



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



**DRAFT VERSION - PRELIMINARY DATA (AS OF 07/25/2016)**

Lake Name: Wood

Survey Type: Standard Survey

DOW Number: 42-0078-00

Survey ID Date: 07/11/2016

**Lake Identification**

Alternate Lake Name: Marguerite  
 Primary Lake Class ID: 43

DNR Sounding Map Number: C0791  
 Alternate Lake Class ID: N/A

**Lake Location**

Primary County: Lyon

Nearest Town: Russell

**Legal Descriptions**

Lake Center: Township - 110N Range - 43W Section - 9  
 PLS Section Lake Center: 11004309

**All Legal Descriptions:**

Lyon County: Township - 110N Range - 43W Sections - 3, 4, 9

**Area Office**

Area Name: Windom  
 Region Name: Southern

ORG Code: F418  
 Region Number: 4

**Lake Access**

(Information based on Re-Survey dated 07/15/1996)

| Station ID | Ownership | Public Use         | Type     | Location / Comments                      |
|------------|-----------|--------------------|----------|--|
| AC - 1     | DNR       | Open to Public use | Concrete | STATE OWNED ACCESS ON NORTH END OF LAKE. |

**Lake Characteristics**

|                                 |        |                               |      |
|---------------------------------|--------|-------------------------------|------|
| Lake Area (planimetered acres): | 367.00 | GIS Shoreline Length (miles): | 3.49 |
| GIS Lake Area (acres):          | 372.81 | Maximum Fetch (miles):        | 1.10 |
| DOW Lake Area (acres):          | 351.00 | Fetch Orientation (degrees):  | 360  |
| Littoral Area (acres):          | 372.80 | USGS Quad Map Number:         | U05d |
| Area in MN (acres):             | 372.81 | USGS Quad 24K GIS Index:      | 4110 |
| Maximum Depth (feet):           | 14.0   |                               |      |
| Mean Depth (feet):              | N/A    |                               |      |

**Watershed Characteristics**

Major Watershed

Name: Redwood River  
 Watershed Number: 27  
 Watershed size (acres): 447,531

Minor Watershed

Name: unknown DNR Minor Wshd  
 Watershed Number: 46  
 Watershed size (acres): 3,158

### Surveys and Investigations

Initial Survey: 07/13/1988.  
 Re-Survey: 07/15/1996.  
 Population Assessment: 07/16/2012, 07/14/2008, 07/12/2004, 07/10/2000, 07/13/1992.  
 Dissolved Oxygen Check: 01/22/2015, 01/02/2014, 02/18/2010.  
 Standard Survey: 07/11/2016.  
 Targeted Survey: 10/05/2015.

### Current Water Level

| Station ID | Date       | Level | Reading (feet) | Reading Type             |
|------------|------------|-------|----------------|--------------------------|
| BM - 1     | 07/20/2016 | High  | -2.10          | Above or below Benchmark |

### Benchmark and Gauge Descriptions / Locations

| Station ID | Location Description |
|------------|----------------------|
| BM - 1     | N/A                  |

### Water Level History - Readings

| Station ID | Date       | Level  | Reading (feet) | Reading Type             |
|------------|------------|--------|----------------|--------------------------|
| BM - 1     | 07/20/2016 | High   | -2.10          | Above or below Benchmark |
|            | 07/17/2012 | Normal | 3.90           | Above or below Benchmark |
|            | 07/17/2008 | Normal | 3.40           | 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     | -2.10         | 07/20/2016 | 3.90          | 07/17/2012 | 6.00         | 1.73                 | Above or below Benchmark (3)          |

### Dissolved Oxygen and Temperature Profile of Lake Water

| Station ID | Sampling Date | Bottom Depth (Feet) | Sample Depth (Feet) | Water            | Dissolved    |
|------------|---------------|---------------------|---------------------|------------------|--------------|
|            |               |                     |                     | Temperature (°F) | Oxygen (ppm) |
| WQ - 1     | 07/19/2016    | 13.3                | Surface             | 75.4             | 8.8          |
|            |               |                     | 1.0                 | 75.4             | 8.8          |
|            |               |                     | 2.0                 | 75.4             | 8.8          |
|            |               |                     | 3.0                 | 75.4             | 8.8          |
|            |               |                     | 4.0                 | 75.4             | 8.8          |
|            |               |                     | 5.0                 | 75.4             | 8.7          |
|            |               |                     | 6.0                 | 75.4             | 8.7          |
|            |               |                     | 7.0                 | 75.4             | 8.7          |
|            |               |                     | 8.0                 | 75.4             | 8.6          |
|            |               |                     | 9.0                 | 75.4             | 8.5          |
|            |               |                     | 10.0                | 75.4             | 8.1          |
|            |               |                     | 11.0                | 75.0             | 7.9          |
|            |               |                     | 12.0                | 74.5             | 7.1          |
|            |               |                     | 13.0                | 74.1             | 2.9          |

**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            | 07/19/2016           | Surface                    | 8.1                        | 8.70            | 360                     | Green              | Algae              |

