

Lake Name: Budd

Survey Type: Standard Survey

DOW Number: 46-0030-00

Survey ID Date: 08/26/2024

Lake Identification

Alternate Lake Name: N/A
Primary Lake Class ID: 24

DNR Sounding Map Number: C0452
Alternate Lake Class ID: N/A

Lake Location

Primary County: Martin

Nearest Town: Fairmont

Legal Descriptions

Lake Center: Township - 102N Range - 30W Section - 17
PLS Section Lake Center: 10203017

All Legal Descriptions:

Martin County: Township - 102N Range - 30W Sections - 17, 18

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 08/10/1993)

Station ID	Ownership	Public Use	Type	Location / Comments
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(Data excludes records where public use is not designated or is designated "No Public Use")

Lake Characteristics

Lake Area (planimetered acres): 222.00
GIS Lake Area (acres): 227.91
DOW Lake Area (acres): 224.00
Littoral Area (acres): 111.00
Area in MN (acres): 227.91
Maximum Depth (feet): 23.0
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 2.23
Maximum Fetch (miles): 0.75
Fetch Orientation (degrees): 315
USGS Quad Map Number: X12b
USGS Quad 24K GIS Index: 4623

Watershed Characteristics

Major Watershed

Name: Blue Earth River
Watershed Number: 30
Watershed size (acres): 777,240

Minor Watershed

Name: Center Cr
Watershed Number: 67
Watershed size (acres): 8,071

Surveys and Investigations

Re-Survey: 08/13/2001, 08/10/1993, 08/07/1989, 07/03/1984.
Population Assessment: 08/17/2009, 08/11/1997.
Special Assessment: 09/15/1997.
Dissolved Oxygen Check: 02/11/2016, 02/24/2015, 01/03/2014, 01/08/2013, 12/28/2012, 02/16/2012, 12/29/2010, 01/15/2010.
External Management Survey: 07/31/2014.
Standard Survey: 08/26/2024, 08/10/2020, 08/14/2017.
Targeted Survey: 04/23/2024, 09/22/2023, 02/03/2020, 02/19/2019, 01/18/2018, 06/30/2017, 08/21/2017

Current Water Level

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
GA - 1	08/29/2024	Normal	1.15	Direct Gauge Reading

Benchmark and Gauge Descriptions / Locations

<u>Station ID</u>	<u>Location Description</u>
GA - 1	George Lake Dam. Main control structure for Fairmont Chain of Lakes. Upstream side of dam on south side.

Water Level History - Readings

<u>Station ID</u>	<u>Date</u>	<u>Level</u>	<u>Reading (feet)</u>	<u>Reading Type</u>
BM - 1	08/13/2020	Low	-7.50	Above Mean Sea Level
	08/22/2017	Normal	-7.60	Above or below Benchmark
	08/19/2009	N/A	138.00	Above or below Benchmark
GA - 1	08/29/2024	Normal	1.15	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	-7.60	08/22/2017	138.00	08/19/2009	145.60	65.20	Above or below Benchmark (2)
BM - 1	-7.50	08/13/2020	-7.50	08/13/2020	0.00	-7.50	Above Mean Sea Level (1)
GA - 1	1.15	08/29/2024	1.15	08/29/2024	0.00	1.15	Direct Gauge Reading (1)

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	08/28/2024	18.6	Surface	79.3	10.9
			3.0	76.8	9.5
			6.0	76.5	6.7
			9.0	76.1	5.2
			12.0	74.5	2.8
			15.0	73.6	1.3
			18.0	73.2	0.7

Field Measurements of Water Quality

<u>Station ID</u>	<u>Sampling Date</u>	<u>Sample Depth (Feet)</u>	<u>Secchi Depth (Feet)</u>	<u>Field pH</u>	<u>Alkalinity (ppm)</u>	<u>Water Color</u>	<u>Color Cause</u>
WQ - 1	08/28/2024	Surface	1.5	9.16	220	Green	Algae

