

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2019 / ML 2018 Request for Funding

Date: May 31, 2017



Program or Project Title: Shell Rock River Watershed Habitat Restoration Program - Phase VII

Funds Requested: \$3,034,800

Manager's Name: Andy Henschel

Title: Director of Field Operations

Organization: Shell Rock River Watershed District

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County Locations: Freeborn

Regions in which work will take place:

- Prairie

Activity types:

- Restore
- Enhance
- Protect in Fee

Priority resources addressed by activity:

- Wetlands
- Habitat

Abstract:

The Shell Rock River Watershed used to be home to thousands of acres of unaltered native prairies. What were once vast prairies and wetlands is now predominantly an agricultural landscape. The SRRWD is requesting funds to complete the Phase VII Habitat Restoration Program. Our watershed prides itself in working alongside landowners to protect, enhance, and restore wildlife habitat. This project continues our effort to return agricultural landscapes to wetland complexes, enhance stream banks, and permanently protect biological functioning parcels. The results would benefit fish, waterfowl, and wildlife populations and reverse the trend of wetland loss and habitat degradation.

Design and scope of work:

Program Goals:

In 2014 the SRRWD created a phased, \$20 million approach to restore, protect, and enhance degraded habitat conditions by implementing projects on a lake-shed basis. The Watershed Habitat Restoration Program is designed to accomplish the following objectives:

- Remove rough fish species and restore desirable fish, waterfowl and wildlife populations
- Enhance native aquatic rooted vegetation
- Increase fish habitat and spawning areas and waterfowl nesting areas
- Improve waterfowl breeding and migratory success
- Restore stream banks and increase wildlife habitat and its natural prairie
- Increase and improve community use of restored natural resources and protect the watershed from invasive species.

Our program will also interconnect and reestablish important flyway habitats within Minnesota. Once completed, the program will establish waterfowl and fish populations, increase habitat for wetland dependent wildlife, and create the wildlife mecca that was recorded in the late 1800's.

Specifically, Phase VII of the program will contribute to these goals by:

- Acquiring 88 acres of key targeted lands to reestablish native vegetation, protect land along the Shell Rock River, and improve nesting habitat and waterfowl food sources.
- Restoring 185 acres of agricultural land into wetland basins to improve upland game and waterfowl nesting habitat.
- Enhancing 15 acres of the Shell Rock River to improve instream habitat and vegetation management creating more productive, self-sustaining fisheries.

The program includes projects that are prioritized on the significance of the benefits to aquatic habitat, urgency of the work, availability of leverage funds, location of projects and agreements with relevant planning documents. The SRRWD has a proven track record with the LSOHC and implementing projects that protect, restore and enhance natural resources. The SRRWD continues to receive strong support for these projects from landowners, local governments and sporting organizations. This proposal uses a programmatic approach to achieve prioritized habitat protection, restoration, and enhancement of lakes, wetlands and streams across the Watershed to once again create the wildlife mecca. Finally, this program will preserve an outdoor legacy for Minnesotans to use and enjoy for generations.

Background:

The Shell Rock River Watershed District (SRRWD) covers 246 square miles inside Freeborn County and includes a complex system of wetlands, streams, and shallow lakes that drain into the Shell Rock River. Managing habitat for this complex system is imperative to the SRRWD as well as understanding its role for providing critical habitat for fish, waterfowl and wildlife. Habitat degradation of wetlands, streams, and shallow lakes is an issue of statewide importance that requires accelerated investment in projects to reverse this degradation. Protection and restoration of this critical habitat is the highest priority in the SRRWD and is directly affected by invasive aquatic vegetation, land use changes, increased water demands, populations of invasive fish species such as common carp, and artificial drainage. Degradation in habitat is influencing available food sources for game fish populations that include Northern Pike, Bluegill, Yellow Perch and Walleye, and duck populations that include Northern Pintail, Redhead, Canvasback and Lesser Scaup.

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

- H2 Protect critical shoreland of streams and lakes
- H5 Restore land, wetlands and wetland-associated watersheds

Which other plans are addressed in this proposal:

- Long Range Plan for Fisheries Management
- North American Waterfowl Management Plan

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

The Habitat Restoration Program accelerates the efforts of the Conservation and Preservation Plan, H2, with the acquisition of critical shoreland habitat to protect from degradation, assure public access for fishing and natural resource management. The Habitat Restoration Program also fits in the Long Range Plan for Fisheries Management by accelerating the core function of conserving, maintaining, or rehabilitating Minnesota's aquatic resources to serve environmental purposes with lakeshore land acquisitions and stream bank restorations.

The Habitat Restoration Program advances H5 by investing in prioritized wetlands that have been drained and converted back into wetland complexes to improve breeding success and migratory habitat. This will also reverse the trend of wetland loss in the state. The multiple wetland restorations also follow Goal 2 in the North American Waterfowl Management Plan for increasing wetland habitat sufficient to sustain waterfowl population levels.

Which LSOHC section priorities are addressed in this proposal:

Prairie:

- Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes

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:

Minnesota's prairie, shallow lake and wetland ecosystems are vital components to a productive landscape for species of wildlife including waterfowl, furbearers, reptiles, amphibians and fish. The Habitat Restoration Program aligns with the LSOHC priority to protect, enhance, and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success by proposing projects that will improve waterfowl feeding and nesting habitat. Four key targeted habitat acquisitions comprising of 88

acres will be protected to provide long term habitat.

It is imperative to recognize the loss of small wetlands and native prairie in the prairie region of Minnesota. The SRRWD is proposing to reverse wetland loss by turning agricultural land into wetlands to provide habitat and food sources for migratory birds. Creating these wetlands provides habitat for both spring and fall migration of waterfowl, overall increase the use days by migratory birds, and provides nesting habitat. Phase VII plans to convert 185 acres of agricultural lands to wetland habitat complexes.

