

Lake Name: St. James  
DOW Number: 83-0043-00

Survey Type: Standard Survey  
Survey ID Date: 05/26/2021

**Lake Identification**

Alternate Lake Name: N/A  
Primary Lake Class ID: 42

DNR Sounding Map Number: C2883  
Alternate Lake Class ID: N/A

**Lake Location**

Primary County: Watonwan

Nearest Town: Saint James

**Legal Descriptions**

Lake Center: Township - 106N Range - 32W Section - 23  
PLS Section Lake Center: 10603223

**All Legal Descriptions:**

Watonwan County: Township - 106N Range - 32W Sections - 14, 23, 24, 26, 27

**Area Office**

Area Name: Windom  
Region Name: Southern

ORG Code: F418  
Region Number: 4

**Lake Access**

(Information based on Re-Survey dated 06/12/1995)

Station ID	Ownership	Public Use	Type	Location / Comments
------------	-----------	------------	------	---------------------

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

**Lake Characteristics**

Lake Area (planimetered acres): 252.00  
GIS Lake Area (acres): 202.76  
DOW Lake Area (acres): 252.00  
Littoral Area (acres): 202.76  
Area in MN (acres): 202.76  
Maximum Depth (feet): 15.4  
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 3.74  
Maximum Fetch (miles): 1.50  
Fetch Orientation (degrees): 45  
USGS Quad Map Number: W11b  
USGS Quad 24K GIS Index: 4421

**Watershed Characteristics**

**Major Watershed**

Name: Watonwan River  
Watershed Number: 31  
Watershed size (acres): 558,963

**Minor Watershed**

Name: St James Cr  
Watershed Number: 20  
Watershed size (acres): 17,084

**Surveys and Investigations**

**Initial Survey:** 06/09/1986.  
**Re-Survey:** 06/09/2003, 06/12/1995, 06/10/1991.  
**Population Assessment:** 04/11/2011, 07/16/2007, 07/13/2005, 06/14/1999.  
**Special Assessment:** 08/05/2013, 06/10/2013, 08/08/2011, 06/01/2011, 07/26/2010, 07/19/2010, 06/22/2010, 06/07/2010, 05/26/2010, 03/31/2010, 08/11/2009, 07/13/2009, 06/04/2009, 04/07/2009, 08/27/2008, 07/28/2008, 06/17/2008, 06/10/2008, 04/21/2008, 05/09/1994, 08/18/1948.  
**Dissolved Oxygen Check:** 02/11/2016, 02/24/2015, 01/03/2014, 12/28/2012, 02/14/2012, 12/29/2010, 01/12/2010.  
**External Management Survey:** 06/10/2009, 06/23/2008.  
**Standard Survey:** 05/26/2021, 06/05/2017, 08/03/2015.  
**Targeted Survey:** 02/03/2020, 02/19/2019, 01/18/2018, 06/19/2017.

**Current Water Level**

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
GA - 1	06/10/2021	N/A	4.70	Direct Gauge Reading

**Benchmark and Gauge Descriptions / Locations**

<u>Station ID</u>	<u>Location Description</u>
GA - 1	On box culvert that goes under Co. Rd. 57. (Tiell Dr.) on south end of lake.

**Water Level History - Readings**

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
BM - 1	06/08/2017	High	2.10	Above or below Benchmark
	08/05/2013	Normal	-5.40	Above or below Benchmark
	08/09/2011	Normal	3.75	Above or below Benchmark
	07/31/2008	N/A	9.65	Direct Gauge Reading
	07/16/2007	Low	-6.20	Above or below Benchmark
GA - 1	06/10/2021	N/A	4.70	Direct Gauge Reading
	06/08/2017	High	5.25	Direct Gauge Reading
	08/03/2015	Normal	4.40	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	-6.20	07/16/2007	3.75	08/09/2011	9.95	-1.44	Above or below Benchmark (4)
BM - 1	9.65	07/31/2008	9.65	07/31/2008	0.00	9.65	Direct Gauge Reading (1)
GA - 1	4.40	08/03/2015	5.25	06/08/2017	0.85	4.78	Direct Gauge Reading (3)

