

Lake Name: Loon

Survey Type: Standard Survey

DOW Number: 32-0020-00

Survey ID Date: 07/08/2024

**Lake Identification**

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

DNR Sounding Map Number: C0523  
Alternate Lake Class ID: N/A

**Lake Location**

Primary County: Jackson

Nearest Town: Jackson

**Legal Descriptions**

Lake Center: Township - 101N Range - 36W Section - 24  
PLS Section Lake Center: 10103624

**All Legal Descriptions:**

Jackson County: Township - 101N Range - 35W Sections - 18, 19  
Township - 101N Range - 36W Sections - 13, 24, 25

**Area Office**

Area Name: Windom  
Region Name: Southern

ORG Code: F418  
Region Number: 4

**Lake Access**

(Information based on Re-Survey dated 06/21/1993)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	State owned access on southwest side of lake.

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

**Lake Characteristics**

Lake Area (planimetered acres): 679.00	GIS Shoreline Length (miles): 6.30
GIS Lake Area (acres): 707.68	Maximum Fetch (miles): 2.00
DOW Lake Area (acres): 738.00	Fetch Orientation (degrees): 292
Littoral Area (acres): 706.97	USGS Quad Map Number: X09d
Area in MN (acres): 707.68	USGS Quad 24K GIS Index: 4718
Maximum Depth (feet): 8.0	
Mean Depth (feet): N/A	

**Watershed Characteristics**

**Major Watershed**

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

**Minor Watershed**

Name: To Spirit L  
Watershed Number: 25  
Watershed size (acres): 5,231

**Surveys and Investigations**

**Re-Survey:** 06/25/2001, 06/21/1993, 06/20/1983.  
**Population Assessment:** 06/18/2012, 06/28/2008, 06/28/2004, 06/23/1997, 06/11/1990, 06/14/1988.  
**Special Assessment:** 10/17/2000, 10/07/1998, 10/02/1996, 11/14/1994, 08/10/1948.  
**Creel Survey:** 05/01/1990.  
**Winter Kill Assessment:** 04/24/2014.  
**Dissolved Oxygen Check:** 02/10/2016, 01/20/2015, 01/02/2014, 02/07/2013, 01/04/2013, 02/17/2012, 01/26/2012/28/2010, 01/04/2010.  
**Natural Reproduction Check:** 09/16/2010.  
**External Management Survey:** 07/30/2014.  
**Standard Survey:** 06/29/2020, 06/27/2016.  
**Targeted Survey:** 10/02/2023, 06/29/2021, 09/24/2020, 08/17/2020, 02/04/2020, 01/10/2019, 01/19/2019/07/2017, 09/28/2016.

**Current Water Level**

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
GA - 1	07/11/2024	High	5.60	Direct Gauge Reading

**Benchmark and Gauge Descriptions / Locations**

<u>Station ID</u>	<u>Location Description</u>
GA - 1	N/A

**Water Level History - Readings**

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
BM - 1	06/30/2020	High	-2.00	Above or below Benchmark
	06/27/2016	High	-2.20	Above or below Benchmark
	06/18/2012	Normal	1.50	Direct Gauge Reading
	07/02/2008	N/A	-2.70	Above or below Benchmark
GA - 1	07/11/2024	High	5.60	Direct Gauge Reading
	06/27/2016	High	1.30	Direct Gauge Reading

**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	-2.70	07/02/2008	-2.00	06/30/2020	0.70	-2.30	Above or below Benchmark (3)
BM - 1	1.50	06/18/2012	1.50	06/18/2012	0.00	1.50	Direct Gauge Reading (1)
GA - 1	1.30	06/27/2016	5.60	07/11/2024	4.30	3.45	Direct Gauge Reading (2)

**Dissolved Oxygen and Temperature Profile of Lake Water**

<u>Station ID</u>	<u>Sampling Date</u>	<u>Bottom Depth (Feet)</u>	<u>Sample Depth (Feet)</u>	<u>Water Temperature (°F)</u>	<u>Dissolved Oxygen (ppm)</u>
WQ - 1	07/10/2024	6.6	Surface	76.5	12.8
			1.0	76.5	13.8
			2.0	76.5	14.1
			3.0	76.5	14.0
			4.0	76.3	13.1
			5.0	75.2	9.6
			6.0	73.4	6.9

**Field Measurements of Water Quality**

<b>Station ID</b>	<b>Sampling Date</b>	<b>Sample Depth (Feet)</b>	<b>Secchi Depth (Feet)</b>	<b>Field pH</b>	<b>Alkalinity (ppm)</b>	<b>Water Color</b>	<b>Color Cause</b>
WQ - 1	07/10/2024	Surface	0.7	9.03	180	Green	Algae

