



Minnesota Department of Natural Resources Fisheries Management



STANDARD LAKE SURVEY REPORT

DRAFT VERSION - PRELIMINARY DATA (AS OF 04/28/2014)

Lake Name: Kinbrae

Survey Type: Winter Kill Assessment

DOW Number: 53-0016-00

Survey ID Date: 04/22/2014

Lake Identification

Alternate Lake Name: Clear
Primary Lake Class ID: 43

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

Lake Location

Primary County: Nobles

Nearest Town: Kinbrae

Legal Descriptions

Lake Center: Township - 104N Range - 39W Section - 11
PLS Section Lake Center: 10403911

All Legal Descriptions:

Nobles County: Township - 104N Range - 39W Section - 11

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Population Assessment dated 06/13/1994)

Station ID	Ownership	Public Use	Type	Location / Comments
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(Data excludes records where public use is not designated or is designated "No Public Use")

Lake Characteristics

Lake Area (planimetered acres): 120.00
GIS Lake Area (acres): 93.94
DOW Lake Area (acres): 87.00
Littoral Area (acres): 93.94
Area in MN (acres): 93.94
Maximum Depth (feet): 7.0
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 1.95
Maximum Fetch (miles): 0.70
Fetch Orientation (degrees): 22
USGS Quad Map Number: W08c
USGS Quad 24K GIS Index: 4515

Watershed Characteristics

Major Watershed

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

Minor Watershed

Name: Talcot L
Watershed Number: 25
Watershed size (acres): 7,297

Surveys And Investigations

Re-Survey: 06/06/2006.
Population Assessment: 06/04/2012, 06/05/2000, 06/13/1994, 07/12/1989.
Winter Kill Assessment: 04/22/2014.
Dissolved Oxygen Check: 12/30/2013, 02/07/2013, 01/07/2013, 02/17/2012, 01/26/2012, 12/28/2010, 01/11/2010.

Water Level History - Readings

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
BM - 1	06/04/2012	N/A	N/A	Not Found
	06/13/2006	High	-3.50	Above or below Benchmark
BM - 2	06/07/2012	Normal	-1.50	Above or below Benchmark

Water Level History - Station Summary

<u>Station ID</u>	<u>Minimum Level</u>		<u>Maximum Level</u>		<u>Range (feet)</u>	<u>Average Level (feet)</u>	<u>Reading Type (and number of readings)</u>
	<u>Feet</u>	<u>Date</u>	<u>Feet</u>	<u>Date</u>			
BM - 1	-3.50	06/13/2006	-3.50	06/13/2006	0.00	-3.50	Above or below Benchmark (1)
BM - 1	N/A	N/A	N/A	N/A	N/A	N/A	Not Found - 06/04/2012 (0)
BM - 2	-1.50	06/07/2012	-1.50	06/07/2012	0.00	-1.50	Above or below Benchmark (1)

Net Catch Summary by Numbers for STN

Special sampling with trap nets

Number of Sets: 4
First Set Date: 04/22/2014
Last Lift Date: 04/23/2014
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BLB	Black Bullhead	852	213.00	N/A	N/A	N/A
		Total Fish/Set:	213.00	* 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	Quartiles for Lake Class 43*		
					25%	50%	75%
BLB	Black Bullhead	71.52	17.88	0.08	N/A	N/A	N/A
		Total Pounds Fish/Set:	17.88	* Quartiles for Mean Weight			

Length Frequency Distribution For STN

Special sampling with trap nets

(Field work conducted between 04/22/2014 and 04/23/2014)

	<u>BLB</u>
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	-
4.00 - 4.49	32
4.50 - 4.99	17
5.00 - 5.49	-
5.50 - 5.99	6
6.00 - 6.49	-
6.50 - 6.99	-
7.00 - 7.49	-
7.50 - 7.99	6
8.00 - 8.49	1
8.50 - 8.99	-
9.00 - 9.49	-
9.50 - 9.99	-
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	-

	<u>BLB</u>
Total	62
Min. Length	4.29
Max. Length	8.46
Mean Length	5.10
# Measured	14
No Lengths for	838

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
STN	Painted Turtle	3	0	N/A	0	N/A
	Snapping Turtle	1	0	N/A	0	N/A

(1) **Key to sampling gear abbreviations:**
 STN = Special sampling with trap nets

(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 04/28/2014), 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.

REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Kinbrae

Survey Type: Winter Kill Assessment

DOW Number: 53-0016-00

Survey ID Date: 04/22/2014

Survey Status: Field Work Complete

The following 22 (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. Dissolved Oxygen And Temperature Profile Of Lake Water
16. Field Measurements Of Water Quality
17. Laboratory Analysis Of Water Chemistry
18. Length At Capture With Last Incremental Length*
19. Back-Calculated Lengths
20. Age Class Frequency Distributions
21. Status Of Fishery And Field Notes
22. 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 before noon on 04/28/2014 may not be reflected in the Distribution tables until after 12:30 pm on 04/28/2014.