The Shell Rock River stream bank restoration demonstrates a permanent conservation legacy by restoring habitat on public lands, increasing public access to fishing, improving native fish reproduction and provides protection from long term endangerment from invasive plant species by incorporating vegetation management.

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:

The SRRWD utilizes precision conservation modeling with monitoring to identify Property Management Zones (PMZs) on a sub-watershed basis. The PMZs are prioritized, evaluated conservation measures and project locations chosen to mitigate specific areas contributing to degradation of habitat which reduces populations of aquatic vegetation, fish, waterfowl and wildlife within the lake-shed.

Historically the Shell Rock River Watershed is a shallow lake system with diverse populations of fish, waterfowl and wildlife. With degraded habitat becoming a concern, and more areas listed as below biodiversity significance in the Freeborn County Biological Survey (MCBS), the District has ongoing efforts with identifying key PMZs to implement projects that expands habitat corridors and protects areas identified by the MCBS.

Two of the land acquisitions and the streambank restoration are all connected and bordering areas identified on the MCBS. Projects such as these are important to expanding corridors and reaching the targeted nine square mile parcels. Additional projects include the Larson Parcel that is contained within a moderate biodiversity significant area of Goose Lake in which the District plans to further enhance. One of the wetland restorations is adjacent to sites identified on the MCBS. Implementing site specific habitat restorations projects, in line with areas identified in the MCBS, are progressively improving populations of native fish, waterfowl and wildlife habitat.

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:

The SRRWD understands that when critical habitats are lost due to land use changes and other factors, restoring the habitat is imperative to the protection of species and their ecological processes. Important species are disappearing at an alarming rate and the SRRWD has the opportunity to protect wetland habitats and the species that call it home.

Using the Minnesota Department of Natural Resources tool for species in greatest conservation need by habitat, the SRRWD has identified species of importance for the Oak Savanna landscape. Those species include the Marsh Wren and Common Moorhen for birds, mussels such as Sheepnose and Round Pigtoe, and amphibians including the Blanding's turtle.

The Common Moorhen is listed as special concern in the Oak Savanna habitat and can be attributed to the loss of well-vegetated ponds and wetlands. With projects proposed by Phase VII, wetland creation and vegetation enhancement can provide restored habitat for both the Common Moorhen and March Wren. Blanding's turtles are listed as being a threatened species and creating stream bank restorations that include habitats such like turtle hibernaculum's and restoring wetland with marshy areas will provide habitat for this threatened species.

One of the fastest declining populations in Minnesota has been the loss of native mussels. The freshwater mussel is threatened by a multitude of sources including dams and stream channelization, wetland drainage, bank erosion, invasive mussels and water pollution. The District is focused on improving habitat and water quality conditions, as well as providing habitat with in-stream features that will improve that quality of habitat for threatened Round Pigtoe, and endangered Sheepnose mussels.

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

The Upper Mississippi River and Great Lakes Region Joint Venture (UMRGLRV) states for Mallard breeding habitat requirements at least a minimum of one hectare (2.47 acres) is required for each breeding pair. Optimal habitat includes a complex of shallow herbaceous wetland and grasslands. Phase VII is proposing 185 acres of shallow wetland restorations that could provide new habitat niches for over 70 nesting pairs. Additional wetland or marsh conditions could provide an additional 600 use days for Pintail and other waterfowl.

The UMRGLRV states for Wood Ducks the accepted rate of 0.5 hectares (1.23 acres) is required per nesting pair. The wooded Pickerel Lake Island targeted acquisition can increase 5 nesting pairs of Wood Ducks.

The 15 acres stream bank restoration located on the Shell Rock River will provide an additional breeding pair of river otters and increase the overall biomass of fish and amphibians that can be supported. The key targeted property acquisitions will also support a variety of species including the threatened Blanding's turtle and Round Pigtoe mussel by providing protected shoreline and stream bank habitat.

Outcomes:

Programs in prairie region:

- Protected, restored, and enhanced habitat for migratory and unique Minnesota species will be measured by the increase of use days for migrating waterfowl and improved habitat acres for unique species. The protected, restored and enhanced shallow lakes, wetlands, and stream banks will provide habitat to wildlife and support healthy natural resource conditions for long term benefits. They will offer an oasis for migratory waterfowl by reestablished and connecting MCBS corridors, and flyway habitats. Improved and permanently protected areas will provide a lasting habitat for Minnesota's unique species.

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

The Shell Rock River Watershed District is authorized by state statute 103D and operates under a series of 10 year water management plans that are approved by the Minnesota Board of Soil and Water Resources (BWSR). The District recently updated its second generation water management plan that was approved by BWSR in 2015. This second generation plan includes a top to bottom comprehensive list detailing natural resource restoration, management, enhancement and protection strategies.

The SRRWD relies on multiple funding sources including a citizen driven local option sales tax, local levy, and multiple public and private funding sources including previously LSOHC phased project to assist in the District's restoration efforts. The District has an aggressive monitoring protocol that generates yearly data used for extensive reporting. The habitat efforts that accrue from the Phase VII Restoration Program will be easily incorporated into this existing results-driven reporting framework. This reporting can be used to generate public interest and education of a watershed based restoration approach. The District has commitment and funding sources necessary to maintain existing and future natural resource enhancement projects.

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

Year	Source of Funds	Step 1	Step 2	Step 3
2021	Sales Tax and LSOHC	Construction and Erosion Control Inspections	Erosion Control and Maintenance Inspections and Maintenance Implementations	Maintenance Inspections and Maintenance Implementations
2022	Sales Tax and LSOHC	Construction and Erosion Control Inspections	Erosion Control and Maintenance Inspections and Maintenance Implementations	Maintenance Inspections and Maintenance Implementation
2023	Sales Tax	Maintenance Inspections and Maintenance Implementations		Maintenance Inspections and Maintenance Implementations

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible:

With the extent of wetland and prairie loss in Minnesota, restoration efforts are an issue that need immediate attention. Degraded habitat and impairments remain in the SRRWD that require action to restore and enhance native habitat for many species. Science and resource based planning have been utilized to strategically select projects that will advance restoration goals specified in our Habitat Restoration Program.

