

CPL Applications
(Total to date: 129)**Conservation Partners Legacy Grant Application****CPL1000121****Spreadsheet****Name and Contact**

Project Identifier:	CPL1000121	Street Address 1:	123 Front Street
Project Name:	Manston Slough Restoration	Street Address 2:	
Organization Name:	Buffalo- Red River Watershed District	City:	Barnesville
Organization Website:		State:	MN
Organization Contact Person:	Bruce Albright	Zip Code:	56514
Contact Email:	brrwd@bvillemn.net		
Contact Phone:	218-354-7710		

Location

Primary County: Wilkin

Nearest City:

Township:

Project Site Name: Manston Slough Restoration

Project Site Land Ownership: Federal, State, and Private

Other Land Ownership:

Project Information

Primary Activity: Restoration

Primary Habitat Type: Wetland

Total Project Acres: 1320

Total Project Sites: 1

Total Grant Amount Requested: \$400000

Total Match Amount: \$500000

Total Project Cost: \$4055000

Project Completion Date: 11/2010 (MM/YYYY)

Project Summary and Outcomes: The proposed project has will restore the natural hydrology of a wetland totaling 1,320 acres between Meadows WPA, Manston WMA, and the adjacent NRCS Wetland Reserve and BWSR RIM Easements. Benefits to Wildlife The deeper improved wetland habitat will be more attractive to nesting waterfowl including blue-winged teal, pintail and especially over water nesting species such as mallard, canvasback and redhead ducks.

Attachments

- [Project Site Information Form](#)
- [Project Budget and Match Description](#)
- [Partner Commitment Letter](#)
- Financial Documentation
- [Conservation Easement](#)
- Supplementary Attachment #1
- Supplementary Attachment #2

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Conservation Partners Legacy Grant Program

Project Site Information

Contact information

Project name:	Manston Slough Restoration
Organization:	Buffalo-Red River Watershed District
Organization contact person (Project Manager):	Bruce Albright

Project information

Project site:	Manston Slough				
Project site land manager	Legal :	T	R	S	Q
or easement holder:	See attached map and spreadsheet				
Private land owner	County:	Wilkin			
(if applicable):					

Activity (may choose more than one): ☒ Enhancement ☒ Restoration ☐ Acquisition
Predominant Habitat (choose one): ☐ Forest ☐ Prairie ☒ Wetland ☐ Fish, Game and Wildlife Habitat
Activity quantity: 1320 ☒ Acres ☐ Miles ☐ Feet ☐ Structures ☐ Wetlands

Project Site #2, if needed.

Project site:					
Project site land manager	Legal :	T	R	S	Q
or easement holder:					
Private land owner	County:				
(if applicable):					

Activity (may choose more than one): ☐ Enhancement ☐ Restoration ☐ Acquisition
Predominant Habitat (choose one): ☐ Forest ☐ Prairie ☐ Wetland ☐ Fish, Game and Wildlife Habitat
Activity quantity: ☐ Acres ☐ Miles ☐ Feet ☐ Structures ☐ Wetlands

Project Site #3, if needed. Use Additional Project Sites form if needed.

Project site:					
Project site land manager	Legal :	T	R	S	Q
or easement holder:					
Private land owner	County:				
(if applicable):					

Activity (may choose more than one): ☐ Enhancement ☐ Restoration ☐ Acquisition
Predominant Habitat (choose one): ☐ Forest ☐ Prairie ☐ Wetland ☐ Fish, Game and Wildlife Habitat
Activity quantity: ☐ Acres ☐ Miles ☐ Feet ☐ Structures ☐ Wetlands

Project timeline:

Time frame	Goal	Time frame	Goal
Winter of 2009/2010	Private Easement Acquisition and Public Hearing	Summer and Fall of 2010	Construction
Winter of 2009/2010	Final Design and Permitting		
Spring of 2010	Bid the project for construction		

Project description and benefits (box will expand as typed into, not to be longer than 2 pages):**Introduction**

The Manston Slough Restoration is a cooperative undertaking between the Buffalo-Red River Watershed District, (BRRWD), Minnesota Department of Natural Resource (DNR), the Minnesota Board of Water and Soil Resources (BWSR), the USDA Natural Resources Conservation Service (NRCS) and the US Fish and Wildlife Service (USFWS) to restore the natural hydrology of a large partially drained wetland in northern Wilkin County.

Location

The project will restore a wetland complex affecting land in Sections 19, 20, 29, 30, 31, and 32, T135N, R46W (Manston Twp.), Sections 5, and 6, T134N, R46W (Meadows Twp.), and Sections 13, 24, and 25, T135N, R47W (Mitchell Twp.), Wilkin County, Minnesota. The project will outlet into the Lateral to Wilkin County Ditch No. 13 in Section 18 of Manston Township. Two DNR protected wetlands, designated as 24W and 30P, will be enhanced by the project.

Existing Condition

The wetland on Meadows Waterfowl Production Area (WPA) was partially drained to the north through Wilkin County Ditch No. 13 Lateral in 1897. As a result, over 50% of the historic wetland basin is dry and the current water level on the remaining portion of the wetland supports a dense stand of tall emergent vegetation that has limited value to waterfowl and other water related birds. The lack of water control for water flowing into and out of the wetland has created unnatural hydrologic conditions (i.e. flashy flooding) making management of water levels in this wetland problematic.

Meadows WPA is adjacent to Manston Slough State Wildlife Management Area (WMA) which is approximately 1,815 acres, making the Meadows/Manston co-owned wetland complex one of the largest continuous block of natural habitat in Wilkin County. The area has traditionally been an important waterfowl production as well as spring and fall migration stopover for waterfowl and shorebirds. The Manston WMA has also been partially drained by Wilkin County Ditch No 13 Lateral.

The surrounding area is relatively flat and historically consisted of wet spongy prairie grassland. During the past 100 years the majority of this surrounding grassland has been converted to agricultural production. This area is primarily cropped to corn, soybean, and wheat and lacks the ability to absorb water, unlike the historical grass covered wet prairie. Combined with a steeper slope on the eastern portion of the watershed, spring runoff or localized storm events create a "flashy" drainage towards the western portion of the watershed (Meadows/Manston area).

Since runoff from the upstream watershed of 27 square miles often floods the flatter Meadows/Manston areas during summer rain storms and spring runoff, the area is undesirable for farming purposes. To add to the watershed problem this co-owned wetland complex drains all but the deeper pockets of this historical wetland area. While the ditch was

not excavated deep and far enough to drain the entire wetland complex it has had a major impact on the natural hydrology.

Project Description

The proposed project has will restore the natural hydrology of the wetland totaling 1,320 acres between Meadows WPA, Manston WMA, and the adjacent NRCS Wetland Reserve and BWSR RIM Easements. The project involves the installation of a principle water control structure that includes two 65 x 40 inch culverts the west culvert fed by an 80 foot weir set at 970.0 with stop logs to 972.0, a four to five foot stop log bay to the bottom and east culvert fed by a 40 foot weir set at 973.75 with a four to five foot stop log bay to the bottom and an independent 300 foot emergency spillway all on the north end of Manston WMA, a secondary water control structure on the outlet of the Meadows WPA two 48 inch culverts fed by a 40 foot weir set at 970.0 with stop logs to 972.0 two four to five foot stop log bays to the bottom, rebuilding of three township roads (dikes) and installation of a fish barrier downstream of the entire project to deter invasion of exotic species. The water control structure on Meadows WPA would allow the USFWS to have partial water control on that portion of the wetland on Meadows WPA.

