

# **Citizen Lake-Monitoring Program**

## **2004 Report on the Transparency of Minnesota Lakes**



**Minnesota Pollution Control Agency**

**Environmental Analysis and Outcomes Division  
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This report was prepared by Pam Skon.

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.

Special thanks to the following individuals for their contributions in preparing this report:

Manuscript Review: Jennifer L.K. Klang

Doug Hall

Matt Lindon

Data Entry: Pam Skon  
On-Line Volunteer Lake Monitors

Word Processing: Janet Eckart

Cover Photo: Dick & Sandy Lennes

Cover Design: Peggy Hicks

On the Cover: According to Dick & Sandy Lennes (Lake Manuella, Meeker County), raccoons had been rummaging the bird feeders at night for several weeks. They happened to hear some noise out on the deck about 7 p.m. one evening. The baby raccoons scampered up the tree and they retreated into the house for their camera. They surprised themselves by catching the raccoons at just the right moment before they scurried into the holes in the basswood.

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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 our State's lakes.

Good water quality is important for healthy ecosystems and for supporting tourism. 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. Information about the water quality of Minnesota's lakes is vital for assessing their physical condition and recreational suitability.

The CLMP involves 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 Minnesota Pollution Control Agency (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, and provide a basis for water quality goal setting.



## Ecoregions and Lake Water Quality

The U.S. Environmental Protection Agency (EPA) has divided the continental United States into ecoregions based on soils, geomorphology, land use, and potential natural vegetation. For Minnesota, this results in seven fairly distinct ecoregions (Figure 1). The ecoregion framework provides a good basis for evaluating differences and similarities in Minnesota's lakes. Reference lakes, which are felt to be representative and minimally impacted by surrounding land-use (see Heiskary and Wilson, 1989 for additional details) were sampled by the MPCA to characterize trophic status conditions for each ecoregion. 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 1) 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 1). The North Central Hardwood Forests Ecoregion (NCHF) is a transitional region and 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. The Western Corn Belt Plains ecoregion (WCBP) is located in the southern one-third part of Minnesota. It has rolling terrain and is extensively cultivated with row crops. 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. It also has rolling terrain and is extensively cultivated with 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.

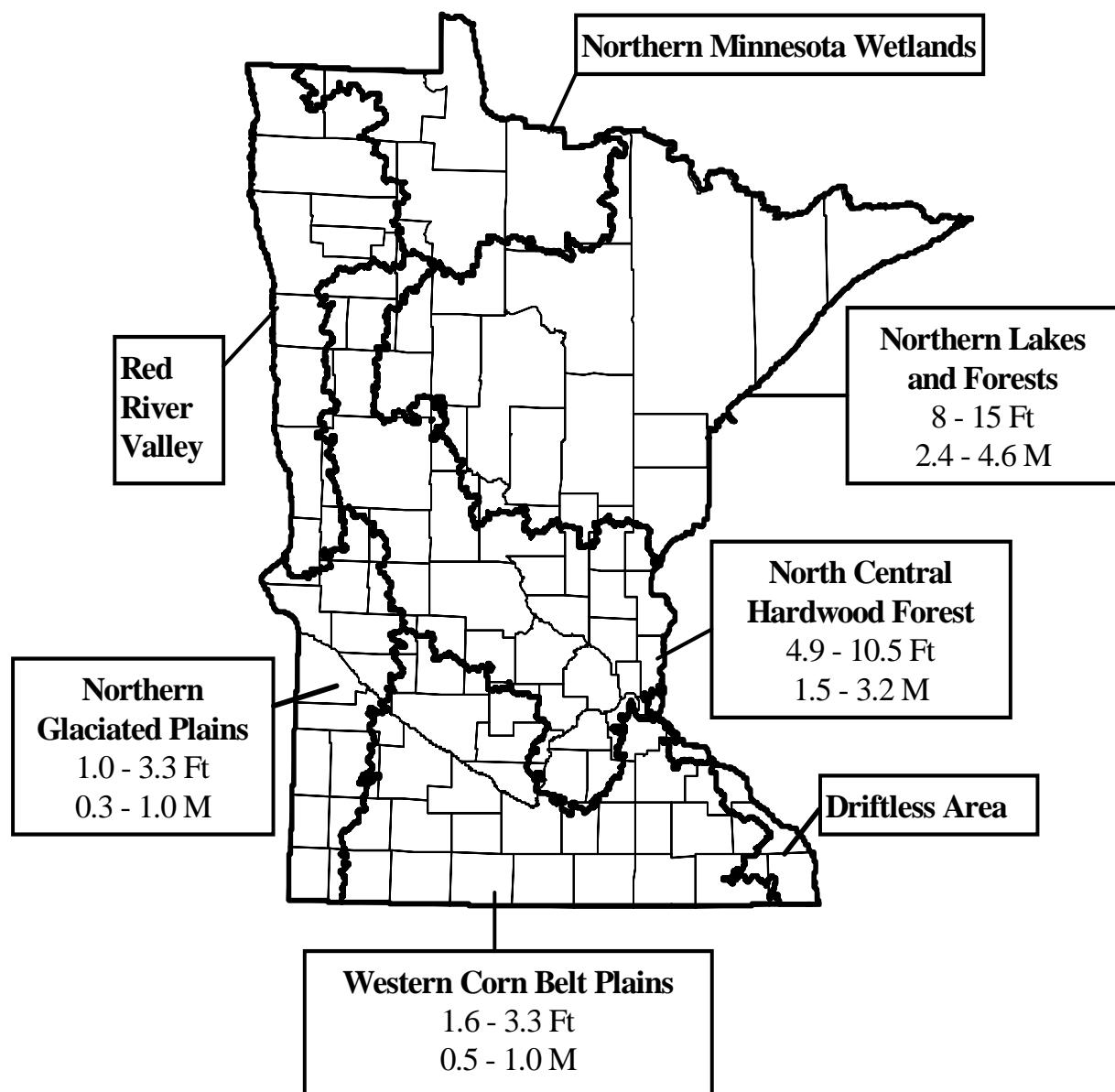
**Table 1. Summer Mean Secchi Transparency Measures by Ecoregion.**

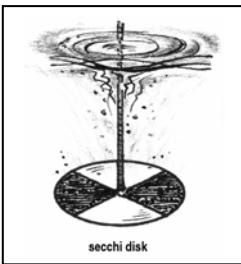
Based on interquartile ranges for reference lakes.<sup>1</sup>

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.

**Figure 1. Typical Summer-Mean Secchi Transparency.**  
Based on Interquartile Ranges for Reference Lakes





## Secchi Transparency Readings for 2004

Secchi transparency 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 most Minnesota lakes, Secchi transparency provides an indirect measure of the amount of algae in the water. Suspended sediments or color due to

dissolved organic material may also 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. On a statewide basis, precipitation in many areas across the state experienced normal precipitation levels typically only 2 or 4 inches above or below the normal in 2004 (Figure 2b). However, the northwest and southeast corners of the state experienced above normal precipitation in 2004, with precipitation 8 to 10 inches above normal. This can sometimes impact the water quality of area lakes because excess precipitation can cause more runoff and nutrient loading.

During the 2004 monitoring season, 978 CLMP volunteers monitored 888 lakes (Figure 3) taking 13,993 individual Secchi readings. The statewide seasonal mean transparency for the 2004 season was 10.7 feet. Sabin Lake (Embarrass Pit) in St. Louis County monitored by Ed and Lee Steblay had the deepest individual Secchi transparency reading (60 feet on 7/17/2004). Five lakes -- Clearwater, Caribou, Lone, Six, and Sabin Lake (Embarrass Pit) -- had summer average Secchi transparency readings of 30 feet or more in 2004. Clearwater Lake (Cook County) had readings at six different sites with summer average readings that ranged from 32.0 to 36.8 feet. Caribou Lake (Itasca County) had three sites averaging 38.6, 39.6, and 39.8 feet. Lone Lake (Aitkin County) had one site which had a summer average of 30.6 feet. Six Lake (Otter Tail County) had one site with a summer average of 30.7 feet. Sabin Lake (Embarrass Pit) averaged 48.5 feet for 2004. Five lakes had summer average Secchi transparency readings of one foot or less in 2004. These lakes were Alice Lake in Otter Tail County (1.0 foot); Unnamed (LP-44) in Dakota County (0.9 feet); Penn Lake in Hennepin County (0.8 feet); Long Lake in Meeker County (0.8 feet); and Wagonga (Main Bay) in Kandiyohi County (0.65 feet). Three lakes had maximum individual Secchi transparency readings of one foot or less. These lakes included Alice Lake in Otter Tail County (1 foot), Long Lake in Meeker County (1.0 foot), and Wagonga (Main Bay) in Kandiyohi County (0.7 feet).

Itasca County had 82 lakes monitored by citizens, making it the county with the highest citizen monitoring. The counties with the next highest number of lakes monitored in 2004 were Crow Wing County with 71 lakes and Cass County with 67 lakes. Eight counties only had one lake monitored by citizens. Thirty-one counties had no citizen lake monitoring activities in 2004.

Summer-mean, minimum, and maximum Secchi values were calculated for each CLMP site. Individual 2004 summer-mean (June through September) Secchi transparency data for each site and participant names 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.**

A new appendix is included in this report: Appendix II contains Secchi, chlorophyll-*a*, and total phosphorus long term seasonal averages (June through September), and Trophic State Indices for each of the parameters sampled. It is important to note that Appendix II data is an average of all available data from all previous years when data was collected. The data presented is all the available data in STORET (EPA's national water quality database). STORET includes data collected by MPCA and other agencies, locally collected data, and volunteer collected data. Individual sites are not provided in this summary and the averages and TSI values are for the entire lake basin.

**Figure 2a. Water Year Precipitation Map.**

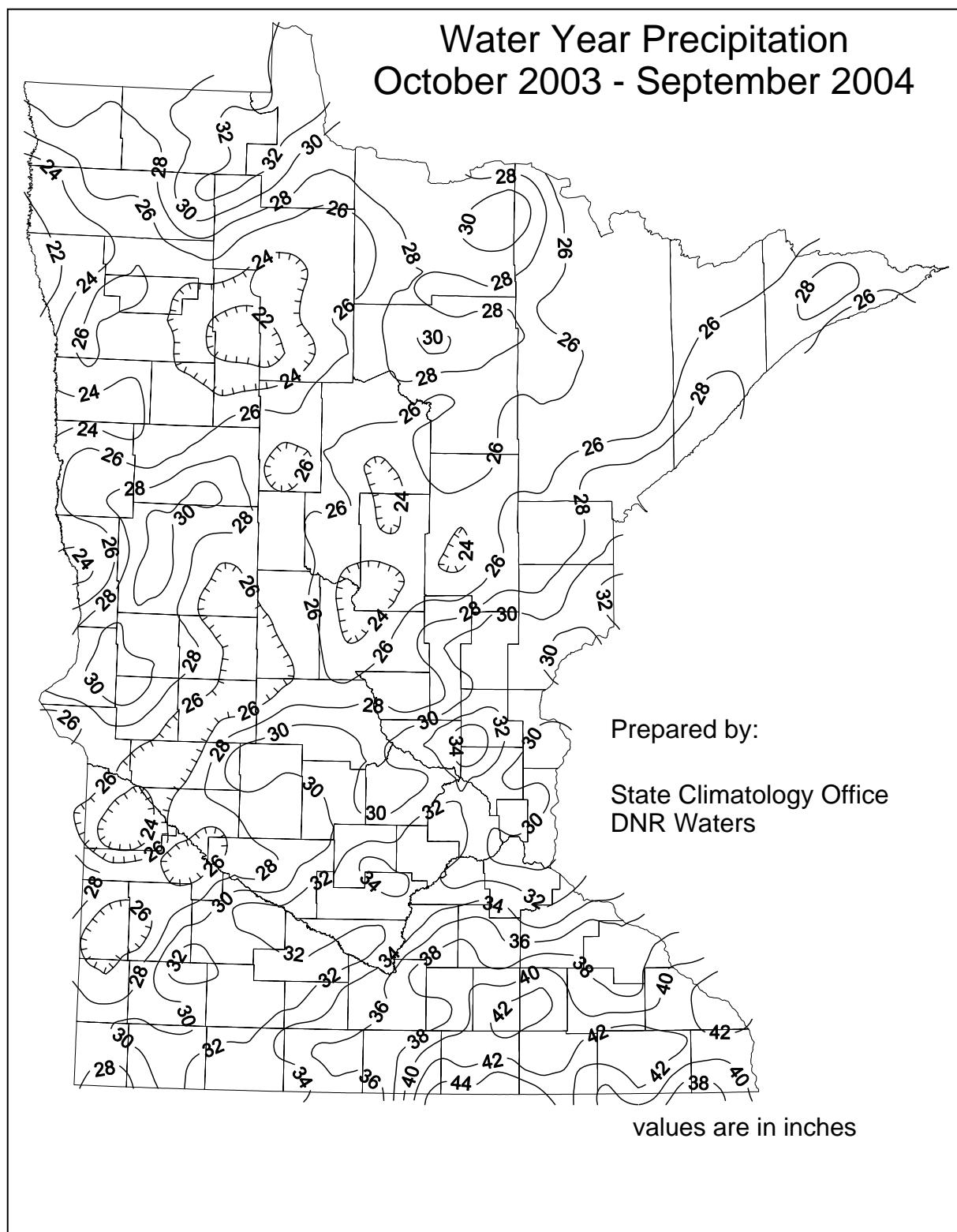


Figure 2b. Departure From Normal Precipitation Map.

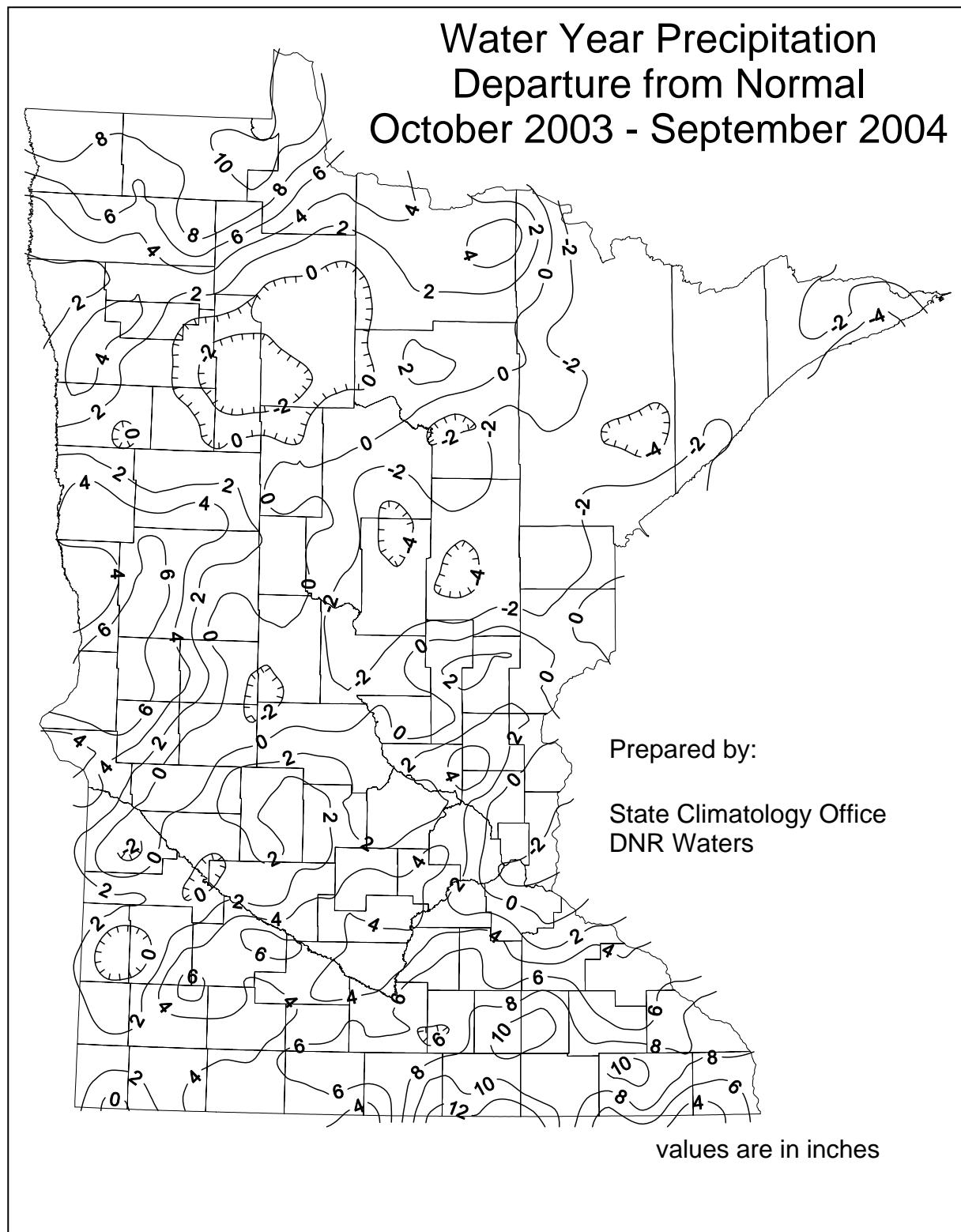
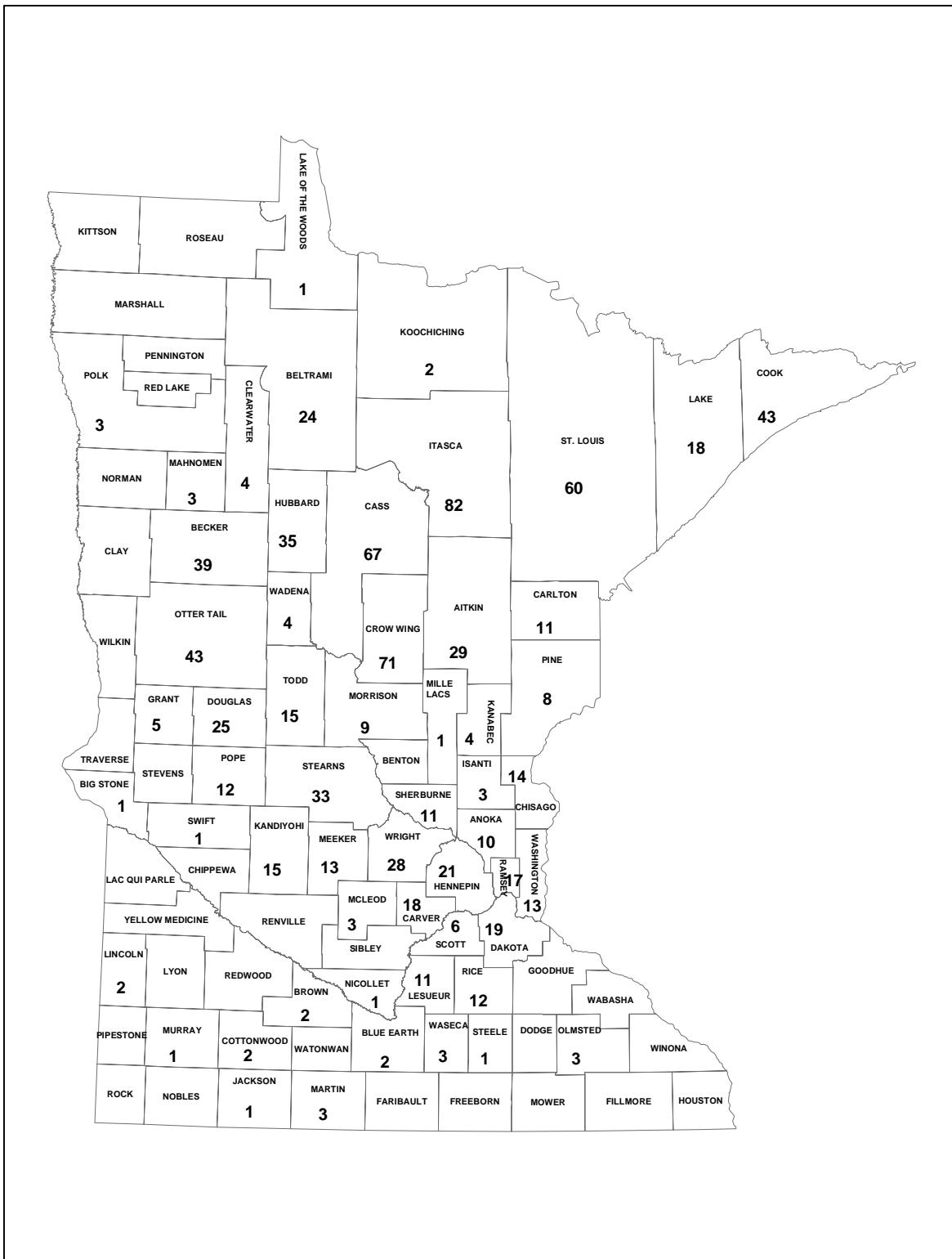
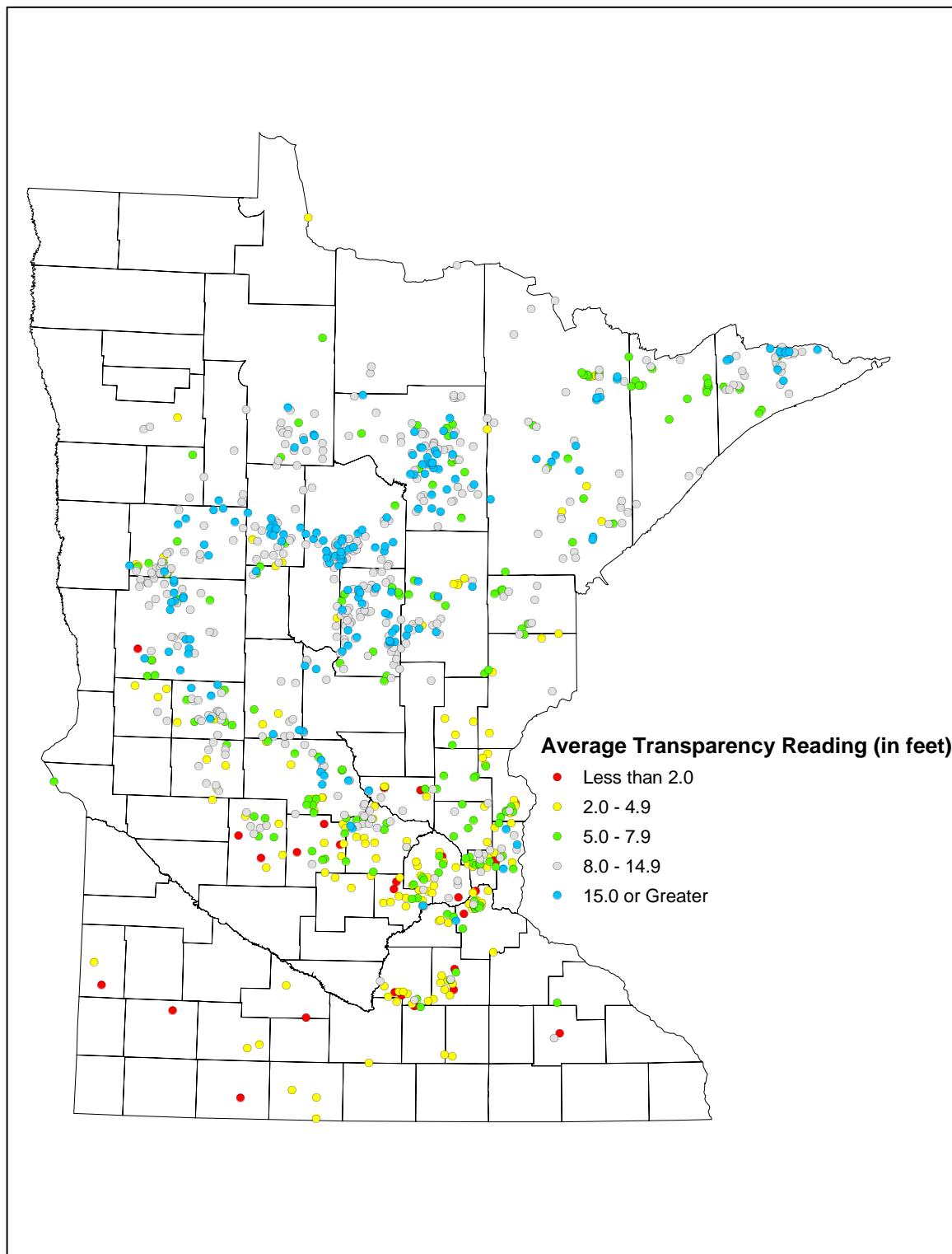


