

### **Fisheries Management**

### LAKE SURVEY REPORT

### **DRAFT VERSION**

PRELIMINARY DATA (AS OF 06/16/2023)

Lake Name: Okamanpeedan Survey Type: Standard Survey

DOW Number: 46-0051-00 Survey ID Date: 06/12/2023

Lake Identification

Alternate Lake Name: N/A

Primary Lake Class ID: 41

DNR Sounding Map Number: N/A

Alternate Lake Class ID: N/A

**Lake Location** 

Primary County: Martin Nearest Town: Ceylon

**Legal Descriptions** 

Lake Center: Township - 101N Range - 31W Section - 28

PLS Section Lake Center: 10103128

**All Legal Descriptions:** 

Martin County: Township - 101N Range - 31W Sections - 21, 28, 29, 31, 32, 33

**Area Office** 

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

### **Lake Access**

(Information based on Initial Survey dated 06/01/1993)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Carry-In	NEAR DES MOINES INLET.
AC - 3	Bordering State	Open to Public use	Concrete	STATE OF IOWA ACCESS ON SOUTH SIDE OF LAKE.

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

**Lake Characteristics** 

Lake Area (planimetered acres): 2,294.30

GIS Lake Area (acres): 2,267.72

DOW Lake Area (acres): 2,205.00

Littoral Area (acres): 1,306.13

Area in MN (acres): 1,306.16

GIS Shoreline Length (miles): 16.30

Maximum Fetch (miles): 2.301

Fetch Orientation (degrees): 22

USGS Quad Map Number: X11d

USGS Quad 24K GIS Index: 4722

Maximum Depth (feet): 6.5 Mean Depth (feet): N/A

#### **Watershed Characteristics**

Major Watershed Minor Watershed

Name: E. Fork Des Moines River

Watershed Number: 53

Name: E Fork Des Moines R

Watershed Number: 3

Watershed size (acres): 129,425 Watershed size (acres): 17,740

Lake Survey Report revision: 20230207-RJE. Data Date: 06/16/2023 at 7:11 am.



### **Surveys and Investigations**

Initial Survey: 06/01/1993.

Re-Survey: 06/07/2005.

Population Assessment: 06/01/1998.

Dissolved Oxygen Check: 01/20/2016, 02/24/2015, 01/23/2014, 01/08/2013, 12/28/2012, 02/16/2012, 01/18/2011,

01/15/2010.

External Management Survey: 06/28/2007.

Standard Survey: <u>06/12/2023</u>, 06/05/2017.

Targeted Survey: 02/03/2020, 02/19/2019, 01/18/2018.

### Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/08/2017	Normal	-3.30	Above or below Benchmark

### **Water Level History - Station Summary**

	Minimum Level Maxii		Maxim	mum Level Range		Average	Reading Type		
Station ID	Feet	Date	Feet	Date	(feet)	Level (feet)	(and number of readings)		
BM - 1	-3.30	06/08/2017	-3.30	06/08/2017	0.00	-3.30	Above or below Benchmark (1)		

### **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	06/12/2023	6.4	Surface	67.1	6.4
			1.0	67.1	6.4
			2.0	66.9	6.3
			3.0	66.9	6.3
			4.0	66.9	6.2
			5.0	66.9	6.2
			6.0	66.9	6.1

### **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	06/12/2023	Surface	0.7	7.80	220	Brown Grn	N/A	

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

### Standard gill net sets

Number of Sets: 3

First Set Date: 06/12/2023 Last Lift Date: 06/15/2023 Target Species: N/A

### Quartiles for Lake Class 411

Abbr	Species	Total Fish	Number Per Set	25%	50%	75%		
BIB	Bigmouth Buffalo	9	3.00	0.33	1.00	6.11		
BLB	Black Bullhead	110	36.67	4.56	23.42	83.00		
CCF	Channel Catfish	17	5.67	N/A	N/A	N/A		
CAP	Common Carp	131	43.67	0.52	1.80	9.13		
NOP	Northern Pike	1	0.33	1.20	3.50	7.79		
QBS	Quillback	4	1.33	N/A	N/A	N/A		
WAE	Walleye	41	13.67	3.22	7.67	15.33		
WHC	White Crappie	3	1.00	0.78	2.00	11.00		
WTS	White Sucker	17	5.67	0.75	2.00	5.88		
YEP	Yellow Perch	25	8.33	3.00	8.94	22.50		
		Total Fish/Set: 119.33 ¹ Quartiles for Number Per Set						