Benefits to Wildlife

The deeper improved wetland habitat will be more attractive to nesting waterfowl including blue-winged teal, pintail and especially over water nesting species such as mallard, canvasback and redhead ducks. The water levels will be more stable during spring and summer rainfall events therefore, nesting success would be less impacted.

The improved wetland habitat would also attract Canada geese. While nesting Canada geese can be a nuisance for farmers adjacent to large wetlands, the Meadows WPA has a large buffer of grassland habitat that should keep the geese on the WPA. Some fields may not have enough of a buffer to keep the geese on the WPA. In those situations the MNDNR does offer a food plot program and other control measures to help farmers protect their crop land.

The enlarged water control structure should also improve migratory bird habitat during the spring and fall migrations. Even though thousands of birds use this area during peak migration, the additional habitat will provide new foraging opportunities to help the birds as they migrate to the breeding grounds.

The muskrat population would remain stable or increase. The danger of wetland bounce from storm events would be reduced since the water control structures would have added capacity to control the additional inflow.

Shorebird habitat can be enhanced by the project. The water control structures can be used to more rapidly draw down the water level to create mudflats during the shorebird migration. The flexibility of having two outlet culverts on the north water control structure will increase the Service's ability to provide mudflats during migration.

More rapid drawdown capability will also allow for eradication of any invasive fish species (i.e. winterkill) should they breach the fish barrier.

Please provide the answers to the following questions. Boxes will expand as typed into.

1. For lands acquired in fee title that will be turned over to a public agency for long-term management:

- a. Provide a description of the work necessary to bring the land up to agency standards and an estimate of the associated cost.

- b. What short- and long-term work is required to manage the land you acquire?

2. For enhancement/ restoration projects on public lands:

- a. Who is/will be the long-term manager for the project site?

This a complex project involving a number of agencies. It will be managed jointly by the Minnesota Department of Natural Resources, the US Fish and Wildlife Service, the Natural Resources Conservation Service, the Minnesota Board of Soil and Water Resources and the Buffalo-Red River Watershed District. The responsibilities of each party is described in the attached Memorandum of Understanding.

- b. What short- and long-term maintenance work is required to sustain the habitat work you will do?

The Buffalo-Red River Watershed District will be responsible for the construction and maintenance of the dikes and North Water Control Structure. Typically these features require little maintenance once they are established. Typical maintenance items include mowing for weed control and reseeding of turf . The North Water Control Structure consists of stop log bays. The stop logs will be made of aluminum and should last 50-years. Some seals may have to be replaced but it would be infrequent. The maintenance of the wetlands habitat will be the responsibility on the MN DNR and USFWS. The details are outlined in the attached Operation and Maintenance Plan.

- c. Who will complete this maintenance work, and how will it be funded?

The Watershed District will hire the appropriate contractor for the type of work required. The Watershed District has a number of projects like this and has project fund account for such items.

- d. Will the CPL funds supplant any existing funds?

Yes.

As required by 2009 MN Session Law, Chapter 172 subd. 10 (8), “any agency or entity receiving an appropriation must, for any project funded in whole or in part with funds from the appropriation, give consideration to and **make timely written contact with the Minnesota Conservation Corps** for consideration of possible use of their services to contract for restoration and enhancement services”. Contact MCC at cplg@conservationcorps.org, or email a copy of this form to the same address. For more information on costs, crew capabilities, etc., visit MCC’s website at <http://www.conservationcorps.org/useacrew.html>.

Signature:

☒ I certify that I have read the Conservation Partners Legacy Grants Program **Request for Proposal, Program Manual** and other program documents, and have discussed this project with the appropriate public land manager, or private landowner and easement holder. I am authorized to apply for and manage these grant and match funds, and the project work by the organization or agency listed below. I have made timely written notification to MCC regarding my restoration or enhancement project.

Signature:	Organization/ Agency: Buffalo-Red River Watershed District
Title: Chairman	Date:

Please save this document to your computer or electronic storage device and attach this document as specified on the online submittal form when ready to apply. Contact [CPL Grant Staff](#) with any questions.

CPL Project Application Review and Approval Form

REVIEWER INFORMATION

Land manager/ easement holder name:	Don Schultz, Minnesota DNR		
Title:	Area Wildlife Supervisor	Date of meeting:	Numerous from 2005 to 2009
Phone:	218-739-7576	Proposal ID #:	
Email:	don.schultz@state.mn.us	(assigned by agency, optional)	

PROJECT INFORMATION:

Project Name:	Manston Slough Restoration	Organization:	Buffalo-Red River Watershed District
Contact Person:	Bruce Albright		
Email:	brrwd@bvillemn.net	Daytime Phone:	218-354-7710

Please check the appropriate boxes:

- ☒ I have read the application and discussed this proposed project with the above listed Organization Contact Person.
- ☐ For work on easements, the private landowner has been contacted and has given support and approval for this project.

I have performed a Natural Heritage Database review and found:

- ☐ this project to have no features within one mile.
- ☒ this project to have features within one mile, but project is not likely to adversely affect those features. I have recommended the following minimization strategy:

- ☐ this project is likely to adversely affect Natural Heritage features. I feel that this project is important and should be forwarded to DNR Ecological Resources staff for further review.

- ☐ I do not have access to the Natural Features database and will forward this completed form to DNR within 3 business days to [CPL Staff](mailto:CPLStaff@LSCPLGrants.DNR@dnr.state.mn.us) at LSCPLGrants.DNR@dnr.state.mn.us for review.

I have discussed what role my office will be expected to have in this project and find that the project, as described will require:

- ☐ minimal or no involvement from my office for completion.
- ☒ a commitment of involvement by staff that is reasonable and can be accomplished with current staffing levels and workload.

- ☐ an amount of staff involvement that cannot be committed during the project time period with current staffing levels. Unless additional staffing can be committed from other offices, Divisions or appropriate partners, I feel this project cannot be completed within the project timeline to our desired standards.

CPL Project Application Review and Approval Form

☒ I have discussed permits and applications that the applicant may be responsible for using the Working on DNR Lands and Working on Public Lands, or Working on Private Lands documents.

Upon final review of this project:

- ☒ I find this project to be consistent with sound conservation science. This work will benefit area fish, game and wildlife by restoring, enhancing or protecting forests, wetlands, prairies and habitat and is consistent with the management or stewardship plan for this land. (APPROVAL)
- ☐ I find that this project does not follow the management or stewardship plan for this land and does not fit within the long range goals for this land at this time on the local level. (DECLINE)
- ☐ I find that this project should be sent up to a higher level within the agency for further review and decision. I have forwarded the Project Planning Form and this Review and Approval Form for further review to:

Name:		Phone:	
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☒ By checking this box and typing my name below I certify that I have met with the above applicant and discussed the proposed project and have provided feedback to the applicant.