Figure 3. Number of CLMP Lakes Monitored by County – 2004.



**Figure 4. 2004 CLMP Lakes Summer-Mean Transparency**



## Trophic State Index

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 nutrient (phosphorus) status of a lake. Carlson's Trophic State Index (TSI) is a common means for characterizing a lake's trophic state (biological productivity) and associating Secchi, chlorophyll-*a*, and phosphorus measurements.

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 (TSI, 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) to 100 (hypereutrophic). High and/or 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 for Minnesota's lakes and can be used to estimate likely ranges of total phosphorus and chlorophyll-*a* for most lakes.

## Big Pine Lake Trophic Status Example

Big Pine Lake is a large-sized lake (614 acres) with a maximum depth of 78 feet (23.8 m) and estimated mean depth of 31 feet (9.5 m). It is in the upper five percent of lakes in terms of its size. The lake is located in southwest Aitkin County, 3 miles north of Nichols, Minnesota. Approximately 42 percent of the lake is littoral and there is only one public access for the lake. Its very small direct (immediate) and total (all contributing) watershed areas are approximately equal at  $2.7 \text{ mi}^2$ . As such, the watershed to lake ratio is also small at 3:1. Its water residence time (time it would take to fill the lake if it were completely empty) is on the order of 7 years.

Water quality data was collected in June, July, August, and September, 2004 by volunteer lake monitors: Dave & Christine Osier. Two sites were used on Big Pine Lake: site 101(201) – located in the northern end of the lake and site 102(203) – located in the southwest end of the lake (Figure 5). Individual results for Big Pine Lake for 2004 can be found in Appendix IV. Sample dates marked with an asterisk indicate data collected by MPCA staff.

**Table 2. Summer-Mean Water Quality Parameters for Big Pine Lake.**  
**(Based on 2004 Epilimnetic Data Collected by Volunteers and MPCA Staff)**

Parameter	Big Pine Lake	Typical Range for NLF <sup>1</sup> Ecoregion
<i>TP (µg/L)</i>	<b>14.4</b>	<b>14 – 27</b>
<i>Chl-a (µg/L)<sup>2</sup></i>	<b>3.2</b>	<b>&lt; 10</b>
<i>Secchi (m)</i>	<b>3.9</b>	<b>2.4 – 4.6</b>
<i>Secchi (ft)</i>	<b>12.7</b>	<b>8 – 15</b>

<sup>1</sup>NLF Ecoregion” range is the 25<sup>th</sup> – 75<sup>th</sup> percentile of summer means from ecoregion reference lakes.

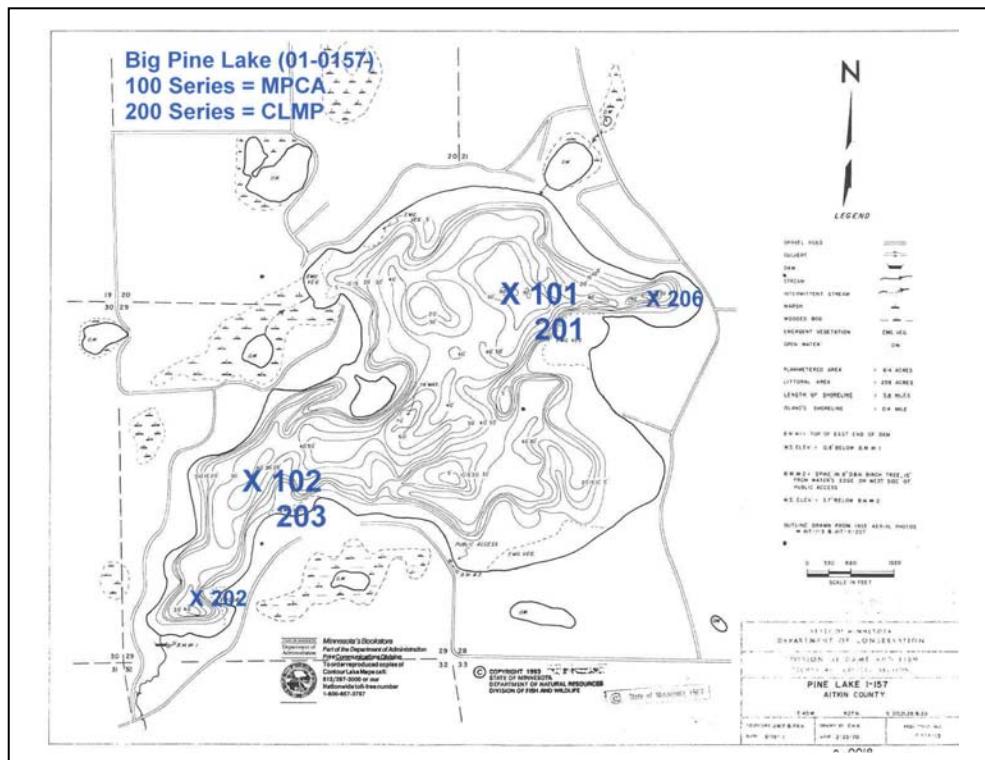
<sup>2</sup>Chlorophyll-*a* measurements have been corrected for pheophytin.

**Total phosphorus** (TP) concentrations averaged 14.4 µg/L (micrograms per liter or parts per billion) in Big Pine Lake during the summer of 2004. This value is within the range of concentrations for reference lakes in this ecoregion (Table 2). TP concentrations ranged from 11 – 22 µg/L (Figure 6) with no significant difference between site 101 and site 102.

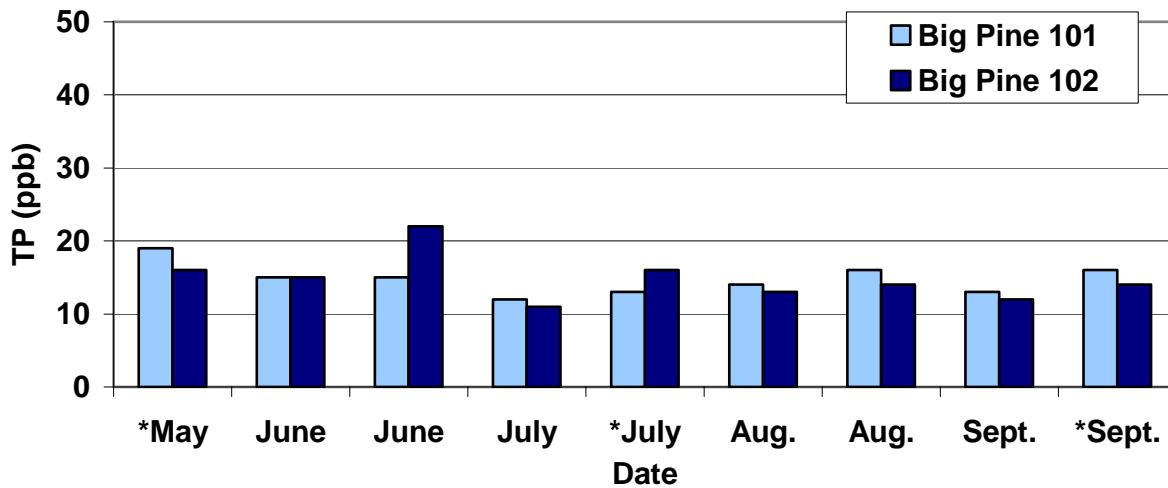
**Chlorophyll-*a*** concentrations for Big Pine Lake averaged 3.2 µg/L and were well below the ecoregion range (Table 2). Concentrations on Big Pine Lake ranged from 1.7 – 4.5 µg/L with no significant difference between site 101 and site 102 (Figure 7).

**Secchi disk transparency** on Big Pine Lake ranged from 9.8 feet (3.0 meters) in late September to 14.8 feet (4.5 meters) in late July (Figure 8) and averaged 12.7 feet (3.9 meters). These transparency measures are well within the typical range for ecoregion reference lakes (Table 2). Transparency values at site 101 were generally greater than transparency values at site 102, except for May and August where transparency was greater at site 102. Along with transparency measurements, subjective measures of Big Pine Lake’s “physical appearance” and “recreational suitability” were made. Lake conditions were characterized as “not quite crystal clear” (Class 2) and “beautiful” (Class 1) throughout the summer for Big Pine Lake.

**Figure 5. Big Pine Lake Bathymetric Map and Monitoring Locations**

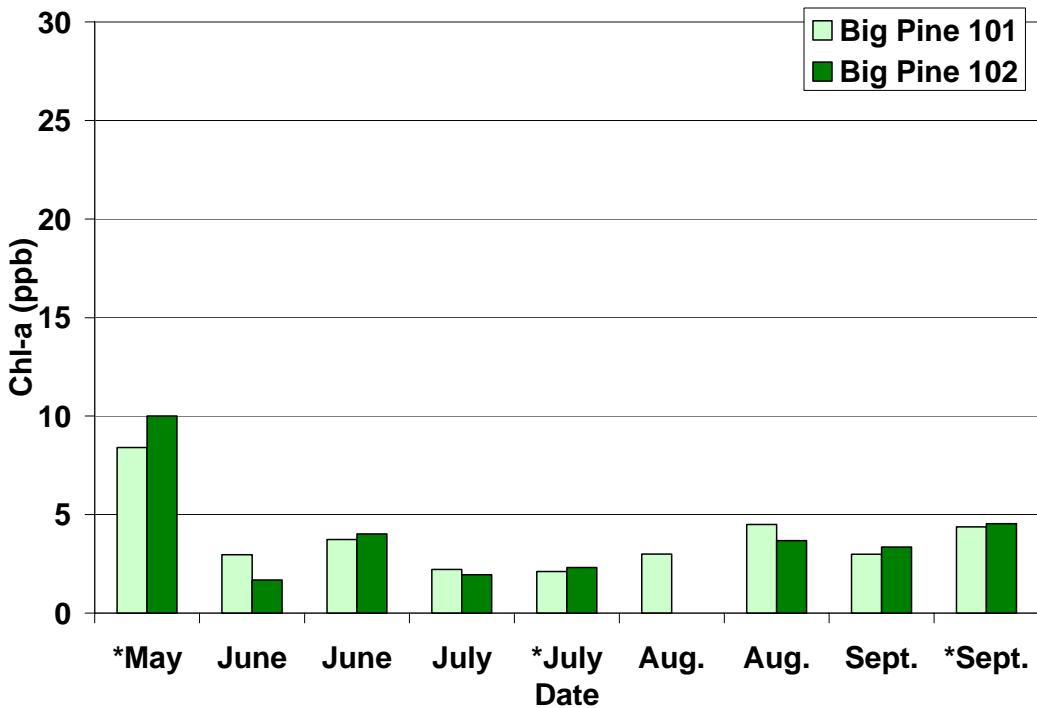


**Figure 6. Big Pine Lake Total Phosphorus Results for 2004**



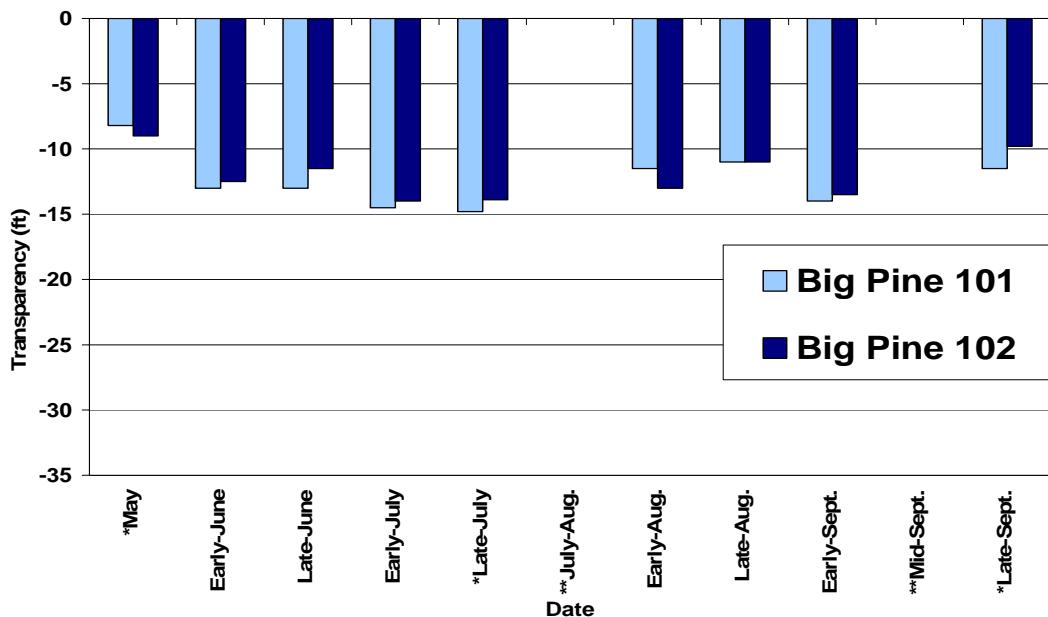
\*MPCA Collected Data.

**Figure 7. Big Pine Lake Chlorophyll-a Results for 2004**



\*MPCA Collected Data.

**Figure 8. Big Pine Lake Secchi Transparency for 2004**



\*MPCA Collected Data.

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

**Table 3. Trophic Status Indicators for Big Pine Lake.**  
(See page 10 for formulas used to calculate these values.)

TSI Parameter	Big Pine Lake TSI Value
<i>TSIP</i>	<b>43</b>
<i>TSIC</i>	<b>42</b>
<i>TSIS</i>	<b>40</b>
<i>Overall TSI</i>	<b>42</b>

### CLMP Plus Program: Updates for 2004 and 2005

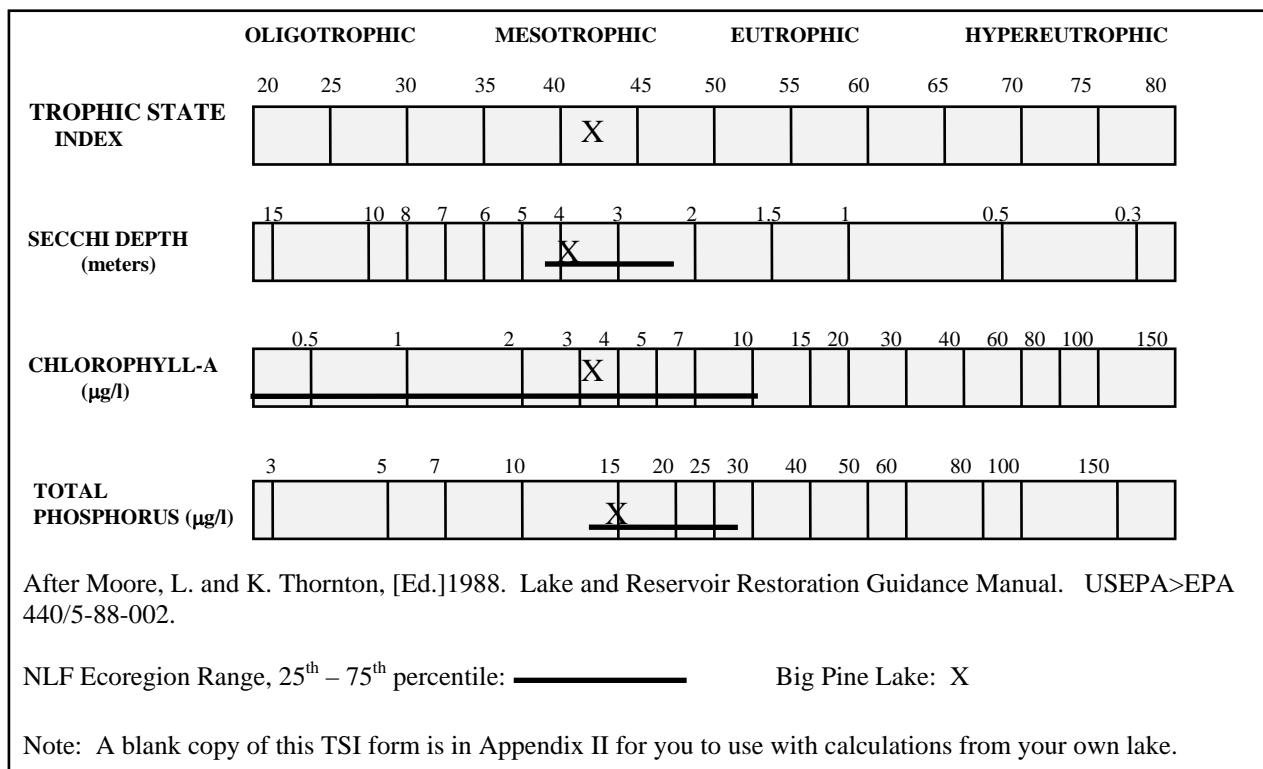
CLMP+ takes volunteer monitoring one step further. In the advanced program, volunteers collect water chemistry and temperature data in addition to collecting transparency data.