### Net Catch Summary by Weight for GN

### Standard gill net sets

		Total Weight	Pounds	Mean	Quartiles for Lake Class 411			
Abbr	Species	(Pounds)	Per Set	Weight <sup>2</sup>	25%	50%	75%	
BIB	Bigmouth Buffalo	14.24	4.75	1.56	N/A	N/A	N/A	
BLB	Black Bullhead	60.31	20.10	0.55	0.21	0.38	0.60	
CCF	Channel Catfish	48.05	16.02	2.83	N/A	N/A	N/A	
CAP	Common Carp	406.17	135.39	3.10	1.00	2.39	4.88	
NOP	Northern Pike	6.84	2.28	6.84	1.53	2.12	2.95	
QBS	Quillback	8.00	2.67	2.00	N/A	N/A	N/A	
WAE	Walleye	44.48	14.83	1.08	0.88	1.37	1.90	
WHC	White Crappie	0.37	0.12	0.12	0.20	0.24	0.40	
WTS	White Sucker	31.99	10.66	1.94	1.44	1.87	2.20	
YEP	Yellow Perch	12.21	4.07	0.51	0.14	0.24	0.36	
		Total Pounds Fish/Set:	210.89		<sup>1</sup> Quartiles for Mean Weight			

<sup>&</sup>lt;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: 11

First Set Date: 06/12/2023 Last Lift Date: 06/15/2023 Target Species: N/A

Quartiles	for	Lake	Class	41 <sup>1</sup>
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Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BLB	Black Bullhead	137	12.45	1.33	14.73	78.13
BLC	Black Crappie	36	3.27	0.98	2.96	12.33
CCF	Channel Catfish	7	0.64	N/A	N/A	N/A
CAP	Common Carp	58	5.27	0.70	1.80	5.11
GSF	Green Sunfish	1	0.09	0.13	0.33	0.66
NOP	Northern Pike	2	0.18	N/A	N/A	N/A
OSS	Orangespotted Sunfish	2	0.18	N/A	N/A	N/A
QBS	Quillback	5	0.45	N/A	N/A	N/A
WAE	Walleye	2	0.18	0.31	0.73	1.69
WHC	White Crappie	109	9.91	0.53	1.82	15.86
YEB	Yellow Bullhead	1	0.09	0.50	1.60	4.05
YEP	Yellow Perch	1	0.09	0.25	0.81	2.62
		Total Fish/Set:	32.82	¹ Quartile	s for Number Pe	Set

### Net Catch Summary by Weight for TN

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

		<b>Total Weight</b>	Pounds	Mean	Quartiles for Lake Class 411			
Abbr	Species	(Pounds)	Per Set	Weight <sup>2</sup>	25%	50%	75%	
BLB	Black Bullhead	89.46	8.13	0.66	0.21	0.36	0.59	
BLC	Black Crappie	9.03	0.82	0.25	0.23	0.34	0.49	
CCF	Channel Catfish	29.66	2.70	4.24	N/A	N/A	N/A	
CAP	Common Carp	214.70	19.52	3.70	2.33	4.10	5.64	
GSF	Green Sunfish	0.16	0.01	0.16	0.06	0.10	0.17	
NOP	Northern Pike	4.28	0.39	2.14	N/A	N/A	N/A	
OSS	Orangespotted Sunfish	0.06	0.01	0.03	N/A	N/A	N/A	
QBS	Quillback	7.73	0.70	1.55	N/A	N/A	N/A	
WAE	Walleye	1.79	0.16	0.89	0.85	1.63	2.41	
WHC	White Crappie	42.28	3.84	0.39	0.21	0.34	0.53	
YEB	Yellow Bullhead	0.61	0.06	0.61	0.40	0.60	0.84	
YEP	Yellow Perch	0.06	0.01	0.06	0.13	0.20	0.31	
	Total Pounds Fish/Set:		36.35		¹ Quartil	es for Mean Wei	ght	

<sup>&</sup>lt;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 06/12/2023 and 06/15/2023)

