Lessard-Sams Outdoor Heritage Council
Fiscal Year 2018 / ML 2017 Request for Funding

Date: May 26, 2016

Program or Project Title: Goose Prairie (HA06)

Funds Requested: $1,820,000

Manager's Name: Kevin Ruud
Title: Administrator
Organization: Wild Rice Watershed District
Address: 11 5th Ave E
City: Ada, MN
Office Number: 218-784-5501
Email: Kevin@wildricewatershed.org
Website: www.wildricewatershed.org

County Locations: Clay

Regions in which work will take place:

- Prairie

Activity types:

- Protect in Easement
- Enhance
- Protect in Fee

Priority resources addressed by activity:

- Wetlands
- Prairie
- Habitat

Abstract:

The Goose Prairie Marsh Enhancement Project will give resource mangers the capacity to manage water levels in Goose Prairie Marsh through installation of a water control structure and a new outlet channel from the marsh to the control structure. The primary purpose of the project is to improve habitat conditions within the shallow lake and the associated upland habitats within and adjacent to the existing WMA. Secondary benefits include additional protections of lands adjacent to the WMA and improved water quality and spring flood risk reduction downstream.

Design and scope of work:

The Goose Prairie Marsh Enhancement project is located approximately 2 miles northeast of Hitterdal, MN in Goose Prairie Township, Clay County. The marsh is part of the Goose Prairie Wildlife Management Area (WMA). Clay County Ditch 18 (CD 18) was constructed through this area in about 1915.

Water levels in Goose Prairie Marsh cannot currently be managed to improve wildlife habitat using the lake's natural outlet. Since the early 1990's the lake has been at historically high levels due to above average precipitation and constricted flow through the the historic outlet channel due to a buildup of sediment and cattails. These high water levels have resulted in substantially degraded habitat conditions in the marsh.

This request for funding includes funds for three components of the Goose Prairie Marsh Enhancement project: installation of a water control structure, realignment of the outlet channel from the marsh to the water control structure, and land acquisition adjacent to the existing WMA (Attachment 1).

1) Water control structure - A water control structure made of reinforced concrete with six, 5-foot stoplog bays will be constructed to allow water level manipulation between from 1203.6 and 1208.5 feet (NAVD 88). The water control structure will be located near the center of section 22, T141, R44 adjacent to 115th Ave N. A reinforced concrete outlet pipe will be installed to convey water leaving the structure under the road. The structure will also include a fish barrier to reduce the upstream movement of fish into Goose Prairie Marsh. A 1,900 foot segment of the township road will also be elevated in order to meet public safety standards.

2) Realignment of the existing outlet channel - The project will construct a new channel between the the Goose Prairie Marsh and the new outlet structure. The new channel will effectively convey water from the marsh to the new outlet and ensure water level management and will avoid wetland impacts and habitat loss associated with cleaning out the existing channel (CD18). The channel is needed to improve water level management and it will also provide improved recreational access to the WMA.

3) Land acquisition - The project will acquire lands adjacent to the WMA where there are willing landowners in order to increase the ratio of upland to wetland habitat and provide additional nesting habitat. Strategic land acquisition will be coordinated with DNR wildlife staff to enhance nesting habitat availability and increase riparian cover for water quality purposes. LSOHC funds will be used for permanent conservation easements or fee title acquisition.

The project also includes selective repair of CD18 immediately downstream of the proposed project features. This maintenance work is needed in order to ensure efficient conveyance of water from the project downstream. This associated work will be completed by the watershed district with local funds under provisions of 103E.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H4 Restore and protect shallow lakes
- H5 Restore land, wetlands and wetland-associated watersheds

Which other plans are addressed in this proposal:

- Long Range Duck Recovery Plan
- Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife

Describe how your program will advance the indicators identified in the plans selected:

Shallow Lakes Plan Objective 2 is: "Maximize management of shallow lakes for waterfowl and wildlife habitat that are Designated Wildlife Lakes or are located completely within public lands." This project directly meets this objective by using strategies identified in the plan: 1) Water level management including installation of permanent water control structures..., 2)Maintenance of water levels through beaver dam removal and outlet channel clean out, and 3)invasive species control (include minnows).