During the summer of 2004, fifteen lakes in Aitkin County were sampled by CLMP volunteers as a part of the CLMP+ program. These lakes were selected because they were a priority within the county and lacked data beyond Secchi 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: Big Pine (01-0157), Clear (01-0093), Dam (01-0096), Elm Island (01-0123), Esquagama (01-0147), Farm Island (01-0159), Hanging Kettle (01-0170), Little Pine (01-0176), Lone (01-0125), Minnewawa (01-0033), Nord (01-0117), Ripple (01-0146), Round (01-0204), Sugar (01-0087) and Wilkins (01-0102). 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. After sampling, the volunteers dropped off their samples at a predetermined location within their county. Janet Smude, Aitkin County Soil and Water Conservation District, helped plan and coordinate the sample drop-off/pick up schedule for the samples in Aitkin County. Jennifer Klang and Pam Skon, MPCA-St. Paul Office, helped plan, train volunteers, and monitor lakes in Aitkin County. Special thanks to the volunteers in Aitkin County who helped make this project a success: Dave and Christine Osier (Big Pine), Ryan and Gary Messer (Clear), John LaClair (Dam), William Jorgenson (Elm Island), Kathryn and John Miller (Esquagamah), Russ Hoppe (Farm Island), Matthew Rymanowski and Ken and Dick Hakes (Hanging Kettle), James W. Kalb (Little Pine), Jerry Baker (Lone), Lee and Jill Carlson and Pat McGinn (Minnewawa), Gordon Prickett (Nord), Joel Hyttinen (Ripple), Robert Williams (Round), Dan and Fran Newton (Sugar), and Richard A. Reese (Wilkins). MPCA staff collected quality assurance and quality control (QA/QC) samples for each lake. A copy of the results will be outlined in a detailed county report 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).

CLMP “Plus” for the 2005 monitoring season is planned for several counties. Lakes are being considered in Douglas, Kandiyohi, Wadena, and Wright counties.

**Figure 9. Carlson's Trophic State Index, based on a scale of 0 – 100. (Carlson 1977)**

- 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.



## 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. 2004 CLMP Data and Participants.

### Aitkin County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
01-0157	BIG PINE	206	16	12.9	11	14.5	Osier, Dave & Christine
01-0062	BIG SANDY	202	7	5.1	3.5	6.5	Hanson, Ken
01-0062	BIG SANDY	203	10	5.3	4.5	5.5	Carlson, James R.
01-0062	BIG SANDY	208	11	6.0	6	6.5	Knoble, Carmen
01-0062	BIG SANDY	209	11	5.5	5	6	Knoble, Carmen
01-0062	BIG SANDY	210	9	2.9	2.5	3.5	Nystuen, John
01-0062	BIG SANDY	211	9	3.0	2.5	3.5	Nystuen, John
01-0062	BIG SANDY	212	10	5.2	4	6	Carlson, James R.
01-0062	BIG SANDY	213	10	4.8	4	5.5	Carlson, James R.
01-0062	BIG SANDY	215	7	4.9	3.5	6.5	Hanson, Ken
01-0062	BIG SANDY	217	10	4.7	4	5	Krezowski, Mark & Lori
01-0062	BIG SANDY	218	10	5.0	4.5	5.5	Krezowski, Mark & Lori
01-0062	BIG SANDY	219	10	3.7	3.5	4	Krezowski, Mark & Lori
01-0062	BIG SANDY	220	9	4.4	3	6	Touhey, Bernie
01-0062	BIG SANDY	221	9	4.4	3	6	Touhey, Bernie
01-0062	BIG SANDY	222	9	4.2	3	5.5	Touhey, Bernie
01-0062	BIG SANDY	223	7	4.8	2.5	6.5	Hanson, Ken
01-0188	BLIND	201	5	5.3	4	7.5	Raudabough, Wallace
01-0209-01	CEDAR (MAIN BASIN)	201	13	12.5	8.5	16	Eberhardt, Tom
01-0209-01	CEDAR (MAIN BASIN)	207	6	11.6	9.5	13	Nelson, Ron & Paul Klinepien
01-0209-01	CEDAR (MAIN BASIN)	208	12	9.9	9	11	Hauge, Paul
01-0093	CLEAR	201	1	28.0	28	28	Messer, Ryan & Gary
01-0096	DAM	201	4	11.1	10	11.8	LaClair, John
01-0123	ELM ISLAND	201	11	3.5	2	4	Jorgensen, William H.
01-0147	ESQUAGAMAH	204	2	5.0	5	5	Miller, Kathryn & John
01-0147	ESQUAGAMAH	206	8	6.6	5	8	Heuer, James P.
01-0159	FARM ISLAND	204	13	14.9	9.5	25	Nardini, Gene
01-0159	FARM ISLAND	205	4	15.5	13.5	20	Hoppe, Russ
01-0105	FLEMING	201	10	4.3	2.5	6.5	Fulton, Lawrence
01-0061	FLOWAGE	201	9	3.1	2.5	4	Nystuen, John
01-0099	GUN	207	8	5.5	5	6.5	Danielson, Bruce
01-0170	HANGING KETTLE	202	7	8.1	6	9.5	Hakes, Dick
01-0022	ISLAND	201	8	8.0	7.5	10	Miller, Mark & Cindy
01-0176	LITTLE PINE	201	11	19.5	17	23	Kalb, James W.
01-0217	LITTLE TURTLE	201	6	11.1	10.5	12	Mazurs, Elmar & Matthew
01-0125	LONE	202.1	12	23.9	18.5	36	Baker, Jerry
01-0125	LONE	203	6	30.6	21.5	44	Mazurs, Elmar & Matthew
01-0089	LONG	201	8	13.9	11.5	18	Glimsdal, Don & Janice
01-0089	LONG	203	10	12.1	10.5	13	Newmann, Gary
01-0001	PINE	202	9	6.4	5	8	Benkusky, Anthony
01-0069	PORTAGE	202	5	6.5	5.5	8.5	Stefanski, Mary
01-0091	RABBIT	204	11	10.6	8	13	Mattson, Deana & Calvin

Legend:

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### Aitkin County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
01-0091	RABBIT	205	11	11.5	9	13	Mattson, Deana & Calvin
01-0091	RABBIT	206	11	10.6	9	12	Mattson, Deana & Calvin
01-0077	RAT	201	3	4.8	4.5	5	Holten, Carole
01-0023	ROUND	201	10	16.9	13	20.5	Williams, Joyce
01-0137	ROUND	201	7	15.8	14.5	18	Christianson, Jim
01-0204	ROUND	204	7	10.5	9.5	11	Williams, Robert
01-0060	SANDY RIVER	201	9	2.9	2.5	4	Nystuen, John
01-0178	SPIRIT	201	5	17.4	14	22	Mazurs, Elmar & Matthew
01-0178	SPIRIT	202	9	12.0	10.5	13	Hakes, Ken
01-0087	SUGAR	201	5	14.9	13.5	18	Newton, Dan & Fran
01-0102	WILKINS	201	3	15.0	14	16	Reese, Richard A.

### Anoka County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
02-0042	COON	203	7	5.6	4.5	6.5	Johnson, Goldie M.
02-0042	COON	204	5	6.3	3.5	8	Mercil, Arlan
02-0042	COON	205	13	9.0	7.5	14	Tierney, Douglas
02-0042	COON	207	4	5.5	5	6	Rasmussen, Dave
02-0042	COON	208	7	6.6	6	8	Johnson, Goldie M.
02-0084	CROOKED	205	6	6.4	5.5	8.5	McCann, James
02-0075-01	EAST MOORE	204	10	5.7	4	12	Ahlers, Kathy
02-0035	FAWN	201	6	14.5	13	15	Arboe, Jim
02-0091	GEORGE	207	1	16.0	16	16	Hall, Doug
02-0091	GEORGE	208	5	9.4	7.5	10.5	Ridge, William G.
02-0053	HAM	201	6	6.8	5	8.5	Arndt, Roger & Jane
02-0034	MARTIN	202	18	2.8	2	4	Docken, Tom & Nancy
02-0003	OTTER	203	5	8.8	6	10.5	Berg, Jim
02-0004	PELTIER	203	9	3.2	1.5	4.5	LeBlanc, Wayne
02-0102	SANDSHORE	201	2	6.5	6.5	6.5	Smith, James

### Becker County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
03-0366	ABBEY	201	6	2.9	1.5	4	PRWD, Dick Hecock
03-0085	BAD MEDICINE	201	14	22.4	19	32	Stadem, Dr. Paul D.
03-0085	BAD MEDICINE	207	16	22.7	16	42	Strohmeier, Ed
03-0085	BAD MEDICINE	210	11	26.1	18	40	Vlasak, Ray
03-0085	BAD MEDICINE	211	16	22.7	16	42	Strohmeier, Ed
03-0304	BIG SUGAR BUSH	202	10	21.0	18.5	24	Drenkow, Fred
03-0304	BIG SUGAR BUSH	207	10	20.6	14.6	24	Drenkow, Fred
03-0030	BOOT	203	7	21.1	20	24	Stecker, Roger
03-0400	BRANDY	201	6	2.3	1.5	3	PRWD, Dick Hecock
03-0286	COTTON	202	6	11.8	9	15	Barbari, Dick
03-0286	COTTON	202	6	12.1	8	15	Carlson, Kent

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## Becker County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
03-0286	COTTON	203	8	10.8	9	14	Peterka, John
03-0381	DETROIT	205	9	10.4	8	13	PRWD, Dick Hecock
03-0381	DETROIT	207	7	10.4	8	12	PRWD, Dick Hecock
03-0503	EUNICE	201	6	11.5	8.5	14	Magnuson, Ken
03-0387	FLOYD	206	1	13.5	13.5	13.5	PRWD, Dick Hecock
03-0387	FLOYD	207	10	14.4	11	17.5	Geihl, Mark
03-0387	FLOYD	207	3	9.2	7.5	10.5	PRWD, Dick Hecock
03-0387	FLOYD	207	9	8.5	4	14.8	Shipley, Kevin & Carol
03-0387	FLOYD	208	11	13.5	10.5	21	Flynn, Dan
03-0387	FLOYD	209	9	8.0	4	15.5	Shipley, Kevin & Carol
03-0358	FOX	201	15	10.4	7	14	Portilla, Sue
03-0358	FOX	201	6	11.4	8	20	PRWD, Dick Hecock
03-0153	ISLAND	202	14	16.1	9	28	Aschbacher, Peter
03-0374-01	JOHNSON	201	6	7.3	6	9	PRWD, Dick Hecock
03-0136	JUGGLER	202	7	21.6	21	22.5	Rofidal, Chris
03-0136	JUGGLER	203	17	23.5	20	31	Zweerink, Jim
03-0596	LARSON	201	11	4.0	1.5	7	Olson, Duane
03-0506	LITTLE CORMORANT	202	12	8.2	6.5	10.5	Renslow, James
03-0506	LITTLE CORMORANT	203	12	7.8	6.5	10	Renslow, James
03-0506	LITTLE CORMORANT	204	12	6.3	5	8	Renslow, James
03-0506	LITTLE CORMORANT	205	12	6.6	6	7.5	Renslow, James
03-0506	LITTLE CORMORANT	206	12	8.5	7.5	10	Renslow, James
03-0386	LITTLE FLOYD	203	11	10.9	7	18	Lembke, Scott
03-0386	LITTLE FLOYD	203	1	11.0	11	11	PRWD, Dick Hecock
03-0189	LITTLE TOAD	201	13	11.6	4.5	20	Purdy, Bill
03-0189	LITTLE TOAD	202	16	12.0	5.5	21	Kercher, Edsel J.
03-0383	LONG	201	3	12.5	11	14	Berg, Dan & Sheri
03-0383	LONG	201	7	12.1	8.5	14.5	PRWD, Dick Hecock
03-0383	LONG	202	10	13.4	10	16.5	Fihn, Shirley
03-0500	MAUD	204	4	14.3	12.5	16	Nelson, Marvin
03-0371	MEADOW	201	7	18.9	13.5	25	PRWD, Dick Hecock
03-0475	MELISSA	201	7	14.5	9.5	22	PRWD, Dick Hecock
03-0602	MIDDLE CORMORANT	201	21	9.4	8	11	Taylor, Robert L.
03-0602	MIDDLE CORMORANT	202	21	9.5	8	12	Taylor, Robert L.
03-0357	MONSON	201	7	11.2	9.5	13	PRWD, Dick Hecock
03-0360	MUSKRAT	201	5	9.3	6	11	PRWD, Dick Hecock
03-0595	NELSON	201	11	6.8	5	10	Olson, Duane
03-0180	NORTH TWIN	202	4	14.3	12	15	Durben, Paul
03-0486	PEARL	201	1	9.5	9.5	9.5	PRWD, Dick Hecock
03-0374-02	REEVES	201	3	8.2	7	9	PRWD, Dick Hecock
03-0293	ROCK	202	4	6.4	5.5	7.5	Blanding, Donald
03-0587	ROSSMAN	201	15	4.0	3.5	7	Leek, Mel
03-0155	ROUND	202	11	14.5	9	21	Bergquist, Ruth

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### Becker County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
03-0359	SALLIE	201	13	9.1	5	14.5	PRWD, Dick Hecock
03-0382	ST. CLAIR	201	5	5.2	4	6	PRWD, Dick Hecock
03-0382	ST. CLAIR	202	5	4.8	3.5	7	PRWD, Dick Hecock
03-0010	STRAIGHT	201	14	10.2	8	16.5	Olson, Gordon
03-0010	STRAIGHT	202	15	9.8	8	16	Olson, Gordon
03-0010	STRAIGHT	203	15	9.6	6	16	Olson, Gordon
03-0323	STRAWBERRY	201	14	19.2	11.5	23.5	Maher Jr., George G.
03-0107	TOAD	203	17	15.9	10.5	24	Koel, Marvin
03-0107	TOAD	204	17	15.7	10	23	Koel, Marvin
03-0657	TURTLE	202	16	23.8	18	29	Link, Robert
03-0657	TURTLE	203	16	23.6	18	28.5	Link, Robert
03-0017	TWO INLETS	202	13	9.6	8.5	10.5	Higgins, Thomas
03-0328	WHITE EARTH	203	13	15.0	10	23.5	Christensen, Ronald
03-0328	WHITE EARTH	209	13	14.5	10.5	24	Christensen, Ronald

### Beltrami County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
04-0135	BELTRAMI (GNAT)	202	14	14.6	11	20.5	Maxson, George-Ann
04-0135	BELTRAMI (GNAT)	203	9	13.8	10	18	Vanek, Jerome
04-0135	BELTRAMI (GNAT)	204	9	15.4	12	19.5	Vanek, Jerome
04-0130	BEMIDJI	201	16	13.2	8.5	20	Roholt, Ina T.
04-0049	BIG	203	12	12.5	8	19.5	Ockenga, Earl
04-0069	BLACKDUCK	203	5	13.2	10.5	16	Gilmore, Tom
04-0069	BLACKDUCK	204	24	15.0	12	18	Bechtold, Steve
04-0030	CASS	208	11	12.1	8	16	Reed, Donald J.
04-0030	CASS	209	8	17.6	17	18	Beaver, Larry
04-0343	CLEARWATER	204	10	11.4	8	14	Widerski, Robert J.
04-0167	DARK	201	6	26.8	22	35	Coe, Leland G.
04-0120	GULL	202	3	7.5	7	8	Houseman, Don
04-0140	IRVING	202	12	5.2	2	9.5	Schmeckpeper, Don
04-0166	JULIA	201	4	14.9	8.5	24	Purcell, Pat & Bob
04-0007	KITCHI	201	2	13.8	10.5	17	Braaten, Laverne
04-0110	LITTLE BASS	201	10	17.6	14	24	DeWenter, James H.
04-0155	LITTLE TURTLE	201	16	8.5	6	13	Davenport, Brad
04-0076	LONG	201	18	18.6	16	21	Beck, William R.
04-0142	MARQUETTE	202	2	10.1	7.6	12.6	Stearns, Rex
04-0063	NORTH TWIN	201	6	17.3	13.5	21	Champlin, Charles
04-0032	PIMUSHE	201	4	13.8	10	19.5	Fussy, Ed
04-0035-01	RED (UPPER RED)	201	1	5.0	5	5	Paakh, Bruce
04-0053	SOUTH TWIN	201	4	19.0	12.5	25	Champlin, Charles
04-0130-01	STUMP	201	8	11.2	7.5	14	Fenson, Roxanne
04-0130-01	STUMP	201	13	10.7	7	16	Tangborn, Archie
04-0130-01	STUMP	202	12	10.2	8	13	Tangborn, Archie

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### Beltrami County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
04-0134	THREE ISLAND	202	8	10.3	8	11.5	Evans, Dan
04-0159	TURTLE (BIG TURTLE)	204	17	13.0	9.5	21.5	Lynne, Vic & Betty
04-0111	TURTLE RIVER	201	10	11.2	9.5	14	Mitchell, George
04-0111	TURTLE RIVER	202	14	10.5	8	15	Wickstrom, Evert B.
04-0137	WHITE FISH	202	3	12.3	12	13	Amland, Charlotte

### Big Stone County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
06-0152	BIG STONE	212	14	7.4	4	12	Michels, Joe

### Blue Earth County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
07-0053	DUCK	203	9	2.1	1.5	3	Dahl, Donald A.
07-0079	LURA	201	6	2.0	1.5	2.5	Kunard, Marlin
07-0079	LURA	202	3	2.3	2	2.5	Kunard, Marlin

### Brown County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
08-0026	HANSKA	201	4	1.4	1	2	Brekke, Loren
08-0026	HANSKA	206	6	1.2	1	1.5	Sturm, Jean
08-0026	HANSKA	207	4	1.6	1.5	2	Helling, Gerald
08-0045	SLEEPY EYE	202	13	3.0	1	6	Schotzko, Edward J.

