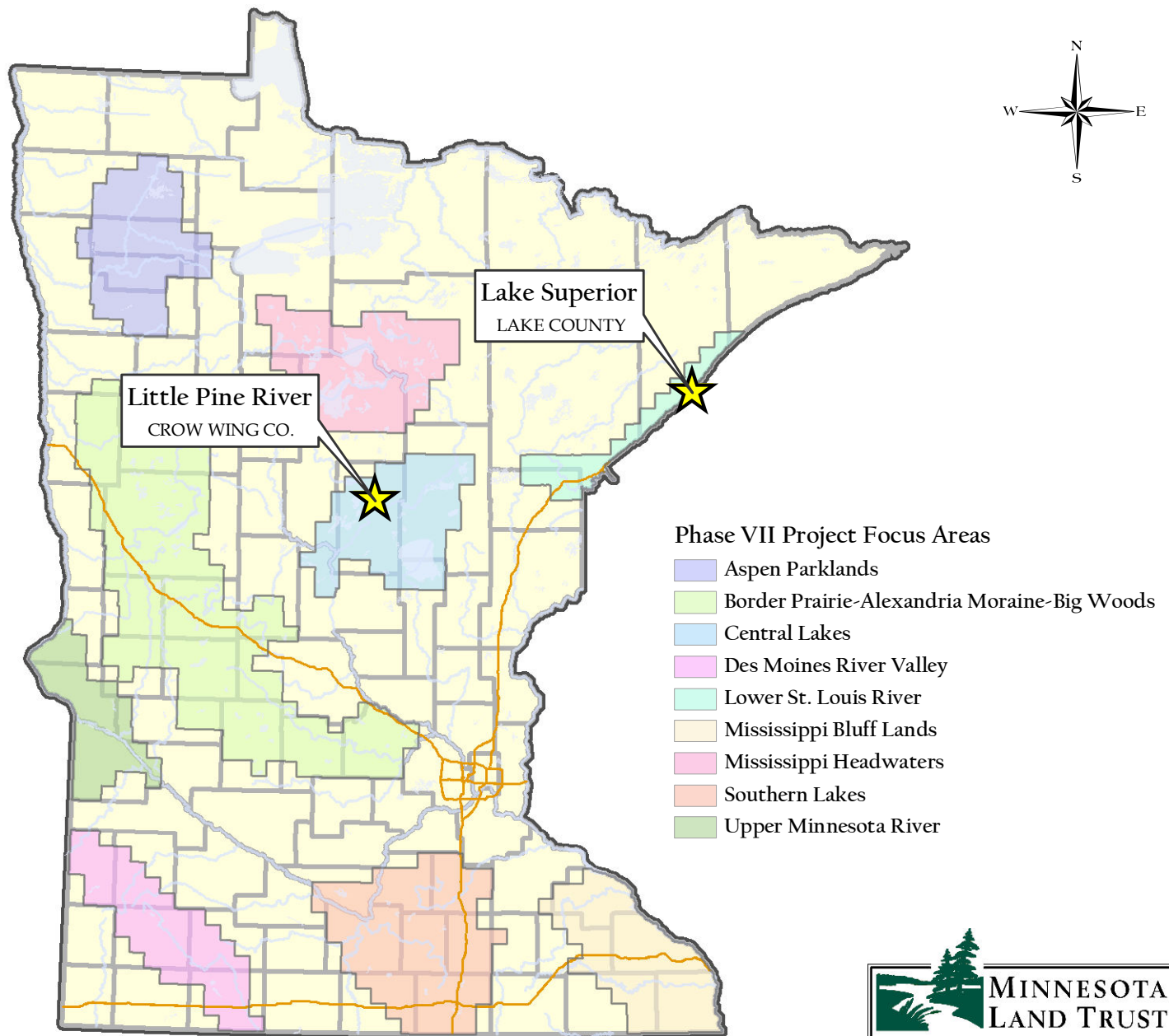
Scale:
1" = 500'

500 250 0 500 Feet



Habitat Conservation Partnership Phase VI Supplemental

MINNESOTA LAND TRUST COMPLETED PROJECTS



PROJECT: Little Pine River, 88 acres

DESCRIPTION: Located at the confluence of the Little Pine River and the Pine River, this 88-acre property consists of forest, grassland, wetlands, and a large, open water pond. The property contains 3,100 feet of shoreline along Little Pine River and 2,340 feet of shoreline around the pond. The mix of forest, wetland and riparian areas on the property can provide habitat for a variety of species in greatest conservation need, including bald eagles, northern goshawks, and Blanding's turtles.

PROJECT: Lake Superior, 11 acres

DESCRIPTION: This property lies along the north shore of Lake Superior, immediately to the northeast of the entrance to Split Rock Lighthouse State Park. It consists primarily of forest and cobblestone beach along Lake Superior. The property is within an area ranked as high biodiversity significance by the Minnesota County Biological Survey. There also is a primitive campsite for the Lake Superior Water Trail on the beach area. This project also used 2009 ENRTF funds.

2010 Project Abstract

For the Period Ending June 30, 2011

PROJECT TITLE: Shallow Lake Easements - HCP Phase VI Supplemental (3c)
PROJECT MANAGER: Jon Schneider, Manager – MN Conservation Programs
AFFILIATION: Ducks Unlimited, Inc.
MAILING ADDRESS: 311 East Lake Geneva Road NE
CITY/STATE/ZIP: Alexandria, Minnesota 56308
PHONE: 320/762-9916
E-MAIL: jschneider@ducks.org
WEBSITE: www.ducks.org
FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: M.L. 2010, Chapter 362, Section 2, Subdivision 4f3c
APPROPRIATION AMOUNT: \$75,000

Overall Project Outcome and Results

Ducks Unlimited used this grant in combination with our 2009 appropriation to help fund approximately 40% of the cost to purchase a permanent conservation easement on the 150-acre Donovan-Posch property on Garden and Johnson Lakes in Crow Wing County in June 2011. In addition, Ducks Unlimited also provided technical assistance and conducted outreach and promotion of conservation easements as a land protection option to new landowners on several shallow lakes, and secured appraisals for potential conservation easements on both the Papenheim and Douglas County Land Company properties on Lake Christina, and ordered an appraisal on the Radunz property on Cedar Lake in Meeker/McLeod County under this grant before funds ran out. Negotiations with these and other landowners are ongoing and will continue in the future through our 2011 appropriation. DU spent \$29,639 in Other Funds to complete this project.

Project Results Use and Dissemination

This grant helped DU continue the protection of shallow lakes by working with private landowners to secure conservation easements and promote conservation easement concepts. Conservation easements with private landowners are sensitive land deals that don't lend themselves to widespread publicity. However, DU has recognized individual landowners and has publicized our work to protect shallow lake shorelines and shoreland locally through local conservation groups, soil and water districts, and tribal organizations supportive of our work to protect wild rice lakes. DU also informed the foundations supporting our Living Lakes Initiative of our conservation accomplishments. The accomplishment of securing two new permanent conservation easements through this grant has helped encourage other private landowners to consider working with DU to protect their shorelines, and news of our progress may be further disseminated through DU news releases and articles DU publications in the future. Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>.

Environment and Natural Resources Trust Fund 2010 Work Program Final Report

Date of Report: January 30, 2012
Final Report
Date of Work Program Approval: June 9, 2010
Project Completion Date: June 30, 2011

I. PROJECT TITLE: HCP Phase VI Supplemental - Shallow Lake Easements (3c)

Project Manager: Jon Schneider, Manager – MN Conservation Programs
Affiliation: Ducks Unlimited, Inc.
Mailing Address: 311 East Lake Geneva Road NE
City / State / Zip: Alexandria, Minnesota 56308
Telephone Number: 320/762-9916
E-mail Address: jschneider@ducks.org
FAX Number: 320/759-1567
Web Page Address: www.ducks.org

Location: All work will be completed within the Habitat Conservation Partnership Project Areas 1-4 and 6-10.

Total Trust Fund Project Budget:	Appropriation:	\$ 75,000
	Amount Spent:	\$ 75,000
	Balance:	\$ 0

Legal Citation: M.L. 2010, Chapter 362, Section 2, Subdivision 4f3c

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the

commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY:

Ducks Unlimited used this grant in combination with our 2009 appropriation to help fund approximately 40% of the cost to purchase a permanent conservation easement on the 150-acre Donovan-Posch property on Garden and Johnson Lakes in Crow Wing County in June 2011. In addition, Ducks Unlimited also provided technical assistance and conducted outreach and promotion of conservation easements as a land protection option to new landowners on several shallow lakes, and secured appraisals for potential conservation easements on both the Papenheim and Douglas County Land Company properties on Lake Christina, and ordered an appraisal on the Radunz property on Cedar Lake in Meeker/McLeod County under this grant before funds ran out. Negotiations with these and other landowners are ongoing and will continue in the future through our 2011 appropriation. DU spent \$29,639 in Other Funds to complete this project.