Name:	Don Schultz,
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Comments: **The Manston Slough project is a partnership between local, state and federal agencies to restore the natural hydrology of a 1,100 acre wetland surrounded by 3,900 acres of restored uplands. A large number of meetings and extensive negotiations have taken place since 2005 with final plans, design, engineering and permitting for this project near completion if not already complete. This project will provide excellent habitat for wetland dependent wildlife and should serve as a model for other mediation projects up and down the Red River Valley.**

Name:	Don Schultz	Phone:	218-739-7576
Title:	Area Wildlife Supervisor	Email:	don.schultz@state.mn.us

Additional
necessary):

Comments(including approval or denial, reasoning):

review (if

REVIEWER INFORMATION

PROJECT INFORMATION:

Please check the appropriate boxes:

- I have performed a Natural Heritage Database review and found:**

- [illegible]

- I have discussed what role my office will be expected to have in this project and find that the project, as described will require:

- Page 1
-
- 092109

- ☒ a commitment of involvement by staff that is reasonable and can be accomplished with current staffing levels and workload.
- ☐ an amount of staff involvement that cannot be committed during the project time period with current staffing levels. Unless additional staffing can be committed from other offices, Divisions or appropriate partners, I feel this project cannot be completed within the project timeline to our desired standards.

CPL Project Application Review and Approval Form

☒ I have discussed permits and applications that the applicant may be responsible for using the Working on DNR Lands and Working on Public Lands, or Working on Private Lands documents.

Upon final review of this project:

- ☒ I find this project to be consistent with sound conservation science. This work will benefit area fish, game and wildlife by restoring, enhancing or protecting forests, wetlands, prairies and habitat and is consistent with the management or stewardship plan for this land. (APPROVAL)
- ☐ I find that this project does not follow the management or stewardship plan for this land and does not fit within the long range goals for this land at this time on the local level. (DECLINE)
- ☐ I find that this project should be sent up to a higher level within the agency for further review and decision. I have forwarded the Project Planning Form and this Review and Approval Form for further review to:

Name:	Phone:
-------	--------

☒ By checking this box and typing my name below I certify that I have met with the above applicant and discussed the proposed project and have provided feedback to the applicant.

Name:	Kevin J. Brennan,
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Comments: **The Manston Slough project is a partnership between local, state and federal agencies to restore the natural hydrology of a 1,100 acre wetland surrounded by 3,900 acres of restored uplands. A large number of meetings and extensive negotiations have taken place since 2005 with final plans, design, engineering and permitting for this project near completion if not already complete. This project will provide excellent habitat for wetland dependent wildlife and should serve as a model for other mediation projects up and down the Red River Valley.**

Name:	Kevin J. Brennan	Phone:	218-736-0627
Title:	Wildlife Refuge Manager	Email:	Kevin_Brennan@fws.gov

Additional
necessary):

Comments(including approval or denial, reasoning):

review (if



Conservation Partners Legacy Grant Program
Natural Heritage Database Review
October 27, 2009

Bruce Albright, Buffalo-Red River Watershed District,

We have received your request for a Natural Heritage Database Review specific to your Conservation Partners Legacy Grant application, titled Manston Slough Restoration. The following information is the result of that review, completed for the project location(s) within your proposed project.

[REDACTED]
[REDACTED]
[REDACTED].

As noted within those documents, the only species found within [REDACTED]
[REDACTED] There are no other recorded features within one mile of this site.

Please note:

- This review only applies to the Conservation Partners Legacy Grant Program application referenced above.
- This information has no bearing on any related permits or projects not covered under the request for review.
- This information will not be valid after March 1, 2010. The only use of this data is to record potential impacts and minimization or avoidance techniques for any Natural Heritage Database records found in or within 1 mile of the listed project site(s).

Please contact CPL Grant staff at LSCPLGrants@state.mn.us with any questions. Thank you for your interest in the CPL Grant Program.

Conservation Partners Legacy Grant

Project Budget and Match Worksheet, Application Requirement

Project name:	Manston Slough Restoration	
Organization:	Buffalo-Red River Watershed District	
Organization contact person (Project Manager):	Bruce Albright	

Please complete all sections and be as detailed as possible for all descriptions under the Details sections. Limit entries in large tables to numbers only, **round to the nearest dollar**. Do not edit table categories, only enter values or text into the table. The tables will adjust to accommodate additional text in each box. If all categories are not needed, please leave those fields blank.

BUDGET: amounts being requested **Note: FY refers to State Fiscal Year: July 1- June 30, with the year reflecting the year that June falls in. For example: if today were September 3rd, 2009 it would be FY2010; December 3rd 2010= FY2011; May 2012= FY2012

Budget Item	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Total
Personnel				
Contracts		\$400,000		
Grant Administration				
Administration/ Environmental Compliance				
Fee Acquisition				
Easement Acquisition				
Easement Stewardship				
Equipment/Tools/Supplies				
Travel				
Additional Budget items				
Total		\$400,000.00		

DETAILS: detail the amounts listed in the above table.

Personnel Details:

Name	Title	Amount

Contract Details:

Contractor Name	Contracted Work	Amount
To be determined in bidding	Construction of the emankment and outlet strutures	\$400,000

Grant Administration:

Administrative Activity	Description/ Amount	Amount

Administration/ Environmental Compliance

Activity	Description	Amount

Fee Acquisition/ Easement Acquisition/ Easement Stewardship Details:

--

Equipment/Tools/Supplies Details:

Item	Use	Amount

Travel Details:

Miles	Purpose	Amount

Additional Budget Items Details:

