

Fisheries Management

LAKE SURVEY REPORT

DRAFT VERSION

PRELIMINARY DATA (AS OF 06/01/2023)

Lake Name: Lime Survey Type: Targeted Survey

DOW Number: 51-0024-00 Survey ID Date: 05/15/2023

TARGETED SURVEY Electrofishing

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 ORG Code: F418
Region Name: Southern Region Number: 4

Lake Access

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

Station ID	Ownership	Public Use	Туре	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 Shoreline Length (miles): 4.10
GIS Lake Area (acres): 326.05 Maximum Fetch (miles): 1.70
DOW Lake Area (acres): 316.00 Fetch Orientation (degrees): 90
Littoral Area (acres): 326.04 USGS Quad Map Number: W07b
Area in MN (acres): 326.05 USGS Quad 24K GIS Index: 4413

Maximum Depth (feet): 7.0 Mean Depth (feet): N/A



LAKE SURVEY REPORT TARGETED SURVEY DATED 05/15/2023 FOR DOW NUMBER 51-0024-00

Watershed Characteristics

Major Watershed Minor Watershed

Name: Des Moines-Headwaters Name: Lime Cr

Watershed Number: 51 Watershed Number: 55

Watershed size (acres): 798,595 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: 05/15/2023, 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

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

Natural Reproduction Catch Summary for SEF

Special sampling, electrofishing

Number of Stations: 1

Total run-time for all stations: 00:32:00
Total on-time for all stations: 00:30:23
First Sampling Date: 05/15/2023
Last Sampling Date: 05/15/2023
Daylight Sampling: Yes

Target Species: N/A

			Total	Number	Mean Length	Length Range (inches)		Catch Rates (number per hour)	
Abbr	Species	Age	Number	Measured	(inches)	Min	Max	Run-Time	On-Time
BIB	Bigmouth Buffalo	All	23	0	N/A	N/A	N/A	43.13	45.42
BLB	Black Bullhead	All	3	3	6.92	6.18	8.11	5.63	5.92
FHM	Fathead Minnow	All	250	0	N/A	N/A	N/A	468.75	493.69

Length Frequency Distribution for <u>SEF</u>

Special sampling, electrofishing

(Field work conducted on 05/15/2023)

(1 1014 110111 00	naactoa
	BLB
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	-
4.00 - 4.49	-
4.50 - 4.99	-
5.00 - 5.49	-
5.50 - 5.99	-
6.00 - 6.49	2 -
6.50 - 6.99	-
7.00 - 7.49	-
7.50 - 7.99	- 1
8.00 - 8.49 8.50 - 8.99	-
9.00 - 9.49	_
9.50 - 9.49	_
10.00 - 10.49	_
10.50 - 10.99	_
11.00 - 11.49	-
11.50 - 11.99	-
12.00 - 12.99	-
13.00 - 13.99	-
14.00 - 14.99	-
15.00 - 15.99	-
16.00 - 16.99	-
17.00 - 17.99	-
18.00 - 18.99	-
19.00 - 19.99	-
20.00 - 20.99	-
21.00 - 21.99	-
22.00 - 22.99	-
23.00 - 23.99	-
24.00 - 24.99	-
25.00 - 25.99 26.00 - 26.99	_
27.00 - 27.99	-
28.00 - 28.99	_
29.00 - 29.99	_
30.00 - 30.99	_
31.00 - 31.99	-
32.00 - 32.99	-
33.00 - 33.99	-
34.00 - 34.99	-
35.00 - 35.99	-
= > 36.00	-
	BI P
Total	<u>BLB</u> 3
Min. Length	6.18
wiiii. Lengul	0.10

	BLB
Total	3
Min. Length	6.18
Max. Length	8.11
Mean Length	6.92
# Measured	3
No Lengths for	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.



LAKE SURVEY REPORT TARGETED SURVEY DATED 05/15/2023 FOR DOW NUMBER 51-0024-00

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 06/01/2023), and is therefore subject to change at any time.



FISHERIES

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.

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: 05/15/2023

Electrofishing

Survey Status: Field Work Complete

The following 26 (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)
- 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. Dissolved Oxygen And Temperature Profile Of Lake Water
- 16. Field Measusrements Of Water Quality
- 17. Water Quality (Winter Observations) (added to revision 01/21/2010)
- 18. Laboratory Analysis Of Water Chemistry
- 19. Zooplankton Sampling (added to revision 20221130)
- 20. Catch Summary (Pre-1993 Format) (added to revision 20201001)
- 21. Length At Capture With Last Incremental Length*
- 22. Back-Calculated Lengths
- 23. Age Class Frequency Distributions
- 24. Other Species (added to revision 03/24/2009)
- 25. Status Of Fishery And Field Notes
- 26. 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 after noon on 06/01/2023 may not be reflected in the Distribution tables until 06/02/2023.

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Fisheries Lake ID = 3451, Survey ID = 20822313533702000