IV. OUTLINE OF PROJECT RESULTS:

Result/Activity 1: Living Lakes Easements (HCP Part 3c)

Description:

DU provided technical assistance and outreach to promote conservation easements to (1) secure one new purchased or donated conservation easement on 20 acres or more, and (2) negotiate new potential easements for future acquisition. DU land protection staff biologists worked with private landowners on managed shallow lakes to purchase or secure the donation of one or more permanent conservation easements on 20 acres or more of shoreland or lake outlet tracts. DU worked with private landowners to protect sensitive shallow lake shoreland on managed basins with improved water quality and wetland ecology (aquatic plants and invertebrates) to protect the state's investment in management time and infrastructure. These included both prairie shallow lakes and forested wild rice lakes managed for wildlife by the Minnesota DNR in HCP Project Areas. Trust Funds were used to pay for DU professional staff time to promote conservation easements to landowners and negotiate terms and conditions of individual easements (due diligence), appraisals, title clearance and other legal services, boundary surveys, baseline condition documentation reports, and for DU staff time to administer this grant. DU endowed the cost of future annual stewardship, monitoring, and enforcement of permanent conservation easements secured through this grant.

Conservation easements held by DU/WAT are monitored once a year. DU field staff conduct annual site visits of all protected properties once yearly. This includes talking

with landowners about their land and touring the property. Any natural or man-made changes to the property are noted in a monitoring report and documented with a photograph, and land management activities and any potential problems discussed with landowners and resolved. The reports are reviewed by the Director of Land Protection and field staff to ensure that no violations have occurred.

Long-term liabilities associated with monitoring and stewardship of the DU/WAT easement portfolio is determined through the use of the DU calculator that estimates travel costs, staff costs associated with landowner contact and reporting, and staff costs associated with in-the-field monitoring. A 3% spend rate (as established by the Finance Committee) is used to determine the endowment necessary to offset future annual monitoring costs. Enforcement costs are analyzed separately from the monitoring and stewardship liabilities.

The conservation easements DU secures protect significant wildlife habitat and undeveloped shoreland on shallow lakes of high value to migrating and brood-rearing waterfowl. Specifically, the easements ensure that undeveloped land on the shore of shallow lakes and wild rice lakes that face significant development pressure remain in a natural state and are not subdivided and developed. These shallow lakes provide important wetland food and habitat resources for migratory bird as described in the North American Waterfowl Management Plan and the Minnesota Duck Recovery Plan.

The conditions of the protected properties are identified in a baseline documentation report. This document assures that any changes that may adversely affect the conservation values will be identified during annual monitoring visits. Further, the terms of the conservation require that reserved rights may only be exercised with advance notice and approval of the Holder (DU/WAT). The exercise of such rights cannot harm or adversely affect the conservation values of the protected properties.

As with all DU/WAT held easements, any Trust Fund supported easement projects will be monitored annually. DU/WAT will comply with all reporting requirements established in any agreements or statutes pertaining to these funds.

All DU/WAT conservation easements clearly indicate that the easement is perpetual. Further, the easements contain language that limits the extinguishment of the easements to condemnation or court order only. This language is standard for all easements used by land trusts and essentially comes directly from the IRS Code and Regulations regarding the perpetual nature of easements.

DU/WAT maintains a separate endowment dedicated to easement stewardship. Earnings of the Stewardship Endowment are available for monitoring, stewardship, and enforcement of conservation easements in the portfolio.

For easements secured through this 2009 grant, funds required to endow future stewardship, monitoring, and defense have been determined by DU to be \$21,000 per easement and will be provided by DU using private funds donated to DU.

Stewardship funds will be managed in a separate WAT easement stewardship account according to the DU Board's investment policy. Trust funds for easement monitoring and stewardship will be received by DU National Headquarters in Memphis, Tennessee. Furthermore, the restricted endowment will be invested according to the policies set forth in DU and WAT's Investment Policy. DU considers the enforcement and defense of the terms and conditions of the conservation easement as an operational cost, and DU understands that this obligation may require the additional expenditure of DU funds to enforce the terms of the easement. WAT adopted the *Land Trust Standards and Practices* published by the Land Trust Alliance in 2004 on April 23, 2005 as technical guidelines for the organization's operation. DU has further outlined conservation easement stewardship management and enforcement procedures for DU staff in a land protection handbook.

To accommodate the need to record a notice of ETF funding restrictions on the deed to lands encumbered by ETF-funded conservation easements, DU included the following language in all conservation easement documents secured with full or partial ETF reimbursement through this LCCMR grant:

"WHEREAS, Wetlands America Trust, Inc. acquired this Easement with funding from the Minnesota Environment and Natural Resources Trust Fund ("Trust Fund") pursuant to a grant agreement between the Trust Fund and Ducks Unlimited, Inc. dated _____. Wetlands America Trust, Inc. is placing this notice on record as confirmation of its obligation as set forth in the grant agreement and in accordance with Minnesota Statutes Section 116P.15, states the following: "This interest in real property shall be administered in accordance with the terms, conditions, and purposes of the grant agreement or work program controlling the acquisition of the property. The interest in real property, or any portion of the interest in real property, shall not be sold, transferred, pledged, or otherwise disposed of or further encumbered without obtaining the prior written approval of the Legislative and Citizens Commission on Minnesota Resources or its successor. If the holder of the interest in real property fails to comply with the terms and conditions of the grant agreement or work program, ownership of the interest in real property shall transfer to this state."

The primary goal of DU conservation easements in Minnesota is to preserve the general condition of existing habitat on the protected property in its current state and protect against future subdivision, development, and shallow lake shoreline alteration. DU conservation easements are permanent, but are working easements that often allow for ongoing use of the property and may include farming activities on some portions of the protected property. In some cases, restoration of shoreland habitat is made possible through the easement too, and DU works closely with landowners to encourage restoration of habitats whenever possible. DU meets these goals through the negotiation of conservation easement terms, and ensures they are maintained through annual easement monitoring site visits with the landowner. A restoration and management plan and stewardship plan for each conservation easement secured through this grant will be provided to LCCMR staff with copies of the recorded easement.

Annual reports on monitoring and management of easements acquired with ENRTF funding will be made to LCCMR staff.

Summary Budget Information for Result/Activity 2:

Trust Fund Budget: \$ 75,000
Amount Spent: \$ 75,000
Balance: \$ 0

Deliverable/Outcome	Completion Date	Budget	Status
1. Conservation Easement Purchase	10/31/2011	\$ 52,977	Completed
2. Technical Assistance to Landowners	10/31/2011	\$ 22,023	Completed
3. Future Stewardship of Easement (w/DU \$)	10/31/2011	\$ 0	Completed

Completion Date: Ongoing, June 30, 2011

Final Report Summary:

Ducks Unlimited used this grant in combination with our 2009 appropriation to help fund approximately 40% of the cost to purchase a permanent conservation easement on the 150-acre Donovan-Posch property on Garden and Johnson Lakes in Crow Wing County in June 2011. In addition, Ducks Unlimited also provided technical assistance and conducted outreach and promotion of conservation easements as a land protection option to new landowners on several shallow lakes, and secured appraisals for potential conservation easements on both the Papenheim and Douglas County Land Company properties on Lake Christina, and ordered an appraisal on the Radunz property on Cedar Lake in Meeker/McLeod County under this grant before funds ran out. Negotiations with these and other landowners are ongoing and will continue in the future through our 2011 appropriation. DU spent \$29,639 in Other Funds to complete this project.

V. TOTAL TRUST FUND PROJECT BUDGET: \$75,000

Personnel:	\$ 13,000	(DU land biologist and manager)
Equipment:	\$ 0	
Contracts:	\$ 9,023	(appraisals, baseline reports, etc.)
Acquisition (easements):	\$ 52,977	(permanent DU easements)
Travel (in-state):	\$ 0	(travel to projects)
Other (easement stewardship):	\$ <u>0</u>	(easement monitoring stewardship)
TOTAL TRUST FUND BUDGET:	\$ 75,000	

Explanation of Capital Expenditures Greater Than \$3,500: None.

VI. PROJECT STRATEGY:

A. Project Partners: This project is part of the Habitat Conservation Partnership Phase VI Supplemental appropriation. All DU projects are completed in partnership with the Minnesota DNR, U.S. Fish & Wildlife Service, and willing private landowners. DU works especially closely with the Minnesota DNR Division of Fish & Wildlife's Shallow Lakes Program. Some private land easement leads on lakes not managed for waterfowl and thus not of interest to DU are referred to the Minnesota Land Trust, DNR, or U.S. Fish & Wildlife Service.

