

Minnesota Department of Natural Resources

Fisheries Management



STANDARD LAKE SURVEY REPORT

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

Lake Name: Wilmert (main bay) **Survey Type: Winter Kill Assessment**

DOW Number: 46-0014-01 Survey ID Date: 04/21/2014

Lake Identification

Alternate Lake Name: N/A DNR Sounding Map Number: C0460 Primary Lake Class ID: 43 Alternate Lake Class ID: N/A

Lake Location

Primary County: Martin Nearest Town: Fairmont

Legal Descriptions

Lake Center: Township - 101N Range - 30W Section - 7

PLS Section Lake Center: 10103007

All Legal Descriptions:

Martin County: Township - 101N Sections - 7, 18 Range - 30W

Area Office

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

Lake Access

(Information based on Re-Survey dated 08/30/2010)

Station ID	Ownership	Public Use	Туре	Location / Comments
AC - 1	DNR	Open to Public use	Asphalt	Needs maintenance. Gravel on top of access ramp cansing truck tires to spin out when loading out boat.

Lake Characteristics

Lake Area (planimetered acres): 362.00 GIS Shoreline Length (miles): 3.27 GIS Lake Area (acres): 335.44 Maximum Fetch (miles): 1.14 DOW Lake Area (acres): 362.00 Fetch Orientation (degrees): 315 Littoral Area (acres): 335.44 USGS Quad Map Number: X12c USGS Quad 24K GIS Index: 4723

Area in MN (acres): 335.44 Maximum Depth (feet): 8.0 Mean Depth (feet): N/A

Watershed Characteristics

Major Watershed Minor Watershed

Name: Blue Earth River Name: From Amber L Watershed Number: 30 Watershed Number: 66

Watershed size (acres): 777,240 Watershed size (acres): 11,904



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WINTER KILL ASSESSMENT DATED 04/21/2014 FOR DOW NUMBER 46-0014-01

Surveys And Investigations

Initial Survey: 09/04/1990.

Re-Survey: 08/30/2010, 08/27/2001, 08/25/1997, 08/30/1993.

Population Assessment: 08/25/1997.

Special Assessment: 10/20/1999, 09/09/1997, 07/07/1950.

Winter Kill Assessment: 04/21/2014.

Dissolved Oxygen Check: 01/03/2014, 01/08/2013, 02/05/2010.

STANDARD LAKE SURVEY REPORT WINTER KILL ASSESSMENT DATED 04/21/2014 FOR DOW NUMBER 46-0014-01

Net Catch Summary by Numbers for STN

Special sampling with trap nets

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*

Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BIB	Bigmouth Buffalo	395	98.75	N/A	N/A	N/A
BLB	Black Bullhead	21	5.25	N/A	N/A	N/A
BLC	Black Crappie	92	23.00	N/A	N/A	N/A
CAP	Common Carp	13	3.25	N/A	N/A	N/A
FRD	Freshwater Drum	5	1.25	N/A	N/A	N/A
NOP	Northern Pike	1	0.25	N/A	N/A	N/A
WAE	Walleye	114	28.50	N/A	N/A	N/A
WHC	White Crappie	10	2.50	N/A	N/A	N/A
WTS	White Sucker	1	0.25	N/A	N/A	N/A
YEP	Yellow Perch	1,780	445.00	N/A	N/A	N/A
		Total Fish/Set:	608.00	* Quartiles	s for Number Pe	er Set