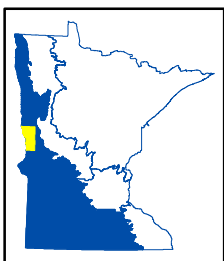
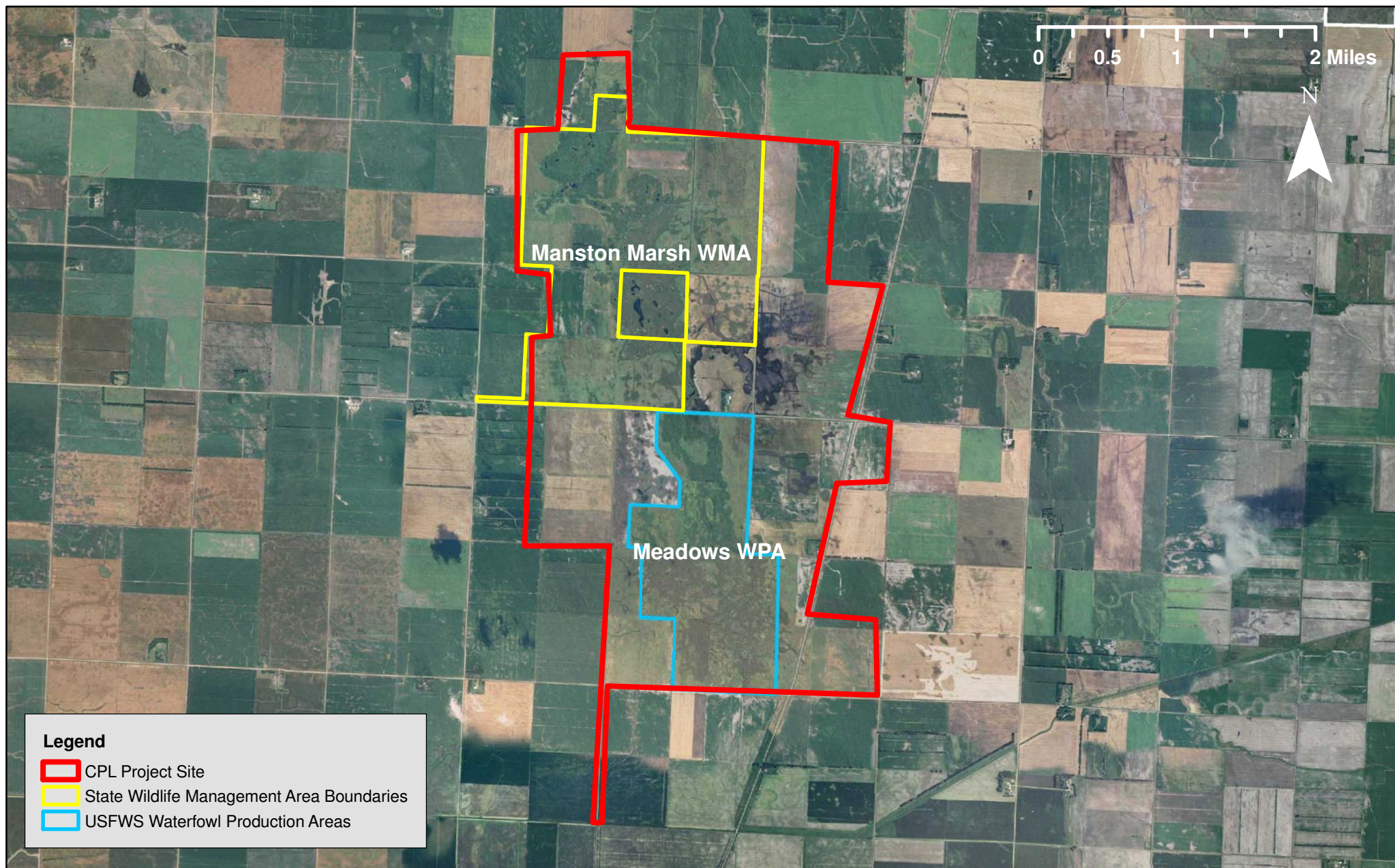
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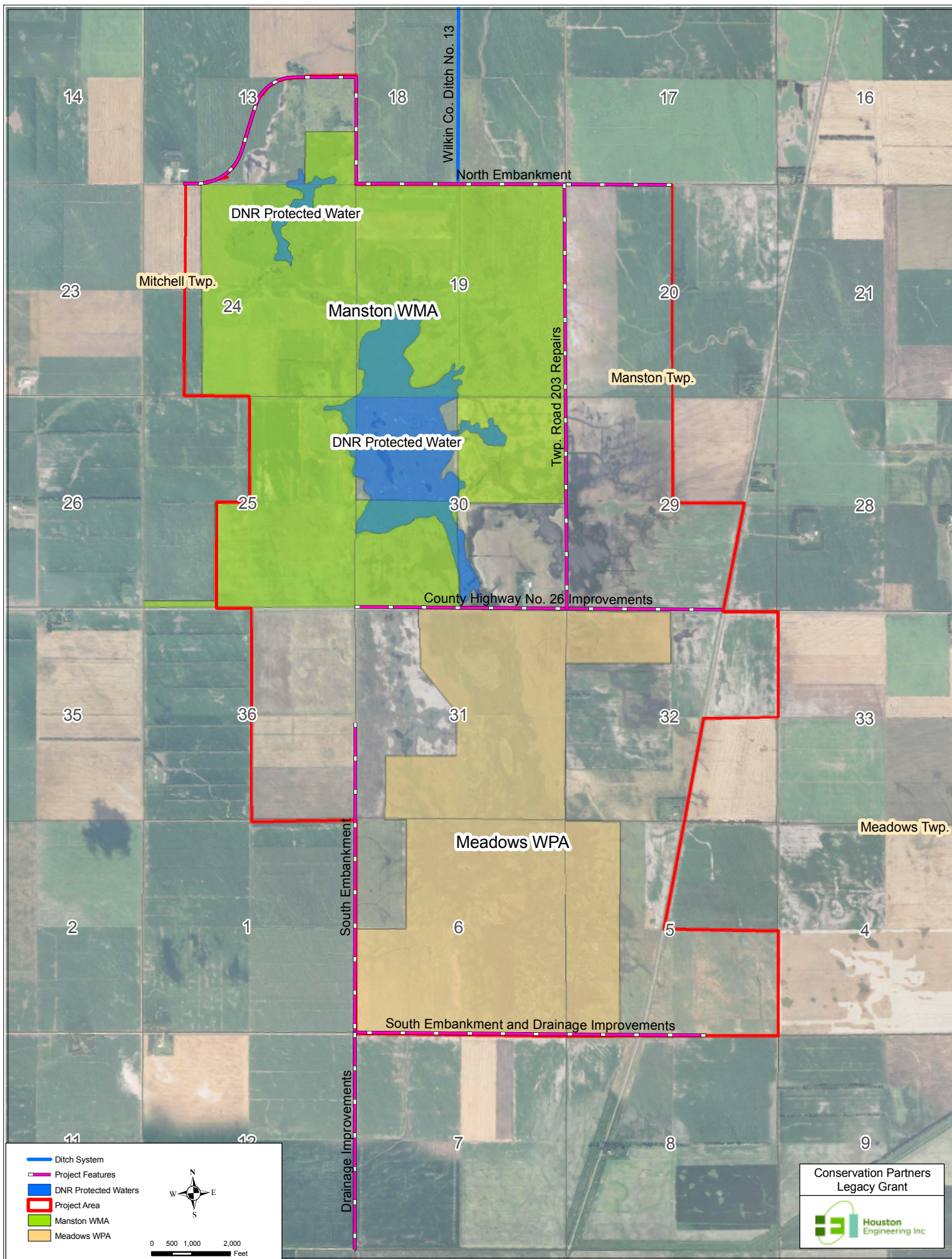
MATCH: Required 10% of total project funds, to be fulfilled by end of Fiscal Year 2012. Use provided rate sheet to determine unit rate and total value of in-kind services to be used as matching funds if applicable.

Source	Description	Units	Unit Rate	Total Value
DNR/BRRWD/Local	Engineering, Legal, Geotechnical, Environmental, Admin.			\$510,000
DNR/BRRWD/Local	Land Acquisition			\$1,440,000
DNR/BRRWD/Local	Construction and Utility Relocations			\$1,705,000.00

Matching description/ comments: if needed

Project financing will be provided as follows, 50% State of Minnesota, Department of Natural Resources (DNR) – Flood Damage Reduction Program, 37.5% - Buffalo-Red River Watershed District (BRRWD), district-wide assessments for projects, and 12.5% from assessments to benefited downstream landowners (Local). The 12.5 % from local assessments will provide approximately \$500,000 which is significantly more than the 10% minimum.





