

# Citizen Lake-Monitoring Program

2006 Report on the Transparency of Minnesota Lakes  
April 2007



Minnesota Pollution Control Agency

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Volunteer lake monitors are one of Minnesota's most important lake water quality tracking systems. The Minnesota Pollution Control Agency thanks the Citizen Lake-Monitoring Program volunteers for their efforts in collecting water quality data. Their efforts toward protecting the surface waters of Minnesota are greatly appreciated.

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## Introduction

The Citizen Lake-Monitoring Program (CLMP) began in 1973 at the University of Minnesota, and was developed by Dr. Joe Shapiro. During that first year, volunteers monitored 74 lakes. Administration of the CLMP was transferred to the Minnesota Pollution Control Agency (MPCA) in 1978. This program continues to be a cost-effective mechanism for obtaining good, basic, water quality data on many of Minnesota's lakes.

Information about lake water quality is vital for assessing a lake's physical condition and recreational suitability. Minnesota has more than 12,000 lakes and a limited number of state staff to monitor them. The participation of citizen volunteer monitors in the CLMP effectively increases the monitoring capabilities of the state. Volunteers provide the state and others with valuable information on the water quality of Minnesota's lakes.

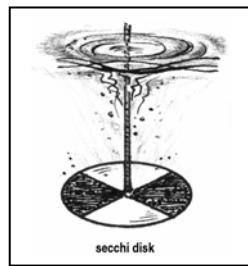
The CLMP involves the voluntary participation of citizens residing on or near lakes or those who are frequent lake users. These participants are asked to take weekly transparency measurements on their lake during the summer using a Secchi disk. At least eight to ten readings per season are needed to adequately define each summer's water quality. Through this process, the volunteers can learn about the water quality of lakes in their area and gain a greater awareness of the causes and effects of lake degradation.

Data from the CLMP are entered into the U.S. Environmental Protection Agency's water quality database (called STORET) along with all other water quality data collected by the MPCA. For many lakes, CLMP data is the **only** water quality information available. These data are used to analyze water quality trends, characterize trophic status (biological productivity), provide ground truthing for remote satellite water quality imagery and provide a basis for water quality goal setting.

Several topics will be covered in this report. First, a discussion of what Secchi depth transparency means – how it is related to water quality. Following that will be two sections on how, using Secchi transparency data, lakes can be compared and lake trophic status can be determined. A brief summary of the 2006 water monitoring season will follow. An update on the CLMP+ Program will follow, and the section will wrap up with an example showing the determination of a trophic state index for a lake. Appendix I will contain seasonal averages, sorted by county, for all lakes, sites and volunteers who participated in the 2006 season.



## Secchi Transparency - What does it measure, and what can hear it?



Secchi transparency is a measure of the depth of light penetration in the water column. These measurements provide a basis for assessing water quality, estimations of trophic status and documentation of trends in water quality over time. Secchi transparency (clarity) can vary greatly among Minnesota's lakes. In many Minnesota lakes, Secchi transparency provides an indirect measure of the amount of algae in the water (see trophic state index).

In some lakes, suspended sediments or color due to dissolved organic material may limit transparency. Precipitation is another factor that can affect the water quality of Minnesota's lakes. In "wet years," excessive precipitation in a lake's watershed often leads to high amounts of runoff and high nutrient loading. This may result in increased algae, and possibly increased suspended sediments in the lake, leading to reduced transparency; however, these impacts may be moderated by increased "flushing" of the lake. In "dry years," the inverse may be true and some lakes may experience increased transparency during periods of low runoff and decreased nutrient loading. It is important to note that no two lakes respond in exactly the same fashion to "wet" or "dry" years. Several consecutive years of monitoring are often needed to understand how your lake responds to climatic changes.

Figure 1a shows precipitation in Minnesota from October 2005 to September 2006 (Water Year 2006). Figure 1b shows the precipitation "departure from normal" or how far from average precipitation in 2006 was across the state. This figure shows that precipitation in much of the north central and southeast regions of Minnesota was two to four inches below normal, while west-central and southwest Minnesota experienced two to six inches above normal precipitation. As discussed above, these variations can have impacts on water quality in area lakes.

## Ecoregions and Lake Water Quality

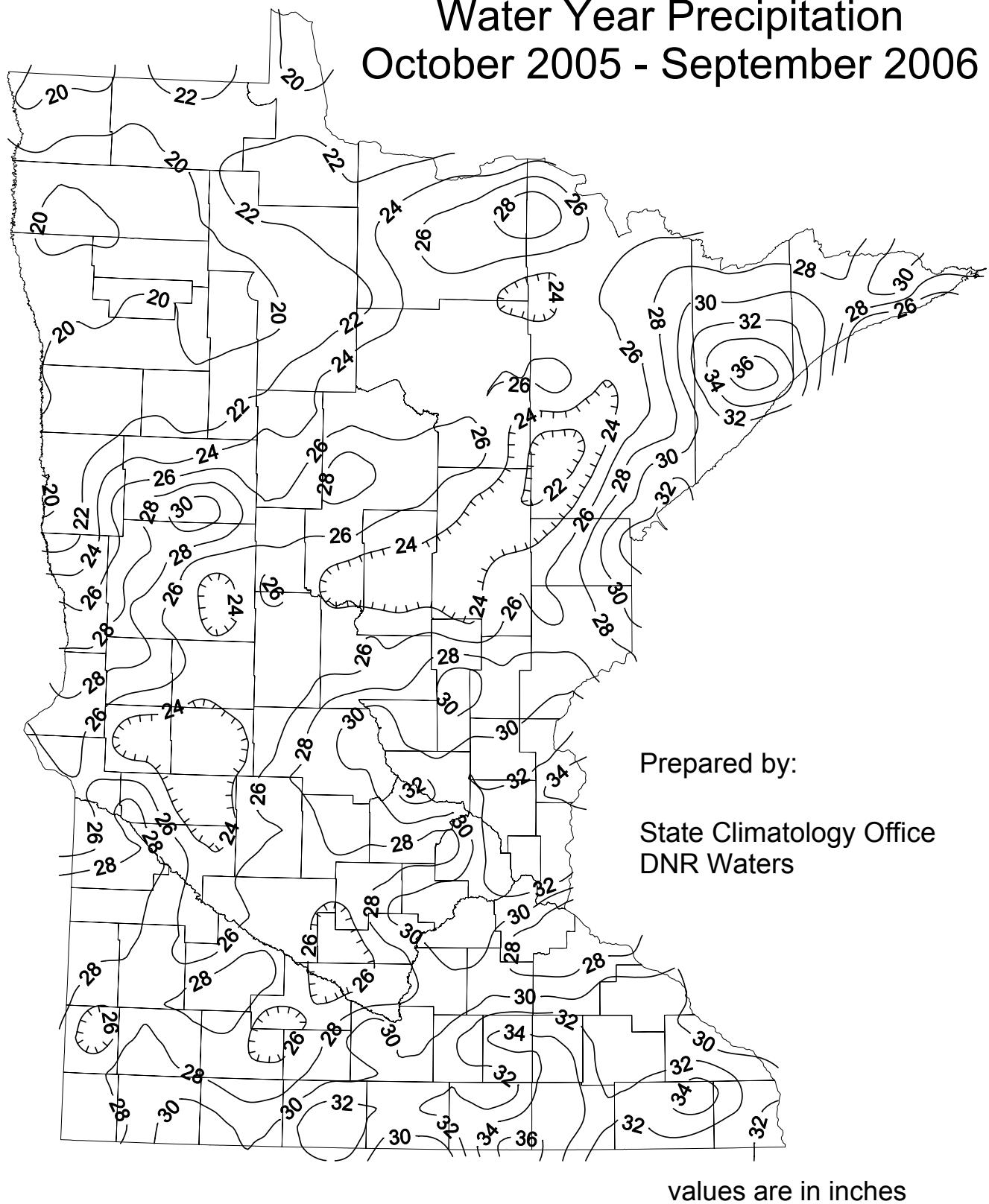
Ecoregions are areas of similar soil, geomorphology, land use, and potential natural vegetation. These factors provide a good basis for comparing differences and similarities in Minnesota's lakes by grouping lakes according to their physical characteristics (i.e. grouping lakes with forested shores and rocky substrates together). The U.S. Environmental Protection Agency (EPA) divided Minnesota into seven fairly distinct ecoregions (Figure 2).

Reference lakes, which represent lakes minimally impacted by surrounding land-uses, were sampled by the MPCA to characterize trophic status conditions for each ecoregion (Heiskary and Wilson, 1989). This yields a baseline for comparison to other lakes. In other words, the reference lakes are the yardsticks by which we measure other lakes. Below is a description of the four ecoregions that contain 98 percent of Minnesota's lakes. Table 1 (and Figure 2) lists typical Secchi readings for reference lakes in each ecoregion.

The Northern Lakes and Forests ecoregion (NLF) is predominately forested with numerous lakes and is located in the northeastern part of Minnesota (Figure 2). These lakes tend to be relatively small and deep, and they stratify (form layers) during the summer. The North Central Hardwood

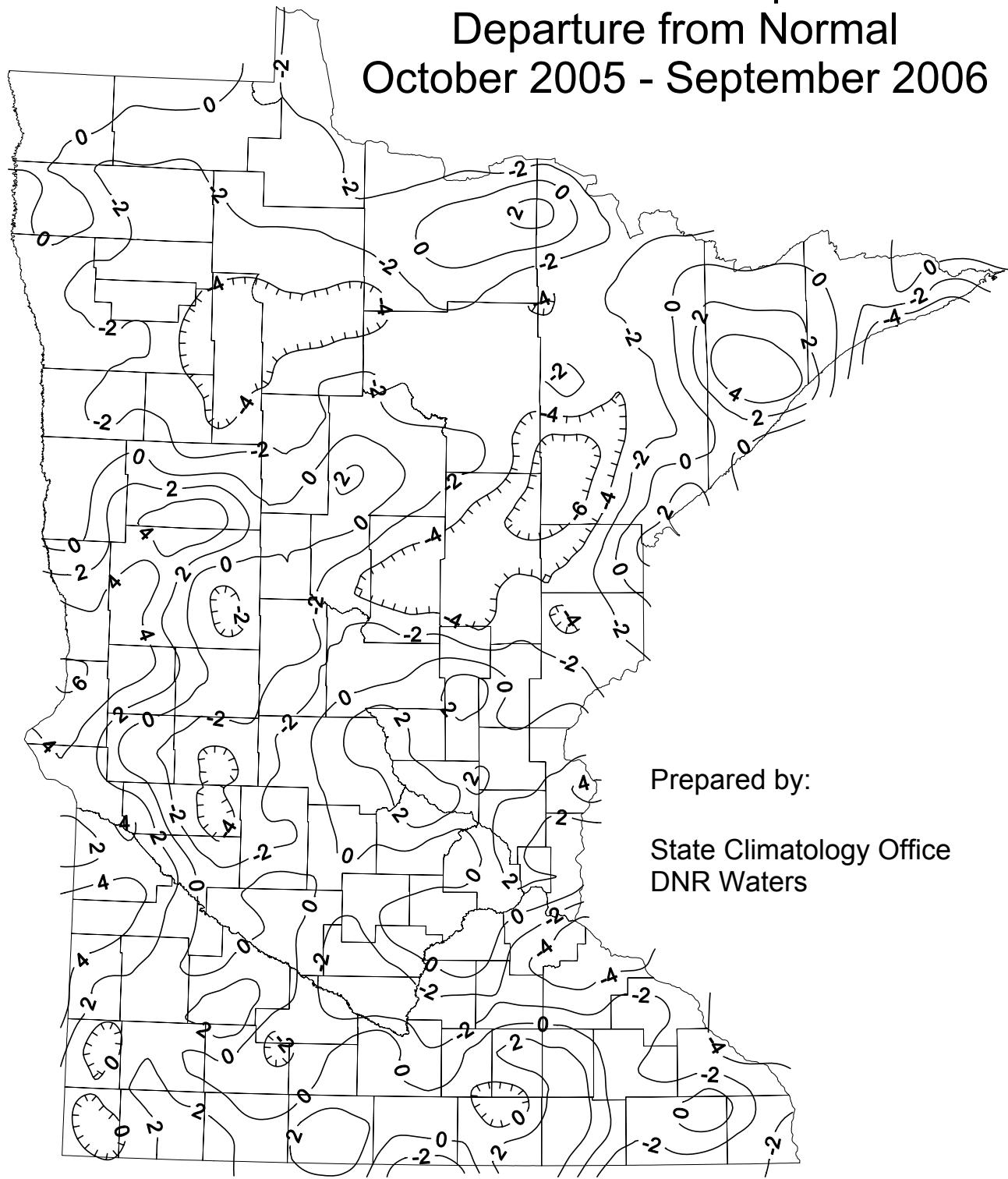
**Figure 1a. Water Year Precipitation Map**

## Water Year Precipitation October 2005 - September 2006



**Figure 1b. Departure from Normal Precipitation Map**

**Water Year Precipitation  
Departure from Normal  
October 2005 - September 2006**



Forests Ecoregion (NCHF) is a transitional region that stretches from the northwestern part of Minnesota to east central Minnesota and includes the Twin Cities area. It has numerous lakes in rolling terrain with various land uses and a high population density. Lakes in this ecoregion also tend to be deep and have relatively small surface areas. The Western Corn Belt Plains ecoregion (WCBP) is located in the southern one-third of Minnesota. It has rolling terrain and is extensively cultivated with row crops. WCBP lakes tend to be shallow, well mixed, and have relatively large surface areas. The Northern Glaciated Plains ecoregion (NGP) is located along the southwestern half of the state. It is similar to the WCBP ecoregion in many ways, also having rolling terrain and extensive cultivation of row crops. It typically has a lower precipitation rate and higher evaporation rate than the WCBP ecoregion. The lakes in the NGP ecoregion are typically shallow and do not stratify (form layers) during the summer.

Lakes of similar make up (soils, depth, land use, etc.) can be compared against the ranges of values expected in a specific ecoregion. To do this, determine the ecoregion in which the lake(s) of interest is located. Next, compare the summer mean Secchi depth (June to September) to the ranges below (Table 1). If the Secchi depth is shallower than the range listed, the lake is in the lower 25% of lakes for clarity – poorer clarity than the expected range for lakes of that ecoregion. If the Secchi transparency is deeper than the range listed, the lake is in the upper 25% of lakes for the ecoregion – better clarity than the expected range. If a lake is on the border of two ecoregions, the clarity will often overlap the ranges of the ecoregions it spans. These lakes would be in a transition zone between ecoregions, and a closer look at land use, soil type, and vegetation may be required to determine which ecoregion is the best fit.

**Table 1. Summer-Mean Secchi Transparency Measures by Ecoregion**  
Based on interquartile ranges for reference lakes<sup>1</sup>

Parameter	Northern Lakes And Forests	North Central Hardwood Forests	Western Corn Belt Plains	Northern Glaciated Plains
<b>Secchi (feet)</b>	8 - 15	4.9 - 10.5	1.6 - 3.3	1.0 - 3.3
<b>Secchi (meters)</b>	2.4 - 4.6	1.5 - 3.2	0.5 - 1.0	0.3 - 1.0

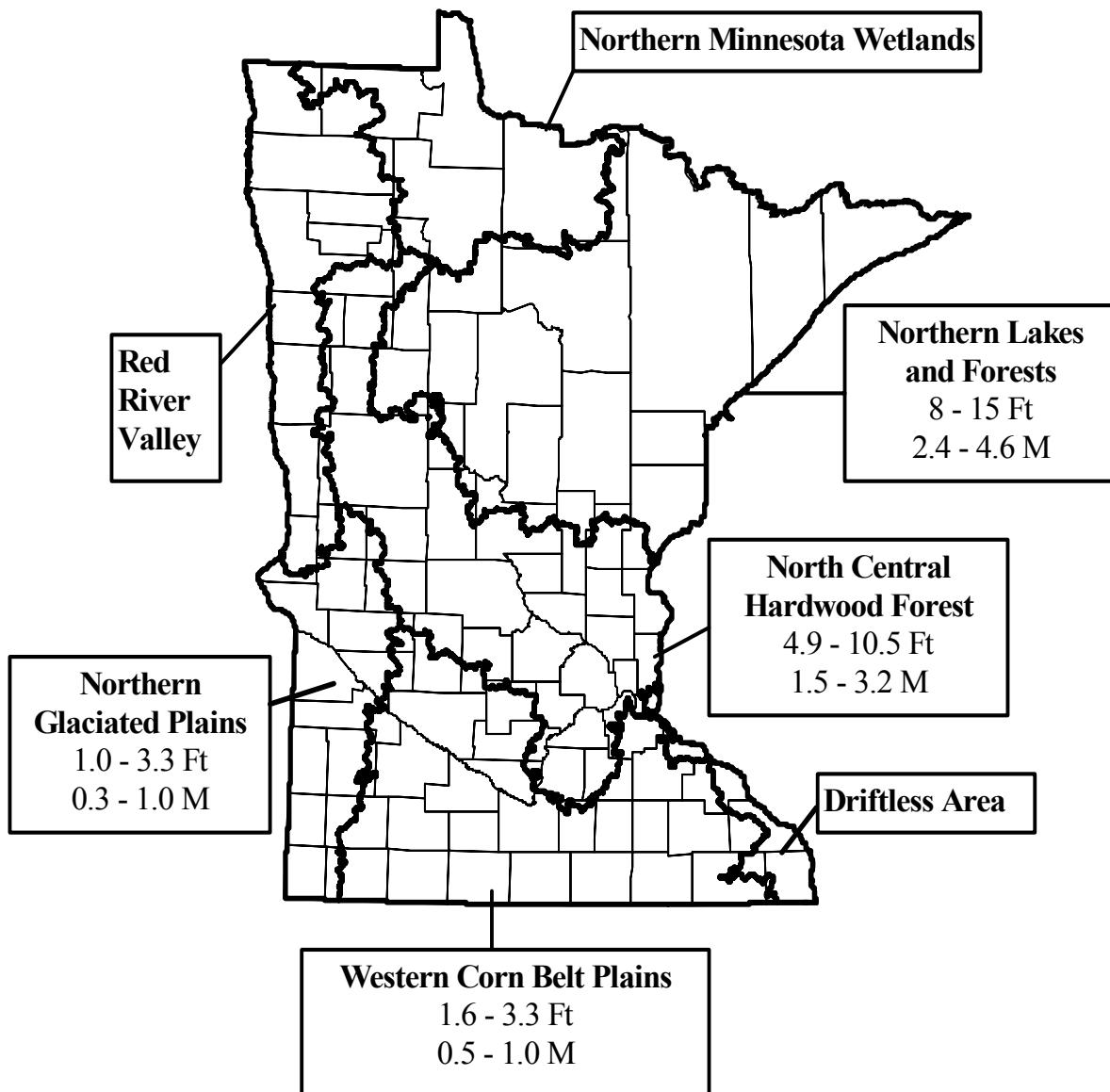
<sup>1</sup> Interquartile range is determined by sorting measures from lowest to highest and represents those measures between the 25<sup>th</sup> and 75<sup>th</sup> percentile.

## Trophic State Index

While the ecoregion classification allows for comparison between lakes of similar origin, land use, etc., the Trophic State Index allows for comparison of any lakes, independent of their location or land use.

Secchi transparency data can be used to convey information on the quality of lakes and allow for estimation of the amount of algae (chlorophyll-a) and nutrients (phosphorus) in a lake. Carlson's Trophic State Index (TSI) is a common means for characterizing a lake's trophic state (fertility and resulting biological productivity).

**Figure 2. Typical Summer-Mean Secchi Transparency**  
Based on Interquartile Ranges for Reference Lakes



The term “trophic status” refers to the level of biological productivity in a lake as measured by phosphorous content, algae abundance, and depth of light penetration. Carlson’s Trophic State Index (Carlson 1977) is one means available to examine the relationship between total phosphorus, chlorophyll-*a*, and Secchi disk readings in a lake and its overall productivity. Individual TSI values can be calculated from the following equations:

$$\text{Total phosphorus TSI (TSIP)} = 14.42 * [\ln(\text{TP average})] + 4.15$$

$$\text{Chlorophyll-}a \text{ TSI (TSIC)} = 9.81 * [\ln(\text{Chlorophyll-}a \text{ average})] + 30.6$$

$$\text{Secchi disk TSI (TSIS)} = 60 - (14.41 * [\ln(\text{Secchi average})])$$

Total phosphorus and chlorophyll-*a* are measured in micrograms per liter ( $\mu\text{g/L}$ ) and Secchi disk transparency is measured in meters (3.281 feet per meter). The *ln* function in these equations is the “natural log” which is different than the “log” function. [The *ln* key is generally found next to the *log* key on most calculators.]

The TSI scale ranges from 0 (ultra-oligotrophic – very nutrient poor, low vegetation or algae) to 100 (hypereutrophic – very nutrient rich, high amounts of vegetation or algae). Increasing trophic status values indicate more eutrophic conditions (higher productivity). Although total phosphorus and chlorophyll-*a* concentrations are not measured in the basic CLMP program, the summer-mean Secchi transparency generally provides a good indication of trophic status and can be used to estimate likely ranges of total phosphorus and chlorophyll-*a* for most Minnesota lakes.

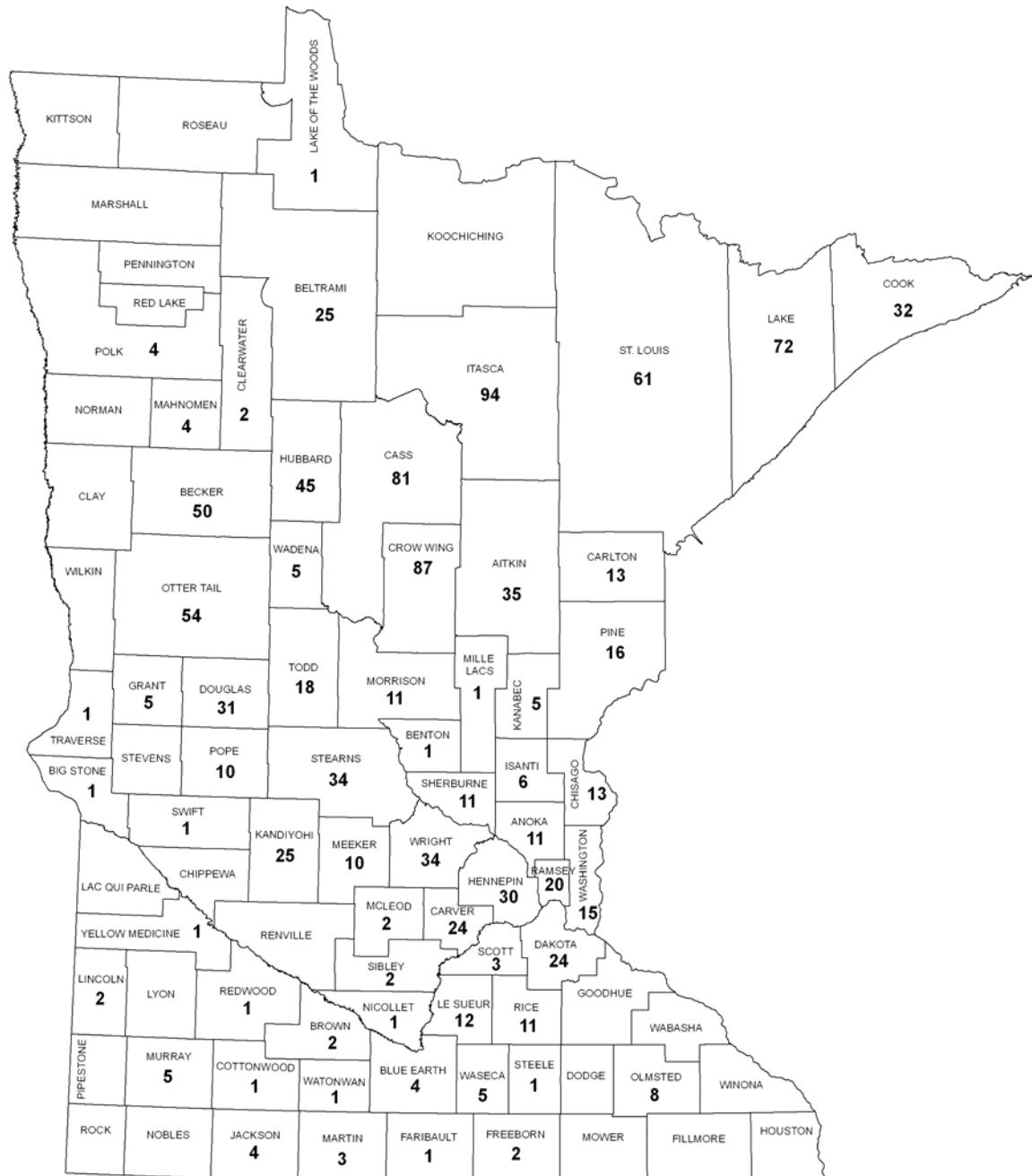
## 2006 CLMP Secchi Season Summary

During the 2006 monitoring season, 1,148 CLMP volunteers monitored 1,746 sites on 1,095 lakes (Figure 3) taking 16,382 individual Secchi readings. The statewide seasonal mean transparency for the 2006 season was 9.8 feet. Sabin Lake (Embarrass Pit) in St. Louis County monitored by Ed and Lee Steblay had the ***deepest individual*** Secchi transparency reading (62.5 feet on 8/03/2006). Four lakes, Bad Medicine, Clearwater, Caribou and Sabin Lake (Embarrass Pit), had ***summer average*** Secchi transparency readings of 30 feet or more in 2006. Bad Medicine Lake (Becker County) had one site which had a summer average of 30.7 feet. Clearwater Lake (Cook County) had readings at six different sites with summer average readings that ranged from 31 to 32.5 feet. Caribou Lake (Itasca County) had two sites averaging 34.7, and 35.7 feet. Sabin Lake (Embarrass Pit) had one site that averaged 47.1 feet for 2006. Fifteen lakes had ***summer average*** Secchi transparency readings of less than one foot in 2006. These lakes were Alice Lake in Otter Tail County (0.5 feet); Clear Lake in Sibley County (0.5 feet), Curtis Lake in Yellow Medicine County (0.5 feet), Wakanda (main basin) Lake in Kandiyohi County (0.5 feet), Campbell Lake in Carver County (0.6 feet), Isabelle Lake in Dakota County (0.6 feet), Francis Lake in Isanti County (0.7 feet), Goose Lake in Ramsey County (0.8 feet), Long Lake in Meeker County (0.8 feet), Swede’s Bay in Le Sueur County (0.8 feet), Unnamed (Tamarack) Lake in Ramsey County (0.8 feet), Crystal Lake in Blue Earth County (0.9 feet), Unnamed (LP-44) Lake in Dakota County (0.9 feet), Hefta Lake in Kandiyohi County (0.9 feet) and Hazeltine Lake in Carver County (0.9 feet). Five lakes had ***maximum individual*** Secchi transparency readings of one foot or less. These lakes included Alice Lake in Otter Tail County (0.5 feet); Clear Lake in Sibley County (0.5 feet), Curtis Lake in Yellow Medicine County (0.5 feet), Wakanda (main basin) Lake in Kandiyohi County (0.75 feet) and Isabelle Lake in Dakota County (0.75 feet).