B. Project Impact and Long-term Strategy:

DU shallow lake improvement and protection projects help achieve the goals of Minnesota's Long Range Duck Recovery Plan that calls for the management and protection of 1,800 shallow lakes statewide. Further, our work addresses the shallow lake conservation objectives and strategies of the Statewide Conservation and Preservation Plan developed for the LCCMR. Finally, our work is done in partnership with both the Minnesota DNR Shallow Lakes Program and USFWS Wetland Management Districts and National Wildlife Refuge System. DU annually monitors and enforces conservation easements secured through this grant on behalf of our Wetlands America Trust (WAT) affiliate and DU will vigorously enforce and defend each easement in perpetuity.

C. Other Funds Spent during the Project Period:

DU estimated that \$25,000 in DU and other partner funds would be spent or donated in land value by private landowners through this grant. DU spent \$29,639 in Other Funds to complete this project.

D. Spending History: DU spent \$475,000 in 2009/2010 through HCP#6 (M.L. 2009, Chap. 143, Sec. 2, Subd. 4e2c3c). DU also spent \$330,000 in 2008/09 through HCP#5 (ML 2008, Chap. 367, Sec. 2, Subd. 3c), \$500,000 in 2007 through HCP#4 (Legal Citation: ML 2007, Chapter 30, Section 2, Subdivision 4b) and \$180,000 in 2008 through HCP#5 (Legal Citation: ML 2008, Chapter 367, Section 2, Subdivision 3c) for shallow lake enhancement and conservation easements projects.

VII. DISSEMINATION: This grant helped DU continue the protection of shallow lakes by working with private landowners to secure conservation easements and promote conservation easement concepts. Conservation easements with private landowners are sensitive land deals that don't lend themselves to widespread publicity. However, DU has recognized individual landowners and has publicized our work to protect shallow lake shorelines and shoreland locally through local conservation groups, soil and water districts, and tribal organizations supportive of our work to protect wild rice lakes. DU also informed the foundations supporting our Living Lakes Initiative of our conservation accomplishments. The accomplishment of securing two new permanent conservation easements through this grant has helped encourage other private landowners to consider working with DU to protect their shorelines, and news of our progress may be further disseminated through DU news releases and articles DU publications in the

future. Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>.

VIII. REPORTING REQUIREMENTS:

Periodic work program progress reports were submitted in December 2010 and June 2011. This work program final report was submitted in January 2012.

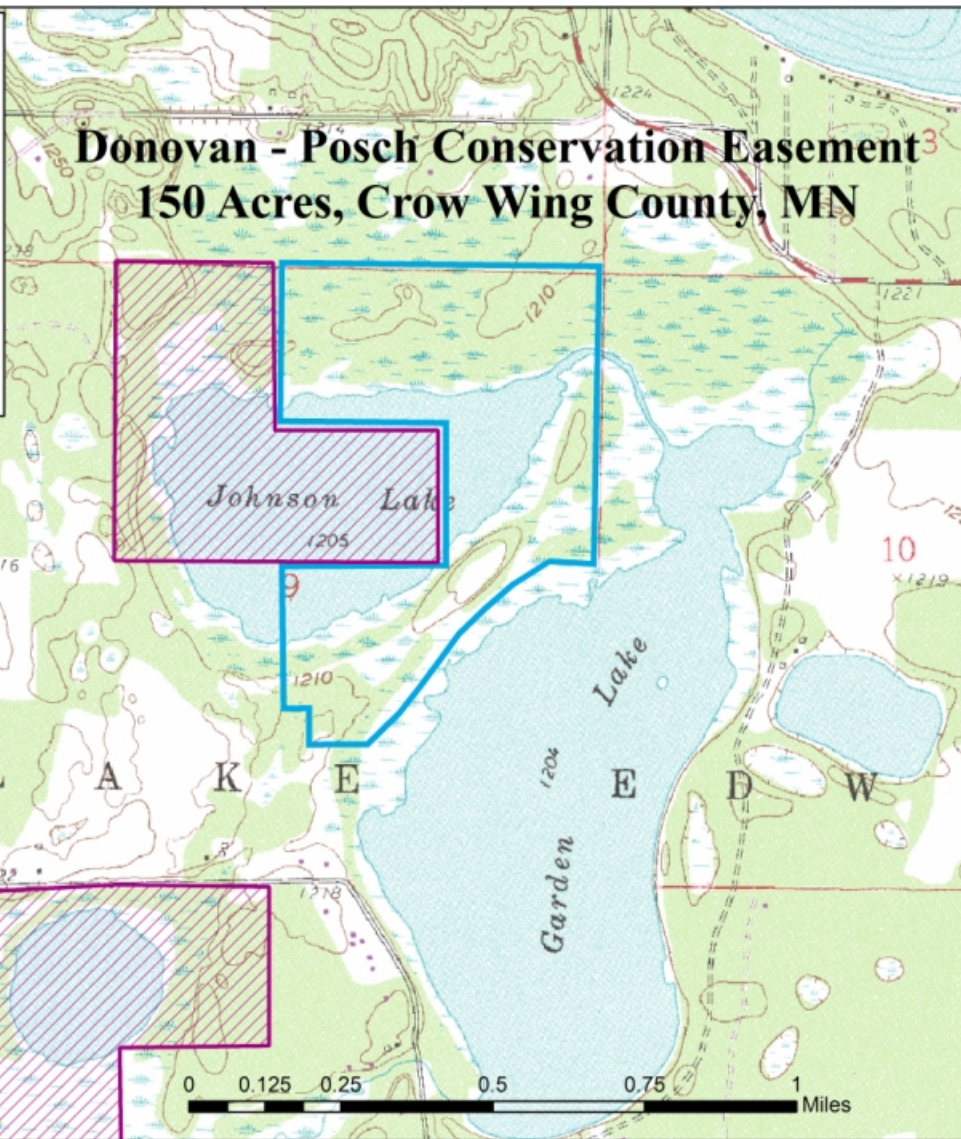
IX. RESEARCH PROJECTS: Not Applicable.

Attachment A: Final Budget Detail for 2010 Project							
Project Title:	Shallow Lake Easements (3c)						
Project Manager Name:	Minnesota's Habitat Conservation Partnership (Phase 6) Supplemental						
	Jon Schneider, Ducks Unlimited (DU)						
Trust Fund Appropriation: \$ 75,000	DATE: January 30, 2012						
2010 Trust Fund Budget		Result 1 Budget:	Amount Spent	Balance	TOTAL BUDGET	TOTAL SPENT	TOTAL BALANCE
		Living Lakes Easements					
BUDGET ITEM							
PERSONNEL: wages and benefits for DU land biologist (0.22 FTE), and conservation program manager (0.03 FTE).		13,000	13,000	0	13,000	13,000	0
CONTRACTS: purchase of easements, contracted professional services such as title clearance, appraisal, legal work, and baseline documentation as detailed in the categories below:		62,000	52,977	0	62,000	52,977	0
Professional/technical (consultant engineering and environmental services)			9,023		0	9,023	
Land rights acquisition (easements)			0	0		0	0
Professional Services for Acquisition			0	0		0	0
Construction			0	0		0	0
TRAVEL (in-state)		0	0	0	0	0	0
OTHER		0	0	0	0	0	0
COLUMN TOTAL		\$75,000	\$75,000	\$0	\$75,000	\$75,000	\$0

Donovan - Posch Conservation Easement

150 Acres; Crow Wing County, MN





2010 Project Abstract

For the Period Ending November 30, 2011

PROJECT TITLE: Wetlands Reserve Program
Minnesota's Habitat Conservation Partnership (Part 3d)
PROJECT MANAGER: Jon Schneider, Manager – Minn. Conservation Programs
AFFILIATION: Ducks Unlimited, Inc.
MAILING ADDRESS: 311 East Lake Geneva Road NE
CITY/STATE/ZIP: Alexandria, Minnesota 56308
PHONE: 320-762-9916
E-MAIL: jschneider@ducks.org
FAX: 320-759-1567
WEB SITE: www.ducks.org

PROJECT CO-MANAGER: Tim Koehler – Assistant State Conservationist
AFFILIATION: USDA Natural Resources Conservation Service (NRCS)
MAILING ADDRESS: USDA-NRCS Jackson Street, Suite 600, St. Paul, MN 55101
PHONE: (651) 602-7857
E-MAIL: Tim.Koehler@mn.usda.gov
FAX: (651) 602-7914

FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: Minnesota Law 2010, Chapter 362, Section 2, Subd. 4f3d

APPROPRIATION AMOUNT: \$ 350,000

Overall Project Outcome and Results

In partnership with the USDA's Natural Resources Conservation Service (NRCS), Ducks Unlimited (DU) contracted with seven Wetlands Reserve Program (WRP) wetland technicians from November 2010 through November 2011 as part 3d of the Habitat Conservation Partnership (HCP) Phase 6.5 "Supplemental" grant. Grant funds were used in combination with private DU funds and federal USDA funds provided by the Natural Resources Conservation Service (NRCS) to contract for the professional services of these seven technicians, whose function was to provide technical assistance to private landowners and USDA - NRCS complete applications and enroll new lands into the WRP, and to help USDA-NRCS and private landowners plan, design, and implement restoration measures on lands previously enrolled in the WRP. The delivery goal for these technicians was to provide Technical Assistance (TA) to help NRCS protect 1,000 acres through new WRP easements and help restore wetlands and associated upland habitat on WRP easements in HCP project areas at an estimated Other Funds cost of \$1,520,000 to NRCS.