**Net Catch Summary by Numbers for GN**

Standard gill net sets

Number of Sets: 3  
First Set Date: 07/08/2024  
Last Lift Date: 07/11/2024  
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 <sup>1</sup>		
				25%	50%	75%
BIB	Bigmouth Buffalo	26	8.67	0.75	2.58	6.96
BLB	Black Bullhead	117	39.00	30.34	75.58	150.62
BLC	Black Crappie	2	0.67	1.41	3.71	13.75
CCF	Channel Catfish	3	1.00	N/A	N/A	N/A
CAP	Common Carp	1	0.33	1.00	3.33	13.75
FRD	Freshwater Drum	5	1.67	0.50	2.56	8.33
LMB	Largemouth Bass	1	0.33	0.20	0.50	1.50
NOP	Northern Pike	7	2.33	1.08	3.00	8.00
WAE	Walleye	64	21.33	2.28	6.83	18.06
WTS	White Sucker	1	0.33	0.81	2.33	6.50
YEP	Yellow Perch	10	3.33	2.65	8.00	25.00
		Total Fish/Set:	79.00	<sup>1</sup> 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 <sup>2</sup>	Quartiles for Lake Class 43 <sup>1</sup>		
					25%	50%	75%
BIB	Bigmouth Buffalo	30.10	10.03	1.16	N/A	N/A	N/A
BLB	Black Bullhead	42.06	14.02	0.36	0.17	0.26	0.39
BLC	Black Crappie	0.40	0.13	0.20	0.16	0.25	0.35
CCF	Channel Catfish	27.73	9.24	9.24	N/A	N/A	N/A
CAP	Common Carp	7.50	2.50	7.50	0.81	1.98	3.70
FRD	Freshwater Drum	5.42	1.81	1.36	0.40	0.82	1.67
LMB	Largemouth Bass	0.57	0.19	0.57	0.60	1.18	1.37
NOP	Northern Pike	23.71	7.90	3.39	1.82	2.50	3.35
WAE	Walleye	38.47	12.82	0.61	1.01	1.53	2.30
WTS	White Sucker	3.86	1.29	3.86	0.93	1.58	2.02
YEP	Yellow Perch	4.04	1.35	0.40	0.13	0.21	0.31
		Total Pounds Fish/Set:	61.29	<sup>1</sup> Quartiles for Mean Weight			

<sup>2</sup> Mean Weights are based on measured fish counts only.

**Net Catch Summary by Numbers for TN**

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

**Number of Sets:** 12  
**First Set Date:** 07/08/2024  
**Last Lift Date:** 07/11/2024  
**Target Species:** N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 <sup>1</sup>		
				25%	50%	75%
BIB	Bigmouth Buffalo	58	4.83	0.17	0.38	1.04
BLB	Black Bullhead	39	3.25	11.50	42.00	132.61
BLC	Black Crappie	50	4.17	1.17	4.88	20.50
CCF	Channel Catfish	2	0.17	N/A	N/A	N/A
CAP	Common Carp	23	1.92	1.00	2.44	5.51
FRD	Freshwater Drum	21	1.75	0.23	0.92	3.25
NOP	Northern Pike	6	0.50	N/A	N/A	N/A
SNG	Shortnose Gar	1	0.08	N/A	N/A	N/A
WAE	Walleye	17	1.42	0.50	1.33	2.95
WHB	White Bass	1	0.08	0.17	0.37	0.70
YEB	Yellow Bullhead	1	0.08	0.50	1.13	2.50
YEP	Yellow Perch	6	0.50	0.33	1.37	3.76
Total Fish/Set:			18.75	<sup>1</sup> 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 <sup>2</sup>	Quartiles for Lake Class 43 <sup>1</sup>		
					25%	50%	75%
BIB	Bigmouth Buffalo	394.18	32.85	6.80	2.56	3.75	5.83
BLB	Black Bullhead	10.18	0.85	0.26	0.18	0.28	0.40
BLC	Black Crappie	26.53	2.21	0.53	0.22	0.34	0.50
CCF	Channel Catfish	2.98	0.25	1.49	N/A	N/A	N/A
CAP	Common Carp	122.51	10.21	5.33	1.42	2.92	4.58
FRD	Freshwater Drum	40.03	3.34	1.91	0.28	0.60	0.95
NOP	Northern Pike	27.50	2.29	4.58	N/A	N/A	N/A
SNG	Shortnose Gar	2.91	0.24	2.91	N/A	N/A	N/A
WAE	Walleye	12.29	1.02	0.72	0.82	1.44	2.28
WHB	White Bass	0.71	0.06	0.71	0.23	0.35	0.60
YEB	Yellow Bullhead	1.11	0.09	1.11	0.31	0.48	0.67
YEP	Yellow Perch	2.27	0.19	0.38	0.11	0.18	0.30
Total Pounds Fish/Set:			53.60	<sup>1</sup> Quartiles for Mean Weight			

<sup>2</sup> Mean Weights are based on measured fish counts only.