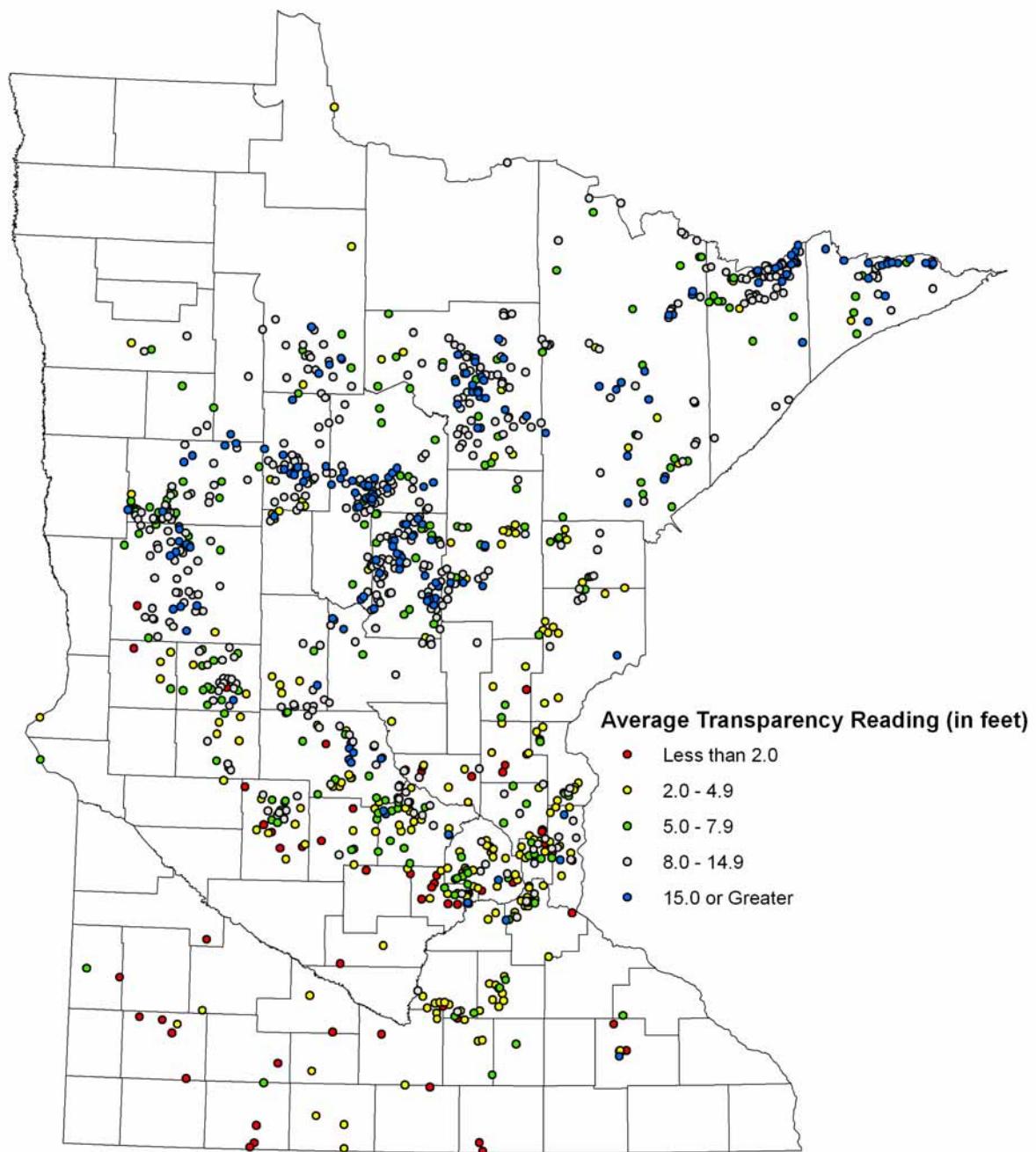
Citizens monitored 94 lakes in Itasca County, making it the county with the highest participation. The counties with the next highest number of lakes monitored in 2006 were Crow Wing County with 87 lakes and Cass County with 81 lakes. Thirteen counties only had one lake monitored by CLMP volunteers. Twenty four counties had no citizen lake monitoring activities in 2006.

Summer-mean, minimum and maximum Secchi values were calculated for each CLMP site. Participant names and individual 2006 summer-mean (June through September) Secchi data for each site are listed in Appendix I. ***It is important to note that only data collected for the Citizen Lake-Monitoring Program was used to calculate the values found in this appendix.***

**Figure 3. Number of CLMP Lakes Monitored by County – 2006**



**Figure 4. 2006 CLMP Lakes Summer-Mean Transparency**



## **CLMP Plus Program: Updates for 2006**

CLMP+ takes volunteer monitoring one step further. In the advanced program, volunteers collect water chemistry and temperature data in addition to collecting transparency data.

During the summer of 2006, nineteen lakes were sampled by CLMP volunteers as a part of the CLMP+ program. The lakes were located in Becker, Itasca and Polk Counties. These lakes were selected because they were a priority within the county or they lacked water quality data beyond Secchi transparency data. The combination of water chemistry and Secchi data provides a good baseline for assessing water quality in these lakes.

Lakes included in the study were:

- **Becker County:** Boot (03-0030)
- **Itasca County:** Dixon (31-0921), Dora (31-0882), Hale (31-0361), Island (31-0913), Little Bowstring (31-0758), Little Split Hand (31-0341), Moose (31-0722), Prairie (31-0384), Round (31-0896), Sand (31-0826), Snaptail (31-0255), Split Hand (31-0353), Swan (31-0067-01 and 31-0067-02), North Twin (31-0190) and South Twin (31-0191)
- **Polk County:** Maple (60-0305), Sarah (60-0202) and Union (60-0217)

All equipment and analytical costs for the samples were provided for and paid by the Minnesota Pollution Control Agency (MPCA). Volunteers on these lakes collected water chemistry samples and temperature profiles one to two times per month (Volunteers were unable to complete monitoring on Maple and Union Lakes. Monitoring on these lakes was completed by MPCA staff). After sampling, the volunteers dropped off their samples at a predetermined location within their county. Michelle Prosser with the Hubbard County Soil and Water Conservation District (SWCD), Noel Gries with the Itasca County SWCD and Gary Lee with the East Polk SWCD helped plan and coordinate the drop-off/pick up schedule for the samples. Jennifer Klang and Pam Anderson, MPCA-St. Paul Office, helped plan, train volunteers, and monitor lakes participating in the 2006 program. Special thanks to the volunteers who helped make this project a success: Roger Stecker (Boot), Dave Lathrop (Dixon), Richard Lacher (Dora), Richard Libbey (Hale), William Luadtke (Island), Norman Ford (Little Bowstring), John Rademacher (Little Split Hand), Marty Christensen (Moose), Jeff Kleinert (Prairie), Donald Ward (Round), Dave Smith (Sand), Alvar E. Hupila (Snaptail), Greg Winkler (Splithand), Lou Mattson (Swan), Tony Appelget (North and South Twin) and Jack Bailey (Sarah). Thanks also to Mike Vavricka, MPCA-Detroit Lakes office, for his assistance with sampling Maple and Union Lakes. MPCA staff collected quality assurance and quality control (QA/QC) samples for each lake. County (Itasca and Polk) or individual (Boot) lake reports were developed and will soon be available through the MPCA or through the MPCA web site: [www.pca.state.mn.us/water/clmp-publications.html](http://www.pca.state.mn.us/water/clmp-publications.html).

## Lake Sarah Trophic Status Example

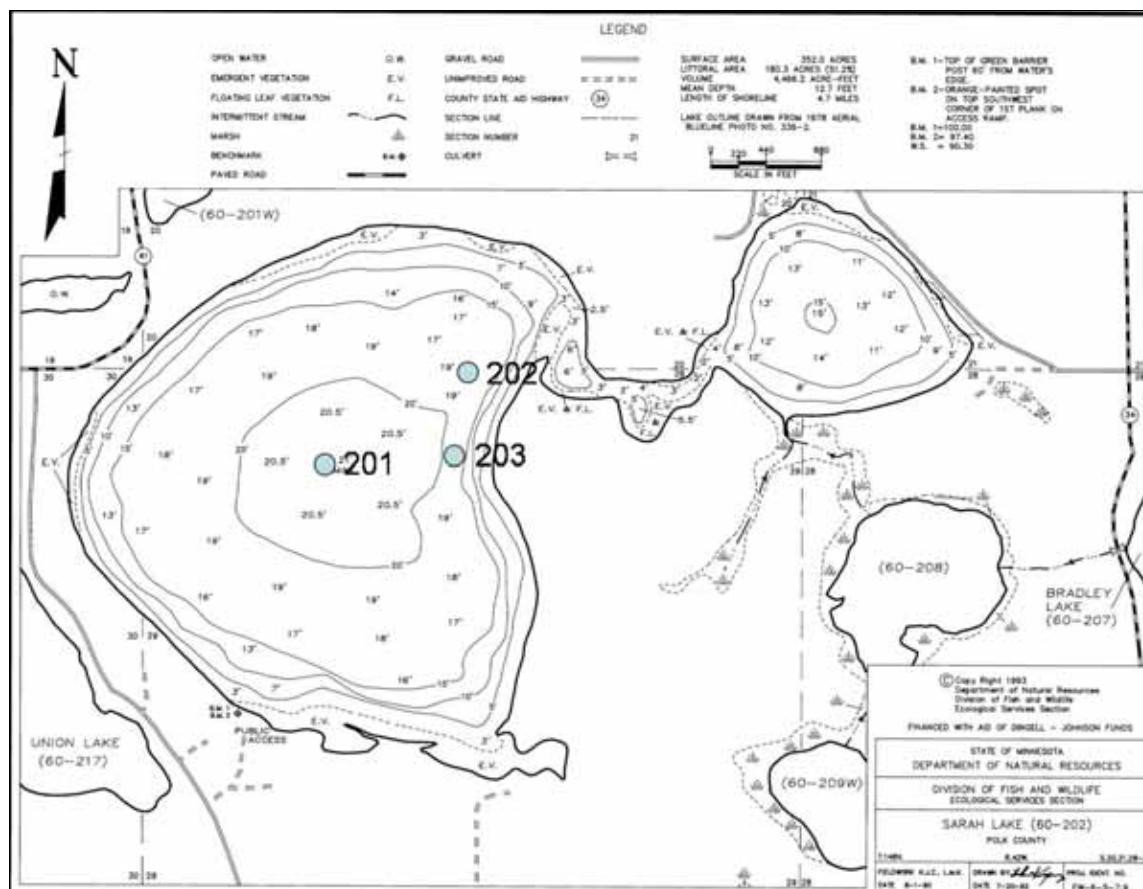
The following is an excerpt from the 2006 CLMP Plus Report for Polk County (Anderson, 2007). This example, using water quality data from Lake Sarah, shows how Secchi depth compares to chlorophyll-*a* and total phosphorus in terms of the Trophic State Index. By verifying this relationship, we can continue to use Secchi depth as a reliable indicator of the nutrients and algal productivity in the lake. Equations used in these calculations can be found on page 6.

### SARAH (60-202)

Lake Sarah is a 352 acre lake located 5 miles south of Erskine, Minnesota, in the North Central Hardwood Forest ecoregion. It has a maximum depth of 27 feet (8.2 m) and a mean depth of 12.7 feet (3.9 m). Of the 352 acres, 180 acres (51%) of the lake are littoral and there is one public access on the lake. It has a small direct and total watershed (10 mi<sup>2</sup>). Its water residence time is on the order of 1.6 years.

Water quality data were collected in June, July, August and September, 2006 by volunteer lake monitor Jack Bailey. Additional May, July and September samples were collected by MPCA staff. One site was used on Lake Sarah: Site 201 – located over the point of maximum depth in middle of the lake (Figure 6).

**Figure 5. Lake Sarah Bathymetric Map and Monitoring Location**



**Table 2. Summer-Mean Water Quality Parameters for Lake Sarah**  
 (Based on 2006 Epilimnetic Data Collected by Volunteers and MPCA Staff)

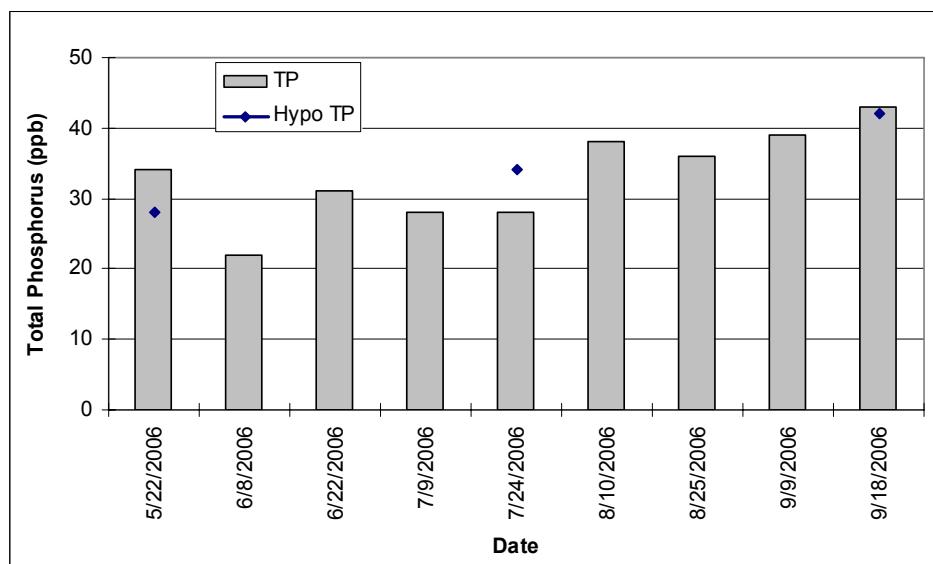
Parameter	Lake Sarah	Typical Range for NLF <sup>1</sup> Ecoregion	Typical Range for NCHF <sup>1</sup> Ecoregion
<i>TP</i> ( $\mu\text{g/L}$ )	33	14 – 27	23 – 50
<i>Chl-a</i> ( $\mu\text{g/L}$ ) <sup>2</sup>	13.6	< 10	5 – 22
<i>Secchi</i> (m)	2.1	2.4 – 4.6	1.5 – 3.2
<i>Secchi</i> (ft)	7	8 – 15	4.9 – 10.5

<sup>1</sup>Typical range is the 25<sup>th</sup> – 75<sup>th</sup> percentile of summer means from reference lakes specific to an ecoregion.

<sup>2</sup>Chlorophyll-*a* measurements have been corrected for pheophytin.

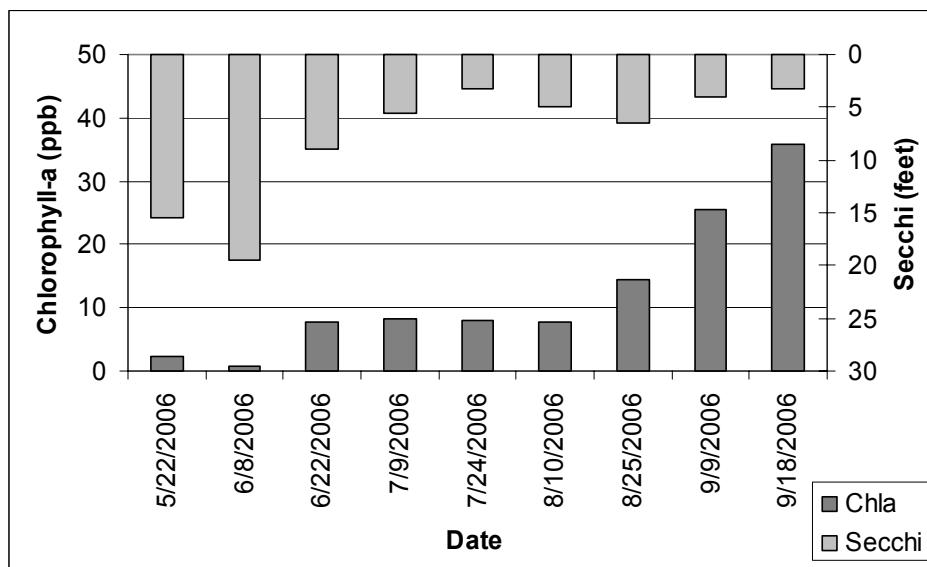
**Total phosphorus** (TP) concentrations averaged 33  $\mu\text{g/L}$  (micrograms per liter or parts per billion) in Lake Sarah during the summer of 2006. This value is within the range of concentrations for reference lakes in the NCHF ecoregion (Table 2). TP concentrations ranged from 22 – 43  $\mu\text{g/L}$  (Figure 6) with an increase in concentrations from June through September. (“Hypo TP” refers to phosphorus readings taken in the lake’s hypolimnion.)

**Figure 6. Lake Sarah Total Phosphorus Results for 2006**



**Chlorophyll-*a*** concentrations for Lake Sarah averaged 13.6  $\mu\text{g/L}$  and were well within the NCHF ecoregion range (Table 2). Concentrations ranged from 0.9 – 35.9  $\mu\text{g/L}$ . Mild algae blooms (chlorophyll-*a* between 10  $\mu\text{g/L}$  and 20  $\mu\text{g/L}$ ) were evident in the late August and severe nuisance algae blooms (chlorophyll-*a* greater than 30  $\mu\text{g/L}$ ) were evident in late September (Figure 7). The increase in chlorophyll-*a* over the summer was consistent with the total phosphorus concentrations over the same period.

**Figure 7. Lake Sarah Chlorophyll-a Concentration and Secchi Transparency for 2006**



**Secchi disk transparency** on Lake Sarah ranged from 3.3 feet (1 meter) in late July to 19.5 feet (5.9 meters) in early June (Figure 8) and averaged 7.0 feet (2.1 meters). These transparency measures are within the typical range for ecoregion reference lakes (Tables 1 and 2). Lake conditions for Lake Sarah were characterized as “crystal clear” (Class 1) and “beautiful, could not be better” (Class 1) throughout the summer to “high algae levels” (Class 4) and “swimming and aesthetic enjoyment slightly impaired” (Class 3).

The change in transparency of Lake Sarah over the course of the summer is fairly typical for mesotrophic-eutrophic lakes in Minnesota. Transparency is highest in the spring when the water is cool and algae populations are low. Frequently, zooplankton (small crustaceans which feed on algae) populations are also high at this time of year but decline later in the summer due to predation by young fish. As the waters warm throughout the summer, the algae (represented in Figure 7 by chlorophyll-a) become more abundant and the transparency declines (Figure 7). The decrease in the abundance of zooplankton may allow for further increases in the amount of algae. Later in the summer, surface blooms of algae may also appear.

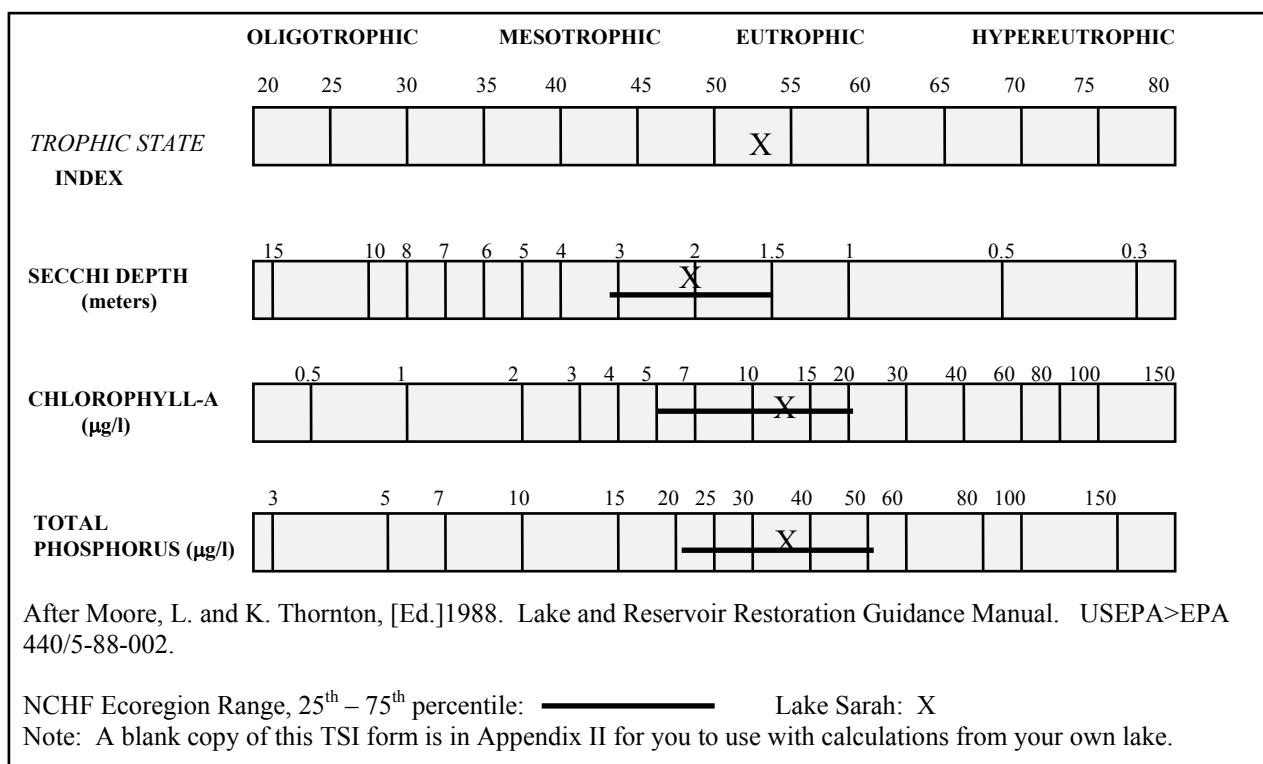
**Trophic State Index (TSI)** values for Lake Sarah compare favorably to each other (Table 3) and indicate *eutrophic* conditions. As such, Secchi transparency should continue to be a good estimator of TP and chlorophyll-a values as well as an indicator of overall water quality for Lake Sarah.

**Table 3. Trophic Status Indicators for Lake Sarah**

TSI Parameter	Lake Sarah TSI Value
Phosphorus	55
Chl-a	56
Secchi	49
Overall TSI	53

**Figure 8. Carlson's Trophic State Index, based on a scale of 0 – 100. (Carlson 1977)**

- |                    |   |
|--------------------|---|
| <b>TSI &lt; 30</b> | Classical Oligotrophy: Clear water, oxygen throughout the year in the hypolimnion, salmonid fisheries in deep lakes.  |
| <b>TSI 30 - 40</b> | Deeper lakes still exhibit classical oligotrophy, but some shallower lakes will become anoxic in the hypolimnion during the summer.                             |
| <b>TSI 40 - 50</b> | Water moderately clear, but increasing probability of anoxia in hypolimnion during summer.  |
| <b>TSI 50 - 60</b> | Lower boundary of classical eutrophy: Decreased transparency, anoxic hypolimnia during the summer, macrophyte problems evident, warm-water fisheries only.      |
| <b>TSI 60 - 70</b> | Dominance of blue-green algae, algal scums probable, extensive macrophyte problems.   |
| <b>TSI 70 - 80</b> | Heavy algal blooms possible throughout the summer, dense macrophyte beds, but extent limited by light penetration. Often would be classified as hypereutrophic. |
| <b>TSI &gt; 80</b> | Algal scums, summer fish kills, few macrophytes, dominance of rough fish.   |



## Glossary

**Alkalinity:** Capacity of a lake to neutralize acid.

**Chloride:** Common anionic form of chlorine which carries one net negative charge. A common anion in many waters.

**Chlorophyll-a:** The main pigment in algae. It is used to measure aquatic productivity.

**Ecoregion:** Areas of relative homogeneity based on land use, soils, topography and potential natural vegetation.

**Epilimnion:** Most lakes form three distinct layers of water during summertime weather. The epilimnion is the upper layer and is characterized by warmer and lighter water.

**Eutrophic:** Describes a lake of high photosynthetic productivity. Nutrient rich.

**Hypolimnion:** The bottom layer of lake water during the summer months. The water in the hypolimnion is denser and much colder than the water in the upper two layers.

**Littoral Area:** The shallow areas around a lake's shoreline, dominated by aquatic plants.

**Mesotrophic:** Describes a lake of moderate photosynthetic productivity.

**Metalimnion:** The middle layer of lake water during the summer months.

**Nitrite/Nitrate Nitrogen:** The weight of concentration of the nitrogen in the nitrate ion.

**Oligotrophic:** Describes a lake of low photosynthetic productivity.

**Phosphate:** An essential nutrient containing phosphorus and oxygen. Phosphate is often a critical nutrient in lake eutrophication management.

**Phosphorus:** Phosphorus is an element that can be found in commercial products such as foods, detergents, and fertilizers as well as in larger amounts naturally in organic materials, soils, and rocks. Phosphorus is one of many essential plant nutrients. Phosphorus forms are continually recycling throughout the aquatic environment. All forms are measured under the term "Total Phosphorus" in parts per billion (ppb).

**Photosynthesis:** The process by which green plants produce oxygen from sunlight, water and carbon dioxide.

**Secchi Disk:** A metal plate used for measuring the depth of light penetration in water.

**Suspended Solids:** Small particles that hang in the water column and create turbid, or cloudy conditions.

**Thermocline:** During summertime, the middle layer of lake water. Lying below the epilimnion, this water rapidly loses warmth. Zone of maximum change in temperature over the depth interval.

**Trophic Status:** The level of growth or productivity of a lake as measured by phosphorus content, algae abundance, and depth of light penetration.

**Turnover (Overturn):** Warming or cooling surface waters, activated by wind action, mix with lower, deeper layers of water.

**Watershed:** Geographical area that supplies water to a stream, lake, or river.

**Zooplankton:** Microscopic animals.

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## Appendix I. 2006 CLMP Data and Participants

### Aitkin County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
01-0157	BIG PINE	206	13	12.8	10.0	16.0	Osier, Dave & Christine
01-0062	BIG SANDY	203	9	4.6	3.5	5.5	Carlson, James R.
01-0062	BIG SANDY	208	9	6.3	5.0	8.0	Knoble, Carmen
01-0062	BIG SANDY	209	9	5.8	4.0	7.5	Knoble, Carmen
01-0062	BIG SANDY	210	3	3.2	3.0	3.5	Nystuen, John
01-0062	BIG SANDY	211	3	3.2	2.5	3.5	Nystuen, John
01-0062	BIG SANDY	212	9	4.5	3.0	6.0	Carlson, James R.
01-0062	BIG SANDY	213	9	4.1	3.5	5.0	Carlson, James R.
01-0062	BIG SANDY	217	11	4.5	3.5	5.5	Krezowski, Mark & Lori
01-0062	BIG SANDY	218	11	4.5	3.0	5.5	Krezowski, Mark & Lori
01-0062	BIG SANDY	219	11	4.5	3.0	5.5	Krezowski, Mark & Lori
01-0062	BIG SANDY	224	10	3.9	3.5	4.5	Lahoud, John
01-0062	BIG SANDY	225	10	3.9	3.5	4.8	Lahoud, John
01-0045	BLACKFACE	201	5	7.3	5.5	8.5	Tennison, Dennis & Joanne
01-0188	BLIND	202	8	4.9	3.5	7.5	Pullis, Kevin
01-0209-01	CEDAR (MAIN BASIN)	202	10	9.1	7.0	10.5	Martin, Les
01-0209-01	CEDAR (MAIN BASIN)	203	6	11.1	10.0	13.0	Martin, Les
01-0209-01	CEDAR (MAIN BASIN)	204	6	10.8	9.0	12.0	Martin, Les
01-0209-01	CEDAR (MAIN BASIN)	205	6	14.0	12.0	17.5	Martin, Les
01-0209-01	CEDAR (MAIN BASIN)	207	7	11.1	10.5	11.5	Nelson, Ron
01-0209-01	CEDAR (MAIN BASIN)	208	11	8.7	6.0	11.0	Hauge, Paul
01-0209-02	CEDAR (NE ARM)	201	3	11.7	11.0	12.0	Rzeszutek, Phil
01-0093	CLEAR	201	9	16.3	12.0	22.0	Messer, Ryan & Gary
01-0096	DAM	201	12	10.4	7.5	13.5	LaClair, John
01-0071-01	DAVIS	201	4	2.4	2.3	2.8	Langsdorf, William
01-0123	ELM ISLAND	201	11	2.8	1.5	4.0	Jorgensen, William H.
01-0147	ESQUAGAMAH	204	4	6.8	3.5	9.0	Miller, Kathryn & John
01-0147	ESQUAGAMAH	206	4	4.4	2.0	6.5	Heuer, James P.
01-0159	FARM ISLAND	204	6	14.4	9.5	16.0	Nardini, Gene
01-0159	FARM ISLAND	205	8	11.8	7.5	17.5	Hoppe, Russ
01-0159	FARM ISLAND	207	9	10.9	7.5	14.0	Butzer, Anne
01-0105	FLEMING	201	7	3.0	2.0	5.0	Fulton, Lawrence
01-0061	FLOWAGE	201	3	2.7	2.0	3.0	Nystuen, John
01-0099	GUN	208	10	5.6	3.5	6.5	Wernli, Don & Barb
01-0161	HAMMAL	201	4	10.3	7.5	13.5	Ring, Ken & Debra
01-0170	HANGING KETTLE	202	1	6.5	6.5	6.5	Hakes, Dick
01-0022	ISLAND	201	7	7.1	6.5	7.5	Miller, Mark & Cindy
01-0176	LITTLE PINE	201	9	18.0	15.0	21.0	Kalb, James W.
01-0125	LONE	202.1	17	21.3	17.0	25.0	Baker, Jerry

Legend:

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### Aitkin County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
01-0089	LONG	201	9	13.9	12.0	14.5	Glimsdal, Don & Janice
01-0089	LONG	205	4	14.3	12.0	15.5	Brotherton, Sid
01-0033	MINNEWAWA	201	8	4.7	3.0	8.5	Meredyk, Greg
01-0033	MINNEWAWA	202	8	4.9	3.0	8.0	Meredyk, Greg
01-0117	NORD	201	15	10.3	8.0	16.0	Prickett, Gordon O.
01-0001	PINE	202	9	6.4	5.0	8.0	Benkusky, Anthony
01-0091	RABBIT	204	12	11.5	9.5	13.5	Mattson, Deanna & Calvin
01-0091	RABBIT	205	12	11.8	10.0	14.5	Mattson, Deanna & Calvin
01-0091	RABBIT	206	12	11.4	9.5	14.0	Mattson, Deanna & Calvin
01-0077	RAT	201	3	3.8	3.5	4.0	Holten, Carole
01-0023	ROUND	201	12	13.2	10.0	18.0	Williams, Joyce
01-0137	ROUND	201	7	14.6	13.0	16.5	Christianson, Jim
01-0137	ROUND	202	8	14.9	13.5	19.0	Warner, Tom & Sue
01-0204	ROUND	204	17	10.6	8.5	13.0	Williams, Robert
01-0060	SANDY RIVER	201	3	2.7	2.0	3.0	Nystuen, John
01-0178	SPIRIT	202	7	12.9	10.5	19.5	Hakes, Ken
01-0207	TOWNLINE	201	7	14.8	13.5	16.5	Kemske, Jon & Ann
01-0058	VANDUSE	201	13	10.5	9.0	12.5	Lund, Michael
01-0136	WAUKENABO	202	8	6.3	5.5	7.0	Erickson, Stanley
01-0102	WILKINS	201	7	15.5	12.0	20.0	Reese, Richard A.

