



Minnesota Department of Natural Resources  
 Fisheries Management  
**LAKE SURVEY REPORT**



**DRAFT VERSION - PRELIMINARY DATA (AS OF 07/14/2016)**

**Lake Name: Talcot**

**Survey Type: Standard Survey**

**DOW Number: 17-0060-00**

**Survey ID Date: 07/11/2016**

**Lake Identification**

Alternate Lake Name: Talcott  
 Primary Lake Class ID: 43

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

**Lake Location**

Primary County: Cottonwood

Nearest Town: Dundee

**All Counties:** Cottonwood, Murray.

**Legal Descriptions**

Lake Center: Township - 105N Range - 38W Section - 19  
 PLS Section Lake Center: 10503819

**All Legal Descriptions:**

Cottonwood County: Township - 105N Range - 38W Sections - 19, 20, 30  
 Murray County: Township - 105N Range - 39W Sections - 24, 25

**Area Office**

Area Name: Windom  
 Region Name: Southern

ORG Code: F418  
 Region Number: 4

**Lake Access**

(Information based on Re-Survey dated 07/31/1995)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	STATE OWNED ACCESS ON SOUTHSHORE.
AC - 2	DNR	Open to Public use	Carry-In	STATE OWNED CANOE ACCESS ON DES MOINES RIVER.

**Lake Characteristics**

Lake Area (planimetered acres): 678.00	GIS Shoreline Length (miles): 8.54
GIS Lake Area (acres): 873.06	Maximum Fetch (miles): 2.00
DOW Lake Area (acres): 928.00	Fetch Orientation (degrees): 45
Littoral Area (acres): 873.05	USGS Quad Map Number: W08b
Area in MN (acres): 873.06	USGS Quad 24K GIS Index: 4415
Maximum Depth (feet): 6.0	
Mean Depth (feet): N/A	

**Watershed Characteristics**

**Major Watershed**

Name: Des Moines-Headwaters  
Watershed Number: 51  
Watershed size (acres): 798,595

**Minor Watershed**

Name: Talcot L  
Watershed Number: 25  
Watershed size (acres): 7,297

**Surveys and Investigations**

**Initial Survey:** 08/05/1985.

**Re-Survey:** 07/29/2002, 07/31/1995.

**Population Assessment:** 07/28/2014, 07/26/2010, 07/24/2006, 08/02/1999, 07/29/1991, 07/23/1990, 07/24/1989.

**Special Assessment:** 07/28/2014, 10/04/2006, 10/11/2004, 10/07/2003, 10/07/2002, 09/13/2001, 09/12/2000, 09/14/1999, 09/21/1998, 09/24/1997, 09/24/1996, 09/27/1995.

**Winter Kill Assessment:** 04/07/2014.

**Dissolved Oxygen Check:** 01/02/2014, 02/07/2013, 01/07/2013, 01/21/2010.

**Natural Reproduction Check:** 10/29/2014, 10/16/2013, 10/16/2012, 10/26/2011, 10/18/2010, 10/08/2008, 10/11/2007.

**Standard Survey:** 07/11/2016.

**Targeted Survey:** 10/07/2015.

**Current Water Level**

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	07/14/2016	High	-3.20	Above or below Benchmark

**Benchmark and Gauge Descriptions / Locations**

Station ID	Location Description
BM - 1	Top of concrete abutment on North end of dam.

**Water Level History - Readings**

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	07/14/2016	High	-3.20	Above or below Benchmark
	07/31/2014	Normal	-3.50	Above or below Benchmark
	07/29/2010	High	3.10	Above or below Benchmark
	07/24/2006	Normal	-3.60	Above or below Benchmark

**Water Level History - Station Summary**

Station ID	Minimum Level		Maximum Level		Range (feet)	Average Level (feet)	Reading Type (and number of readings)
	Feet	Date	Feet	Date			
BM - 1	-3.60	07/24/2006	3.10	07/29/2010	6.70	-1.80	Above or below Benchmark (4)

**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	07/13/2016	5.8	Surface	75.7	6.2
			2.0	75.7	6.4
			4.0	75.7	6.2
			6.0	75.7	5.9