LSOHC funds accelerate ongoing conservation efforts by increasing the number of successful projects the District is able to complete each year in the watershed. Projects selected in the program contribute to the success of long-term management plans, enhance growth of aquatic plants, reduce populations of undesirable fish, increase of native fish communities, improve waterfowl nesting and breeding success and provide habitat for fish, waterfowl, and wildlife.

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

The Habitat Restoration Program, Phase VII, builds and expands upon previous LSOHC funding including the Wedge Creek, White Lake and Fountain Lake Fish Barriers (2009-10); Shell Rock River Headwaters Project (2011-12); Albert Lea Lake Dam and Fish Barrier (2013-14); Goose Creek Fish Barrier (CPL Grant) (2013-14); Shell Rock River Headwaters Restoration, Phase II (CPL Grant) (2014-15); Shell Rock River Watershed Habitat Restoration Program, Phase IV (2015-16); the Habitat Restoration Program, Phase V (2016-17); and the Habitat

Restoration Program, Phase VI (2017-18). The LSOHC funded projects consolidates previous SRRWD projects including the Fish Barrier Program, Stream Bank Restoration Program, the ISTS Program, and the Wetland Restoration Program.

The District has a proven record of leveraging local funds into successful projects in a timely manner. The District will also leverage its experience to ensure optimum project design and implementation, resulting in rapid habitat restoration and enhancement benefits. In turn, implementation of these projects will provide long-term protection of the SRRWD's shallow lakes, wetlands and streams. Projects that are implemented are focused on recovery of impaired resources on a watershed basis that provide measurable and lasting results.

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
2012	Local Tax Levy -25% Grant Match	180,000
2013	Local Tax Levy -25% Grant Match	230,000
2014	Local Tax Levy -25% Grant Match	804,750
2015	Local Tax Levy -25% Grant Match	200,000
2016	Local Tax Levy -25% Grant Match	750,000

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

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

The Shell Rock River is open to state fishing regulations. The wetland restorations and land acquisitions are currently not open to hunting and fishing.

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

Will follow the State of Minnesota fishing and hunting laws.

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

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

Accomplishment Timeline

Activity	Approximate Date Completed
Begin project planning, design, permitting work and acquisitions	July 2018
Begin projects during the 2019 construction season following completion of design, permits and contracting	2019 Construction Season to 2020
Complete all restoration and habitat improvement projects and finalize acquisitions	End of 2020 Construction Season
Vegetation enhancement on restoration projects	June 2021
Maintenance and monitoring of all restoration and habitat improvement projects	Ongoing

Budget Spreadsheet

Total Amount of Request: \$3,034,800

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$45,000	\$0		\$45,000
Contracts	\$1,223,100	\$0		\$1,223,100
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$979,300	\$0		\$979,300
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$391,100	\$200,000	Local Option Sales Tax	\$591,100
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$20,000	\$0		\$20,000
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$376,300	\$0		\$376,300
DNR IDP	\$0	\$0		\$0
Total	\$3,034,800	\$200,000		\$3,234,800

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Program Manager	0.43	1.00	\$25,000	\$0		\$25,000
Program Assistant	0.30	1.00	\$20,000	\$0		\$20,000
Total	0.73	2.00	\$45,000	\$0		\$45,000

Amount of Request: \$3,034,800

Amount of Leverage: \$200,000

Leverage as a percent of the Request: 6.59%

DSS + Personnel: \$45,000

As a % of the total request: 1.48%

Easement Stewardship: \$0

As a % of the Easement Acquisition: -%

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

Yes, all of the work in the contract line is centered on restoration and enhancement projects.

Describe and explain leverage source and confirmation of funds:

The SRRWD is an agency that has a local option sales tax in place that will be used to leverage funds.

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the "economy of scale" and how outputs would change with reduced funding, if applicable:

Yes, Phase VII has scalable projects, however a reduction in funds would lead to a decrease in potential projects that the SRRWD could complete.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	185	0	0	0	185
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	88	88
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	15	15
Total	185	0	0	103	288

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$1,281,700	\$0	\$0	\$0	\$1,281,700
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$1,123,100	\$1,123,100
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$630,000	\$630,000
Total	\$1,281,700	\$0	\$0	\$1,753,100	\$3,034,800

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	185	0	185
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	88	0	88
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	15	0	15
Total	0	0	0	288	0	288

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$0	\$1,281,700	\$0	\$1,281,700
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$1,123,100	\$0	\$1,123,100
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$630,000	\$0	\$630,000
Total	\$0	\$0	\$0	\$3,034,800	\$0	\$3,034,800

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$6,928	\$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	\$12,763
Protect in Easement	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$42,000

Table 6. Average Cost per Acre by Ecological Section

Type	Metro /Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$6,928	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$12,763	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$42,000	\$0

Target Lake/Stream/River Feet or Miles

18,004 Feet

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:

Parcels are selected using the Property Management Zones (PMZs). The PMZs are identified using precision conservation modeling, along with monitoring, and science based targeting. Parcels are then prioritized and ranked based on the degree of habitat degradation, restoration potential, and landowner interest and support.

