

Lake Name: Lime
DOW Number: 51-0024-00

Survey Type: Targeted Survey
Survey ID Date: 05/27/2025

TARGETED SURVEY
Trap Netting
Water Quality Measurement

Lake Identification

Alternate Lake Name: N/A
Primary Lake Class ID: 43

DNR Sounding Map Number: N/A
Alternate Lake Class ID: N/A

Lake Location

Primary County: Murray

Nearest Town: Avoca

Legal Descriptions

Lake Center: Township - 106N Range - 40W Section - 29
PLS Section Lake Center: 10604029

All Legal Descriptions:

Murray County: Township - 106N Range - 40W Sections - 28, 29, 32, 33

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 06/16/1997)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	STATE OWNED ACCESS ON NE CORNER OF LAKE.

(Data excludes records where public use is not designated or is designated "No Public Use")

Lake Characteristics

Lake Area (planimetered acres): 338.00
GIS Lake Area (acres): 326.05
DOW Lake Area (acres): 316.00
Littoral Area (acres): 326.04
Area in MN (acres): 326.05
Maximum Depth (feet): 7.0
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 4.10
Maximum Fetch (miles): 1.70
Fetch Orientation (degrees): 90
USGS Quad Map Number: W07b
USGS Quad 24K GIS Index: 4413

Watershed Characteristics

Major Watershed

Name: Des Moines-Headwaters
 Watershed Number: 51
 Watershed size (acres): 798,595

Minor Watershed

Name: Lime Cr
 Watershed Number: 55
 Watershed size (acres): 26,713

Surveys and Investigations

Re-Survey: 06/25/2007, 06/16/1997, 06/15/1987.
Population Assessment: 06/17/2013, 06/18/2001.
Special Assessment: 07/01/2013, 04/17/1997, 06/18/1992.
Dissolved Oxygen Check: 02/18/2016, 02/19/2015, 12/30/2013, 02/06/2013, 01/02/2013, 01/10/2012, 12/30/2010, 01/05/2010.
Targeted Survey: 05/27/2025, 05/15/2023, 02/06/2020, 05/22/2019, 01/19/2018.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	05/23/2019	High	1.00	Above or below Benchmark
	06/18/2013	Normal	-0.80	Above or below Benchmark
	06/25/2007	High	-1.30	Above or below Benchmark

Water Level History - Station Summary

Station ID	Minimum Level		Maximum Level		Range (feet)	Average Level (feet)	Reading Type (and number of readings)
	Feet	Date	Feet	Date			
BM - 1	-1.30	06/25/2007	1.00	05/23/2019	2.30	-0.37	Above or below Benchmark (3)

Dissolved Oxygen and Temperature Profile of Lake Water

Station ID	Sampling Date	Bottom Depth (Feet)	Sample Depth (Feet)	Water Temperature (°F)	Dissolved Oxygen (ppm)
WQ - 1	05/28/2025	5.3	Surface	61.3	10.2
			1.0	61.3	10.4
			2.0	61.5	10.6
			3.0	61.3	10.7
			4.0	61.3	10.6
			5.0	61.3	9.8

Field Measurements of Water Quality

Station ID	Sampling Date	Sample Depth (Feet)	Secchi Depth (Feet)	Field pH	Alkalinity (ppm)	Water Color	Color Cause
WQ - 1	05/28/2025	Surface	0.3	8.99	160	Green	Algae

Net Catch Summary by Numbers for TN

Standard 3/4-in mesh, double frame trap net sets

Number of Sets: 11
 First Set Date: 05/27/2025
 Last Lift Date: 05/30/2025
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 ¹		
				25%	50%	75%
BIB	Bigmouth Buffalo	15	1.36	0.17	0.38	1.04
BLB	Black Bullhead	838	76.18	11.50	42.00	132.61
BLC	Black Crappie	3	0.27	1.17	4.88	20.50
BLG	Bluegill	4	0.36	1.17	3.89	20.00
CCF	Channel Catfish	2	0.18	N/A	N/A	N/A
CAP	Common Carp	49	4.45	1.00	2.44	5.51
LMB	Largemouth Bass	1	0.09	0.23	0.38	0.67
NOP	Northern Pike	67	6.09	N/A	N/A	N/A
QBS	Quillback	25	2.27	N/A	N/A	N/A
TPM	Tadpole Madtom	1	0.09	N/A	N/A	N/A
WAE	Walleye	1	0.09	0.50	1.33	2.95
WTS	White Sucker	22	2.00	0.34	0.88	2.58
YEB	Yellow Bullhead	1	0.09	0.50	1.13	2.50
YEP	Yellow Perch	9	0.82	0.33	1.37	3.76
Total Fish/Set:			94.36	¹ Quartiles for Number Per Set		