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

Station ID	Sampling Date	Bottom Depth (Feet)	Sample Depth (Feet)	Water Temperature (°F)	Dissolved Oxygen (ppm)
WQ - 1	06/07/2021	13.2	Surface	75.6	7.2
			1.0	75.4	7.1
			2.0	75.4	7.2
			3.0	75.2	7.1
			4.0	75.0	6.8
			5.0	74.8	6.4
			6.0	74.8	6.5
			7.0	74.7	5.9
			8.0	74.7	6.2
			9.0	74.7	6.1
			10.0	74.3	5.5
			11.0	73.8	5.1
			12.0	71.2	3.1
			13.0	67.6	0.7

**Field Measurements of Water Quality**

Station ID	Sampling Date	Sample Depth (Feet)	Secchi Depth (Feet)	Field pH	Alkalinity (ppm)	Water Color	Color Cause
WQ - 1	06/07/2021	Surface	3.0	8.26	280	Brown Grn	Algae

**Net Catch Summary by Numbers for GN**

Standard gill net sets

Number of Sets: 2  
 First Set Date: 06/07/2021  
 Last Lift Date: 06/09/2021  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 42*		
				25%	50%	75%
BLB	Black Bullhead	44	22.00	9.63	39.75	91.42
BLC	Black Crappie	14	7.00	1.50	5.50	14.69
BLG	Bluegill	44	22.00	N/A	N/A	N/A
CCF	Channel Catfish	1	0.50	N/A	N/A	N/A
NOP	Northern Pike	25	12.50	1.54	4.29	7.00
WAE	Walleye	7	3.50	1.00	2.50	7.33
YEP	Yellow Perch	50	25.00	3.00	8.00	26.50
Total Fish/Set:			92.50	* 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	Quartiles for Lake Class 42*		
					25%	50%	75%
BLB	Black Bullhead	25.01	12.51	0.57	0.18	0.28	0.49
BLC	Black Crappie	2.50	1.25	0.18	0.12	0.18	0.29
BLG	Bluegill	7.17	3.59	0.16	N/A	N/A	N/A
CCF	Channel Catfish	2.54	1.27	2.54	N/A	N/A	N/A
NOP	Northern Pike	91.06	45.53	3.64	1.49	2.17	3.40
WAE	Walleye	15.14	7.57	2.16	0.95	1.58	2.80
YEP	Yellow Perch	5.50	2.75	0.11	0.14	0.20	0.28
Total Pounds Fish/Set:			74.46	* Quartiles for Mean Weight			

**Net Catch Summary by Numbers for TN**

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

Number of Sets: 9  
 First Set Date: 06/07/2021  
 Last Lift Date: 06/10/2021  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 42*		
				25%	50%	75%
BLB	Black Bullhead	144	16.00	2.20	17.30	60.46
BLC	Black Crappie	8	0.89	2.36	5.60	15.10
BLG	Bluegill	757	84.11	1.88	10.80	29.50
GSF	Green Sunfish	1	0.11	0.20	0.40	2.00
LMB	Largemouth Bass	1	0.11	0.25	0.60	1.20
NOP	Northern Pike	4	0.44	N/A	N/A	N/A
WAE	Walleye	7	0.78	0.40	0.86	1.94
YEP	Yellow Perch	6	0.67	0.48	1.29	3.45
Total Fish/Set:			103.11	* 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	Quartiles for Lake Class 42*		
					25%	50%	75%
BLB	Black Bullhead	90.07	10.01	0.63	0.19	0.30	0.50
BLC	Black Crappie	1.85	0.21	0.23	0.17	0.25	0.36
BLG	Bluegill	148.89	16.54	0.20	0.15	0.20	0.30
GSF	Green Sunfish	0.26	0.03	0.26	0.09	0.10	0.19
LMB	Largemouth Bass	1.13	0.13	1.13	0.37	0.61	1.20
NOP	Northern Pike	9.41	1.05	2.35	N/A	N/A	N/A
WAE	Walleye	18.05	2.01	2.58	0.59	1.53	2.56
YEP	Yellow Perch	0.81	0.09	0.14	0.10	0.17	0.27
Total Pounds Fish/Set:			30.05	* Quartiles for Mean Weight			