During the life of this grant, the contract specialists made 900 landowner contacts, prepared and submitted 122 applications, submitted 156 easement restoration plans or plan modifications, completed 7 wetland restoration designs, and provided field level

management and oversight of 64 restoration projects. Meanwhile, during this grant period, NRCS spent \$6,222,501 of federal other funds to close 50 WRP easements protecting 5,252 acres. DU and NRCS also spent an additional \$463,127 to pay specialists and administer this grant, for a total non-state Other Funds investment of \$6,685,628 during this grant period, significantly more than our estimated proposal goal of \$1,520,000.

Project Results Use and Dissemination

Information on the WRP signups has been publicized through news releases from the USDA's NRCS and local Soil and Water Conservation Districts, and through hundreds of individual landowner contacts made by DU wetland restoration specialists. Additional announcements and landowner contacts continue to be made and publicized by DU and USDA's NRCS.

Environment and Natural Resources Trust Fund 2010 Work Program Final Report

Date of Report: January 30, 2012
Final Report
Date of Work Program Approval: June 9, 2010
Project Completion Date: November 30, 2011

I. PROJECT TITLE: HCP Phase VI Supplemental - Wetlands Reserve Program (3d)

Project Manager: Jon Schneider, Manager, MN Conservation Programs
Affiliation: Ducks Unlimited, Inc.
Mailing Address: 311 East Lake Geneva Road NE,
City / State / Zip: Alexandria MN 56308
Telephone Number: 320/762-9916
E-mail Address: jschneider@ducks.org
FAX Number: 320/759-1567
Web Site Address: www.ducks.org

Project Co-Manager: Tim Koehler, Assistant State Conservationist
Affiliation: USDA – Natural Resources Conservation Service
Mailing Address: 375 Jackson, Suite 600
City / State / Zip: St. Paul, MN 55101
Telephone Number: 651/602-7857
E-mail Address: tim.koehler@mn.usda.gov
FAX Number: 651/602-7914
Web Site Address: www.mn.nrcs.usda.gov

Location: Within the nine Habitat Conservation Project Areas.

Total Trust Fund Project Budget:	Appropriation	\$ 350,000
	Amount Spent:	\$ 350,000
	Balance:	\$ 0

Legal Citation: M.L. 2010, Chap. 362, Sec. 2, Subd. 4f3d

Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an

authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY:

In partnership with the USDA's Natural Resources Conservation Service (NRCS), Ducks Unlimited (DU) contracted with seven Wetlands Reserve Program (WRP) wetland technicians from November 2010 through November 2011 as part 3d of the Habitat Conservation Partnership (HCP) Phase 6.5 "Supplemental" grant. Grant funds were used in combination with private DU funds and federal USDA funds provided by the Natural Resources Conservation Service (NRCS) to contract for the professional services of these seven technicians, whose function was to provide technical assistance to private landowners and USDA - NRCS complete applications and enroll new lands into the WRP, and to help USDA-NRCS and private landowners plan, design, and implement restoration measures on lands previously enrolled in the WRP. The delivery goal for these technicians was to provide Technical Assistance (TA) to help NRCS protect 1,000 acres through new WRP easements and help restore wetlands and associated upland habitat on WRP easements in HCP project areas at an estimated Other Funds cost of \$1,520,000 to NRCS.

During the life of this grant, the contract specialists made 900 landowner contacts, prepared and submitted 122 applications, submitted 156 easement restoration plans or plan modifications, completed 7 wetland restoration designs, and provided field level management and oversight of 64 restoration projects. Meanwhile, during this grant period, NRCS spent \$6,222,501 of federal other funds to close 50 WRP easements protecting 5,252 acres. DU and NRCS also spent an additional \$463,127 to pay specialists and administer this grant, for a total non-state Other Funds investment of \$6,685,628 during this grant period, significantly more than our estimated proposal goal of \$1,520,000.

IV. OUTLINE OF PROJECT RESULTS:

Result /Activity 1: Secure WRP Easements (Part 3D)

Description:

Seven wetland specialists were contracted to provide technical assistance (TA) to the Natural Resources Conservation Service (NRCS) and private landowners to help USDA-NRCS enroll and protect lands through the Wetlands Reserve Program (WRP) easements in HCP habitat conservation project areas. DU coordinated the partnership and administered contracts with wetland specialists, including payments for time, travel, and field expenses with grant funds and grant administration and coordination. NRCS will paid for all WRP easements and restoration work with federal funds. All restoration work was performed to USDA-NRCS standards, guidelines, and specifications.

Summary Budget Information for Result/Activity 1:

Trust Fund Budget: \$ 350,000
Amount Spent: \$ 350,000
Balance: \$ 0

Deliverable/Outcome	Completion Date	Budget
1. Technical assistance (TA) to help USDA-NRCS secure WRP easements. Ongoing TA activities will include landowner contacts, WRP applications submitted, easement restoration plans submitted, wetland restoration designs, and restoration project oversight/management.	11/30/2011	\$350,000
2. WRP easements secured on 1,000 acres or more	11/30/2011	Federal USDA NRCS funding

Result Completion Date: November 30, 2011

Final Report Summary:

Contract wetland specialists made 900 landowner contacts, prepared and submitted 122 applications, submitted 156 easement restoration plans or plan modifications, completed 7 wetland restoration designs, and provided field level management and oversight of 64 restoration projects. Meanwhile, during this grant period, NRCS spent \$6,222,501 of federal other funds to close 50 WRP easements protecting 5,252 acres. DU and NRCS also spent an additional \$463,127 to pay specialists and administer this grant, for a total non-state Other Funds investment of \$6,685,628 during this grant period, significantly more than our estimated goal of \$1,520,000.

V. TOTAL TRUST FUND PROJECT BUDGET:

Staff:	<u>\$ 10,000</u>	(DU grant administration & coordination 0.10 FTE)
Contract Services:	<u>\$340,000</u>	(7 FTE contracted WRP specialists)
Equipment/Tools/Supplies:	\$ 0	
Acquisition:	\$ 0	(NRCS buys/holds easements with federal funds)
Travel:	\$ 0	
Additional Budget Items:	\$ 0	

TOTAL TRUST FUND PROJECT BUDGET: \$350,000

VI. PROJECT STRATEGY:

A. Project Partners:

This project was part of the Habitat Conservation Partnership Phase VI Supplemental appropriation. Please reference the overall HCP work program. DU worked especially closely with the USDA's Natural Resources Conservation Service to provide technical assistance, and to coordinate and deliver the Wetlands Reserve Program in Minnesota. WRP easements were secured as stand alone and in conjunction with ReInvest In Minnesota Reserve program easements administered by The Board of Water and Soil Resources (BWSR) and funded through State Capital Investment (Bonding) funding. Local Soil and Water Conservation Districts and many partners assist with the implementation of the WRP.

B. Project Impact and Long-term Strategy:

The USDA's Wetland Reserve Program is the most effective wetland restoration program in Minnesota and restores more acres of wetlands and associated native prairie uplands than any other effort. The USDA's Natural Resources Conservation Service routinely monitors and enforces the terms of its easements, and works with landowners to manage these restored wetlands and prairie uplands in perpetuity. Through this grant, DU and NRCS partnered to protect or restore prairie wetlands and associated uplands, including the lakesheds of key shallow lakes wherever possible. These restored and protected lands will help improve and protect water quality and wildlife habitat in and around shallow lakes throughout the southern and western portion of Minnesota in HCP project areas, often in relatively close proximity to human communities. Importantly, these restored and protected lands provide important wetland/upland complexes for multiple wildlife species, especially migratory birds that include both game and non-game species. This work helps address the wetland and associated prairie restoration strategies of the Statewide Conservation Plan, and the goals of the DNR's Duck Recovery Plan.

C. Other Funds Proposed to be Spent during the Project Period:

NRCS spent \$6,222,501 of federal other funds to close 50 WRP easements protecting 5,252 acres. DU and NRCS also spent an additional \$463,127 to pay specialists and administer this grant, for a total non-state Other Funds investment of \$6,685,628 during this grant period, significantly more than our estimated goal of \$1,520,000.

D. Spending History:

DU spent \$420,000 through HCP#6 (ML 2009, Chapter 143, Section 2, Subdivision 4e3d). DU also spent \$350,000 in 2007 through HCP#4 (ML 2007, Chapter 30, Section 2, Subdivision 4b) and \$267,500 in 2008 through HCP#5 (ML 2008, Chapter 367, Section 2, Subdivision 3c) to help NRCS promote and deliver the Wetlands Reserve Program.