**Net Catch Summary by Numbers for GN**

Standard gill net sets

**Number of Sets:** 3  
**First Set Date:** 07/18/2016  
**Last Lift Date:** 07/21/2016  
**Target Species:** N/A

| Abbr            | Species         | Total Fish | Number Per Set | Quartiles for Lake Class 43*   |       |        |
|-----------------|-----------------|------------|----------------|--------------------------------|-------|--------|
|                 |                 |            |                | 25%                            | 50%   | 75%    |
| BLB             | Black Bullhead  | 2          | 0.67           | 30.34                          | 75.58 | 150.62 |
| CAP             | Common Carp     | 2          | 0.67           | 1.00                           | 3.33  | 13.75  |
| LMB             | Largemouth Bass | 1          | 0.33           | 0.20                           | 0.50  | 1.50   |
| WAE             | Walleye         | 44         | 14.67          | 2.28                           | 6.83  | 18.06  |
| WTS             | White Sucker    | 2          | 0.67           | 0.81                           | 2.33  | 6.50   |
| YEP             | Yellow Perch    | 311        | 103.67         | 2.65                           | 8.00  | 25.00  |
| Total Fish/Set: |                 |            | 120.67         | * 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%  |
| BLB                    | Black Bullhead  | 1.90                  | 0.63           | 0.95                        | 0.17                         | 0.26 | 0.39 |
| CAP                    | Common Carp     | 5.62                  | 1.87           | 2.81                        | 0.81                         | 1.98 | 3.70 |
| LMB                    | Largemouth Bass | 0.63                  | 0.21           | 0.63                        | 0.60                         | 1.18 | 1.37 |
| WAE                    | Walleye         | 43.02                 | 14.34          | 0.98                        | 1.01                         | 1.53 | 2.30 |
| WTS                    | White Sucker    | 6.06                  | 2.02           | 3.03                        | 0.93                         | 1.58 | 2.02 |
| YEP                    | Yellow Perch    | 178.77                | 59.59          | 0.57                        | 0.13                         | 0.21 | 0.31 |
| Total Pounds Fish/Set: |                 |                       | 78.67          | * 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: 07/18/2016  
 Last Lift Date: 07/21/2016  
 Target Species: N/A

| Abbr            | Species        | Total Fish | Number Per Set | Quartiles for Lake Class 43*   |       |        |
|-----------------|----------------|------------|----------------|--------------------------------|-------|--------|
|                 |                |            |                | 25%                            | 50%   | 75%    |
| BLB             | Black Bullhead | 9          | 1.00           | 11.50                          | 42.00 | 132.61 |
| CAP             | Common Carp    | 20         | 2.22           | 1.00                           | 2.44  | 5.51   |
| WAE             | Walleye        | 46         | 5.11           | 0.50                           | 1.33  | 2.95   |
| YEP             | Yellow Perch   | 4          | 0.44           | 0.33                           | 1.37  | 3.76   |
| Total Fish/Set: |                |            | 8.78           | * 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%  |
| BLB                    | Black Bullhead | 12.28                 | 1.36           | 1.36                        | 0.18                         | 0.28 | 0.40 |
| CAP                    | Common Carp    | 132.41                | 14.71          | 6.62                        | 1.42                         | 2.92 | 4.58 |
| WAE                    | Walleye        | 16.50                 | 1.83           | 0.36                        | 0.82                         | 1.44 | 2.28 |
| YEP                    | Yellow Perch   | 2.20                  | 0.24           | 0.55                        | 0.11                         | 0.18 | 0.30 |
| Total Pounds Fish/Set: |                |                       | 18.15          | * Quartiles for Mean Weight |                              |      |      |

**Length Frequency Distribution for GN**

**Standard gill net sets**

(Field work conducted between 07/18/2016 and 07/21/2016)