	BIB	BLB	CAP	CCF	NOP	QBS	WAE	WHC	WTS	YEP
< 2.00	ыь	<u> </u>	CAP	<u> </u>	NOP	QDS	WAL	<u> </u>	WIS	IEP
< 3.00	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	-	-	-	-	-	1	-	-
4.50 - 4.99	-	-	-	-	-	-	-	'	-	-
5.00 - 5.49	-	3	-	-	-	-	-	-	-	-
5.50 - 5.99	-	1	-	-	-	-	-	-	-	-
6.00 - 6.49	-	-	-	-	-	-	-	1	-	-
6.50 - 6.99	-	3	-	-	-	-	-	1	-	2
7.00 - 7.49	1	-	-	-	-	-	-	-	-	-
7.50 - 7.99	1	8	-	-	-	-	-	-	-	1
8.00 - 8.49	-	15	-	-	-	-	1	-	-	-
8.50 - 8.99	1	12	-	-	-	-	-	-	-	3
9.00 - 9.49	-	5	-	-	-	-	-	-	-	8
9.50 - 9.99	-	8	-	-	-	-	-	-	-	-
10.00 - 10.49	1	12	1	-	-	-	-	-	-	5
10.50 - 10.99	-	15	-	-	-	-	-	-	-	6
11.00 - 11.49	-	12	-	-	-	-	-	-	-	-
11.50 - 11.99	-	12	-	-	-	-	-	-	-	-
12.00 - 12.99	-	3	1	1	-	-	9	-	4	-
13.00 - 13.99	-	-	-	1	-	1	13	-	1	-
14.00 - 14.99	1	-	5	-	-	1	7	-	1	-
15.00 - 15.99	-	-	7	-	-	1	-	-	3	-
16.00 - 16.99	-	-	27	-	-	-	7	-	3	-
17.00 - 17.99	1	-	38	1	-	-	3	-	4	-
18.00 - 18.99	1	-	27	1	-	1	-	-	-	-
19.00 - 19.99	-	-	12 4	6 3	-	-	-	-	1	-
20.00 - 20.99	-	-	1	ა 1	-	-	- 1	-	-	-
21.00 - 21.99	-	-	1	3	-	-	'	-	-	-
22.00 - 22.99 23.00 - 23.99	_	_	1	-	_	_	_	_	_	_
24.00 - 24.99	_	_	1	_	_	_	_	_	_	_
25.00 - 25.99	_	-	-	-	_	_	_	_	_	_
26.00 - 26.99	_	_	1	_	_	_	_		_	_
27.00 - 27.99	_	_	1	_	_	_	_	_	_	_
28.00 - 28.99	_	_	3	_	_	_	_	_	_	_
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	-	-	-	-	-	-	-	-	-	-
	<b>-</b> :-				N-0-		10	14	16	==
<b>-</b>	<u>BIB</u>	<u>BLB</u>	<u>CAP</u>	<u>CCF</u>	NOP	QBS	<u>WAE</u>	WHC	<u>WTS</u>	<u>YEP</u>
Total	7	109	131	17 12.28	1	4	41	3 4.06	17	25
Min. Length	7.13	5.20	10.00		30.94	13.50	8.31	4.96	12.24	6.69
Max. Length	18.82	12.17	28.82	22.91	30.94	18.19	21.46	6.54	19.13	10.91
Mean Length	12.09	9.65	18.10	19.35	30.94	15.36	14.37	5.98	15.62	9.61
# Measured	7	109	127	17	1	4	41	3	16	23
No Lengths for	2	1	4	0	0	0	0	0	1	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 06/12/2023 and 06/15/2023)