Manston Slough Restoration Private Easement Data March 31, 2009									
Landowner	Legal Description	Road/Dam Site R/W		Pool Easements				Drainage Ditch R/W	
		Permanent	Temporary	Below Elev. 972		Elev. 972 to 974		Permanent	Temporary
				Untilled	Cropland	Untilled	Cropland		
Joseph C. & Nancy Wulfekuhle	SW1/4SW1/4, 13-135-47	0.38							
2116 190th ST	SW1/4SW1/4, 17-135-46	1.19	2.96						
Wolverton, MN 56594	SE1/4SW1/4, 17-135-46	1.22	3.04						
(218) 557-8859	NW1/4NW1/4, 24-135-47						1.07		
Dennis & Phyllis VanWechel	NW1/4SE1/4, 13-135-47	5.49	8.49			13.38	8.29		
1811 200th AVE	SW1/4SE1/4, 13-135-47	0.04	0.66	0.02		22.93	14.82		
Wolverton, MN 56594	SE1/4SW1/4, 13-135-47	6.19	7.09				3.20		
(218) 557-8844	NE1/4SW1/4, 13-135-47	0.52	1.33						
E-mail: dvwechel@rrt.net									
306 S Recker Road, Lot 57									
Mesa, AZ 85206									
Kent Road & Gun Club	NE1/4NE1/4, 30-135-46			3.44		31.06			
c/o Andy Bever	SE1/4NE1/4, 30-135-46			2.93		35.34			
2665 170th AVE	SW1/4NW1/4, 30-135-46			5.45		29.06			
Kent, MN 55653	NW1/4NW1/4, 30-135-46			5.10		31.21			
(218) 643-6530									
E-mail: abever@aqwireless.net									
Thomas A. & Susan M. Arnhalt	SE1/4SE1/4, 18-135-46	1.61	2.98						
2017 210th ST	SW1/4SE1/4, 18-135-46	10.34	4.01						
Wolverton, MN 56594	NE1/4NW1/4, 20-135-46	1.28	3.04		0.06		14.76		
(218) 557-8805	SE1/4NW1/4, 20-135-46				0.01		18.71		
	SW1/4NW1/4, 20-135-46				8.79		28.05		
	NW1/4NW1/4, 20-135-46	1.25	2.97		16.37		17.53		
	NE1/4SW1/4, 20-135-46						17.90		
	SE1/4SW1/4, 20-135-46				0.04		15.01		
	SW1/4SW1/4, 20-135-46				2.11		33.18		
	NW1/4SW1/4, 20-135-46				12.36		26.61		
	SW1/4SE1/4, 20-135-46						0.09		
	SW1/4NW1/4, 6-134-46				25.97		10.91		
	NW1/4NW1/4, 6-134-46				26.41		9.98		
Virgil and Thoreen Fankhanel	SE1/4SW1/4, 18-135-46	1.36	3.01						
1303 260th AVE									
Barnesville, MN 56514									
(218) 493-4358									
Woolson Family Revocable	PT NE1/4NW1/4, 31-135-46				21.33		14.99		
Living Trust	PT SE1/4NW1/4, 31-135-46				4.40		34.50		
Loren & Rita Woolson	SW1/4NW1/4, 31-135-46						15.30		
830 N Union AVE	NW1/4NW1/4, 31-135-46						15.53		
Fergus Falls, MN 56537	PT NE1/4NW1/4, 31-135-46				3.57		36.60		
(218) 736-5532	PT W1/2SW1/4SW1/4, 31-135-						9.83		
	PT NW1/4SW1/4, 31-135-46				1.10		18.25		
Delores A. Dinger, REV Trust	NW1/4NE1/4, 20-135-46						0.94		
c/o Dale L. Dinger, Trustee	SW1/4NE1/4, 20-135-46					0.11	0.38		
303 16th AVE S									
Devils Lake, ND 58301-3406									
(701) 662-3984									

Landowner	Legal Description	Road/Dam Site R/W		Pool Easements				Drainage Ditch R/W	
		Permanent	Temporary	Below Elev. 972		Elev. 972 to 974		Permanent	Temporary
Shawn T & Jesse T Norman	SW1/4NE1/4, 29-135-46						10.34		
2510 200th ST	NW1/4NE1/4, 29-135-46						4.01		
Rothsay, MN 56579									
Shawn-(218) 867-2643									
Jesse-(218) 867-2675									
Stuart J Tschakert	NE1/4NE1/4, 32-135-46						0.01		
410 10th ST S, APT C	SW1/4NE1/4, 32-135-46						24.14		
Breckenridge, MN 56520-2115	NW1/4NE1/4, 32-135-46	0.74	2.71				27.88		
(218) 643- 2488									
Louis H Tschakert									
114 9th ST N									
Breckenridge, MN 56520-1602									
(218) 557-8397									
Marlene Miller	SW1/4SW1/4, 32-135-46				13.54	1.05	18.61		
c/o Bruce Miller	PT SE1/4SW1/4, 32-135-46					0.18	13.08		
18035 88R ST SE	PT SW1/4SE1/4, 32-135-46						3.13		
Wahpeton, ND 58075	NW1/4SE1/4, 32-135-46						9.88		
701-642-3436 farm									
701-640-0141 cell									
C&H Farms Company	NE1/4NW1/4, 7-134-46							2.35	2.29
9766 E Ironwood DR	Govt. Lot 2, 7-134-46							1.89	2.28
Scottsdale, AZ 85258-4728	Govt. Lot 1, 7-134-46							3.95	4.02
(480) 699-7668	NE1/4SW1/4, 5-134-46			5.52		21.08	8.19		
Email: drewwesner@yahoo.com	SE1/4SW1/4, 5-134-46			2.46		16.12	15.00		
	W1/2SW1/4NW1/4, 5-134-46			0.87		19.81			
	W1/2NW1/4NW1/4, 5-134-46	0.58	3.03	0.61			34.85		
	SE1/4SE1/4, 29-135-46						0.61		
	SW1/4SE1/4, 29-135-46	0.47	2.80				18.11		
	NW1/4SE1/4, 29-135-46						26.44		
	NE1/4SW1/4, 29-135-46				1.02		38.96		
	SE1/4SW1/4, 29-135-46	0.58	3.03		0.61		34.85		
	SW1/4SW1/4, 29-135-46	0.56	2.96		19.62		14.93		
	NW1/4SW1/4, 29-135-46				21.45		17.54		
	NE1/4NW1/4, 29-135-46						34.57		
	SE1/4NW1/4, 29-135-46				0.84		38.97		
	SW1/4NW1/4, 29-135-46				13.96		25.00		
	NW1/4NW1/4, 29-135-46				3.46		34.58		
Joseph L & Helen Hulne	Govt. Lot 4, 18-135-46	2.39	5.24						
258 Crescent DR	Govt. Lot 3, 18-135-46	1.26	2.60						
Breckenridge, MN 56520									
(218) 643-8578									
Dolores E Rehder	NE1/4SE1/4, 13-135-47	3.24	5.52	0.03		18.30			
3704 Decathlon PKWY									
Billings, MT 59102-7263									
(406) 655-1046									
Robert & Darlene Yaggie	NW1/4NE1/4, 8-134-46							1.33	2.26
2514 ST HWY 210									
Breckenridge, MN 56520-9662									
(218) 643-6021									

