

Lake Name: Long

Survey Type: Targeted Survey

DOW Number: 83-0040-00

Survey ID Date: 05/09/2023

TARGETED SURVEY
Gill Netting
Trap Netting

Lake Identification

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

DNR Sounding Map Number: C0751
Alternate Lake Class ID: N/A

Lake Location

Primary County: Watonwan

Nearest Town: Saint James

Legal Descriptions

Lake Center: Township - 105N Range - 32W Section - 15
PLS Section Lake Center: 10503215

All Legal Descriptions:

Watonwan County: Township - 105N Range - 32W Sections - 10, 11, 14, 15

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 07/11/1994)

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

Lake Characteristics

Lake Area (planimetered acres): 264.00
GIS Lake Area (acres): 263.30
DOW Lake Area (acres): 256.00
Littoral Area (acres): 263.29
Area in MN (acres): 263.30
Maximum Depth (feet): 13.0
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 4.68
Maximum Fetch (miles): 1.50
Fetch Orientation (degrees): 315
USGS Quad Map Number: W11b
USGS Quad 24K GIS Index: 4421

Watershed Characteristics

Major Watershed

Name: Watonwan River
 Watershed Number: 31
 Watershed size (acres): 558,963

Minor Watershed

Name: Co Ditch #1
 Watershed Number: 14
 Watershed size (acres): 8,782

Surveys and Investigations

Initial Survey: 07/08/1985.

Re-Survey: 06/24/2002, 07/11/1994, 07/10/1990.

Population Assessment: 06/23/2014, 06/28/2010, 06/26/2006, 07/06/1998.

Special Assessment: 06/05/2013, 10/18/1999, 09/08/1998, 10/30/1997, 05/15/1995.

External Management Survey: 07/14/2010.

Standard Survey: 07/18/2022, 07/16/2018.

Targeted Survey: 05/09/2023, 10/03/2022, 09/06/2022, 09/26/2017.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	07/16/2018	Normal	-1.90	Above or below Benchmark
	06/24/2014	High	-1.50	Above or below Benchmark
	06/29/2010	High	-1.60	Above or below Benchmark
	06/29/2006	Normal	-1.90	Above or below Benchmark
GA - 1	07/16/2018	Normal	2.25	Direct Gauge Reading
	06/24/2014	High	2.80	Direct Gauge Reading
	06/29/2010	High	2.60	Direct Gauge Reading
	06/29/2006	Normal	2.15	Direct Gauge Reading

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	-1.90	06/29/2006	-1.50	06/24/2014	0.40	-1.73	Above or below Benchmark (4)
GA - 1	2.15	06/29/2006	2.80	06/24/2014	0.65	2.45	Direct Gauge Reading (4)

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 1
 First Set Date: 05/09/2023
 Last Lift Date: 05/10/2023
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 ¹		
				25%	50%	75%
BLB	Black Bullhead	25	25.00	30.34	75.58	150.62
BLC	Black Crappie	1	1.00	1.41	3.71	13.75
NOP	Northern Pike	1	1.00	1.08	3.00	8.00
Total Fish/Set:			27.00	¹ Quartiles for Number Per Set		

Net Catch Summary by Weight for GN

Standard gill net sets

Abbr	Species	Total Weight (Pounds)	Pounds Per Set	Mean Weight ²	Quartiles for Lake Class 43 ¹		
					25%	50%	75%
BLB	Black Bullhead	18.65	18.65	0.75	0.17	0.26	0.39
BLC	Black Crappie	0.02	0.02	0.02	0.16	0.25	0.35
NOP	Northern Pike	0.75	0.75	0.75	1.82	2.50	3.35
Total Pounds Fish/Set:			19.42	¹ Quartiles for Mean Weight			

² Mean Weights are based on measured fish counts only.

Net Catch Summary by Numbers for STN

Special sampling with trap nets

Number of Sets: 2
First Set Date: 05/09/2023
Last Lift Date: 05/10/2023
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 ¹		
				25%	50%	75%
BIB	Bigmouth Buffalo	1	0.50	N/A	N/A	N/A
BLB	Black Bullhead	411	205.50	N/A	N/A	N/A
BLC	Black Crappie	3	1.50	N/A	N/A	N/A
CAP	Common Carp	2	1.00	N/A	N/A	N/A
NOP	Northern Pike	1	0.50	N/A	N/A	N/A
YEB	Yellow Bullhead	1	0.50	N/A	N/A	N/A
YEP	Yellow Perch	1	0.50	N/A	N/A	N/A
Total Fish/Set:			210.00	¹ Quartiles for Number Per Set		