VII. DISSEMINATION:

Information on the WRP signups has been publicized through news releases from the USDA's NRCS and local Soil and Water Conservation Districts, and through hundreds of individual landowner contacts made by DU wetland restoration specialists. Additional announcements and landowner contacts continue to be made and publicized by DU and USDA's NRCS. Accomplishment information and press releases will be made available at <http://www.mnhabitatcorridors.org>.

VIII. REPORTING REQUIREMENTS:

Periodic work program progress reports were submitted in December 2010, and June 2011. This project was completed on November 30, 2011 and this work program final report was submitted on January 30, 2012.

IX. RESEARCH PROJECTS: N/A

Attachment A: Final Budget Detail for 2010 Project					
Project Title: Wetlands Reserve Program (HCP Part 3d)					
Minnesota's Habitat Conservation Partnership 2010 Phase 6 Supplemental Grant					
Project Manager Name: Jon Schneider (DU) & Tim Koehler (NRCS)					
Trust Fund Appropriation: \$350,000					
DATE: January 30, 2012					
2010 Trust Fund Budget	<u>Result 1</u>	Amount Spent	Balance	TOTAL BUDGET	TOTAL BALANCE
	<i>Secure WRP Easements</i>				
BUDGET ITEM					
PERSONNEL: wages and benefits: DU project administration, coordination with NRCS, and contract tech hiring and supervision (0.25 FTE)	10,000	10,000	0	10,000	0
Contracts					
Professional/technical: contracted WRP wetland restoration specialists to promote and help NRCS secure WRP easements (6-7 FTE)	340,000	340,000	0	340,000	0
Other contracts					
Other					
COLUMN TOTAL	\$350,000	\$350,000	\$0	\$350,000	\$0

2010 Project Abstract

For the Period Ending June 30, 2011

PROJECT TITLE: 4B: Fisheries Acquisition – MN DNR – Division of Fish and Wildlife
PROJECT MANAGER: Mike Halverson
AFFILIATION: MN DNR – Division of Fish & Wildlife
MAILING ADDRESS: 500 Lafayette Rd.
CITY/STATE/ZIP: St. Paul, MN 55155
PHONE: (651) 259- 5209
FAX: (651) 297-4916
E-MAIL: mike.halverson@state.mn.us
WEBSITE: [
FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: ML 2010, CH 362, Sec. 2, Sub 4(f)

APPROPRIATION AMOUNT: \$100,000

Overall Project Outcome and Results

This project focused on the acquisition of Preece Point AMA, one of the most prominent geographic features on Lake Marquette - a Mississippi River headwaters lake. Here the lakeshore forms a long, narrow point, which is visible from virtually everywhere around the lake. The entire property along with it's associated aquatic habitat is unimpacted by human activities. This AMA will now provide walk-in access to a lake that has no developed public access. The property was sold to DNR as a bargain sale, and the family is happy to know that it will be preserved in it's natural state.

Project goals were to protect 20 acres (0.3 miles of lake and stream shoreline) with the help of partner and other state funding. Partner funding includes donations of land value and cash.

This project resulted in a grand total of approximately 11.8 acres and 0.2 miles of lake and stream shoreline. Environmental and Natural Resources Trust dollars directly acquired approximately 5.9 acres of the total, including 0.1 mile of lake shoreline. Donations of land value and cash ("other funds" \$50,000) and other state monies (\$50,000) leveraged with trust dollars totaled \$100,000. These contributions helped acquire the remaining acres of the grand total, including 2.94 acres and 0.05 shoreline miles using other state dollars and 2.94 acres and 0.05 shoreline miles from donations of land value and cash. Preece Point was acquired jointly using both 2009 and 2010-Supplemental grants to Minnesota's Habitat Conservation Partnership – Fish and Wildlife Acquisition (4b). Results for Preece Point were proportionately distributed for each grant.

As a result of the combined 2009 and 2009-supplemental grants, 17 acres, including 0.3 miles of critical fish and wildlife habitat are now permanently protected and open to public angling and other light use recreational activities on Preece Point AMA. Acquired parcels are now designated and managed as Aquatic Management Areas (AMAs).

Project Results Use and Dissemination

Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>, and all AMAs will be added to DNR's Public Recreational Information Maps (PRIM).

**2010 Environment and Natural Resources Trust Fund (ENRTF)
Final Work Program Report**

Date of Report: May 11, 2011
Date of Next Status Report: NA
Date of Work Program Approval: July 1, 2010
Project Completion Date: June 30, 2011

I. Project Title: 4B: Fisheries Acquisition – MN DNR – Division of Fish and Wildlife

Name: Mike Halverson
Sponsoring Organization: DNR Section of Fish & Wildlife
Address: 500 Lafayette Rd, Box 20, St Paul, 55155-4020
Telephone Number: 651-259-5209
E-mail: Mike.Halverson@dnr.state.mn.us
Fax : 651-297-4916
Web Address: www.dnr.state.mn.us

Location: Statewide – within project areas determined by

Total ENRTF Project Budget:		ENRTF
	Appropriation:	\$ 100,000
	Minus Amount Spent:	\$ 100,000
	Equal Balance:	\$ 0

Legal Citation: ML 2010, Chap.362, Sec.2, Subd.4(f).

Appropriation Language: \$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. & III. FINAL PROJECT SUMMARY:

This project focused on the acquisition of Preece Point AMA, one of the most prominent geographic features on Lake Marquette - a Mississippi River headwaters lake. Here the lakeshore forms a long, narrow point, which is visible from virtually everywhere around the lake. The entire property along with its associated aquatic habitat is unimpacted by human activities. This AMA will now provide walk-in access to a lake that has no developed public access. The property was sold to DNR as a bargain sale, and the family is happy to know that it will be preserved in its natural state.

Project goals were to protect 20 acres (0.3 miles of lake and stream shoreline) with the help of partner and other state funding. Partner funding includes donations of land value and cash.

This project resulted in a grand total of approximately 11.8 acres and 0.2 miles of lake and stream shoreline. Environmental and Natural Resources Trust dollars directly acquired approximately 5.9 acres of the total, including 0.1 mile of lake shoreline. Donations of land value and cash ("other funds" \$50,000) and other state monies (\$50,000) leveraged with trust dollars totaled \$100,000. These contributions helped acquire the remaining acres of the grand total, including 2.94 acres and 0.05 shoreline miles using other state dollars and 2.94 acres and 0.05 shoreline miles from donations of land value and cash. Preece Point was acquired jointly using both 2009 and 2010-Supplemental grants to Minnesota's Habitat Conservation Partnership – Fish and Wildlife Acquisition (4b). Results for Preece Point were proportionately distributed for each grant.

As a result of the combined 2009 and 2009-supplemental grants, 17 acres, including 0.3 miles of critical fish and wildlife habitat are now permanently protected and open to public angling and other light use recreational activities on Preece Point AMA. Acquired parcels are now designated and managed as Aquatic Management Areas (AMAs).

Professional Services costs for 10 ETF acquisitions totaled \$126.00

IV. OUTLINE OF PROJECT RESULTS:

Project money will secure fee title or easements on approximately 20 acres (0.3 miles of shoreline). Priority will be given to acquiring regionally significant fish and wildlife habitat that will both build on the existing shoreline habitat and provide angler access.

Result 1: Fish and Wildlife Land Acquisition

Allocation \$556,388 Balance \$612 (back to ETF)

<u>Program Area/Result</u>	<u>Trust Dollars Spent</u>	<u>Trust Accomplishments</u>
	\$ 100,000	11.8 acres with 0.2 miles of shoreline

Professional services in the amount of \$126.00 is included

Completion Date: June 30, 2011

Description: Preece Point, in Beltrami County is one of the most prominent geographic features on Lake Marquette - a Mississippi River headwaters lake. Here the lakeshore forms a long, narrow point, which is visible from virtually everywhere around the lake. The entire property along with its associated aquatic habitat is unimpacted by human activities. This AMA will provide walk-in access to a lake that has no developed public access. The

2009	ETF – Metro	\$ 500,000
Total		\$9,726,000

D. Time: Fisheries plans to expend these funds within 12-15 months of their availability. July 1, 2010 – June 30, 2012 (if needed).

VII. DISSEMINATION Accomplishment Reports and press releases will be made available at <http://www.mnhabitatcorridors.org>, and all AMAs will be added to DNR's Public Recreational Information Maps (PRIM).