Section 1 - Restore / Enhance Parcel List

Freeborn

Name	TRDS	Acres	Est Cost	Existing Protection?
Pickerel Lake Subwatershed Wetland Restoration	10222221	85	\$469,200	No
Shell Rock River Streambank Restoration	10120231	15	\$615,000	Yes
Wedge Creek Wetland Restoration	10322216	60	\$371,300	No
Wedge Creek Wetland Restoration	10322234	40	\$426,300	No

Section 2 - Protect Parcel List

Freeborn

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Dakin Property	10120231	24	\$295,800	No	Full	Full
Houg Property	10120231	37	\$456,000	No	Full	Full
Leland Property	10221203	21	\$266,200	No	No	No
Pickerel Lake Island	10221219	6	\$70,000	No	Full	Full

Section 2a - Protect Parcel with Bldgs

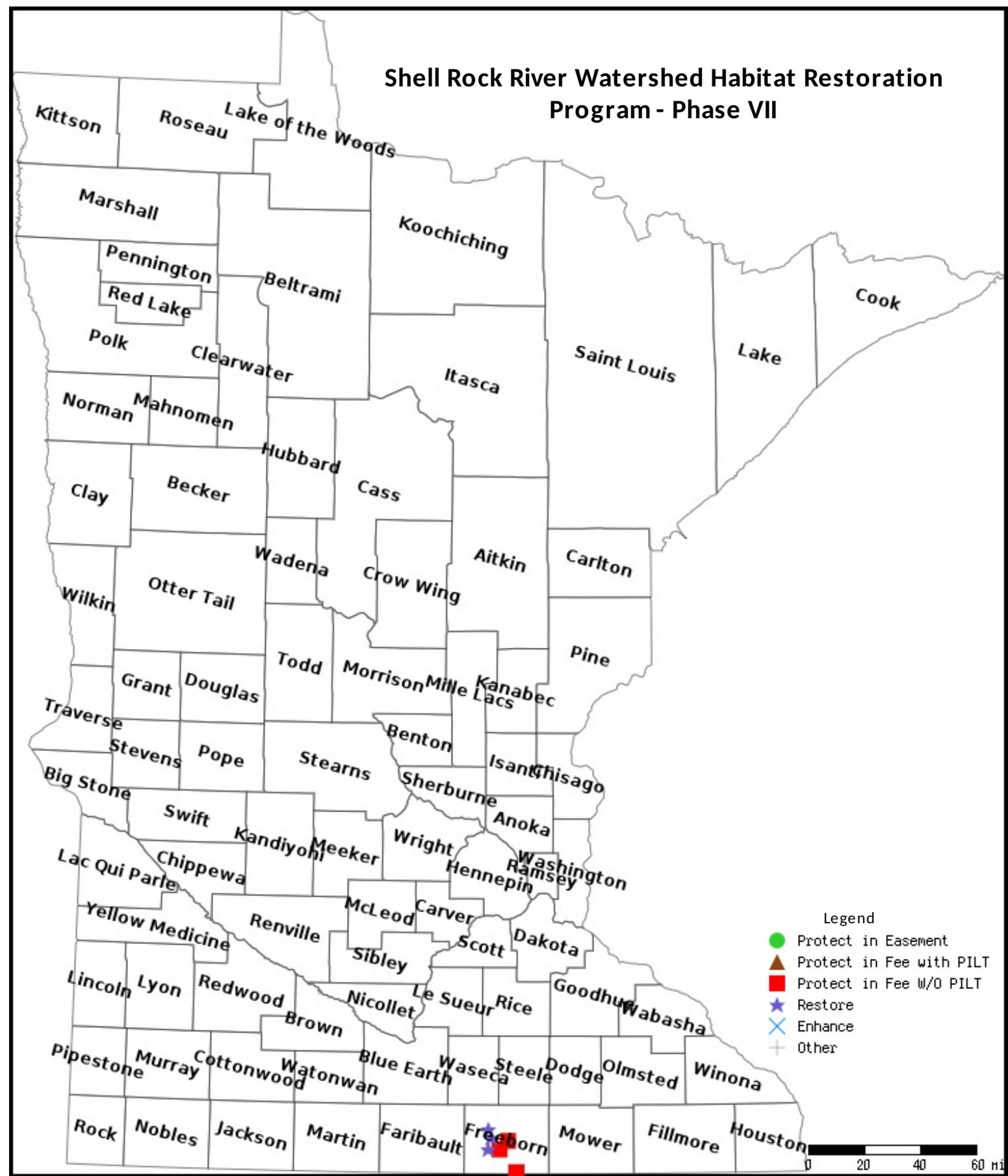
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

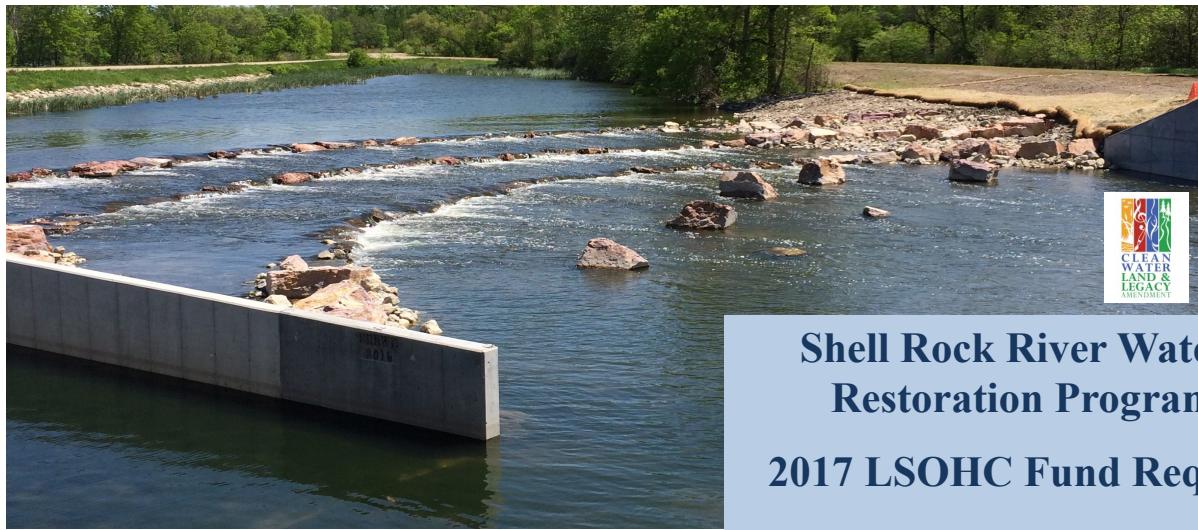
No parcels with an other activity type.