### Carlton County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
09-0032	BIG	202	4	11.2	8.5	13.5	Nynas, Carlie
09-0057	EAGLE	202	8	9.9	7	13.5	Fischer, Gary L.
09-0039	EDDY	201	11	6.5	6	7	Wentkiewicz, Sandy
09-0038	HANGING HORN	205	9	8.2	6.5	10.5	Sandberg, Betty
09-0060-02	ISLAND (SOUTH BAY)	201	4	10.4	7.5	16	Freiermuth, Bill
09-0035	LITTLE HANGING HORN	201	8	12.6	11	14	Kelly, Dorothy J. & Robert
09-0035	LITTLE HANGING HORN	202	8	12.4	11	14	Kelly, Dorothy J. & Robert
09-0066	LONG	201	3	5.4	5	5.6	Walli, Sulo
09-0041	MOOSEHEAD	201	4	5.9	5.5	6	Hedberg, Leon & Kathi
09-0041	MOOSEHEAD	202	4	5.6	5.5	6	Hedberg, Leon & Kathi
09-0029	PARK	203	5	10.2	8.5	14	Davis, Duane H.
09-0067	TAMARACK	201	16	5.7	5	6.5	Gurske, Ray
09-0063	WOODBURY	201	4	5.5	5	6.5	Butcher, Kelly

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## Carver County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
10-0019	BAVARIA	202	10	5.7	4.5	8	Environmental Services, Carver County
10-0225	BRICKYARD	201	9	15.2	11	18	Environmental Services, Carver County
10-0084	BURANDT	201	9	4.5	3.5	5	Environmental Services, Carver County
10-0005	COURTHOUSE	201	8	9.4	7.5	12.5	Environmental Services, Carver County
10-0121	EAGLE	201	8	2.4	1	6.5	Environmental Services, Carver County
10-0226	FIREMANS	201	9	11.8	5	14	Environmental Services, Carver County
10-0089	GOOSE	203	9	1.3	1	2	Environmental Services, Carver County
10-0218	GRACE	201	8	3.2	2	4	Environmental Services, Carver County
10-0088	HYDES	201	9	2.8	1	5.5	Environmental Services, Carver County
10-0006	LOTUS	202	6	4.1	2.4	7.5	Strohmaier, Shelley
10-0007	LUCY	201	6	3.5	1.5	9.5	Carlson, Dale E.
10-0029	MILLER	201	8	2.4	1.5	5	Environmental Services, Carver County
10-0009	MINNEWASHTA	204	6	10.6	9	13	Kohman, Roger R.
10-0093	OAK	201	8	3.3	1.5	9	Environmental Services, Carver County
10-0093	OAK	202	12	3.0	1	8	Sadler, Terry
10-0053	PIERSON	201	10	6.6	5	7.5	Pierson, John
10-0052	REITZ	201	6	3.3	1.5	7	Environmental Services, Carver County
10-0095	SWEDE	201	9	1.7	1.5	3	Lemke, Mark
10-0095	SWEDE	202	7	1.6	1	2	Environmental Services, Carver County
10-0015	VIRGINIA	201	8	3.6	3	4.5	Renay, Leone

## Cass County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
11-0250	ADA	203	10	16.6	12.5	20	Hansen, Jon
11-0250	ADA	205	10	16.4	12.5	22	Hansen, Jon
11-0216	AGATE	201	6	11.1	11	11.5	Webster, Scott
11-0283	BABY	201	6	15.3	12.5	21	Kumpula, Stan
11-0283	BABY	203	6	12.9	10.5	17	Kumpula, Stan
11-0281	BARNUM	201	18	18.3	12	28	Newman, Julie
11-0069	BASS	201	12	19.1	17	23	Barington, Bill
11-0308-02	BIG PORTAGE (E BAY)/RICE PORTAGE	201	4	8.4	7.5	9	Dressel, LeRoy
11-0308-01	BIG PORTAGE (W BAY)	202	4	7.9	6	10	Dressel, LeRoy
11-0077	BIG SAND	201	8	11.3	11	12	Perra, Jim
11-0412	BIRCH	201	8	14.0	12	15	McCormick, James W.
11-0412	BIRCH	204	8	12.3	10.5	16	McCormick, James W.
11-0412	BIRCH	206	8	13.7	10.5	16	Haefner, Ed

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**Cass County Continued**

LAKE ID	LAKE NAME	SITE	NS	MEAN	MIN	MAX	Volunteers
11-0274	BLACKWATER	201	5	15.0	11	20	Dindorf, Carolyn
11-0274	BLACKWATER	202	4	13.4	12.5	14	Thielmann, Lloyd
11-0201-01	BROADWATER BAY	206	2	13.5	11.5	15.5	Lange, John
11-0263	CHILD	202	2	9.5	9	10	Lange, John
11-0163	COOPER	201	8	12.4	10	15.5	Hipsher, Diane
11-0502	CRYSTAL	201	12	13.1	11.5	15	Mechelke, Robert
11-0502	CRYSTAL	203	12	10.5	10	11.5	Mechelke, Robert
11-0237	DEEP PORTAGE	203	2	13.0	13	13	Dressel, LeRoy
11-0351	FIVE POINT	202	9	15.3	13	16.5	Monson, John E. & Barbara
11-0086	GRAVE (GRAVES)	201	6	18.8	18	20.5	Scolland, Walt
11-0305	GULL	205	14	11.6	8.5	16.5	Struss, Gregg
11-0305	GULL	206	9	8.6	7	9.5	Jaster, Gene
11-0305	GULL	208	9	12.2	9	16	Schley, Herm
11-0305	GULL	209	12	13.8	10	20	Streed, Wes
11-0305	GULL	210	6	8.8	8.5	9	Motley, Paul
11-0242	HAND	201	3	16.7	12	21	Epling, Patricia
11-0242	HAND	201	6	16.0	14	18	Smith, Fred W.
11-0242	HAND	202	3	16.0	15	17	Epling, Patricia
11-0242	HAND	203	3	16.0	15	17	Epling, Patricia
11-0242	HAND	204	3	16.3	15	17	Epling, Patricia
11-0209	HARDY	201	8	11.2	9.5	14	Grussing, Paul
11-0232	HATTIE	201	13	9.7	6.5	13.5	Johnson, Greg
11-0232	HATTIE	202	13	9.4	6	13	Johnson, Greg
11-0232	HATTIE	203	13	9.3	7	12.5	Johnson, Greg
11-0232	HATTIE	204	13	8.8	6	11.5	Johnson, Greg
11-0232	HATTIE	205	2	11.0	9.5	12.5	Johnson, Greg
11-0199	HAY	203	7	13.6	12.5	15	Droen, Andy
11-0472	HOWARD	202	10	15.6	11	19	Rykkeli, Ray
11-0170	HUNTER	203	13	28.0	23	36	Trampe, David
11-0120-01	INGUADONA (N. BAY)	201	17	9.8	7	13.6	Jass, Doug
11-0102	ISLAND	201	2	20.3	20	20.5	Dressen, Bill
11-0102	ISLAND	202	2	19.8	19.5	20	Dressen, Bill
11-0102	ISLAND	203	2	20.8	20	21.5	Dressen, Bill
11-0257	ISLAND	201	17	22.6	20.6	24.8	Aagard, Hans
11-0363	JOHNSON	201	10	15.1	12.5	18	Peterson, Sylvia
11-0268	KERR	201	9	17.6	14.5	22.5	Osborn, Paul
11-0262	KID	201	14	14.2	10.5	18	Rueter, Clarence
11-0053	LAWRENCE	201	10	12.4	11	13	Reiswig, Myrle & Jill
11-0053	LAWRENCE	202	10	13.3	11.5	14	Reiswig, Myrle & Jill
11-0037	LEAVITT	201	13	11.8	10	14	Schramm, W. Melvin
11-0167	LITTLE BOY	201	16	12.3	7.5	18	Wenzel, Dewey
11-0236	LITTLE PORTAGE	202	8	15.5	14	17.5	Lacho, Jon & Mary
11-0092	LITTLE SAND	201	6	9.5	8.5	10.5	Klunder, Larry

Legend:

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**Cass County Continued**

LAKE ID	LAKE NAME	SITE	NS	MEAN	MIN	MAX	Volunteers
11-0230	LITTLE SAND	201	3	11.3	9.5	13	Johnson, Greg
11-0009-01	LITTLE THUNDER (W. BAY)	201	7	24.9	20	27	Ondich, Thomas M.
11-0142-02	LONG (MAIN BASIN)	202	9	17.4	11	23.5	Sifford, Paul
11-0142-02	LONG (MAIN BASIN)	204	13	20.7	16.5	26	Arnquist, Kit
11-0142-04	LONG (SW BAY)	203	5	17.2	16.5	18	Casey, John R.
11-0226	LOON	201	11	11.9	9.5	14	Littman, Robert
11-0269	LOST	201	14	13.4	11.5	17	Rueter, Clarence
11-0282	MANN	202	10	10.0	9	13	Shipman, William
11-0222	MARGARET	201	18	4.4	3	9.5	Koska, Ed
11-0222	MARGARET	204	18	4.7	3.5	9	Koska, Ed
11-0261	MCKEOWN	201	12	18.5	13	31	Bjorgaard, Ralph
11-0200	MULE	201	9	17.4	12	21.5	Dahlager, Marjorie R.
11-0200	MULE	202	20	15.5	11.5	21	Hermanutz, Roger
11-0307	NORWAY	202	9	8.1	7.9	8.5	Van Vorst, Donald
11-0244	ONE (SAND NO ONE)	201	6	16.8	13.5	20	Jensen, Cathy
11-0355	OX YOKE	201	3	15.7	12	18	DeBoer, Arden
11-0383	PLEASANT	202	6	17.8	15	21	Fark, Dan
11-0234	PONTO	201	7	21.9	16	29.5	Fisker, John
11-0476	PORTAGE	201	14	26.7	22	30	Mergens, Ed
11-0490	PORTAGE	201	6	12.0	10.5	14	Harris, Jay
11-0490	PORTAGE	202	9	10.6	8.5	12	Gustafson, Jack
11-0220	RAY (BASS)	202	8	10.1	8	13.5	Anderson, David L.
11-0043	ROOSEVELT	201	6	13.0	10	16	McKeon, Terri
11-0043	ROOSEVELT	202	5	13.6	10	16	McKeon, Terri
11-0043	ROOSEVELT	203	4	12.9	12.5	14	MacDonald, David
11-0043	ROOSEVELT	204	4	12.6	11.5	13.5	MacDonald, David
11-0043	ROOSEVELT	204	1	8.0	8	8	Neill, Denny
11-0043	ROOSEVELT	205	4	12.6	12	13.5	MacDonald, David
11-0043	ROOSEVELT	206	2	11.0	10.5	11.5	MacDonald, David
11-0043	ROOSEVELT	206	5	12.0	9.5	16.5	Pertl, Lee
11-0043	ROOSEVELT	210	11	13.5	11	18	Lauman, Thomas
11-0043	ROOSEVELT	211	7	12.0	7.5	19	Kowalski, Mary
11-0361	SANBURN	202	12	13.4	13	14	Wengler, Don
11-0279	SAND	201	8	22.8	17.5	28.5	Freitag, Katherine
11-0279	SAND	201	5	23.9	21	25	Harrison, Jim
11-0504	STEAMBOAT	201	8	11.3	7.5	14	Stepan, Dan
11-0371	STONY	201	16	21.2	19	27	Larsen, Dr. John C.
11-0413	TEN MILE	202	15	22.6	19	25.5	Schwartz, Dr. James W.
11-0413	TEN MILE	204	15	19.4	17	21.5	Schwartz, Dr. James W.
11-0062	THUNDER	206	12	21.9	18	26.5	Edlund, Joan M.
11-0270	TRILLIUM (LIZARD)	201	18	12.2	6	15.5	Duncan, Robert M.
11-0029	VERMILLION	201	10	7.4	5.5	11.5	Saulsbury, Lonny
11-0171-01	WABEDO (NE BAY)	202	17	10.6	8	15	Anderson, Ronald

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### Cass County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
11-0171-02	WABEDO (SW BAY)	201	7	10.8	7.5	13	Plotnik, Mike
11-0171-02	WABEDO (SW BAY)	203	8	10.4	7.5	13	Plotnik, Mike
11-0059	WASHBURN	201	5	13.2	12.5	14.5	Reich, Ron
11-0059	WASHBURN	203	11	14.4	13	16	Behning, Ron
11-0059	WASHBURN	204	13	14.0	11.5	16	Nelles, Richard D.
11-0059	WASHBURN	205	9	15.6	14	18	Dutton, Howard
11-0059	WASHBURN	206	5	12.9	12	14	Reich, Ron
11-0059	WASHBURN	207	13	15.4	14	16.6	Nelles, Richard D.
11-0093	WILSON	201	2	8.0	7.5	8.5	Gish, Gerald
11-0201-02	WOMAN (MAIN LAKE)	201	5	12.6	11.6	13.5	Lange, John
11-0201-02	WOMAN (MAIN LAKE)	206	2	12.0	11	13	Lange, John

### Chisago County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
13-0012-01	CHISAGO	202	5	8.0	3	14	Wohlenhaus, Daniel
13-0012-02	CHISAGO	201	1	4.0	4	4	Pavey, Robert
13-0012-02	CHISAGO	202	1	2.0	2	2	Pavey, Robert
13-0053	COMFORT	201	7	5.1	4.5	7	Rheault, Charles
13-0053	COMFORT	202	7	5.2	4.5	8	Rheault, Charles
13-0053	COMFORT	203	7	5.1	4	7	Rheault, Charles
13-0083-01	GOOSE (NORTH BAY)	201	13	2.4	1	5	Schwaab, Joe
13-0083-01	GOOSE (NORTH BAY)	202	13	2.2	1	4	Schwaab, Joe
13-0083-02	GOOSE (SOUTH BAY)	205	3	5.7	5	6	Steman, Robert
13-0083-02	GOOSE (SOUTH BAY)	206	13	6.2	3.5	12	Schwaab, Joe
13-0041-01	GREEN (LITTLE GREEN)	202	5	5.3	2.5	10	Ekstrand, Rick
13-0041-02	GREEN (MAIN BASIN)	201	5	6.6	3.5	14	Ekstrand, Rick
13-0013	KROON	201	6	5.8	3	10.5	Spetzman, Jerry
13-0032-01	NORTH CENTER	202	7	2.6	2	3	Kjelland, Joe & Ann Marie
13-0032-02	NORTH CENTER POND	201	2	2.0	1	3	Nyquist, Rich
13-0034	PIONEER	201	7	1.4	1	2	Anklan, Greg
13-0069-01	RUSH (EAST BAY)	208	7	3.3	2	6	McKenzie, Tom
13-0069-02	RUSH (WEST BAY)	204	7	2.9	2	5	McKenzie, Tom
13-0069-02	RUSH (WEST BAY)	205	12	5.0	2.5	11	Bachmeier, Ralph P.
13-0028	SOUTH LINDSTROM	204	5	6.9	3	12	Wohlenhaus, Daniel

### Clearwater County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
15-0010	ELK	201	8	11.9	5.9	15.7	Itasca, State Park
15-0010	ELK	202	1	13.0	13	13	Ploof, Jim & Carolyn
15-0016	ITASCA	201	8	8.4	5.6	10.8	Itasca, State Park
15-0016	ITASCA	202	8	8.6	4.9	16.7	Itasca, State Park
15-0016	ITASCA	203	8	8.3	5.6	12.5	Itasca, State Park
15-0016	ITASCA	204	8	8.7	5.6	13.8	Itasca, State Park

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### Clearwater County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
15-0068	LONG LOST	201	11	23.6	17.5	31	Svobodny, Jim
15-0068	LONG LOST	202	11	19.5	16	25	Holmes, Dean
15-0068	LONG LOST	207	10	19.9	16	25.6	Holmes, Dean
15-0060	WALKER BROOK	201	7	11.2	8.5	15	Michel, James

### Cook County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
16-0622	ALTON	202	1	9.0	9	9	Bratlien, Diana
16-0228	BEARSKIN	201	6	21.8	19	25	Serrin, Phil & Rhoda
16-0659	BETH	201	1	8.0	8	8	Anderson, Mary
16-0344	BIGSBY (LITTLE CARIBOU)	201	5	5.6	4.5	6.5	Vaughan, Pat
16-0477	BURNT	201	1	8.0	8	8	Bashor, Chris
16-0141	CARIBOU	201	1	19.5	19.5	19.5	Chapman, Pat
16-0141	CARIBOU	201	1	10.0	10	10	Skuta, Glenn
16-0360	CARIBOU	201	4	7.3	7	8	Kelleher, Ethel
16-0360	CARIBOU	204	6	6.0	5.5	6.5	Vaughan, Pat
16-0360	CARIBOU	205	6	6.2	6	6.5	Vaughan, Pat
16-0360	CARIBOU	206	4	7.0	6	8	Kelleher, Ethel
16-0360	CARIBOU	206	6	6.0	5.75	6.5	Vaughan, Pat
16-0360	CARIBOU	207	6	6.4	6	7.5	Vaughan, Pat
16-0524	CHEROKEE	202	1	12.0	12	12	Bashor, Chris
16-0524	CHEROKEE	203	1	11.5	11.5	11.5	Bashor, Chris
16-0139	CLEARWATER	201	3	36.3	34.5	38.5	Olson, Bob & Kay
16-0139	CLEARWATER	202	4	33.0	25.5	40	Olson, Bob & Kay
16-0139	CLEARWATER	204	5	32.1	25.5	39	Olson, Bob & Kay
16-0139	CLEARWATER	205	2	32.0	30	34	Olson, Bob & Kay
16-0139	CLEARWATER	206	2	36.8	35	38.5	Olson, Bob & Kay
16-0139	CLEARWATER	207	2	35.3	34.5	36	Olson, Bob & Kay
16-0723	CROOKED	202	1	14.0	14	14	Sullivan, Dan
16-0150	DANIELS	201	4	20.1	18	22.5	Olson, Bob & Kay
16-0136	DEER	201	1	8.8	8.75	8.75	Chapman, Pat
16-0143	DEVIL TRACK	201	11	11.4	8.5	13	MacLean, Bonnie & David
16-0143	DEVIL TRACK	202	11	10.7	9.5	12	MacLean, Bonnie & David
16-0143	DEVIL TRACK	203	4	8.7	8.5	8.9	Powers, Jim
16-0143	DEVIL TRACK	204	5	9.8	9	10.5	Futterer, Chuck
16-0232	DUNCAN	202	1	18.0	18	18	Skuta, Glenn
16-0042	EAST PIKE	204	1	19.0	19	19	Skuta, Glenn
16-0147	FLOUR (FLOWER)	201	1	14.5	14.5	14.5	Chapman, Pat
16-0657	GRACE	201	1	7.5	7.5	7.5	Wallin, Angie
16-0241	HORSESHOE	205	1	8.0	8	8	Wojcicki, Isaac
16-0227	HUNGRY JACK	201	5	17.1	15	21.5	Bottger, John & Barbara
16-0222	JACKAL (JAKE)	201	1	9.5	9.5	9.5	Verhagen, Ingrid

