



Minnesota Department of Natural Resources

Fisheries Management



STANDARD LAKE SURVEY REPORT

DRAFT VERSION - PRELIMINARY DATA (AS OF 06/04/2015)

Lake Name: Clear

Survey Type: Standard Survey

DOW Number: 32-0022-00

Survey ID Date: 06/01/2015

Lake Identification

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

DNR Sounding Map Number: C2550
Alternate Lake Class ID: N/A

Lake Location

Primary County: Jackson

Nearest Town: Jackson

Legal Descriptions

Lake Center: Township - 102N Range - 35W Section - 19
PLS Section Lake Center: 10203519

All Legal Descriptions:

Jackson County: Township - 102N Range - 35W Sections - 18, 19, 20
Township - 102N Range - 36W Section - 24

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 07/13/1993)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	State owned access in S.18 on N side.

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

Lake Characteristics

Lake Area (planimetered acres): 415.00	GIS Shoreline Length (miles): 3.81
GIS Lake Area (acres): 434.16	Maximum Fetch (miles): 1.31
DOW Lake Area (acres): 415.00	Fetch Orientation (degrees): 90
Littoral Area (acres): 434.16	USGS Quad Map Number: X09a
Area in MN (acres): 434.16	USGS Quad 24K GIS Index: 4618
Maximum Depth (feet): 9.0	
Mean Depth (feet): N/A	

Watershed Characteristics

Major Watershed

Name: Little Sioux River
Watershed Number: 84
Watershed size (acres): 205,753

Minor Watershed

Name: Jud Ditch #8
Watershed Number: 24
Watershed size (acres): 8,202

Surveys And Investigations

Re-Survey: 07/09/2001, 07/13/1993, 07/27/1987, 07/28/1982.
Population Assessment: 06/06/2011, 06/08/2009, 07/09/2007, 07/05/2005, 07/07/2003, 07/12/1999, 07/14/1997, 08/02/1990.
Special Assessment: 10/07/2005, 10/10/2004, 04/13/2004, 10/02/2000, 09/17/1998, 10/16/1997, 10/01/1996.
Creel Survey: 05/01/1990.
Dissolved Oxygen Check: 02/25/2015, 01/02/2014, 02/07/2013, 01/04/2013, 02/17/2012, 01/26/2012, 12/28/2010, 01/04/2010.
Natural Reproduction Check: 09/16/2010, 09/15/2008, 10/03/2006.
External Management Survey: 06/28/2007.
Standard Survey: 06/01/2015.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/06/2011	High	N/A	Above or below Benchmark
	06/11/2009	High	-4.30	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	-4.30	06/11/2009	-4.30	06/11/2009	0.00	-4.30	Above or below Benchmark (1)

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	06/01/2015	8.7	Surface	62.4	9.5
			1.0	62.4	9.4
			2.0	62.2	9.4
			3.0	62.2	9.4
			4.0	62.1	9.4
			5.0	62.1	9.4
			6.0	62.1	9.3
			7.0	62.1	9.3
			8.0	61.9	9.2

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	06/01/2015	Surface	1.2	6.70	128	Brown Grn	Algae

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 3
First Set Date: 06/01/2015
Last Lift Date: 06/04/2015
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	1	0.33	0.75	2.58	6.96
BLB	Black Bullhead	6	2.00	30.34	75.58	150.62
BLC	Black Crappie	1	0.33	1.41	3.71	13.75
CCF	Channel Catfish	4	1.33	N/A	N/A	N/A
CAP	Common Carp	4	1.33	1.00	3.33	13.75
FRD	Freshwater Drum	29	9.67	0.50	2.56	8.33
NOP	Northern Pike	10	3.33	1.08	3.00	8.00
WAE	Walleye	12	4.00	2.28	6.83	18.06
YEB	Yellow Bullhead	1	0.33	0.50	1.50	3.50
YEP	Yellow Perch	13	4.33	2.65	8.00	25.00
Total Fish/Set:			27.00	* 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	Quartiles for Lake Class 43*		
					25%	50%	75%
BIB	Bigmouth Buffalo	4.43	1.48	4.43	N/A	N/A	N/A
BLB	Black Bullhead	7.43	2.48	1.24	0.17	0.26	0.39
BLC	Black Crappie	0.03	0.01	0.03	0.16	0.25	0.35
CCF	Channel Catfish	19.94	6.65	4.98	N/A	N/A	N/A
CAP	Common Carp	29.84	9.95	7.46	0.81	1.98	3.70
FRD	Freshwater Drum	39.31	13.10	1.36	0.40	0.82	1.67
NOP	Northern Pike	23.57	7.86	2.36	1.82	2.50	3.35
WAE	Walleye	15.46	5.15	1.29	1.01	1.53	2.30
YEB	Yellow Bullhead	0.93	0.31	0.93	0.31	0.53	0.73
YEP	Yellow Perch	5.78	1.93	0.44	0.13	0.21	0.31
Total Pounds Fish/Set:			48.91	* Quartiles for Mean Weight			