Parcel Map

Shell Rock River Watershed Habitat Restoration Program - Phase VII



Data Generated From Parcel List



Pictured Left: Previously LSOHC Funded Albert Lea Lake Dam and Fish Barrier.



Shell Rock River Watershed Habitat Restoration Program - Phase VII

2017 LSOHC Fund Request: \$3,034,800

About the Watershed Habitat Restoration Program

The District's Phase VII Habitat Restoration Program will restore, enhance and protect 288 acres of essential shallow lake, wetland and streambank habitat across the watershed. Projects will turn agricultural landscapes into wetland complexes, streambanks will be enhanced, and key biological functioning parcels will be permanently protected. Projects in Phase VII are critical for the benefit of fish, waterfowl and wildlife populations, reversing the trend of wetland loss and habitat degradation.

The SRRWD Habitat Restoration Program is a phased, \$20 million watershed-wide effort to restore, protect and enhance degraded habitat conditions through implementation of projects on a lake-shed basis. This Phase VII proposal is the latest effort that builds on and complements previously funded LSOHC Projects, including Phase IV, V and VI of the Habitat Restoration Program, along with the Albert Lea Lake Dam and Fish Barrier Project.

Restore

- Restore 185 acres of agricultural land into wetland basins to improve upland game and waterfowl nesting habitat

Protect

- Acquire 88 acres of key targeted lands to reestablish native vegetation, improve nesting habitat and waterfowl food sources

Project Highlights

Enhance

- Enhance 15 acres of instream and streambank within the Shell Rock River to improve habitat and vegetation management



Pictured Above: A portion of the Shell Rock River Watershed District that is included in the Phase VII proposal for invasive plant species removal, instream and streambank habitat restoration, and native plant establishment. Note the cut bank.

Shell Rock River Watershed Habitat Restoration Program - Phase VII

2017 Lessard-Sams Outdoor Heritage Fund Request: \$3,034,800



SRRWD LSOHC Timeline

- 2009-2010:** The SRRWD received a grant from the LSOHC to install fish barriers at Wedge Creek, White Lake, and Fountain Lake. The fish barriers will prevent migration of rough fish upstream of Fountain Lake to spawn.
- 2012:** The SRRWD purchased a 257 acre parcel surrounding the headwaters to the Shell Rock River with funds awarded from LSOHC. This land acquisition was a key step in replacing the Albert Lea Lake Dam and Fish Barrier.
- 2014-2015:** With roughly \$1.8 million in LSOHC funds, the District was able to replace the Albert Lea Lake Dam that includes an electric fish barrier and drawdown structure. This project allows for vegetation enhancement in Albert Lea Lake and protects the District's chain of lakes against aquatic invasive species.
- 2014-2015:** In 2015, the SRRWD received LSOHC funding for Phase IV of the Habitat Restoration Program. Four main projects will be completed including: Wedge Creek Reach #6, Upper Twin Pumping Station, Upper and Lower Twin Fish Barrier, and Pickerel Lake Adjustable Outlet.
- 2015-2016:** In 2016, the SRRWD received LSOHC funding for Phase V of the Habitat Restoration Program. The \$1.2 million will be used for projects including wetland restorations, vegetative restorations, and key targeted land acquisitions.
- 2016-2017:** The SRRWD is expected to receive \$1.7 million for Phase VI of the Habitat Restoration Program for habitat improving projects.

Benefits

The Watershed Habitat Restoration Program will restore desirable fish, waterfowl and wildlife populations, enhance native aquatic root vegetation, increase fish habitat and spawning areas, waterfowl nesting areas, Improve waterfowl breeding and migratory success, restore stream-banks, and protect the watershed from invasive species.

Key Targeted Habitat Acquisition for Phase VII



LSOHC Director Mark Johnson at the Albert Lea Lake Dam and Fish Barrier Ribbon Cutting Ceremony