### Anoka County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
02-0006	CENTERVILLE	202	4	1.9	1.5	2.5	Mottl, Greg
02-0042	COON	201	6	5.9	4.5	9.0	Harvey, John
02-0042	COON	203	2	6.0	5.5	6.5	Johnson, Goldie M.
02-0042	COON	204	5	5.6	3.5	9.0	Mercil, Arlan
02-0042	COON	205	9	6.4	5.0	8.0	Tierney, Douglas
02-0042	COON	207	4	5.6	5.5	6.0	Rasmussen, Dave
02-0042	COON	208	2	6.6	6.3	7.0	Johnson, Goldie M.
02-0084	CROOKED	205	11	6.5	4.5	10.0	McCann, James
02-0035	FAWN	201	7	12.4	10.0	15.0	Arboe, Jim
02-0091	GEORGE	208	4	8.3	6.5	11.0	Ridge, William G.
02-0045	GOLDEN	202	6	2.6	2.0	3.5	Peterson, Eric
02-0053	HAM	201	7	8.8	4.5	11.5	Arndt, Roger & Jane
02-0034	MARTIN	202	17	3.0	2.0	4.0	Docken, Tom & Nancy
02-0003	OTTER	203	6	10.4	9.5	11.0	Berg, Jim
02-0003	OTTER	203	4	10.8	10.5	11.0	Mottl, Greg
02-0004	PELTIER	203	11	1.1	0.1	3.0	LeBlanc, Wayne
02-0102	SANDSHORE	201	2	6.5	6.0	7.0	Smith, James

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## Becker County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
03-0366	ABBEY	201	6	1.9	1.0	2.5	PRWD, Dick Hecock
03-0085	BAD MEDICINE	201	12	27.3	21.0	37.0	Stadem, Dr. Paul D.
03-0085	BAD MEDICINE	207	14	25.2	19.0	35.0	Strohmeier, Ed
03-0085	BAD MEDICINE	210	10	30.7	20.0	42.0	Vlasak, Ray
03-0085	BAD MEDICINE	211	14	25.3	19.0	35.0	Strohmeier, Ed
03-0088	BASS	201	4	10.8	9.0	12.0	Ritzschke, Richard
03-0638	BESEAU (BIJOU)	201	9	6.2	4.0	9.5	Clark, Susan
03-0638	BESEAU (BIJOU)	202	9	5.1	3.0	11.5	Clark, Susan
03-0638	BESEAU (BIJOU)	203	9	4.9	3.5	9.5	Clark, Susan
03-0576	BIG CORMORANT	205	7	13.1	8.5	18.0	Hill, Eloyes
03-0304	BIG SUGAR BUSH	202	8	17.3	14.0	20.5	Drenkow, Fred
03-0304	BIG SUGAR BUSH	207	8	15.7	13.0	19.6	Drenkow, Fred
03-0400	BRANDY	201	6	7.8	4.5	10.5	PRWD, Dick Hecock
03-0286	COTTON	202	9	9.8	7.0	14.0	Barbari, Dick
03-0286	COTTON	203	13	8.6	6.5	14.5	Peterka, John
03-0363	CURFMAN	201	6	8.7	5.5	13.5	PRWD, Dick Hecock
03-0381	DETROIT	205	14	7.2	5.0	14.0	PRWD, Dick Hecock
03-0381	DETROIT	207	15	9.1	6.5	12.5	PRWD, Dick Hecock
03-0381	DETROIT	209	8	5.2	3.5	7.0	PRWD, Dick Hecock
03-0503	EUNICE	201	8	9.7	7.0	12.0	Magnuson, Ken
03-0387-02	FLOYD (MAIN BASIN)	206	13	8.9	7.5	13.0	Geihl, Mark
03-0387-02	FLOYD (MAIN BASIN)	208	8	7.3	6.0	9.5	PRWD, Dick Hecock
03-0387-01	FLOYD (MUD)	207	8	6.4	4.5	8.0	PRWD, Dick Hecock
03-0387-01	FLOYD (MUD)	207	9	7.0	6.0	9.5	Geihl, Mark
03-0358	FOX	201	3	16.8	10.5	20.0	PRWD, Dick Hecock
03-0364	GLAWE	201	5	5.9	5.0	7.0	PRWD, Dick Hecock
03-0582	IDA	201	4	9.6	7.0	12.0	Askelson, Curtis
03-0153	ISLAND	202	15	10.6	6.0	21.5	Aschbacher, Peter
03-0374-01	JOHNSON	201	6	8.0	7.0	9.0	PRWD, Dick Hecock
03-0136	JUGGLER	201	2	19.8	18.5	21.0	Scott, Sue
03-0136	JUGGLER	202	8	22.6	21.0	25.0	Rofidal, Chris
03-0136	JUGGLER	203	15	23.9	20.0	30.0	Zweerink, Jim
03-0596	LARSON	201	10	4.4	3.0	8.5	Olson, Duane
03-0619	LEE (TALAC)	201	1	4.5	4.5	4.5	Paakh, Bruce
03-0506	LITTLE CORMORANT	202	12	5.5	4.5	8.5	Renslow, James
03-0506	LITTLE CORMORANT	203	12	5.3	4.0	8.5	Renslow, James
03-0506	LITTLE CORMORANT	204	12	4.5	3.5	8.0	Renslow, James
03-0506	LITTLE CORMORANT	205	12	5.0	4.0	8.0	Renslow, James
03-0506	LITTLE CORMORANT	206	12	6.1	4.5	9.5	Renslow, James
03-0386	LITTLE FLOYD	203	7	6.9	5.0	9.0	PRWD, Dick Hecock
03-0189	LITTLE TOAD	201	11	10.8	7.5	17.0	Kercher, Edsel Jay
03-0189	LITTLE TOAD	201	4	14.9	9.0	22.5	Purdy, Bill

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## Becker County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
03-0383	LONG	201	4	12.4	12.0	13.0	Berg, Dan & Sheri
03-0383	LONG	201	6	12.5	7.0	14.0	PRWD, Dick Hecock
03-0383	LONG	202	13	12.6	10.0	14.0	Fihn, Shirley
03-0489	LOON	201	7	5.4	2.0	9.0	PRWD, Dick Hecock
03-0500	MAUD	204	12	12.5	8.5	20.0	Sherlin & Julie Scothorn, Bill
03-0371	MEADOW	201	6	14.5	10.0	20.0	PRWD, Dick Hecock
03-0475	MELISSA	201	9	8.0	4.5	15.5	PRWD, Dick Hecock
03-0602	MIDDLE CORMORANT	201	20	9.2	7.0	11.0	Taylor, Robert L.
03-0602	MIDDLE CORMORANT	202	20	9.1	7.0	11.0	Taylor, Robert L.
03-0357	MONSON	201	6	9.3	7.5	12.0	PRWD, Dick Hecock
03-0360	MUSKRAT	201	7	8.9	5.5	13.0	PRWD, Dick Hecock
03-0595	NELSON	201	10	6.9	3.5	11.0	Olson, Duane
03-0180	NORTH TWIN	202	5	10.7	8.0	12.5	Durben, Paul
03-0486	PEARL	201	13	6.1	4.5	10.0	Kalberer, James
03-0486	PEARL	201	6	7.6	4.0	13.0	PRWD, Dick Hecock
03-0287	PICKERAL	202	16	14.2	10.5	18.0	PRWD, Dick Hecock
03-0293	ROCK	202	3	5.5	3.5	7.0	Blanding, Donald
03-0587	ROSSMAN	201	15	4.3	2.5	6.0	Leek, Mel
03-0155	ROUND	202	11	13.3	10.0	18.0	Bergquist, Ruth
03-0359	SALLIE	201	10	6.9	3.5	16.0	PRWD, Dick Hecock
03-0420	SANDS	201	5	9.0	4.5	13.0	PRWD, Dick Hecock
03-0102	SHELL	201	3	5.5	4.0	7.5	Cirksena, Randy
03-0382	ST. CLAIR	202	6	2.3	1.5	3.0	PRWD, Dick Hecock
03-0010	STRAIGHT	201	13	9.7	6.5	13.5	Olson, Gordon
03-0010	STRAIGHT	202	14	9.4	5.5	14.0	Olson, Gordon
03-0010	STRAIGHT	203	13	9.3	6.5	13.5	Olson, Gordon
03-0323	STRAWBERRY	201	6	17.1	12.5	19.5	Maher Jr., George G.
03-0107	TOAD	203	16	6.2	3.5	11.0	Monteith, Gene
03-0107	TOAD	204	15	6.2	3.5	12.0	Monteith, Gene
03-0657	TURTLE	202	15	21.6	15.0	30.0	Link, Robert
03-0657	TURTLE	203	15	21.4	15.0	30.0	Link, Robert
03-0017	TWO INLETS	202	12	7.2	4.5	10.5	Higgins, Thomas
03-0588	UPPER CORMORANT	201	3	4.3	3.0	6.0	Hedlund, Steve
03-0588	UPPER CORMORANT	202	14	5.7	4.0	10.5	Foldesi, John
03-0588	UPPER CORMORANT	203	14	6.0	3.5	10.0	Friedrich, Jan
03-0328	WHITE EARTH	203	16	12.5	6.5	22.0	Christensen, Ronald
03-0328	WHITE EARTH	209	16	12.1	6.5	20.0	Christensen, Ronald

## Beltrami County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
04-0329	BALM (TURTLE)	201	11	11.9	10.0	15.0	Frame, Nathan
04-0135	BELTRAMI (GNAT)	202	10	13.0	9.0	17.0	Maxson, George-Ann
04-0135	BELTRAMI (GNAT)	203	15	11.7	8.0	16.5	Vanek, Jerome
04-0135	BELTRAMI (GNAT)	204	15	12.8	8.0	17.5	Vanek, Jerome

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### **Beltrami County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
04-0130	BEMIDJI	201	15	8.1	4.0	13.5	Roholt, Ina T.
04-0049	BIG	203	5	12.3	7.0	15.5	Ockenga, Earl
04-0132-02	BIG BASS (EAST PORTION)	202	4	12.9	10.0	15.0	Porter, Ron
04-0069	BLACKDUCK	203	3	5.3	3.0	9.0	Gilmore, Tom
04-0069	BLACKDUCK	204	12	6.1	3.0	18.0	Bechtold, Steve
04-0030	CASS	208	7	12.9	6.0	14.5	Reed, Donald J.
04-0030	CASS	209	8	9.2	8.5	10.0	Beaver, Larry
04-0030	CASS	210	17	7.9	6.0	12.0	Murray, John
04-0030	CASS	211	11	10.9	6.0	15.5	Burton, Robert
04-0343	CLEARWATER	204	10	10.2	7.5	13.5	Widerski, Robert J.
04-0167	DARK	201	8	21.3	17.5	26.0	Coe, Leland G.
04-0230	DEER	202	2	10.3	10.0	10.5	Drusch, Donald A.
04-0162	FOX	201	8	12.2	11.0	14.0	Ducharme, Judy
04-0217	GRANT	201	7	10.3	7.5	14.0	Tjaden, Cyri
04-0217	GRANTt	202	7	13.9	12.0	17.0	Tjaden, Cyri
04-0120	GULL	202	2	8.8	8.5	9.0	Houseman, Don
04-0140	IRVING	202	8	3.2	2.0	6.0	Gritzmacher, Hal
04-0140	IRVING	203	9	3.7	2.0	7.5	Lorence, Joe
04-0166	JULIA	201	4	13.6	6.0	19.0	Purcell, Pat & Bob
04-0110	LITTLE BASS	201	10	16.4	13.0	22.0	DeWenter, James H.
04-0155	LITTLE TURTLE	201	18	5.5	3.5	10.0	Davenport, Brad
04-0076	LONG	201	18	18.9	17.0	22.0	Beck, William R.
04-0063	NORTH TWIN	201	5	19.4	16.0	22.5	Champlin, Charles
04-0032	PIMUSHE	201	2	7.0	5.0	9.0	Fussy, Ed
04-0035-01	RED (UPPER RED)	201	2	3.8	3.5	4.0	Paakh, Bruce
04-0053	SOUTH TWIN	201	4	19.3	16.5	22.5	Champlin, Charles
04-0159	TURTLE (BIG TURTLE)	204	12	9.0	6.5	12.5	Lynne, Vic & Betty
04-0111	TURTLE RIVER	201	11	10.9	9.0	12.5	Mitchell, George
04-0111	TURTLE RIVER	202	11	8.9	6.5	14.5	Wickstrom, Evert B.
04-0137	WHITE FISH	202	2	13.5	13.0	14.0	Amland, Charlotte

### **Benton County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
05-0013	LITTLE ROCK	210	5	2.3	1.0	3.0	Schindele, Jim

### **Big Stone County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
06-0152	BIG STONE	217	7	5.9	3.5	8.5	Jordahl, Jan

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### **Blue Earth County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
07-0098	CRYSTAL	202	10	0.9	0.5	1.0	Hobart, Bob
07-0053	DUCK	203	11	3.0	2.0	4.5	Dahl, Donald A.
07-0079	LURA	201	5	2.6	1.5	4.0	Kunard, Marlin
07-0079	LURA	202	5	2.6	1.5	4.0	Kunard, Marlin
07-0044	MADISON	202	8	4.9	2.3	10.0	Allen, Kevin & Jared

### **Brown County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
08-0026	HANSKA	201	5	1.5	1.0	2.0	Brekke, Loren
08-0026	HANSKA	206	3	1.5	1.5	1.5	Sturm, Jean
08-0026	HANSKA	207	4	1.1	1.0	1.5	Helling, Gerald
08-0045	SLEEPY EYE	202	13	2.2	1.0	6.0	Schotzko, Edward J.

### **Carlton County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
09-0032	BIG	202	5	11.0	10.6	11.5	Nynas, Carlie
09-0062	CROSS	201	5	3.3	3.0	4.0	Oman, Donald
09-0057	EAGLE	202	8	8.2	4.0	12.0	Fischer, Gary L.
09-0039	EDDY	201	9	6.1	5.5	6.5	Wentkiewicz, Sandy
09-0064	FLOWER	201	6	2.3	2.0	3.0	Johnson, Tom
09-0038	HANGING HORN	204	8	8.2	7.0	10.0	Sandberg, Betty
09-0038	HANGING HORN	205	8	8.7	7.0	10.0	Sandberg, Betty
09-0060-02	ISLAND (SOUTH BAY)	200	12	3.8	3.5	4.5	Bridge, Greg
09-0035	LITTLE HANGING HORN	201	7	12.3	11.0	15.0	Kelly, Dorothy J. & Robert
09-0035	LITTLE HANGING HORN	202	8	12.0	11.0	14.0	Kelly, Dorothy J. & Robert
09-0066	LONG	201	11	5.0	4.0	6.0	Walli, Sulo
09-0041	MOOSEHEAD	201	3	3.8	2.5	5.0	Hedberg, Leon & Kathi
09-0041	MOOSEHEAD	202	3	4.0	3.0	5.0	Hedberg, Leon & Kathi
09-0029	PARK	203	4	11.8	10.0	13.0	Davis, Duane H.
09-0067	TAMARACK	201	11	5.5	5.0	6.5	Gurske, Ray
09-0063	WOODBURY	201	7	5.9	5.5	6.0	Butcher, Kelly

### **Carver County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
10-0019	BAVARIA	202	9	8.4	5.0	15.0	Environmental Services, Carver County
10-0225	BRICKYARD	201	8	16.4	12.0	19.0	Environmental Services, Carver County
10-0127	CAMPBELL	201	9	0.6	0.5	1.0	Environmental Services, Carver County
10-0005	COURTHOUSE	201	8	14.9	12.0	18.0	Environmental Services, Carver County
10-0121	EAGLE	201	8	1.6	1.0	2.0	Environmental Services, Carver County
10-0226	FIREMANS	201	6	8.4	6.0	12.5	Environmental Services, Carver County

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## Carver County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
10-0031	GAYSTOCK	201	9	1.2	0.5	2.5	Environmental Services, Carver County
10-0089	GOOSE	203	8	1.3	1.0	2.0	Environmental Services, Carver County
10-0218	GRACE	201	9	3.5	1.5	8.5	Environmental Services, Carver County
10-0014	HAZELTINE	201	9	0.9	0.5	2.5	Environmental Services, Carver County
10-0088	HYDES	201	8	3.3	1.5	7.5	Environmental Services, Carver County
10-0217	JONATHAN	201	9	1.4	0.5	2.5	Environmental Services, Carver County
10-0006	LOTUS	202	8	3.7	1.5	6.5	Strohmaier, Shelley
10-0007	LUCY	201	4	2.6	2.5	3.0	Carlson, Dale E.
10-0216	MCKNIGHT	201	9	1.4	0.5	2.5	Environmental Services, Carver County
10-0029	MILLER	201	7	1.8	1.0	4.0	Environmental Services, Carver County
10-0009	MINNEWASHTA	204	4	10.0	8.0	12.5	Kohman, Roger R.
10-0009	MINNEWASHTA	205	6	6.2	6.0	6.5	Coldwell, Bill
10-0093	OAK	201	7	1.6	1.0	2.5	Environmental Services, Carver County
10-0093	OAK	202	10	2.3	1.0	6.5	Sadler, Terry
10-0053	PIERSON	201	6	6.1	5.5	7.5	Pierson, John
10-0052	REITZ	201	8	4.3	3.0	8.0	Environmental Services, Carver County
10-0002	RILEY	204	15	5.4	3.5	10.0	Bushey, John
10-0080	RUTZ	201	8	1.7	1.0	3.5	Environmental Services, Carver County
10-0095	SWEDE	201	8	1.7	1.5	2.0	Lemke, Mark
10-0095	SWEDE	202	9	1.4	1.0	2.5	Environmental Services, Carver County
10-0059	WACONIA	201	8	6.1	3.5	13.5	Environmental Services, Carver County
10-0048	WASSERMANN	201	12	2.8	2.0	6.0	Rud, Stan

## Cass County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
11-0250	ADA	203	14	14.0	10.5	15.5	Hansen, Jon
11-0250	ADA	205	14	12.7	10.0	16.0	Hansen, Jon
11-0283	BABY	201	8	15.0	12.0	19.0	Kumpula, Stan
11-0283	BABY	203	8	13.8	12.0	17.0	Kumpula, Stan
11-0281	BARNUM	201	17	17.9	15.0	22.0	Newman, Julie
11-0308-02	BIG PORTAGE (E BAY)/RICE PORTAGE	201	5	6.7	4.0	8.0	Dressel, LeRoy
11-0308-01	BIG PORTAGE (W BAY)	202	5	6.2	4.5	8.0	Dressel, LeRoy
11-0412	BIRCH	201	6	14.3	10.5	17.5	McCormick, James W.
11-0412	BIRCH	204	6	11.9	10.5	13.0	McCormick, James W.
11-0412	BIRCH	206	5	13.6	10.0	17.5	Haefner, Ed

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## Cass County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
11-0274	BLACKWATER	201	4	14.6	11.0	16.0	Dindorf, Carolyn
11-0274	BLACKWATER	202	7	14.6	12.0	17.5	Thielmann, Lloyd
11-0376	BLUEBERRY	201	4	4.5	3.5	6.0	Payne, Ray
11-0263	CHILD	202	6	13.8	10.5	15.5	Schires, Arlan
11-0163	COOPER	201	8	13.2	12.5	15.0	Hipsher, Diane
11-0502	CRYSTAL	201	13	23.8	20.5	28.5	Mechelke, Robert
11-0502	CRYSTAL	203	13	13.1	12.0	14.5	Mechelke, Robert
11-0237	DEEP PORTAGE	203	5	11.5	7.0	15.0	Dressel, LeRoy
11-0342	EAGLE (CLEAR)	201	7	13.8	11.0	15.0	Stimler, Carol
11-0351	FIVE POINT	202	13	14.3	10.5	15.5	Monson, John E. & Barbara
11-0174	GIRL	203	4	15.1	14.5	16.0	Johnson, Doug & Judy
11-0086	GRAVE (GRAVES)	201	5	14.2	13.0	19.0	Scolland, Walt
11-0305	GULL	205	10	10.7	8.0	14.0	Struss, Gregg
11-0305	GULL	206	13	8.2	7.0	11.0	Jaster, Gene
11-0305	GULL	208	8	11.3	9.0	15.0	Schley, Herm
11-0305	GULL	209	10	11.6	7.5	14.0	Street, Wes
11-0242	HAND	201	8	14.4	11.0	17.0	Smith, Fred W.
11-0209	HARDY	201	8	9.2	8.0	12.5	Schmutzer, Mark
11-0232	HATTIE	201	17	8.7	5.0	12.0	Johnson, Greg
11-0232	HATTIE	202	17	8.7	5.0	12.5	Johnson, Greg
11-0232	HATTIE	203	17	8.9	5.5	12.5	Johnson, Greg
11-0232	HATTIE	204	17	8.4	5.0	12.5	Johnson, Greg
11-0199	HAY	203	6	13.1	11.0	15.5	Droen, Andy
11-0472	HOWARD	202	1	8.0	8.0	8.0	Rykkeli, Ray
11-0170	HUNTER	203	12	29.8	24.0	38.0	Trampe, David
11-0120-01	INGUADONA (N. BAY)	201	17	7.6	5.0	10.5	Jass, Doug
11-0102	ISLAND	201	4	15.3	14.0	16.0	Dressen, Bill
11-0257	ISLAND	201	11	20.8	18.3	26.3	Aagard, Hans
11-0102	ISLAND	202	4	14.5	12.0	16.5	Dressen, Bill
11-0102	ISLAND	203	4	15.0	13.5	16.0	Dressen, Bill
11-0363	JOHNSON	201	7	18.8	17.0	20.5	Peterson, Sylvia
11-0268	KERR	201	4	19.3	18.5	20.5	Naechel, Chuck
11-0262	KID	201	12	13.5	11.0	16.5	Rueter, Clarence
11-0053	LAWRENCE	201	9	9.2	7.5	11.0	Reiswig, Myrtle & Jill
11-0053	LAWRENCE	202	9	10.1	8.5	12.0	Reiswig, Myrtle & Jill
11-0037	LEAVITT	201	14	9.9	7.0	11.0	Schramm, W. Melvin
11-0203-01	LEECH (MAIN BASIN)	209	13	7.6	6.0	10.5	Roehl, Jerry
11-0203-04	LEECH (SHINGOBEE BAY)	203	3	10.8	9.0	14.0	Smith, George
11-0167	LITTLE BOY	201	16	9.3	5.5	13.5	Wenzel, Dewey
11-0236	LITTLE PORTAGE	202	6	15.3	13.0	17.0	Lacho, Jon & Mary
11-0092	LITTLE SAND	201	11	10.1	8.0	12.0	Klunder, Larry
11-0230	LITTLE SAND	201	3	11.7	10.0	12.5	Johnson, Greg
11-0009-01	LITTLE THUNDER (W. BAY)	201	12	15.6	13.0	24.5	Ondich, Thomas M.

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## Cass County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
11-0387	LITTLE WEB	201	8	13.9	11.0	17.0	Swenson, Gerald
11-0142-02	LONG (MAIN BASIN)	202	12	16.5	14.0	25.0	Sifford, Paul
11-0142-02	LONG (MAIN BASIN)	204	16	19.9	15.5	27.0	Arnquist, Kit
11-0142-04	LONG (SW BAY)	203	7	16.7	14.0	23.0	Casey, John R.
11-0142-04	LONG (SW BAY)	204	3	17.0	15.5	18.0	Locke, Dick
11-0258	LONG LAKE #2	201	4	15.8	11.8	19.5	Allmendinger, Kevin
11-0226	LOON	201	9	13.7	12.5	15.5	Littman, Robert
11-0269	LOST	201	12	14.7	10.5	17.5	Rueter, Clarence
11-0129	LOWER TRELIPE	201	13	6.6	5.0	10.0	Senst, Charles
11-0222	MARGARET	201	17	3.9	3.0	6.0	Koska, Ed
11-0222	MARGARET	204	17	4.2	3.0	7.5	Koska, Ed
11-0261	MCKEOWN	201	12	13.5	12.0	15.0	Bjorgaard, Ralph
11-0200	MULE	201	12	14.9	10.5	19.0	Dahlager, Marjorie R.
11-0200	MULE	202	11	13.0	9.0	18.5	Hermanutz, Roger
11-0307	NORWAY	201	11	7.3	5.5	9.0	Becker, Lenore
11-0244	ONE (SAND NO ONE)	201	4	15.8	13.5	18.5	Jensen, Cathy
11-0415	PIKE BAY	201	8	13.9	10.5	16.5	Erickson, Ron
11-0411	PINE MOUNTAIN	202	1	10.5	10.5	10.5	Smude, Bob
11-0383	PLEASANT	202	9	16.3	13.0	19.5	Fark, Dan
11-0234	PONTO	201	9	21.2	18.5	23.5	Fisker, John
11-0204	PORTAGE	201	17	7.3	6.3	8.0	Knapp, Douglas
11-0476	PORTAGE	201	15	27.3	23.0	33.0	Mergens, Ed
11-0490	PORTAGE	201	6	11.5	8.5	15.5	Harris, Jay
11-0490	PORTAGE	202	10	12.1	10.0	14.5	Gustafson, Jack
11-0356	RAINY	201	8	13.9	12.5	15.0	Johnston, Judy
11-0220	RAY (BASS)	202	10	9.0	6.5	12.0	Anderson, David L.
11-0324	ROCK	201	9	6.1	5.0	7.0	Marquardt, Vergil
11-0043	ROOSEVELT	201	4	12.5	11.5	14.0	McKeon, Terri
11-0043	ROOSEVELT	202	4	12.5	11.5	14.0	McKeon, Terri
11-0043	ROOSEVELT	204	5	12.5	11.0	13.0	Neill, Denny
11-0043	ROOSEVELT	206	6	8.8	5.5	10.5	Nicholson, Deborah
11-0043	ROOSEVELT	206	9	11.6	7.5	15.0	Pertl, Lee
11-0043	ROOSEVELT	210	7	10.5	9.0	12.5	Lauman, Thomas
11-0043	ROOSEVELT	212	6	8.6	5.5	10.0	Nicholson, Deborah
11-0043	ROOSEVELT	213	4	9.9	8.0	12.0	Hanson, Eric W.
11-0043	ROOSEVELT	214	6	8.8	5.5	11.0	Nicholson, Deborah
11-0361	SANBURN	203	2	17.8	17.0	18.5	Sladek, Robert
11-0279	SAND	201	9	17.6	15.5	20.0	Freitag, Katherine
11-0279	SAND	201	12	19.3	17.0	20.5	Harrison, Jim
11-0504	STEAMBOAT	201	8	11.3	8.5	13.0	Stepan, Dan
11-0504	STEAMBOAT	202	8	12.1	10.3	14.0	Ekstam, Rick
11-0371	STONY	201	17	19.0	12.5	23.0	Trout, Jerry
11-0375	SURPRISE	201	4	7.4	6.5	8.0	Payne, Ray

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## Cass County, continued

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11-0304-02	SYLVAN (NE BAY)	201	4	17.8	17.3	18.0	Braga, Al
11-0304-01	SYLVAN (SW BAY)	201	3	17.7	16.0	19.5	Skroch, Andy
11-0304-01	SYLVAN (SW BAY)	202	5	17.6	14.0	23.0	Reese, Thomas L.
11-0413	TEN MILE	202	14	21.9	15.0	26.0	Schwartz, Dr. James W.
11-0413	TEN MILE	204	14	16.6	13.5	18.5	Schwartz, Dr. James W.
11-0062	THUNDER	206	8	19.1	16.5	22.0	Edlund, Joan M.
11-0062	THUNDER	210	1	11.0	11.0	11.0	Berg, Pat
11-0062	THUNDER	211	1	12.5	12.5	12.5	Berg, Pat
11-0270	TRILLIUM (LIZARD)	201	15	8.0	4.5	15.0	Duncan, Robert M.
11-0218	UPPER GULL	202	12	8.6	7.8	9.3	Swenson, Jerry
11-0105	UPPER TRELIPE	201	7	12.9	10.5	17.5	Peterson, John
11-0029	VERMILLION	201	7	6.0	3.0	10.0	Saulsbury, Lonny
11-0171-01	WABEDO (NE BAY)	202	17	8.1	6.0	10.5	Anderson, Ronald
11-0171-02	WABEDO (SW BAY)	201	12	9.5	8.0	10.5	Plotnik, Mike
11-0171-02	WABEDO (SW BAY)	203	12	9.5	8.0	10.5	Plotnik, Mike
11-0059	WASHBURN	201	3	10.5	10.5	10.5	Reich, Ron
11-0059	WASHBURN	203	15	9.9	9.5	10.0	Behning, Ron
11-0059	WASHBURN	204	13	10.7	7.5	14.0	Nelles, Richard D.
11-0059	WASHBURN	205	8	14.8	12.5	16.5	Dutton, Howard
11-0059	WASHBURN	206	3	10.2	10.0	10.5	Reich, Ron
11-0059	WASHBURN	207	13	12.7	11.0	14.0	Nelles, Richard D.
11-0059	WASHBURN	208	10	13.5	11.5	15.0	Snesrud, Dave
11-0311	WEBB	201	6	15.0	13.0	17.0	Althaus, Don
11-0273	WIDOW	202	8	15.7	13.0	18.5	Shallbetter, Bonnie
11-0147	WINNIBIGOSHISH	202	1	6.5	6.5	6.5	Paakh, Bruce
11-0201-02	WOMAN (MAIN LAKE)	206	3	12.8	11	14	Lange, John
11-0201-02	WOMAN (MAIN LAKE)	207	5	14.1	11.0	17.5	Kruse, Don