VIII. REPORTING REQUIREMENTS:

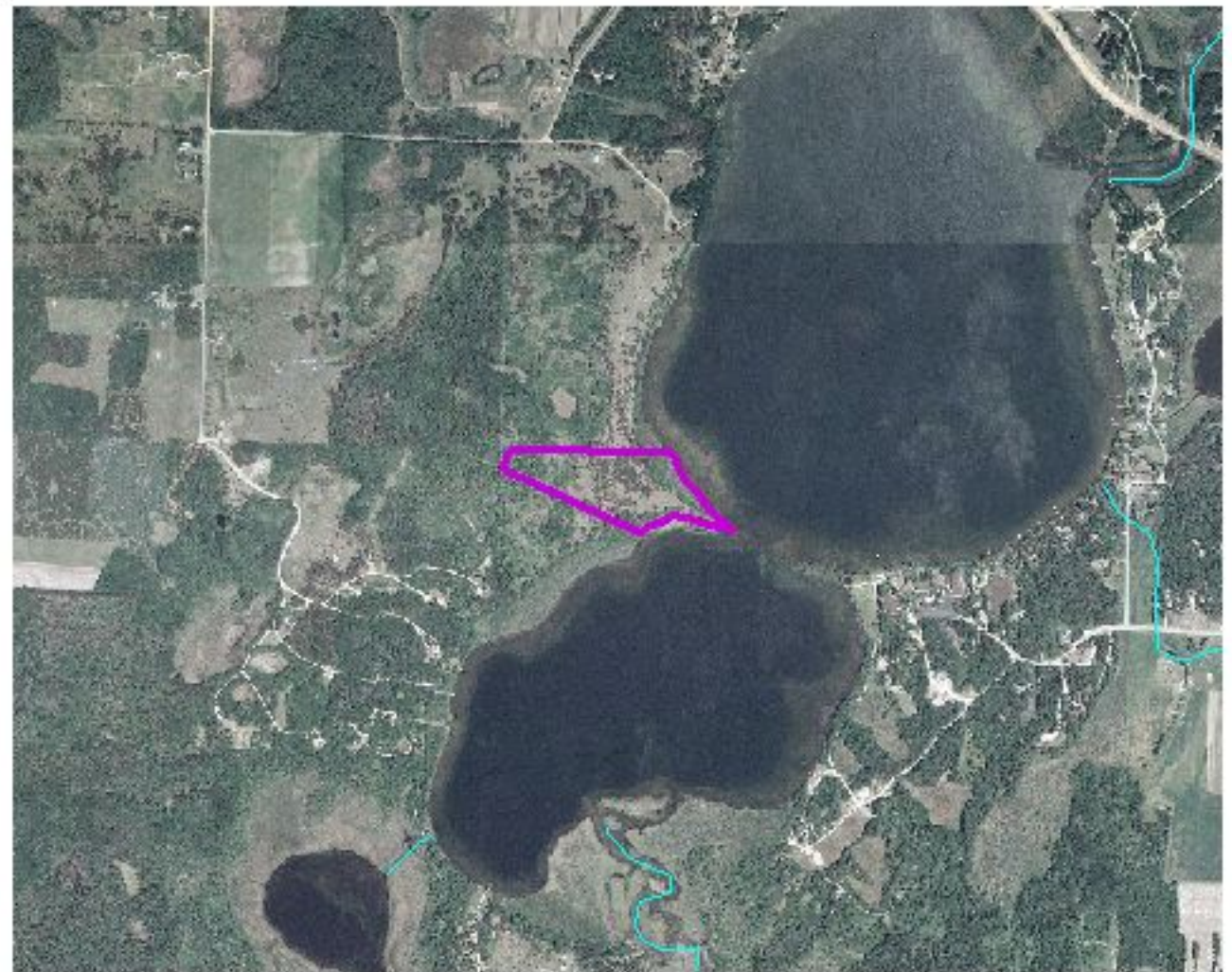
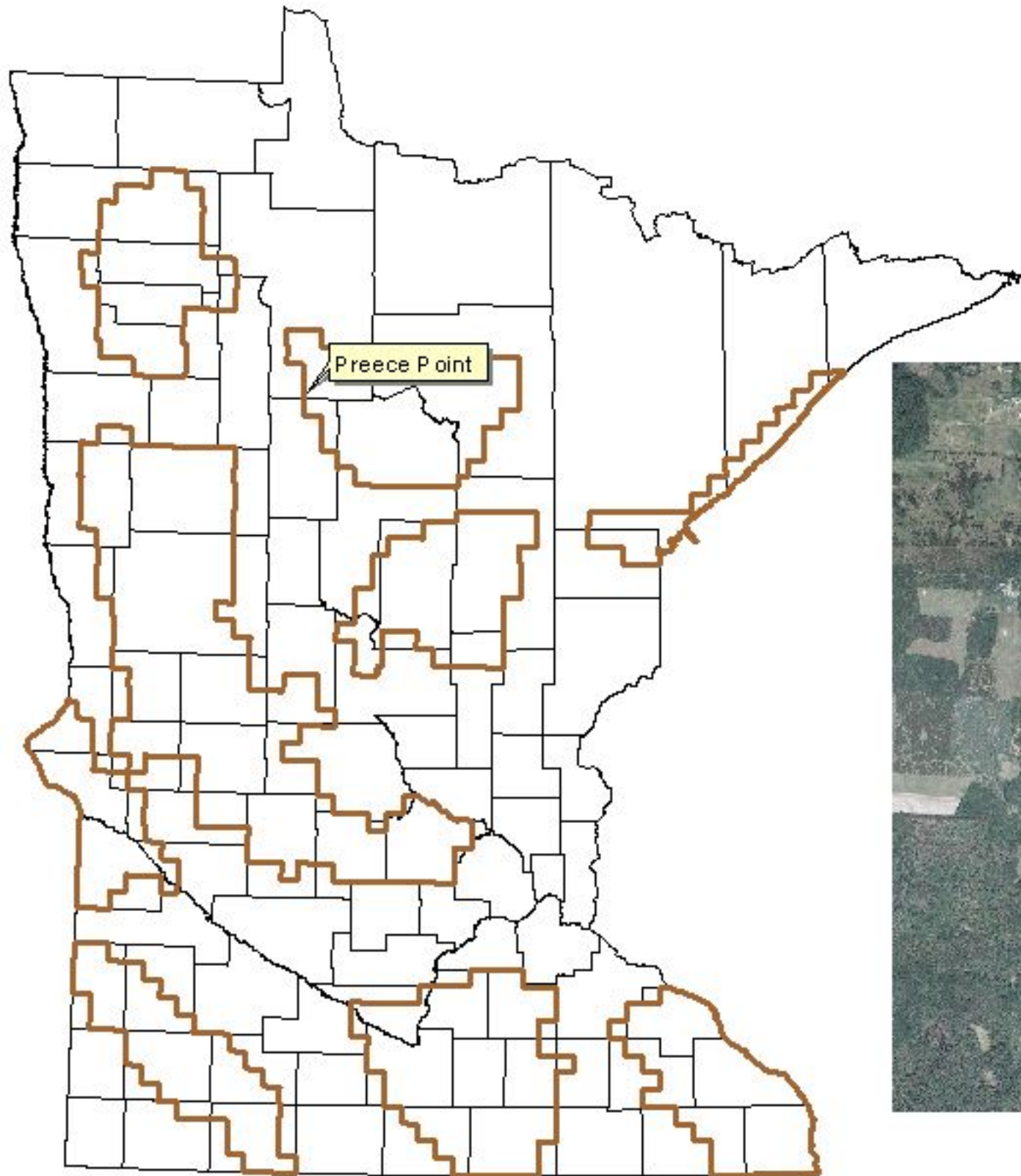
Periodic work program progress reports will be submitted not later than December 1, 2010, June 1, 2011, and December 1, 2011. A final work program report and associated products will be submitted between June 30 and August 1, 2012 as requested by the LCCMR.

IX. RESEARCH PROJECTS: NA

Attachment A: Budget Detail for 2010 Projects - HCP Phase VI 2009 Supplemental - Final Budget Page					
Project Title: Fish and Wildlife Acquisition (4b)					
	Minnesota's Habitat Conservation Partnership (VII)				
Project Manager Name: Mike Halverson					
Trust Fund Appropriation: \$ 100,000					
2009 Trust Fund Budget	<u>Result 1 Budget:</u>	Amount Spent <i>(date)</i>	Balance <i>(date)</i>	TOTAL BUDGET	TOTAL BALANCE
	Land Acquisition				
BUDGET ITEM			0	0	0
Land acquisition	100,000	99,874	126	100,000	126
Land rights acquisition			0	0	0
Professional Services for Acq.	0	126	-126	0	-126
Other			0	0	0
COLUMN TOTAL	\$100,000	\$100,000	\$0	100,000	0

2010 LCCMR HCP Accomplishment

Preece Point AMA, Beltrami County



2010 Project Abstract

For the Period Ending June 30, 2012

PROJECT TITLE: *Critical Lands Protection Program, The Trust for Public Land*

Minnesota's Habitat Conservation Partnership Phase VI Supplemental

www.mnhabitatcorridors.org

PROJECT MANAGER: Robert McGillivray

AFFILIATION: The Trust for Public Land

MAILING ADDRESS: 2610 University Ave, #300

CITY/STATE/ZIP: St. Paul, MN 55114

PHONE: 651-999-5307

E-MAIL: rjm@tpl.org

WEBSITE: www.tpl.org

FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: ML 2010, Chapter 362, Section 2, Subdivision 4f4c.