Landowner	Legal Description	Road/Dam Site R/W		Pool Easements				Drainage Ditch R/W	
				Below Elev. 972		Elev. 972 to 974			
		Permanent	Temporary	Untilled	Cropland	Untilled	Cropland	Permanent	Temporary
Lowell R & Connie M Seidler	NE1/4NW1/4, 8-134-46							1.55	2.00
2361 250th AVE	NW1/4NW1/4, 8-134-46							1.75	2.26
Rothsay, MN 56579									
(218) 867-2661									
Todd Allen Klien	NE1/4NE1/4, 7-134-46							2.04	2.28
2460 CO RD 16									
Breckenridge, MN 56520									
(218) 643-4551									
Sharon K Tscharkert	NE1/4SW1/4, 32-135-46					0.08	28.79		
710 Broadway	NW1/4SW1/4, 32-135-46					0.34	11.46		
Abercrombie, ND 58001	SW1/4NW1/4, 32-135-46						26.70		
(701) 553-9119	SE1/4NW1/4, 32-135-46						40.20		
	NW1/4NE1/4, 7-134-46							2.04	2.28
Abel Farm Partnership	Govt. Lot 4, 7-134-46							1.78	2.30
c/o Jerry Abel	Govt. Lot 3, 7-134-46							1.77	2.28
1952 170th AVE									
Wolverton, MN 56594									
(218) 557-8865									
Jerry L Schmidt	PT SE1/4SW1/4, 32-135-46					0.36	1.81		
2199 ST HWY 9									
Rothsay, MN 56579									
(218) 867-2651									
James H Lucke	SE1/4SE1/4, 5-134-46						0.03		
1789 140th AVE	SW1/4SE1/4, 5-134-46						17.77		
Wolverton, MN 56594-9604	NW1/4SE1/4, 5-134-46						7.64		
(218) 995-2240									
Duane A & Bonnie J Stuehrenberg	SW1/4NE1/4, 5-134-46						5.76		
2052 250th ST	NW1/4NE1/4, 5-134-46						2.31		
Kent, MN 56553-9550	E1/2SE1/4NW1/4, 5-134-46				2.67		16.51		
(218) 557-9182	E1/2NE1/4NW1/4, 5-134-46						16.30		
	TOTALS	40.69	67.47	26.43	199.69	240.41	995.39	20.45	24.25

**Memorandum of Understanding Between
The Minnesota Department of Natural Resources,
The Minnesota Board of Water and Soil Resources
The Natural Resources Conservation Service,
The United States Fish and Wildlife Service,
and
The Buffalo-Red River Watershed District**

I. Authority

This Memorandum of Understanding (MOU) between the, Minnesota Department of Natural Resources (MN DNR), Minnesota Board of Water and Soil Resources (MN BWSR), U. S. Department of Agriculture - Natural Resources Conservation Service (NRCS), U.S. Fish and Wildlife Service (USFWS) and the Buffalo-Red River Watershed District (BRRWD), jointly known as the cooperators, is hereby entered into under the authority contained in the following legislation:

USFWS – The Migratory Bird Conservation Act of February 18, 1929 (16 USC 715-715r); the Fish and Wildlife Coordination Act of March 10, 1934 (16 USC 661-666c) and November 8, 1978 (16 USC 742f(b)); the Fish and Wildlife Act of August 8, 1956 (16 USC 742a – 742k); the National Wildlife Refuge System Administration Act of October 15, 1966 (16 USC 668d-668ee) as amended and other applicable legislation.

MN DNR – Under Minn. Stat. § 471.59, subd.10, the State is empowered to engage such assistance as deemed necessary.

NRCS – Wetlands Reserve Program, 16 U.S.C. 3837-3837F; Farm Security and Rural Investment Act of 2002, Public Law 107-171 and Public Law 106-387; 7 U.S.C. 6962(A) and program authority.

MN BWSR – Minnesota Statutes 103B.101 Subdivision 9

BRRWD- Minnesota Statutes 103D.335 Subdivision 7

II. Purpose

The purpose of this MOU is to cooperate in the restoration of the natural hydrology of the 1,320 acre Manston Slough located in Sections 19, 20, 29, 30, 31, & 32 Township 135 North, Range 46 West, Sections 13, 24, 25, & 36 Township 135 North, Range 47 West, Sections 5 & 6 Township 134 North Range 46 West, Wilkin County, Minnesota (Project Area), to authorize the BRRWD to construct those water management facilities as needed to restore the natural hydrology of this wetland and to establish a team to guide the operation of these water management facilities. These lands are jointly owned or controlled by the cooperating agencies.

III. Statement of Mutual Benefits and Interest:

The cooperators are dedicated to the wise management of natural resources and agree that it is to their mutual benefit to work cooperatively on the restoration and management of Manston Slough consistent with each agency's mission and objectives.

Sharing of the cooperators resources in restoring the natural hydrology of Manston Slough will allow them to meet their legislated mandates and missions in an effective and efficient manner. The primary benefits of this wetland restoration include:

1. Increasing the quantity and quality of waterfowl and wildlife habitat within the project area and the associated recreational benefits to the public.
2. Enhancing the quality of water flowing from the project area.
3. Providing for ground water recharge to the South lobe of the Buffalo aquifer.
4. Providing for reduced flood damages adjacent to and downstream of the project area.

IV. Statements of Responsibility:

USFWS Shall:

1. Shall agree to the restoration of Manston Slough to 972.0 mean sea level elevation.
2. Shall agree to allow the BRRWD to raise the elevation of public roads or construct dikes along the south and west sides of their property to 977.0 mean sea level elevation.
3. Shall operate and maintain the water control structure under County Road 26 along the north side of their property

MN DNR Shall:

1. Shall agree to the restoration of Manston Slough to 972.0 mean sea level elevation
2. Shall agree to allow the BRRWD to install a water control structure and spillway on the outlet of Lateral 1 to Wilkin County Ditch 13 along the north side of their property in section 19 and to raise the public roads or construct dikes along the north side of their property to 977.0 mean sea level elevation.
3. Shall operate the water control structure on the outlet of Manston Slough on Lateral 1 to Wilkin County Ditch 13 on the north side of Section 19, Manston Township.

NRCS Shall:

1. Shall agree to the restoration of Manston Slough to 972.0 mean sea level elevation according to the individual Wetland Reserve Program plans for lands within the project area enrolled in USDA's Wetland Reserve Program.

2. Shall agree to allow the BRRWD to impact adjacent Wetland Reserve Program lands according to the individual Wetland Reserve Program plans in raising the elevation of public roads or construct dikes within the project area to 977.0 mean sea level elevation.
3. Allow maintenance, according to the individual Wetland Reserve Program plans, of existing drainages, flowing into lands within the project area enrolled in USDA's Wetland Reserve Program.
4. Enter into Administrative Jurisdictional Agreements with the MN DNR and USFWS for certain management responsibilities and lands within the project area.