Net Catch Summary by Numbers for TN

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

Number of Sets: 8
First Set Date: 06/01/2015
Last Lift Date: 06/04/2015
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BLB	Black Bullhead	54	6.75	11.50	42.00	132.61
BLC	Black Crappie	5	0.63	1.17	4.88	20.50
BLG	Bluegill	4	0.50	1.17	3.89	20.00
CAP	Common Carp	15	1.88	1.00	2.44	5.51
FRD	Freshwater Drum	1	0.13	0.23	0.92	3.25
WAE	Walleye	19	2.38	0.50	1.33	2.95
WTS	White Sucker	9	1.13	0.34	0.88	2.58
YEB	Yellow Bullhead	7	0.88	0.50	1.13	2.50
YEP	Yellow Perch	1	0.13	0.33	1.37	3.76
Total Fish/Set:			14.38	* 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	Quartiles for Lake Class 43*		
					25%	50%	75%
BLB	Black Bullhead	63.00	7.87	1.17	0.18	0.28	0.40
BLC	Black Crappie	5.16	0.64	1.03	0.22	0.34	0.50
BLG	Bluegill	3.27	0.41	0.82	0.13	0.24	0.39
CAP	Common Carp	108.55	13.57	7.24	1.42	2.92	4.58
FRD	Freshwater Drum	1.28	0.16	1.28	0.28	0.60	0.95
WAE	Walleye	14.24	1.78	0.75	0.82	1.44	2.28
WTS	White Sucker	28.43	3.55	3.16	1.05	1.47	2.04
YEB	Yellow Bullhead	6.78	0.85	0.97	0.31	0.48	0.67
YEP	Yellow Perch	0.72	0.09	0.72	0.11	0.18	0.30
Total Pounds Fish/Set:			28.93	* Quartiles for Mean Weight			

Length Frequency Distribution For GN

Standard gill net sets

(Field work conducted between 06/01/2015 and 06/04/2015)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>NOP</u>	<u>WAE</u>	<u>YEB</u>	<u>YEP</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	-	-	-	-	-	-	-	-	-	4
7.50 - 7.99	-	-	-	-	-	-	-	-	-	3
8.00 - 8.49	-	-	-	-	-	-	-	-	-	-
8.50 - 8.99	-	-	-	-	-	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-	-	-	-	-	-
9.50 - 9.99	-	-	-	-	-	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-	-	-	-	-	1
10.50 - 10.99	-	-	-	-	-	-	-	-	-	4
11.00 - 11.49	-	-	-	-	-	-	-	-	-	1
11.50 - 11.99	-	-	-	-	-	-	-	-	-	-
12.00 - 12.99	-	4	-	-	-	-	-	8	1	1
13.00 - 13.99	-	2	-	-	-	16	-	1	-	-
14.00 - 14.99	-	-	-	-	-	9	-	-	-	-
15.00 - 15.99	-	-	-	-	-	2	-	-	-	-
16.00 - 16.99	-	-	-	-	-	1	-	-	-	-
17.00 - 17.99	-	-	-	-	1	-	-	-	-	-
18.00 - 18.99	-	-	-	-	1	-	-	-	-	-
19.00 - 19.99	1	-	-	-	-	1	1	2	-	-
20.00 - 20.99	-	-	-	1	-	-	6	-	-	-
21.00 - 21.99	-	-	-	-	-	-	1	-	-	-
22.00 - 22.99	-	-	-	1	1	-	2	1	-	-
23.00 - 23.99	-	-	-	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	1	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	1	-	-	-	-	-	-
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>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>NOP</u>	<u>WAE</u>	<u>YEB</u>	<u>YEP</u>
Total	1	6	1	3	4	29	10	12	1	14
Min. Length	19.53	12.05	4.09	20.71	17.76	13.19	19.13	12.05	12.28	7.20
Max. Length	19.53	13.43	4.09	29.76	26.85	19.33	22.05	22.56	12.28	12.64
Mean Length	19.53	12.75	4.09	24.41	21.40	14.31	20.83	14.64	12.28	9.34
# Measured	1	6	1	3	4	29	10	12	1	12
No Lengths for	0	0	0	1	0	0	0	0	0	1