Net Catch Summary by Weight for STN

Special sampling with trap nets

		Total Weight	Pounds	Mean	Quartiles for Lake Class 43*		s 43*	
Abbr	Species	(Pounds)	Per Set	Weight	25%	50%	75%	
BIB	Bigmouth Buffalo	100.72	25.18	0.25	N/A	N/A	N/A	
BLB	Black Bullhead	11.27	2.82	0.54	N/A	N/A	N/A	
BLC	Black Crappie	55.29	13.82	0.60	N/A	N/A	N/A	
CAP	Common Carp	31.12	7.78	2.39	N/A	N/A	N/A	
FRD	Freshwater Drum	0.15	0.04	0.03	N/A	N/A	N/A	
NOP	Northern Pike	10.25	2.56	10.25	N/A	N/A	N/A	
WAE	Walleye	81.25	20.31	0.71	N/A	N/A	N/A	
WHC	White Crappie	0.33	0.08	0.03	N/A	N/A	N/A	
WTS	White Sucker	0.00	0.00	0.00	N/A	N/A	N/A	
YEP	Yellow Perch	203.28	50.82	0.11	N/A	N/A	N/A	
		Total Pounds Fish/Set:	123.42		* Quartiles for Mean Weight			

STANDARD LAKE SURVEY REPORT WINTER KILL ASSESSMENT DATED 04/21/2014 FOR DOW NUMBER 46-0014-01

Length Frequency Distribution For STN

Special sampling with trap nets

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

		BIB	BLB	BLC	CAP	FRD	NOP	WAE	WHC	YEP
3.50 - 3.99	< 3.00	-	-	-	-	-	-	-	-	-
4.00 - 4.49	3.00 - 3.49	-	-	-	-	-	-	-	1	-
4.50 - 4.99	3.50 - 3.99	-	-	5	-	-	-	-	4	249
5.00 - 5.49 - <t< td=""><td>4.00 - 4.49</td><td>-</td><td>-</td><td>16</td><td>-</td><td>3</td><td>-</td><td>-</td><td>2</td><td>997</td></t<>	4.00 - 4.49	-	-	16	-	3	-	-	2	997
5.50 - 5.99 - - - 1 - <t< td=""><td>4.50 - 4.99</td><td>-</td><td>2</td><td>5</td><td>-</td><td>2</td><td>-</td><td>-</td><td>3</td><td>-</td></t<>	4.50 - 4.99	-	2	5	-	2	-	-	3	-
6.00 - 6.49 15 - - 3 - <t< td=""><td>5.00 - 5.49</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	5.00 - 5.49	-	-	-	-	-	-	-	-	-
6.50 - 6.99	5.50 - 5.99	-	-	-	1	-	-	-	-	-
6.50 - 6.99	6.00 - 6.49	15	-	-	3	-	-	-	-	-
7.00 - 7.49 31 - - 1 - <		31	3	-	4	-	-	-	-	-
7.50 - 7.99 123 3 - <		31	_	_	1	_	_	_	_	_
8.00 - 8.49 15 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	7.50 - 7.99	123	3	_	-	_	_	_	_	_
8.50 - 8.99		15	_	_	_	_	_	_	_	_
9.00 - 9.49		_	_	_	_	_	_	3	_	379
9.50 - 9.99		_	_	_	_	_	_	22	_	135
10.00 - 10.49		_	_	_	_	_	_		_	
10.50 - 10.99		_		_	_	_	_		_	_
11.00 - 11.49		_		33	_	_		-	_	_
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12.00 - 12.99		_			_	_	_	_	_	-
13.00 - 13.99		_			_	_	_	_	_	_
14.00 - 14.99 1 15.00 - 15.99 1 16.00 - 16.99 3 17.00 - 17.99 3 18.00 - 18.99 3 19.00 - 19.99 </td <td></td> <td>_</td> <td></td> <td></td> <td>_</td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>_</td>		_			_	_		_	_	_
15.00 - 15.99			_	_	_	_			_	_
16.00 - 16.99		_	_	_	_	_	_		_	_
17.00 - 17.99		_	_	_	_	_	_		_	_
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19.00 - 19.99		-	-	-	-	-			-	-
20.00 - 20.99 - - - - 2 - - 21.00 - 21.99 - - - - - - - - 22.00 - 22.99 - - - - - - - - 23.00 - 23.99 - - - - - - - - - 24.00 - 24.99 - - - 2 - - - - - 25.00 - 25.99 - - - 1 - - - - - 26.00 - 26.99 - - - 1 - <		-	-	-	-	-			-	-
21.00 - 21.99		-	-	-	-	-			-	-
22.00 - 22.99 - <		-	-	-	-	-	-	2	-	-
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 - <		-	-	-	-	-	1	-	-	-
= > 36.00		-	-	-	-	-	-	-	-	-
BIB BLB BLC CAP FRD NOP WAE WHC YEP Total 215 23 92 13 5 1 69 10 1765 Min. Length 6.26 4.80 3.98 5.79 4.09 33.46 8.98 3.46 3.70 Max. Length 8.43 11.97 11.73 26.42 4.76 33.46 20.94 4.84 11.06 Mean Length 7.53 9.12 5.45 12.27 4.45 33.46 12.65 4.13 6.34 # Measured 14 11 12 13 3 1 30 10 18		-	-	-	-	-	-	-	-	-
Total 215 23 92 13 5 1 69 10 1765 Min. Length 6.26 4.80 3.98 5.79 4.09 33.46 8.98 3.46 3.70 Max. Length 8.43 11.97 11.73 26.42 4.76 33.46 20.94 4.84 11.06 Mean Length 7.53 9.12 5.45 12.27 4.45 33.46 12.65 4.13 6.34 # Measured 14 11 12 13 3 1 30 10 18	= > 36.00	-	-	-	-	-	-	-	-	
Total 215 23 92 13 5 1 69 10 1765 Min. Length 6.26 4.80 3.98 5.79 4.09 33.46 8.98 3.46 3.70 Max. Length 8.43 11.97 11.73 26.42 4.76 33.46 20.94 4.84 11.06 Mean Length 7.53 9.12 5.45 12.27 4.45 33.46 12.65 4.13 6.34 # Measured 14 11 12 13 3 1 30 10 18		RIR	RIR	BI C	CAB	EDD	NOD	WAE	WHC	VED
Min. Length 6.26 4.80 3.98 5.79 4.09 33.46 8.98 3.46 3.70 Max. Length 8.43 11.97 11.73 26.42 4.76 33.46 20.94 4.84 11.06 Mean Length 7.53 9.12 5.45 12.27 4.45 33.46 12.65 4.13 6.34 # Measured 14 11 12 13 3 1 30 10 18	Total									
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Mean Length 7.53 9.12 5.45 12.27 4.45 33.46 12.65 4.13 6.34 # Measured 14 11 12 13 3 1 30 10 18										
# Measured 14 11 12 13 3 1 30 10 18	•									
No Lengths for 381 10 80 0 2 0 84 0 1762										
	No Lengths for	381	10	80	0	2	0	84	0	1762