MN DNR's Long Range Duck Recovery Plan suggests that at least 1,800 shallow lakes would require protection and management to achieve desired targets set for the recovery of duck populations. An average of 29 lakes a year need improved protection and/or management to achieve this target. This project will also provide public benefits to those who use this area for hunting and other outdoor recreation.

Which LSOHC section priorities are addressed in this proposal:

Prairie:

- Protect, restore, and enhance shallow lakes

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

High water levels in Goose Prairie Marsh have resulted in substantially degraded habitat conditions. Once this project is complete, lake levels over the long term will be more effectively managed to improve habitat conditions which will result in increased use of the shallow lake for migratory waterfowl. The project will also improve recreational access to the lake. Enhancement of shallow lakes is an LSOHC priority.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

Goose Prairie Marsh is a shallow lake which has historically provided quality wildlife habitat. Although the marsh is located outside of a currently designated MN Prairie Plan corridor area it is part of the agricultural matrix area and is critical to a large complex of wetlands

and grasslands in this area. Approximately 1,420 acres of WMA, 5,520 acres of WPA, and 120 acres of Reinvest in Minnesota (RIM) easements are located within five miles of the Goose Prairie Marsh. This project will substantially improve habitat conditions within this degraded shallow lake to provide important open water habitats for this area.

According to Breeding Pair Accessibility Maps (Thunderstorm Maps) produced by the USFWS Habitat and Population Evaluation Team (HAPET). 41-50 pairs of upland nesting waterfowl could potentially nest in each 40 acre block around Goose Prairie Marsh. The purpose of the Thunderstorm Map is to identify priority sites for land managers to apply treatments such as grassland restorations. Goose Prairie Marsh is within the second highest priority level within the Thunderstorm Map criteria.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species:

Goose Prairie Marsh is almost entirely contained within Goose Prairie WMA. The WMA is 490 acres and consists of approximately 318 acres of wetlands and 172 acres of upland grassland and forest. Native northern dry prairie has been identified on 23.5 acres of the WMA by MN DNR Division of Ecological and Water Resources. The WMA is part of a large habitat complex in the area, there are approximately 1,420 acres of WMA, 5,520 acres of WPA, and 120 acres of Reinvest in Minnesota (RIM) easements within five miles of the WMA. This project will protect an additional 270 acres of wetland and upland habitats adjacent to the WMA.

Native plant communities in the project area include northern mesic prairie, central mesic hardwood forest, and prairie mixed cattail marsh. Key habitats in the subsection include prairie, forest-lowland deciduous, wetland-non-forest, river-headwater to large and river-very large. Goose Prairie WMA is rated a moderate biodiversity significance rating by the Minnesota Biological Survey meaning that the site contains occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery.

Less than 5% of pre-settlement wetlands remain in Clay County. Those that remain are stressed and degraded from intensive agricultural drainage, excessive sediment and nutrient loading, invasive species, and increased shoreline development pressure. Eighty-three SGCN are known or predicted to occur in the Red River Prairie subsection. Four of those 83 SGCN are unique to the Red River Prairie area. Shallow lakes and wetlands in the Red River Prairie provide habitat for 37 SGCN species.

Identify indicator species and associated quantities this habitat will typically support:

Indicator species indicated for restoration, protection, and enhancement of shallow lakes include mallards and trumpeter swans. Goose Prairie WMA contains approximately 318 acres of wetlands which have the potential to typically support 129 mallards and 2 pairs of trumpeter swans. This project will directly improve the habitat conditions within the marsh that these species depend on. Completion of this project will result in a lake which is able to maintain a clear phase state which will provide cover and food of sufficient quality to support these indicator species.