**Electrofishing Catch Summary for EF**

**Standard electrofishing**

**Total run-time for all stations:** 01:00:00  
**Total on-time for all stations:** 01:00:00  
**First Sampling Date:** 05/26/2021  
**Last Sampling Date:** 05/26/2021  
**Daylight Sampling:** Yes  
**Target Species:** N/A

Abbr	Species	Summary By Numbers			Summary By Weight (pounds)			
		Total Number	Number per Hour Run-Time	On-Time	Total Weight	Lbs per Hour Run-Time	On-Time	Mean Weight
CAP	Common Carp	3	3.00	3.00	0.00	0.00	0.00	0.00
LMB	Largemouth Bass	24	24.00	24.00	35.12	35.12	35.12	1.46

**Length Frequency Distribution for GN**

**Standard gill net sets**

(Field work conducted between 06/07/2021 and 06/09/2021)

	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CCF</u>	<u>NOP</u>	<u>WAE</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	-	-	2	-	-	-	-
5.50 - 5.99	-	-	17	-	-	-	14
6.00 - 6.49	-	-	17	-	-	-	20
6.50 - 6.99	-	4	5	-	-	-	9
7.00 - 7.49	-	6	2	-	-	-	2
7.50 - 7.99	-	4	1	-	-	-	2
8.00 - 8.49	-	-	-	-	-	-	3
8.50 - 8.99	-	-	-	-	-	1	-
9.00 - 9.49	3	-	-	-	-	-	-
9.50 - 9.99	10	-	-	-	-	-	-
10.00 - 10.49	22	-	-	-	-	1	-
10.50 - 10.99	9	-	-	-	-	1	-
11.00 - 11.49	-	-	-	-	-	-	-
11.50 - 11.99	-	-	-	-	-	-	-
12.00 - 12.99	-	-	-	-	-	1	-
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	-	-	-	1	-	-	-
20.00 - 20.99	-	-	-	-	1	1	-
21.00 - 21.99	-	-	-	-	1	-	-
22.00 - 22.99	-	-	-	-	3	1	-
23.00 - 23.99	-	-	-	-	4	-	-
24.00 - 24.99	-	-	-	-	5	-	-
25.00 - 25.99	-	-	-	-	3	-	-
26.00 - 26.99	-	-	-	-	5	1	-
27.00 - 27.99	-	-	-	-	1	-	-
28.00 - 28.99	-	-	-	-	1	-	-
29.00 - 29.99	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	1	-	-
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>	<u>BLC</u>	<u>BLG</u>	<u>CCF</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
Total	44	14	44	1	25	7	50
Min. Length	9.25	6.54	5.31	19.09	20.28	8.98	5.51
Max. Length	10.87	7.87	7.80	19.09	30.51	26.65	8.27
Mean Length	10.14	7.26	6.13	19.09	24.84	16.05	6.43
# Measured	44	14	44	1	25	7	48
No Lengths for	0	0	0	0	0	0	2