MN BWSR Shall:

1. Shall agree to the restoration of Manston Slough to 972.0 mean sea level elevation.
2. Shall agree to allow the BRRWD to raise the elevation of public roads or construct dikes adjacent to lands within the project area enrolled in the Reinvest In Minnesota Program to 977.0 mean sea level elevation.

BRRWD Shall:

1. Shall fund and construct the water control structures, spillway, dikes and associated facilities as needed to restore Manston Slough to 972.0 mean sea level elevation. Final project plans will be submitted to the other cooperators for approval.
2. Shall negotiate with the appropriate road authorities to raise the adjacent public roads or construct dikes to 977.0 mean sea level elevation as needed.
3. Shall maintain the water control structure and spillway on the outlet of Manston Slough on Lateral 1 to Wilkin County Ditch 13 the north side of Section 19, Manston Township and downstream fish barrier.
4. Shall develop the project in compliance with applicable local, state and federal laws.

V. It is Mutually Agreed and Understood Between the Parties that:

1. Manston Slough shall be restored to a normal operating pool level of 972.0 mean sea level elevation. The primary outlet structure shall consist of a concrete box structure with two bays and two 65" x 40" arched RCP through 190th Street near the north quarter corner of Section 19, Manston Township on Lateral 1 to Wilkin County Ditch 13. The west bay shall have a crest length of 80 feet at elevation 970.0 with stop-log bays up to elevation 972.0. The east bay shall have a crest length of 40 feet at elevation 973.75. Both the east and west bays of the primary outlet structure shall have one stop-log bay extending to the bottom of the structure to allow for complete drawdown.
2. A three hundred foot wide emergency spillway with a crest elevation of 974.0 will be constructed approximately 500 feet east of the primary outlet.
3. A fish barrier will be installed downstream of the Manston Slough outlet on Lateral 1 of Wilkin County Ditch 13 to deter invasive fish species.

4. A second water control structure will be installed near the north quarter corner of section 31, Manston Township consisting of a concrete box structure with a crest length of 40 feet at elevation 970 with stop-log bays up to elevation 972 and two 48" RCPs through Wilkin County Highway 26. This structure shall have two stop-log bays extending to the bottom of the structure to allow for complete drawdown.
5. As needed roads and/or dikes will be constructed on the project area to elevation 977.0.
6. Operation of the Manston Slough project will be guided by the "Operation and Maintenance Plan for the Manston Slough Project", which is attached and incorporated into this agreement. The cooperators shall meet at least once annually (generally late winter) to review the specific short and long term operational plans for water levels within the project area.
7. The cooperators shall work together with other agencies and individuals to increase water conservation practices in the contributing drainage area to Manston Slough with the following goals: buffer strips 10 miles, wetland restorations 50 acres and stream channel restoration 3 miles.
8. The Federal Government's tort liability shall be governed by the provisions of the Federal Tort Claims Act (28 U.S.C. et seq.). Each party will be responsible for its own acts and behavior and the results thereof. Claims for damage or injury will be settled in accordance with State and Federal Law in effect at the time of the claim.
9. Modifications within the scope of the instrument shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by all parties, prior to any changes being performed.
10. The rights and benefits conferred by this Agreement shall be subject to the laws of the United States governing the Fish and Wildlife Service and the Natural Resources Conservation Service and their employees, and to the rules and regulations promulgated thereunder, whether now in force or hereafter enacted or provided.
11. In the event of any issue of controversy under this Agreement, the parties may pursue Alternate Dispute Resolution procedures to voluntarily resolve those issues. These procedures may include, but are not limited to conciliation, facilitation, mediation, and fact finding.

VI. Project Officers:

1. The Parties agree the individuals in the following positions will serve as Project Officers for the implementation of this MOU.

- A. FWS
Project Leader
Fergus Falls Wetland Management District
21932 State Hwy 210 East
Fergus Falls, MN 56537
- B. MN DNR
Area Wildlife Manager
MN Department of Natural Resources
1509 1st Ave N.
Fergus Falls, MN 56537
- C. NRCS
Assistant State Conservationist for Field Operations
NRCS Area II Office
1004 Frontier Drive
Fergus Falls, MN 56537
- D. MN BWSR
Board Conservationist
1004 Frontier Drive
Fergus Falls, MN 56537
- E. BRRWD
Office Administrator
Buffalo-Red River Watershed District
P.O. Box 341
Barnsville, MN 56514

VII. Effective Date:

IN WITNESS WHEREOF, the parties hereto have executed this MOU as of the last written date below and shall continue in force for the life of the project.

U.S. Fish and Wildlife Service

MN Department of Natural Resources

Walter M. Zuber

Regional Chief
National Wildlife Refuge System

Title: _____

Date 1.7.2009

By: Dennis E. Simon
(with delegated authority)

Title: Chief, Wildlife Management Section

Date 1/28/2009

Natural Resources Conservation Service

Minnesota Board of Soil & Water Resources

William Hunt

Title: State Conservationist

Date 2/12/09

John P. Calk

Title: Exec. Director

Date 2/17/09

Buffalo-Red River Watershed District

Roger Ellefson

Title: Chairman

Date December 8, 2008

**Operation and Maintenance
Plan
For the
Manston Slough
Project**

November 14, 2008

**Minnesota Department of Natural Resources
Minnesota Board of Water and Soil Resources
USDA-Natural Resources Conservation Service
US Fish and Wildlife Service
Buffalo Red River Watershed District**

Background

The Manston Slough project is a cooperative undertaking between the Minnesota Department of Natural Resources (MN DNR), the Minnesota Board of Water and Soil Resources (MN BWSR), the USDA Natural Resources Conservation Service (NRCS), the US Fish and Wildlife Service (USFWS) and the Buffalo Red River Watershed District (BRRWD) to restore the natural hydrology of this large partially drained wetland.

The cooperating agencies jointly own or control approximately 5,000 acres of land located in Sections 19, 20, 29, 30, 31, & 32 Township 135 North, Range 46 West, Sections 13, 24, 25, & 36 Township 135 North, Range 47 West, Sections 5 & 6 Township 134 North Range 46 West, Wilkin County, Minnesota (see attached map). The majority of these lands have been acquired under a number of state or federal programs whose primary purpose is restoration of wetlands for waterfowl and/or wildlife management.

The project has a drainage area of 26.5 miles with the restoration of Manston Slough to a mean sea level elevation of 972.0 resulting in a 1,320 acre wetland. The project involves the installation of a new outlet structure on Lateral 1 of Wilkin County Ditch 13 and spillway along the north line of Section 19, Township 135N Range 46 West, installation of a downstream fish barrier, installation of a water control structure under Wilkin County Highway 26 and rebuilding of some township roads or construction of dikes around the project area to act as embankments.

General

A. The project will be operated and maintained in compliance with applicable Federal, State and local laws, including dam safety rules and regulations.