## Chisago County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
13-0012-01	CHISAGO (NORTH PORTION)	202	2	9.5	4.0	15.0	Wohlenhaus, Daniel
13-0012-02	CHISAGO (SOUTH PORTION)	201	2	4.5	4.0	5.0	Pavey, Robert
13-0012-02	CHISAGO (SOUTH PORTION)	202	2	6.5	6.0	7.0	Pavey, Robert
13-0053	COMFORT	201	6	4.9	4.0	6.0	Rheault, Charles
13-0053	COMFORT	202	6	4.7	3.5	5.5	Rheault, Charles
13-0053	COMFORT	203	6	4.8	4.0	5.0	Rheault, Charles
13-0083-01	GOOSE (NORTH BAY)	201	15	1.8	1.0	4.5	Schwaab, Joe
13-0083-01	GOOSE (NORTH BAY)	202	15	1.5	0.5	4.0	Schwaab, Joe
13-0083-02	GOOSE (SOUTH BAY)	201.1	4	5.3	5.0	5.5	Sudeith, Babe
13-0083-02	GOOSE (SOUTH BAY)	205	3	5.3	4.5	6.0	Steman, Robert
13-0083-02	GOOSE (SOUTH BAY)	206	15	6.5	4.0	10.5	Schwaab, Joe
13-0041-01	GREEN (LITTLE GREEN)	202	6	4.4	2.0	8.0	Ekstrand, Rick
13-0041-02	GREEN (MAIN BASIN)	201	6	6.1	3.0	10.0	Ekstrand, Rick
13-0041-02	GREEN (MAIN BASIN)	203	8	4.7	2.5	8.5	Guertin, James

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### Chisago County, continued

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13-0033	LITTLE	201	11	2.6	2.0	3.0	Duren, Michelle
13-0032-01	NORTH CENTER LAKE	202	6	3.2	2.0	5.5	Kjelland, Joe & Anne Marie
13-0069-01	RUSH (EAST BAY)	208	6	3.3	1.5	8.0	McKenzie, Tom
13-0069-02	RUSH (WEST BAY)	204	7	2.9	2.0	6.0	McKenzie, Tom
13-0069-02	RUSH (WEST BAY)	205	11	5.4	2.5	12.0	Bachmeier, Ralph P.
13-0027	SOUTH CENTER	206	10	4.4	2.0	9.5	Smude, Bob
13-0028	SOUTH LINDSTROM	204	2	9.5	4.0	15.0	Wohlenhaus, Daniel

### Clearwater County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
15-0068	LONG LOST	201	12	22.6	20.0	26.0	Svobodny, Jim
15-0068	LONG LOST	202	5	19.8	17.0	21.0	Holmes, Dean
15-0068	LONG LOST	207	5	20.3	17.0	22.0	Holmes, Dean
15-0060	WALKER BROOK	201	12	10.3	8.0	13.0	Michel, James

### Cook County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
16-0182	BALL CLUB	201	12	14.0	11.5	15.5	Parker, Richard
16-0228	BEARSKIN	201	7	22.6	21.0	25.5	Serrin, Phil & Rhoda
16-0247	BIRCH	201	5	19.2	18.0	20.5	Edlund, Stephen
16-0141	CARIBOU	201	1	15.5	15.5	15.5	Furseth, Arlene
16-0240	CARIBOU	201	1	7.0	7.0	7.0	High Adventure Camp, Northern Tier
16-0360	CARIBOU	201	4	6.1	5.0	7.0	Kelleher, Ethel
16-0360	CARIBOU	203	4	6.6	5.8	7.5	Vaughan, Pat
16-0360	CARIBOU	204	4	6.7	5.8	8.5	Vaughan, Pat
16-0360	CARIBOU	205	4	6.9	5.5	8.0	Vaughan, Pat
16-0360	CARIBOU	206	4	6.8	5.0	8.0	Kelleher, Ethel
16-0360	CARIBOU	206	4	6.0	5.0	7.5	Vaughan, Pat
16-0360	CARIBOU	207	4	5.0	5.0	5.0	Vaughan, Pat
16-0139	CLEARWATER	201	2	31.0	31.0	31.0	Olson, Bob & Kay
16-0139	CLEARWATER	202	2	31.8	31.5	32.0	Olson, Bob & Kay
16-0139	CLEARWATER	204	2	31.3	30.5	32.0	Olson, Bob & Kay
16-0139	CLEARWATER	205	2	32.5	32.0	33.0	Olson, Bob & Kay
16-0139	CLEARWATER	206	1	22.5	22.5	22.5	Furseth, Arlene
16-0139	CLEARWATER	206	1	32.0	32.0	32.0	Olson, Bob & Kay
16-0139	CLEARWATER	207	1	32.0	32.0	32.0	Olson, Bob & Kay
16-0150	DANIELS	201	1	22.5	22.5	22.5	Olson, Bob & Kay
16-0143	DEVIL TRACK	201	10	9.1	7.5	12.0	Klingsporn, Sarah
16-0143	DEVIL TRACK	201	8	12.4	10.0	14.0	MacLean, Bonnie & David
16-0143	DEVIL TRACK	202	9	10.0	7.5	11.5	MacLean, Bonnie & David
16-0143	DEVIL TRACK	203	13	13.0	11.0	15.0	Parker, Richard
16-0143	DEVIL TRACK	204	6	9.3	8.5	10.0	Futterer, Chuck
16-0319	GASKIN	202	1	14.5	14.5	14.5	High Adventure Camp, Northern Tier

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## Cook County, continued

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16-0356	GUNFLINT	202	4	20.6	19.0	21.5	Caple, Jerry
16-0314	HENSON	201	1	7.5	7.5	7.5	High Adventure Camp, Northern Tier
16-0366	HOLLY (UPPER TWIN)	201	8	4.9	3.5	5.5	Nelson, Paul
16-0406	HOMER	203	8	5.6	5.5	6.0	Nelson, Paul
16-0241	HORSESHOE	206	1	9.0	9.0	9.0	High Adventure Camp, Northern Tier
16-0227	HUNGRY JACK	201	6	19.5	16.0	21.0	Bottger, John & Barbara
16-0035	JOHN	200	1	9.0	9.0	9.0	Furuseth, Arlene
16-0188	KEMO	201	4	16.4	13.0	18.0	Zavoral, Bob Sopoci & Betsy
16-0198	LEO	201	4	14.4	13.5	16.5	Little, Janet
16-0142	LITTLE CARIBOU	202	1	5.5	5.5	5.5	Furuseth, Arlene
16-0026	LITTLE JOHN	201	1	18.0	18.0	18.0	Furuseth, Arlene
16-0027	MCFARLAND	201	1	15.0	15.0	15.0	Furuseth, Arlene
16-0027	MCFARLAND	201	2	17.3	16.5	18.0	Nelson, David & Stephanie
16-0027	MCFARLAND	203	2	17.8	16.5	19.0	Nelson, David & Stephanie
16-0353	OMEGA	202	1	12.0	12.0	12.0	High Adventure Camp, Northern Tier
16-0252	PIKE	202	4	19.8	18.0	23.0	Heinz, Jim
16-0252	PIKE	205	4	21.0	20.0	23.0	Heinz, Jim
16-0252	PIKE	206	4	19.1	18.0	20.0	Heinz, Jim
16-0041	PINE	204	1	22.5	22.5	22.5	Furuseth, Arlene
16-0239	POPLAR	203	5	11.0	9.5	11.5	Perusse, Harvey & Joan
16-0239	POPLAR	204	5	11.0	9.5	11.5	Perusse, Harvey & Joan
16-0629	SEA GULL	204	8	15.6	13.0	16.5	Lande, Kathy
16-0384	TAIT	201	10	6.8	6.0	7.3	Emery, Don
16-0019	TOM	202	11	9.1	8.3	10.3	Bolinger, Harold
16-0224	VISTA	201	1	9.5	9.5	9.5	High Adventure Camp, Northern Tier
16-0086	WEST PIKE	203	1	25.0	25.0	25.0	Furuseth, Arlene
16-0354	WINCHELL	206	1	19.5	19.5	19.5	High Adventure Camp, Northern Tier

## Cottonwood County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
17-0003	MOUNTAIN	201	17	1.1	1.0	1.5	Palm, Marlin

## Crow Wing County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
18-0358	BASS	201	11	16.6	14.5	19.0	Swanson, Mary
18-0384	BASS	201	9	18.1	16.5	20.0	Helsene, Larry
18-0034	BAY	203	18	15.6	10.0	20.0	Anderson, Dane
18-0034	BAY	204	9	15.7	13.0	17.0	Sather, Elliot & Monica
18-0034	BAY	205	18	15.5	10.0	22.0	Anderson, Dane
18-0034	BAY	206	18	17.2	12.0	22.0	Anderson, Dane
18-0211	BLUE	201	1	18.5	18.5	18.5	Holmgren, Gordon
18-0259	BONNIE	201	7	17.6	17.5	18.0	Gatzow, Ray
18-0259	BONNIE	202	7	17.6	17.0	18.0	Gatzow, Ray

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**Crow Wing County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
18-0020	BORDEN	201	11	10.0	8.0	12.0	Puchtell, Richard
18-0231	BUTTERFIELD	201	5	10.4	7.0	15.0	Johnson, Jim
18-0018	CAMP	201	11	6.7	5.0	10.0	Tinberg, Julie
18-0374	CLARK	201	5	9.6	7.0	11.0	Bedard, George
18-0374	CLARK	202	4	8.3	6.0	10.0	Bedard, George
18-0038	CLEARWATER	203	13	12.6	10.0	17.0	Kittock, Al
18-0038	CLEARWATER	207	12	11.3	9.5	17.0	Jones, Robert H.
18-0131	CLINKER	202	14	13.6	6.0	17.0	Wier, Dennis
18-0041-02	CROOKED (MAIN BAY)	201	9	17.1	14.0	22.0	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	202	9	15.6	14.0	17.0	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	203	8	17.3	15.0	21.5	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	204	9	15.4	14.0	17.5	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	205	3	14.5	13.5	15.0	Steblay, Jon K. & Margaret
18-0041-01	CROOKED (SUGAR BAY)	201	3	15.7	15.0	16.0	Steblay, Jon K. & Margaret
18-0271	DAGGETT	202	3	9.3	8.5	10.0	Neer, Larry
18-0204	DAHLER	201	17	7.5	7.5	7.5	Knox, Ron
18-0298	EAST FOX	202	9	16.2	14.0	21.0	Stancer, Bob
18-0407	EAST TWIN	201	3	18.0	15.0	20.5	Adams, Tom
18-0305	EDWARD	203	12	14.7	12.0	17.5	Olson, Merle (Bud)
18-0203	EMILY	201	18	2.2	1.5	4.0	Dick, Ron
18-0224	FOOL	201	2	7.0	7.0	7.0	Miller, Lisa Joan
18-0224	FOOL	202	2	6.0	6.0	6.0	Miller, Lisa Joan
18-0320-01	GILBERT (E. BAY)	203	6	20.0	17.5	24.0	Borash, Maurice
18-0320-01	GILBERT (E. BAY)	204	5	7.7	6.5	9.5	Borash, Maurice
18-0320-02	GILBERT (W. BAY)	201	3	14.0	14.0	14.0	Borash, Maurice
18-0338	GLADSTONE	203	4	12.3	8.5	15.0	MacDonald Jr., Robert G.
18-0226	GOODRICH	204	4	17.3	16.0	18.0	Royce, Richard
18-0080	GOOSE	201	4	14.4	13.5	15.0	Dix, Bill
18-0070	HAMLET	201	9	18.3	17.5	19.0	Stelter, Scott
18-0044	HANKS	202	3	16.5	16.0	17.0	Steblay, Jon K. & Margaret
18-0251-01	HORSESHOE (E. BAY)	206	12	15.7	15.0	17.0	Westby, Ray
18-0251-02	HORSESHOE (W. BAY)	205	15	14.3	11.5	17.5	Geadelmann, Jon
18-0375	HUBERT	207	6	15.6	12.0	19.0	Tack, Dennis
18-0375	HUBERT	208	9	15.4	12.8	20.5	Watkins, Karen
18-0183	ISLAND	201	9	6.1	5.5	7.0	Dierling, Beatrice L.
18-0415	JAIL (BIG RICE)	201	9	3.9	2.0	8.0	Larson, Loren & Kay
18-0415	JAIL (BIG RICE)	202	9	3.8	2.0	8.0	Larson, Loren & Kay
18-0340	LITTLE HUBERT	202	8	14.3	12.5	19.0	Bloom, John
18-0351	LITTLE PELICAN	202	8	12.6	10.5	15.5	Loyva, Allan O.
18-0266	LITTLE PINE	202	4	7.3	5.5	9.5	Haag, Dan
18-0266	LITTLE PINE	203	3	9.2	8.0	10.5	Neer, Larry
18-0357	LITTLE ROUND	201	6	16.5	15.0	18.0	Kroeger, John
18-0360	LITTLE STAR	201	6	14.7	12.5	16.5	Kroeger, John

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**Crow Wing County, continued**

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18-0076	LONG	201	8	10.0	5.5	15.0	Weisbrod, Tom
18-0342	LOUGEE	203	4	8.4	7.0	11.0	Hickman, Don
18-0403	LOWER CULLEN	202	5	11.8	7.5	15.0	Beaver, Tom & Ann
18-0403	LOWER CULLEN	202	11	12.6	9.0	16.5	Swift, Gil
18-0378	LOWER HAY	201	8	13.0	7.3	19.8	Topinka, Dave & Judy
18-0378	LOWER HAY	202	8	13.3	6.8	18.8	Topinka, Dave & Judy
18-0378	LOWER HAY	203	15	13.2	7.0	18.0	Rezanka, Kay
18-0378	LOWER HAY	204	8	12.6	6.3	16.8	Topinka, Dave & Judy
18-0243	LOWER MISSION	203	7	5.6	3.0	8.0	Bernier, Nick
18-0243	LOWER MISSION	203	6	5.6	1.5	10.5	Hedlund, Ron
18-0343	MARKEE	202	9	13.2	10.0	16.0	Holst, Dick & Janet
18-0343	MARKEE	203	9	13.3	11.0	16.0	Kramer, Dale
18-0185	MARY	202	4	5.3	5.0	5.5	Fairchild, Paul & Bonnie
18-0377	MIDDLE CULLEN	204	2	15.0	15.0	15.0	Beaver, Tom & Ann
18-0377	MIDDLE CULLEN	204	5	12.7	10.0	15.0	Boudrye, Charlie & Marie
18-0021	MILLER (ALMOND)	202	6	10.7	6.5	15.0	Garbarini, James
18-0294	MITCHELL	201	8	8.2	7.0	12.5	Cardinal, Ken
18-0166	MUD	201	3	3.7	3.5	4.0	Flemmer, Arlene G.
18-0104	NOKAY	201	14	9.0	4.5	14.0	Roepe, Steve
18-0372	NORTH LONG	204	15	11.2	9.0	13.5	Rush, Ken
18-0372	NORTH LONG	206	16	15.7	13.5	17.0	Loney, Corey
18-0372	NORTH LONG	208	5	13.6	8.5	16.5	Mason, Don & Janet
18-0372	NORTH LONG	210	4	12.6	9.5	15.0	McMenimen, Michael
18-0227-02	O'BRIEN (NE BAY)	201	13	19.3	13.5	23.5	Peterson, Martin
18-0352	OSSAWINNAMAKEE	201	8	18.6	15.5	21.0	Donaldson, Alec & Donna
18-0352	OSSAWINNAMAKEE	203	8	18.1	16.0	21.0	Donaldson, Alec & Donna
18-0352	OSSAWINNAMAKEE	204	11	20.0	18.0	23.0	O'Donnell, Joe & Catherine
18-0352	OSSAWINNAMAKEE	211	11	17.5	16.0	20.0	O'Donnell, Joe & Catherine
18-0308	PELICAN	205	7	19.6	17.0	21.0	Smieja, Dr. Gerald D.
18-0371	PERCH	201	2	13.3	12.5	14.0	Paul, David B.
18-0354	PIG	201	11	13.2	10.5	15.5	Boline, John & Gail
18-0088	PLATTE	201	8	4.9	3.5	7.0	Dilly, Kevin
18-0088	PLATTE	202	8	4.9	3.5	7.5	Dilly, Kevin
18-0088	PLATTE	203	7	4.5	3.0	6.5	Bosn, Al
18-0088	PLATTE	207	7	4.3	3.0	6.0	Bosn, Al
18-0050	PORTAGE	201	5	15.1	12.5	17.5	Steblay, Jon K. & Margaret
18-0050	PORTAGE	203	7	18.3	13.0	23.0	Kennedy, Lorie
18-0093-01	RABBIT (EAST PORTION)	202	6	13.0	9.0	17.0	Henrichs, Dennis
18-0093-01	RABBIT (EAST PORTION)	204	6	12.0	7.0	16.0	Henrichs, Dennis
18-0093-02	RABBIT (WEST PORTION)	201	6	14.2	12.0	18.0	Henrichs, Dennis
18-0093-02	RABBIT (WEST PORTION)	203	6	13.2	10.0	18.0	Henrichs, Dennis
18-0386	RED SAND	201	9	11.3	8.5	12.5	Schmidt, Eldo
18-0184	ROGER	201	5	16.0	12.5	19.5	Siegel, Richard

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**Crow Wing County, continued**

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18-0165	ROSS	202	7	4.2	4.0	5.0	Garberg, Robert
18-0373	ROUND	202	11	9.4	5.0	14.0	von Fischer, Robert
18-0373	ROUND	203	9	11.3	6.0	16.5	Stark, Larry
18-0373	ROUND	205	4	10.5	7.5	13.5	Alsleben, Jerry
18-0373	ROUND	206	11	9.7	5.5	13.5	von Fischer, Robert
18-0311	RUSH	201	13	10.8	9.0	12.0	Zahler, Kevin
18-0311	RUSH	209	7	14.9	12.5	17.0	Wallace, Craig
18-0212	RUTH	205	3	19.8	19.5	20.0	Bialon, Van
18-0212	RUTH	206	3	20.2	19.5	21.0	Bialon, Van
18-0033	SCOTT	201	3	15.3	14.5	16.5	Wadsten, Brad
18-0090	SERPENT	201	12	15.9	9.0	22.0	Bowen, Arlen
18-0072	SHIRT	201	12	15.8	13.0	18.0	O'Brien, John
18-0239	SILVER	201	5	17.0	15.0	18.0	Duerre, Dick
18-0028	SMITH	201	9	10.9	9.0	14.0	Vaidich, Tom & Mary
18-0028	SMITH	202	11	12.0	11.0	13.0	Playle, William
18-0028	SMITH	202	10	10.5	8.0	13.0	Vaidich, Tom & Mary
18-0028	SMITH	203	9	11.3	9.0	14.0	Vaidich, Tom & Mary
18-0136	SOUTH LONG	209	13	6.2	4.0	10.5	Grimsby, Paul
18-0136	SOUTH LONG	210	13	6.3	3.0	10.0	Grimsby, Paul
18-0136	SOUTH LONG	211	13	6.1	4.0	9.5	Grimsby, Paul
18-0136	SOUTH LONG	212	13	6.4	4.0	10.5	Grimsby, Paul
18-0359	STAR	204	6	17.3	14.0	19.5	Kroeger, John
18-0359	STAR	205	6	17.8	16.5	18.5	Kroeger, John
18-0169	STARK	201	9	8.8	6.0	10.5	Olson, Gary G.
18-0169	STARK	204	14	8.4	7.5	10.5	Adam, Joseph
18-0047	TURTLE	201	11	9.9	8.0	12.0	Schmit, Joseph H.
18-0167-01	TWIN (WEST BASIN)	201	4	5.6	5.5	6.0	Konstas, Ernest
18-0167-01	TWIN (WEST BASIN)	202	8	5.3	5.0	6.0	Olson, Kurt
18-0148	TWIN LAKES	201	12	13.4	11.0	18.0	Eisel, Mervin
18-0148	TWIN LAKES	202	12	10.0	7.5	11.5	Eisel, Mervin
18-0385	UNNAMED	201	9	7.3	7.0	8.5	Helsene, Larry
18-0413	UNNAMED	201	1	6.5	6.5	6.5	Larson, Loren & Kay
18-0376	UPPER CULLEN	207	4	8.3	5.0	11.0	Opsahl, Dennis
18-0412	UPPER HAY	202	15	5.9	4.0	8.0	Jensen, Paul & LaVonne
18-0242	UPPER MISSION	201	7	11.6	4.5	17.0	Bernier, Nick
18-0242	UPPER MISSION	205	6	13.3	3.5	21.0	Hedlund, Ron
18-0242	UPPER MISSION	206	6	13.9	4.5	22.5	Hedlund, Ron
18-0096	UPPER SOUTH LONG	205	11	5.9	4.0	9.0	Rolfs, John R.
18-0284	VELVET	201	14	10.4	6.5	17.0	Blosberg, Dale
18-0297	WEST FOX	203	9	15.1	13.0	19.0	Stancer, Bob
18-0379	WHITE SAND	203	6	10.9	7.0	14.0	Mezner, Laurel
18-0001	WHITEFISH	201	10	12.7	11.5	15.0	Vessey, General John W.
18-0310	WHITEFISH	208	15	10.0	7.0	13.0	Rezanka, Kay

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## Dakota County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
19-0021	ALIMAGNET	201	3	2.2	1.5	2.5	Grazzini Jr., Gene
19-0081	AUGUSTA	201	1	1.3	1.3	1.3	Stein, Ellsworth
19-0259	BUR OAKS POND	201	6	9.3	9.0	9.5	Carlson, David
19-0006	BYLLESBY	201	9	1.3	0.5	2.0	Moesler, Guenther & Allene
19-0006	BYLLESBY	202	10	3.2	2.0	5.0	Moesler, Guenther & Allene
19-0006	BYLLESBY	203	10	3.4	2.0	6.0	Moesler, Guenther & Allene
19-0155	CARLSON	201	3	3.5	2.5	4.0	Weston, Steve
19-0155	CARLSON	202	1	3.0	3.0	3.0	Weston, Steve
19-0150	CEDAR POND	201	7	2.4	2.0	2.5	Ochs, Mark
19-0027	CRYSTAL	204	17	5.2	3.0	12.5	Tranchilla, Joe
19-0161	EAST THOMAS	201	6	5.7	5.0	6.5	Hedblom, Tom
19-0057	FISH	204	4	2.9	2.5	3.8	Nippert, Carl
19-0069	GERHARDT	201	2	2.5	2.0	3.0	Peterson, Bruce
19-0004	ISABEL	201	3	0.6	0.5	0.8	Chapman, Clarence & Helen
19-0071	JENSEN	201	11	3.9	3.0	5.0	Foss, Rollin & Monica
19-0030	KINGSLEY	201	13	7.0	5.5	8.0	Thomson, Robin
19-0446	LAC LAVON	201	7	10.1	8.0	14.0	Shaver, Wally
19-0082	LEMAY	201	1	3.5	3.5	3.5	Heyn, John L.
19-0056	O'LEARY	201	12	3.3	3.0	4.0	Cashman, Robert
19-0066	QUIGLEY (CARLSON)	201	7	3.2	2.0	5.0	Bergh, Brian
19-0067	THOMAS	203	5	3.5	3.0	4.0	Alt, Joanne
19-0062	UNNAMED (HAY)	201	3	6.3	5.0	8.0	Krech, Jack
19-0153	UNNAMED (HEINE LK)	201	7	11.5	8.0	14.0	Ochs, Mark
19-0290	UNNAMED (JP-23)	201	4	2.1	1.0	3.5	Scheller, Dan
19-0454	UNNAMED (LP-39)	201	6	3.0	2.0	4.5	Solie, Greg
19-0156	UNNAMED (LP-44)	201	10	0.9	0.5	1.5	Tyre, Royce M.
19-0063	UNNAMED (SCHWANZ)	201	6	6.0	2.5	11.0	Schaefer, Joseph
19-0063	UNNAMED (SCHWANZ)	202	6	6.2	2.5	11.0	Schaefer, Joseph
19-0063	UNNAMED (SCHWANZ)	203	6	6.1	3.0	10.0	Schaefer, Joseph
19-0095	UNNAMED (SEIDL)	201	8	2.1	1.0	3.0	Bartz, Harvey & Janet

## Douglas County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
21-0242	AARON	202	5	7.7	6.5	10.0	Wagner, Dick
21-0085	ANDREW	206	4	7.8	6.5	8.5	Anderson, Ed
21-0145	BIG CHIPPEWA	203	1	10.5	10.5	10.5	Otto, Jim
21-0102	BROPHY	201	5	8.1	7.0	9.5	Saurdiff, Ron (Red)
21-0103	COWDRY	201	7	9.7	7.5	11.5	Ries, Thomas M.
21-0199-01	CROOKED (NW BAY)	201	2	7.8	5.0	10.5	Howe, Mike
21-0080	DARLING	202	19	9.2	6.0	12.5	Landman, Kirk
21-0080	DARLING	203	19	9.7	5.5	13.0	Landman, Kirk
21-0213	DEVILS	201	8	7.2	5.5	10.0	Davis, Harry

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## Douglas County, continued

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21-0052	GENEVA	201	17	10.4	7.5	15.0	Hains, Leonard
21-0052	GENEVA	202	8	9.1	6.5	13.0	Moe, Nicholas
21-0123	IDA	201	12	13.9	12.0	16.0	Jahnke, Dean R.
21-0123	IDA	202	8	13.4	11.0	16.5	Sandstrom, Bill
21-0123	IDA	203	4	12.5	11.5	14.0	Mathson, Mel
21-0123	IDA	204	5	10.6	9.0	14.0	Anderson, Greg
21-0123	IDA	205	6	14.0	12.0	21.0	Kilgore, William
21-0123	IDA	206	8	13.3	12.0	15.0	Wood, Janet & Tom
21-0123	IDA	207	7	11.2	10.5	13.0	Hoeben, Al & Darlene
21-0123	IDA	208	8	13.1	10.5	14.5	Kanwischer, Jim
21-0123	IDA	209	9	12.9	11.5	16.5	Erstad, Don & Yvonne
21-0123	IDA	210	5	14.5	12.0	17.0	Bedman, Harry
21-0123	IDA	211	5	14.9	12.5	18.0	Delp, Cliff
21-0123	IDA	214	5	14.2	10.0	20.0	Katzmerak, Richard
21-0123	IDA	215	9	11.7	10.0	14.5	Kohnen, Richard (Dick)
21-0076	IRENE	203	17	6.0	3.5	13.0	Heesen, Don
21-0055	JESSIE	201	6	5.2	3.5	7.5	Brink, Gary
21-0106-01	LATOKA (NORTH BAY)	202	8	13.5	11.0	16.0	Braun, Rich & Marlene
21-0106-01	LATOKA (NORTH BAY)	203	8	13.8	11.0	17.0	Braun, Rich & Marlene
21-0106-02	LATOKA (SOUTH BAY)	201	8	14.1	11.0	16.5	Braun, Rich & Marlene
21-0056	LE HOMME DIEU	204	7	10.2	8.0	15.0	Kosin, George
21-0056	LE HOMME DIEU	206	4	11.6	8.0	14.0	Clayton, James
21-0056	LE HOMME DIEU	207	4	11.3	7.0	14.0	Clayton, James
21-0056	LE HOMME DIEU	208	4	11.3	7.0	14.0	Clayton, James
21-0056	LE HOMME DIEU	209	4	11.3	7.0	14.0	Clayton, James
21-0144-01	LOBSTER (EAST BAY)	201	12	8.0	6.5	12.0	Onstad, Pete
21-0144-01	LOBSTER (EAST BAY)	202	12	6.7	5.5	9.0	Onstad, Pete
21-0144-02	LOBSTER (WEST BAY)	201	17	7.7	6.0	11.0	Onstad, Pete
21-0144-02	LOBSTER (WEST BAY)	202	17	7.7	6.5	10.5	Onstad, Pete
21-0094	LOUISE	201	6	9.2	8.5	10.5	Pexsa, Kenneth
21-0079	MAPLE	203	17	8.7	7.0	13.0	Steffen, Ralph E.
21-0079	MAPLE	204	15	7.7	7.0	9.5	Morgan, David L.
21-0092	MARY	205	11	8.9	6.5	12.0	Schmidt, Terry
21-0083	MILTONA	203	7	10.6	7.0	17.0	Fulton, Jerry
21-0083	MILTONA	204	7	10.6	7.0	17.5	Fulton, Jerry
21-0245	MOSES	201	8	13.9	11.0	18.0	Cress, James
21-0245	MOSES	202	5	14.6	12.0	18.0	Sparks, Dennis
21-0140	POCKET (VAN LOONS)	202	7	5.1	4.0	7.0	Cooper, Terry
21-0125	PRIVATE (KIEHNE)	201	16	6.7	4.0	9.5	Full, Mike
21-0291	RED ROCK	202	8	5.3	2.5	8.0	Dahl, Elmo
21-0016	SMITH	202	10	4.4	2.5	11.5	Bohner, Neil
21-0041	SOUTH UNION	201	8	18.2	9.5	25.0	Fenelon, Ron
21-0264	STOWE	204	5	3.7	2.0	7.0	Gilligan, Eugene E.