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 3
First Set Date: 08/26/2024
Last Lift Date: 08/29/2024
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 24 ¹		
				25%	50%	75%
BLB	Black Bullhead	4	1.33	2.50	10.46	44.95
BLC	Black Crappie	69	23.00	2.50	6.91	16.50
CCF	Channel Catfish	5	1.67	N/A	N/A	N/A
CAP	Common Carp	1	0.33	0.33	1.00	3.00
FRD	Freshwater Drum	129	43.00	4.00	11.75	32.25
LMB	Largemouth Bass	1	0.33	0.25	0.50	0.83
WAE	Walleye	7	2.33	1.17	2.82	6.33
WTS	White Sucker	1	0.33	0.40	1.00	2.17
YLB	Yellow Bass	141	47.00	N/A	N/A	N/A
YEB	Yellow Bullhead	1	0.33	0.50	2.00	7.51
YEP	Yellow Perch	74	24.67	2.00	10.50	27.94
		Total Fish/Set:	144.33	¹ 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 ²	Quartiles for Lake Class 24 ¹		
					25%	50%	75%
BLB	Black Bullhead	1.50	0.50	0.37	0.29	0.44	0.66
BLC	Black Crappie	9.41	3.14	0.14	0.15	0.20	0.26
CCF	Channel Catfish	16.61	5.54	3.32	N/A	N/A	N/A
CAP	Common Carp	10.80	3.60	10.80	1.87	3.41	5.24
FRD	Freshwater Drum	105.65	35.22	0.82	0.25	0.50	1.13
LMB	Largemouth Bass	0.16	0.05	0.16	0.40	0.60	1.00
WAE	Walleye	14.93	4.98	2.13	1.20	1.81	2.69
WTS	White Sucker	2.65	0.88	2.65	1.55	2.00	2.38
YLB	Yellow Bass	33.78	11.26	0.24	N/A	N/A	N/A
YEB	Yellow Bullhead	1.28	0.43	1.28	0.46	0.61	0.82
YEP	Yellow Perch	13.61	4.54	0.19	0.10	0.13	0.18
		Total Pounds Fish/Set:	70.13	¹ Quartiles for Mean Weight			

² 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: 9
 First Set Date: 08/26/2024
 Last Lift Date: 08/29/2024
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 24 ¹		
				25%	50%	75%
BIB	Bigmouth Buffalo	2	0.22	0.20	0.25	0.75
BLC	Black Crappie	92	10.22	1.83	6.50	21.16
BLG	Bluegill	41	4.56	7.54	23.13	62.50
CCF	Channel Catfish	7	0.78	N/A	N/A	N/A
CAP	Common Carp	22	2.44	0.38	0.74	2.00
FRD	Freshwater Drum	41	4.56	0.50	1.17	4.19
HSF	Hybrid Sunfish	1	0.11	N/A	N/A	N/A
QBS	Quillback	6	0.67	N/A	N/A	N/A
WAE	Walleye	22	2.44	0.27	0.60	1.24
WHC	White Crappie	1	0.11	0.50	1.50	6.55
WTS	White Sucker	4	0.44	0.20	0.44	1.00
YLB	Yellow Bass	9	1.00	N/A	N/A	N/A
YEB	Yellow Bullhead	3	0.33	0.88	2.15	5.68
YEP	Yellow Perch	11	1.22	0.25	0.60	1.67
Total Fish/Set:			29.11	¹ 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 ²	Quartiles for Lake Class 24 ¹		
					25%	50%	75%
BIB	Bigmouth Buffalo	11.80	1.31	5.90	2.50	4.13	5.65
BLC	Black Crappie	21.69	2.41	0.23	0.18	0.24	0.33
BLG	Bluegill	9.14	1.02	0.22	0.13	0.18	0.25
CCF	Channel Catfish	11.94	1.33	1.71	N/A	N/A	N/A
CAP	Common Carp	165.76	18.42	7.53	2.58	4.07	6.02
FRD	Freshwater Drum	35.21	3.91	0.87	0.43	0.79	1.21
HSF	Hybrid Sunfish	0.09	0.01	0.09	N/A	N/A	N/A
QBS	Quillback	13.42	1.49	2.24	N/A	N/A	N/A
WAE	Walleye	29.36	3.26	1.33	0.80	1.50	2.78
WHC	White Crappie	0.29	0.03	0.29	0.23	0.30	0.40
WTS	White Sucker	13.14	1.46	3.29	1.61	2.16	2.84
YLB	Yellow Bass	2.96	0.33	0.31	N/A	N/A	N/A
YEB	Yellow Bullhead	2.15	0.24	0.72	0.50	0.67	0.84
YEP	Yellow Perch	2.09	0.23	0.19	0.10	0.13	0.20
Total Pounds Fish/Set:			35.45	¹ Quartiles for Mean Weight			