B. The Buffalo-Red River Watershed District shall fund the construction of the facilities necessary to restore Manston Slough. The following table shows which cooperators will be responsible for the operation and maintenance of the project facilities:

Project Responsibilities

<u>Item</u>	<u>Responsible Governmental Unit</u>
North Water Control Structure Maintenance	BRRWD
Emergency Spillway Maintenance	BRRWD
Dike Maintenance	BRRWD
North Water Control Structure Operation	MN DNR
Highway 26 Water Control Structure Operation & Maintenance	USFWS

Fish Barrier Maintenance

BRRWD

Fish Barrier Cleaning

MN DNR-USFWS

The Buffalo-Red River Watershed District will make an annual inspection of all water management facilities during the months of May or June to determine the condition of the project. In addition an inspection will be made after severe floods and any other occurrence of unusual conditions which might adversely affect the structural elements of the project. The BRRWD will make and submit to the cooperators a written report of all inspections of the project.

Plan of Operation

A. Structure Descriptions:

Primary Water Control Structure – This structure is a concrete box with two bays and two 65” x 40” arched RCP through 190th Street near the north quarter corner of Section 19, Manston Township on Lateral 1 to Wilkin County Ditch 13. The west bay has a crest length of 80 feet at elevation 970.0 with stop-log bays up to elevation 972.0. The east bay has a crest length of 40 feet at elevation 973.75. Both the east and west bays of the structure have one stop-log bay extending to the bottom of the structure to allow for complete drawdown. The stop-log bays will be used to draw the wetland pool below 972.0 for water level management.

Emergency Spillway- A 300 foot depressed overflow section on the north embankment of the dam on the township road is provided to safely convey extreme runoff events and prevent overtopping of the dam. The spillway crest is set at elevation 974.0

County Highway 26 Water Control Structure- This structure is installed near the north quarter corner of section 31, Manston Township and consists of a concrete box with a crest length of 40 feet at elevation 970 with stop-logs up to elevation 972 and two 48” RCPs through Wilkin County Highway 26. This structure has two stop-log bays (east & west sides) extending to the bottom of the structure to allow for complete drawdown. The stop-log bays will be used to draw the wetland pool below 972.0 for water level management.

Fish Barrier – A “Carp fingers” fish barrier is installed downstream of the Manston Slough outlet on the Baumgartner Lake structure to deter invasive fish species.

Dikes- Dikes are constructed along the north, west and south sides of the project. They are constructed with a 24 foot top width and 4:1 side slopes. The dike tops are set at elevation 977.0 to provide sufficient freeboard. Borrow areas are no deeper than 3 feet with side slopes no steeper than 5:1.

An access road/fire break between Sections 5 and 6 in Township 134 North Range 46 West will be maintained for use by the USFWS during non-flood events.

B. Operation

1. General

Management of Manston Slough will attempt to maximize habitat values to benefit waterfowl and other wetland dependant wildlife.

The primary goal for Manston Slough will be to create and maintain a hemi-marsh mix of open water and emergent vegetation as well as abundant submerged aquatic vegetation for waterfowl use during the breeding season as well as during the spring and fall migrations.

The hemi-marsh stage provides abundant food resources via aquatic plants and invertebrates as well as providing concealment for territorial breeding ducks and other wetland dependent wildlife. In order to maintain a productive hemi-marsh stage the wetland must periodically dry out to allow for the recycling of nutrients, oxidation of the mud bottom and re-sprouting of both submerged and emergent aquatic plants. This can be accomplished by a draw-down of all or a portion of the wetland once every 5 to 7 years and subsequently slowly re-flooding the area over a period of 2 or 3 years.

Many wetland dependent wildlife species benefit from draw down water level management as well. When mud flats are exposed during low water levels, shorebirds actively feed on insects in the moist soils. Wading birds feed on frogs and other amphibians in these marshes as well. Shallow flooding of drawn down basins during spring and fall may make abundant moist soil plant foods from the previous growing season available to migrating waterfowl which often gather in large concentrations. Many species utilize these wetlands at varying stages of flooding because of the diversity of plants and water depths found in these managed marshes. In addition drawn-down over the winter can freeze-out invasive fish species that would otherwise degrade the wetland.

Depending upon the immediate climatic and runoff conditions it will be the goal to drawdown all or a portion of the Manston Slough once every 5-7 years.

It is recognized that climatic conditions may not allow for implementation of the ideal water management scenarios. This can include extremely high level of precipitation and resulting runoff or extremely low levels of precipitation resulting in a natural drawdown of the wetland.

It will be a goal to maintain flexibility in implementing the management plan for Manston Slough so as to take advantage of the prevailing climatic conditions.

It is also recognized that restoration of Manston Slough will provide other wetland values including water quality enhancement, ground water recharge and flood damage reduction. The topography of the watershed and downstream channel as well as design of the water management facilities are such that flood control benefits will result during periods of abnormally high runoff.

2. Normal Operation

North Water Control Structure - The west riser stoplogs will be set at 972.0 and the east riser bay stoplogs will be set at 973.75.

County Highway 26 Water Control Structure – The water control structure stoplogs will be removed and that portion of Manston Slough south of Highway 26 will fluctuate along with the portion north of Highway 26.

3. Drawdown Operation (every 5-7 years)

North Water Control Structure – During late winter or early spring the top stoplogs of the west bay will be removed from the structure with additional stoplogs being removed on a regular basis while maintaining flows at or below the capacity of the downstream channel. The stoplogs in the east bay may also be removed to accommodate additional discharge while maintaining flows below the capacity of the downstream channel. Drawdown should be completed by early July. Once the wetland is totally drawdown all stop-logs in the west bay should be removed and the wetland should remain dry through the following winter and depending on the response of aquatic plants the wetland may remain in drawdown during next growing season. The stoplogs of the east bay should be replaced although close monitoring of this bay may allow partial or complete opening to maintain the drawdown while staying within the downstream channel capacity.

The following fall or spring the wetland should be partially reflooded by installing enough stoplogs to hold the wetland half full. This half full water level should be maintained throughout the entire growing season. Once the aquatic vegetation (generally the 2nd or 3rd year after drawdown) in the wetland responds favorably to the drawdown the full compliment of stoplogs should be added to the structure. Reflooding of the wetland may vary in timing depending upon climatic conditions during drawdown and response of the aquatic vegetation.

County Highway 26 Water Control Structure – Depending upon management needs the stoplogs in this structure maybe installed to retain water in the southern portion of the wetland while the northern portion is in drawdown, it may be allowed to go into drawdown along with the northern portion or it may be kept dry while the northern portion is reflooded.

To provide additional flexibility in water management in the future further subdividing of the north and/or south pools maybe considered subject to the approval of all the project cooperators.

4. Flood Operation

During flood operations the east stoplog bay of the North Water Control structure will remain closed and the structure and spillway will operate as designed.

Flood Operation status will be determined when the outflow from the North Water Control Structure reaches the capacity of the downstream channel at which time if not already closed the east stoplog bay will be closed to its normal crest elevation of 973.75.

Management Team

The Management Team shall be made up of one individual from each agency owning or holding easements on lands within the project area as well as one member from the Buffalo-Red Watershed District. This team will meet each year in mid to late February to plan current year water management as well as any long term management. The team will also consider maintenance needs for the project facilities. Any team member may call a meeting at other times of the year should the need arise to address pressing management needs.

Modification of Plan of Operation

This plan of operation and maintenance may be modified or amended at any time by mutual consent of the cooperators.