Habitat Restoration Program Project Locations

Legend

Shell Rock River

Habitat Restoration Projects

Phase

4

5

6

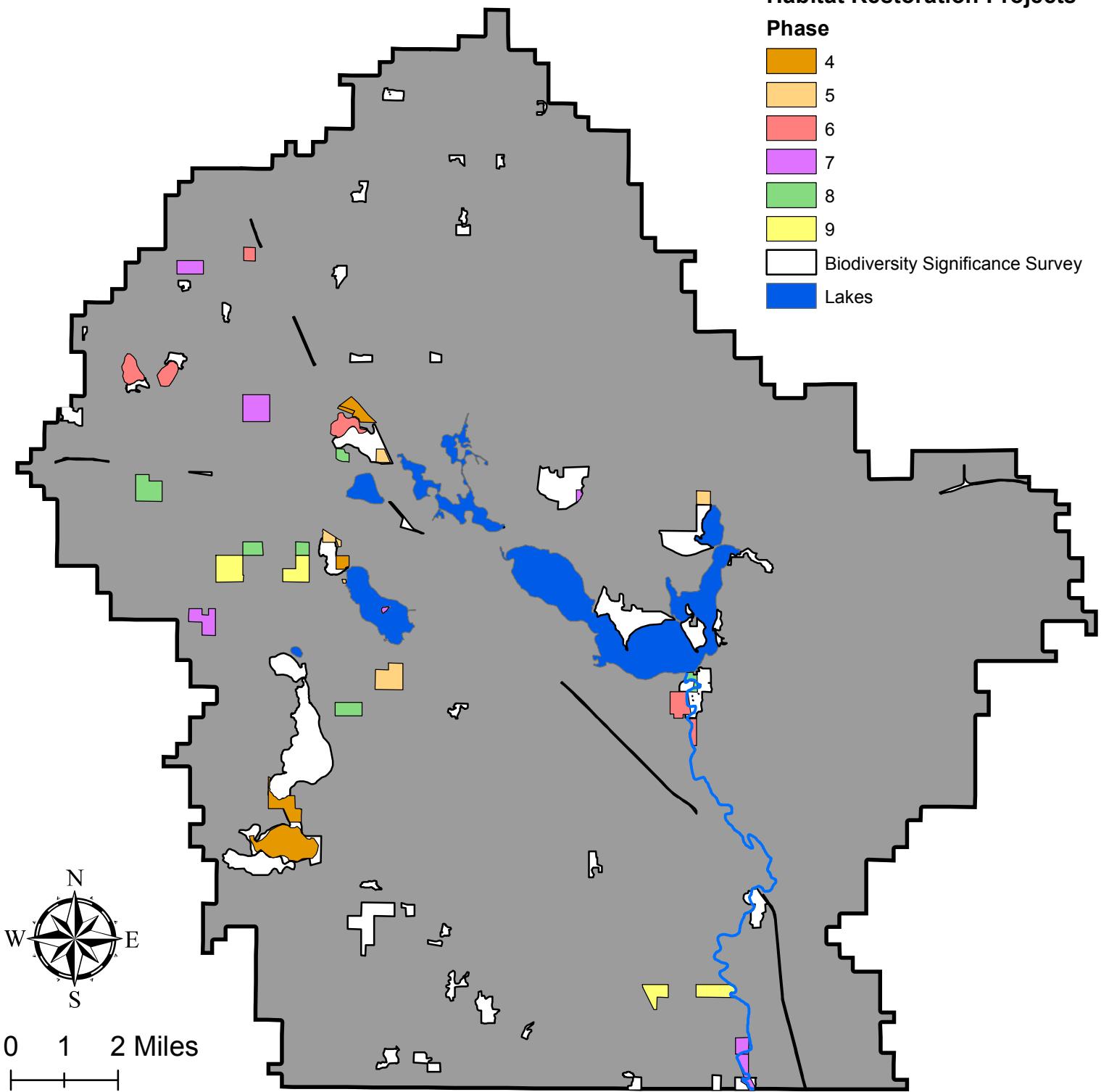
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Biodiversity Significance Survey

Lakes



L-SOHC Grant

Shell Rock River Watershed Habitat Restoration Program

Project List

Project Title	Description	Est. Cost	Type of Project	Water Plan	Plan Priority Connection	Subwatershed Number	Section, Twshp, Range	Acres	Parcel
Pickerel Lake-Adjustable outlet	Install adjustable outlet on Pickerel Lake to enhance lake habit thru periodic draw-downs	\$ 615,250	Restore	TMDL	4.0 Pickerel Lake Table 4-3, Page 15, PL-11, description pg. 21	49016	T102 R22 S13	620	99130010
Upper and Lower Twin Lake Fish Barrier and Reclamation	Maintain and enhance existing game fish population and improve waterfowl habitat	\$ 743,750	Enhance	Watershed District	Appendix B, Project Goal 6, Objective 2, Implementation Action 1	49011	T101 R22 S12	464	339200010
Upper Twin Water Level Control Station	To assist in drawdown of Upper Twin Lake to re-establish native vegetation and improve waterfowl habitat	\$ 397,500	Enhance	Watershed District	Appendix B, Project Goal 6, Objective 1, Implementation Action 1	49011	T101 R22 S02	213	49020010
Wedge Creek Reach #6 Wetland	Establishment of a wetland basin to improve waterfowl habitat	\$ 243,570	Enhance	TMDL	Page 46, Table 6-3, BMP FLWB-09, Water quality project near Wedge Creek outlets.	49013	T103 R22 S36	16	140360020
Wedge Creek Restoration Reach #6	Install BMP's for improvement of in stream spawning and over-wintering habitat of native fish species	\$ 450,800	Restore	TMDL	Page 46, Table 6-3, BMP FLWB-09, Water quality project near Wedge Creek outlets.	49013	T103 R22 S36	150	140360020
Wedge Creek Reach #1 Vegetative Restoration	Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 72,450	Enhance	Watershed District	Appendix E, Objective 2, Implementation Action 2	49013	T102 R21 S6	181	80060070
Pickerel Lake Site #12 Channel/Wetland Restoration	Establishment of a wetland basin to improve waterfowl habitat and Northern Pike spawning	\$ 40,250	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S13	587	90505030
Targeted Habitat Acquisition; Owens Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 400,000	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49016	T102 R21 S30	40	80360020
Albert Lea Lake - Unnamed Creek - Wetland restoration	Establishment of a wetland basin to improve waterfowl habitat	\$ 201,250	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49003	T102 R20 S06	202	70060030
Targeted Habitat Acquisition; Mud Lake Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 332,775	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49016	T102 R22 S12	27	90120130
Targeted Habitat Acquisition; Remakel Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 87,815	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49016	T102 R22 S12	7	90120050
School Section, Halls, and Sugar Lakes Fish Community Reclamation	Rotenone treatment of School Section Lake to kill the rough fish and reestablish native aquatic vegetation	\$ 327,750	Enhance	TMDL	6.0 Fountain Lake, Table 6-3, pg. 43, FLWB-20, description pg. 53	49013	T103 R22 S36	266	-
Targeted Habitat Acquisition; Olson Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 406,725	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49007	T102 R21 S36	33	80360020
Headwaters Stream Bank Habitat Restoration	Restoration of habitat along the headwater property to improve wildlife habitat	\$ 775,625	Restore	Watershed District	Appendix E, Goal 2, Objective 3. Implementation Action 2	49007	T102 R21 S25	25	80250021
Wedge Creek Wetland Restoration in T103 R22 S15	Establishment of a wetland basin to improve waterfowl habitat	\$ 225,625	Restore	TMDL	6.0 Fountain Lake, Table 6-3, pg 44, FLWB-15 description pg. 51	49014	T103 R22 S15	35	140150100
Targeted Habitat Acquisition; Houg Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 456,025	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49009	T101 R20 S31	37	20310020
Shell Rock River Streambank Restoration	Restoration of habitat along the headwater property to improve wildlife habitat	\$ 615,000	Enhance	Watershed District	Appendix E, Goal 2, Objective 3. Implementation Action 2	49009	T101 R20 S31	15	29310030
Targeted Habitat Acquisition; Leland Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 266,220	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49012	T102 R21 S03	21	342110040
Targeted Habitat Acquisition; Pickerel Lake Island	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 70,000	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49016	T102 R21 S19	6	80190070
Wedge Creek Wetland Restoration in T103 R22 S16	Establishment of a wetland basin to improve waterfowl habitat	\$ 371,250	Restore	TMDL	6.0 Fountain Lake, Table 6-3, pg 44, FLWB-14 description pg. 51	49014	T103 R22 S16	60	140160030