APPROPRIATION AMOUNT: \$200,000

Overall Project Outcome and Results

On September 30, 2011, the Trust for Public Land (TPL) acquired 510 acres in Le Sueur County containing high-quality wetlands and 1.64 miles of naturally flowing Cannon River just upstream from a concentration of rare freshwater mussels. TPL immediately conveyed the property to the Department of Natural Resources (DNR) who will manage the land as a new Wildlife Management Area ("Dora Lake WMA"). In addition to conserving a large area of Minnesota County Biological Survey (MCBS)-identified native habitat, acquisition of these tracts provides an opportunity to restore approximately 200 acres of tilled land in a sensitive water quality area. The DNR will restore them to wetlands, grassland and eventual guided succession to Big Woods. Protection of the property ensures habitat for fish, game and wildlife in the Cannon River watershed.

Project Results Use and Dissemination

Accomplishment Reports and press releases about the overall Habitat Conservation Partnership are available at <http://www.mnhabitatcorridors.org>. Information about this acquisition and the Cannon River Headwaters Habitat Complex effort will be posted on TPL's website: www.tpl.org. Information about the Cannon River Headwaters Habitat Complex effort has also been disseminated through its network of supporters which include: the Cannon River Watershed Partnership, the Tri-Lake Sports Club, the Dark House Anglers Southern Chapter, Minnesota Deer Hunters Association South Central Prairieland Bucks Chapter (Le Sueur, Rice, Waseca, and Steele Counties), Waterville Sportsman's Club, Montgomery Sportsmen's Club, Minnesota Waterfowl Association Scott- LeSueur Chapter, the Izaak Walton League Owatonna Chapter, and the Minnesota Department of Natural Resources.

Environment and Natural Resources Trust Fund (ENRTF) 2010 Work Program Final Report

Date of Report: 1-23-12
Date of Next Progress Report: Final Report
Date of Work Program Approval: 6-2-2010
Project Completion Date: 6-30-2012

I. PROJECT TITLE: *Critical Lands Protection Program, The Trust for Public Land,*
Minnesota's Habitat Conservation Partnership Phase VI Supplemental
www.mnhabitatcorridors.org

Project Manager: Robert McGillivray
Affiliation: The Trust for Public Land
Mailing Address: 2610 University Ave, #300
City / State / Zip: St. Paul, MN 55114
Telephone Number: 651-999-5307
E-mail Address: rjm@tpl.org
FAX Number: 651-917-2248
Web Site Address: www.tpl.org

Location: Statewide within Habitat Conservation Partnership Project Area boundaries.
See attached map.

Total ENRTF Project Budget:	ENRTF Appropriation	\$200,000
	Minus Amount Spent:	\$ 0
	Equal Balance:	\$200,000

Legal Citation: ML 2010, Chapter 362, Section 2, Subdivision 4f4c.

Appropriation Language: \$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the commissioner of natural resources with money

from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

II. and III. FINAL PROJECT SUMMARY:

On September 30, 2011, the Trust for Public Land (TPL) acquired 510 acres in Le Sueur County containing high-quality wetlands and 1.64 miles of naturally flowing Cannon River just upstream from a concentration of rare freshwater mussels. TPL immediately conveyed the property to the Department of Natural Resources (DNR) who will manage the land as a new Wildlife Management Area ("Dora Lake WMA"). In addition to conserving a large area of Minnesota County Biological Survey (MCBS)-identified native habitat, acquisition of these tracts provides an opportunity to restore approximately 200 acres of tilled land in a sensitive water quality area. The DNR will restore them to wetlands, grassland and eventual guided succession to Big Woods. Protection of the property ensures habitat for fish, game and wildlife in the Cannon River watershed.

IV. OUTLINE OF PROJECT RESULTS:

RESULT 1: Acquisition

Description: TPL may work in any one of the designated HCP project areas. Currently projects are underway in Cass, Fillmore, Kandiyohi, Le Sueur, Rice, and Wabasha Counties involving shoreline, wetlands, grasslands and woodlands. TPL will focus on habitat linkage projects that have the following characteristics: large, difficult and/or complex; multiple owners and multiple funding sources; proximity to regional growth centers; and/or, high risk of development. Priority will be given to lands with high quality natural resources, especially shoreland and other lands that provide natural buffers to water resources. The Statewide Conservation and Preservation Plan will be used to help identify such lands. A current project list in order of priority is attached. Final acreage protection will ultimately be affected by landowner willingness to sell key parcels. Because TPL is focusing on lands buffering water resources, the per acre cost is higher than that of non-riparian land.

Summary Budget Information for Result 1:	ENRTF Budget:	\$200,000
	Amount Spent:	<u>\$200,000</u>
	Balance:	\$ 0

Deliverable	Completion Date	Budget
1. Acquire approximately 100 acres (20 acres allocated ENRTF) of habitat in designated project areas. See attached potential project list.	June 30, 2012	\$200,000

Final Report Summary:

Overview: Of the various projects on TPL's potential project list, TPL used its 2009 ENRTF funding to acquire the Dora Lake WMA in the Cannon River Headwaters Complex. The Lester Lake SNA/AMA and Dead Lake WMA/AMA properties were successfully acquired and transferred to the State using other funding. Work on the other projects originally listed continues.

The Cannon River Headwaters Habitat Complex: The Dora Lake WMA ~510 acre acquisition is part of the Cannon River Headwaters Habitat Complex (CRHHC) program, focusing on protection of high-quality wetland, forest, lake, and Cannon River shoreline habitat for fish, game and wildlife in the Cannon River watershed located within Rice and LeSueur Counties. Protection of this large complex will provide opportunities for public hunting, fishing and wildlife conservation.

The Cannon River Headwaters Habitat Complex effort addresses the following problems: degradation and loss of quality and diversity of habitat in the prairie section of the State; degradation of water quality in the Cannon River Watershed; and lack of available public lands for hunting and angling opportunities, especially within an hour's drive for over half of the state's population.

This conservation effort is part of a multi-year effort that includes acquisition, protection, and restoration of core parcels of land that will contribute to a large complex of restored prairies, grasslands, wetlands, lakeshore, and river shoreline.

Protection and restoration of CRHHC parcels will provide critical habitat for game species, including migratory waterfowl (mallards, canvasback, wood ducks, hooded mergansers, pintails, lesser scaup), upland birds (dove, turkey, pheasant, and woodcock) white tail deer, and fish (northern pike, black crappies, bluegills, bullheads and walleye). Protection will also provide access for a diversity of recreational experiences including duck, pheasant, turkey and deer hunting as well as river, stream, and lake fishing. Non-game wildlife, including Species in Greatest Conservation Need, likely to benefit from this protection and restoration work includes Bald Eagle, Bell's Vireo, Cerulean Warbler, Loggerhead Shrike, Sandhill Crane, Red-headed Woodpecker, Greater Yellowlegs, Buff-breasted Sandpiper, Short-billed Dowitcher, Blanding's Turtle, Mudpuppies, and the Giant Floater, a species of freshwater mussel.

Protecting and restoring vegetative cover within basins and the riparian areas of the lakes, rivers, and streams in this focus area will also help protect water quality by reducing surface water runoff and by providing ecological services such as infiltration through natural buffers to our waterways. All wildlife—and humans—will benefit from improved water quality.

The Cannon River Headwaters Habitat Complex effort is highly supported by the Cannon River Watershed Partnership, the Tri-Lake Sports Club, the Dark House Anglers Southern Chapter, Minnesota Deer Hunters Association South Central Prairieland Bucks Chapter (Le Sueur, Rice, Waseca, and Steele Counties), Waterville Sportsman's Club, Montgomery Sportsmen's Club, Minnesota Waterfowl Association

Scott- LeSueur Chapter, the Izaak Walton League Owatonna Chapter, and the Minnesota Department of Natural Resources.

The Dora Lake WMA Acquisition: This is a large (510-acre) upland-wetland complex with a mosaic of native plant types. It is near the Velishek, Diamond Lake, and the proposed LeTamarague WMAs and the Delehanty Waterfowl Production Area (WPA). The parcel contains Minnesota County Biological Survey (MCBS)- identified native habitat including a portion of remnant Big Woods, some southern-most occurrence of tamarack swamp in the state, and 1.64 miles of naturally flowing Cannon River, directly upstream from a concentration of rare freshwater mussels. The Cannon is a large river basin that along with its associated uplands accomplishes Minnesota Statewide Conservation and Preservation Plan (MSCPP) habitat goals #1,2,5, and 7 by maintaining & enhancing water quality of a vital river. These tracts also provide an opportunity to retire approximately 200 acres of tilled land in a sensitive water quality area and restore them to wetlands, grassland and eventual guided succession to Big Woods.