**Length Frequency Distribution for GN**

**Standard gill net sets**

(Field work conducted between 07/08/2024 and 07/11/2024)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>LMB</u>	<u>NOP</u>	<u>WAE</u>	<u>WTS</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	-	14	-	-	-	-	-	-	-	-	-
5.50 - 5.99	-	11	-	-	-	-	-	-	-	-	-
6.00 - 6.49	-	14	1	-	-	-	-	-	-	-	-
6.50 - 6.99	-	9	-	-	-	-	-	-	-	-	-
7.00 - 7.49	1	4	-	-	-	1	-	-	-	-	-
7.50 - 7.99	1	3	1	-	-	1	-	-	-	-	-
8.00 - 8.49	7	2	-	-	-	-	-	-	-	-	1
8.50 - 8.99	3	12	-	-	-	-	-	-	-	-	5
9.00 - 9.49	1	10	-	-	-	-	-	-	4	-	2
9.50 - 9.99	-	21	-	-	-	-	-	-	3	-	1
10.00 - 10.49	-	9	-	-	-	-	1	-	15	-	1
10.50 - 10.99	-	2	-	-	-	-	-	-	17	-	-
11.00 - 11.49	-	1	-	-	-	-	-	-	16	-	-
11.50 - 11.99	-	-	-	-	-	-	-	-	1	-	-
12.00 - 12.99	5	3	-	-	-	-	-	-	1	-	-
13.00 - 13.99	6	2	-	-	-	-	-	-	-	-	-
14.00 - 14.99	1	-	-	-	-	-	-	-	2	-	-
15.00 - 15.99	-	-	-	-	-	1	-	-	1	-	-
16.00 - 16.99	-	-	-	-	-	-	-	-	1	-	-
17.00 - 17.99	-	-	-	-	-	-	-	-	1	-	-
18.00 - 18.99	-	-	-	-	-	-	-	-	-	-	-
19.00 - 19.99	-	-	-	-	-	1	-	-	-	1	-
20.00 - 20.99	-	-	-	-	-	-	-	4	1	-	-
21.00 - 21.99	-	-	-	-	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-	1	-	-	-
23.00 - 23.99	-	-	-	-	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	1	-	-	-	-	-	-
25.00 - 25.99	1	-	-	1	-	-	-	-	1	-	-
26.00 - 26.99	-	-	-	-	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	1	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-	-	1	-	-	-
30.00 - 30.99	-	-	-	-	1	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	1	-	-	-
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>LMB</u>	<u>NOP</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
Total	26	117	2	1	3	4	1	7	64	1	10
Min. Length	7.32	5.04	6.38	25.63	24.33	7.40	10.00	20.12	9.13	19.06	8.23
Max. Length	25.67	13.62	7.60	25.63	30.39	19.09	10.00	32.64	25.67	19.06	10.08
Mean Length	11.18	8.08	6.99	25.63	27.59	12.48	10.00	23.76	11.46	19.06	9.06
# Measured	26	117	2	1	3	4	1	7	61	1	10
No Lengths for	0	0	0	0	0	1	0	0	3	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.