² Mean Weights are based on measured fish counts only.

Length Frequency Distribution for GN

Standard gill net sets

(Field work conducted between 08/26/2024 and 08/29/2024)

	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>LMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>	<u>YLB</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	-	-	-	-	-	-	-	-	-
4.50 - 4.99	-	-	-	-	-	-	-	-	-	-	-
5.00 - 5.49	-	1	-	-	-	-	-	-	1	-	-
5.50 - 5.99	-	12	-	-	-	-	-	-	1	2	-
6.00 - 6.49	-	37	-	-	-	-	-	-	3	33	-
6.50 - 6.99	-	18	-	-	-	-	-	-	31	8	-
7.00 - 7.49	1	1	-	-	-	1	-	-	23	10	-
7.50 - 7.99	-	-	-	-	-	-	-	-	7	39	-
8.00 - 8.49	1	-	-	-	-	-	-	-	3	13	-
8.50 - 8.99	1	-	-	-	1	-	-	-	4	25	-
9.00 - 9.49	-	-	-	-	1	-	-	-	1	8	-
9.50 - 9.99	1	-	-	-	4	-	-	-	-	1	-
10.00 - 10.49	-	-	-	-	1	-	-	-	-	1	-
10.50 - 10.99	-	-	-	-	1	-	1	-	-	-	-
11.00 - 11.49	-	-	-	-	4	-	-	-	-	-	-
11.50 - 11.99	-	-	-	-	10	-	-	-	-	-	-
12.00 - 12.99	-	-	-	-	76	-	-	-	1	-	-
13.00 - 13.99	-	-	-	-	30	-	-	-	-	-	-
14.00 - 14.99	-	-	-	-	1	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	-	-	-	-	-	-
17.00 - 17.99	-	-	-	1	-	-	-	-	-	-	-
18.00 - 18.99	-	-	-	2	-	-	1	1	-	-	-
19.00 - 19.99	-	-	-	-	-	-	3	-	-	-	-
20.00 - 20.99	-	-	-	-	-	-	2	-	-	-	-
21.00 - 21.99	-	-	-	-	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	1	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	-	-	-	-	-	-	-
25.00 - 25.99	-	-	-	1	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-	-	-	-	-	-
29.00 - 29.99	-	-	1	-	-	-	-	-	-	-	-
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>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>LMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>	<u>YLB</u>
Total	4	69	1	5	129	1	7	1	1	74	140
Min. Length	7.24	5.47	29.92	17.99	8.66	7.40	10.94	18.74	12.44	5.39	5.98
Max. Length	9.57	7.05	29.92	25.00	14.06	7.40	20.94	18.74	12.44	9.37	10.12
Mean Length	8.46	6.31	29.92	20.51	12.46	7.40	18.36	18.74	12.44	7.18	7.66
# Measured	4	67	1	5	126	1	7	1	1	68	127
No Lengths for	0	2	0	0	3	0	0	0	0	6	14

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 08/26/2024 and 08/29/2024)