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### Cook County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
16-0476	KELLY	201	1	8.0	8	8	Rusbolt, Robin
16-0476	KELLY	202	1	7.0	7	7	Bashor, Chris
16-0188	KEMO	201	2	16.0	14	18	Zavoral, Bob Sopoci & Betsy
16-0168	KROFT	201	1	6.7	6.7	6.7	Wojcicki, Anna
16-0198	LEO	201	4	13.9	10	16	Little, Janet
16-0142	LITTLE CARIBOU	202	1	9.0	9	9	Chapman, Pat
16-0142	LITTLE CARIBOU	202	1	7.0	7	7	Skuta, Glenn
16-0170	LITTLE TROUT	201	1	16.0	16	16	Wojcicki, Anna
16-0223	LUX	201	1	7.5	7.5	7.5	Verhagen, Ingrid
16-0529	MISSING LINK	201	1	11.5	11.5	11.5	Sullivan, Dan
16-0117	MOON (SUCKER)	201	1	10.0	10	10	Chapman, Pat
16-0220	MORGAN	201	1	14.5	14.5	14.5	Verhagen, Ingrid
16-0726	OWL	202	1	16.5	16.5	16.5	Sullivan, Dan
16-0478	PETERSON	201	1	6.0	6	6	Rusbolt, Robin
16-0239	POPLAR	203	4	13.9	12.5	15.5	Huggenvik, Rolf & Ina
16-0174	RAM	201	1	13.7	13.7	13.7	Verhagen, Ingrid
16-0200	ROAD	201	2	7.3	7	7.5	Lease, Eleanor
16-0230	ROSE	201	1	14.5	14.5	14.5	Skuta, Glenn
16-0169	RUM	201	1	4.0	4	4	Wojcicki, Anna
16-0496	SAWBILL	201	2	8.3	8	8.5	Nordlum, Christa
16-0496	SAWBILL	201	1	8.0	8	8	Olson, Annie
16-0496	SAWBILL	202	1	9.0	9	9	Olson, Annie
16-0496	SAWBILL	203	1	8.5	8.5	8.5	Bashor, Chris
16-0496	SAWBILL	203	1	8.0	8	8	Olson, Annie
16-0496	SAWBILL	204	1	7.5	7.5	7.5	Olson, Annie
16-0496	SAWBILL	205	1	7.0	7	7	Bashor, Chris
16-0244	SOUTH	201	1	25.0	25	25	Skuta, Glenn
16-0457	SOUTH TEMPERANCE	202	1	11.0	11	11	Bashor, Chris
16-0731	TARRY	201	1	18.0	18	18	Sullivan, Dan
16-0156	TWO ISLAND	201	3	8.8	8	10.5	Sackrison, Kathleen
16-0224	VISTA	201	1	8.0	8	8	Verhagen, Ingrid

### Cottonwood County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
17-0007	BINGHAM	201	14	2.2	0.5	4	Turner, Dr. Bruce A.
17-0003	MOUNTAIN	201	16	2.3	1.5	5	Palm, Marlin

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## Crow Wing County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
18-0384	BASS	201	6	20.0	17.5	21.5	Helsene, Larry
18-0034	BAY	203	17	15.8	12.5	25	Anderson, Dane
18-0034	BAY	204	12	14.2	11.5	19	Sather, Elliot & Monica
18-0034	BAY	205	17	15.3	10.5	23.5	Anderson, Dane
18-0034	BAY	206	17	15.0	13	18	Anderson, Dane
18-0259	BONNIE	201	3	14.4	14	14.6	Gatzow, Ray
18-0259	BONNIE	202	3	14.5	14	15	Gatzow, Ray
18-0020	BORDEN	201	6	9.8	9	10.5	Puchtell, Richard
18-0018	CAMP	201	6	8.0	6.5	9.5	Tinberg, Julie
18-0374	CLARK	201	1	11.0	11	11	Bedard, George
18-0038	CLEARWATER	203	14	13.7	11	17	Kittock, Al
18-0038	CLEARWATER	207	13	12.0	9.5	13	Jones, Robert H.
18-0041-02	CROOKED (MAIN BAY)	201	10	17.6	16	20	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	202	10	16.3	15	18	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	203	10	18.0	16	22	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	204	10	15.5	14	18	Morrison, John A.
18-0041-02	CROOKED (MAIN BAY)	205	8	17.0	14.5	20	Steblay, Jon K. & Margaret
18-0041-01	CROOKED (SUGAR BAY)	201	8	15.9	14	18	Steblay, Jon K. & Margaret
18-0155	CROW WING	202	4	6.4	5	7.5	Vik, Lois & Marvin
18-0155	CROW WING	203	4	6.8	5.5	8.5	Vik, Lois & Marvin
18-0155	CROW WING	204	4	6.4	5	8	Vik, Lois & Marvin
18-0271	DAGGETT	202	9	9.9	7.5	12.5	Neer, Larry
18-0305	EDWARD	203	9	14.7	12.5	17	Olson, Merle (Bud)
18-0203	EMILY	201	16	8.8	8	9.5	Dick, Ron
18-0320-01	GILBERT (E. BAY)	203	5	19.1	15.5	22	Borash, Maurice
18-0320-01	GILBERT (E. BAY)	204	5	13.9	11	17	Borash, Maurice
18-0320-02	GILBERT (W. BAY)	201	3	12.7	11.5	13.5	Borash, Maurice
18-0338	GLADSTONE	202	3	9.3	8	10	Duerre, Dick
18-0338	GLADSTONE	203	6	11.8	10	14.5	MacDonald Jr., Robert G.
18-0226	GOODRICH	204	6	18.3	16.5	20.5	Boyd, Harold
18-0070	HAMLET	201	8	17.8	16	19	Stelter, Scott
18-0044	HANKS	202	8	15.8	14.5	18	Steblay, Jon K. & Margaret
18-0251-02	HORSESHOE (W. BAY)	205	17	14.5	12.5	17.5	Gadelmann, Jon
18-0375	HUBERT	207	5	14.7	13	17	Tack, Dennis
18-0183	ISLAND	201	12	7.6	5.6	9.5	Dierling, Beatrice L.
18-0340	LITTLE HUBERT	202	8	12.1	10	13.5	Bloom, John & Arlene
18-0266	LITTLE PINE	203	9	9.7	7.5	11.5	Neer, Larry
18-0357	LITTLE ROUND	201	2	14.3	13	15.5	Kroeger, John
18-0360	LITTLE STAR	201	2	14.8	13.5	16	Kroeger, John
18-0076	LONG	201	9	18.1	14	27	Weisbrod, Tom
18-0342	LOUGEY	203	8	10.0	9	11	Hickman, Don
18-0403	LOWER CULLEN	202	4	11.0	8	15	Beaver, Tom & Ann
18-0403	LOWER CULLEN	202	13	11.3	9	14.5	Swift, Gil

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**Crow Wing County Continued**

LAKE ID	LAKE NAME	SITE	NS	MEAN	MIN	MAX	Volunteers
18-0378	LOWER HAY	201	10	15.7	12.3	22.3	Topinka, Dave & Judy
18-0378	LOWER HAY	202	10	15.8	11.8	22.3	Topinka, Dave & Judy
18-0378	LOWER HAY	203	15	18.5	13.5	23	Rezanka, Kay
18-0378	LOWER HAY	204	10	16.4	11.3	21.8	Topinka, Dave & Judy
18-0243	LOWER MISSION	203	4	11.6	9.5	15.5	Bernier, Nick
18-0343	MARKEE	202	16	12.7	9.5	16	Holst, Dick & Janet
18-0343	MARKEE	203	16	13.6	9.5	18	Kramer, Dale
18-0185	MARY	202	7	8.2	6.5	10	Fairchild, Paul & Bonnie
18-0377	MIDDLE CULLEN	204	4	11.3	8.5	15	Beaver, Tom & Ann
18-0377	MIDDLE CULLEN	204	12	13.0	11.5	15.5	Boudrye, Charlie & Marie
18-0021	MILLER (ALMOND)	202	8	11.1	8.5	14.5	Garbarini, James
18-0294	MITCHELL	201	11	11.2	8.5	14.5	Cardinal, Ken
18-0166	MUD	201	2	6.3	6	6.5	Flemmer, Arlene G.
18-0372	NORTH LONG	204	12	14.5	11.5	16	Rush, Ken
18-0372	NORTH LONG	206	13	16.6	15.3	17.5	Loney, Corey
18-0227-02	O'BRIEN (NE BAY)	201	11	15.9	12.5	24	Peterson, Martin
18-0352	OSSAWINNAMAKEE	201	7	15.4	13.5	18	Donaldson, Alec & Donna
18-0352	OSSAWINNAMAKEE	203	7	14.5	12	18	Donaldson, Alec & Donna
18-0352	OSSAWINNAMAKEE	204	14	17.3	15	19	O'Donnell, Joe & Catherine
18-0352	OSSAWINNAMAKEE	211	14	15.8	13.5	18	O'Donnell, Joe & Catherine
18-0308	PELICAN	205	6	19.8	16.5	21	Smieja, Dr. Gerald D.
18-0371	PERCH	201	2	17.0	17	17	Paul, David B.
18-0354	PIG	201	15	15.4	11	18.5	Boline, John & Gail
18-0088	PLATTE	201	9	6.6	5	9	Dilly, Kevin
18-0088	PLATTE	202	9	6.3	4.5	8.5	Dilly, Kevin
18-0088	PLATTE	203	7	4.9	4	6.5	Bosn, Al
18-0088	PLATTE	207	7	5.0	4	6	Bosn, Al
18-0050	PORTAGE	201	9	14.4	12	19.5	Steblay, Jon K. & Margaret
18-0093-01	RABBIT (EAST PORTION)	202	6	16.5	11	24	Hendrichs, Dennis
18-0093-01	RABBIT (EAST PORTION)	204	6	16.8	12	23	Hendrichs, Dennis
18-0093-02	RABBIT (WEST PORTION)	201	6	18.2	12	26	Hendrichs, Dennis
18-0093-02	RABBIT (WEST PORTION)	202	5	15.2	12.5	18.8	Kidd, Larry
18-0093-02	RABBIT (WEST PORTION)	203	6	18.2	11	26	Hendrichs, Dennis
18-0386	RED SAND	201	11	10.5	5.5	13.5	Schmidt, Eldo
18-0184	ROGER	201	7	22.1	16.5	30.5	Siegel, Richard
18-0165	ROSS	202	14	7.6	6.5	9	Garberg, Robert
18-0373	ROUND	201	5	10.1	8	13	Durrenberger, Lynn & Cyril
18-0373	ROUND	202	5	10.4	8	14	Durrenberger, Lynn & Cyril
18-0373	ROUND	202	10	10.9	7.5	12.5	von Fischer, Robert
18-0373	ROUND	203	5	10.5	7	14	Durrenberger, Lynn & Cyril
18-0373	ROUND	203	7	13.4	10.5	17	Stark, Larry
18-0373	ROUND	204	4	10.5	7	13.5	Durrenberger, Lynn & Cyril

Legend:

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### Crow Wing County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
18-0373	ROUND	205	4	11.0	8.5	13.5	Alsleben, Jerry
18-0373	ROUND	205	4	11.0	6	15	Durrenberger, Lynn & Cyril
18-0373	ROUND	206	5	11.2	8	15.5	Durrenberger, Lynn & Cyril
18-0373	ROUND	206	10	11.2	7.5	13.5	von Fischer, Robert
18-0311	RUSH	201	13	13.6	12	15	Zahler, Kevin
18-0311	RUSH	208	3	18.0	18	18	Steck, Doug & Julia
18-0033	SCOTT	201	4	14.4	13.5	16	Wadsten, Brad
18-0090	SERPENT	201	12	14.8	9.5	18.5	Bowen, Arlen
18-0404	SIBLEY	203	8	5.1	4.5	5.75	Meyer, Dennis R.
18-0028	SMITH	201	10	10.6	9	13.5	Vaidich, Tom & Mary
18-0028	SMITH	202	6	10.9	9.6	11.3	Playle, William
18-0028	SMITH	202	10	10.4	9.5	13	Vaidich, Tom & Mary
18-0028	SMITH	203	10	11.5	9	14	Vaidich, Tom & Mary
18-0136	SOUTH LONG	207	11	8.8	5	13.5	Warner, Tom & Sue
18-0359	STAR	204	2	17.8	17	18.5	Kroeger, John
18-0359	STAR	205	2	17.5	17	18	Kroeger, John
18-0169	STARK	201	6	7.8	5	9.5	Olson, Gary G.
18-0169	STARK	204	14	7.3	6	9	Adam, Joseph
18-0167-01	TWIN (WEST BASIN)	201	4	5.9	5	6.5	Konstas, Ernest
18-0167-01	TWIN (WEST BASIN)	202	10	5.5	5	5.5	Olson, Kurt
18-0148	TWIN LAKES	201	9	16.9	15	20	Eisel, Mervin
18-0148	TWIN LAKES	202	9	12.8	12.5	13.5	Eisel, Mervin
18-0385	UNNAMED	201	6	8.0	8	8	Helsene, Larry
18-0376	UPPER CULLEN	207	4	9.9	5.5	13	Beaver, Tom & Ann
18-0412	UPPER HAY	201	12	6.3	4	9	Jensen, Paul & LaVonne
18-0242	UPPER MISSION	201	4	12.6	10	15	Bernier, Nick
18-0096	UPPER SOUTH LONG	202	13	7.0	5.5	9	Nelson, Herb
18-0096	UPPER SOUTH LONG	204	13	5.7	4.5	7	Nelson, Herb
18-0096	UPPER SOUTH LONG	205	6	6.9	6.5	7	Rolfs, John R.
18-0284	VELVET	201	11	11.2	7.5	16	Blosberg, Dale
18-0409	WEST TWIN	202	14	17.5	13.5	23.5	Yahn, Jonathan
18-0379	WHITE SAND	203	9	11.3	9	15	Mezner, Laurel
18-0001	WHITEFISH	201	13	13.6	12.5	17.5	Vessey, General John W.
18-0310	WHITEFISH	208	14	13.0	11	14.5	Rezanka, Kay

### Dakota County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
19-0021	ALIMAGNET	201	1	1.5	1.5	1.5	Grazzini Jr., Gene
19-0081	AUGUSTA	201	1	1.6	1.58	1.58	Stein, Ellsworth
19-0006	BYLLESBY	201	10	1.2	0.5	1.7	Moesler, Guenther & Allene
19-0006	BYLLESBY	202	10	2.4	1	5	Moesler, Guenther & Allene
19-0006	BYLLESBY	203	10	2.6	1	5.5	Moesler, Guenther & Allene

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## Dakota County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
19-0150	CEDAR POND	201	7	2.8	1.5	4.5	Ochs, Mark
19-0057	FISH	204	9	5.2	2.67	11.3	Nippert, Carl
19-0069	GERHARDT	201	3	2.2	2	2.5	Peterson, Bruce
19-0078	GUN CLUB	201	1	2.5	2.5	2.5	Shillingford, Barry
19-0071	JENSEN	201	8	5.1	5	5.5	Foss, Rollin & Monica
19-0026-01	MARION	203	1	7.5	7.5	7.5	Danner Sr., Lowell
19-0056	O'LEARY	201	13	3.2	2.5	4	Cashman, Robert
19-0075	SCHULTZ	201	17	6.5	4.5	9	Rasmussen, Dave
19-0067	THOMAS	203	6	5.4	5	6	Alt, Joanne
19-0062	UNNAMED (HAY)	201	4	4.9	3.5	6	Krech, Jack
19-0153	UNNAMED (HEINE LK)	201	7	10.9	8	14	Ochs, Mark
19-0290	UNNAMED (JP-23)	201	6	3.4	2.5	4.5	Scheller, Dan
19-0454	UNNAMED (LP-39)	201	4	6.1	6	6.5	Solie, Greg
19-0156	UNNAMED (LP-44)	201	10	0.9	0.5	1.5	Tyre, Royce M.
19-0063	UNNAMED (SCHWANZ)	201	11	5.3	2.5	8	Schaefer, Joseph
19-0063	UNNAMED (SCHWANZ)	202	11	5.4	2.5	8.5	Schaefer, Joseph
19-0063	UNNAMED (SCHWANZ)	203	11	5.5	2.5	8.5	Schaefer, Joseph
19-0095	UNNAMED (SEIDL)	201	9	3.8	1.5	6.5	Bartz, Harvey & Janet

## Douglas County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
21-0145	BIG CHIPPEWA	202	3	15.7	11	21	Cashman, James
21-0145	BIG CHIPPEWA	203	3	13.0	10.5	15.5	Cashman, James
21-0102	BROPHY	201	7	10.8	10	12.5	Saurdiff, Ron (Red)
21-0057	CARLOS	205	4	12.3	11	13	Baker, Dave
21-0103	COWDRY	201	8	11.8	9.5	14	Ries, Thomas M.
21-0199-01	CROOKED (NW BAY)	201	1	7.5	7.5	7.5	Howe, Mike
21-0080	DARLING	202	17	11.6	8.5	15	Landman, Kirk
21-0080	DARLING	203	17	11.0	8.5	15	Landman, Kirk
21-0213	DEVILS	201	9	9.3	8	13	Davis, Harry
21-0052	GENEVA	201	17	14.3	9.5	21	Hains, Leonard
21-0052	GENEVA	202	5	15.6	11.5	19.5	Moe, Nicholas
21-0123	IDA	201	13	17.0	13	20	Jahnke, Dean R.
21-0123	IDA	202	9	17.0	13	21	Sandstrom, Bill
21-0123	IDA	203	7	14.4	13	16	Mathson, Mel
21-0123	IDA	204	4	16.3	12	18	Anderson, Raymond
21-0123	IDA	205	8	17.7	14.5	22	Kilgore, William
21-0123	IDA	206	5	16.5	15	18	Wood, Janet & Tom
21-0123	IDA	207	9	13.9	9.5	17	Hoeben, Al & Darlene
21-0123	IDA	208	9	16.4	13.5	18.5	Kanwischer, Jim
21-0123	IDA	209	10	15.9	12	23	Erstad, Don & Yvonne
21-0123	IDA	210	4	16.3	12.5	20	Bedman, Harry

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## Douglas County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
21-0123	IDA	211	6	17.2	13.5	20	Delp, Cliff
21-0123	IDA	212	5	16.5	15	17.5	Haugen, Douglas
21-0123	IDA	214	2	21.0	19	23	Katzmerak, Richard
21-0123	IDA	215	10	15.7	12.5	18.5	Kohnen, Richard (Dick)
21-0076	IRENE	203	16	7.3	3.5	14	Heesen, Don
21-0055	JESSIE	201	15	6.2	3.5	9	Kerick, Tony
21-0106-01	LATOKA (NORTH BAY)	201	8	15.4	13.5	17	Braun, Rich & Marlene
21-0106-01	LATOKA (NORTH BAY)	202	7	15.4	13	17	Braun, Rich & Marlene
21-0106-01	LATOKA (NORTH BAY)	203	7	15.3	13	17	Braun, Rich & Marlene
21-0056	LE HOMME DIEU	204	5	12.5	9	15	Kosin, George
21-0212	LITTLE CHIPPEWA	201	7	10.1	7	14.5	Greenquist, Bud & Florence
21-0144-01	LOBSTER (EAST BAY)	201	14	9.8	7	12	Onstad, Pete
21-0144-01	LOBSTER (EAST BAY)	202	14	8.4	6	10	Onstad, Pete
21-0144-02	LOBSTER (WEST BAY)	201	17	8.4	6.5	10	Onstad, Pete
21-0144-02	LOBSTER (WEST BAY)	202	17	8.1	6.5	10	Onstad, Pete
21-0079	MAPLE	203	17	14.4	9	24	Steffen, Ralph E.
21-0083	MILTONA	203	8	13.8	9.5	17	Fulton, Jerry
21-0083	MILTONA	204	8	13.4	9	16	Fulton, Jerry
21-0245	MOSES	201	9	18.2	11	22	Cress, James
21-0291	RED ROCK	202	5	3.9	2.5	6.5	Dahl, Elmo
21-0016	SMITH	202	9	6.0	3	8.5	Bohner, Neil
21-0264	STOWE	204	4	5.4	3.5	7	Gilligan, Eugene E.
21-0073	VERMONT	201	5	15.3	12.4	18	Past, LaVonne
21-0054	VICTORIA	204	17	13.1	7	21	Syverson, Mike
21-0081	WINONA	201	13	3.1	0.67	7.9	Pugh, Charles E.