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

STANDARD LAKE SURVEY REPORT WINTER KILL ASSESSMENT DATED 04/21/2014 FOR DOW NUMBER 46-0014-01

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.

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REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Wilmert (main bay)

Survey Type: Winter Kill Assessment

DOW Number: 46-0014-01 Survey ID Date: 04/21/2014

Survey Status: Field Work Complete

The following 25 (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. Water Level History Readings*
- 5. Water Level History Station Summary*
- 6. Lake Inlets
- 7. Additional Inlet Information
- 8. Lake Outlets
- 9. Additional Outlet Information
- 10. Water Control Structure (Dam)
- 11. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations²
- 12. Resorts And Campgrounds
- 13. Fish Spawning Conditions
- 14. Erosion And Pollution
- 15. Fish Diseases And Parasites
- 16. Aquatic Vegetation And Shoalwater Substrates
- 17. Dissolved Oxygen And Temperature Profile Of Lake Water
- 18. Field Measusrements Of Water Quality
- 19. Laboratory Analysis Of Water Chemistry
- 20. Length At Capture With Last Incremental Length*
- 21. Back-Calculated Lengths
- 22. Age Class Frequency Distributions
- 23. Status Of Fishery And Field Notes
- 24. Other Species (added to revision 03/24/2009)
- 25. 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.