. 0.00	BLB	BLC	CAP	CCF	<u>GSF</u>	<u>NOP</u>	oss	QBS	WAE	WHC	<u>YEB</u>	YEP
< 3.00	-	1	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	1	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	1	-	-	-	-	-
4.00 - 4.49	-	1	-	-	-	-	-	-	-	-	-	-
4.50 - 4.99	-	15	-	-	-	-	-	-	-	1	-	-
5.00 - 5.49	3	-	-	-	-	-	-	-	-	-	-	1
5.50 - 5.99	3	-	-	-	1	-	-	-	-	-	-	-
6.00 - 6.49	3	-	-	-	-	-	-	-	-	-	-	-
6.50 - 6.99	4	4	-	-	-	-	-	-	-	4	-	-
7.00 - 7.49	3	1	-	-	-	-	-	-	-	4	-	-
7.50 - 7.99	6	-	-	-	-	-	-	-	-	7	-	-
8.00 - 8.49	6	-	-	-	-	-	-	-	-	24	-	-
8.50 - 8.99	1	2	-	-	-	-	-	-	-	22	-	-
9.00 - 9.49	7	7	-	-	-	-	-	-	1	17	-	-
9.50 - 9.99	6	-	-	-	-	-	-	-	-	11	-	-
10.00 - 10.49	10	3	-	-	-	-	-	-	-	15	1	-
10.50 - 10.99	17	-	-	-	-	-	-	-	-	1	-	-
11.00 - 11.49	30	1	1	-	-	-	-	-	-	1	-	-
11.50 - 11.99	32	1	_	-	-	-	-	1	_	2	-	_
12.00 - 12.99	8	_	_	_	_	_	-	_	_	_	_	_
13.00 - 13.99	-	_	_	_	_	_	_	1	_	_	_	_
14.00 - 14.99	_	_	2	_	_	_	_	1	_	_	_	_
15.00 - 15.99	_	_	8	_	_	_	_	1	_	_	_	_
16.00 - 16.99	_	_	9	_	_	_	_		1	_	_	_
17.00 - 17.99	_	_	16	_	_	_	_	_		_	_	_
18.00 - 18.99			6			1		1				
19.00 - 19.99	_	_	5	1	_		_	'	_	_	-	_
	-	-	1	1	-	-	-	-	-	-	-	-
20.00 - 20.99	-	-	'	1	-	-	-	-	-	-	-	-
21.00 - 21.99	-	-			-	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	2	-	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	3	-	1	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	-	-	-	-	-	-	-	-
25.00 - 25.99	-	-	2	-	-	-	-	-	-	-	-	-
26.00 - 26.99	-	-	1	-	-	-	-	-	-	-	-	-
27.00 - 27.99	-	-	1	-	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	5	-	-	-	-	-	-	-	-	-
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>	BLC	CAP	CCF	GSF <sub>1</sub>	NOP	<u>oss</u>	QBS_	WAE	WHC	YEB	YEP 1
Total	139	36	58	7	1	2	2	5	2	109	10.20	1
Min. Length	5.20	1.38	11.10	19.37	5.94	18.39	3.11	11.61	9.13	4.53	10.39	5.12
Max. Length	12.44	11.50	29.13	23.82	5.94	23.62	3.54	18.15	16.73	11.57	10.39	5.12
Mean Length	10.29	6.84	18.94	22.42	5.94	21.00	3.33	14.69	12.93	8.89	10.39	5.12
# Measured	130	36	58	7	1	2	2	5	2	78	1	1
No Lengths for	7	0	0	0	0	0	0	0	0	31	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

Gear		Total	Number	Length (inches)	Number	Weight (pounds)
<b>Type</b> (1)	Other Species (Gender) (2)	Num	Measured	Min - Mean - Max	Weighed	Min - Mean - Max
TN	Painted Turtle	25	0	N/A	0	N/A
	Snapping Turtle	5	5	12.99 - 14.02 - 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 06/16/2023), and is therefore subject to change at any time.



FISHERIES

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: Okamanpeedan Survey Type: Standard Survey

DOW Number: 46-0051-00 Survey ID Date: 06/12/2023

Survey Status: Field Work Complete

The following 23 (of 34) report components are not included in this Lake Survey Report:

- 1. Current Water Level
- 2. Benchmark And Gauge Descriptions / Locations
- 3. Water Level History1
- 4. Lake Inlets
- 5. Additional Inlet Information
- 6. Lake Outlets
- 7. Additional Outlet Information
- 8. Water Control Structure (Dam)
- Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations<sup>2</sup>
- Resorts And Campgrounds
- 11. Fish Spawning Conditions
- 12. Erosion And Pollution
- 13. Fish Diseases And Parasites
- 14. Aquatic Vegetation And Shoalwater Substrates
- 15. Water Quality (Winter Observations) (added to revision 01/21/2010)
- 16. Laboratory Analysis Of Water Chemistry
- 17. Zooplankton Sampling (added to revision 20221130)
- 18. Catch Summary (Pre-1993 Format) (added to revision 20201001)
- 19. Length At Capture With Last Incremental Length\*
- 20. Back-Calculated Lengths
- 21. Age Class Frequency Distributions
- 22. Status Of Fishery And Field Notes
- 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.
- <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 06/16/2023 may not be reflected in the Distribution tables until after 12:30 pm on 06/16/2023.

The following survey component was flagged to be specifically excluded from this report: TN - 15

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