Net Catch Summary by Weight for STN

Special sampling with trap nets

Abbr	Species	Total Weight (Pounds)	Pounds Per Set	Mean Weight ²	Quartiles for Lake Class 43 ¹		
					25%	50%	75%
BIB	Bigmouth Buffalo	7.61	3.80	7.61	N/A	N/A	N/A
BLB	Black Bullhead	307.61	153.81	0.75	N/A	N/A	N/A
BLC	Black Crappie	0.27	0.13	0.09	N/A	N/A	N/A
CAP	Common Carp	7.06	3.53	3.53	N/A	N/A	N/A
NOP	Northern Pike	5.73	2.87	5.73	N/A	N/A	N/A
YEB	Yellow Bullhead	0.47	0.24	0.47	N/A	N/A	N/A
YEP	Yellow Perch	0.06	0.03	0.06	N/A	N/A	N/A
Total Pounds Fish/Set:			164.40	¹ Quartiles for Mean Weight			

² Mean Weights are based on measured fish counts only.

Length Frequency Distribution for GN

Standard gill net sets

(Field work conducted between 05/09/2023 and 05/10/2023)

	<u>BLB</u>	<u>BLC</u>	<u>NOP</u>
< 3.00	-	-	-
3.00 - 3.49	-	-	-
3.50 - 3.99	-	-	-
4.00 - 4.49	-	1	-
4.50 - 4.99	-	-	-
5.00 - 5.49	-	-	-
5.50 - 5.99	-	-	-
6.00 - 6.49	-	-	-
6.50 - 6.99	-	-	-
7.00 - 7.49	-	-	-
7.50 - 7.99	-	-	-
8.00 - 8.49	-	-	-
8.50 - 8.99	-	-	-
9.00 - 9.49	1	-	-
9.50 - 9.99	1	-	-
10.00 - 10.49	5	-	-
10.50 - 10.99	9	-	-
11.00 - 11.49	5	-	-
11.50 - 11.99	4	-	-
12.00 - 12.99	-	-	-
13.00 - 13.99	-	-	-
14.00 - 14.99	-	-	-
15.00 - 15.99	-	-	1
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	-	-	-

	<u>BLB</u>	<u>BLC</u>	<u>NOP</u>
Total	25	1	1
Min. Length	9.25	4.29	15.16
Max. Length	11.97	4.29	15.16
Mean Length	10.85	4.29	15.16
# Measured	25	1	1
No Lengths for	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.

Length Frequency Distribution for STN

Special sampling with trap nets

(Field work conducted between 05/09/2023 and 05/10/2023)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>NOP</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	-	-	-	-	-	-	-
5.50 - 5.99	-	-	2	-	-	-	-
6.00 - 6.49	-	-	1	-	-	-	-
6.50 - 6.99	-	-	-	-	-	-	-
7.00 - 7.49	-	-	-	-	-	-	-
7.50 - 7.99	-	-	-	-	-	-	-
8.00 - 8.49	-	-	-	-	-	-	-
8.50 - 8.99	-	-	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-	1	-
9.50 - 9.99	-	-	-	-	-	-	-
10.00 - 10.49	-	4	-	-	-	-	-
10.50 - 10.99	-	6	-	-	-	-	-
11.00 - 11.49	-	5	-	-	-	-	-
11.50 - 11.99	-	6	-	-	-	-	-
12.00 - 12.99	-	2	-	-	-	-	-
13.00 - 13.99	-	-	-	-	-	-	-
14.00 - 14.99	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	-	-
17.00 - 17.99	-	-	-	-	-	-	-
18.00 - 18.99	-	-	-	1	-	-	-
19.00 - 19.99	-	-	-	1	-	-	-
20.00 - 20.99	-	-	-	-	-	-	-
21.00 - 21.99	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	-	-	-	-
24.00 - 24.99	1	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	1	-	-
31.00 - 31.99	-	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>NOP</u>	<u>YEB</u>	<u>YEP</u>
Total	1	23	3	2	1	1	1
Min. Length	24.02	10.39	5.91	18.66	30.16	9.45	4.92
Max. Length	24.02	12.05	6.10	19.09	30.16	9.45	4.92
Mean Length	24.02	11.16	6.00	18.88	30.16	9.45	4.92
# Measured	1	23	3	2	1	1	1
No Lengths for	0	388	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.

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 05/11/2023), 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.

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REPORT OVERVIEW - FOR OFFICE USE ONLY

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Lake Name: Long

Survey Type: Targeted Survey

DOW Number: 83-0040-00

Survey ID Date: 05/09/2023

Gill Netting, Trap Netting

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)
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. Dissolved Oxygen And Temperature Profile Of Lake Water
16. Field Measurements 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 05/11/2023 may not be reflected in the Distribution tables until 05/12/2023.

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Fisheries Lake ID = 3819, Survey ID = 20822313029536000

Lake Survey Report revision: 20230207-RJE. Data Date: 05/11/2023 at 12:59 pm .