## Grant County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
26-0095	BARRETT	202	12	8.5	5	10	Montonye, Joe
26-0040	ELK	202	4	9.6	7	13	Eblen, Gene
26-0282	LIGHTNING	201	8	2.4	1	4	Weigand, Clair
26-0002	PELICAN	201	3	2.5	2.25	3	Vodegel, Don
26-0002	PELICAN	202	3	2.7	2.25	3.25	Vodegel, Don
26-0002	PELICAN	203	3	2.3	2	2.75	Vodegel, Don
26-0002	PELICAN	204	3	1.9	1.5	2.5	Vodegel, Don
26-0002	PELICAN	208	3	2.4	2	3	Vodegel, Don
26-0097	POMME DE TERRE	202	4	3.4	3	4	Hubbard, Ken
26-0097	POMME DE TERRE	204	17	4.8	4	5	Derby, Doyle

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## Hennepin County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
27-0098	BASS	203	10	3.5	1.5	7	Groth, Marvin L.
27-0047	BUSH	201	4	8.3	6.5	10.5	Wood, Charles
27-0047	BUSH	202	4	8.3	7	10	Wood, Charles
27-0047	BUSH	203	4	8.6	7	10.5	Wood, Charles
27-0047	BUSH	204	4	7.6	6.5	9.5	Wood, Charles
27-0047	BUSH	205	4	8.0	6.5	10	Wood, Charles
27-0031	CALHOUN	202	8	13.8	10	18	DuFresne, Jorja
27-0119	CEDAR ISLAND	202	12	1.3	1	1.5	Lane, Steven
27-0034	CRYSTAL	201	1	2.5	2.5	2.5	Meyer, Andrew
27-0191-02	EAST SARAH	205	10	2.8	1.5	8.5	Hibbard, Bill
27-0118	FISH	206	9	5.1	3	10.5	Schultz Chouinard, Diane
27-0016	HARRIET	202	1	9.5	9.5	9.5	Westphal, Warren
27-0176	INDEPENDENCE	204	11	2.3	1.5	4	McLaughlin, Mike
27-0133-10	MINNETONKA (CRYSTAL BAY)	201	7	7.0	5.5	9	Humboldt, Joyce
27-0133-09	MINNETONKA (HALSTEDS BAY)	203	11	3.3	1.5	10	Magnuson, Michelle
27-0133-09	MINNETONKA (HALSTEDS BAY)	204	5	2.0	2	2	Seeley, Larry E.
27-0133-02	MINNETONKA (LOWER LAKE)	204	10	9.4	8	12.5	Backes, Marie J.
27-0133-02	MINNETONKA (LOWER LAKE)	210	4	9.0	9	9	Sundet, John
27-0133-11	MINNETONKA (MAXWELL BAY)	201	7	5.7	5	8.5	Humboldt, Joyce
27-0133-05	MINNETONKA (UPPER LAKE)	201	6	3.8	3	4.5	Kittelsen, Jeff
27-0133-05	MINNETONKA (UPPER LAKE)	206	13	6.1	4.5	11	Partyka, Eugene
27-0133-05	MINNETONKA (UPPER LAKE)	208	13	9.6	6.5	12	Mason, Mike
27-0133-05	MINNETONKA (UPPER LAKE)	210	17	8.9	8	10	Skramstad, Tom
27-0107	PARKERS	201	16	6.2	4	11	Videen, Marsha & Robert
27-0004	PENN	200	9	0.8	0.5	2	Rodenbeck, Bill
27-0116	RICE	201	11	3.8	2.5	5.6	Schneider, George
27-0102	SCHMIDT (SMITH)	201	9	5.7	3.3	8.5	Wahlstrom, Dale
27-0141	TANGER	202	14	3.6	2.5	5	Molumby, Gary
27-0874	UNNAMED (PONDIDY)	201	9	2.6	2.17	3.42	Connolly, Bob

## Hubbard County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
29-0208	BAD AXE	203	6	18.5	12	22	Martin, John
29-0146	BELLE TAINE	201	15	15.9	12	19.5	Lamp, Jerry
29-0146	BELLE TAINE	202	15	18.4	13.5	23.5	Lamp, Jerry
29-0146	BELLE TAINE	203	15	22.2	18	32.5	Lamp, Jerry
29-0146	BELLE TAINE	204	15	22.3	19.5	32.5	Lamp, Jerry

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## Hubbard County Continued

LAKE ID	LAKE NAME	SITE	NS	MEAN	MIN	MAX	Volunteers
29-0032	BIG BASS	201	16	22.3	18	28	Miller, Fred
29-0185	BIG SAND	204	10	20.4	16	25	Wenzel, James B.
29-0185	BIG SAND	206	5	23.4	21	25	Dyre, Dan
29-0185	BIG SAND	206	10	20.6	16	26	Wenzel, James B.
29-0185	BIG SAND	207	5	23.1	20	25.5	Dyre, Dan
29-0185	BIG SAND	208	5	22.0	20	23.5	Dyre, Dan
29-0185	BIG SAND	208	4	24.0	19	26	Provinzino, Dr. Richard J.
29-0143	BIG STONY	203	6	9.2	6.5	11	Petersen, Roger W.
29-0142	DUCK	201	13	4.3	2.5	5.5	Mead, Dewayne
29-0256	EAGLE	201	10	11.4	9	13	Weideman, Mike & Janine
29-0256	EAGLE	202	10	10.9	8.5	13	Weideman, Mike & Janine
29-0110	EAST DEAD	201	9	21.2	19	24	Graham, Jim
29-0072	EIGHTH CROW WING	202	6	12.8	6.5	18.5	Weil, Jim & Joann
29-0092	FIFTH CROW WING	201	10	9.6	5	15	Petersen, Howard E.
29-0086	FIRST CROW WING	203	6	4.3	3	5.5	Forcier, Oscar
29-0242	FISH HOOK	201	9	12.4	11	14	McCann, Mike
29-0242	FISH HOOK	202	9	12.5	11.5	14.5	McCann, Mike
29-0242	FISH HOOK	203	9	11.8	11	13.5	McCann, Mike
29-0242	FISH HOOK	204	9	11.9	10.5	13.5	McCann, Mike
29-0242	FISH HOOK	205	9	11.1	10	12.5	McCann, Mike
29-0188	GILMORE	202	16	12.3	5	19	Thielges, Tom & Iva
29-0071	GRACE	201	17	14.6	10	19.5	Black, Richard
29-0088	ISLAND	201	4	11.6	10	13.5	Bob, Thompson
29-0075	KABEKONA	206	8	11.8	9.5	14.5	Smeby, Rolf C.
29-0313	LITTLE MANTRAP	201	9	18.2	15	19	Axelson, June & Richard
29-0313	LITTLE MANTRAP	202	9	18.7	15.5	20.5	Axelson, June & Richard
29-0313	LITTLE MANTRAP	203	9	18.3	16.5	20	Axelson, June & Richard
29-0150	LITTLE SAND	201	8	23.6	20	35	Luke, Mel
29-0150	LITTLE SAND	203	8	24.3	19	33	Sedlak, Sarah
29-0161	LONG	201	8	10.9	8	13	Dahl, Scott
29-0161	LONG	202	8	11.1	8.5	13.5	Dahl, Scott
29-0161	LONG	203	8	11.0	8	13.5	Dahl, Scott
29-0180	LOWER BOTTLE	201	13	16.4	12.5	21.5	Evans, Lyle
29-0180	LOWER BOTTLE	203	13	18.5	15	25.5	Evans, Lyle
29-0180	LOWER BOTTLE	204	13	16.9	14.5	24	Evans, Lyle
29-0151-01	MANTRAP (EAST BASIN)	201	17	14.7	10	18	Laske, Lyle
29-0151-01	MANTRAP (EAST BASIN)	203	16	14.2	10	18	Laske, Lyle
29-0151-05	MANTRAP (HOME BAY)	201	17	16.2	11	19	Gabbert, Charles W.
29-0151-02	MANTRAP (MIDDLE BASIN)	203	17	11.4	8	19	Gabbert, Charles W.
29-0151-02	MANTRAP (MIDDLE BASIN)	205	17	11.1	7	19	Gabbert, Charles W.
29-0151-02	MANTRAP (MIDDLE BASIN)	207	17	9.7	7	13	Gabbert, Charles W.

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### Hubbard County Continued

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29-0151-04	MANTRAP (WEST ARM)	202	17	13.9	11	16.5	Gabbert, Charles W.
29-0151-04	MANTRAP (WEST ARM)	203	17	13.6	10	16	Gabbert, Charles W.
29-0247	MORAN	202	4	11.8	11.5	12	Giefer, Tom
29-0025	NINTH CROW WING	201	5	12.0	10.5	13	Weil, Jim & Joann
29-0087	PALMER	203	14	13.0	9	18	Prussner, Alvin C.
29-0156	PLANTAGENET	202	13	10.0	5.5	18.5	Mueller, Clint
29-0250	PORTAGE	201	24	3.0	2	5.5	Peterson, Marilyn
29-0243	POTATO	202	13	11.2	6	13.5	Rothermel, Richard A.
29-0243	POTATO	203	13	10.7	6.5	12.5	Rothermel, Richard A.
29-0243	POTATO	204	17	11.9	7	15	Sundstrom, Jim
29-0243	POTATO	205	11	10.3	7.6	13	Sorenson, Mark
29-0243	POTATO	206	9	9.6	7.5	11	Sawyer, Cliff
29-0091	SEVENTH CROW WING	201	4	7.6	4.5	11.5	Bastis, Charles
29-0093	SIXTH CROW WING	201	6	9.4	6.5	12	Edstrom, Dan
29-0117-02	SPIDER (EAST BAY)	201	7	17.7	14	21	Miller, Everett W.
29-0148	UPPER BOTTLE	201	12	16.7	11.5	25.5	Jones, Bill
29-0148	UPPER BOTTLE	202	12	16.6	13	22.5	Jones, Bill
29-0148	UPPER BOTTLE	203	12	16.4	12.5	22	Jones, Bill
29-0148	UPPER BOTTLE	204	12	16.8	12.5	21.5	Jones, Bill
29-0148	UPPER BOTTLE	205	12	16.0	11.5	23.5	Jones, Bill
29-0149	WEST DEAD	201	9	18.3	16	20	Graham, Jim

### Isanti County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
30-0107-01	BLUE (NORTH BAY)	201	6	5.8	3	7.5	Schunk, Vincent G.
30-0136	GREEN	204	16	7.4	3.5	16	McLaughlin, Jim
30-0022	SKOGMAN	201	12	6.0	4	9	Bley, Sherrill

### Itasca County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0597	AMEN	201	12	22.5	16.5	32.5	LeDuc, F.L.
31-0305	ANN	202	15	7.6	5.5	10.5	Duszak, Mike
31-0349	ANTLER	201	10	16.7	16.5	17.5	Petrie, Gene
31-0259	BALSAM	201	6	10.5	9.75	11.5	Coil, Mark
31-0576	BASS	202	9	12.3	10	15	Mutchler, Julie
31-0197	BATTLE	201	10	10.3	8.5	12	Blackmer, Lawrence
31-0058	BEATRICE	201	16	11.6	10.5	13.5	Gardner, Neil F.
31-0726	BELLO	201	7	10.1	9	11.5	Vojta, James
31-0656	BIG DICK	201	3	10.7	9	12	Knutson, Clayton J.
31-0395	BLUEWATER	202	15	18.8	14	26	Ellsworth, Nancy
31-0395	BLUEWATER	203	17	18.9	15	25	Klacan, George R.
31-0069	BUCK	201	12	10.8	7	13	Maki, Charlotte
31-0069	BUCK	202	3	13.0	13	13	Walsh, Mike

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## Itasca County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0424	BURNT SHANTY	202	13	17.3	12	21.5	Simonson, Ken & Betty
31-0413	BURROWS	201	5	12.6	12	13.5	Pedrow, Paul
31-0620	CARIBOU	203	5	39.6	35	44	Uggla, Don
31-0620	CARIBOU	204	8	39.8	33	43	Mangni, Tim
31-0620	CARIBOU	205	5	38.6	30	44.5	Uggla, Don
31-0749	CHASE	201	6	27.3	27	28	Farnham, Chris
31-0214	CLEARWATER (ROUND)	201	5	11.6	11	13.5	Reed, Rian H.
31-0193	CROOKED	201	6	6.8	6	8	Pearson, Mary Jean
31-0334	DEER	201	6	11.3	10	13.5	Carlson, Dennis M.
31-0719	DEER	206	4	15.3	14	16.5	Goracke, Earl E.
31-0719	DEER	207	3	14.3	10	17	Widen, Douglas A.
31-0719	DEER	209	7	15.7	13	17.5	Chatterton, David
31-0719	DEER	210	4	17.6	14.5	22.5	Ritzinger, George
31-0719	DEER	211	7	15.1	10	18.5	Ratzlaff, Joan
31-0921	DIXON	201	4	8.1	5.5	11.5	Lathrop, Dave
31-0882	DORA	201	11	10.6	9	12	Lacher, Richard G.
31-0221	DUNNING	201	6	22.1	20.5	25	Orf, D. Hestwood & Earl
31-0616	EAST SMITH	201	13	14.1	12	20	Hugdahl, Tom
31-0497	FIFTH CHAIN LAKE	201	11	13.3	10.5	17.5	Maschwitz, David
31-0183	FIVE ISLAND	201	7	12.0	10	14.3	Brewer, Jim
31-0492	GUM (THIRD CHAIN, GUNN)	201	11	13.2	10	17.5	Maschwitz, David
31-0452	GUNN	201	5	13.7	10.5	16	Gronberg, Wally
31-0452	GUNN	201	10	13.9	11.5	16.5	Maschwitz, David
31-0361	HALE	201	9	15.0	11.5	20	Libbey, Richard K.L.
31-0373	HALE	201	13	17.4	13	21	Erickson, Vern
31-0020	HART	201	9	10.7	8.5	12	Friedbauer, Allan
31-0154	HARTLEY	201	11	10.8	9	13.5	Hartman, Bruce
31-0696	HORSESHOE	202	8	7.9	7	9	Olsen, Ronnie
31-0254	IAASAC	201	12	15.0	12	18.5	Erickson, Bob
31-0913	ISLAND	205	13	8.8	6	13	Luadtke, William
31-0657-01	JACK THE HORSE (N.)	201	8	12.7	12	13	Dobihal, Charles C.
31-0657-02	JACK THE HORSE (S.)	201	8	12.7	12	13	Dobihal, Charles C.
31-0565	JAY GOULD	201	2	11.0	11	11	Rossing, Lyle
31-0786	JESSIE	203	10	13.2	7	22.5	Nelson, Bill
31-0586	JOHNSON	202	14	15.3	13	16.5	Hendrickson, Bud
31-0231	LAWRENCE	201	10	5.1	4.5	6.5	Peters, Walter
31-0758	LITTLE BOWSTRING	201	10	11.5	8.5	14.5	Ford, Norman
31-0621	LITTLE DEAD HORSE	201	5	16.3	13.3	18.5	Johnson, Dennis
31-0784	LITTLE JESSIE	201	2	14.0	8.5	19.5	Arcand, Joe
31-0613	LITTLE LONG	202	6	15.7	14.5	17	Chapin, Tom
31-0613	LITTLE LONG	203	6	17.3	15.5	21.5	Buck, Virgil
31-0610	LITTLE MOOSE	202	3	5.7	5.5	6	Skallman, Dean V.

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**Itasca County Continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0093	LITTLE SAND	202	1	10.0	10	10	Kujala, Eli
31-0394	LITTLE TROUT	200	9	25.7	22.5	30	Gephart, Peter
31-0399	LITTLE WABANA	202	11	16.6	13.5	20	Adams, Cheryl
31-0266	LONG	202	10	5.6	4	7	Hall, Curtis
31-0571	LOON	201	6	14.7	14	16	Hansen, Norley
31-0759	MAKI	201	6	20.7	10.5	26	Ford, Norman
31-0585	MCAVITY (CROOKED)	201	6	16.8	13.5	22.5	Olson, Nancy
31-0078	MCGUIRE	201	9	7.7	6	10	Norton, Art
31-0898	MOOSE	201	4	18.6	14.6	23.6	Gehn, Lyle
31-0722	MOOSE	202	7	13.0	9	17	Christensen, Marty
31-0339	PICKEREL	201	13	10.3	8.5	13	Stensrud, Homer
31-0532-01	POKEGAMA (MAIN BASIN)	202	7	17.3	12.5	23	Farris, Nancy & Bob
31-0532-01	POKEGAMA (MAIN BASIN)	202	7	17.6	15	24	Giddings, Bob & Tom
31-0532-01	POKEGAMA (MAIN BASIN)	204	7	18.0	15	24	Giddings, Bob & Tom
31-0532-01	POKEGAMA (MAIN BASIN)	205	7	17.4	14.5	23	Giddings, Bob & Tom
31-0532-01	POKEGAMA (MAIN BASIN)	206	6	12.1	9	14.5	Bonner, Jack
31-0532-01	POKEGAMA (MAIN BASIN)	208	15	16.9	12	19.5	Davis, Pat
31-0532-01	POKEGAMA (MAIN BASIN)	214	6	14.6	13	15.5	Lorenz, Dave
31-0532-01	POKEGAMA (MAIN BASIN)	215	6	13.6	11	18	Bonner, Jack
31-0532-01	POKEGAMA (MAIN BASIN)	216	6	11.5	9.5	14	Bonner, Jack
31-0532-01	POKEGAMA (MAIN BASIN)	217	6	12.2	10	14	Bonner, Jack
31-0532-02	POKEGAMA (WENDIGO)	203	9	14.8	14	17	Hoshal, Wayne
31-0384	PRAIRIE	201	8	5.9	5.5	6.5	Kleinert, Jeff
31-0284	RADDISON	201	3	15.7	12	20	Farmer, Chris
31-0268	ROUND	201	3	20.0	15.5	26	Lannon, James B.
31-0268	ROUND	202	3	18.0	16.5	21	Lannon, James B.
31-0268	ROUND	204	3	18.0	16	20	Lannon, James B.
31-0268	ROUND	205	1	21.0	21	21	Lannon, James B.
31-0896	ROUND	201	11	7.3	4	12	Howard, Richard
31-0209	ROUND (CLEAR)	201	9	10.9	9	16.5	Reed, Janis Y.
31-0438	SAND	201	16	18.6	16	21.5	Altobelli, lone
31-0826	SAND	202	7	11.8	7	16	Smith, Dave
31-0345	SCRAPPER (WILSON)	201	3	11.3	11	11.5	Fortner, Larry
31-0554	SISEEBAKWET (SUGAR)	203	17	15.9	12	21	Stenerson, Dick
31-0554	SISEEBAKWET (SUGAR)	214	11	13.9	9.5	20	Olson, Don
31-0255	SNAPTAIL	201	7	12.0	9.5	16	Hupila, Alvar E.
31-0003	SOUTH STURGEON	201	11	4.2	3.5	5.5	Leschak, Pete
31-0555	SOUTH SUGAR	201	7	14.4	12	16	Sandeen, Dan
31-0191	SOUTH TWIN	202	10	11.9	10	13.5	Appelget, Tony
31-0191	SOUTH TWIN	203	10	12.1	10	14	Appelget, Tony
31-0538	SPIDER	203	16	8.8	6	11	Swenson, Glen R.
31-0353	SPLITHAND	203	18	10.1	8.5	12.5	Winkler, Greg
31-0124	SUCKER	202	9	6.0	5	10	Ross, Anthony