Outcomes:

Programs in prairie region:

- Protected, restored, and enhanced shallow lakes and wetlands *This project will result in improved water level management and habitat conditions throughout the Goose Prairie WMA. Success will be measured by achieving desired water levels based on a shallow lake operating plan, through improvement in water clarity and the composition of the plant community within the marsh (species richness), and increased use of the WMA by waterfowl during nesting and migration.*

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

The watershed district in cooperation with the MN DNR will be responsible for long term maintenance of this project. The watershed district is leading the land acquisition, project development, and engineering of this project. The Watershed District will complete this project using authorities granted in watershed district law (Minnesota Statutes 103D). Long term project maintenance will be authorized and funded through established watershed district construction and maintenance funds and DNR wildlife funds based on a joint powers agreement.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2017	LSOHC	Construction	Establish vegetation in areas associated with construction	Begin water level management according to operating plan
2018	Watershed District Maintenance Fund/ DNR	Maintenance of infrastructure		

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for

this work as soon as possible:

This project is ready to move forward to final engineering and construction. Environmental review is complete and all needed permits should be awaiting approvals by Fall of 2016. LSOHC funds are needed to complete final engineering and to construct the project.

How does this proposal include leverage in funds or other effort to supplement any OHF appropriation:

The Wild Rice Watershed District has invested approximately $64,000 in project development, engineering, and permitting. The MN DNR has made considerable investments in staff time to complete the Environmental Assessment Worksheet (EAW) for this project. These funds as well as additional watershed district and DNR wildlife program funds are anticipated to leverage LSOHC funds.

Relationship to other funds:

- Not Listed

Describe the relationship of the funds:

Not Listed

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
2014, 2015	Wild RIce Watershed District	64,000
2015	MN DNR staff time for EAW preparation and completion	

Activity Details

Requirements:

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056 - **Yes**

Will local government approval be sought prior to acquisition - **Yes**

Is the land you plan to acquire free of any other permanent protection - **Yes**

Is the land you plan to acquire free of any other permanent protection - **Yes**

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program - **Yes**

Is the activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 - **Yes (WMA, Public Waters)**

Do you anticipate federal funds as a match for this program - **No**

Land Use:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **No**

Is this land currently open for hunting and fishing - **Yes**

Most of the land is within an existing Wildlife Management Area. Private lands adjacent to the existing WMA are not open to public hunting.

Will the land be open for hunting and fishing after completion - **Yes**

All lands acquired in fee title with LSOHC funds for this project which are adjacent to the existing WMA will be open to public hunting and fishing.

Will the eased land be open for public use - **Yes**

All lands acquired in a conservation easement with LSOHC funds will be open to public hunting.

Are there currently trails or roads on any of the acquisitions on the parcel list - **No**

Will new trails or roads be developed as a result of the OHF acquisition - **No**

Accomplishment Timeline

Activity	Approximate Date Completed
FInal Engineering	Fall, 2017
Land Acquisition	Fall, 2017
Construction	Summer 2018

Budget Spreadsheet

Total Amount of Request: $1,820,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	$0	$0		$0
Contracts	$600,000	$40,000	Wild Rice Watershed District	$640,000
Fee Acquisition w/ PILT	$0	$0		$0
Fee Acquisition w/o PILT	$450,000	$0		$450,000
Easement Acquisition	$630,000	$0		$630,000
Easement Stewardship	$0	$0		$0
Travel	$0	$0		$0
Professional Services	$140,000	$47,000	Wild RIce Watershed District	$187,000
Direct Support Services	$0	$0		$0
DNR Land Acquisition Costs	$0	$0		$0
Capital Equipment	$0	$0		$0
Other Equipment/Tools	$0	$0		$0
Supplies/Materials	$0	$0		$0
DNR IDP	$0	$0		$0
Total	$1,820,000	$87,000	-	$1,907,000

Amount of Request:	$1,820,000
Amount of Leverage:	$87,000
Leverage as a percent of the Request:	4.78%
DSS + Personnel:	$0
As a % of the total request:	0.00%
Easement Stewardship:	$0
As a % of the Easement Acquisition:	-%

Does the amount in the contract line include R/E work?

Describe and explain leverage source and confirmation of funds:

WRWD will locally fund channel maintenance work downstream of project. DNR will provide in-kind support for land acquisition and additional funds as available.