**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	07/13/2016	Surface	0.4	8.63	160	Green	Algae

**Net Catch Summary by Numbers for GN**

Standard gill net sets

Number of Sets: 3  
 First Set Date: 07/11/2016  
 Last Lift Date: 07/14/2016  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	35	11.67	0.75	2.58	6.96
BLB	Black Bullhead	208	69.33	30.34	75.58	150.62
BLC	Black Crappie	3	1.00	1.41	3.71	13.75
CCF	Channel Catfish	14	4.67	N/A	N/A	N/A
CAP	Common Carp	6	2.00	1.00	3.33	13.75
NOP	Northern Pike	1	0.33	1.08	3.00	8.00
QBS	Quillback	1	0.33	N/A	N/A	N/A
WAE	Walleye	62	20.67	2.28	6.83	18.06
WTS	White Sucker	395	131.67	0.81	2.33	6.50
YEB	Yellow Bullhead	1	0.33	0.50	1.50	3.50
YEP	Yellow Perch	72	24.00	2.65	8.00	25.00
Total Fish/Set:			266.00	* 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 43*		
					25%	50%	75%
BIB	Bigmouth Buffalo	27.41	9.14	0.78	N/A	N/A	N/A
BLB	Black Bullhead	47.03	15.68	0.23	0.17	0.26	0.39
BLC	Black Crappie	0.79	0.26	0.26	0.16	0.25	0.35
CCF	Channel Catfish	29.99	10.00	2.14	N/A	N/A	N/A
CAP	Common Carp	6.01	2.00	1.00	0.81	1.98	3.70
NOP	Northern Pike	3.80	1.27	3.80	1.82	2.50	3.35
QBS	Quillback	1.45	0.48	1.45	N/A	N/A	N/A
WAE	Walleye	94.74	31.58	1.53	1.01	1.53	2.30
WTS	White Sucker	305.64	101.88	0.77	0.93	1.58	2.02
YEB	Yellow Bullhead	0.18	0.06	0.18	0.31	0.53	0.73
YEP	Yellow Perch	11.02	3.67	0.15	0.13	0.21	0.31
Total Pounds Fish/Set:			176.03	* Quartiles for Mean Weight			

**Net Catch Summary by Numbers for TN**

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

Number of Sets: 11  
 First Set Date: 07/11/2016  
 Last Lift Date: 07/14/2016  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	11	1.00	0.17	0.38	1.04
BLB	Black Bullhead	17	1.55	11.50	42.00	132.61
BLC	Black Crappie	18	1.64	1.17	4.88	20.50
CCF	Channel Catfish	1	0.09	N/A	N/A	N/A
CAP	Common Carp	65	5.91	1.00	2.44	5.51
NOP	Northern Pike	7	0.64	N/A	N/A	N/A
OSS	Orangespotted Sunfish	3	0.27	N/A	N/A	N/A
QBS	Quillback	7	0.64	N/A	N/A	N/A
WAE	Walleye	26	2.36	0.50	1.33	2.95
WHC	White Crappie	1	0.09	0.25	1.83	5.96
WTS	White Sucker	30	2.73	0.34	0.88	2.58
YEB	Yellow Bullhead	6	0.55	0.50	1.13	2.50
YEP	Yellow Perch	23	2.09	0.33	1.37	3.76
Total Fish/Set:			19.55	* 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 43*		
					25%	50%	75%
BIB	Bigmouth Buffalo	52.44	4.77	4.77	2.56	3.75	5.83
BLB	Black Bullhead	4.65	0.42	0.27	0.18	0.28	0.40
BLC	Black Crappie	4.46	0.41	0.25	0.22	0.34	0.50
CCF	Channel Catfish	0.03	0.00	0.03	N/A	N/A	N/A
CAP	Common Carp	111.15	10.10	1.71	1.42	2.92	4.58
NOP	Northern Pike	37.04	3.37	5.29	N/A	N/A	N/A
OSS	Orangespotted Sunfish	0.08	0.01	0.03	N/A	N/A	N/A
QBS	Quillback	2.66	0.24	0.38	N/A	N/A	N/A
WAE	Walleye	31.77	2.89	1.22	0.82	1.44	2.28
WHC	White Crappie	0.13	0.01	0.13	0.27	0.40	0.63
WTS	White Sucker	26.79	2.44	0.89	1.05	1.47	2.04
YEB	Yellow Bullhead	1.72	0.16	0.29	0.31	0.48	0.67
YEP	Yellow Perch	3.15	0.29	0.14	0.11	0.18	0.30
Total Pounds Fish/Set:			25.10	* Quartiles for Mean Weight			

