

Pioneer-Sarah Creek Watershed Management Organization

Water of Concern

Lake Independence

Impairment

Phosphorus

CWL Funding by Category

Technical Assistance Funds	
SSTS Funds	\$0
Professional Development	\$0
Hired Positions	\$0
Total TA Funds	\$53,000.00
Implementation Funds	
AgBMP Loans	\$0
CWAG Funds	\$357,000.00
Leveraged Dollars	\$0
Total Imp. Funding	\$357,000.00
Total CWL Funding	\$410,000.00

PROJECT CONTACT

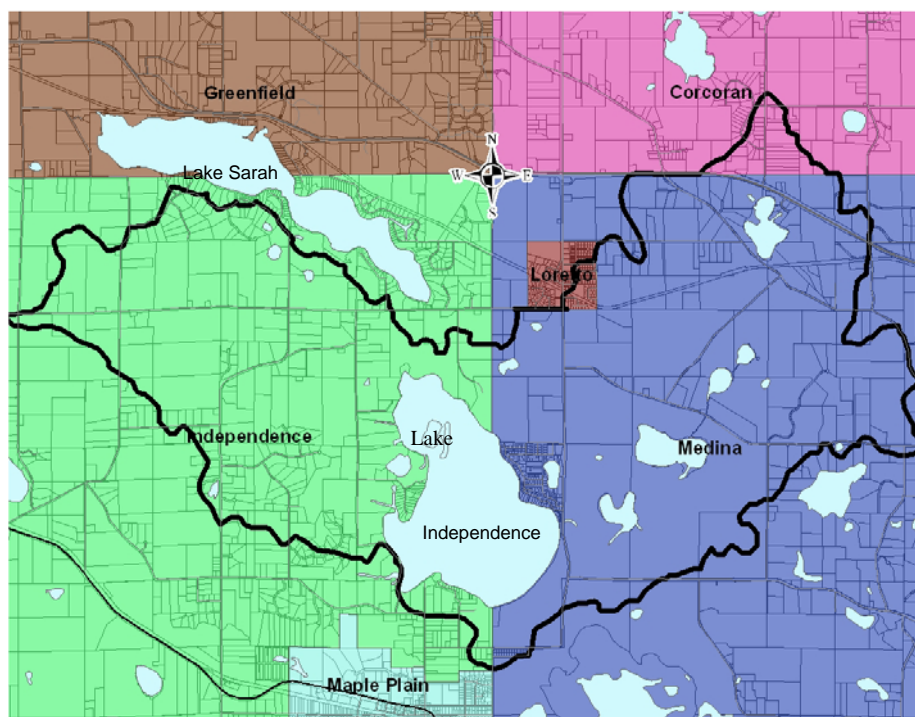
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Lake Independence Nutrient Management Program

Lake Independence Watershed Area



Project Description

In 2002 the Minnesota Pollution Control Agency listed Lake Independence as impaired for aquatic recreation. The main cause of the impairment is excessive nutrients in the lake. The lake receives runoff from a 7,631 acre predominantly agricultural watershed which contains portions of three municipalities, Medina, Independence and Loreto. Because of rapid urbanization, hobby farm uses, livestock and agriculture runoff, the lake has seriously declined in water quality. Algal blooms now occur throughout most of the summer season, negatively impacting recreational use. These issues were addressed by community stakeholders and a study with an implementation plan was developed to pinpoint the causes and solutions to the problem.

The Lake Independence nutrient management program was developed to assist in solving the nutrient problems with the lake by cleaning up surface water runoff to decrease nutrient transport into the lake. It helps landowners in the lakes watershed with cost share assistance to install animal waste control and urban water quality practices that will reduce nutrients flowing into the lake and begin the healing process to the impairment of Lake Independence.

Conservation Practices Implemented

Name of Conservation Practice(s) Installed	Number or Linear Feet Installed	Estimated Pollutant Load Reduction (Phosphorus)	Total Cost
Shoreline Restoration	23,660 sq. ft. (0.53 ac.)	26.5 lbs/ year	\$89,343.11
Shoreline Stabilization	695 ft.	19 lbs/year	\$123,377.84
Rain Gardens	3 gardens	3 lbs/year	\$30,843.20
Agriculture Projects	1-compost bin 700'-exclusion fence 90'-rain gutters	12.5 lbs/year	\$10,818.69
Pond Projects	6 ponds	2.8 lbs/year	\$312,491.40
Gully Control Projects	1212 ft.	4,4 lbs/year	\$67,861.81

Conservation Planning Activities

Name of Plan(s) Written	Number of Landowners Contacted	Number of Plans Written	Total Cost	Types of Practices Identified	Number of Practices Identified	Number of Practices Implemented
Livestock Nutrient Management	404/mailings 44/personal visits	5		Livestock manure and runoff control practices	9	3
Urban Development	30	18		Urban Runoff practices-	8	23
Ag Cropland	5	0		Buffer/ nutrient management/ structural	5	0

Contributing Partners: (List or copy from restoration implementation plan)

Partner	Description	Project Contribution	Leveraged Funds
Three Rivers Park Dist.		TMDL study/ implementation plan	\$50,000
Lake Association		Publicity, project leads	Time contribution
Hennepin Co.	Dept. of Environmental Services	Technical Assistance, NRICH	\$15,000.00/Time Contribution
Independence		Member City/Publicity	Postage/Time Contribution
Medina		Member City/Publicity	Postage/Time Contribution
MN Extension		Technical Assistance	Time Contribution
Association of Metropolitan Districts		Technical Assistance	Time Contribution

Project Informational/Educational Activities

Type of Activity	Newsletters, Brochures, Posters, Etc.	Other
Mailings/Flyers to all property owners in Lakeshed.	Mailer-March 2007 September 2007 March 2008 July 2008 July 2008	Project & kickoff meeting Announced expanded docket
Press Release	March 2007 September 2007 February 2008 March 2008 June 2008	
Newsletter Announcements		
• Independence	Summer 2008 Spring 2007 Fall 2007	
• Medina	Winter 2008 Aug/Sept. 08	
• Lake Independence Association	January 2007 June 2007 June 2008 July 2008 April 2009	
Project kickoff meeting	March 22, 2007	25 people in attendance.
Booth at Independence Heritage Days Festival	September 2007	Very good turn-out and interest.
Technical Advisor Committee meeting	September 25, 2008	Discussions with local pw/administrator/engineering staffs
Landowner luncheon program	March 15, 2008	8 landowners in attendance
Independence/Medina joint City Council presentation	January 2008	
Stakeholders Meeting	January 2007	
Commission Planning Session	August 2007 January 2008 February 2008	

Phosphorus Source	Proposed Phosphorus TMDL Reduction	Actual Phosphorus Reductions from CWLA Grant
Agricultural Cropland	284 Pounds	0
Animal Waste	370 Pounds	12.5 pounds
Urban Development	146 Pounds	55.7 pounds
Failing Individual Sewage Treatment Systems	8 Pounds	0
Loretto Sewage Treatment Facility	53 Pounds	0
Geese	11 Pounds	0

Project Photos, Additional Maps, or Conservation Practice



Johnson shoreline stabilization and restoration



Donaldson/Szarznski Shoreline Restoration



Camp Ihduhapi Gully Control Project.



Appendix 6



Hasek Rain Garden



Hedeem/Ehramjian Rain Garden



Baker Campground Stormwater
Pond and Gully Stabilization



Zadeh Exclusion Fence
&
Compost Bin



Bachtold Shoreline Stabilization



Palo/Lynch Gully Control