Does this proposal have the ability to be scalable? - No

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	0	0
Protect in Fee with State PILT Liability	90	0	0	0	90
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	180	0	0	0	180
Enhance	318	24	0	148	490
Total	588	24	0	148	760

Table 1b. How many of these Prairie acres are Native Prairie?

Type	Native Prairie
Restore	0
Protect in Fee with State PILT Liability	0
Protect in Fee W/O State PILT Liability	0
Protect in Easement	0
Enhance	24
Total	24

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	$0	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$450,000	$0	$0	$0	$450,000
Protect in Easement	$630,000	$0	$0	$0	$630,000
Enhance	$740,000	$0	$0	$0	$740,000
Total	$1,820,000	$0	$0	$0	$1,820,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	90	0	90
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	180	0	180
Enhance	0	0	0	490	0	490
Total	0	0	0	760	0	760

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	$0	$0	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$450,000	$0	$450,000
Protect in Easement	$0	$0	$0	$630,000	$0	$630,000
Enhance	$0	$0	$0	$740,000	$0	$740,000
Total	$0	$0	$0	$1,820,000	$0	$1,820,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0
Protect in Easement	$3,500	$0	$0	$0
Enhance	$2,327	$0	$0	$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	$0	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$3,500	$0
Enhance	$0	$0	$0	$1,510	$0

Target Lake/Stream/River Feet or Miles

0

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Parcel List

Explain the process used to select, rank and prioritize the parcels:

In order to construct this project lands up to the maximum expected pool elevation need to be acquired through fee title or flowage easement must be acquired. The parcels on the list are priorities for acquisition because they are adjacent to the existing WMA boundary and are within the flood pool. LSOHC funds will be used to acquire lands from willing sellers of lands adjacent to the WMA. If landowners are not interested in fee title acquisition, the watershed district or DNR will acquire flowage easements with other funds in order to complete the project.

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

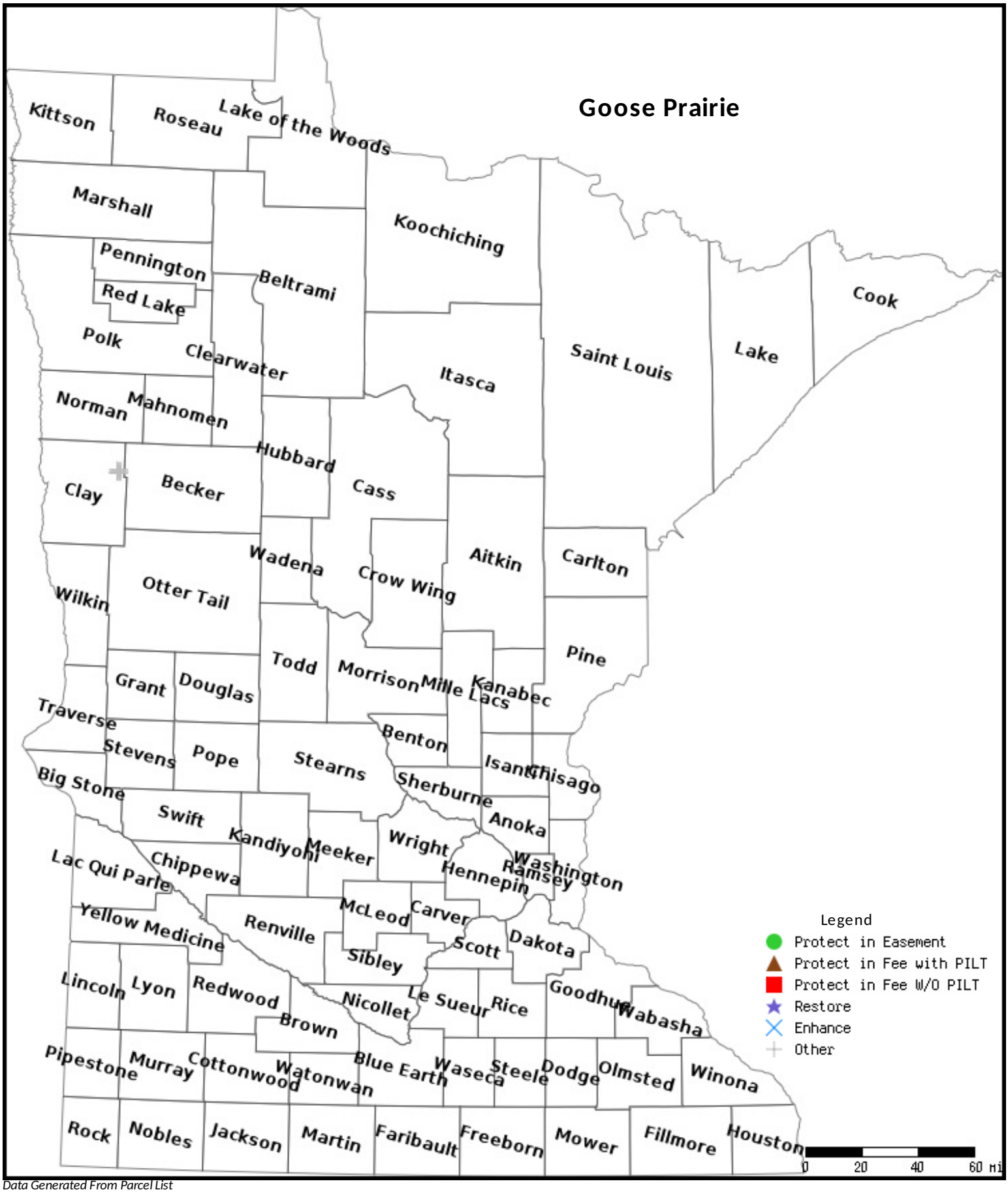
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

