

## Minnesota Department of Natural Resources Fisheries Management

# FISHERIES

#### LAKE SURVEY REPORT

**DRAFT VERSION** - PRELIMINARY DATA (AS OF 07/09/2015)

Lake Name: Flahtery Survey Type: Standard Survey

DOW Number: 32-0045-00 Survey ID Date: 06/30/2015

Lake Identification

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

Primary Lake Class ID. Alternate Lake Class ID. IN/A

**Lake Location** 

Primary County: Jackson Nearest Town: Lakefield

**Legal Descriptions** 

Lake Center: Township - 103N Range - 36W Section - 7

PLS Section Lake Center: 10303607

All Legal Descriptions:

Township - Range - Section -

**Area Office** 

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

**Lake Characteristics** 

Lake Area (planimetered acres): N/A GIS Shoreline Length (miles): 3.81

GIS Lake Area (acres): 450.76 Maximum Fetch (miles): N/A
DOW Lake Area (acres): 464.00 Fetch Orientation (degrees): N/A
Littoral Area (acres): 0.00 USGS Quad Map Number: X09b
Area in MN (acres): 450.76 USGS Quad 24K GIS Index: 4617

Maximum Depth (feet): N/A Mean Depth (feet): N/A

**Watershed Characteristics** 

Major Watershed Minor Watershed

Name: Des Moines-Headwaters

Name: From L Flaherty

Watershed Number: 51

Watershed Number: 100

Watershed size (acres): 798,595 Watershed size (acres): 5,133

Surveys and Investigations

**Standard Survey:** 06/30/2015.

**Riparian Landscape Observations** 

Soil Types (Primary and Secondary): N/A

Soil Comments: N/A

Number of Homes/Cabins: 6

Comments About Shoreline Development: N/A

Lake Survey Report revision: 20150625. Data Date: 07/09/2015 at 8:36 am.



#### **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	07/02/2015	6.2	Surface	70.9	8.0
			1.0	70.9	8.1
			2.0	70.9	8.1
			3.0	70.9	8.1
			4.0	70.9	8.1
			5.0	70.9	8.0
			6.0	71.1	3.1

#### **Field Measurements of Water Quality**

			Secchi				
	Sampling	Sample	Depth	Field	Alkalinity		
Station ID	Date	Depth (Feet)	(Feet)	рН	(ppm)	Water Color	Color Cause
WQ - 1	07/02/2015	Surface	1.3	8.20	170	Brown Grn	Algae

#### Net Catch Summary by Numbers for GN

#### Standard gill net sets

Number of Sets: 1

First Set Date: 06/30/2015 Last Lift Date: 07/01/2015 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BIB	Bigmouth Buffalo	9	9.00	N/A	N/A	N/A
BLB	Black Bullhead	73	73.00	N/A	N/A	N/A
WAE	Walleye	1	1.00	N/A	N/A	N/A
WTS	White Sucker	11	11.00	N/A	N/A	N/A
YEP	Yellow Perch	69	69.00	N/A	N/A	N/A
		Total Fish/Set:	163.00	* Quartiles	s for Number Pe	er Set

#### Net Catch Summary by Weight for **GN**

#### Standard gill net sets

Abbr	Species	Total Weight (Pounds)	Pounds Per Set	Mean Weight	25%	50%	75%
BIB	Bigmouth Buffalo	12.83	12.83	1.43	N/A	N/A	N/A
BLB	Black Bullhead	33.25	33.25	0.46	N/A	N/A	N/A
WAE	Walleye	4.19	4.19	4.19	N/A	N/A	N/A
WTS	White Sucker	9.03	9.03	0.82	N/A	N/A	N/A
YEP	Yellow Perch	10.02	10.02	0.15	N/A	N/A	N/A
		Total Pounds Fish/Set:	69.32		* Quarti	les for Mean W	eight

#### Net Catch Summary by Numbers for TN

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

Number of Sets: 9

First Set Date: 06/30/2015 Last Lift Date: 07/02/2015 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BIB	Bigmouth Buffalo	2	0.22	N/A	N/A	N/A
BLB	Black Bullhead	31	3.44	N/A	N/A	N/A
CAP	Common Carp	25	2.78	N/A	N/A	N/A
oss	Orangespotted Sunfish	23	2.56	N/A	N/A	N/A
WTS	White Sucker	1	0.11	N/A	N/A	N/A
YEP	Yellow Perch	95	10.56	N/A	N/A	N/A
		Total Fish/Set:	19.67	* Quartiles	s for Number Pe	er 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	25%	50%	75%
BIB	Bigmouth Buffalo	12.02	1.34	6.01	N/A	N/A	N/A
BLB	Black Bullhead	11.73	1.30	0.38	N/A	N/A	N/A
CAP	Common Carp	188.31	20.92	7.53	N/A	N/A	N/A
OSS	Orangespotted Sunfish	0.67	0.07	0.03	N/A	N/A	N/A
WTS	White Sucker	2.43	0.27	2.43	N/A	N/A	N/A
YEP	Yellow Perch	10.09	1.12	0.11	N/A	N/A	N/A
	То	tal Pounds Fish/Set:	25.03		* Quarti	les for Mean W	eight

#### Length Frequency Distribution for GN

#### Standard gill net sets

(Field work conducted between 06/30/2015 and 07/01/2015)