Legend:

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### Douglas County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
21-0073	VERMONT	202	6	13.8	11.5	16.5	Meyer, Micah
21-0073	VERMONT	203	6	11.8	9.0	15.0	Meyer, Micah
21-0054	VICTORIA	204	14	11.6	7.0	23.0	Syverson, Mike
21-0081	WINONA	201	7	1.2	1.0	1.5	Pugh, Charles E.

### Faribault County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
22-0033	MINNESOTA	201	3	1.0	1.0	1.0	Heather, Jack

### Freeborn County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
24-0028	BEAR	202	1	1.0	1.0	1.0	Marpe, Scott
24-0030	STATE LINE	202	2	1.0	1.0	1.0	Marpe, Scott

### Grant County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
26-0095	BARRETT	202	10	4.6	4.0	6.0	Montonye, Joe
26-0040	ELK	202	11	5.5	5.0	6.5	Eblen, Gene
26-0282	LIGHTNING	201	5	1.7	1.0	3.0	Weigand, Clair
26-0002	PELICAN	201	4	2.8	2.5	3.3	Vodegel, Don
26-0002	PELICAN	202	4	2.8	2.5	3.0	Vodegel, Don
26-0002	PELICAN	203	4	2.7	2.5	3.0	Vodegel, Don
26-0002	PELICAN	204	4	3.2	2.8	3.5	Vodegel, Don
26-0002	PELICAN	208	4	2.7	2.5	3.0	Vodegel, Don
26-0097	POMME DE TERRE	202	4	2.4	2.0	3.0	Hubbard, Ken
26-0097	POMME DE TERRE	205	3	2.5	2.0	3.0	Huseth, John

### Hennepin County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
27-0098	BASS	203	11	2.4	1.5	3.5	Groth, Marvin L.
27-0031	CALHOUN	202	9	11.7	8.5	16.0	DuFresne, Jorja
27-0119	CEDAR ISLAND	202	13	1.0	1.0	1.5	Lane, Steven
27-0034	CRYSTAL	202	3	2.8	2.5	3.0	Magnuson, Paul
27-0022	DIAMOND	202	7	1.6	1.5	2.0	Jeutter, Larry
27-0111-01	EAGLE	204	2	3.0	2.0	4.0	Hippen, Ron
27-0111-01	EAGLE	205	2	3.5	3.0	4.0	Hippen, Ron
27-0191-02	EAST SARAH	206	10	2.5	1.5	4.0	Allen, David
27-0118	FISH	206	10	4.0	2.5	10.5	Schultz Chouinard, Diane
27-0016	HARRIET	202	1	5.5	5.5	5.5	Westphal, Warren
27-0176	INDEPENDENCE	206	9	6.0	4.5	10.5	Bisagno, Lynne
27-0044	INDIANHEAD	201	2	4.1	3.8	4.5	Maney, Mike
27-0044	INDIANHEAD	202	2	4.3	3.8	4.8	Maney, Mike
27-0103	LOST	202	7	2.9	1.5	5.0	Shebuski, Joe

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## Hennepin County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
27-0133-06	MINNETONKA (BLACK LK)	201	13	6.1	4.5	10.5	King, Wallace
27-0133-10	MINNETONKA (CRYSTAL BAY)	201	6	7.5	4.5	12.0	Humboldt, Joyce
27-0133-09	MINNETONKA (HALSTEDS BAY)	203	8	2.8	2.0	4.0	Magnuson, Michelle
27-0133-09	MINNETONKA (HALSTEDS BAY)	204	4	2.3	2.0	2.5	Seeley, Larry E.
27-0133-02	MINNETONKA (LOWER LAKE)	201	5	11.3	10.5	12.5	Fey, Fred
27-0133-02	MINNETONKA (LOWER LAKE)	204	9	10.2	7.5	12.5	Backes, Marie J.
27-0133-02	MINNETONKA (LOWER LAKE)	210	3	9.0	8.0	10.0	Sundet, John
27-0133-02	MINNETONKA (LOWER LAKE)	213	9	10.5	9.5	13.0	Davis, Jill
27-0133-11	MINNETONKA (MAXWELL BAY)	201	7	5.3	2.5	11.0	Humboldt, Joyce
27-0133-12	MINNETONKA (STUBBS BAY)	202	6	3.0	1.5	7.5	Humboldt, Joyce
27-0133-05	MINNETONKA (UPPER LAKE)	201	6	4.8	3.5	7.5	Kittelsen, Jeff
27-0133-05	MINNETONKA (UPPER LAKE)	206	12	6.5	5.0	9.0	Partyka, Eugene
27-0133-05	MINNETONKA (UPPER LAKE)	207	16	7.2	5.5	9.5	Shellenbaum, Steve
27-0133-05	MINNETONKA (UPPER LAKE)	208	5	6.2	5.0	9.0	Mason, Mike
27-0133-05	MINNETONKA (UPPER LAKE)	210	17	7.8	6.0	12.0	Skramstad, Tom
27-0133-05	MINNETONKA (UPPER LAKE)	211	2	6.9	6.5	7.3	Edwards, Ward
27-0133-14	MINNETONKA (W. ARM)	206	8	2.0	1.5	2.5	Johnson, Paul
27-0055	MIRROR	201	4	21.3	18.0	27.0	Shaughnessy, Suzanne
27-0070	MITCHELL	202	12	1.8	1.3	2.0	Strand, Tam
27-0019	NOKOMIS	202	7	3.9	1.5	12.5	Jeutter, Larry
27-0178	OX YOKE	201	12	2.5	2.0	3.0	Albers, Mitch
27-0107	PARKERS	201	16	9.9	5.0	18.0	Videen, Marsha & Robert
27-0111-02	PIKE	202	2	2.8	2.5	3.0	Hippen, Ron
27-0111-02	PIKE	203	2	2.5	2.5	2.5	Hippen, Ron
27-0014	POWDERHORN	203	4	3.9	2.5	6.5	Livingston, James
27-0076	RED ROCK	201	2	3.3	2	4.5	Henk, Ken
27-0116	RICE	201	12	2.6	1.5	4.5	Schneider, George
27-0141	TANAGER	202	6	2.5	1.8	3.5	Molumby, Gary
27-0117	WEAVER	201	8	11.0	6.0	18.0	Lugtu, Trish
27-0191-01	WEST SARAH	206	21	3.4	1.5	10.5	Peterson, Mike

## Hubbard County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
29-0208	BAD AXE	203	9	14.9	12.0	18.0	Martin, John
29-0146	BELLE TAINÉ	201	7	15.4	10.5	19.5	Smith, Bob & Julie
29-0146	BELLE TAINÉ	202	7	16.4	10.5	22.5	Smith, Bob & Julie
29-0146	BELLE TAINÉ	203	7	20.2	15.0	24.5	Smith, Bob & Julie
29-0146	BELLE TAINÉ	204	7	20.6	16.0	26.5	Smith, Bob & Julie
29-0032	BIG BASS	201	13	19.0	17.0	21.0	Miller, Fred
29-0185	BIG SAND	204	9	20.9	17.0	27.0	Wenzel, James B.
29-0185	BIG SAND	206	4	19.6	15.0	24.5	Dyre, Dan
29-0185	BIG SAND	206	9	20.1	15.0	25.0	Wenzel, James B.

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## Hubbard County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
29-0185	BIG SAND	207	4	19.6	16.5	27.0	Dyre, Dan
29-0185	BIG SAND	208	4	20.0	16.5	25.5	Dyre, Dan
29-0185	BIG SAND	208	6	23.0	21.0	26.0	Provinzino, Dr. Richard J.
29-0143	BIG STONY	203	6	9.3	7.5	11.0	Petersen, Roger W.
29-0184	BLUE	203	13	18.2	13.0	21.5	Carlson, Rollin
29-0142	DUCK	201	12	8.3	7.5	9.5	Mead, Dewayne
29-0256	EAGLE	201	10	10.6	9.0	11.5	Weideman, Mike & Janine
29-0256	EAGLE	202	10	10.6	8.5	12.0	Weideman, Mike & Janine
29-0110	EAST DEAD	201	10	22.3	20.0	25.0	Graham, Jim
29-0072	EIGHTH CROW WING	202	5	7.6	4.0	10.5	Weil, Jim & Joann
29-0092	FIFTH CROW WING	201	9	9.3	5.0	15.0	Petersen, Howard E.
29-0086	FIRST CROW WING	203	6	2.7	2.0	5.0	Forcier, Oscar
29-0242	FISH HOOK	201	11	12.1	9.0	15.0	McCann, Mike
29-0242	FISH HOOK	202	11	12.3	10.0	15.0	McCann, Mike
29-0242	FISH HOOK	203	11	12.2	10.0	15.0	McCann, Mike
29-0242	FISH HOOK	204	11	12.3	10.0	15.0	McCann, Mike
29-0242	FISH HOOK	205	11	12.3	10.0	15.0	McCann, Mike
29-0061	GARFIELD	203	13	10.2	5.0	20.0	Warisch, Mark
29-0188	GILMORE	202	16	12.5	7.0	15.0	Thielges, Tom & Iva
29-0071	GRACE	201	12	11.2	7.0	20.0	Black, Richard
29-0088	ISLAND	201	4	13.3	12.0	15.0	Nelson, James
29-0254	ISLAND	201	7	8.4	4.5	10.0	Ridgley, Bryan
29-0075	KABEKONA	206	15	11.5	6.0	17.5	Smeby, Rolf C.
29-0313	LITTLE MANTRAP	201	8	17.6	13.5	20.0	Axelson, June & Richard
29-0313	LITTLE MANTRAP	202	8	17.9	16.0	20.0	Axelson, June & Richard
29-0313	LITTLE MANTRAP	203	8	17.5	16.0	19.5	Axelson, June & Richard
29-0150	LITTLE SAND	201	8	21.9	19.0	27.0	Luke, Mel
29-0150	LITTLE SAND	203	7	20.3	18.0	25.0	Sedlak, Sarah
29-0161	LONG	201	7	10.5	8.0	12.5	Dahl, Scott
29-0161	LONG	202	7	10.7	8.5	12.0	Dahl, Scott
29-0161	LONG	203	7	10.6	8.5	12.0	Dahl, Scott
29-0180	LOWER BOTTLE	201	10	10.8	7.0	16.5	Evans, Lyle
29-0180	LOWER BOTTLE	203	10	11.8	7.0	15.5	Evans, Lyle
29-0180	LOWER BOTTLE	204	10	11.4	8.0	15.0	Evans, Lyle
29-0151-01	MANTRAP (EAST BASIN)	201	15	12.5	8.5	16.5	Laske, Lyle
29-0151-01	MANTRAP (EAST BASIN)	203	15	12.3	8.0	16.0	Laske, Lyle
29-0151-05	MANTRAP (HOME BAY)	201	17	14.8	12.0	17.0	Gabbert, Charles W.
29-0151-02	MANTRAP (MIDDLE BASIN)	203	17	10.0	6.5	13.0	Gabbert, Charles W.
29-0151-02	MANTRAP (MIDDLE BASIN)	205	17	9.1	5.5	12.5	Gabbert, Charles W.
29-0151-02	MANTRAP (MIDDLE BASIN)	207	17	10.0	6.5	13.5	Gabbert, Charles W.
29-0151-04	MANTRAP (WEST ARM)	202	17	13.4	11.0	18.0	Gabbert, Charles W.
29-0151-04	MANTRAP (WEST ARM)	203	17	13.0	11.0	16.0	Gabbert, Charles W.
29-0101-02	MIDDLE CROOKED	202	7	11.4	11.0	12.0	Lein, Mike

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## **Hubbard County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
29-0066	MIIDGE	201	9	13.4	10.5	16.0	Brose, Ralph
29-0247	MORAN	202	6	12.3	12.0	13.0	Giefer, Tom
29-0025	NINTH CROW WING	201	6	9.0	7.0	11.0	Weil, Jim & Joann
29-0087	PALMER	203	10	11.2	9.0	12.5	Hed, Loren
29-0178	PICKEREL	201	4	10.8	9.0	14.0	Rausch, Christine
29-0178	PICKEREL	202	4	13.1	12.0	14.0	Rausch, Christine
29-0178	PICKEREL	202	1	12.0	12.0	12.0	Grob, Kenneth
29-0156	PLANTAGENET	202	15	6.2	4.5	11.5	Mueller, Clint
29-0250	PORTAGE	201	27	3.0	2.3	4.0	Peterson, Marilyn
29-0243	POTATO	202	16	10.6	8.5	13.0	Rothermel, Richard A.
29-0243	POTATO	203	16	9.9	7.0	13.0	Rothermel, Richard A.
29-0243	POTATO	204	16	11.1	7.5	14.0	Sundstrom, Jim
29-0243	POTATO	205	11	10.8	9.0	13.0	Sorenson, Mark
29-0243	POTATO	206	4	11.9	10.0	14.5	Grob, Kenneth
29-0215	SCHOOLCRAFT	201	1	9.5	9.5	9.5	Grob, Kenneth
29-0091	SEVENTH CROW WING	201	5	9.1	6.0	12.5	Bastis, Charles
29-0043	SHINGOBEE	201	16	12.3	8.5	16.5	Hudson, Dallas
29-0212	SKUNK	201	4	19.0	18.0	21.0	Holz, Del
29-0239	SPEARHEAD	202	13	16.7	14.0	23.0	Mississippi Headwaters, Audobon
29-0117-02	SPIDER (EAST BAY)	201	9	14.9	12.0	18.5	Miller, Everett W.
29-0117-02	SPIDER (EAST BAY)	203	11	15.5	12.0	19.0	Miller, Everett W.
29-0077	THIRD CROW WING	202	14	2.6	1.5	4.0	Larson, Dan
29-0148	UPPER BOTTLE	201	5	11.2	8.0	19.0	Jones, Bill
29-0148	UPPER BOTTLE	202	5	11.2	8.0	18.0	Jones, Bill
29-0148	UPPER BOTTLE	203	5	11.2	8.0	18.0	Jones, Bill
29-0148	UPPER BOTTLE	204	5	11.2	8.5	19.0	Jones, Bill
29-0148	UPPER BOTTLE	205	5	10.3	7.5	15.0	Jones, Bill
29-0149	WEST DEAD	201	10	18.5	17.0	20.0	Graham, Jim

## **Isanti County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
30-0043	FANNIE	202	3	3.5	2.0	6.0	Paulson, Lloyd
30-0043	FANNIE	203	3	3.5	2.0	6.0	Paulson, Lloyd
30-0080	FRANCIS	202	9	0.7	0.5	1.5	Quaintance, Don
30-0136	GREEN	204	14	3.6	2.5	4.5	McLaughlin, Jim
30-0072	LONG	204	6	1.0	1.0	1.0	Dutkiewicz, DuWayne
30-0096	LORY (LOWRY)	201	2	3.8	2.0	5.5	Golly, Darell
30-0022	SKOGMAN	201	13	4.6	3.0	14.0	Bley, Sherrill

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## Itasca County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0597	AMEN	201	10	14.5	10.0	20.0	LeDuc, F.L.
31-0259	BALSAM	201	4	11.0	10.0	12.5	Coil, Mark
31-0576	BASS	201	16	15.6	10.5	18.5	Axtell, Don
31-0576	BASS	202	12	12.5	10.0	15.5	Mutchler, Julie
31-0197	BATTLE	201	9	7.6	6.0	9.0	Blackmer, Lawrence
31-0058	BEATRICE	201	14	12.5	10.5	15.0	Gardner, Neil F.
31-0726	BELLO	201	8	10.6	9.0	13.5	Vojta, James
31-0017	BENGAL	201	5	13.2	11.5	14.5	Sinn, Terry
31-0656	BIG DICK	201	4	11.1	10.5	12.0	Knutson, Clayton J.
31-0210	BLACKBERRY	201	2	7.0	7.0	7.0	Reed, Rian H.
31-0395	BLUEWATER	202	16	22.8	20.0	25.0	Ellsworth, Nancy
31-0395	BLUEWATER	203	16	22.3	19.5	27.0	Klacan, George R.
31-0069	BUCK	201	10	10.4	6.5	15.0	Maki, Charlotte
31-0069	BUCK	202	3	10.0	7.0	15.0	Walsh, Mike
31-0424	BURNT SHANTY	202	13	17.7	12.8	23.0	Simonson, Ken & Betty
31-0413	BURROWS	201	5	12.8	11.5	14.5	Pedrow, Paul
31-0620	CARIBOU	203	7	34.7	30.5	46.0	Uggla, Don
31-0620	CARIBOU	205	7	35.7	30.5	45.0	Uggla, Don
31-0214	CLEARWATER (ROUND)	201	6	5.7	4.5	6.0	Reed, Rian H.
31-0540	CLUBHOUSE	203	2	16.3	16.0	16.5	Lundquist, Erik
31-0193	CROOKED	201	6	8.7	7.0	10.0	Pearson, Mary Jean
31-0857-01	CUT FOOT SIOUX	202	14	8.4	4.0	16.0	Tollenaar, Norm
31-0334	DEER	201	6	8.6	7.5	9.5	Carlson, Dennis M.
31-0719	DEER	201	9	14.0	12.5	16.0	Bengtson, Wayne
31-0719	DEER	206	4	15.1	13.5	17.0	Goracke, Earl E.
31-0719	DEER	207	2	16.0	16.0	16.0	Widen, Douglas A.
31-0719	DEER	209	8	14.6	13.5	16.0	Chatterton, David
31-0719	DEER	210	5	16.5	14.0	18.5	Ritzinger, George
31-0719	DEER	211	6	17.4	15.0	20.5	Ratzlaff, Joan
31-0921	DIXON	201	7	4.6	2.5	8.0	Lathrop, Dave
31-0882	DORA	201	16	8.6	6.5	11.0	Lacher, Richard G.
31-0221	DUNNING	201	6	18.5	16.5	24.0	Orf, D. Hestwood & Earl
31-0616	EAST SMITH	201	11	12.2	11.0	15.0	Hugdahl, Tom
31-0497	FIFTH CHAIN LAKE (GUNN)	201	10	14.1	12.0	18.0	Maschwitz, David
31-0183	FIVE ISLAND	201	7	10.9	9.0	14.0	Brewer, Jim
31-0569	GUILE	201	5	11.0	9.0	15.0	Christman, Howard
31-0569	GUILE	202	5	11.6	10.5	14.0	Christman, Howard
31-0492	GUM (THIRD CHAIN, GUNN)	201	10	14.6	12.5	16.5	Maschwitz, David
31-0782	GUNDERSON	201	3	12.7	10.0	14.0	David, Rachelle
31-0782	GUNDERSON	202	3	13.0	11.0	14.0	David, Rachelle
31-0452	GUNN (SOUTH LAKE)	201	10	14.8	12.5	17.0	Maschwitz, David
31-0452	GUNN (SOUTH LAKE)	201	5	13.5	10.0	15.5	Gronberg, Wally

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MEAN: Mean Secchi Transparency (ft)

MAX: Maximum Secchi Reading (ft)

**Itasca County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0361	HALE	201	15	10.7	6.0	15.0	Libbey, Richard K.L.
31-0373	HALE	201	11	19.5	15.0	21.0	Erickson, Vern
31-0020	HART	201	9	9.9	8.5	11.0	Friedbauer, Allan
31-0154	HARTLEY	201	12	11.5	10.0	12.0	Hartman, Bruce
31-0696	HORSESHOE	202	10	11.4	10.5	12.0	Olsen, Ronnie
31-0254	IAASAC	201	9	13.7	12.5	16.0	Erickson, Bob
31-0372	ICE (CRYSTAL)	200	2	18.5	12.5	24.5	Braun-Johnson, Susan
31-0913	ISLAND	205	9	5.3	3.0	9.0	Luadtke, William
31-0657-01	JACK THE HORSE (N.)	201	7	12.4	12.0	13.0	Dobihal, Charles C.
31-0657-02	JACK THE HORSE (S.)	201	7	12.4	12.0	13.0	Dobihal, Charles C.
31-0786	JESSIE	203	11	7.7	3.0	16.5	Nelson, Bill
31-0586	JOHNSON	202	18	15.4	14.0	17.0	Hendrickson, Bud
31-0231	LAWRENCE	201	10	4.5	3.5	5.5	Peters, Walter
31-0575	LITTLE BASS	201	9	12.5	10.5	14.0	Angst, Jerry
31-0758	LITTLE BOWSTRING	201	14	7.0	3.5	11.0	Ford, Norman
31-0198	LITTLE COWHORN	201	3	4.2	2.5	5.5	Loegering, Perry C. & Shirley
31-0621	LITTLE DEAD HORSE	201	5	14.3	11.5	17.0	Johnson, Dennis
31-0784	LITTLE JESSIE	202	8	13.8	9.5	16.0	Nystrom, Mike
31-0613	LITTLE LONG	202	2	15.5	14.5	16.5	Chapin, Tom
31-0613	LITTLE LONG	203	11	16.5	16.0	17.0	Buck, Virgil
31-0610	LITTLE MOOSE	202	1	8.0	8.0	8.0	Skallman, Dean V.
31-0093	LITTLE SAND	202	11	8.9	6.0	11.0	Kujala, Eli
31-0341	LITTLE SPLIT HAND	202	1	6.5	6.5	6.5	Loegering, Perry C. & Shirley
31-0341	LITTLE SPLIT HAND	203	7	6.6	3.5	11.0	Rademacher, John
31-0394	LITTLE TROUT	202	9	20.1	17.0	22.0	Oberg, Paul
31-0399	LITTLE WABANA	202	11	21.8	19.0	25.5	Adams, Cheryl
31-0266	LONG	202	10	6.1	4.0	9.0	Hall, Curtis
31-0571	LOON	201	7	12.4	11.5	14.0	Hansen, Norley
31-0759	MAKI	201	9	17.1	12.0	22.0	Ford, Norman
31-0585	MCAVITY (CROOKED)	201	5	14.5	12.5	16.0	Olson, Nancy
31-0078	MCGUIRE	201	11	4.1	2.0	7.0	Norton, Art
31-0722	MOOSE	202	9	11.5	9.0	16.5	Christensen, Marty
31-0290	NAPOLEON	203	5	10.5	9.0	12.0	Askew, Wiley
31-0877	NATURES (SQUAW)	202	7	2.9	2.0	4.0	Hurley, Jack
31-0877	NATURES (SQUAW)	203	7	3.1	2.3	4.5	Hurley, Jack
31-0653	NORTH STAR	205	6	11.7	8.0	14.5	Dittberner, Duane
31-0190	NORTH TWIN	202	4	7.9	6.5	8.5	Appelget, Tony
31-0339	PICKEREL	201	10	11.3	10.0	12.5	Stensrud, Homer
31-0532-01	POKEGAMA (MAIN BASIN)	202	7	16.6	14.0	21.0	Giddings, Bob & Tom
31-0532-01	POKEGAMA (MAIN BASIN)	204	7	16.9	14.0	21.0	Giddings, Bob & Tom
31-0532-01	POKEGAMA (MAIN BASIN)	205	7	16.2	13.5	19.0	Giddings, Bob & Tom
31-0532-01	POKEGAMA (MAIN BASIN)	206	6	11.6	10.0	13.5	Bonner, Jack
31-0532-01	POKEGAMA (MAIN BASIN)	208	13	16.5	13.0	21.0	Davis, Pat

Legend:

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## Itasca County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0532-01	POKEGAMA (MAIN BASIN)	214	7	15.7	13.0	18.0	Lorenz, Dave
31-0532-01	POKEGAMA (MAIN BASIN)	215	6	11.7	11.0	13.0	Bonner, Jack
31-0532-01	POKEGAMA (MAIN BASIN)	216	6	11.3	9.0	13.5	Bonner, Jack
31-0532-01	POKEGAMA (MAIN BASIN)	217	6	11.7	10.0	14.0	Bonner, Jack
31-0532-02	POKEGAMA (WENDIGO)	203	12	12.8	11.5	14.0	Hoshal, Wayne
31-0532-02	POKEGAMA (WENDIGO)	204	5	15.0	14.5	15.5	Farris, Todd
31-0532-02	POKEGAMA (WENDIGO)	205	5	14.8	13.5	16.0	Farris, Robert
31-0384	PRAIRIE	201	7	5.4	4.5	6.5	Kleinert, Jeff
31-0284	RADDISON	201	6	15.5	15.5	15.5	Farmer, Chris
31-0717	RICE	203	8	12.0	11.3	14.3	Frieze, Gail
31-0717	RICE	204	4	12.9	10.5	16.0	Goeman, Tim & Julie
31-0268	ROUND	201	3	22.8	17.0	30.0	Lannon, James B.
31-0896	ROUND	201	8	5.3	3.0	8.0	Howard, Richard
31-0896	ROUND	202	8	4.3	2.5	7.0	Ward, Donald
31-0268	ROUND	205	3	19.8	17.0	23.5	Lannon, James B.
31-0268	ROUND	206	3	20.2	17.0	23.0	Lannon, James B.
31-0268	ROUND	207	3	20.3	15.0	25.5	Lannon, James B.
31-0268	ROUND	208	3	20.5	16.0	25.0	Lannon, James B.
31-0268	ROUND	209	3	19.8	17.0	23.0	Lannon, James B.
31-0209	ROUND (CLEAR)	201	8	10.1	5.5	15.5	Reed, Janis Y.
31-0438	SAND	201	15	18.5	16.0	23.5	Altobelli, Ione
31-0826	SAND	202	9	8.4	6.0	12.0	Smith, Dave
31-0345	SCRAPPER (WILSON)	201	6	8.8	4.5	14.0	Fortner, Larry
31-0084	SHALLOW	203	5	13.6	13.0	15.0	Ranta, Archie
31-0554	SISEEBAKWET (SUGAR)	203	16	13.8	10.0	18.0	Stenerson, Dick
31-0554	SISEEBAKWET (SUGAR)	214	8	14.6	9.5	19.0	Olson, Don
31-0547	SMITH	201	3	10.3	10.0	10.5	Loegering, Perry C. & Shirley
31-0255	SNAPTAIL	201	7	14.1	13.5	15.0	Hupila, Alvar E.
31-0003	SOUTH STURGEON	201	10	5.2	3.0	7.0	Leschak, Pete
31-0555	SOUTH SUGAR	201	10	14.7	10.0	17.0	Sandeen, Dan
31-0191	SOUTH TWIN	205	5	10.3	8.5	13.0	Appelget, Tony
31-0191	SOUTH TWIN	206	4	9.3	8.5	10.0	Appelget, Tony
31-0538	SPIDER	203	16	7.3	5.0	11.5	Swenson, Glen R.
31-0353	SPLIT HAND	203	7	5.4	3.5	8.5	Winkler, Greg
31-0926	SUGAR	201	1	6.5	6.5	6.5	Paakh, Bruce
31-0067-02	SWAN (MAIN BASIN)	201	15	15.9	9.0	21.0	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	202	15	16.2	9.5	21.5	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	203	15	15.3	10.5	19.0	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	204	15	13.9	9.0	17.5	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	205	6	13.1	10.0	17.5	Weiss, Holly
31-0067-01	SWAN (WEST BAY)	201	15	8.7	4.0	15.0	Mattson, Lou
31-0542	THREE ISLAND	201	7	21.1	15.0	25.0	McDougall, Grant
31-0127	TRESTLE	201	5	13.4	11.5	14.5	Adamson, Jack

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SITE: Monitoring Location on Lake MEAN: Mean Secchi Transparency (ft) MAX: Maximum Secchi Reading (ft)

### **Itasca County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0216	TROUT	202	8	13.7	7.5	21.0	Heltemes, Don
31-0410	TROUT	202	9	18.1	15.0	21.5	Zimmerman, John
31-0410	TROUT	202	2	22.3	22.0	22.5	Berg, William E.
31-0410	TROUT	203	2	18.3	12.5	24.0	Berg, William E.
31-0410	TROUT	203	9	16.9	12.0	20.0	Zimmerman, John
31-0410	TROUT	204	3	20.3	12.0	24.5	Berg, William E.
31-0410	TROUT	204	8	16.3	12.0	20.5	Zimmerman, John
31-0216	TROUT	205	6	14.9	10.0	22.0	Karppi, William
31-0410	TROUT	205	2	18.8	13.0	24.5	Berg, William
31-0410	TROUT	205	9	17.1	12.0	20.5	Zimmerman, John
31-0216	TROUT	206	8	12.0	9.0	17.5	Heltemes, Don
31-0216	TROUT	207	8	14.3	8.5	22.0	Hecimovich, Darrel
31-0725	TURTLE (BIG TURTLE)	201	8	17.9	17.5	18.5	Hagen, Owen A.
31-0725	TURTLE (BIG TURTLE)	202	12	16.6	14.5	18.5	Stretton, Ann & Bill
31-0725	TURTLE (BIG TURTLE)	205	8	14.9	13.5	18.0	Dziuk, Dr. Harold
31-0725	TURTLE (BIG TURTLE)	206	5	15.8	14.0	18.0	Swanson, Kris
31-0392	WABANA	201	11	17.4	15.0	20.0	Koewler, Dennis & Jean
31-0392	WABANA	202	10	20.0	19.0	22.0	Miner, Sherry
31-0392	WABANA	205	12	18.5	15.0	21.0	Lick, Susan
31-0392	WABANA	206	16	16.7	15.0	18.0	Zimmer, Kenneth
31-0392	WABANA	207	10	19.3	18.5	21.0	Miner, Sherry
31-0260	WHITE SWAN	201	5	9.8	9.5	10.5	Schloesser, Larry

### **Jackson County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
32-0022	CLEAR	202	6	1.8	1.0	2.5	Pribyl, David
32-0018	FISH	203	6	6.2	3.0	14.0	Pribyl, David
32-0024	LITTLE SPIRIT	201	6	1.5	1.0	2.0	Pribyl, David
32-0020	LOON	201	6	1.2	1.0	1.5	Pribyl, David

### **Kanabec County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
33-0040	ANN	202	4	2.3	1.5	3.0	Anderson, Tim
33-0040	ANN	203	3	2.2	1.5	2.5	Coplan, Terry
33-0040	ANN	204	3	2.5	2.5	2.5	Coplan, Terry
33-0040	ANN	205	3	3.0	2.5	3.5	Coplan, Terry
33-0033	DEVILS	202	5	5.2	4.5	6.0	Brothen, Suzanne
33-0036	FISH	201	4	2.3	1.5	3.0	Mandery, Duane
33-0032	LEWIS	201	7	7.7	7.0	9.0	Shimshock, Mary
33-0032	LEWIS	202	7	6.7	5.0	9.0	Shimshock, Mary
33-0009	POMROY	201	9	3.7	2.5	4.5	Haertzen, Dennis
33-0015	QUAMBA	202	12	1.9	1.5	3.0	Kieffer, Dennis
33-0015	QUAMBA	203	4	1.8	1.5	2.5	Peterson, Wayne L.
33-0015	QUAMBA	204	4	1.8	1.5	2.5	Peterson, Wayne L.