Targeted Habitat Acquisition; Dakin Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 295,800	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49009	T101 R20 S31	24	20310010
Pickerel Lake Subwatershed Wetland Restoration and Habitat Improvement	Restoration of wetland site in Pickerel Lake Subwatershed to improve wildlife habitat	\$ 469,200	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S21	85	90210010
Wedge Creek Wetland Restoration in T103 R22 S34	Establishment of a wetland basin to improve waterfowl habitat	\$ 426,250	Restore	TMDL	6.0 Fountain Lake, Table 6-3, pg 44, FLWB-13 description pg. 51	49015	T103 R22 S34	40	140340010
Pickerel Lake Subwatershed Wetland Restoration and Habitat Improvement	Restoration of wetland site in Pickerel Lake Subwatershed to improve wildlife habitat	\$ 51,750	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S11	8	90110100
Targeted Habitat Acquisition; Petersen School Section Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 320,450	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49003	T103 R22 S36	32	90010110
Targeted Habitat Acquisition; Palmer Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 332,775	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49007	T102 R21 S25	27	80250040
Wedge Creek Wetland Restoration in T102 R22 S5	Establishment of a wetland basin to improve waterfowl habitat	\$ 433,750	Restore	TMDL	6.0 Fountain Lake, Table 6-3, pg 43, FLWB-12 description pg. 50	49014	T102 R22 S5	21	90050060
Pickerel Lake Subwatershed Wetland Restoration and Habitat Improvement	Restoration of wetland site in Pickerel Lake Subwatershed to improve wildlife habitat	\$ 331,200	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S10	60	90100100
Pickerel Lake Subwatershed Wetland Restoration and Habitat Improvement	Restoration of wetland site in Pickerel Lake Subwatershed to improve wildlife habitat	\$ 1,656,000	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S25	300	90250010
Pickerel Lake Subwatershed Wetland Restoration and Habitat Improvement	Restoration of wetland site in Pickerel Lake Subwatershed to improve wildlife habitat	\$ 58,650	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S15	11	90150080
Pickerel Lake Subwatershed Wetland Restoration and Habitat Improvement	Restoration of wetland site in Pickerel Lake Subwatershed to improve wildlife habitat	\$ 193,200	Restore	Watershed District	Appendix B, Goal 2, Objective 3.1, Upper Watershed treatments to enhance and sustain improvements in the lake environment.	49016	T102 R22 S14	35	90140010
Targeted Habitat Acquisition; Lang Property	Protect and Reestablish native vegetation to improve upland game and waterfowl nesting habitat	\$ 455,400	Protect	Watershed District	Appendix B, Goal 2, Objective 3.2, Preservation and enhancement of shoreland and riparian zones around lakes and along water courses in the watershed.	49017	T 101 R21 S25	207	30250030
Fountain Lake Variable Crest Dam	Install adjustable outlet on Fountain Lake to enhance lake habit.	\$ 2,978,500	Enhance	Watershed District	Appendix B, Goal 5, Objective 4.1, Variable crest dam.	49003	T102 R21 S09	550	347870020

Color Coding for Project Phases:

Phase 4	
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here to pass a week or a month; and the angling and shooting leave nothing to be desired. Some take quarters at the hotels, some live in cottages, and others camp out, where the conventionalities of society may be measurably ignored, and communion with nature enjoyed without restraint. The people of Albert Lea should make a specialty of entertaining summer visitors, and transform the whole city into a rural boarding house community, where homelike fare and favor could be obtained without the starched formalities of hotel life at the summer resorts.

Around the lake there is a drive, but if the public-spirited citizens would make a boulevard around the entire lake, close to the shore, following the contour of its winding banks, it would be the finest drive between Long Branch and the Golden Gate.

Poets have sung of many beautiful spots, and painters pictured charming scenes, and here are scenes for both.

Below we copy an article published in the "Turf, Field and Farm" of New York, under date of May 22d, 1874:

"Albert Lea, a beautiful lake about thirteen miles in length and varying in width from a quarter of a mile to three miles, and situated in Freeborn county, Minnesota, is an attractive body of water to the sportsman. A gentleman, whose name is known to the whole country, and who is a thorough sportsman, writes us some interesting facts from that neighborhood. The elevation being great, the air is pure and the climate healthy. People seldom die there. A few years ago the lake was stocked with fish, but we are told that the 'Vandals who follow murder for a living, having no perception or appreciation of sport, have nearly drained it.' In the winter a hole is cut in the ice, and the fish are speared with a pitchfork and hauled away by the wagon-load. From five to twenty-five tons of pickerel have been taken out of the lake each winter for several years. It is gratifying to learn that the sportsmen of the State have been successful in the effort to have the Legislature pass a stringent law for the preservation of fish and game, and also that they are determined to see the law enforced. In the fall of the year ducks and geese visit Albert Lea in myriads, and it is said that no place on the continent affords better sport. Sandhill cranes cover the prairie and grain fields, and snipe, plo-

ver, and curlew are, to use an expressive phrase, 'as thick as flies in a country tavern,' and prairie chickens are without number. All this will sound most eloquent to the ear of the sportsman, and doubtless he will dream fond dreams of Albert Lea when he reads this paragraph."