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### Itasca County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
31-0067-02	SWAN (MAIN BASIN)	201	10	17.6	12.5	23.5	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	202	10	18.1	12.5	23.5	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	203	10	18.1	13.5	25.5	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	204	10	14.7	8.5	24.5	Mattson, Lou
31-0067-02	SWAN (MAIN BASIN)	205	2	10.3	10	10.5	Weiss, Holly
31-0067-01	SWAN (WEST BAY)	201	10	13.0	10.5	15	Mattson, Lou
31-0127	TRESTLE	201	4	12.8	12	14	Adamson, Jack
31-0410	TROUT	202	1	21.0	21	21	Berg, William E.
31-0410	TROUT	202	4	19.5	18	20	Zimmerman, John
31-0410	TROUT	203	1	19.0	19	19	Berg, William E.
31-0410	TROUT	203	4	18.3	15	20	Zimmerman, John
31-0410	TROUT	204	8	19.1	16	24	Berg, William E.
31-0216	TROUT	202	10	16.3	9	26	Heltemes, Don
31-0216	TROUT	205	7	19.7	14	25	Karppi, William
31-0216	TROUT	206	9	16.1	11	23	Heltemes, Don
31-0216	TROUT	207	10	17.0	12.5	22.5	Hecimovich, Darrel
31-0725	TURTLE (BIG TURTLE)	201	12	17.9	16.5	20	Hagen, Owen A.
31-0725	TURTLE (BIG TURTLE)	202	14	19.2	16.5	22.5	Stretton, Ann & Bill
31-0725	TURTLE (BIG TURTLE)	205	6	17.3	14.5	19	Dziuk, Dr. Harold
31-0725	TURTLE (BIG TURTLE)	206	9	14.6	11	16.5	Higgins, Tim
31-0392	WABANA	201	14	16.4	12	20	Koewler, Dennis & Jean
31-0392	WABANA	205	9	17.6	16	20	Lick, Susan
31-0392	WABANA	206	17	17.9	15.5	20.5	Zimmer, Kenneth
31-0392	WABANA	207	10	19.2	16	22	Miner, Sherry
31-0298	WALTERS	201	11	6.9	5	9.5	Comstock, Maurice

### Jackson County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
32-0022	CLEAR	202	6	1.6	1	2.5	Pribyl, David

### Kanabec County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
33-0040	ANN	202	4	3.1	2.5	3.5	Anderson, Tim
33-0040	ANN	203	4	2.4	2	2.8	Coplan, Terry
33-0040	ANN	204	4	3.0	2.5	3.5	Coplan, Terry
33-0040	ANN	205	4	3.2	3	3.8	Coplan, Terry
33-0033	DEVILS	202	5	2.6	2.5	3	Brothen, Suzanne
33-0032	LEWIS	201	9	8.3	7	10.5	Shimshock, Mary
33-0032	LEWIS	202	9	7.2	5.5	11	Shimshock, Mary
33-0015	QUAMBA	202	9	2.4	2	3	Kieffer, Dennis
33-0015	QUAMBA	203	4	2.1	1.5	2.5	Peterson, Wayne L.
33-0015	QUAMBA	204	4	2.0	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	7.8	5	10.5	Taunton, Tom
34-0086	BIG KANDIYOH	204	8	2.2	1.5	3	Furr, Tim
34-0086	BIG KANDIYOH	205	8	2.9	2	4	Furr, Tim
34-0032	CARRIE	201	4	3.0	2.8	3.1	Lehmbecker, Gene
34-0292	CHURCH	201	4	1.1	1	1.5	Ruff, Greg
34-0158-04	CROW RIVER MILL POND (MIDDLE BAY)	201	8	7.2	4.6	8.6	Beck, Loren
34-0044	DIAMOND	204	9	4.3	0	7.5	Gilmer, Jon
34-0044	DIAMOND	205	7	5.9	3.5	11	Deadrick, Tom
34-0044	DIAMOND	206	9	6.0	3	9.5	Schultz, Bill
34-0171	EAGLE	202	18	7.9	3	17	Eagle Lake, Assoc.
34-0217	FLORIDA	202	7	8.2	6	11.5	Morris, James
34-0224	GAMES	202	6	8.2	7	9	Bosch, Doug & Barb
34-0142	GEORGE	201	15	13.5	11	16	Howell, Norman
34-0079	GREEN	201	8	13.9	13	15	Wacholz, Marilyn
34-0079	GREEN	202	8	14.3	13	15	Wacholz, Marilyn
34-0079	GREEN	203	8	13.9	13	15	Wacholz, Marilyn
34-0079	GREEN	208	8	13.9	13	15	Wacholz, Marilyn
34-0079	GREEN	210	6	13.4	10.5	18.2	Wright, Skip
34-0192	LONG	202	4	7.8	5	11	Johnston, Dr. Mark
34-0192	LONG	203	4	9.0	6.5	12	Johnston, Dr. Mark
34-0251	NORWAY	201	13	3.5	2.5	4.5	Kaye, John
34-0251	NORWAY	202	14	2.4	2	3	Yeo, Greg & Rhett
34-0251	NORWAY	203	6	3.8	3	5	Torison, Joel
34-0251	NORWAY	204	10	3.5	2	4.5	Packer, Marvin
34-0062	UNNAMED (CALHOUN)	201	13	4.8	4	6	Wensman, Tim
34-0062	UNNAMED (CALHOUN)	202	6	3.7	3	5	Johnson, Ron
34-0169-03	WAGONGA (MAIN BAY)	201	4	0.7	0.5	0.7	Druskin, Marilee F.

### Koochiching County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
36-0011	CLEAR	201	1	10.5	10.5	10.5	Franklin, Paul
36-0009	SERETHA (GOSLIN)	201	1	10.7	10.7	10.7	Franklin, Paul

### Lake County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
38-0645	BASSWOOD	201	1	12.0	12	12	Peterson, Charles
38-0498	ENSIGN	201	1	8.5	8.5	8.5	Heffron, Susan
38-0498	ENSIGN	202	1	8.5	8.5	8.5	Heffron, Susan
38-0498	ENSIGN	203	1	8.5	8.5	8.5	Heffron, Susan
38-0498	ENSIGN	204	1	9.0	9	9	Heffron, Susan
38-0498	ENSIGN	205	1	8.5	8.5	8.5	Heffron, Susan

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### Lake County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
38-0779	FARM	202	10	7.0	5	9	Lenartz, John
38-0779	FARM	203	10	5.6	4.5	6.5	Behnke, Gene
38-0779	FARM	204	10	8.5	7.5	9.5	Behnke, Gene
38-0813	FOURTOWN	201	1	6.0	6	6	Wolf, Danelle
38-0813	FOURTOWN	202	1	6.7	6.7	6.7	Wolf, Danelle
38-0813	FOURTOWN	203	1	8.0	8	8	Wolf, Danelle
38-0813	FOURTOWN	204	1	8.0	8	8	Wolf, Danelle
38-0782	GARDEN	201	11	5.7	5	6	Harger, Henry C.
38-0782	GARDEN	202	11	5.7	5	6	Harger, Henry C.
38-0782	GARDEN	203	11	5.7	5.5	6	Harger, Henry C.
38-0726	GOOD	201	1	10.5	10.5	10.5	Peterson, Charles
38-0557	GROUSE	201	7	6.1	6	6.5	Brekke, Gary
38-0396	ISABELLA	201	1	5.3	5.3	5.3	McCollor, Sylvia
38-0242	JOHNSON (WOLF)	201	12	11.7	9	16	Wolf Ridge, Env. Learning Ctr
38-0070	KAWASACHONG	201	1	5.6	5.6	5.6	Pfaller, Ruth
38-0080	KAWISHIWI	201	1	5.0	5	5	Pfaller, Ruth
38-0080	KAWISHIWI	202	1	7.0	7	7	Mondloch, Jeffrey
38-0098	KOMA	201	1	6.7	6.7	6.7	Pfaller, Ruth
38-0406	LAX	201	12	10.4	8	12	Linscheid, Jim
38-0104	POLLY	201	1	7.3	7.3	7.3	Pfaller, Ruth
38-0778	SOUTH FARM	201	10	5.8	4	6.5	Lenartz, John
38-0074	SQUARE	201	1	5.6	5.6	5.6	Pfaller, Ruth
38-0871	TOWNLINE	201	1	6.3	6.3	6.3	Pfaller, Ruth
38-0729	WOOD	201	1	6.5	6.5	6.5	Peterson, Charles

### Lake of the Woods County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
39-0002-02	LAKE OF THE WOODS (4 MI BAY)	201	8	3.1	2	4.5	Nelson, LeRoy O.

### Le Sueur County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
40-0092-01	EAST JEFFERSON	205	10	3.5	3	4	Geldner, Ryann
40-0092-01	EAST JEFFERSON	206	8	4.1	2.5	6.5	Pederson, Ben
40-0124	EMILY	201	5	2.4	1.5	3.5	Hausenbauer, Tom
40-0051	FISH	201	8	13.1	10.5	16	Roessler, Charles & Genevieve
40-0057	FRANCES	202	4	4.6	4.5	5	Houlihan, Dan
40-0063	GERMAN	205	10	2.5	2	3	Geldner, Ryann
40-0092-04	MIDDLE JEFFERSON	204	9	2.4	1.5	4	Nerison, Larry
40-0002	SAKATAH (UPPER)	201	16	3.8	2.5	7.5	Chromey, Harold
40-0092-03	SWEDE'S BAY	204	8	1.8	1	4	Gardner, Doug

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### Le Sueur County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
40-0031	TETONKA	201	17	5.4	2	8	Wangen, Roy
40-0031	TETONKA	204	17	4.9	3	7.5	Wangen, Roy
40-0031	TETONKA	205	16	5.5	0	11	Schwake, Gene & Bonnie
40-0031	TETONKA	206	16	6.6	4	11.5	Schwake, Gene
40-0117	WASHINGTON	205	6	3.6	3	6	Riessen, Reinhard
40-0117	WASHINGTON	207	10	3.1	2	5	Engels, Greg
40-0092-02	WEST JEFFERSON	201	6	1.4	1	1.5	West, Warren (Buster)
40-0092-02	WEST JEFFERSON	202	6	1.4	1	1.5	West, Warren (Buster)
40-0092-02	WEST JEFFERSON	203	5	1.3	1	1.5	West, Warren (Buster)
40-0092-02	WEST JEFFERSON	204	6	1.2	1	1.5	West, Warren (Buster)

### Lincoln County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
41-0043	BENTON	202	7	1.6	1	2	Brinkman, Marvin
41-0089	SHAOKOTAN	201	14	4.8	0.5	7.5	Hanson, Mark
41-0089	SHAOKOTAN	203	14	5.0	1.5	9.5	Hanson, Mark

### McLeod County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
43-0073	HOOK	201	9	2.4	1	4.5	Bombeck, Jim
43-0073	HOOK	202	7	1.6	1	2.5	Pendergast, Butch
43-0034	SILVER	202	3	2.7	1.5	3.5	Dalbec, Jake
43-0012	WINSTED	203	4	2.6	1	4.5	Zachmann, Ronald C.

### Mahnomen County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
44-0038	ISLAND	201	4	5.1	4	6	Robokoff, Michael
44-0001	ROY (SIMON)	202	14	8.3	6.5	12	Brown, Richard
44-0045	SNIDER	201	10	10.7	9.5	12	Sahli, Roger & Ginny

### Martin County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
46-0030	BUDD	202	11	4.5	2	7.5	Segar, David
46-0109	FOX	203	10	2.7	2	4	Peters, Ken
46-0109	FOX	204	6	2.6	2	4	Hanson, Kirby
46-0020	SOUTH SILVER	201	7	1.9	1.5	2.6	Senenfelder, Gloria & Jim
46-0020	SOUTH SILVER	202	7	2.2	2	2.5	Senenfelder, Gloria & Jim
46-0020	SOUTH SILVER	203	14	2.0	1.4	3	Hand, Ernest

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### Meeker County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
47-0023	ARVILLA	201	4	1.6	1.5	2	Scepaniak, David
47-0049	BELLE	202	6	3.6	2.5	5.5	Steele, Dan
47-0049	BELLE	203	6	3.7	3	5.5	Steele, Dan
47-0049	BELLE	204	6	3.5	2.5	4.5	Steele, Dan
47-0049	BELLE	205	6	3.7	2.5	5	Steele, Dan
47-0049	BELLE	206	6	3.8	2.5	6	Steele, Dan
47-0042	BETTY (BETSY)	200	12	2.2	1	7	Saukkola, George
47-0038	BIG SWAN	201	9	4.4	2.5	7	Koehnen, Wayne
47-0038	BIG SWAN	202	9	4.2	3	5.5	Koehnen, Wayne
47-0095	CLEAR	202	16	1.4	1	2.5	Brandenburg, Richard
47-0002	FRANCIS	201	13	6.5	5	9	Lyftogt, Carolyn
47-0002	FRANCIS	202	13	6.7	5	9.5	Lyftogt, Carolyn
47-0177	LONG	202	17	0.8	0.8	1	Hanson, Roger
47-0050	MANUELLA	201	18	6.8	4.5	10.5	Schwingler, Bob
47-0119	MINNIE-BELLE	204	8	10.5	9	14	Jensen, Rollie H.
47-0088	RICHARDSON	201	16	2.9	2	6.5	Horwath, Gary
47-0134	RIPLEY	203	11	7.2	4.5	10.5	Besser, Steve
47-0134	RIPLEY	204	10	7.4	4.5	11	Besser, Steve
47-0032	SPRING	201	4	2.6	2	3	Scepaniak, David
47-0068	STELLA	201	11	6.3	4.5	8.5	Raabe, Henry E. (Hap)
47-0068	STELLA	202	16	7.1	4	11	Schuster, N. Jack

### Mille Lacs County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
48-0002	MILLE LACS	209	6	12.7	10.5	15	Fritz, David
48-0002	MILLE LACS	213	4	11.1	8.5	13	Adair, Richard

### Morrison County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
49-0079	ALEXANDER	201	8	13.9	10.5	19	Prozinski, Tony
49-0079	ALEXANDER	202	11	18.7	12	30	Simonet, Arthur
49-0079	ALEXANDER	204	7	18.7	13	23	Ness, Dale
49-0140	CEDAR	202	15	12.3	6.5	16.5	Drill, James
49-0133	CROOKNECK	202	7	10.1	9	11	Rabe, Adolph
49-0137	FISH TRAP	204	8	15.8	10.5	21.5	Kosec, Tom
49-0015	LONG	201	11	8.6	7	10	Steigauf, James E.
49-0081	PINE	202	8	18.5	17.5	19.5	Stueve, Richard
49-0056	ROUND	202	10	11.7	9.5	14	Halverson, Wayne & Kathy
49-0127	SHAMINEAU	203	11	14.5	12	18	Doree, Alderic J.
49-0016	SULLIVAN	204	2	7.3	6.5	8	Haas, Dale & Sandy

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LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
51-0040	BLOODY	201	14	1.9	1.5	2.5	Sauer, Bill

### Nicollet County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
52-0001	UNNAMED (HALLET)	201	15	13.1	8.5	17	Olmanson, Trudi

### Olmsted County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
55-0006	BAMBER	201	13	15.2	10.5	20	Stewart, Howard
55-0006	BAMBER	202	4	11.9	6.5	15	Stewart, Howard
55-0003	SILVER	201	13	2.0	0.5	4	Frederickson, Mark W.
55-0004	ZUMBRO	201	4	6.2	3.75	7.5	McClanahan, Tim & Tyler
55-0004	ZUMBRO	207	13	6.0	2	11	Ward, Nicole

### Otter Tail County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
56-0867	ALICE	201	4	1.0	1	1	Eisinger, Dr. Lawrence
56-0770	BASS	201	10	12.7	10	18	Anderson, Donald
56-1149	BERGER	201	6	7.3	5.5	11	Kalinowski, Van
56-0386-01	BIG MCDONALD	201	4	17.8	14	26	Brokke, Keith
56-0386-03	BIG MCDONALD #2	201	20	11.5	7	18	Borgerding, George
56-0130	BIG PINE	202	13	7.5	6	11.5	Taylor, George E.
56-0130	BIG PINE	204	9	6.3	5	7	Hermanson, Michael
56-0130	BIG PINE	205	13	7.2	5.5	12	Taylor, George E.
56-0130	BIG PINE	206	13	7.5	6	13.5	Taylor, George E.
56-0240	BLANCHE	202	11	15.8	11.5	23.5	Ramsey, Bill
56-0559	CLEAR	201	9	7.7	5.5	13	Perry, Donald A.
56-0238	CLITHERALL	205	7	18.4	14.5	23	Reckert, Ann R.
56-0238	CLITHERALL	207	7	19.1	14	23.5	Cummings, Gary
56-0298	DEER	201	4	12.0	11.5	12.5	Long, Ray
56-0253	EAGLE	202	2	20.9	18.8	23	Beech, Jim
56-0253	EAGLE	202	7	21.6	19.5	23	Hansen, Paul
56-0116-02	EAST LEAF	202	9	9.1	6	12	Oppgaard, Florene
56-0523	EAST LOON	201	9	14.3	12	17	Mansager, Eugene
56-0523	EAST LOON	202	9	10.1	7.5	14.5	Mansager, Eugene
56-0523	EAST LOON	203	9	10.8	9.5	12	Mansager, Eugene
56-0378-01	EAST LOST (N. BAY)	202	5	12.8	12	13.5	Thiel, Albert
56-0378-01	EAST LOST (N. BAY)	203	5	12.4	11.5	13	Thiel, Albert
56-0193	ETHEL	201	7	20.1	15.5	25	Behr, Scott
56-0768	FISH	201	13	14.2	11	16	Carpenter, Roger F.
56-0639	INDIAN	201	10	5.9	4	7.5	Ario, H. Charles
56-0651	LARSON	201	11	2.1	2	2.5	Ario, H. Charles

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## Otter Tail County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
56-0532	LEEK (TROWBRIDGE)	201	13	13.2	8.5	16	Tuomala, Mike
56-0532	LEEK (TROWBRIDGE)	203	13	12.8	10	15.5	Tuomala, Mike
56-0747-01	LIDA (MAIN BASIN)	207	10	13.1	9	17	King, Don
56-0747-02	LIDA (SOUTH ARM)	201	11	13.1	9	19.5	Spangler, Mike
56-0747-02	LIDA (SOUTH ARM)	202	11	13.3	9	20	Spangler, Mike
56-0328	LITTLE MCDONALD	202	4	19.4	16.5	20.5	Faber, Charles
56-0328	LITTLE MCDONALD	203	4	20.3	17.5	22.5	Faber, Charles
56-0328	LITTLE MCDONALD	204	4	20.1	17.5	21.5	Faber, Charles
56-0761	LITTLE PELICAN	201	10	8.8	5.5	13	Manuel, Fred
56-0142	LITTLE PINE	201	7	8.6	6.5	14	Gunderson, Les & Jean
56-0142	LITTLE PINE	201	7	10.0	8.5	12	Maleitzke, Art
56-0142	LITTLE PINE	203	7	8.8	7.5	11	Maleitzke, Art
56-0142	LITTLE PINE	204	7	8.6	7	11	Maleitzke, Art
56-0388	LONG	202	6	9.8	8	12.5	Bennett, Jerry
56-0243	MARION	205	5	14.1	11	17	Haedtke, Richard & Pat
56-0243	MARION	205	6	13.6	12	16	Lysne, Duane
56-0243	MARION	206	4	10.8	9	13	Haedtke, Richard & Pat
56-0243	MARION	206	14	12.2	8.5	16.5	Lysne, Duane
56-0116-01	MIDDLE LEAF	201	5	11.3	9	14	Anderson, Curt
56-0377	NAGEL (S. TURTLE)	201	8	15.1	11	19	Worum, Chuck
56-0242	OTTER TAIL	201	9	11.4	10.5	12.5	Sliper, Jeff
56-0242	OTTER TAIL	205	8	15.8	14.5	20	Hansen, Jim & Clara
56-0335	PAUL	201	16	23.1	19	36	Tolkinen, Erv
56-0786	PELICAN	204	3	15.7	15	17	Berg, Dick
56-0786	PELICAN	205	10	12.2	9	16	DeHollander, Bill
56-0786	PELICAN	207	9	14.9	13	16.5	Larsen, John C.
56-0358	SCALP (LAKE SEVEN)	201	10	19.1	16.5	21.5	Overland, Greg
56-0302-01	SILVER (1ST SILVER)	202	6	11.3	8	15	Matteson, John
56-0369	SIX	203	10	30.7	25	37	Greenough, Frank & Betty
56-0385	STAR	201	13	16.5	12.5	23.5	Herron, Carolyn
56-0385	STAR	202	12	18.0	14.5	23	Sheldon, Gary
56-0385	STAR	204	11	15.2	12.8	18.5	Sheldon, Gary
56-0385	STAR	205	11	18.3	12.5	29.5	Herron, Carolyn
56-0191-01	STUART (MAIN BASIN)	202	10	16.6	10	22	Hofflander, Bob
56-0191-01	STUART (MAIN BASIN)	203	10	10.3	8	12.5	Hofflander, Bob
56-0781	SWAN	202	9	16.6	12.5	19	Wright, Grace
56-0387	SYBIL	201	10	19.3	16.5	22	Cruff, Gary L.
56-0387	SYBIL	202	10	19.2	16	21	Cruff, Gary L.
56-0387	SYBIL	203	10	19.7	17	22	Cruff, Gary L.
56-0931	TAMARAC	201	10	8.7	6.5	10.5	Nettestad, Thomas & Vickie
56-0613	TEN MILE	201	13	6.2	4	17	Westberg, Al
56-0658	WALL	203	7	10.8	8	17	Jungroth, Vernon
56-0658	WALL	204	7	10.4	7	18	Jungroth, Vernon