This initial acquisition was prioritized because of its capacity to provide a large wetland/upland complex, the presence of MCBS identified features of the property, the presence of the Cannon River flowing through the property, and its location near existing protected areas. Landowner willingness to sell and the threat of development were also taken into consideration. Restoration work will focus on the degraded portions of the lands acquired and will include conversion of agricultural fields near the wetlands and river into native habitat.

TPL acquired the property on September 30, 2011 and immediately conveyed it to the DNR. Details of the funding for this acquisition are given below.

SOURCE OF FUNDS	AMOUNT	PERCENT	ALLOCATED ACRES
OHF 2011- Cannon River Headwaters (TPL) \$	1,369,493.00	71.33	363.77
ENRTF 2009- HCP (TPL) \$	350,000.00	18.23	92.97
Izaak Walton League (private) \$	507.00	0.03	0.13
ENRTF 2010- HCP (TPL) \$	200,000.00	10.42	53.13
Purchase Price & Appraised Value \$	1,920,000.00	100.00	510.00

V. TOTAL ENRTF PROJECT BUDGET:

Personnel: \$ N/A.

Contracts: \$ N/A.

Equipment/Tools/Supplies: \$ N/A.

Acquisition (Fee Title or Permanent Easements): \$ 200,000.

Travel: \$ N/A.

Additional Budget Items: \$ N/A.

TOTAL ENRTF PROJECT BUDGET: \$200,000.

Explanation of Capital Expenditures Greater Than \$3,500: N/A.

VI. PROJECT STRATEGY:

A. Project Partners: We are part of the Habitat Conservation Partnership Phase VII proposal. Please see main proposal for complete partner list. The Trust for Public Land will transfer land to the DNR or another appropriate public or nonprofit entity for long term stewardship.

B. Project Impact and Long-term Strategy: TPL believes that the success of conservation in Minnesota will depend on effective partnerships amongst nonprofit organizations and with public agencies. Through these public/private partnerships, greater conservation can be achieved with each partner bringing their own particular strengths to bear on the critical issues of protection, restoration, and long term stewardship and management. We believe that working within the Habitat Conservation Partnership allows us to better conserve, restore, enhance and manage habitat for the purpose of sustaining fish, wildlife and native plant communities for all generations. We seek to do this with an emphasis on high quality natural resource lands buffering water resources that will provide outstanding access to nature for the public.

C. Other Funds Proposed to be Spent during the Project Period: The \$100,000 in other funds may come from a variety of sources including federal (LWCF, forest legacy, ACUB, NAWCA, transportation), local (dedication, bonds or other), and private dollars (donations including land value donation). It is also anticipated that \$700,000 of state dollars (the exact sources of which are currently unknown) will be used on this project.

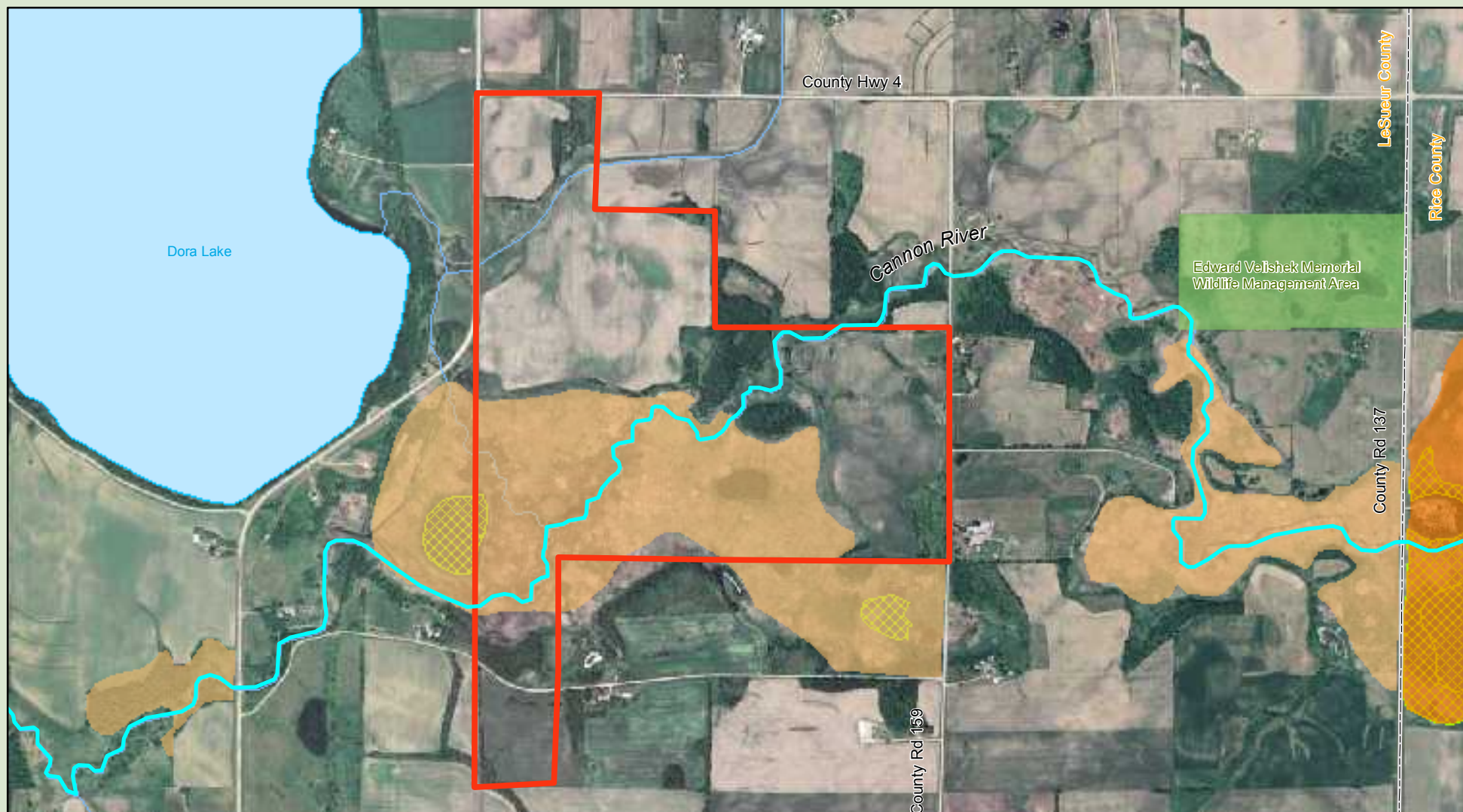
D. Spending History: ENRTF Spending: 2001: \$900,000; 2003: \$328,030; 2005: \$425,000; 2007: \$480,000; 2008: \$350,000. **Other Funds Spending:** 2001: \$371,000; 2003: \$202,000; 2005: \$677,270; 2007: \$0 "Other Funds," (but \$355,000 in other state funds, \$190,000 in partner ENRTF funds and \$175,000 in RIM leveraged land value donations); 2008 \$0 "Other Funds," (but \$1,090,000 in other state funds, and \$60,000 in private funds leveraging state funds).

VII. DISSEMINATION:

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than December 2010, June 2011, December 2011, and June 2012. A final work program report and associated products will be submitted between June 30 and August 1, 2012 as requested by the LCCMR. All reports will be generated using the HCP online reporting system.

IX. RESEARCH PROJECTS: N/A.

Attachment A: Final Budget Detail for 2010 Project			
Project Title: TPL's Critical Lands Protection Program			
	Minnesota's Habitat Conservation Partnership (VI Supplem		
Project Manager Name: Robert McGillivray			
Trust Fund Appropriation: \$200,000			
2010 Trust Fund Budget	<u>Result 1 Budget:</u>	Amount Spent	Balance
		9-30-11	30-11
	Acquisition		
BUDGET ITEM			0
Land acquisition	200,000	200,000	0
COLUMN TOTAL	\$200,000	\$200,000	\$0



PROPOSED DORA LAKE WMA (TRACTS 1 & 2)

LESUEUR COUNTY, MINNESOTA

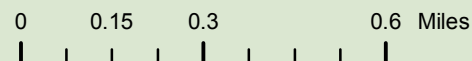
Legend

- Cannon River
- MN Sites of Biodiversity Significance**
- Outstanding
- High
- Moderate
- Below
- County Boundary
- County Boundary
- Natural Plant Communities**
- Natural Plant Communities



Map created by The Trust for Public Land
on 12/23/ 2010

Information on this map is provided for purposes of
discussion and visualization only.



Habitat Conservation Partnership Proposed Phase VI Project Areas

-Restoring Minnesota's Fish and Wildlife Habitat Corridors-