	<u>BIB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>HSF</u>	<u>QBS</u>	<u>WAE</u>	<u>WHC</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>	<u>YLB</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	1	-	-	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	1	-	-	-	-	-	-	-	-	-	-	-
4.50 - 4.99	-	-	2	-	1	-	1	-	-	-	-	-	-	-
5.00 - 5.49	-	-	8	-	-	-	-	-	-	-	-	-	-	-
5.50 - 5.99	-	7	12	-	-	-	-	-	-	-	-	-	-	1
6.00 - 6.49	-	14	4	-	-	-	-	-	-	-	-	-	-	2
6.50 - 6.99	-	25	2	-	-	-	-	-	-	-	-	-	4	-
7.00 - 7.49	-	19	7	-	-	-	-	-	-	-	-	1	5	-
7.50 - 7.99	-	7	2	-	-	-	-	-	-	-	-	-	-	-
8.00 - 8.49	-	7	-	-	-	-	-	-	-	1	-	-	1	-
8.50 - 8.99	-	3	1	-	-	-	-	-	-	-	-	-	-	2
9.00 - 9.49	-	2	1	-	2	2	-	-	-	-	-	1	-	2
9.50 - 9.99	-	2	-	-	1	5	-	-	-	-	-	-	-	2
10.00 - 10.49	-	-	-	-	-	4	-	-	2	-	-	-	-	-
10.50 - 10.99	-	2	-	-	-	2	-	-	4	-	-	-	-	-
11.00 - 11.49	-	-	-	1	1	-	-	2	3	-	-	-	-	-
11.50 - 11.99	-	-	-	2	-	1	-	-	2	-	-	-	-	-
12.00 - 12.99	-	1	-	-	-	10	-	1	1	-	-	1	-	-
13.00 - 13.99	-	-	-	1	-	10	-	-	1	-	-	-	-	-
14.00 - 14.99	-	-	-	-	-	4	-	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	2	-	1	2	-	-	-	-	-
17.00 - 17.99	-	-	-	-	1	-	-	-	-	-	-	-	-	-
18.00 - 18.99	-	-	-	-	-	-	-	1	3	-	-	-	-	-
19.00 - 19.99	1	-	-	2	-	-	-	-	1	-	1	-	-	-
20.00 - 20.99	-	-	-	2	-	-	-	-	1	-	3	-	-	-
21.00 - 21.99	-	-	-	-	-	-	-	1	-	-	-	-	-	-
22.00 - 22.99	1	-	-	2	-	-	-	-	1	-	-	-	-	-
23.00 - 23.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	2	-	-	-	-	1	-	-	-	-	-
25.00 - 25.99	-	-	-	2	-	-	-	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	1	1	-	-	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	2	-	-	-	-	-	-	-	-	-	-
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	-	-	-	2	-	-	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	<u>BIB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>HSF</u>	<u>QBS</u>	<u>WAE</u>	<u>WHC</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>	<u>YLB</u>
Total	2	89	41	22	7	40	1	6	22	1	4	3	10	9
Min. Length	19.13	5.59	3.74	11.42	4.92	9.21	4.80	11.42	10.39	8.15	19.21	7.40	6.50	5.94
Max. Length	22.13	12.05	9.09	34.21	26.85	16.69	4.80	21.02	24.33	8.15	20.94	12.72	8.07	9.69
Mean Length	20.63	7.26	6.10	23.53	12.66	12.29	4.80	15.23	14.63	8.15	20.38	9.78	7.14	8.02
# Measured	2	80	41	22	7	40	1	6	22	1	4	3	10	8
No Lengths for	0	12	0	0	0	1	0	0	0	0	0	0	1	1

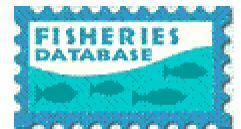
Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish.

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 08/30/2024), 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.

Lake Survey Report revision: 20230207-RJE. Data Date: 08/30/2024 at 7:23 am .

REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Budd
DOW Number: 46-0030-00

Survey Type: Standard Survey
Survey ID Date: 08/26/2024

Survey Status: Field Work Complete

The following 22 (of 34) report components are not included in this Lake Survey Report:

1. Water Level History¹
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 Observations²
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. Other Species (added to revision 03/24/2009)
21. Status Of Fishery And Field Notes
22. Survey Attachments (added to revision 20150622)

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 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 08/30/2024 may not be reflected in the Distribution tables until after 12:30 pm on 08/30/2024.

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