**Length Frequency Distribution for TN**

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

(Field work conducted between 07/08/2024 and 07/11/2024)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>NOP</u>	<u>SNG</u>	<u>WAE</u>	<u>WHB</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	-	4	2	-	-	-	-	-	-	-	-	-
5.00 - 5.49	-	7	-	-	-	-	-	-	-	-	-	-
5.50 - 5.99	-	6	7	-	-	-	-	-	-	-	-	-
6.00 - 6.49	-	6	2	-	-	-	-	-	-	-	-	1
6.50 - 6.99	-	4	2	-	-	2	-	-	-	-	-	-
7.00 - 7.49	-	1	1	-	-	3	-	-	-	-	-	-
7.50 - 7.99	-	2	7	-	-	2	-	-	-	-	-	-
8.00 - 8.49	-	-	8	-	-	1	-	-	-	-	-	2
8.50 - 8.99	-	1	3	-	-	-	-	-	-	-	-	1
9.00 - 9.49	1	2	2	-	-	-	-	-	1	-	-	1
9.50 - 9.99	-	2	-	-	-	1	-	-	-	-	-	-
10.00 - 10.49	-	1	-	-	-	1	-	-	1	-	-	-
10.50 - 10.99	-	-	-	-	-	1	-	-	4	-	-	-
11.00 - 11.49	-	-	4	-	1	-	-	-	4	1	-	-
11.50 - 11.99	1	-	1	-	-	-	-	-	2	-	-	1
12.00 - 12.99	6	2	7	-	-	-	-	-	-	-	1	-
13.00 - 13.99	3	1	4	1	-	2	-	-	-	-	-	-
14.00 - 14.99	1	-	-	1	-	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	3	-	-	-	-	1	-	-	-
16.00 - 16.99	-	-	-	1	-	2	-	-	3	-	-	-
17.00 - 17.99	-	-	-	2	1	3	1	-	-	-	-	-
18.00 - 18.99	1	-	-	-	-	-	-	-	-	-	-	-
19.00 - 19.99	2	-	-	2	-	-	1	-	-	-	-	-
20.00 - 20.99	6	-	-	3	-	-	-	-	-	-	-	-
21.00 - 21.99	5	-	-	-	-	1	-	-	-	-	-	-
22.00 - 22.99	6	-	-	1	-	-	1	-	-	-	-	-
23.00 - 23.99	4	-	-	1	-	1	1	-	-	-	-	-
24.00 - 24.99	6	-	-	1	-	-	-	-	-	-	-	-
25.00 - 25.99	5	-	-	3	-	-	-	-	-	-	-	-
26.00 - 26.99	6	-	-	1	-	-	-	-	-	-	-	-
27.00 - 27.99	1	-	-	1	-	-	-	-	-	-	-	-
28.00 - 28.99	3	-	-	-	-	-	-	1	-	-	-	-
29.00 - 29.99	1	-	-	1	-	1	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	-	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-	1	-	-	-	-	-
32.00 - 32.99	-	-	-	1	-	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	1	-	-	-	-	-
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>SNG</u>	<u>WAE</u>	<u>WHB</u>	<u>YEB</u>	<u>YEP</u>
Total	58	39	50	23	2	21	6	1	16	1	1	6
Min. Length	9.29	4.76	4.53	13.82	11.38	6.50	17.48	28.39	9.09	11.26	12.64	6.18
Max. Length	29.76	13.86	13.35	32.76	17.72	29.37	33.98	28.39	16.57	11.26	12.64	11.89
Mean Length	21.45	7.00	8.89	21.20	14.55	13.11	24.72	28.39	12.24	11.26	12.64	8.78
# Measured	58	39	50	23	2	21	6	1	16	1	1	6
No Lengths for	0	0	0	0	0	0	0	0	1	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**

<b>Gear Type (1)</b>	<b>Other Species (Gender) (2)</b>	<b>Total Num</b>	<b>Number Measured</b>	<b>Length (inches) Min - Mean - Max</b>	<b>Number Weighed</b>	<b>Weight (pounds) Min - Mean - Max</b>
TN	Painted Turtle	1	0	N/A	0	N/A
	Snapping Turtle	2	2	11.97 - 12.33 - 12.68	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.

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**Approval Dates And Notices**

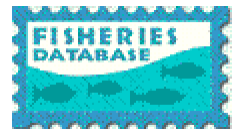
Date Approved By Windom Area Fisheries Supervisor: \_\_\_\_\_

Date Approved By Southern Region Fisheries Manager: \_\_\_\_\_

**This DRAFT VERSION of the Lake Survey Report contains preliminary data (as of 07/12/2024), 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 Lake Survey Report and should be discarded)*

**Lake Name: Loon**

**Survey Type: Standard Survey**

**DOW Number: 32-0020-00**

**Survey ID Date: 07/08/2024**

**Survey Status:** Proposed

The following 21 (of 34) report components are not included in this Lake Survey Report:

1. Water Level History<sup>1</sup>
2. Lake Inlets
3. Additional Inlet Information
4. Lake Outlets
5. Additional Outlet Information
6. Water Control Structure (Dam)
7. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations<sup>2</sup>
8. Resorts And Campgrounds
9. Fish Spawning Conditions
10. Erosion And Pollution
11. Fish Diseases And Parasites
12. Aquatic Vegetation And Shoalwater Substrates
13. Water Quality (Winter Observations) (added to revision 01/21/2010)
14. Laboratory Analysis Of Water Chemistry
15. Zooplankton Sampling (added to revision 20221130)
16. Catch Summary (Pre-1993 Format) (added to revision 20201001)
17. Length At Capture With Last Incremental Length\*
18. Back-Calculated Lengths
19. Age Class Frequency Distributions
20. Status Of Fishery And Field Notes
21. Survey Attachments (added to revision 20150622)

<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 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 07/12/2024 may not be reflected in the Distribution tables until after 12:30 pm on 07/12/2024.**

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