•	DID	D. D	\A/ A =	MITO	VED
	BIB	<u>BLB</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	-	1	-	-	-
5.00 - 5.49	-	2	-	-	7
5.50 - 5.99	-	-	-	-	27
6.00 - 6.49	-	-	-	-	22
6.50 - 6.99	-	2	-	-	2
7.00 - 7.49	-	5	-	-	-
7.50 - 7.99	-	6	-	1	1
8.00 - 8.49	-	10	-	1	-
8.50 - 8.99	2	14	-	-	4
9.00 - 9.49	1	17	_	_	4
9.50 - 9.99	1	8	_	_	2
10.00 - 10.49	_	3	_	1	_
10.50 - 10.99	_	1	_	_	_
11.00 - 11.49	_	2	_	1	_
11.50 - 11.49	1	-	_	2	_
12.00 - 12.99		2	_	2	_
		_	_	_	_
13.00 - 13.99	-	-	-	-	-
14.00 - 14.99	1	-	-	2	-
15.00 - 15.99		-	-	2	-
16.00 - 16.99	3	-	-	-	-
17.00 - 17.99	-	-	-	-	-
18.00 - 18.99	-	-	-	-	-
19.00 - 19.99	-	-	-	-	-
20.00 - 20.99	-	-	-	-	-
21.00 - 21.99	-	-	-	-	-
22.00 - 22.99	-	-	1	-	-
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	_	_	_	_	_
- > 50.00					
	BIB	BLB	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>

	BIB	BLB	WAE	<u>WTS</u>	<u>YEP</u>
Total	9	73	1	10	69
Min. Length	8.78	4.92	22.32	7.87	5.31
Max. Length	16.89	12.83	22.32	15.67	9.96
Mean Length	12.66	8.81	22.32	11.78	6.52
# Measured	9	73	1	10	61
No Lengths for	0	0	0	1	8

**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

<u>BIB</u>

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

(Field work conducted between 06/30/2015 and 07/02/2015)

<u>CAP</u>

<u>oss</u>

<u>WTS</u>

<u>YEP</u>

<u>BLB</u>

	DID	DLD	CAP	<u>U33</u>	WIS	IEF
< 3.00	-	-	-	8	-	-
3.00 - 3.49	-	-	-	11	-	-
3.50 - 3.99	-	-	-	4	-	-
4.00 - 4.49	-	-	-	-	-	-
4.50 - 4.99	-	1	-	-	-	3
5.00 - 5.49	_	1	_	_	_	16
5.50 - 5.99	_	1	_	_	_	39
6.00 - 6.49	_	2	_	_	_	19
6.50 - 6.99	_	2	_	_	_	10
7.00 - 7.49	_	6	_	_	_	3
7.50 - 7.49	_	3	1	_	_	4
8.00 - 8.49	_	7		_	_	
		2				
8.50 - 8.99	_	1	_	_	_	_
9.00 - 9.49	-		-	-	-	-
9.50 - 9.99	-	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-	-
10.50 - 10.99	-	1	-	-	-	-
11.00 - 11.49	-	1	-	-	-	-
11.50 - 11.99	-	3	-	-	-	-
12.00 - 12.99	-	-	-	-	-	-
13.00 - 13.99	-	-	1	-	-	-
14.00 - 14.99	-	-	1	-	-	-
15.00 - 15.99	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	-
17.00 - 17.99	-	-	-	-	1	-
18.00 - 18.99	-	-	-	-	-	-
19.00 - 19.99	1	-	-	-	-	-
20.00 - 20.99	-	-	-	-	-	-
21.00 - 21.99	-	-	3	-	-	-
22.00 - 22.99	_	_	2	_	-	-
23.00 - 23.99	_	_	3	_	_	_
24.00 - 24.99	_	_	1	_	_	_
25.00 - 25.99	_	_	3	_	_	_
26.00 - 26.99	1	_	2	_	_	_
27.00 - 27.99	_	_	3	_	_	_
28.00 - 28.99	_	_	1	_	_	_
29.00 - 29.99	_	_	1	_	_	_
30.00 - 30.99	_	_	3	_	_	_
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	oss	<u>wts</u>	YEP
Total	2	31	25	23	1	94
Min. Length	19.29	4.80	7.60	2.56	17.68	4.84
Max. Length	26.06	11.69	30.79	3.86	17.68	7.87
-			24.06		17.68	
Mean Length	22.68	8.09		3.12		5.94
# Measured	2	31	25	22	1	84
No Lengths for	0	0	0	1	0	11

**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

Gear		Total	Number	Length (inches)	Number	Weight (pounds)
Type (1)	Other Species (Gender) (2)	Num	Measured	Min - Mean - Max	Weighed	Min - Mean - Max
TN	Painted Turtle	54	0	N/A	0	N/A
	Snapping Turtle	1	1	12.80	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 07/09/2015), 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.

#### REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Flahtery Survey Type: Standard Survey

DOW Number: 32-0045-00 Survey ID Date: 06/30/2015

Survey Status: Active

The following 23 (of 32) report components are not included in this Lake Survey Report:

- 1. Lake Access
- 2. Current Water Level
- 3. Benchmark And Gauge Descriptions / Locations
- 4. Water Level History1
- 5. Water Level History Readings\*
- 6. Water Level History Station Summary\*
- 7. Lake Inlets
- 8. Additional Inlet Information
- 9. Lake Outlets
- 10. Additional Outlet Information
- 11. Water Control Structure (Dam)
- 12. Resorts And Campgrounds
- 13. Fish Spawning Conditions
- 14. Erosion And Pollution
- 15. Fish Diseases And Parasites
- 16. Aquatic Vegetation And Shoalwater Substrates
- 17. Laboratory Analysis Of Water Chemistry
- 18. Length At Capture With Last Incremental Length\*
- 19. Back-Calculated Lengths
- 20. Age Class Frequency Distributions
- 21. Status Of Fishery And Field Notes
- 22. Water Quality (Winter Observations) (added to revision 01/21/2010)
- 23. 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.

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 07/09/2015 may not be reflected in the Distribution tables until after 12:30 pm on 07/09/2015.

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