

2021

CONSERVATION AUTO TOUR

SITE 6: CD 61 STORAGE & TREATMENT WETLAND

This project is part of County Drainage Improvement. Landowners filed a petition to improve the ditch that included the storage and treatment site. The landowners of the system have identified that the County Ditch is no longer functioning the way it was originally designed and something needed to be done due to excess maintenance and little drainage benefit. The project has been identified in numerous plans for priority (CD61 FER, CD 61 Drainage Inspection Plan), the plans have identified that storage is needed.

One of the petitioners offered his upper watershed land as a storage and treatment basin. The site is 31.1 acres in size, 15.4 acres will be the restored wetland, along with a 15.7-acre upland buffer that will be planted to native vegetation. The County Ditch system improvement plan had identified other options for storage, but all other options were for in-channel storage of the ditch system by reducing culvert sizes to accomplish storage. The storage and treatment basin was the best option for the system and will provide the greatest storage and water quality benefits.

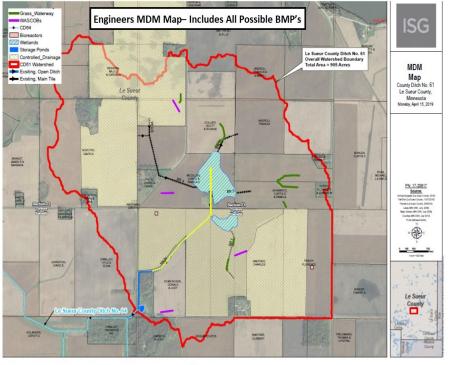
The project will provide an overall 76.56 T/yr of Sediment reduction, 52.55 T/yr of estimated Soil savings, and 170.02 lbs/yr of estimated Phosphorus reduction which will help address the reduction needed for Scotch Lake downstream. A calculated 17.2 acre/feet of water will be stored by the 15.4-acre wetland restoration and will treat the 535 acre watershed.

SITE 6:

CD 61 STORAGE & TREATMENT WETLAND

- Grant Funds Awarded From the Clean Water Fund: \$215,541.00
- Construction is set to start July 2021
- Contract will be Selly Excavating from Le Center, MN
- Project oversight will be done by ISG Inc.
- Easement will be held by the Le Sueur County Drainage Authority

This is a quick overview of the project from the Grant Application, the upland acres have changed to 15.7



Le Sueur County Ditch 61

Multipurpose Drainage
Management (MDM)

Storage and Treatment Wetland

- 15.4 Ac. Wetland
- 15.0 Ac. Upland Buffer
- 17.2 ac/ft water storage
- Treat 535 Ac.
- 76.56 T/yr Sediment Reduction
- 52.55 T/yr Soil Savings
- 170.02 lbs/yr Phosphorus Reduction

15 ₁	31/10	BRANCH	
		1/80	
1F	30° >> >> >> BRANCH 4		30.4 AC WETLAND RESTORATION 15.4 AC SHALLOW MARSH 15.0 AC UPLAND BUFFER
Bathat		S WCL	BRANCHS CTION

	Engineers Project Cost Estimate				
Item No.	Item	Unit	Quantity	Unit Price	Amount
101	MOBILIZATION	LS	1	\$ 1,990.00	\$ 1,990
102	UPLAND BUFFER SEEDING (MESIC PRAIRIE SOUTWEST SEED MIX: 35-541)	AC	15.0	\$ 300.00	\$ 4,500
103	CONSTRUCT CONCRETE LOW FLOW WEIR	EA	1	\$ 31,968.70	\$ 31,969
104	CLASS III RIPRAP WITH GEOTEXTILE FABRIC	CY	50	\$ 65.80	\$ 3,290
				TOTAL	41,749
			10	% UNFORSEEN	\$ 4,175
				SUBTOTAL	\$ 45,924
	TEMPORARY DAMAGES	AC	0.00		\$ -
	LAND ACQUISTION/ PERMANENT DAMAGES	AC	29.75	\$ 7,423.02	\$ 220,835
	LAND ACQUISTION/ PERMANENT DAMAGES (NON CROPLAND)	AC	0.65	\$ 4,303.20	\$ 2,797
		COUNT	Y ADMINIST	RATION COSTS	\$ 2,297
				APHIC SURVEY	-
				PECIFICATIONS	3,215
				MINISTRATION	3,674
	TOTAL STORAGE AND TREATM	ENT WETL	AND IMPRO	VEMENT COST	\$ 278,741

Conservation Cooperator

PROJECT FACT SHEET



John McGillen/ Le Sueur County Drainage Authority CD 61

Cooperator & Location

Applicant(s): John E. McGillen & Pamela K. McGillen Family Trust

Address:

City State Zip: KI

Twp/Range: T 110N - R 24W

Section: 23

City or Twp: Cordova Twp

Funding Source: CWF 2020 MDM Grant Watershed: 28039

Project Information

Practice

Storage and Treatment Wetland

Resource Protected

Middle Minnesota River (Scotch Lake)

Dates SWCD Review 3/23/2020 Project Start NA Project Finish

Description

The Drainage Authority will acquire an easement with the landowner. The easement will follow the 2019 Multipurpose Drainage Management Grant RFP. The upland buffer area is 15.7 acres and the wetland area is 15.4 acres for a total of 31.1 acres. An additional .7 acres had been added to the upland buffer to incorporate the access to the easement. A calculated 17.2 acre/feet of water will be stored by the 15.4-acre wetland restoration and will help treat the upstream Middle Minnesota River Watershed of 535 acres.

Environmental Benefits

<u>Parameter</u>	Before	After	Saved
Soil Erosion (tons/yr)	52.55	0	52.55
Sediment Load (tons/yr)	76.56	0	76.56
Phosphorus Load (lbs/yr)	170.02	0	170.02
Runoff Reduction (acre ft)	17.2	0	17.2

Cost Analysis

PROJECT	r Costs
Other:	\$228,734.44
Contruction:	\$73,781
Total:	\$302,515

FUNDIN	G SOURCES	%
Drainage Authority:	\$93,474	31
Federal:	NA	
State:	\$209,041	69

Aerial Photo

Current Project Site Photo