Net Catch Summary by Weight for TN

Standard 3/4-in mesh, double frame trap net sets

Abbr	Species	Total Weight (Pounds)	Pounds Per Set	Mean Weight ²	Quartiles for Lake Class 43 ¹		
					25%	50%	75%
BIB	Bigmouth Buffalo	105.88	9.63	7.06	2.56	3.75	5.83
BLB	Black Bullhead	200.69	18.24	0.25	0.18	0.28	0.40
BLC	Black Crappie	2.45	0.22	0.82	0.22	0.34	0.50
BLG	Bluegill	0.96	0.09	0.24	0.13	0.24	0.39
CCF	Channel Catfish	8.64	0.79	4.32	N/A	N/A	N/A
CAP	Common Carp	201.25	18.30	4.11	1.42	2.92	4.58
LMB	Largemouth Bass	0.83	0.08	0.83	0.30	0.85	1.53
NOP	Northern Pike	186.59	16.96	2.78	N/A	N/A	N/A
QBS	Quillback	35.03	3.18	1.40	N/A	N/A	N/A
TPM	Tadpole Madtom	0.05	0.00	0.05	N/A	N/A	N/A
WAE	Walleye	1.43	0.13	1.43	0.82	1.44	2.28
WTS	White Sucker	35.99	3.27	1.64	1.05	1.47	2.04
YEB	Yellow Bullhead	0.53	0.05	0.53	0.31	0.48	0.67
YEP	Yellow Perch	5.05	0.46	0.56	0.11	0.18	0.30
Total Pounds Fish/Set:			71.40	¹ Quartiles for Mean Weight			

² Mean Weights are based on measured fish counts only.

Length Frequency Distribution for TN

Standard 3/4-in mesh, double frame trap net sets

(Field work conducted between 05/27/2025 and 05/30/2025)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>CCF</u>	<u>LMB</u>	<u>NOP</u>	<u>QBS</u>	<u>TPM</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.50 - 4.99	-	-	-	-	-	-	-	-	1	-	-	-	-	-
5.00 - 5.49	-	9	-	-	-	-	-	-	-	-	-	-	-	-
5.50 - 5.99	-	16	-	1	-	-	-	-	-	-	-	-	-	-
6.00 - 6.49	-	73	-	2	-	-	-	-	-	-	-	-	-	-
6.50 - 6.99	-	95	-	1	-	-	-	-	-	-	-	-	-	-
7.00 - 7.49	-	167	-	-	-	-	-	-	-	-	-	-	-	-
7.50 - 7.99	-	114	-	-	-	-	-	-	-	-	-	-	-	1
8.00 - 8.49	-	42	-	-	-	-	-	-	-	-	-	-	-	-
8.50 - 8.99	-	31	-	-	-	-	-	-	-	-	-	-	-	1
9.00 - 9.49	-	6	1	-	-	-	-	-	-	-	-	-	-	1
9.50 - 9.99	-	14	-	-	-	-	-	-	1	-	-	-	1	1
10.00 - 10.49	-	7	-	-	-	-	-	-	1	-	-	1	-	2
10.50 - 10.99	-	13	-	-	1	-	-	-	4	-	-	-	-	1
11.00 - 11.49	-	2	1	-	-	-	-	-	3	-	-	-	-	1
11.50 - 11.99	-	-	1	-	-	-	1	-	2	-	-	-	-	-
12.00 - 12.99	-	4	-	-	1	-	-	-	1	-	-	2	-	1
13.00 - 13.99	-	-	-	-	4	-	-	-	-	-	-	-	-	-
14.00 - 14.99	-	-	-	-	5	-	-	-	3	-	-	-	-	-
15.00 - 15.99	-	-	-	-	10	-	-	5	4	-	1	7	-	-
16.00 - 16.99	-	-	-	-	6	-	-	1	1	-	-	9	-	-
17.00 - 17.99	-	-	-	-	2	1	-	7	-	-	-	3	-	-
18.00 - 18.99	1	-	-	-	1	-	-	4	3	-	-	-	-	-
19.00 - 19.99	-	-	-	-	-	-	-	5	2	-	-	-	-	-
20.00 - 20.99	1	-	-	-	3	-	-	8	-	-	-	-	-	-
21.00 - 21.99	4	-	-	-	1	-	-	3	-	-	-	-	-	-
22.00 - 22.99	2	-	-	-	1	-	-	8	-	-	-	-	-	-
23.00 - 23.99	2	-	-	-	1	-	-	4	-	-	-	-	-	-
24.00 - 24.99	2	-	-	-	3	-	-	6	-	-	-	-	-	-
25.00 - 25.99	2	-	-	-	2	-	-	4	-	-	-	-	-	-
26.00 - 26.99	1	-	-	-	-	1	-	2	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	3	-	-	1	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	2	-	-	3	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	2	-	-	1	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	-	-	-	3	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	1	-	-	1	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	1	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>CCF</u>	<u>LMB</u>	<u>NOP</u>	<u>QBS</u>	<u>TPM</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	15	593	3	4	49	2	1	67	25	1	1	22	1	9
Min. Length	18.15	5.28	9.41	5.75	10.67	17.64	11.65	15.31	9.92	4.53	15.20	10.16	9.96	7.56
Max. Length	26.46	12.28	11.50	6.73	31.10	26.38	11.65	32.76	19.53	4.53	15.20	17.56	9.96	12.64
Mean Length	22.82	7.55	10.67	6.29	19.20	22.01	11.65	22.30	13.85	4.53	15.20	15.57	9.96	10.04
# Measured	15	157	3	4	49	2	1	65	25	1	1	22	1	9
No Lengths for	0	681	0	0	0	0	0	2	0	0	0	0	0	0

Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish.

Other Species

<u>Gear Type (1)</u>	<u>Other Species (Gender) (2)</u>	<u>Total Num</u>	<u>Number Measured</u>	<u>Length (inches) Min - Mean - Max</u>	<u>Number Weighed</u>	<u>Weight (pounds) Min - Mean - Max</u>
TN	Snapping Turtle	1	1	18.50	0	N/A

(1) Key to sampling gear abbreviations:

TN = Standard 3/4-in mesh, double frame trap net sets

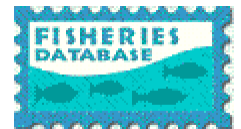
(2) Gender: If identified and reported.

Approval Dates And Notices

Date Approved By Windom Area Fisheries Supervisor: _____

Date Approved By Southern Region Fisheries Manager: _____

This DRAFT VERSION of the Lake Survey Report contains preliminary data (as of 06/06/2025), and is therefore subject to change at any time.



Minnesota Department of Natural Resources

By accepting the data in this report, the user agrees the data will be used for personal benefit and not for profit. Any other uses or publication of the data needs the consent of the Department. The Minnesota Department of Natural Resources assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on the data.

Lake Survey Report revision: 20230207-RJE. Data Date: 06/06/2025 at 8:38 am .

REPORT OVERVIEW - FOR OFFICE USE ONLY

(This page is not part of the Lake Survey Report and should be discarded)

Lake Name: Lime

Survey Type: Targeted Survey

DOW Number: 51-0024-00

Survey ID Date: 05/27/2025

Trap Netting, Water Quality Measurement

Survey Status: Field Work Complete

The following 23 (of 34) report components are not included in this Lake Survey Report:

1. Current Water Level
2. Benchmark And Gauge Descriptions / Locations
3. Water Level History¹
4. Lake Inlets
5. Additional Inlet Information
6. Lake Outlets
7. Additional Outlet Information
8. Water Control Structure (Dam)
9. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations²
10. Resorts And Campgrounds
11. Fish Spawning Conditions
12. Erosion And Pollution
13. Fish Diseases And Parasites
14. Aquatic Vegetation And Shoalwater Substrates
15. Water Quality (Winter Observations) (added to revision 01/21/2010)
16. Laboratory Analysis Of Water Chemistry
17. Zooplankton Sampling (added to revision 20221130)
18. Catch Summary (Pre-1993 Format) (added to revision 20201001)
19. Length At Capture With Last Incremental Length*
20. Back-Calculated Lengths
21. Age Class Frequency Distributions
22. Status Of Fishery And Field Notes
23. Survey Attachments (added to revision 20150622)

¹ Water Level History report: This data has not yet been migrated into the Fisheries LSM database. On 01/08/2009, two additional Water Level History report components (Readings and Station Summary) were added.

² Effective 03/25/2014, the Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations report component was modified to be included in the Lake Survey report if it did not include any Watershed and Shoreline characteristics and only consisted of Riparian Landscape Observations.

* Length At Capture With Last Incremental Length report: The following criteria must be met for a report to be generated:

1. The fish species must have an assigned body scale constant.
2. Fish must have an "official" age assigned.
3. Fish must have a digitized measurement marked for back calculation use.

Note: The data source for Length and Age Class Frequency Distribution tables is updated twice daily - once at noon and once overnight. Any changes to the data made before noon on 06/06/2025 may not be reflected in the Distribution tables until after 12:30 pm on 06/06/2025.

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