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

(Field work conducted between 06/01/2015 and 06/04/2015)

	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>FRD</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	-	-	-	-	-	-	-	-	-
5.00 - 5.49	-	-	-	-	-	-	-	-	-
5.50 - 5.99	-	-	1	-	-	-	-	-	-
6.00 - 6.49	-	-	-	-	-	-	-	-	-
6.50 - 6.99	-	-	-	-	-	-	-	-	-
7.00 - 7.49	-	-	-	-	-	-	-	-	-
7.50 - 7.99	-	-	-	-	-	-	-	-	-
8.00 - 8.49	-	-	-	-	-	-	-	-	-
8.50 - 8.99	-	-	1	-	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-	-	-	-	-
9.50 - 9.99	-	-	2	-	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-	-	-	-	-
10.50 - 10.99	1	-	-	-	-	-	-	-	-
11.00 - 11.49	-	-	-	-	-	-	-	2	1
11.50 - 11.99	6	1	-	-	-	2	-	-	-
12.00 - 12.99	33	4	-	-	-	7	-	5	-
13.00 - 13.99	13	-	-	-	-	7	-	-	-
14.00 - 14.99	1	-	-	-	1	2	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	-	1	-	-
17.00 - 17.99	-	-	-	-	-	-	2	-	-
18.00 - 18.99	-	-	-	-	-	-	5	-	-
19.00 - 19.99	-	-	-	-	-	-	1	-	-
20.00 - 20.99	-	-	-	-	-	-	-	-	-
21.00 - 21.99	-	-	-	2	-	-	-	-	-
22.00 - 22.99	-	-	-	1	-	-	-	-	-
23.00 - 23.99	-	-	-	3	-	-	-	-	-
24.00 - 24.99	-	-	-	2	-	-	-	-	-
25.00 - 25.99	-	-	-	4	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	3	-	-	-	-	-
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>BLG</u>	<u>CAP</u>	<u>FRD</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	54	5	4	15	1	18	9	7	1
Min. Length	10.59	11.65	5.75	21.65	14.17	11.61	16.77	11.02	11.42
Max. Length	14.06	12.64	9.84	27.91	14.17	14.49	19.33	12.83	11.42
Mean Length	12.58	12.25	8.52	24.69	14.17	12.99	18.12	12.05	11.42
# Measured	54	5	4	15	1	18	9	7	1
No Lengths for	0	0	0	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

Gear Type (1)	Other Species (Gender) (2)	Total Num	Number Measured	Length (inches) Min - Mean - Max	Number Weighed	Weight (pounds) Min - Mean - Max
TN	Painted Turtle	6	0	N/A	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 Standard Lake Survey Report contains preliminary data (as of 06/04/2015), 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.

Standard Lake Survey Report revision: 03/25/2014-RJE. Data Date: 06/04/2015 at 12:58 pm .

REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Clear

Survey Type: Standard Survey

DOW Number: 32-0022-00

Survey ID Date: 06/01/2015

Survey Status: Active

The following 20 (of 31) report components are not included in this 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. Laboratory Analysis Of Water Chemistry
16. Length At Capture With Last Incremental Length*
17. Back-Calculated Lengths
18. Age Class Frequency Distributions
19. Status Of Fishery And Field Notes
20. Water Quality (Winter Observations) (added to revision 01/21/2010)

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 Standard 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 06/04/2015 may not be reflected in the Distribution tables until 06/05/2015.

The following survey component was flagged to be specifically excluded from this report: TN - 8