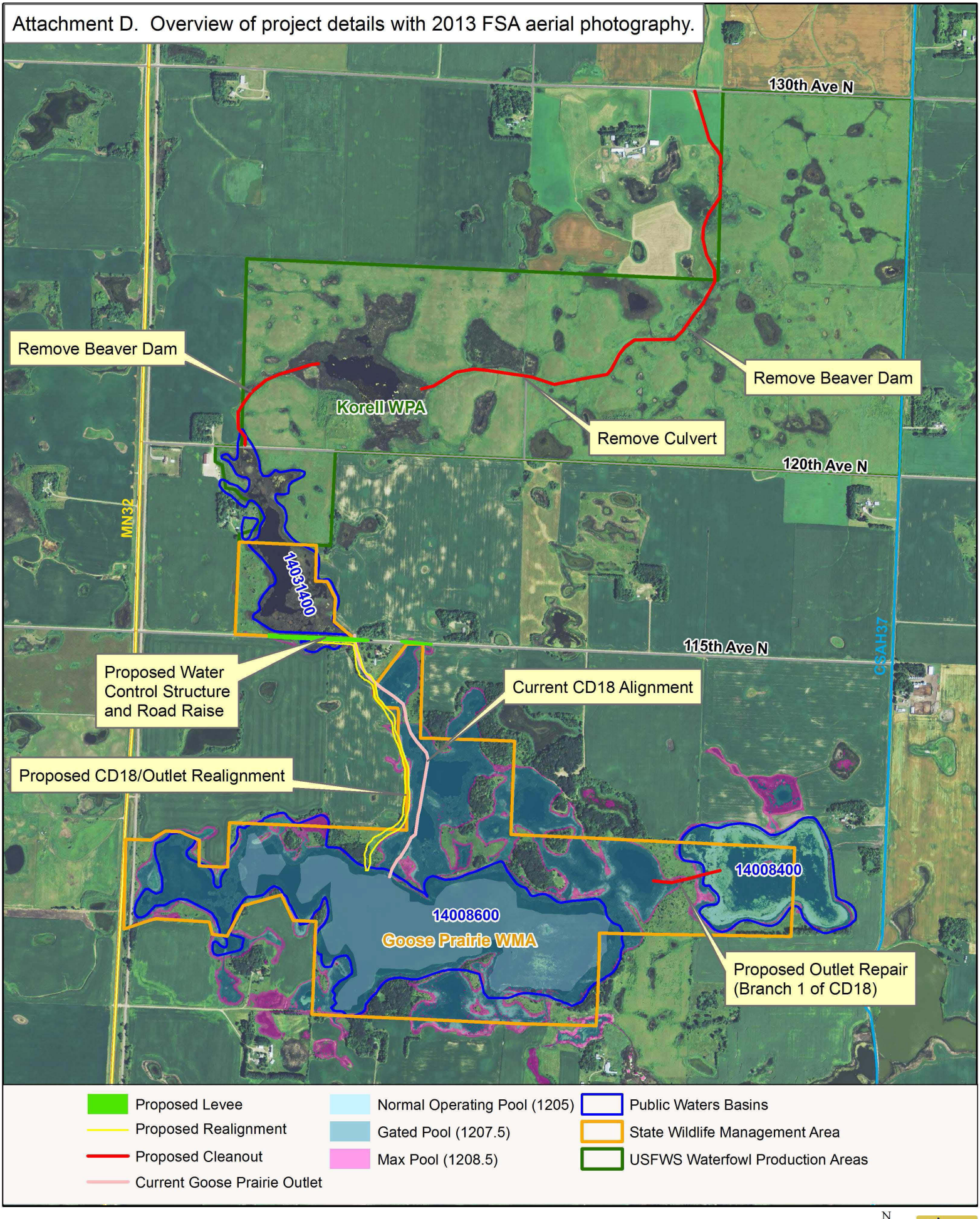
Clay

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
A BRUCE PAAKH JR., TTEE	1414426	26	$104,300	No	Full	Full
A BRUCE PAAKH JR., TTEE	1414426	27	$108,900	No	Full	Full
ANDERSON EDMUND L & COLLENE M	1414423	32	$129,800	No	Full	Full
DAHL JAMES E & KENNETH D & LE: ERVIN	1414427	28	$114,100	No	Full	Full
GERNER JOSEPH A & LAVERNE M	1414427	11	$44,600	No	Full	Full
GINGER R PETERMANN REVOCABLE LIVING TRUST	1414426	25	$100,600	No	Full	Full
GJEVRE JOHN A & MARJORIE A	1414422	9	$35,400	No	Full	Full
GJEVRE JOHN & MARJORIE	1414427	3	$13,700	No	Full	Full
HARDING LLOYD JR	1414427	8	$32,100	No	Full	Full
JACOBSON KYLE & JESSICA	1414422	28	$111,000	No	Full	Full
KJOS TODD M	1414422	3	$11,000	No	Full	Full
OLEK ROBERT J	1414427	36	$143,400	No	Full	Full
SAVIG AUDREY & DIANE BAKKE	1414423	33	$131,100	No	Full	Full

Parcel Map



Data Generated From Parcel List


Attachment D. Overview of project details with 2013 FSA aerial photography.
130th Ave N
Remove Beaver Dam
Remove Beaver Dam
Korell WPA
Remove Culvert
120th Ave N
MN32
14031400
115th Ave N
CSAH37
Proposed Water Control Structure and Road Raise
Current CD18 Alignment
Proposed CD18/Outlet Realignment
14008400
14008600
Goose Prairie WMA
Proposed Outlet Repair (Branch 1 of CD18)
Proposed Levee
Proposed Realignment
Proposed Cleanout
Current Goose Prairie Outlet
Normal Operating Pool (1205)
Gated Pool (1207.5)
Max Pool (1208.5)
Public Waters Basins
State Wildlife Management Area
USFWS Waterfowl Production Areas
0
1,250
2,500
5,000 Feet
N
MNDNR

PIN	Easement
110221000	27.68
110223000	8.82
110224201	2.74
110233000	32.35
110234000	32.68
110262400	27.15
110262401	26.01
110264000	25.09
110272001	35.74
110272200	3.42
110272401	8.01
110273100	11.11
110274000	28.45
Total	**269.25**