**Length Frequency Distribution for GN**

**Standard gill net sets**

(Field work conducted between 07/11/2016 and 07/14/2016)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>NOP</u>	<u>QBS</u>	<u>WAE</u>	<u>WTS</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	-	2	-	-	-	-	-	-	-	-	-
5.00 - 5.49	-	17	-	-	-	-	-	-	-	-	1
5.50 - 5.99	-	16	1	-	-	-	-	-	-	-	14
6.00 - 6.49	-	26	1	-	1	-	-	-	1	-	26
6.50 - 6.99	-	63	-	-	2	-	-	-	1	1	16
7.00 - 7.49	1	27	-	-	-	-	-	-	3	-	7
7.50 - 7.99	4	12	-	-	-	-	-	-	-	-	4
8.00 - 8.49	2	11	-	-	-	-	-	-	4	-	-
8.50 - 8.99	5	19	-	-	-	-	-	-	4	-	-
9.00 - 9.49	8	7	-	-	-	-	-	-	2	-	-
9.50 - 9.99	6	4	1	1	-	-	-	-	2	-	1
10.00 - 10.49	1	1	-	-	-	-	-	-	18	-	2
10.50 - 10.99	-	1	-	1	-	-	-	-	21	-	-
11.00 - 11.49	-	-	-	-	-	-	-	1	89	-	-
11.50 - 11.99	3	1	-	2	-	-	-	2	61	-	-
12.00 - 12.99	1	-	-	1	2	-	-	12	144	-	-
13.00 - 13.99	1	-	-	-	-	-	-	3	14	-	-
14.00 - 14.99	-	-	-	-	-	-	1	7	11	-	-
15.00 - 15.99	1	-	-	1	2	-	-	10	2	-	-
16.00 - 16.99	1	-	-	-	-	-	-	14	-	-	-
17.00 - 17.99	-	-	-	-	-	-	-	1	5	-	-
18.00 - 18.99	-	-	-	-	1	-	-	4	10	-	-
19.00 - 19.99	1	-	-	-	3	-	-	3	1	-	-
20.00 - 20.99	-	-	-	-	-	-	-	3	-	-	-
21.00 - 21.99	-	-	-	-	1	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-	2	-	-	-
23.00 - 23.99	-	-	-	-	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	2	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	-	1	-	-	-	-	-
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>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>NOP</u>	<u>QBS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	35	207	3	6	14	1	1	62	393	1	71
Min. Length	7.32	4.92	5.67	9.96	6.18	25.98	14.41	11.42	6.22	6.69	5.35
Max. Length	19.49	11.81	9.57	15.04	24.80	25.98	14.41	22.80	19.69	6.69	10.16
Mean Length	10.10	7.13	7.11	12.05	16.00	25.98	14.41	15.72	12.32	6.69	6.61
# Measured	35	143	3	6	14	1	1	62	145	1	59
No Lengths for	0	65	0	0	0	0	0	0	250	0	13