**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 06/07/2021 and 06/10/2021)

	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>GSF</u>	<u>LMB</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-
4.00 - 4.49	-	1	-	-	-	-	-	-
4.50 - 4.99	-	-	15	-	-	-	-	-
5.00 - 5.49	-	-	62	-	-	-	-	-
5.50 - 5.99	-	-	199	-	-	-	-	-
6.00 - 6.49	-	-	156	-	-	-	-	2
6.50 - 6.99	-	-	160	1	-	-	-	1
7.00 - 7.49	-	2	128	-	-	-	-	1
7.50 - 7.99	-	3	33	-	-	-	-	1
8.00 - 8.49	-	1	4	-	-	-	-	-
8.50 - 8.99	-	-	-	-	-	-	-	-
9.00 - 9.49	3	1	-	-	-	-	-	-
9.50 - 9.99	21	-	-	-	-	-	-	-
10.00 - 10.49	58	-	-	-	-	-	-	-
10.50 - 10.99	44	-	-	-	-	-	-	-
11.00 - 11.49	17	-	-	-	-	-	-	-
11.50 - 11.99	-	-	-	-	-	-	-	-
12.00 - 12.99	-	-	-	-	-	-	-	-
13.00 - 13.99	-	-	-	-	1	-	-	-
14.00 - 14.99	-	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	1	-	-
17.00 - 17.99	-	-	-	-	-	-	1	-
18.00 - 18.99	-	-	-	-	-	-	-	-
19.00 - 19.99	-	-	-	-	-	-	2	-
20.00 - 20.99	-	-	-	-	-	-	2	-
21.00 - 21.99	-	-	-	-	-	-	1	-
22.00 - 22.99	-	-	-	-	-	-	1	-
23.00 - 23.99	-	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	-	2	-	-
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>	<u>BLC</u>	<u>BLG</u>	<u>GSF</u>	<u>LMB</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
Total	143	8	757	1	1	3	7	5
Min. Length	9.06	4.13	4.72	6.50	13.39	16.34	17.09	6.18
Max. Length	11.42	9.25	8.03	6.50	13.39	25.39	22.05	7.56
Mean Length	10.36	7.47	6.32	6.50	13.39	22.31	20.02	6.80
# Measured	104	8	224	1	1	3	7	5
No Lengths for	40	0	533	0	0	1	0	1

**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 EF**

**Standard electrofishing**

(Field work conducted on 05/26/2021)

	<u>LMB</u>
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	1
4.00 - 4.49	-
4.50 - 4.99	-
5.00 - 5.49	-
5.50 - 5.99	1
6.00 - 6.49	-
6.50 - 6.99	1
7.00 - 7.49	1
7.50 - 7.99	-
8.00 - 8.49	1
8.50 - 8.99	-
9.00 - 9.49	-
9.50 - 9.99	1
10.00 - 10.49	-
10.50 - 10.99	1
11.00 - 11.49	3
11.50 - 11.99	-
12.00 - 12.99	-
13.00 - 13.99	1
14.00 - 14.99	4
15.00 - 15.99	4
16.00 - 16.99	1
17.00 - 17.99	5
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>LMB</u>
Total	25
Min. Length	3.78
Max. Length	17.87
Mean Length	12.51
# Measured	21
No Lengths for	3

**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	27	0	N/A	0	N/A
	Snapping Turtle	7	7	11.81 - 13.74 - 16.54	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**

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 06/11/2021), 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.

Lake Survey Report revision: 20210209-RJE. Data Date: 06/11/2021 at 7:06 am .

*(This page is intentionally blank)*

*(This page is intentionally blank)*

## REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: St. James  
DOW Number: 83-0043-00

Survey Type: Standard Survey  
Survey ID Date: 05/26/2021

Survey Status: Field Work Complete

The following 20 (of 33) 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. Catch Summary (Pre-1993 Format) (added to revision 20201001)
16. Length At Capture With Last Incremental Length\*
17. Back-Calculated Lengths
18. Age Class Frequency Distributions
19. Status Of Fishery And Field Notes
20. 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 06/11/2021 may not be reflected in the Distribution tables until after 12:30 pm on 06/11/2021.**

**FOR OFFICE USE ONLY:** As of revision 20150622, this page is automatically suppressed on signed versions of this report (area supervisor, region manager, research biologist, research supervisor, program staff, or program manager signed).