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## Kandiyohi County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
34-0206	ANDREW	205	10	7.6	5.5	12.0	Taunton, Tom
34-0086	BIG KANDIYOH	202	3	5.0	5.0	5.0	Stuhr, Dave
34-0086	BIG KANDIYOH	204	7	2.8	2.0	3.5	Furr, Tim
34-0086	BIG KANDIYOH	205	7	3.4	2.0	5.5	Furr, Tim
34-0086	BIG KANDIYOH	206	3	5.2	5.0	5.5	Stuhr, Dave
34-0032	CARRIE	201	9	3.9	3.5	4.5	Lehmbecker, Gene
34-0158-04	CROW RIVER MILL POND (MIDDLE BAY)	201	8	5.1	4.0	6.0	Beck, Loren
34-0044	DIAMOND	204	4	4.4	3.0	5.5	Gilmer, Jon
34-0044	DIAMOND	206	8	5.1	2.0	10.0	Schultz, Bill
34-0171	EAGLE	202	14	6.9	4.0	13.0	Eagle Lake, Assoc.
34-0246	EAST SOLOMON	201	6	1.5	1.0	2.0	Williamson, Robert
34-0022-02	ELIZABETH (MAIN LAKE)	202	3	1.7	1.5	2.0	Engelby, Loren
34-0119	ELKHORN	201	6	9.4	7.0	12.0	Chetrit, Guy
34-0217	FLORIDA	203	4	11.6	10.5	12.5	Brouwer, Del
34-0181	FOOT	201	7	1.8	1.5	2.5	Gieseke, Marvin
34-0181	FOOT	202	8	2.9	2.5	3.0	Haines, John
34-0224	GAMES	202	8	8.4	7.0	10.0	Bosch, Doug & Barb
34-0142	GEORGE	201	11	12.6	8.0	19.0	Howell, Norman
34-0079	GREEN	201	8	14.8	12.0	18.0	Wacholz, Marlyn
34-0079	GREEN	202	8	14.9	12.0	17.5	Wacholz, Marlyn
34-0079	GREEN	203	8	14.6	11.0	17.5	Wacholz, Marlyn
34-0079	GREEN	208	8	14.6	11.0	17.5	Wacholz, Marlyn
34-0079	GREEN	211	7	11.4	9.0	16.0	Peterson, Chris
34-0347	HEFTA	201	3	0.9	0.8	1.0	Sondrol, Brenda
34-0116	HENDERSON	202	9	10.3	7	13.5	Fladeboe, Gerold
34-0116	HENDERSON	203	9	10.7	7	14	Fladeboe, Gerold
34-0116	HENDERSON	204	8	10.7	8	13	Fladeboe, Gerold
34-0066	LONG	201	9	11.4	9.0	14.5	Zink, Larry
34-0066	LONG	202	9	11.7	8.5	15.0	Zink, Larry
34-0192	LONG	202	9	5.6	3.5	7.0	Swanson, Tim
34-0066	LONG	203	4	14.3	11.0	21.5	Knudsen, Kyle
34-0192	LONG	203	9	6.1	3.5	8.0	Swanson, Tim
34-0066	LONG	204	9	11.1	8.5	13.5	Zink, Larry
34-0192	LONG	204	9	5.8	4.0	8.0	Swanson, Tim
34-0158-02	MUD (MONOGALIA)	202	4	5.6	4.0	7.0	Wright, Russ
34-0154	NEST	204	8	5.0	3.5	10.0	Lovold, Dean
34-0251	NORWAY	201	11	4.0	3.0	5.5	Kaye, John
34-0251	NORWAY	202	14	1.8	1.0	3.0	Yeo, Greg & Rhett
34-0251	NORWAY	203	11	3.6	2.5	6.0	Torison, George
34-0283	ST. JOHNS	201	4	3.8	2.0	5.5	Petersen, Darrell
34-0062	UNNAMED (CALHOUN)	201	14	4.6	3.5	6.0	Wensman, Tim
34-0062	UNNAMED (CALHOUN)	202	8	4.2	3.0	5.5	Johnson, Ron

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## Kandiyohi County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
34-0169-03	WAKANDA (MAIN BAY)	201	15	0.5	0.3	0.8	Druskin, Marilee F.
34-0180	WILLMAR	201	7	1.4	1.0	2.0	Williamson, Robert

## Lake County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
38-0365	AHMAKOSE	200	1	20.0	20.0	20.0	High Adventure Camp, Northern Tier
38-0365	AHMAKOSE	201	1	20.5	20.5	20.5	High Adventure Camp, Northern Tier
38-0365	AHMAKOSE	202	2	20.0	20.0	20.0	Bound Wilderness, Outward
38-0330	ALICE	200	1	10.0	10.0	10.0	High Adventure Camp, Northern Tier
38-0330	ALICE	201	1	13.0	13.0	13.0	ELC, Wolf Ridge
38-0330	ALICE	202	1	19.0	19.0	19.0	ELC, Wolf Ridge
38-0330	ALICE	202	2	9.6	8.8	10.5	High Adventure Camp, Northern Tier
38-0330	ALICE	203	2	13.0	11.0	15.0	High Adventure Camp, Northern Tier
38-0227	AMOEGER (BEARSKIN)	201	1	25.0	25.0	25.0	Bound Wilderness, Outward
38-0227	AMOEGER (BEARSKIN)	201	1	21.5	21.5	21.5	High Adventure Camp, Northern Tier
38-0195	ANNIE	200	1	6.5	6.5	6.5	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	200	3	13.7	11.5	17.0	Bound Wilderness, Outward
38-0645	BASSWOOD	201	1	11.0	11.0	11.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	202	1	8.0	8.0	8.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	203	4	10.8	10.0	11.5	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	204	2	14.0	13.5	14.5	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	205	2	17.3	14.5	20.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	206	2	7.5	7.5	7.5	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	207	1	18.5	18.5	18.5	Bound Wilderness, Outward
38-0645	BASSWOOD	208	1	6.0	6.0	6.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	209	1	11.0	11.0	11.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	210	1	9.0	9.0	9.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	211	1	9.0	9.0	9.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	212	1	14.0	14.0	14.0	High Adventure Camp, Northern Tier
38-0645	BASSWOOD	213	1	8.5	8.5	8.5	High Adventure Camp, Northern Tier
38-0532	BIRCH	200	3	15.2	13.5	16.0	High Adventure Camp, Northern Tier
38-0532	BIRCH	202	1	16.0	16.0	16.0	Bound Wilderness, Outward
38-0532	BIRCH	203	1	13.5	13.5	13.5	Bound Wilderness, Outward
38-0532	BIRCH	204	1	15.0	15.0	15.0	High Adventure Camp, Northern Tier
38-0532	BIRCH	205	1	15.5	15.5	15.5	High Adventure Camp, Northern Tier
38-0532	BIRCH	206	1	13.0	13.0	13.0	High Adventure Camp, Northern Tier
38-0532	BIRCH	207	1	17.5	17.5	17.5	High Adventure Camp, Northern Tier
38-0390	BONNIE	200	1	7.0	7.0	7.0	High Adventure Camp, Northern Tier
38-0390	BONNIE	202	1	16.0	16.0	16.0	Bound Wilderness, Outward
38-0503	BOOT	200	1	11.6	11.6	11.6	High Adventure Camp, Northern Tier
38-0503	BOOT	202	1	5.0	5.0	5.0	Bound Wilderness, Outward

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## Lake County, continued

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38-0521	CARP	201	1	7.0	7.0	7.0	Bound Wilderness, Outward
38-0521	CARP	202	1	11.0	11.0	11.0	Bound Wilderness, Outward
38-0521	CARP	203	1	6.5	6.5	6.5	High Adventure Camp, Northern Tier
38-0510	CATTYMAN	201	1	5.5	5.5	5.5	High Adventure Camp, Northern Tier
38-0638	CLEARWATER	201	1	13.5	13.5	13.5	Bound Wilderness, Outward
38-0817	CROOKED	201	4	9.6	8.0	10.5	High Adventure Camp, Northern Tier
38-0817	CROOKED	202	3	10.0	8.5	12.0	High Adventure Camp, Northern Tier
38-0817	CROOKED	203	3	8.5	5.0	10.5	High Adventure Camp, Northern Tier
38-0817	CROOKED	204	1	12.0	12.0	12.0	High Adventure Camp, Northern Tier
38-0817	CROOKED	205	1	12.5	12.5	12.5	High Adventure Camp, Northern Tier
38-0391	DIX	201	1	15.0	15.0	15.0	High Adventure Camp, Northern Tier
38-0187	EDDY	201	2	17.0	15.0	19.0	High Adventure Camp, Northern Tier
38-0187	EDDY	203	2	18.0	18.0	18.0	High Adventure Camp, Northern Tier
38-0498	ENSIGN	203	1	12.0	12.0	12.0	Bound Wilderness, Outward
38-0498	ENSIGN	204	2	11.0	11.0	11.0	High Adventure Camp, Northern Tier
38-0498	ENSIGN	206	2	8.8	5.0	12.5	High Adventure Camp, Northern Tier
38-0498	ENSIGN	207	1	4.5	4.5	4.5	Watkins, Justin
38-0779	FARM	202	10	6.5	5.5	7.5	Lenartz, John
38-0779	FARM	203	9	4.7	4.0	6.0	Behnke, Gene
38-0779	FARM	204	9	7.3	5.5	9.0	Behnke, Gene
38-0528	FOUR	201	1	7.5	7.5	7.5	ELC, Wolf Ridge
38-0528	FOUR	202	1	13.5	13.5	13.5	Bound Wilderness, Outward
38-0528	FOUR	202	1	8.0	8.0	8.0	ELC, Wolf Ridge
38-0528	FOUR	203	1	8.0	8.0	8.0	High Adventure Camp, Northern Tier
38-0813	FOURTOWN	204	2	8.5	7.5	9.5	High Adventure Camp, Northern Tier
38-0372	FRASER	201	1	16.5	16.5	16.5	Bound Wilderness, Outward
38-0372	FRASER	202	1	14.0	14.0	14.0	High Adventure Camp, Northern Tier
38-0372	FRASER	203	1	14.5	14.5	14.5	Bound Wilderness, Outward
38-0372	FRASER	204	1	14.3	14.3	14.3	High Adventure Camp, Northern Tier
38-0782	GARDEN	201	9	5.4	5.0	5.5	Mason, Bud
38-0782	GARDEN	202	9	5.4	5.0	6.0	Mason, Bud
38-0782	GARDEN	203	9	5.4	5.0	6.0	Mason, Bud
38-0366	GERUND	201	2	14.1	9.8	18.5	Bound Wilderness, Outward
38-0508	GIBSON	201	2	9.5	9.0	10.0	High Adventure Camp, Northern Tier
38-0726	GOOD	202	1	3.0	3.0	3.0	Bound Wilderness, Outward
38-0557	GROUSE	201	6	6.3	6.0	6.5	Brekke, Gary
38-0206	HANSON	201	1	13.5	13.5	13.5	High Adventure Camp, Northern Tier
38-0792	HORSE	202	1	9.5	9.5	9.5	High Adventure Camp, Northern Tier
38-0484	HUDSON	201	1	8.0	8.0	8.0	ELC, Wolf Ridge
38-0484	HUDSON	201	1	9.5	9.5	9.5	High Adventure Camp, Northern Tier
38-0484	HUDSON	201	1	19.0	19.0	19.0	Bound Wilderness, Outward
38-0484	HUDSON	202	1	9.5	9.5	9.5	Bound Wilderness, Outward

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## Lake County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
38-0728	HULA	201	1	3.5	3.5	3.5	Bound Wilderness, Outward
38-0400	IMA	203	1	15.5	15.5	15.5	High Adventure Camp, Northern Tier
38-0400	IMA	204	1	11.0	11.0	11.0	High Adventure Camp, Northern Tier
38-0725	INDIANA	201	1	4.6	4.6	4.6	Bound Wilderness, Outward
38-0725	INDIANA	202	1	6.2	6.2	6.2	Bound Wilderness, Outward
38-0397	INSULA	201	1	10.0	10.0	10.0	ELC, Wolf Ridge
38-0397	INSULA	202	1	10.0	10.0	10.0	ELC, Wolf Ridge
38-0397	INSULA	203	1	10.3	10.3	10.3	Bound Wilderness, Outward
38-0397	INSULA	203	1	11.0	11.0	11.0	ELC, Wolf Ridge
38-0397	INSULA	204	1	20.0	20.0	20.0	Bound Wilderness, Outward
38-0194-01	JENNY	203	1	14.5	14.5	14.5	High Adventure Camp, Northern Tier
38-0242	JOHNSON (WOLF)	201	12	10.8	7.5	15.0	ELC, Wolf Ridge
38-0511	JORDAN	201	1	9.5	9.5	9.5	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	200	2	22.8	20.5	25.0	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	200	1	18.0	18.0	18.0	Bound Wilderness, Outward
38-0226	KEKEKABIC	201	2	25.5	25.0	26.0	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	202	1	19.5	19.5	19.5	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	203	2	26.3	26.0	26.5	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	204	1	19.5	19.5	19.5	Bound Wilderness, Outward
38-0226	KEKEKABIC	204	1	20.0	20.0	20.0	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	205	1	24.5	24.5	24.5	High Adventure Camp, Northern Tier
38-0226	KEKEKABIC	206	1	24.5	24.5	24.5	High Adventure Camp, Northern Tier
38-0188-02	KEKEKABIC POND 2	202	1	22.0	22.0	22.0	High Adventure Camp, Northern Tier
38-0334	KIANA	201	1	13.5	13.5	13.5	Bound Wilderness, Outward
38-0404	KNIFE	200	2	22.3	21.5	23.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	205	1	26.5	26.5	26.5	High Adventure Camp, Northern Tier
38-0404	KNIFE	206	1	22.5	22.5	22.5	High Adventure Camp, Northern Tier
38-0404	KNIFE	206	1	24.0	24.0	24.0	Bound Wilderness, Outward
38-0404	KNIFE	207	1	14.0	14.0	14.0	Bound Wilderness, Outward
38-0404	KNIFE	208	1	21.0	21.0	21.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	209	1	11.5	11.5	11.5	High Adventure Camp, Northern Tier
38-0404	KNIFE	210	1	21.0	21.0	21.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	211	1	20.0	20.0	20.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	212	3	22.3	22.0	23.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	213	1	24.0	24.0	24.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	214	1	12.0	12.0	12.0	High Adventure Camp, Northern Tier
38-0404	KNIFE	215	1	19.5	19.5	19.5	High Adventure Camp, Northern Tier
38-0169	LAKE OF THE CLOUDS	201	1	17.6	17.6	17.6	Bound Wilderness, Outward
38-0406	LAX	201	13	11.7	9.0	15.0	Linscheid, Jim
38-0703	LITTLE GABBRO	202	1	5.5	5.5	5.5	Bound Wilderness, Outward
38-0522	MELON	201	1	7.0	7.0	7.0	Bound Wilderness, Outward
38-0522	MELON	201	1	8.5	8.5	8.5	High Adventure Camp, Northern Tier

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## Lake County, continued

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38-0398	MISSIONARY	201	1	23.6	23.6	23.6	High Adventure Camp, Northern Tier
38-0398	MISSIONARY	202	1	29.0	29.0	29.0	High Adventure Camp, Northern Tier
38-0644	MOOSE	200	1	16.5	16.5	16.5	High Adventure Camp, Northern Tier
38-0644	MOOSE	201	1	15.0	15.0	15.0	High Adventure Camp, Northern Tier
38-0644	MOOSE	202	3	13.8	11.5	15.5	High Adventure Camp, Northern Tier
38-0644	MOOSE	203	2	15.0	14.5	15.5	High Adventure Camp, Northern Tier
38-0644	MOOSE	203	1	11.5	11.5	11.5	Watkins, Justin
38-0644	MOOSE	204	1	14.0	14.0	14.0	High Adventure Camp, Northern Tier
38-0644	MOOSE	205	2	15.5	14.0	17.0	High Adventure Camp, Northern Tier
38-0492	NEGLIGE	201	1	14.0	14.0	14.0	Bound Wilderness, Outward
38-0619	NEWFOUND	200	1	16.0	16.0	16.0	Bound Wilderness, Outward
38-0619	NEWFOUND	201	4	12.5	9.0	15.0	High Adventure Camp, Northern Tier
38-0619	NEWFOUND	202	4	13.0	10.0	15.0	High Adventure Camp, Northern Tier
38-0619	NEWFOUND	203	1	9.0	9.0	9.0	High Adventure Camp, Northern Tier
38-0605	ONE	203	1	8.5	8.5	8.5	High Adventure Camp, Northern Tier
38-0211	OTTERTRACK (CYPRESS)	200	2	22.5	21.5	23.5	High Adventure Camp, Northern Tier
38-0211	OTTERTRACK (CYPRESS)	202	1	23.0	23.0	23.0	Bound Wilderness, Outward
38-0220	PERENT (PARENT)	201	1	5.0	5.0	5.0	Sinden, Carol
38-0389	PICKLE	201	1	10.0	10.0	10.0	Bound Wilderness, Outward
38-0389	PICKLE	201	1	13.5	13.5	13.5	High Adventure Camp, Northern Tier
38-0610	RIFLE	201	1	8.0	8.0	8.0	Bound Wilderness, Outward
38-0225	SAGUS	202	1	11.6	11.6	11.6	High Adventure Camp, Northern Tier
38-0529	SNOWBANK	200	1	20.0	20.0	20.0	High Adventure Camp, Northern Tier
38-0778	SOUTH FARM	201	10	5.9	5.0	7.0	Lenartz, John
38-0531	SPLASH (LITTLE IRON)	202	1	5.0	5.0	5.0	Watkins, Justin
38-0388	SPOON	200	1	11.0	11.0	11.0	High Adventure Camp, Northern Tier
38-0388	SPOON	202	1	11.0	11.0	11.0	High Adventure Camp, Northern Tier
38-0388	SPOON	203	1	17.0	17.0	17.0	High Adventure Camp, Northern Tier
38-0744	STEWART	202	5	9.9	9.0	11.0	Starr, Linda
38-0360	STRUP	201	1	13.5	13.5	13.5	Bound Wilderness, Outward
38-0360	STRUP	202	1	9.0	9.0	9.0	High Adventure Camp, Northern Tier
38-0530	SUCKER	200	1	12.5	12.5	12.5	High Adventure Camp, Northern Tier
38-0530	SUCKER	201	1	16.0	16.0	16.0	High Adventure Camp, Northern Tier
38-0530	SUCKER	202	1	14.5	14.5	14.5	High Adventure Camp, Northern Tier
38-0530	SUCKER	203	2	14.5	14.0	15.0	High Adventure Camp, Northern Tier
38-0351	THOMAS	200	2	18.5	17.0	20.0	High Adventure Camp, Northern Tier
38-0351	THOMAS	201	1	19.2	19.2	19.2	Bound Wilderness, Outward
38-0351	THOMAS	201	1	15.0	15.0	15.0	High Adventure Camp, Northern Tier
38-0351	THOMAS	203	1	16.0	16.0	16.0	High Adventure Camp, Northern Tier
38-0351	THOMAS	204	1	15.5	15.5	15.5	High Adventure Camp, Northern Tier
38-0351	THOMAS	205	1	7.5	7.5	7.5	Bound Wilderness, Outward
38-0351	THOMAS	206	1	17.0	17.0	17.0	High Adventure Camp, Northern Tier
38-0351	THOMAS	207	1	14.8	14.8	14.8	High Adventure Camp, Northern Tier

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## Lake County, continued

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38-0600	THREE	200	1	7.0	7.0	7.0	High Adventure Camp, Northern Tier
38-0600	THREE	202	1	18.0	18.0	18.0	Bound Wilderness, Outward
38-0172	TOPAZ (STAR)	201	1	17.0	17.0	17.0	Bound Wilderness, Outward
38-0172	TOPAZ (STAR)	202	2	14.8	13.5	16.0	High Adventure Camp, Northern Tier
38-0490	TRADER	201	1	11.0	11.0	11.0	Bound Wilderness, Outward
38-0490	TRADER	201	1	16.6	16.6	16.6	High Adventure Camp, Northern Tier
38-0490	TRADER	202	1	7.0	7.0	7.0	High Adventure Camp, Northern Tier
38-0704	TURTLE	201	1	3.5	3.5	3.5	Bound Wilderness, Outward
38-0608	TWO	201	1	10.5	10.5	10.5	Bound Wilderness, Outward
38-0608	TWO	201	1	10.5	10.5	10.5	ELC, Wolf Ridge
38-0608	TWO	202	1	8.0	8.0	8.0	High Adventure Camp, Northern Tier
38-0852	UNNAMED	201	1	7.5	7.5	7.5	Bound Wilderness, Outward
38-0491	VERA	202	2	15.0	10.0	20.0	High Adventure Camp, Northern Tier
38-0491	VERA	203	1	14.0	14.0	14.0	Bound Wilderness, Outward
38-0047	WILSON	201	6	15.7	13.5	18.5	Kingston, Tom & Mary
38-0642	WIND	201	2	9.3	4.5	14.0	High Adventure Camp, Northern Tier
38-0642	WIND	202	1	20.0	20.0	20.0	Bound Wilderness, Outward
38-0361	WISINI	200	1	12.0	12.0	12.0	High Adventure Camp, Northern Tier
38-0361	WISINI	201	1	12.5	12.5	12.5	Bound Wilderness, Outward
38-0361	WISINI	202	1	10.0	10.0	10.0	Bound Wilderness, Outward
38-0361	WISINI	203	1	9.0	9.0	9.0	High Adventure Camp, Northern Tier

## Lake of the Woods County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
39-0002-01	LAKE OF THE WOODS	201	11	2.9	1.0	3.5	Nelson, LeRoy O.

## Le Sueur County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
40-0092-01	EAST JEFFERSON	206	7	4.5	2.5	10.0	Pederson, Ben
40-0124	EMILY	201	8	3.4	2.5	5.0	Hausenbauer, Tom
40-0051	FISH	201	9	13.1	11.0	14.5	Roessler, Charles & Genevieve
40-0057	FRANCES	202	3	5.7	4.5	7.0	Houlihan, Dan
40-0063	GERMAN	202	6	3.9	3.5	4.0	Clemen, Julie
40-0092-04	MIDDLE JEFFERSON	204	5	2.6	1.5	6.5	Nerison, Larry
40-0056	RAYS (CHARLES)	201	3	2.2	2.0	2.5	Klages, Tim
40-0002	SAKATAH (UPPER)	201	10	5.1	2.5	9.0	Chromy, Harold
40-0092-03	SWEDE'S BAY	204	9	0.8	0.5	3.0	Gardner, Doug
40-0031	TETONKA	201	16	5.4	1.5	15.0	Wangen, Roy
40-0031	TETONKA	204	16	4.8	1.5	15.0	Wangen, Roy
40-0031	TETONKA	205	13	4.7	1.5	14.0	Schwake, Gene & Bonnie
40-0031	TETONKA	206	13	4.9	1.5	16.0	Schwake, Gene
40-0117	WASHINGTON	203	14	6.4	3.0	14.0	Schwarck, Greg
40-0117	WASHINGTON	205	8	3.7	2.5	8.0	Riessen, Reinhard

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## Le Sueur County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
40-0117	WASHINGTON	206	11	2.0	1.5	3.5	Venjohn, Larry
40-0117	WASHINGTON	207	2	5.0	4.0	6.0	Engels, Greg
40-0117	WASHINGTON	208	10	2.4	1.5	4.0	Venjohn, Larry
40-0117	WASHINGTON	209	10	2.4	1.5	4.0	Venjohn, Larry
40-0092-02	WEST JEFFERSON	201	8	2.1	1.5	4.0	West, Warren (Buster)
40-0092-02	WEST JEFFERSON	202	8	1.9	1.5	3.0	West, Warren (Buster)
40-0092-02	WEST JEFFERSON	203	8	2.1	1.5	3.0	West, Warren (Buster)
40-0092-02	WEST JEFFERSON	204	8	1.9	1.0	4.5	West, Warren (Buster)

## Lincoln County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
41-0021	DEAD COON	201	12	1.8	1.0	2.5	Madsen, Ron
41-0089	SHAOKOTAN	201	15	5.5	2.0	11.0	Hanson, Mark
41-0089	SHAOKOTAN	203	15	5.1	2.0	10.0	Hanson, Mark

## McLeod County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
43-0073	HOOK	201	8	1.3	1.0	2.0	Bombeck, Jim
43-0073	HOOK	202	7	1.4	1.0	1.5	Pendergast, Butch
43-0012	WINSTED	203	7	3.3	1.0	5.5	Zachmann, Ronald C.

## Mahnomen County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
44-0006	BASS (BIG BASS)	201	3	14.7	14.0	15.5	Graham, Terry
44-0169	LITTLE VANOSE	201	10	6.3	2.5	8.5	Larson, Ronald M.
44-0001	ROY (SIMON)	202	11	5.7	3.5	9.5	Brown, Richard
44-0045	SNIDER	201	9	10.1	8.5	12.0	Sahli, Roger & Ginny

## Martin County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
46-0030	BUDD	202	6	3.2	2.0	4.5	Segar, David
46-0109	FOX	203	11	4.0	3.0	5.5	Peters, Ken
46-0020	SOUTH SILVER	201	9	3.1	2.5	4.5	Senenfelder, Gloria & Jim
46-0020	SOUTH SILVER	202	9	3.0	2.0	5.0	Senenfelder, Gloria & Jim
46-0020	SOUTH SILVER	203	13	3.0	2.0	4.0	Hand, Ernest

## Meeker County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
47-0049	BELLE	201	7	3.2	2.5	4.5	Nieland, Roger
47-0042	BETTY (BETSY)	200	10	4.2	3.0	8.5	Saukkola, George
47-0038	BIG SWAN	201	9	3.6	2.0	8.5	Koehnen, Wayne
47-0038	BIG SWAN	202	9	3.0	2.0	4.0	Koehnen, Wayne
47-0095	CLEAR	202	17	1.4	1.0	3.0	Brandenburg, Richard

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### Meeker County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
47-0002	FRANCIS	201	10	6.2	3.5	10.0	Knox, Brian
47-0002	FRANCIS	202	10	5.6	3.5	7.5	Knox, Brian
47-0002	FRANCIS	202	10	6.6	4.0	9.5	LaChance, Frank
47-0026	LONG	203	3	7.0	5.5	8.0	Craswell, Rick
47-0177	LONG	202	15	0.8	0.4	1.4	Hanson, Roger
47-0050	MANUELLA	201	16	7.0	4.5	11.5	Schwingler, Bob
47-0119	MINNIE-BELLE	204	4	12.0	10.5	16.5	Jensen, Rollie H.
47-0088	RICHARDSON	201	16	3.7	2.0	5.5	Horwath, Gary
47-0032	SPRING	201	4	2.6	2.5	3.0	Scepaniak, David
47-0068	STELLA	201	9	5.3	4.5	6.0	Raab, Henry E. (Hap)
47-0068	STELLA	202	15	6.1	4.3	10.0	Schuster, N. Jack

### Mille Lacs County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
48-0002	MILLE LACS	209	4	12.6	11.5	14.0	Fritz, David
48-0002	MILLE LACS	213	6	10.8	9.0	13.0	Adair, Richard

### Morrison County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
49-0079	ALEXANDER	201	5	14.3	11.0	20.0	Prozinski, Tony
49-0079	ALEXANDER	201	5	15.4	15.0	16.0	Schindele, Jim
49-0079	ALEXANDER	202	5	15.3	12.8	17.5	Simonet, Arthur
49-0079	ALEXANDER	204	7	15.2	11.5	18.0	Ness, Dale
49-0140	CEDAR	202	12	13.5	7.5	17.0	Drill, James
49-0133	CROOKNECK	202	11	8.8	5.5	12.0	Rabe, Adolph
49-0137	FISH TRAP	204	7	9.7	5.0	14.0	Fogelberg, Jim
49-0137	FISH TRAP	204	5	12.1	11.0	13.0	Schindele, Jim
49-0035	GREEN PRAIRIE FISH	201	10	7.5	7.0	8.5	Fogle, Bruce
49-0015	LONG	201	8	12.0	10.0	14.0	Steigauf, James E.
49-0005	PEAVY	202	3	14.7	14.0	15.0	Nagel, Kori
49-0024	PIERZ	203	9	8.9	5.0	14.5	Spiczka, Jim
49-0056	ROUND	202	8	10.8	8.0	12.5	Halverson, Wayne & Kathy
49-0127	SHAMINEAU	203	7	17.9	15.5	23.0	Doree, Alderic J.
49-0016	SULLIVAN	204	6	11.8	9.0	16.0	Haas, Dale & Sandy

### Murray County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
51-0040	BLOODY	201	13	2.2	2.0	3.0	Sauer, Bill
51-0082	CURRENT	200	6	1.3	1.0	1.5	Buesing, Sam
51-0021	FIRST FULDA	203	5	1.3	1.0	2.0	Buesing, Sam
51-0063	SARAH	203	13	1.3	0.3	2.8	Noerenberg, Melissa
51-0046	SHETEK	207	8	1.3	1.0	2.0	Radke, Wes
51-0046	SHETEK	208	1	1.0	1.0	1.0	Shaver, Wally & Connie H.

