

Minnesota Department of Natural Resources

Fisheries Management



STANDARD LAKE SURVEY REPORT

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

Lake Name: Eagle **Survey Type: Winter Kill Assessment**

DOW Number: 17-0020-00 Survey ID Date: 04/21/2014

Lake Identification

Alternate Lake Name: N/A DNR Sounding Map Number: N/A Primary Lake Class ID: 43 Alternate Lake Class ID: N/A

Lake Location

Primary County: Cottonwood Nearest Town: Mountain Lake

Legal Descriptions

Range - 35W Section - 26 Lake Center: Township - 106N

PLS Section Lake Center: 10603526

All Legal Descriptions:

Cottonwood County: Township - 106N Sections - 26, 35 Range - 35W

Area Office

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

Lake Access

(Information based on Initial Survey dated 08/21/1995)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Gravel	STATE OWNED ACCESS ON NORTHEAST
				SIDE OF LAKE, ACCESS DEVELOPED IN 1996.

Lake Characteristics

Lake Area (planimetered acres): 120.00 GIS Shoreline Length (miles): 1.53 GIS Lake Area (acres): 105.41 Maximum Fetch (miles): 0.49 DOW Lake Area (acres): 88.00 Fetch Orientation (degrees): 360 USGS Quad Map Number: W09a Littoral Area (acres): 105.41 USGS Quad 24K GIS Index: 4418

Area in MN (acres): 105.41 Maximum Depth (feet): 8.0 Mean Depth (feet): 6.0

Watershed Characteristics

Major Watershed Minor Watershed

Name: From Mountain L Name: Watonwan River Watershed Number: Watershed Number:

Watershed size (acres): 558,963 Watershed size (acres): 7,845



Surveys And Investigations

Initial Survey: 08/21/1995.

Population Assessment: 08/18/2008.

Special Assessment: 06/25/1964.

Winter Kill Assessment: <u>04/21/2014</u>, 04/07/2010. **Dissolved Oxygen Check:** 01/09/2014, 01/20/2012.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	08/18/2008	Low	-3.90	Above or below Benchmark

Water Level History - Station Summary

	Minim	um Level	Maxim	um Level	Range	Average	Reading Type
Station ID	Feet	Date	Feet	Date	(feet)	Level (feet)	(and number of readings)
BM - 1	-3.90	08/18/2008	-3.90	08/18/2008	0.00	-3.90	Above or below Benchmark (1)

Net Catch Summary by Numbers for TN

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

Number of Sets: 4

First Set Date: 04/21/2014 Last Lift Date: 04/22/2014 Target Species: N/A

Quartiles	for	Lake	Class	43*
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Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BLB	Black Bullhead	487	121.75	11.50	42.00	132.61
		Total Fish/Set:	121.75	* Quartile	es for Number P	er Set

Net Catch Summary by Weight for TN

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

		Total Weight	Pounds	Mean	Quartiles	for Lake Clas	s 43*
Abbr	Species	(Pounds)	Per Set	Weight	25%	50%	75%
BLB	Black Bullhead	88.15	22.04	0.18	0.18	0.28	0.40
		Total Pounds Fish/Set:	22.04		* Quarti	les for Mean W	eight

Length Frequency Distribution For TN

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

(Field work conducted between 04/21/2014 and 04/22/2014)

, 2.00	<u>BLB</u>
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	-
4.00 - 4.49	-
4.50 - 4.99	27
5.00 - 5.49	27
5.50 - 5.99	109
6.00 - 6.49	-
6.50 - 6.99	-
7.00 - 7.49	-
7.50 - 7.99	27
8.00 - 8.49	82
8.50 - 8.99	27
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	
	BLB

BLB
299
4.92
8.62
6.69
11
476

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		Total	Number	Length (inches)	Number	Weight (pounds)
Type (1)	Other Species (Gender) (2)	Num	Measured	Min - Mean - Max	Weighed	Min - Mean - Max
TN	Painted Turtle	2	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
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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: Eagle Survey Type: Winter Kill Assessment

DOW Number: 17-0020-00 Survey ID Date: 04/21/2014

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
- 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. 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)

- * 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.

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.