**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 07/11/2016 and 07/14/2016)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>NOP</u>	<u>OSS</u>	<u>QBS</u>	<u>WAE</u>	<u>WHC</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	1	-	-	-	-	-	1	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	1	-	-	-	-	-	-
4.00 - 4.49	-	1	-	-	-	-	-	-	-	-	-	1	-
4.50 - 4.99	-	1	4	-	1	-	-	-	-	-	-	-	1
5.00 - 5.49	-	2	3	-	-	-	-	-	-	-	-	-	4
5.50 - 5.99	-	2	1	-	-	-	-	-	-	-	-	-	6
6.00 - 6.49	-	-	2	-	-	-	-	-	-	-	1	-	4
6.50 - 6.99	-	3	-	-	-	-	-	-	-	1	1	2	-
7.00 - 7.49	-	1	-	-	-	-	-	-	-	-	1	-	3
7.50 - 7.99	-	-	-	-	-	-	-	3	-	-	2	1	3
8.00 - 8.49	-	2	-	1	-	-	-	2	-	-	-	1	-
8.50 - 8.99	-	-	5	1	-	-	-	1	-	-	-	-	-
9.00 - 9.49	-	1	3	2	-	-	-	-	-	-	-	-	1
9.50 - 9.99	-	1	-	5	-	-	-	-	-	-	1	-	-
10.00 - 10.49	-	1	-	4	-	-	-	-	-	-	1	-	-
10.50 - 10.99	-	-	-	4	-	-	-	-	-	-	3	1	-
11.00 - 11.49	-	2	-	3	-	-	-	-	1	-	3	-	-
11.50 - 11.99	-	-	-	6	-	-	-	-	-	-	2	-	-
12.00 - 12.99	-	-	-	8	-	-	-	1	7	-	5	-	-
13.00 - 13.99	-	-	-	1	-	-	-	-	4	-	3	-	-
14.00 - 14.99	-	-	-	9	-	-	-	-	2	-	3	-	-
15.00 - 15.99	2	-	-	4	-	-	-	-	4	-	1	-	-
16.00 - 16.99	-	-	-	6	-	-	-	-	7	-	1	-	-
17.00 - 17.99	3	-	-	5	-	-	-	-	-	-	-	-	-
18.00 - 18.99	-	-	-	1	-	-	-	-	-	-	2	-	-
19.00 - 19.99	1	-	-	-	-	-	-	-	-	-	-	-	-
20.00 - 20.99	1	-	-	1	-	-	-	-	-	-	-	-	-
21.00 - 21.99	1	-	-	-	-	-	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	-	1	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	1	-	-	-	-	1	-	-	-	-
24.00 - 24.99	-	-	-	-	-	-	-	-	-	-	-	-	-
25.00 - 25.99	1	-	-	1	-	-	-	-	-	-	-	-	-
26.00 - 26.99	1	-	-	1	-	1	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	1	-	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	1	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	-	2	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	1	-	-	-	-	-	-	-
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>NOP</u>	<u>OSS</u>	<u>QBS</u>	<u>WAE</u>	<u>WHC</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	11	17	18	65	1	7	2	7	26	1	30	6	22
Min. Length	2.44	4.29	4.84	8.46	4.96	22.83	2.40	7.64	11.34	6.50	6.42	4.37	4.96
Max. Length	26.97	11.30	9.37	27.68	4.96	32.20	3.78	12.87	23.74	6.50	18.31	10.83	9.41
Mean Length	18.27	7.43	6.91	13.88	4.96	28.82	3.09	8.75	14.72	6.50	12.04	7.47	6.31
# Measured	11	17	18	65	1	7	2	7	26	1	30	6	21
No Lengths for	0	0	0	0	0	0	1	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

**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	2	0	N/A	0	N/A
	Snapping Turtle	2	2	9.92 - 11.18 - 12.44	0	N/A
	Spiney Softshell Turtle	5	0	N/A	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 07/14/2016), 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: Talcot

Survey Type: Standard Survey

DOW Number: 17-0060-00

Survey ID Date: 07/11/2016

Survey Status: Proposed

The following 19 (of 32) 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. Laboratory Analysis Of Water Chemistry
14. Length At Capture With Last Incremental Length\*
15. Back-Calculated Lengths
16. Age Class Frequency Distributions
17. Status Of Fishery And Field Notes
18. Water Quality (Winter Observations) (added to revision 01/21/2010)
19. 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 after noon on 07/14/2016 may not be reflected in the Distribution tables until 07/15/2016.**

The following survey component was flagged to be specifically excluded from this report: TN - 8

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