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### Nicollet County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
52-0001	UNNAMED (HALLET)	201	13	10.5	4.0	20.0	Olmanson, Trudi

### Olmsted County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
55-0006	BAMBER	201	12	18.5	9.5	26.5	Stewart, Howard
55-0006	BAMBER	202	10	18.2	13.5	26.5	Stewart, Howard
55-0024-01	CASCADE (MAYO POND)	201	7	4.9	3.0	8.0	Loy, Robin
55-0024-02	CASCADE (N CENTRAL POND)	201	7	4.9	3.0	10.0	Loy, Robin
55-0024-03	CASCADE (S CENTRAL POND)	201	4	3.9	2.5	5.5	Loy, Robin
55-0025	MANOR WOODS POND	201	7	2.6	1.5	4.0	Loy, Robin
55-0005	SHADY	200	12	1.8	1.0	3.0	Gregor, Nathan
55-0003	SILVER	201	14	1.6	0.5	3.0	Frederickson, Mark W.
55-0004	ZUMBRO	207	4	7.3	4.0	9.5	Ward, Nicole

### Otter Tail County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
56-0867	ALICE	201	4	0.5	0.5	0.5	Eisinger, Dr. Lawrence
56-1149	BERGER	201	7	5.1	4.0	6.5	Kalinoski, Van
56-0386-01	BIG MCDONALD	201	4	12.8	9.0	18.0	Brokke, Keith
56-0386-03	BIG MCDONALD #2	201	7	12.3	8.0	17.0	Borgerding, George
56-0130	BIG PINE	202	16	6.1	4.0	11.0	Taylor, George E.
56-0130	BIG PINE	204	8	5.5	3.0	9.5	Hermanson, Michael
56-0130	BIG PINE	205	16	5.9	4.0	11.5	Taylor, George E.
56-0130	BIG PINE	206	16	5.9	4.0	10.5	Taylor, George E.
56-0240	BLANCHE	202	8	8.1	5.0	13.0	Ramsey, Bill
56-0079	BLOCK	202	4	2.5	1.0	4.5	Konrad, Richard
56-0559	CLEAR	201	8	8.4	5.0	15.0	Perry, Donald A.
56-0559	CLEAR	202	11	7.8	6.0	10.5	Roubik, Bill
56-0238	CLITHERALL	202	3	12.3	12.0	12.5	Weber, William
56-0238	CLITHERALL	207	7	13.5	11.5	16.5	Cummings, Gary
56-0749	CRYSTAL	202	15	9.2	7.5	13.5	Bertschi, Barb
56-0383	DEAD	205	17	9.2	5.5	13.5	Hansen, Les
56-0298	DEER	201	4	10.8	10.0	12.0	Long, Ray
56-0253	EAGLE	202	12	25.6	23.0	30.0	Beech, Jim
56-0523	EAST LOON	201	16	10.1	8.5	12.0	Oehlerking, Richard
56-0523	EAST LOON	202	15	8.3	5.5	12.0	Oehlerking, Richard
56-0523	EAST LOON	203	16	13.2	10.5	15.5	Oehlerking, Richard
56-0378-01	EAST LOST (N. BAY)	202	5	11.4	9.5	12.5	Thiel, Albert
56-0378-01	EAST LOST (N. BAY)	203	5	11.1	9.0	12.5	Thiel, Albert
56-0517	EAST SILENT	201	4	18.5	16.5	20.5	Gerold, Janna
56-0306	ELBOW	201	3	16.3	14.0	19.0	Mauch, Jeff
56-0193	ETHEL	201	2	14.3	13.5	15.0	Behr, Scott & Laurie
56-0768	FISH	201	14	11.5	8.0	15.0	Carpenter, Roger F.

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## Otter Tail County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
56-0695	HEILBERGER	201	4	12.9	12.0	13.5	Butterfield, Ralph
56-0695	HEILBERGER	202	4	10.0	8.0	12.5	Butterfield, Ralph
56-0639	INDIAN	201	10	8.3	7.0	10.5	Ario, H. Charles
56-0639	INDIAN	202	9	8.8	6.0	12.0	Johnson, Wayne
56-1636	KERBS	202	10	19.6	18.5	20.5	Stark, Charles
56-0651	LARSON	201	10	2.1	2.0	2.5	Ario, H. Charles
56-0532	LEEK (TROWBRIDGE)	201	4	10.3	8.0	13.0	Jahnke, Mike
56-0532	LEEK (TROWBRIDGE)	203	4	9.0	6.5	13.0	Jahnke, Mike
56-0747-01	LIDA (MAIN BASIN)	207	7	9.6	8.0	14.0	King, Don
56-0747-02	LIDA (SOUTH ARM)	201	15	8.1	6.0	13.0	Spangler, Mike
56-0747-02	LIDA (SOUTH ARM)	202	15	8.8	7.0	13.0	Spangler, Mike
56-0328	LITTLE MCDONALD	202	4	18.0	17.5	18.5	Haider, James & Benita
56-0328	LITTLE MCDONALD	203	4	18.5	18.0	19.5	Haider, James & Benita
56-0328	LITTLE MCDONALD	204	4	18.1	16.5	19.5	Haider, James & Benita
56-0761	LITTLE PELICAN	201	11	7.0	4.5	11.0	Manuel, Fred
56-0142	LITTLE PINE	201	5	8.7	4.0	10.5	Gunderson, Les & Jean
56-0142	LITTLE PINE	201	4	8.8	7.0	10.0	Maleitzke, Art
56-0142	LITTLE PINE	203	4	8.0	7.0	9.0	Maleitzke, Art
56-0142	LITTLE PINE	204	4	8.0	7.0	9.0	Maleitzke, Art
56-0390	LONG	201	6	11.4	9.0	13.0	Babcock, Chuck
56-0388	LONG	202	6	7.0	6.0	8.0	Bennett, Jerry
56-0243	MARION	205	17	12.1	10.0	17.0	Lysne, Duane
56-0243	MARION	206	17	8.2	5.0	14.0	Lysne, Duane
56-0116-01	MIDDLE LEAF	201	6	9.4	7.5	11.5	Anderson, Curt
56-0242	OTTER TAIL	201	5	9.2	8.5	10.0	Sliper, Jeff
56-0242	OTTER TAIL	205	10	14.2	9.5	17.5	Hansen, Jim & Clara
56-0242	OTTER TAIL	208	5	9.7	7.5	13.0	Hawkinson, Ann
56-0335	PAUL	201	13	21.1	18.0	26.0	Tolkinen, Erv
56-0786	PELICAN	204	4	14.3	13.0	15.0	Berg, Dick
56-0786	PELICAN	205	10	10.3	7.5	15.0	Mueller, Jim
56-0786	PELICAN	207	8	10.4	8.5	15.0	Larsen, John C.
56-0786	PELICAN	208	10	10.5	8.0	14.0	Mueller, Jim
56-0475	PICKEREL	202	11	14.5	10.0	20.5	Falconer, Keith
56-0475	PICKEREL	203	11	14.5	9.5	20.0	Falconer, Keith
56-0475	PICKEREL	204	11	14.4	9.0	20.0	Falconer, Keith
56-0360	ROSE	202	5	11.6	9.5	15.5	Hogan, Stephanie
56-0358	SCALP (LAKE SEVEN)	201	6	23.5	19.0	27.5	Overland, Greg
56-0302-01	SILVER (1 <sup>ST</sup> SILVER)	202	8	11.0	7.0	14.0	Matteson, John
56-0369	SIX	204	10	20.4	18.5	21.5	Jacobson, Lynelle
56-0377	SOUTH TURTLE	201	6	16.3	13.0	18.0	Worum, Chuck
56-0437	STALKER	203	2	11.3	11.0	11.5	Grothe, Dennis

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## Otter Tail County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
56-0385	STAR	201	10	12.0	8.0	16.5	Herron, Carolyn
56-0385	STAR	202	9	16.1	15.0	19.5	Sheldon, Gary
56-0385	STAR	204	8	12.4	10.0	16.5	Sheldon, Gary
56-0385	STAR	205	4	12.9	9.0	15.5	Herron, Carolyn
56-0191-02	STUART (LITTLE W. BAY)	201	11	10.3	9.0	11.5	Henderson, Donald
56-0191-01	STUART (MAIN BASIN)	202	11	13.0	10.0	15.5	Henderson, Donald
56-0781	SWAN	202	11	12.6	11.5	13.5	Wright, Grace
56-0387	SYBIL	201	13	16.2	14.0	21.0	Cruff, Gary L.
56-0387	SYBIL	202	13	15.3	14.0	18.0	Cruff, Gary L.
56-0387	SYBIL	203	13	15.2	14.0	17.0	Cruff, Gary L.
56-0931	TAMARAC	201	8	7.6	6.0	9.0	Nettestad, Thomas C. & Vickie
56-0613	TEN MILE	201	9	5.9	5.0	9.5	Westberg, Al
56-0658	WALL	203	8	9.2	6.0	24.5	Jungroth, Vernon & Dorothy
56-0658	WALL	204	8	10.1	6.0	23.5	Jungroth, Vernon & Dorothy
56-0239	WEST BATTLE	201	11	15.7	10.5	22.5	Horgen, Dr. Jerry
56-0239	WEST BATTLE	202	10	15.5	13.5	18.5	Horgen, Dr. Jerry
56-0239	WEST BATTLE	203	10	15.3	12.5	19.5	Horgen, Dr. Jerry
56-0386-02	WEST McDONALD	202	7	16.7	14.0	20.0	Condon, Kevin
56-0950-01	WEST OLAF	201	2	6.8	6.5	7.0	Maske, Joe

## Pine County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
58-0138	BIG PINE	201	15	4.6	3.0	8.5	Huber, Charles
58-0138	BIG PINE	202	1	4.5	4.5	4.5	Marnich, Paul J.
58-0119	CROSS	201	4	3.1	2.0	5.0	Trent, Gerald
58-0073	DAGO	201	4	9.6	9.5	10.0	Tuthill, Greg S.
58-0123	GRINDSTONE	201	12	12.8	7.0	17.0	Aust, Kathy
58-0123	GRINDSTONE	203	16	12.9	9.5	18.0	Spong, Ron
58-0123	GRINDSTONE	204	12	12.5	7.0	15.5	Aust, Kathy
58-0123	GRINDSTONE	205	12	13.0	8.0	16.0	Aust, Kathy
58-0123	GRINDSTONE	206	7	10.6	7.5	15.5	Spong, Ron
58-0132	INDIAN	201	1	2.5	2.5	2.5	Martin, Sam
58-0062	ISLAND	203	15	6.9	5.0	8.0	Sorenson, Edward C.
58-0062	ISLAND	204	15	7.1	5.0	8.5	Sorenson, Edward C.
58-0062	ISLAND	207	8	6.8	5.5	8.5	Erickson, Don & Jan
58-0129	LITTLE PINE	201	6	4.5	3.5	6.0	Scott, Mr. & Mrs. Glen
58-0038	NET	201	8	3.4	2.5	4.0	Ruud, David
58-0038	NET	202	5	2.5	2.0	3.0	Neumann, Mary
58-0048	OAK	202	5	4.2	2.5	6.0	Ecklund, Allen
58-0142	POKEGAMA	211	13	2.9	1.5	6.0	Royce, Charles & Pauline
58-0136	RHINE	201	7	3.6	3.5	4.0	Razskazoff, Don
58-0081	SAND	202	8	7.9	6.0	11.5	Olson, Tom & Joyce
58-0081	SAND	203	8	8.3	6.0	12.5	Olson, Tom & Joyce
58-0081	SAND	204	3	12.3	12.0	13.0	Dee, Pauline

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### Pine County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
58-0067	STURGEON	204	6	11.6	8.5	16.5	Schroeder, Harlan
58-0067	STURGEON	205	6	11.7	8.5	17.0	Schoreder, Harlan
58-0067	STURGEON	206	4	16.5	16.0	18.0	Goettsch, Ron
58-0067	STURGEON	207	4	16.0	16.0	16.0	Goettsch, Ron
58-0024	TAMARACK	201	10	16.1	14.5	17.0	Pearson, Debbie & Kim
58-0130	UPPER PINE	202	4	4.8	4.5	5.0	Gangl, Raymond

### Polk County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
60-0305	MAPLE	204	2	2.8	2.0	3.5	Dahle, Edward
60-0305	MAPLE	205	2	3.0	2.5	3.5	Dahle, Edward
60-0202	SARAH	203	9	7.2	4.0	19.5	Bailey, Jack
60-0217	UNION	201	7	8.5	7.0	9.5	Eide, Verna
60-0217	UNION	204	6	8.8	7.0	12.0	Bratrud, Doug
60-0139	UNNAMED (JEPSON)	201	6	13.3	9.0	16.0	Bergendahl, Ragnar

### Pope County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
61-0122	ANN	201	5	3.4	0.8	10.0	Howe, Mike
61-0072	GILCHRIST	201	17	3.5	2.0	7.0	Heimkes, Richard
61-0092	HOFF	201	4	6.9	5.0	10.0	Swartz, Greg
61-0066	LEVEN	203	5	4.9	3.0	10.0	Brown, Bruce
61-0037	LINKA	202	4	10.0	6.0	13.0	Griffen, Dr. Richard
61-0060	MARLU	201	7	4.6	2.5	10.0	Morton, John
61-0130	MINNEWASKA	208	7	8.5	6.0	12.0	Jones, Robert
61-0130	MINNEWASKA	209	11	7.2	5.0	11.5	Walters, Steve
61-0130	MINNEWASKA	210	7	8.6	6.0	12.0	Jones, Robert C.
61-0130	MINNEWASKA	211	7	7.9	6.0	10.5	Jones, Robert C.
61-0130	MINNEWASKA	212	7	8.3	6.0	11.0	Jones, Robert
61-0111	PELICAN	203	10	4.7	3.5	6.0	Mueller, Robert
61-0111	PELICAN	204	6	5.1	4.0	6.5	Magnus, Doug
61-0111	PELICAN	205	6	4.3	3.5	5.0	Magnus, Doug
61-0078	RENO	201	2	7.8	7.0	8.5	Redman, Sandra
61-0041	SCANDINAVIAN	202	10	9.9	8.5	12.5	Nyhusmoen, Sid

### Ramsey County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
62-0002	BALD EAGLE	206	7	4.1	3.0	6.0	Doran, Mike
62-0002	BALD EAGLE	207	5	3.0	2.0	4.0	Mottl, Greg
62-0002	BALD EAGLE	208	6	3.6	2.0	7.0	Weber, Marty
62-0002	BALD EAGLE	209	8	3.1	2.0	4.5	Moore, Jim
62-0018	DEEP	202	2	4.0	3.5	4.5	Grzeskowiak, Bonnie
62-0080	EMILY	201	15	3.6	2.0	6.5	Moller, Karlind T.

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## Ramsey County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
62-0095	EVERGREEN PNDS (KERRY)	201	5	4.4	3.0	6.0	Nees, Terry
62-0037	GEM	202	9	2.5	2.3	3.0	Artig-Swomley, Gretchen
62-0007	GERVAIS	203	7	5.8	3.5	8.5	Petersen, Jonathan
62-0034	GOOSE	201	8	0.8	0.5	1.5	Hafdahl, Richard
62-0057	JOSEPHINE	202	13	5.7	3.5	11.0	Kucera, Emil
62-0049-02	LANGTON (SOUTH)	201	4	4.1	3.5	4.5	Ternes, David J.
62-0067	LONG	203	1	3.0	3.0	3.0	Fabian, Lindsey & Pete
62-0054	MCCARRON	202	11	11.6	9.0	15.5	McCarron, Chad
62-0056	OWASSO	205	20	2.6	1.5	6.0	Hermes, Mike
62-0056	OWASSO	206	20	2.7	1.5	6.5	Hermes, Mike
62-0056	OWASSO	206	9	2.8	1.5	5.0	Terry, Bob
62-0056	OWASSO	207	20	2.6	1.5	6.0	Hermes, Mike
62-0056	OWASSO	208	20	2.7	1.5	6.5	Hermes, Mike
62-0056	OWASSO	209	20	2.6	1.5	5.5	Hermes, Mike
62-0056	OWASSO	210	20	2.5	1.5	4.5	Hermes, Mike
62-0056	OWASSO	211	4	3.3	2.0	5.0	Peterson, Carrie
62-0056	OWASSO	212	4	3.4	2.5	5.0	Peterson, Carrie
62-0056	OWASSO	213	3	4.1	3.0	6.3	Bester, Joe
62-0056	OWASSO	214	7	3.2	1.5	6.5	Foss, Megan & Matt
62-0056	OWASSO	215	7	3.4	1.5	7.0	Foss, Megan & Matt
62-0013	PHALEN	201	5	7.4	5.0	11.0	Omann, Ron
62-0013	PHALEN	204	5	7.4	5	11.5	Omann, Ron
62-0046	PLEASANT	203	8	8.4	5.0	18.5	Kellin, R. Scott
62-0036	PRIEBE	202	3	1.0	0.5	1.5	Wilson, Scott A.
62-0001	SILVER	202	14	7.8	4.5	11.0	Anderson, Paul
62-0083	SILVER	205	6	2.6	1.0	3.5	Sausser, Patti
62-0073	SNAIL	201	12	8.8	6.0	12.5	Fox, Roger
62-0073	SNAIL	202	12	8.9	7.0	11.5	Fox, Roger
62-0073	SNAIL	203	7	9.9	7.5	14.5	Sandberg, Frank
62-0061	TURTLE	207	7	6.6	5.0	8.5	Gross, Gregory S.
62-0061	TURTLE	208	3	8.1	6.0	9.5	Hall, Doug
62-0022	UNNAMED (TAMARACK)	201	9	0.8	0.5	1.5	Stewart, Shannon
62-0082	WABASSO	202	8	7.8	4.5	9.5	Newquist, Leonard

## Redwood County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
64-0150	LAURA	201	18	2.4	1.5	3.5	Bernhardson, Marilyn
64-0150	LAURA	202	18	2.4	1.5	3.5	Bernhardson, Marilyn
64-0150	LAURA	203	18	2.4	1.5	3.5	Bernhardson, Marilyn

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## Rice County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
66-0008	CANNON	201	4	2.5	2.0	3.0	Luikens, Jan
66-0008	CANNON	208	4	4.0	2.0	6.0	Luikens, Jan
66-0052	CEDAR	206	8	2.4	2.0	3.0	Luehrs, Virgil
66-0052	CEDAR	207	8	2.5	2.0	3.0	Luehrs, Virgil
66-0052	CEDAR	208	8	2.6	2.0	3.5	Luehrs, Virgil
66-0052	CEDAR	209	8	2.3	1.5	4.0	Luehrs, Virgil
66-0027	CIRCLE	209	4	2.5	2.0	3.5	Miller & Wendy Anderson, Terry
66-0027	CIRCLE	210	4	2.1	1.5	3.0	Miller & Wendy Anderson, Terry
66-0014	DUDLEY	204	4	6.8	6.0	8.0	Jarvis, John
66-0029	FOX	203	13	6.4	4.0	11.0	Stratmoen, Lois
66-0029	FOX	206	13	6.7	3.5	11.0	Stratmoen, Lois
66-0015	KELLY	202	4	6.3	5.0	7.5	Jarvis, John
66-0039	MAZASKA	206	9	4.5	2.5	11.0	Bakos, James
66-0018	ROBERDS	201	4	2.6	1.0	5.5	Tuma, Ted
66-0044	SAKATAH (LOWER)	201	10	3.1	1.5	6.0	Chromy, Harold
66-0055	SHIELDS	205	9	3.3	1.5	6.5	Elsen, Rick
66-0055	SHIELDS	206	7	3.1	2.0	5.5	Misgen, Richard
66-0010	WELLS	201	7	3.4	2.0	5.0	Wagner, George

## Saint Louis County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
69-0131	ALDEN	201	4	4.1	4.0	4.5	Furo, Mark
69-0278	ARMSTRONG	201	4	16.4	15.0	17.5	Edwards, Bev
69-0278	ARMSTRONG	202	5	12.9	12.0	14.0	Garrett, Kim
69-0864	ASH	202	7	8.9	3.5	11.0	Maki, David
69-0041	BASSETT	201	12	9.5	7.0	14.0	Swanson, Ken
69-0190	BIG LAKE	201	10	8.3	8.0	9.0	Schneider, Eric
69-0190	BIG LAKE	202	10	7.6	7.0	8.5	Schneider, Eric
69-0128	BRIAR	201	7	6.0	5.5	6.5	Stanley, Charles E. & Barbara
69-0118	BURNTSIDE	201	7	24.3	22.0	25.5	Nyman, George
69-0118	BURNTSIDE	202	4	27.9	26.5	29.0	Plude, Walt
69-0118	BURNTSIDE	213	5	24.8	21.0	26.0	Bahnemann, David & Abbie
69-0114	CADOTTE	201	7	13.0	8.5	16.5	Miller, Brad
69-0545	CAMERON (WEST BASS)	201	8	7.2	6.0	9.0	Musburger, Becky
69-0489	CARIBOU	201	4	8.8	6.5	10.0	Herman, Richard D.
69-0489	CARIBOU	202	4	8.1	6.0	9.5	Herman, Richard D.
69-0489	CARIBOU	203	4	6.5	5.5	7.5	Herman, Richard D.
69-0489	CARIBOU	204	4	5.6	5.5	6.0	Herman, Richard D.
69-0277	CLEAR	201	10	11.8	10.5	13.0	Aldrich, Douglas L.
69-0523	DODO	201	6	15.7	13.0	18.5	Strum, Jerry

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**Saint Louis County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
69-0285-01	EAGLES NEST #1	201	9	19.0	16.0	21.5	Gervais, Gloria
69-0285-03	EAGLES NEST #3	202	9	12.9	10.0	26.0	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	203	9	11.9	9.0	23.5	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	204	9	12.5	10.0	22.0	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	206	9	11.6	9.0	19.0	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	208	9	11.3	9.0	18.0	Rodorigo, Barbara
69-0218	EAGLES NEST #4	202	8	18.3	17.0	19.0	Bertelson, Glenn
69-0660	ELY	202	9	17.4	15.0	25.0	Nyhus, John
69-0565	ESQUAGAMA	201	11	8.5	6.5	10.5	Nyhus, John
69-0394	FLOWAGE (FREDENBERG)	201	4	5.4	5.3	5.8	Stingl, Kathy
69-1306	GILBERT PIT	201	2	29.0	28.0	30.0	Steblay, Edward & Lee
69-0092	GULL	201	1	7.0	7.0	7.0	Bound Wilderness, Outward
69-0093	GUN	201	1	7.5	7.5	7.5	Bound Wilderness, Outward
69-0121	IRON	203	1	10.5	10.5	10.5	High Adventure Camp, Northern Tier
69-0121	IRON	204	1	10.0	10.0	10.0	High Adventure Camp, Northern Tier
69-0121	IRON	205	1	12.0	12.0	12.0	High Adventure Camp, Northern Tier
69-0889	ISLAND	201	4	15.3	14.5	16.5	Kuryatnik, Steve & Helen
69-0889	ISLAND	202	4	15.8	15.0	17.0	Erickson, Ron
69-0372-02	ISLAND RSVR (E. BASIN)	202	4	5.1	4.5	5.5	Curran, Sarah & Stephanie
69-0372-02	ISLAND RSVR (E. BASIN)	203	6	6.0	5.5	7.5	Curran, Sarah & Stephanie
69-0224	LAC LA CROIX	203	1	12.0	12.0	12.0	High Adventure Camp, Northern Tier
69-0513	LITTLE GRAND	201	16	17.9	14.0	21.0	Harvieux, Gina & Dan
69-0760	LITTLE JOHNSON	201	4	5.0	4.0	7.0	Niemi, Ken & RosaLee
69-0066	LITTLE LONG	202	10	17.9	15.5	20.0	Yahnke, Curt & Rose Ann
69-0066	LITTLE LONG	203	11	17.4	14.5	19.5	Sadler, John & Jane
69-0732	LITTLE SAND	201	9	4.6	4.0	5.5	Thompson, Sue
69-0653	LONG	202	15	9.9	8.0	14.0	Kishel, Thomas C.
69-0426	LOON	201	17	20.4	17.0	25.0	Baker, John
69-0426	LOON	203	17	19.2	16.0	23.0	Baker, John
69-0721	MAJESTIC	201	7	16.4	15.5	18.0	Bainter, Chuck
69-0700	MAPLE LEAF	203	15	9.9	7.5	11.0	Ebeling, Mrs. Ira
69-0693	NAMAKAN	202	10	12.8	11.0	14.5	Hanson, Herb & Ivy
69-0841	PELICAN	202	6	5.8	3.0	10.0	Kemkes, Robert J.
69-0011	PEQUAYWAN	201	8	9.3	8.0	11.0	Mead, Scott Phyl & Forest
69-0932	PERCH	203	17	10.2	8.0	12.0	Labonte, Arden
69-0490	PIKE	201	10	15.0	12.0	17.0	Campbell, Peg
69-0490	PIKE	202	10	14.3	12.0	16.0	Campbell, Peg
69-0490	PIKE	203	10	14.7	12.5	16.5	Campbell, Peg
69-0490	PIKE	203	2	15.0	14.5	15.5	Hammond, Richard D.
69-0848	PRAIRIE	204	8	5.8	4.5	7.0	Hallberg, Ken
69-0848	PRAIRIE	205	8	5.9	4.5	7.5	Hallberg, Ken
69-0848	PRAIRIE	206	8	5.6	4.5	7.0	Hallberg, Ken
69-0848	PRAIRIE	207	8	5.9	4.0	7.5	Hallberg, Ken