|               | <u>BLB</u> | <u>CAP</u> | <u>LMB</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   | -          | -          | -          | -          | -          | -          |
| 5.00 - 5.49   | -          | -          | -          | -          | -          | -          |
| 5.50 - 5.99   | -          | -          | -          | -          | -          | -          |
| 6.00 - 6.49   | -          | -          | -          | -          | -          | -          |
| 6.50 - 6.99   | -          | -          | -          | -          | -          | -          |
| 7.00 - 7.49   | -          | -          | -          | 11         | -          | -          |
| 7.50 - 7.99   | -          | -          | -          | 21         | -          | -          |
| 8.00 - 8.49   | -          | -          | -          | 1          | -          | -          |
| 8.50 - 8.99   | -          | -          | -          | -          | -          | 4          |
| 9.00 - 9.49   | -          | -          | -          | 1          | -          | 14         |
| 9.50 - 9.99   | -          | -          | -          | -          | -          | 41         |
| 10.00 - 10.49 | -          | -          | 1          | -          | -          | 160        |
| 10.50 - 10.99 | -          | -          | -          | -          | -          | 80         |
| 11.00 - 11.49 | -          | -          | -          | -          | -          | 10         |
| 11.50 - 11.99 | -          | -          | -          | -          | -          | 2          |
| 12.00 - 12.99 | 2          | -          | -          | -          | -          | -          |
| 13.00 - 13.99 | -          | -          | -          | -          | -          | -          |
| 14.00 - 14.99 | -          | -          | -          | -          | -          | -          |
| 15.00 - 15.99 | -          | -          | -          | -          | -          | -          |
| 16.00 - 16.99 | -          | -          | -          | -          | -          | -          |
| 17.00 - 17.99 | -          | 2          | -          | 3          | 1          | -          |
| 18.00 - 18.99 | -          | -          | -          | -          | -          | -          |
| 19.00 - 19.99 | -          | -          | -          | 3          | 1          | -          |
| 20.00 - 20.99 | -          | -          | -          | -          | -          | -          |
| 21.00 - 21.99 | -          | -          | -          | 1          | -          | -          |
| 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 | -          | -          | -          | 3          | -          | -          |
| 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>CAP</u> | <u>LMB</u> | <u>WAE</u> | <u>WTS</u> | <u>YEP</u> |
|----------------|------------|------------|------------|------------|------------|------------|
| Total          | 2          | 2          | 1          | 44         | 2          | 311        |
| Min. Length    | 12.40      | 17.32      | 10.47      | 7.28       | 17.68      | 8.94       |
| Max. Length    | 12.60      | 17.36      | 10.47      | 28.62      | 19.72      | 11.54      |
| Mean Length    | 12.50      | 17.34      | 10.47      | 10.94      | 18.70      | 10.23      |
| # Measured     | 2          | 2          | 1          | 43         | 2          | 161        |
| No Lengths for | 0          | 0          | 0          | 1          | 0          | 150        |

**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 07/18/2016 and 07/21/2016)

|               | <u>BLB</u> | <u>CAP</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   | -          | -          | -          | -          |
| 5.50 - 5.99   | -          | -          | -          | -          |
| 6.00 - 6.49   | -          | -          | -          | -          |
| 6.50 - 6.99   | -          | -          | -          | -          |
| 7.00 - 7.49   | -          | -          | 2          | -          |
| 7.50 - 7.99   | -          | -          | 20         | -          |
| 8.00 - 8.49   | -          | -          | 14         | -          |
| 8.50 - 8.99   | -          | -          | 3          | -          |
| 9.00 - 9.49   | -          | -          | 2          | -          |
| 9.50 - 9.99   | -          | -          | -          | 1          |
| 10.00 - 10.49 | -          | -          | -          | -          |
| 10.50 - 10.99 | -          | -          | -          | 2          |
| 11.00 - 11.49 | -          | -          | -          | 1          |
| 11.50 - 11.99 | -          | 1          | -          | -          |
| 12.00 - 12.99 | 4          | -          | -          | -          |
| 13.00 - 13.99 | 2          | -          | -          | -          |
| 14.00 - 14.99 | 2          | -          | -          | -          |
| 15.00 - 15.99 | 1          | -          | -          | -          |
| 16.00 - 16.99 | -          | 1          | -          | -          |
| 17.00 - 17.99 | -          | 5          | -          | -          |
| 18.00 - 18.99 | -          | -          | 1          | -          |
| 19.00 - 19.99 | -          | -          | 2          | -          |
| 20.00 - 20.99 | -          | -          | 1          | -          |
| 21.00 - 21.99 | -          | 1          | -          | -          |
| 22.00 - 22.99 | -          | 1          | -          | -          |
| 23.00 - 23.99 | -          | 1          | -          | -          |
| 24.00 - 24.99 | -          | 1          | -          | -          |
| 25.00 - 25.99 | -          | 1          | -          | -          |
| 26.00 - 26.99 | -          | 2          | -          | -          |
| 27.00 - 27.99 | -          | 3          | -          | -          |
| 28.00 - 28.99 | -          | 1          | -          | -          |
| 29.00 - 29.99 | -          | 2          | -          | -          |
| 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>CAP</u> | <u>WAE</u> | <u>YEP</u> |
|----------------|------------|------------|------------|------------|
| Total          | 9          | 20         | 45         | 4          |
| Min. Length    | 12.13      | 11.97      | 7.17       | 9.80       |
| Max. Length    | 15.59      | 29.92      | 20.75      | 11.18      |
| Mean Length    | 13.46      | 22.78      | 9.10       | 10.60      |
| # Measured     | 9          | 20         | 43         | 4          |
| No Lengths for | 0          | 0          | 3          | 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**

| <b>Gear Type (1)</b> | <b>Other Species (Gender) (2)</b> | <b>Total Num</b> | <b>Number Measured</b> | <b>Length (inches)<br/>Min - Mean - Max</b> | <b>Number Weighed</b> | <b>Weight (pounds)<br/>Min - Mean - Max</b> |
|----------------------|-----------------------------------|------------------|------------------------|---|-----------------------|---|
| TN                   | Painted Turtle                    | 4                | 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.

---



**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 07/25/2016), 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.

(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: Wood**

**Survey Type: Standard Survey**

**DOW Number: 42-0078-00**

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

**Survey Status:** Field Work Complete

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 before noon on 07/25/2016 may not be reflected in the Distribution tables until after 12:30 pm on 07/25/2016.**

**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).