

# Minnesota Department of Natural Resources Fisheries Management

# STANDARD LAKE SURVEY REPORT



**DRAFT VERSION** - PRELIMINARY DATA (AS OF 05/02/2014)

Lake Name: Heron (South Heron) Survey Type: Winter Kill Assessment

DOW Number: 32-0057-07 Survey ID Date: 05/01/2014

Lake Identification

Alternate Lake Name: N/A DNR Sounding Map Number: N/A Primary Lake Class ID: 41 Alternate Lake Class ID: N/A

**Lake Location** 

Primary County: Jackson Nearest Town: Lakefield

**Legal Descriptions** 

Lake Center: Township - 103N Range - 37W Section - 13

PLS Section Lake Center: 10303713

All Legal Descriptions:

Jackson County: Township - 103N Range - 36W Sections - 19, 29, 30

Township - 103N Range - 37W (Eleven various sections)

**Area Office** 

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

#### **Lake Access**

(Information based on Population Assessment dated 07/06/1993)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Carry-In	DNR access on Northwest side T-103 R-37 S-15.
AC - 2	County	Open to Public use	Concrete	County access on east side T-103 R-36 S-19.
AC - 3	County	Open to Public use	Concrete	County access on West side T-103 R-37 S-24.

#### **Lake Characteristics**

Lake Area (planimetered acres): 2845.00 GIS Shoreline Length (miles): 14.43

GIS Lake Area (acres): 2641.39 Maximum Fetch (miles): 5.05

DOW Lake Area (acres): 0.00 Fetch Orientation (degrees): 315

Littoral Area (acres): 2641.39 USGS Quad Map Number: X09b

Area in MN (acres): 2641.39 USGS Quad 24K GIS Index: 4617

Maximum Depth (feet): 5.0 Mean Depth (feet): 3.0



#### STANDARD LAKE SURVEY REPORT

#### WINTER KILL ASSESSMENT DATED 05/01/2014 FOR DOW NUMBER 32-0057-07

#### **Watershed Characteristics**

Major Watershed Minor Watershed

Name: Des Moines-Headwaters

Name: Division Cr

Watershed Number: 51

Watershed Number: 95

Watershed size (acres): 798,595 Watershed size (acres): 16,116

**Surveys And Investigations** 

**Re-Survey:** 07/08/1991, 07/06/1987, 09/08/1981.

**Population Assessment:** 06/13/2011, 07/06/1999, 06/29/1998, 07/14/1997, 07/01/1996, 07/10/1995, 07/05/1994,

07/06/1993.

Winter Kill Assessment: 05/01/2014. Dissolved Oxygen Check: 01/14/2011.

## STANDARD LAKE SURVEY REPORT WINTER KILL ASSESSMENT DATED 05/01/2014 FOR DOW NUMBER 32-0057-07

#### Net Catch Summary by Numbers for STN

#### Special sampling with trap nets

Number of Sets: 4

First Set Date: 05/01/2014 Last Lift Date: 05/02/2014 Target Species: N/A

#### Quartiles for Lake Class 41\*

Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BIB	Bigmouth Buffalo	16	4.00	N/A	N/A	N/A
BLB	Black Bullhead	2	0.50	N/A	N/A	N/A
CAP	Common Carp	20	5.00	N/A	N/A	N/A
NOP	Northern Pike	1	0.25	N/A	N/A	N/A
WAE	Walleye	2	0.50	N/A	N/A	N/A
WTS	White Sucker	2	0.50	N/A	N/A	N/A
YEP	Yellow Perch	1	0.25	N/A	N/A	N/A
		Total Fish/Set:	11.00	* Quartiles	s for Number Pe	er Set

#### Net Catch Summary by Weight for <u>STN</u>

#### Special sampling with trap nets

		Total Weight	Pounds	Mean	Quartiles for Lake Class 41*		
Abbr	Species	(Pounds)	Per Set	Weight	25%	50%	75%
BIB	Bigmouth Buffalo	7.93	1.98	0.50	N/A	N/A	N/A
BLB	Black Bullhead	0.19	0.05	0.10	N/A	N/A	N/A
CAP	Common Carp	103.82	25.95	5.19	N/A	N/A	N/A
NOP	Northern Pike	3.70	0.92	3.70	N/A	N/A	N/A
WAE	Walleye	4.57	1.14	2.29	N/A	N/A	N/A
WTS	White Sucker	2.31	0.58	1.15	N/A	N/A	N/A
YEP	Yellow Perch	0.06	0.01	0.06	N/A	N/A	N/A
		Total Pounds Fish/Set:	30.64		* Quartiles for Mean Weight		

#### Length Frequency Distribution For <u>STN</u>

#### Special sampling with trap nets

(Field work conducted between 05/01/2014 and 05/02/2014)

. 0.00	BIB	BLB	CAP	<u>NOP</u>	WAE	<u>wts</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-
3.50 - 3.99	-	1	-	-	-	-	_
4.00 - 4.49 4.50 - 4.99	1	'	-	-	-	-	_
	'	-	-	-	-	-	1
5.00 - 5.49	6	-	-	-	-	-	'
5.50 - 5.99	1	-	-	-	-	-	-
6.00 - 6.49	2	1	-	-	-	1	_
6.50 - 6.99	4	'	-	-	-	'	_
7.00 - 7.49	-	-	-	-	-	-	_
7.50 - 7.99	1	-	-	-	-	-	-
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	-	-	-	-	1	1	-
17.00 - 17.99	-	-	-	-	'	ı	-
18.00 - 18.99	-	-	- 1	-	-	-	-
19.00 - 19.99	-	-	3	-	1	-	-
20.00 - 20.99	- 1	-	ა 5	-	-	-	-
21.00 - 21.99	,	-		-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	-	-	-	-
24.00 - 24.99	-	-	5	- 1	-	-	-
25.00 - 25.99	-	-		1	-	-	-
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							
	BIB	BLB	CAP	NOP	WAE	<u>WTS</u>	YEP
Total	16	2	14	1	2	2	1
Min. Length	4.88	4.29	19.72	25.94	17.76	6.61	5.16
Max. Length	21.06	6.61	24.84	25.94	19.92	17.36	5.16
Mean Length	7.33	5.45	22.19	25.94	18.84	11.99	5.16
# Measured	16	2.43	11	1	2	2	1
No Lengths for	0	0	9	0	0	0	0
140 Longins IOI	U	U	9	U	U	U	U

**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 05/01/2014 FOR DOW NUMBER 32-0057-07

**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 05/02/2014), 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: Heron (South Heron) Survey Type: Winter Kill Assessment

DOW Number: 32-0057-07 Survey ID Date: 05/01/2014

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 History<sup>1</sup>
- 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 Observations<sup>2</sup>
- 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)
- <sup>1</sup> 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.
- <sup>2</sup> 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 05/02/2014 may not be reflected in the Distribution tables until 05/03/2014.