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## Saint Louis County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
69-0694	RAINY	203	3	9.2	8.0	11.0	Anderson, Paul A.
69-0525	ROSE	201	15	12.0	11.0	13.5	Nyborg, Sean
69-0429	SABIN (EMBARRASS PIT)	201	11	47.1	32.0	62.5	Steblay, Edward & Lee
69-0736	SAND	204	5	8.7	5.5	14.5	Verbick, Ben
69-0617	SAND POINT	201	4	8.0	7.5	8.5	Cooley, Diane
69-0546	SCHUBERT (EAST BASS)	201	10	8.4	8.0	8.5	Berndt, Steven
69-0230	SCHULTZ	203	7	15.9	11.0	19.0	Larson, Cheryl L.
69-0069	SHAGAWA	201	13	11.8	7.0	20.0	Zabinski, Eugene W.
69-0069	SHAGAWA	203	7	11.9	8.0	15.0	Scheuer, Bob
69-0933	SIDE	202	6	10.4	10.0	11.0	Olson, Charles & Jaye
69-0519	SIDE (BOWMAN)	201	8	5.1	4.5	6.0	Fait, Thomas A.
69-0111	SMITH	201	2	11.8	11.0	12.5	Bradbury, Carol
69-0111	SMITH	202	6	12.1	11.0	13.0	Brooks, Dale
69-0111	SMITH	203	6	12.8	11.0	14.0	Brooks, Dale
69-0129	SPRING	201	4	10.0	9.0	11.0	Stocco, Jeff
69-0529	STRAND	201	13	3.6	3.0	4.5	Rosenthal, Lois
69-0939-01	STURGEON	202	8	14.2	12.0	16.5	Prusak, Michael
69-0235	SUNSHINE	201	10	21.5	19.0	24.0	Turner, Gary
69-0794	THIRTEEN	201	6	14.2	13.0	16.0	Swanson, Michael G.
69-0241	THOMPSON	201	13	5.0	4.0	7.0	Haney, Richard
69-0965	UNNAMED (HARTLEY POND)	201	4	5.1	3.3	6.1	Nature Center, Hartley
69-0378	VERMILION	203	10	7.4	5.0	10.0	Lotz, Steven
69-0378	VERMILION	204	10	6.4	3.5	10.0	Lotz, Steven K.
69-0378	VERMILION	206	8	6.9	4.0	14.0	Marjanen, Karin & George
69-0378	VERMILION	210	2	8.0	6.0	10.0	Wullschleger, Richard
69-0378	VERMILION	211	2	7.0	5.0	9.0	Wullschleger, Richard
69-0378	VERMILION	218	6	9.2	6.0	14.5	Hintz, Mel & Ellen
69-0378	VERMILION	219	6	7.3	5.0	10.5	Hintz, Mel & Ellen
69-0378	VERMILION	221	4	10.2	9.8	10.5	Paulsen, Terri Lee
69-0004	WHITE IRON	201	7	5.9	5.5	6.0	Pinckney, Robert
69-0004	WHITE IRON	202	13	6.3	6.0	6.5	Ajax, Sheldon
69-0375	WHITEFACE RESERVOIR	202	12	4.1	3.5	5.0	Steblay, Edward & Lee
69-0375	WHITEFACE RESERVOIR	205	8	4.0	4.0	4.0	Kopnick, Brian & Denese
69-0161	WOLF	201	3	11.3	9.5	13.5	Krebsbach, Sue & John
69-0434-02	WYNNE	202	12	7.9	5.5	9.5	Laugen, Joe

## Scott County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
70-0009	KRENZ	201	10	15.2	13.0	17.0	Jorgensen, Holly
70-0026	LOWER PRIOR	203	8	4.8	3.0	9.0	Modders, J. Nick
70-0072	UPPER PRIOR	201	10	2.0	1.5	4.5	Modders, J. Nick
70-0072	UPPER PRIOR	202	15	3.5	2.0	8.5	Fourre, Frank
70-0072	UPPER PRIOR	203	13	2.1	1.5	5.0	Bergstrom, Kevin

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### Sherburne County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
71-0082	BIG	201	2	11.5	11.0	12.0	Oveson, Jim and Others
71-0146	BRIGGS	205	10	6.4	3.5	8.0	Ernzer, Harry
71-0123	CAMP	201	9	12.1	9.0	19.0	Gill, Kathleen A.
71-0067	EAGLE	201	15	2.9	2.0	4.0	Hunt, Chuck
71-0055	ELK	202	11	2.5	1.0	5.0	McDevitt, Dean
71-0141	ELK (BIG ELK)	204	9	1.4	0.5	3.5	Heinemann, Charles
71-0016	FREMONT	201	13	1.7	0.5	4.0	Ward, Dennis
71-0016	FREMONT	202	13	1.8	1.0	4.0	Ward, Dennis
71-0016	FREMONT	203	13	1.9	1.0	4.5	Ward, Dennis
71-0145	JULIA	203	15	2.1	1.5	3.5	Fors, Paul
71-0159	LONG	201	8	8.3	6.0	11.0	Sickler, Raymond C.
71-0159	LONG	202	8	8.2	7.5	8.5	Sickler, Raymond C.
71-0081	MITCHELL	202	2	11	10.5	11.5	Oveson, Jim
71-0013	ORONO	202	4	2.3	2.0	2.8	Plant, Patrick
71-0013	ORONO	204	4	2.8	2.0	4.5	Plant, Patrick
71-0013	ORONO	205	4	2.6	2.0	3.5	Plant, Patrick
71-0013	ORONO	206	4	2.9	2.5	3.5	Plant, Patrick
71-0147	RUSH	201	16	1.6	1.0	3.0	Brown, Douglas
71-0147	RUSH	201	1	1.0	1.0	1.0	Munsterman, Walt
71-0040	SANDY	204	12	12.7	9.5	15.5	Heffron, Molly
71-0167	UNNAMED (ROUND)	201	12	6.8	5.0	10.0	Nawara, Sharon

### Sibley County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
72-0089	CLEAR	201	1	0.5	0.5	0.5	Graupman, Richard
72-0042	TITLOW	201	6	2.7	2.5	3.0	Schrupp, Calvin

### Stearns County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
73-0190	BEAR	201	4	9.0	9.0	9.0	Greener, Glen
73-0159	BIG	201	18	6.8	5.0	9.0	Press, Joe
73-0106	BIG FISH	201	9	16.8	13.5	25.5	Peters, Matthew
73-0106	BIG FISH	202	12	14.2	11.0	18.0	Schnettler, Bill
73-0106	BIG FISH	203	3	13.0	12.0	14.0	Peters, Joe & Darlene
73-0106	BIG FISH	204	14	17.6	15.0	24.0	Chovan, Joe
73-0102	BIG WATAB	201	20	19.7	13.0	24.0	Strobel, Joan & Mark
73-0102	BIG WATAB	202	19	20.4	15.0	25.5	Strobel, Joan & Mark
73-0088	BOLFING	202	5	2.6	2.0	4.5	Binsfeld, Joe
73-0006	CROOKED	201	8	13.8	13.5	14.5	Payne, Robert
73-0703	ELEVEN QUARRY	201	6	17.5	16.0	19.0	Stearns Co., Parks
73-0244	ELLERING (ELRINGS)	201	8	5.8	4.0	11.0	Wenker, Melissa
73-0055	GRAND	203	13	7.7	5.0	10.0	Lehner, Jake & Harriet
73-0055	GRAND	204	6	8.0	6.0	10.0	Ludwig, Paul

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## **Stearns County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
73-0233	KINGS	201	8	10.6	6.0	15.0	Herges, Peter
73-0233	KINGS	202	8	10.4	6.0	14.0	Herges, Peter
73-0086	KNAUS	203	5	2.2	2.0	3.0	Binsfeld, Joe
73-0200-02	KORONIS (MAIN BASIN)	202	4	7.1	3.5	13.0	Watershed District, N Fork Crow River
73-0200-02	KORONIS (MAIN BASIN)	211	12	6.6	3.5	14.0	Ebent, Roland
73-0200-02	KORONIS (MAIN BASIN)	211	1	7.3	7.3	7.3	Moyer, William H.
73-0064	KRAEMER	201	11	5.6	4.5	6.5	Steffes, Bob
73-0097	KREIGHLE	201	6	15.9	13.0	24.0	Smith, Wes
73-0107	LONG	201	4	15.0	13.0	16.0	Lewis, William
73-0231	LONG	201	3	4.9	4.5	5.6	Rueter, Joe
73-0004	LONG	202	8	13.4	13.0	14.0	Payne, Robert
73-0231	LONG	202	3	5.5	5.0	6.0	Rueter, Joe
73-0139	LONG	203	4	4.8	4.0	6.0	Spohn, Kenneth
73-0123	LOWER SPUNK	201	11	8.0	5.0	12.5	Ahles, Gerritt
73-0123	LOWER SPUNK	202	2	8.8	8.5	9.0	Johnson, Hugo
73-0123	LOWER SPUNK	203	2	8.8	8.5	9.0	Johnson, Hugo
73-0701	MELROSE DEEP QUARRY	201	6	11.7	8.0	16.0	Stearns Co., Parks
73-0128	MIDDLE SPUNK	205	5	10.2	9.0	13.0	Tomlyanovich, Aletha
73-0147	NORTH BROWN'S	205	18	3.5	2.0	9.5	Dehler, Fred
73-0122	OCHOTTO	201	5	13.9	13.0	15.0	Voss, Carol
73-0118	PELICAN	202	15	12.2	7.0	15.5	Angulski, Chet
73-0118	PELICAN	203	15	11.6	6.0	17.0	Koopmeiners, Linus
73-0118	PELICAN	205	7	11.6	5.5	15.0	Lang, Joseph
73-0136	PINE	201	9	5.6	4.0	7.0	Petron, Mark
73-0144	PIRZ	203	7	7.8	6.5	10.0	Birk, Leon
73-0144	PIRZ	203	19	8.1	5.0	13.0	Weber, Tom
73-0051	PLEASANT	203	12	10.4	5.0	15.0	Becker, Bill
73-0051	PLEASANT	204	15	10.0	5.0	15.0	Borgmann, Gwen Ballinger-Dale
73-0196	RICE	203	6	3.8	2.5	6.5	Watershed District, North Fork Crow River
73-0196	RICE	208	8	1.4	1.0	2.0	Karl, Dallas
73-0196	RICE	208	3	3.2	3.0	3.5	Skartvedt, Gary
73-0196	RICE	211	9	3.2	2.5	5.0	Vadner, Bob
73-0196	RICE	212	8	3.2	2.5	4.5	Karl, Dallas
73-0072	ROSSIER	201	14	4.3	3.0	5.5	Streng, Steve
73-0199	SAND	202	13	1.8	1.5	2.5	Bloch, Jim
73-0082	SCHNEIDER	202	8	4.3	3.0	6.8	Lingofelt, Barb
73-0035	SCHOOL SECTION	202	5	7.0	6.5	7.5	Eckman, Richard
73-0249	SYLVIA	202	9	8.6	5.5	14.0	Spanier, Wendy
73-0138	TWO RIVERS	204	6	4.8	4.0	6.0	Martin, Bob
73-0138	TWO RIVERS	205	5	4.6	4.0	5.0	Martin, Bob
73-0070	WATAB	201	12	8.3	4.0	13.0	Faber, Roger

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**Steele County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
74-0019	KOHLMEIER	202	1	7.5	7.5	7.5	Hollatz, Dennis

**Swift County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
76-0072	CAMP	201	4	4.4	4.0	4.8	Nemmers, Duane

**Todd County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
77-0024	BASS	201	9	15.4	11.5	19.0	Mareck, Andrew
77-0084-01	BIG BIRCH (NORTH BASIN)	203	10	10.0	5.5	20.0	Hinnenkamp, Holly
77-0084-01	BIG BIRCH (NORTH BASIN)	214	7	8.4	4.5	17.5	Grossman, Dick & Nadine
77-0084-01	BIG BIRCH (NORTH BASIN)	215	10	10.1	5.5	21.0	Hinnenkamp, Holly
77-0084-01	BIG BIRCH (NORTH BASIN)	218	7	7.9	4.5	13.0	Grossman, Dick & Nadine
77-0084-01	BIG BIRCH (NORTH BASIN)	219	7	8.5	5.0	15.5	Grossman, Dick & Nadine
77-0084-01	BIG BIRCH (NORTH BASIN)	225	10	10.3	5.5	21.0	Hinnenkamp, Holly
77-0084-02	BIG BIRCH (SOUTH BASIN)	202	11	11.1	5.5	23.5	Schiemann, Chuck & Beth
77-0084-02	BIG BIRCH (SOUTH BASIN)	204	5	10.6	7.5	21.5	Ebnet, Mick
77-0084-02	BIG BIRCH (SOUTH BASIN)	205	16	9.8	6.0	19.0	Dinndorf, Don A.
77-0084-02	BIG BIRCH (SOUTH BASIN)	207	5	9.4	6.0	19.5	Ebnet, Mick
77-0084-02	BIG BIRCH (SOUTH BASIN)	210	12	10.4	7.0	17.0	Meyer, Glenn
77-0084-02	BIG BIRCH (SOUTH BASIN)	212	11	10.9	5.5	19.5	Schiemann, Chuck & Beth
77-0084-02	BIG BIRCH (SOUTH BASIN)	213	16	10.4	6.0	23.5	Dinndorf, Don A.
77-0084-02	BIG BIRCH (SOUTH BASIN)	216	12	10.4	7.0	16.5	Meyer, Glenn
77-0084-02	BIG BIRCH (SOUTH BASIN)	217	12	10.3	7.0	16.0	Meyer, Glenn
77-0084-02	BIG BIRCH (SOUTH BASIN)	220	16	10.9	6.5	19.5	Wander, David
77-0084-02	BIG BIRCH (SOUTH BASIN)	221	16	11.4	6.5	22.5	Wander, David
77-0084-02	BIG BIRCH (SOUTH BASIN)	222	11	11.9	5.5	25.5	Schiemann, Chuck & Beth
77-0084-02	BIG BIRCH (SOUTH BASIN)	223	16	9.4	6.0	17.0	Dinndorf, Don A.
77-0084-02	BIG BIRCH (SOUTH BASIN)	224	5	10.3	7.0	21.0	Ebnet, Mick
77-0084-02	BIG BIRCH (SOUTH BASIN)	226	16	10.9	7.0	21.5	Wander, David
77-0023	BIG SWAN	203	6	9.0	5.0	14.0	Johnson, Robert T.
77-0023	BIG SWAN	204	9	7.7	1.5	12.0	Grimli, Clarence
77-0046	COAL	201	16	7.2	4.5	11.0	Johnston, Rodger
77-0154	FAIRY	201	13	11.5	8.0	14.5	Tank, Loren
77-0128	HORSESHOE	201	6	10.5	9.0	11.5	McClellan, Patricia
77-0105	LATIMER	203	14	4.3	2.0	10.0	Swenson, Paul A.
77-0089	LITTLE BIRCH	201	11	7.9	5.0	12.0	Moening, Bud
77-0089	LITTLE BIRCH	202	11	8.1	5.0	13.0	Moening, Bud
77-0089	LITTLE BIRCH	203	11	8.2	5.0	13.0	Moening, Bud
77-0089	LITTLE BIRCH	204	11	8.5	5.0	14.0	Moening, Bud
77-0164	LITTLE SAUK	201	7	3.6	2.0	8.0	Eidem, Richard
77-0149-01	LONG (MAIN BASIN)	201	10	11.4	6.0	15.5	Ploof, Jim & Carolyn
77-0149-01	LONG (MAIN BASIN)	202	8	10.7	9.0	13.5	Floerke, Bob
77-0149-02	LONG (SOUTH BAY)	201	4	10.6	9.5	11.5	Ploof, Jim & Carolyn

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### Todd County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
77-0181	MAPLE	203	10	4.8	3.5	8.5	Klick, Peter
77-0007	MOUND	201	17	12.8	9.0	18.0	Peterson, David
77-0007	MOUND	202	9	13.8	9.0	18.0	Zeis, Robert
77-0007	MOUND	202	17	12.5	9.0	19.0	Peterson, David
77-0215	OSAKIS	208	6	4.1	2.5	8.5	Koich, Stan M.
77-0067	PINE ISLAND	201	1	10.5	10.5	10.5	Beaudry, Paul
77-0150-02	SAUK (NORTH BAY)	205	11	5.4	3.0	11.0	Weir, Tim & Dave
77-0150-01	SAUK (SW BAY)	201	16	4.3	2.0	14.5	Beckerman, Vern

### Traverse County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
78-0025	TRAVERSE	206	1	2.5	2.5	2.5	Grazzini, Gregory

### Wadena County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
80-0034	BLUEBERRY	201	13	2.4	1.1	6.0	Lindblom, Leofwin
80-0030	LOWER TWIN	201	4	4.8	4.0	5.5	Broughton, Don
80-0038	MORGAN	201	14	22.1	16.0	27.5	Lindblom, Leofwin
80-0039	SPIRIT	202	15	14.2	11.0	17.5	Lindblom, Leofwin
80-0039	SPIRIT	203	11	11.7	10.0	15.0	Callahan, Mike
80-0037	STOCKING	203	10	4.5	2.0	9.5	Hepokoski, Mark

### Waseca County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
81-0014-01	CLEAR	201	18	3.2	2.0	6.0	Rathmann, Duane
81-0095	ELYSIAN	203	11	1.8	1.0	3.0	Genz, Carl J.
81-0015	LOON	203	16	2.7	2.0	3.8	Purcell, Ron
81-0055	REEDS	201	12	4.8	3.5	6.0	Kretzschmar, Alan
81-0003	ST. OLAF	201	10	5.5	3.5	7.5	Grabau, Al

### Washington County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
82-0049	BIG CARNELIAN	202	6	10.9	9.0	13.5	Gavelak, Ron
82-0049	BIG CARNELIAN	203	6	11.0	8.5	14.0	Bower, John
82-0049	BIG CARNELIAN	204	10	12.4	10.0	14.5	McKay, Maurice
82-0052	BIG MARINE	203	4	9.1	7.5	11.0	Hinze, Charlie
82-0054	BONE	202	13	4.8	4.0	6.0	Hafner, Jon
82-0090	BROOKMAN (WILMES)	201	4	3.8	3.0	5.5	Thompson, Dale
82-0090	BROOKMAN (WILMES)	202	3	3.7	2.5	4.5	Thompson, Dale
82-0163	CLEAR	202	8	4.4	3.5	5.0	Fuerstenberg, Deborah J.
82-0009	CLOVERDALE	201	10	8.1	4.5	11.0	Johnson, David J.
82-0159	FOREST	212	4	4.9	3.5	7.0	Murphy, John T.

#### Legend:

LAKE ID: Lake Identification Number: |XX|-|YYYY|-|ZZ| X-County Number, Y-Lake Number, Z-Bay Number

LAKE NAME: Name of Lake NS: Number of Readings MIN: Minimum Secchi Reading (ft)

SITE: Monitoring Location on Lake MEAN: Mean Secchi Transparency (ft) MAX: Maximum Secchi Reading (ft)

### Washington County, continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
82-0080	HALFBREED (SYLVAN)	202	5	16.1	15.0	17.0	Sparks, Curt
82-0080	HALFBREED (SYLVAN)	203	6	18.3	16.0	21.0	Huerstel, Peggy & Eugene
82-0104	JANE	201	14	15.1	10.0	20.0	Taylor, Charles W.
82-0021	LONG	201	4	3.1	3.0	3.5	Peterson, Leah
82-0130	LONG	201	7	8.2	7.0	10.0	Francy-Payton, Kathryn A.
82-0010	MCDONALD	202	9	5.0	1.0	11.5	Kelsey, Maynard J.
82-0153	SUNSET	201.1	6	9.5	8.0	11.5	Coderre, Diane
82-0153	SUNSET	201.1	3	10.8	10.5	11.0	Mottl, Greg
82-0128	UNNAMED	201	3	4.5	3.5	6.0	Vanzwol, Charles F.
82-0167	WHITE BEAR	223	3	9.7	7.0	12.0	Bartz, Greg

### Watowwan County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
83-0036	KANSAS	201	6	2.4	1.0	4.5	Olson, Ron

### Wright County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
86-0234	BASS	203	11	14.3	12.5	16.5	Ross, Dan
86-0023	BEEBE	204	18	2.9	1.8	7.0	Pyle, Roger
86-0023	BEEBE	205	18	3.3	2.0	7.0	Pyle, Roger
86-0023	BEEBE	206	18	3.1	2.0	7.0	Pyle, Roger
86-0066	BIRCH	202	12	13.2	10.5	16.5	Holme, Keith R.
86-0221	CAMP	201	5	3.0	2.0	4.0	Moe, Jenny
86-0221	CAMP	202	2	4.8	3.0	6.5	Young, Eric
86-0281	CAROLINE	201	5	8.2	5.5	12.5	Faidley, Dave
86-0281	CAROLINE	201	12	6.1	3.5	12.0	Schrader, Donald
86-0227	CEDAR	202	8	5.1	4.0	7.5	Johnson, Robert B.
86-0227	CEDAR	203	8	4.9	3.5	7.0	Johnson, Robert B.
86-0227	CEDAR	205	5	3.9	3.5	4.5	Knaup, Tom & Sharon
86-0227	CEDAR	208	5	4.7	4.0	5.3	Knaup, Tom & Sharon
86-0011	CHARLOTTE	204	4	17.5	17.0	18.0	Stecker, Alyn (Bruce)
86-0252	CLEARWATER	210	12	8.8	7.0	11.0	Roeder, Delores
86-0252	CLEARWATER	211	12	5.8	4.5	7.5	Roeder, Delores
86-0263	COKATO	202	5	6.4	5.0	8.0	Hanson, Philip L.
86-0293	COLLINWOOD	201	9	5.8	3.5	7.5	Gehlen, Richard
86-0148	EAGLE	202	16	7.0	4.0	13.0	Johnson, Jim
86-0289	EAST LAKE SYLVIA	201	7	16.4	14.0	19.0	Robb, Tim
86-0289	EAST LAKE SYLVIA	202	5	15.4	14.0	17.0	Heino, Helen
86-0289	EAST LAKE SYLVIA	204	2	14.8	14.0	15.5	Neumann, Herold
86-0289	EAST LAKE SYLVIA	205	8	16.2	13.5	17.3	Beek, E.J.
86-0183	FISH	201	13	4.6	3.0	6.0	Durant, Karen

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LAKE NAME: Name of Lake

NS: Number of Readings

MIN: Minimum Secchi Reading (ft)

SITE: Monitoring Location on Lake

MEAN: Mean Secchi Transparency (ft)

MAX: Maximum Secchi Reading (ft)

## **Wright County, continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
86-0217	GRANITE	202	16	4.5	2.0	7.0	Rau, Ray
86-0217	GRANITE	203	3	3.8	2.5	5.5	Peterson, Jean A.
86-0217	GRANITE	204	16	4.7	2.0	7.5	Rau, Ray
86-0217	GRANITE	205	16	4.6	2.5	6.5	Rau, Ray
86-0217	GRANITE	206	16	4.4	2.5	6.5	Rau, Ray
86-0217	GRANITE	207	16	4.5	2.5	6.5	Rau, Ray
86-0243	GRASS	201	1	7.5	7.5	7.5	Derosier, Jerome
86-0199	HOWARD	201	4	5.6	4.0	7.5	Forst, Curt
86-0223	INDIAN	201	11	5.0	3.0	8.0	Nelson, Alton E.
86-0288	JOHN	201	13	6.5	5.0	8.5	Fleskes, Robert
86-0282	LOUISA (MARIE)	201	11	2.6	1.5	6.5	Howard, Mike
86-0282	LOUISA (MARIE)	203	7	4.1	2.0	8.0	Driver, Donn R.
86-0134	MAPLE	201	17	5.5	2.5	12.0	Ruddle, Bill
86-0134	MAPLE	203	17	10.4	8.0	15.0	Ruddle, Bill
86-0134	MAPLE	206	17	9.8	7.0	13.0	Ruddle, Bill
86-0134	MAPLE	207	3	8.3	7.5	9.5	Ditter, Bill
86-0009	MARTHA	201	11	5.8	3.5	11.0	Miller, Jim
86-0156	MARY	201	4	8.1	7.5	8.5	Wurm, John
86-0193	MARY	202	15	7.9	6.0	14.0	Ollig, Mike
86-0193	MARY	203	7	8.0	5.0	12.0	Jude, Andrew
86-0229	MINK	205	4	2.5	1.5	4.5	Fritz, Steve
86-0238	NIXON	202	16	11.8	11.0	13.0	Lee, William A.
86-0251	PLEASANT	204	8	6.9	4.0	10.5	Peterson, Jim
86-0053-02	PULASKI (MAIN BAY)	204	9	12.4	8.0	21.0	Muntifering, Ron
86-0120	RAMSEY	202	4	3.3	3.0	4.0	Fritz, Steve
86-0182	ROCK	202	17	4.8	2.0	8.0	Yager, Peter, Mark & Eliz.
86-0230	SOMERS	204	4	3.8	2.5	6.0	Fritz, Steve
86-0233	SUGAR	202	9	8.7	7.0	11.0	Kastl, James E.
86-0233	SUGAR	203	9	8.7	7.0	11.0	Kastl, James E.
86-0119	SULLIVAN	201	9	3.5	3.0	5.5	Schoenfuss, Tonya
86-0298	UNION	203	13	6.6	4.0	10.0	Lysen, Paul
86-0279	WEST LAKE SYLVIA	204	8	16.5	15.5	18.0	Waldhauer, John
86-0279	WEST LAKE SYLVIA	211	6	18.8	18.0	20.0	Dandrea, Jim

## **Yellow Medicine County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
87-0016	CURTIS	201	3	0.5	0.5	0.5	Busack, Ernie

### Legend:

LAKE ID: Lake Identification Number: |XX|-|YYYY|-|ZZ| X-County Number, Y-Lake Number, Z-Bay Number

LAKE NAME: Name of Lake

NS: Number of Readings

MIN: Minimum Secchi Reading (ft)

SITE: Monitoring Location on Lake

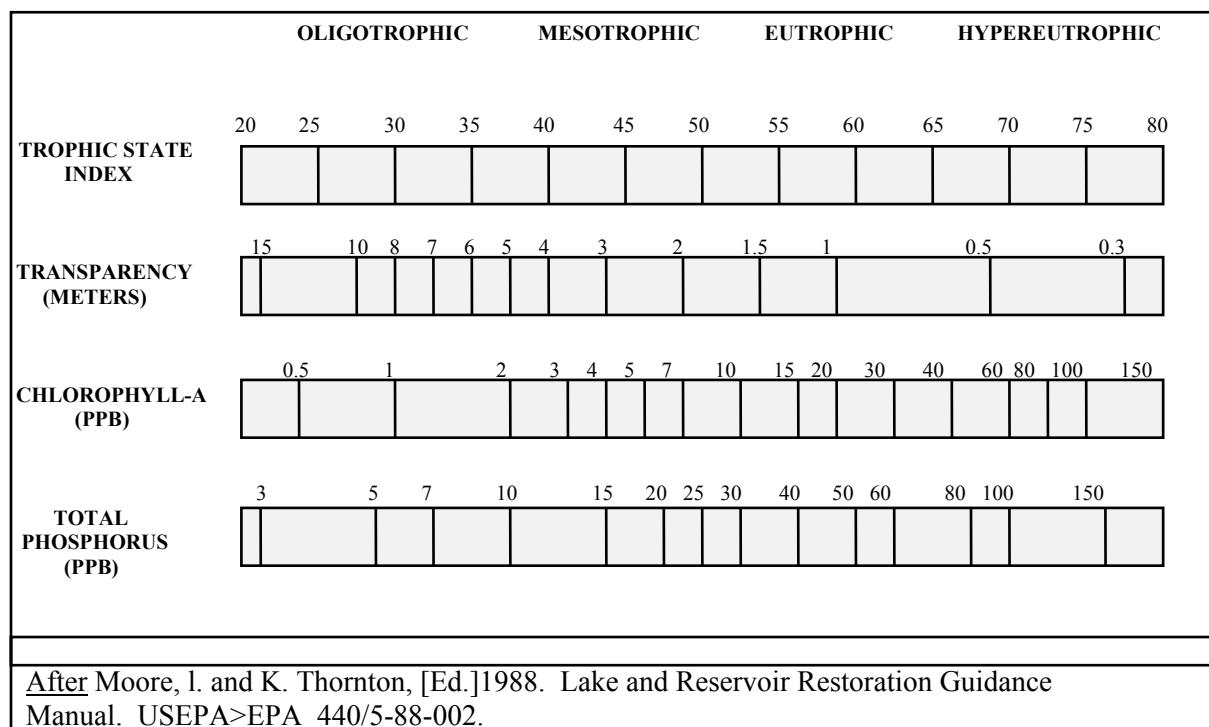
MEAN: Mean Secchi Transparency (ft)

MAX: Maximum Secchi Reading (ft)

## Appendix II. Carlson's Trophic State Index

### R.E. Carlson

- TSI < 30** Classical Oligotrophy: Clear water, oxygen throughout the year in the hypolimnion, salmonid fisheries in deep lakes.
- TSI 30 - 40** Deeper lakes still exhibit classical oligotrophy, but some shallower lakes will become anoxic in the hypolimnion during the summer.
- TSI 40 - 50** Water moderately clear, but increasing probability of anoxia in hypolimnion during summer.
- TSI 50 - 60** Lower boundary of classical eutrophy: Decreased transparency, anoxic hypolimnia during the summer, macrophyte problems evident, warm-water fisheries only.
- TSI 60 - 70** Dominance of blue-green algae, algal scums probable, extensive macrophyte problems.
- TSI 70 - 80** Heavy algal blooms possible throughout the summer, dense macrophyte beds, but extent limited by light penetration. Often would be classified as hypereutrophic.
- TSI > 80** Algal scums, summer fish kills, few macrophytes, dominance of rough fish.



### Appendix III. Lake Sarah 2006 Data

**Lake Sarah Site 201**

	TP (ppb)	Chl- <i>a</i> (ppb)	Secchi (feet)	Physical Condition (1-5)	Recreational Suitability (1-5)
*May - mid	34	2.2	15.5	1	1
June - early	22	0.9	19.5	2	2
June - late	31	7.7	9.0	2	2
July - early	28	8.2	5.5	2	2
*July - late	28	8.1	3.3	3	3
Aug. - early	38	7.7	5.0	4	3
Aug. - late	36	14.4	6.5	3	3
Sept. - early	39	25.6	4.0	3	3
*Sept. - late	43	35.9	3.3	2	3

\*MPCA Collected Data.