In driving about the various lakes and natural parks, constant surprises are in waiting for those who appreciate nature in her quiet moods. One of the highest authorities as to sporting grounds is the above mentioned journal, and in connection with other pleasant things said about Albert Lea a few years ago, we cull the following:

"Col. S. A. Hatch has returned to the city from his shooting-box on the romantic shores of the lake at Albert Lea, Minnesota. He reports that the duck and geese shooting was never better than this fall. Quite a party of gentlemen from New York gathered at Albert Lea in the last days of September, and remained until the lakes closed on the 29th of October. The majority of them were Wall street magnates, who had shot ducks in various parts of the country, not excepting Maryland and Virginia and the Carolina coast. After a thorough experience they were unanimous in expressing the opinion that they never saw ducks in greater abundance, and of such delicate flavor, as in the bracing altitudes of Minnesota. They voted Albert Lea the center of the sportsman's paradise. It is just far enough removed from the great hatching district, to become the first feeding-ground of the full-grown birds. And the food is so abundant and of such fine quality, that the ducks fairly burst with fatness when stopped short in their flight by a charge of number sixes. Very large bags of canvas backs, mallards, red heads, and teal, were made every day by each member of the party. The goose shooting was also superb in October. In a small body of water, which the gentlemen christened Lake Rosa, rude blinds were made, and one day a well-known shot of the party killed six geese, in addition to a large number of red heads and mallards. Any one who has had experience in wild goose shooting, knows how difficult it is to bring the cautious birds to bag, and therefore he will appreciate the skill of the sportsman who captured six in a hunt lasting but a few hours. The sandhill cranes swarmed the prairies, but no effort was made to bring them to bag. We are surprised at this, for there is a charm in crane

voting, which is only heightened by the wariness of the huge birds. The pinnated grouse had packed early in October, and so not much time was wasted on them. When the "chickens" move in flocks, which number thousands, they will not lie to the dogs, and no pleasure is extracted from the pursuit of them, especially when water fowl swarm by the million right under your nose. The fishing was very fine this fall in the lakes about Albert Lea. One day shortly after the arrival of the party, Col. Hatch entered the house with a splendid string of pickerel in his hand. "What are those?" asked a well-known New Yorker, his eyes blazing with admiration. "Trout," was the laconic reply. "Good heavens! you don't tell me so. Why, they are the biggest trout I ever saw. Where did you catch them?" "They came from the lake which you see before you," said Col. Hatch, with a wave of the hand. "And are there any like these left in the lake?" queried the New Yorker, with the deepest interest in his tones. "Plenty of them," said the host. "Then, boys," almost shouted the enthusiastic disciple of Walton, rising from his chair, "no duck shooting for me to-morrow. I shall try my hand at the trout." When the would be fisherman realized that a joke had been played on him, he put on a grave face, and swore that the pickerel bred in the cool and clear waters of Fountain Lake were equal to the best trout ever taken from a mountain brook in Virginia, or a limpid stream in the Adirondacks. This fish story beats all hollow the little mud-hen narrative which had circulation last year. There seems to be something deceptive in the air of Minnesota. Objects do not always look what they really are. The Storm King swept down from the north earlier than usual this year. On the 29th of October, the ice was an inch and a half thick on the lakes, and the water fowl moved in solid bodies for the South, bringing the shooting to an abrupt close at Albert Lea."

Of course there is no place in the county, so interwoven with its history from the earliest period up to the present time as the county seat, and in respect to many points they are identical, and in giving something of the early settlement several items already alluded to, reappear here, in order not to destroy the connection. As to the town, the village or city, little attempt will be made to separate them here, although the town and the city governments will receive individual mention.

Those who first came here resolved to build a town that should become a city, and although their determination was supplemented by the natural advantages of the location, it is doing but simple justice to the pioneers to express the opinion that equal energy and determination, displayed almost anywhere else, would have accomplished a like result.

When Mr. Ruble made the proposition to Ly Brand and Thompson to pool their united energies and means, and make St. Nicholas the metropolis of this region, they made a fatal mistake in spurning the offer, for that city, which so filled their minds as almost to dethrone common sense, now has no shelter, even for the owls and the bats, which are supposed to linger around deserted habitations.

Albert Lea village was platted by Charles C. Colby, and recorded on the 29th of October 1856, in Dodge county, of which it then formed a part. On the 24th of February, 1859, it was duly recorded in the Register's office of this county, and numerous additions have been made since that time, the most important of which will be mentioned.

The first plat recorded had the name of Charles C. Cobly as surveyor. Austin T. Clark, as administrator of Lucius P. Wedge, signed the document. A. Armstrong was the Notary Public. John Wood was Register of Deeds, and J. E. Bancroft, Deputy Register. William Morin and George S. Ruble were also proprietors.

E. C. Stacy had a subdivision recorded on the 18th of October, 1877. H. C. Stacy, Surveyor.

Ballard's Addition was recorded on the 22d of March, 1880.

Out-lots of Parker's Addition, surveyed by W. G. Kellar, went on the record on the 22d of June, 1880.

F. A. Blackmer's addition was on the records on the 25th of June, 1880.

Charles W. Ballard's Subdivision to Albert Lea was recorded on the 15th of November, 1880.

Among the earlier additions were Kittleson & Johnson's, recorded as a subdivision on the 16th of June, 1869.

Francis Hall's addition was recorded on the 12th of June, 1859.

D. G. Parker's addition was made on the 28th of November, 1869.

The Railroad Addition, south of the railroad,