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### Otter Tail County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
56-0239	WEST BATTLE	201	14	17.4	12	24	Thomas, Richard
56-0239	WEST BATTLE	202	14	16.6	11.5	21	Thomas, Richard
56-0239	WEST BATTLE	203	14	16.8	12	21	Thomas, Richard
56-0386-02	WEST MCDONALD	202	4	17.9	14.5	20	Condon, Kevin

### Pine County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
58-0138	BIG PINE	201	5	7.6	7	10	Ketchmark, George
58-0138	BIG PINE	202	8	7.1	6	8	Marnich, Paul J.
58-0062	ISLAND	203	14	7.4	4	10.5	Sorenson, Edward C.
58-0062	ISLAND	204	14	7.4	4	10	Sorenson, Edward C.
58-0038	NET	201	7	3.1	3	3.5	Ruud, David
58-0038	NET	202	1	3.5	3.5	3.5	Neumann, Mary
58-0048	OAK	202	3	2.3	2	2.5	Ecklund, Allen
58-0142	POKEGAMA	211	12	4.6	3	6	Royce, Charles & Pauline
58-0081	SAND	202	10	10.9	8.5	12	Olson, Tom
58-0081	SAND	203	10	10.6	7	13	Olson, Tom
58-0081	SAND	204	4	11.5	8	14	Dee, Pauline
58-0024	TAMARACK	201	9	14.0	13	15	Pearson, Debbie & Kim
58-0130	UPPER PINE	202	5	4.8	4	5.5	Gangl, Raymond

### Polk County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
60-0142	HILL RIVER	201	5	2.7	1.5	5	Bergendahl, Ragnar
60-0202	SARAH	203	6	11.6	7	16.5	Bailey, Jack
60-0217	UNION	201	5	10.8	6.5	20	Eide, Verna
60-0217	UNION	203	17	10.3	6	20	Weiler, Philip

### Pope County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
61-0064	AMELIA	203	15	12.9	8	25	Stanke, Robert
61-0122	ANN	201	8	8.1	3	11	Howe, Mike
61-0072	GILCHRIST	201	17	4.9	2.5	17.5	Heimkes, Richard
61-0092	HOFF	201	4	9.3	8.5	10.5	Swartz, Greg
61-0066	LEVEN	203	6	6.9	4	11	Brown, Bruce
61-0037	LINKA	202	8	10.9	6	16	Griffen, Dr. Richard
61-0060	MARLU	201	2	4.0	4	4	Morton, John
61-0130	MINNEWASKA	209	15	9.2	5.5	14	Walters, Steve
61-0130	MINNEWASKA	210	5	11.7	9	17	Jones, Robert C.
61-0130	MINNEWASKA	211	5	9.1	6.5	12	Jones, Robert C.
61-0111	PELICAN	203	6	4.2	4	4.5	Mueller, Robert
61-0111	PELICAN	204	10	3.9	3	5.5	Magnus, Doug
61-0111	PELICAN	205	10	3.9	3	6	Magnus, Doug

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### Pope County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
61-0078	RENO	201	7	12.4	6	18	Redman, Sandra
61-0041	SCANDINAVIAN	202	10	9.8	8	10.5	Nyhusmoen, Sid
61-0067	VILLARD	204	15	9.6	7	13	Stanke, Robert

### Ramsey County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
62-0002	BALD EAGLE	206	9	4.8	3	8	Doran, Mike
62-0080	EMILY	201	8	7.1	5.5	9.5	Moller, Karlind T.
62-0037	GEM	201	9	5.0	4	6.5	Hoeschler, Linda
62-0007	GERVAIS	203	9	4.4	3	6	Petersen, Jonathan
62-0007	GERVAIS	205	6	3.5	3	4	Baller, Victor
62-0078	JOHANNA	202	5	5.1	5	5.5	Gilbert, Caroline
62-0078	JOHANNA	203	5	5.2	5	5.5	Gilbert, Caroline
62-0057	JOSEPHINE	202	12	6.4	4.5	11	Kucera, Emil
62-0067	LONG	203	3	5.0	4.5	6	Fabian, Lindsey & Pete
62-0054	MCCARRON	202	12	8.0	6.5	11.5	McCarron, Karlee
62-0056	OWASSO	206	10	4.2	3	6.5	Terry, Bob
62-0046	PLEASANT	203	6	9.2	4	13	Kellin, R. Scott
62-0036	PRIEBE	202	3	1.7	1	2.5	Wilson, Scott A.
62-0001	SILVER	202	13	7.0	4.5	11	Anderson, Paul
62-0083	SILVER	204	7	2.5	1.25	4.5	Sausser, Patti
62-0073	SNAIL	201	10	9.5	7	12	Fox, Roger
62-0073	SNAIL	202	10	10.1	8	13	Fox, Roger
62-0073	SNAIL	203	6	8.2	7.5	9	Sandberg, Frank
62-0061	TURTLE	207	3	8.3	6.5	9.5	Gross, Gregory S.
62-0061	TURTLE	208	4	10.3	8.5	13	Hall, Doug
62-0022	UNNAMED (TAMARACK)	201	3	2.7	2.5	3	Stewart, Shannon
62-0082	WABASSO	202	5	7.5	6	8.5	Newquist, Leonard

### Rice County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
66-0008	CANNON	201	4	1.9	1	3	Luikens, Jan
66-0008	CANNON	208	4	2.4	2	3	Luikens, Jan
66-0052	CEDAR	206	8	2.9	1.5	6	Luehrs, Virgil
66-0052	CEDAR	207	8	2.6	1.5	4.5	Luehrs, Virgil
66-0052	CEDAR	208	8	2.8	2	4.5	Luehrs, Virgil
66-0052	CEDAR	209	8	3.4	1.5	8.5	Luehrs, Virgil
66-0027	CIRCLE	209	7	1.3	1	1.5	Wenthe, Fred
66-0027	CIRCLE	210	4	1.4	1	2	Wenthe, Fred
66-0014	DUDLEY	204	3	9.0	7	11.5	Jarvis, John
66-0029	FOX	203	16	5.0	3	9	Stratmoen, Lois
66-0029	FOX	206	16	5.1	3	8.5	Stratmoen, Lois
66-0038	FRENCH	201	9	3.0	2	7	Scott, Jane & Richard

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### Rice County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
66-0047	HUNT	207	7	3.7	1.5	12	Rabeneck, Beth
66-0015	KELLY	202	3	7.5	7	8.5	Jarvis, John
66-0018	ROBERDS	201	9	3.7	2.5	5	Tuma, Ted
66-0044	SAKATAH (LOWER)	201	14	2.9	2	4	Chromey, Harold
66-0055	SHIELDS	205	14	4.5	2.5	5.5	Elsen, Rick
66-0010	WELLS	201	6	1.9	0.5	3	Wagner, George

### Saint Louis County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
69-0041	BASSETT	201	12	11.5	10	13	Swanson, Ken
69-0842	BLACKDUCK	202	10	11.0	3	18	Faith, Vaneps
69-0128	BRIAR	201	9	5.8	5	8	Stanley, Charles E. & Barbara
69-0381	BUCK	201	1	6.5	6.5	6.5	Vouk, Bob
69-0381	BUCK	202	1	6.0	6	6	Vouk, Bob
69-0118	BURNTSIDE	201	10	23.0	19	30.5	Nyman, George
69-0118	BURNTSIDE	202	3	22.7	18	31	Stenlund, Milt
69-0118	BURNTSIDE	207	4	26.5	23	29	Reabe, Gordon
69-0118	BURNTSIDE	211	1	21.0	21	21	Vouk, Bob
69-0118	BURNTSIDE	212	1	21.0	21	21	Vouk, Bob
69-0118	BURNTSIDE	213	4	20.6	16	25	Bahnemann, David & Abbie
69-0489	CARIBOU	201	7	9.2	7.5	11	Herman, Richard D.
69-0489	CARIBOU	202	7	8.9	7.5	10.5	Herman, Richard D.
69-0489	CARIBOU	203	7	7.8	7	8.5	Herman, Richard D.
69-0489	CARIBOU	204	7	7.1	6	8.5	Herman, Richard D.
69-0450	CHAD	201	1	6.5	6.5	6.5	Vouk, Bob
69-0450	CHAD	202	1	6.5	6.5	6.5	Vouk, Bob
69-0277	CLEAR	201	11	11.8	11	12.5	Aldrich, Douglas L.
69-0412	COMSTOCK (BIG COMSTOCK)	201	9	6.9	6.5	7.5	Wallin, Joseph A.
69-0220	CRAB	201	1	12.5	12.5	12.5	Vouk, Bob
69-0220	CRAB	202	1	12.0	12	12	Vouk, Bob
69-0221	CUMMINGS	201	1	12.5	12.5	12.5	Vouk, Bob
69-0523	DODO	201	10	13.4	9.5	16.5	Strum, Jerry
69-0285-01	EAGLES NEST #1	201	8	20.2	13.5	24	Gervais-Adkisson, Gloria
69-0285-03	EAGLES NEST #3	202	8	18.1	12	23	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	203	8	16.6	11.5	23	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	204	8	17.2	13.5	23	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	206	8	15.3	11.5	21	Rodorigo, Barbara
69-0285-03	EAGLES NEST #3	208	8	15.8	12	19	Rodorigo, Barbara
69-0218	EAGLES NEST #4	201	6	19.1	18	22	Bertelson, Glenn
69-0660	ELY	202	17	17.6	11	23.5	Nyhus, John
69-0565	ESQUAGAMA	201	14	7.3	5.5	9	Nyhus, John
69-1306	GILBERT PIT	201	2	17.8	13.5	22	Steblay, Edward & Lee

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## Saint Louis County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
69-0292	GLENMORE	201	1	5.0	5	5	Vouk, Bob
69-0511	GRAND	201	2	12.8	12	13.5	Moore, Anne
69-0654	HORSESHOE	201	6	7.6	5	10	Isaacson, Mark & Jamie
69-0889	ISLAND	201	4	13.6	13	15	Kuryatnik, Steve & Helen
69-0889	ISLAND	202	7	16.9	14	21	Tuominen, Paul
69-0315	KORB	201	1	6.5	6.5	6.5	Vouk, Bob
69-0296	LITTLE CRAB	201	1	6.5	6.5	6.5	Vouk, Bob
69-0760	LITTLE JOHNSON	201	5	8.2	7	9	Niemi, Ken & RosaLee
69-0066	LITTLE LONG	202	2	18.5	18	19	Yahnke, Curt & Rose Ann
69-0066	LITTLE LONG	203	7	18.9	18	20	Lindbeck, John
69-0732	LITTLE SAND	201	11	7.2	3.5	10	Thompson, Sue
69-0653	LONG	202	19	8.9	6.5	12	Kishel, Thomas C.
69-0426	LOON	201	14	22.9	20	27	Baker, John
69-0426	LOON	203	12	20.3	18	23	Baker, John
69-0295	LUNETTA	201	1	4.0	4	4	Vouk, Bob
69-0721	MAJESTIC	201	7	16.4	15	18	Bainter, Chuck
69-0700	MAPLE LEAF	203	14	10.9	9	14	Ebeling, Mrs. Ira
69-0007	PARADISE	201	9	8.8	7	10	Taraldsen, Theresa
69-0011	PEQUAYWAN	201	5	9.9	8.5	10.5	Mead, Scott Phyl & Forest
69-0932	PERCH	203	12	11.0	9	15	Labonte, Arden
69-0490	PIKE	201	10	12.7	9.5	16.5	Campbell, Peg
69-0490	PIKE	202	10	12.6	10	18.5	Campbell, Peg
69-0490	PIKE	203	10	11.8	8	15.5	Campbell, Peg
69-0848	PRAIRIE	204	10	7.4	6.5	8.5	Hallberg, Ken
69-0848	PRAIRIE	205	10	7.3	5.5	8.5	Hallberg, Ken
69-0848	PRAIRIE	206	10	6.6	4.5	7.5	Hallberg, Ken
69-0848	PRAIRIE	207	10	7.5	6.5	9	Hallberg, Ken
69-0694	RAINY	203	4	9.4	8	11	Anderson, Paul A.
69-0525	ROSE	201	18	11.5	10	14	Nyborg, Sean
69-0429	SABIN (EMBARRASS PIT)	201	10	48.5	35	60	Steblay, Edward & Lee
69-0736	SAND	204	8	12.5	11.5	13.5	Verbick, Ben
69-0617	SAND POINT	201	4	9.0	9	9	Cooley, Diane
69-0018	SCHAFFER	201	9	8.3	7	9.5	Taraldsen, James
69-0294	SCHLAMM (SCHLAM)	201	1	4.0	4	4	Vouk, Bob
69-0546	SCHUBERT (BASS)	201	10	8.2	6.5	9.5	Berndt, Steven
69-0230	SCHULTZ	203	8	18.1	14.5	19.5	Larson, Cheryl L.
69-0069	SHAGAWA	201	15	11.0	8	16	Zabinski, Eugene W.
69-0069	SHAGAWA	203	8	13.0	8	18	Scheuer, Bob
69-0519	SIDE (BOWMAN)	201	5	5.5	5	6	Fait, Thomas A.
69-0129	SPRING	201	4	9.3	8.5	10	Stocco, Jeff
69-0529	STRAND	201	12	3.5	3	5	Rosenthal, Lois
69-0235	SUNSHINE	201	9	21.4	17.5	28	Turner, Gary
69-0794	THIRTEEN	201	10	13.5	12	16	Swanson, Michael G.

Legend:

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### Saint Louis County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
69-0241	THOMPSON	201	10	4.8	4	7	Haney, Richard
69-0378	VERMILLION	203	11	9.7	6.5	13.5	Lotz, Steven
69-0378	VERMILLION	204	12	9.3	6.5	12.5	Lotz, Steven K.
69-0378	VERMILLION	206	9	8.9	7	11.5	Marjanen, Karin & George
69-0378	VERMILLION	210	4	11.0	9	14	Wullschleger, Richard
69-0378	VERMILLION	211	4	12.5	10	16	Wullschleger, Richard
69-0378	VERMILLION	218	7	10.7	8.5	15	Hintz, Mel & Ellen
69-0378	VERMILLION	219	7	8.3	5	10.5	Hintz, Mel & Ellen
69-0378	VERMILLION	221	4	10.0	9.5	10.5	Paulsen, Terri Lee
69-0379	WESTERN	201	1	6.0	6	6	Vouk, Bob
69-0030	WHITE	201	4	9.3	8.5	10	Bangsund, Bill
69-0030	WHITE	202	4	12.8	10	15	Bangsund, Bill
69-0004	WHITE IRON	201	8	5.8	5.5	6	Pinckney, Robert
69-0004	WHITE IRON	202	17	7.0	6	8	Ajax, Sheldon
69-0375	WHITEFACE RESERVOIR	202	13	4.9	4.5	5.5	Steblay, Edward & Lee
69-0434-02	WYNNE	202	13	9.3	6.5	13	Laugen, Joe

### Scott County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
70-0022	CLEARY	202	1	2.0	2	2	Kirscht, Tom
70-0019	HANRAHAN (HANREHAN)	202	1	7.0	7	7	Swan, Desiree & Phil
70-0009	KRENZ	201	7	16.1	13.5	17.5	Jorgensen, Holly
70-0026	LOWER PRIOR	203	9	6.4	4.5	9.5	Modders, J. Nick
70-0054	SPRING	205	2	3.0	2.5	3.5	Kirscht, Tom
70-0072	UPPER PRIOR	201	12	3.1	1.5	6.5	Modders, J. Nick
70-0072	UPPER PRIOR	202	18	3.6	2.5	6	Fourre, Frank

### Sherburne County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
71-0146	BRIGGS	205	9	3.1	2	4	Herkenhoff, Stan
71-0123	CAMP	201	12	9.0	6	14	Gill, Kathleen A.
71-0041	CANTLIN	201	13	7.5	7	8	Patten, Peggy
71-0055	ELK	202	11	1.8	1	2.5	McDevitt, Dean
71-0016	FREMONT	201	15	1.8	0.5	3.5	Improvement Association, Lake Fremont
71-0016	FREMONT	202	15	2.2	1	5	Improvement Association, Lake Fremont
71-0016	FREMONT	203	15	2.1	1	5	Improvement Association, Lake Fremont
71-0145	JULIA	203	15	2.2	1	5.5	Fors, Paul
71-0159	LONG	201	12	9.3	7.5	11.5	Sickler, Raymond C.
71-0159	LONG	202	12	8.3	8	8.5	Sickler, Raymond C.
71-0147	RUSH	201	10	2.0	1	4	Munsterman, Walt
71-0040	SANDY	204	11	14.5	10.5	16.5	Heffron, Molly

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### Sherburne County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
71-0096	THOMPSON	202	4	9.6	8.5	10.5	Gardetto, Robert
71-0167	UNNAMED (ROUND)	201	13	15.1	12	17	Nawara, Sharon

### Stearns County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
73-0190	BEAR	201	6	9.0	7	11	Greener, Glen
73-0159	BIG	202	17	7.1	5	8.5	Press, Joe
73-0106	BIG FISH	201	7	17.1	14	19.5	Peters, Matthew
73-0106	BIG FISH	202	11	13.5	11	16	Schnettler, Bill
73-0106	BIG FISH	204	14	18.9	13	25	Chovan, Joe
73-0102	BIG WATAB	201	20	17.1	12.5	21.5	Strobel, Joan & Mark
73-0102	BIG WATAB	202	21	17.2	13	24.5	Strobel, Joan & Mark
73-0088	BOLFING (BOLTING)	202	10	4.4	3.5	10	Binsfeld, Joe
73-0133-01	CEDAR ISLAND (MAIN BAY)	205	13	4.1	2.5	5.5	Stewart, Mike
73-0133-01	CEDAR ISLAND (MAIN BAY)	207	8	7.8	4	12	Piechocki, Daniel B.
73-0006	CROOKED	201	3	13.0	12.5	13.5	Payne, Robert
73-0150	EDEN	202	6	3.9	2.5	7	Weller, Mike
73-0703	ELEVEN QUARRY	201	7	15.1	10	20	Stearns Co., Parks
73-0055	GRAND	203	11	9.2	6	12	Lehner, Jack & Harriet
73-0055	GRAND	204	4	8.4	7	9	Ludwig, Paul
73-0157	HORSESHOE	211	1	3.0	3	3	Logsdon, Audrey
73-0233	KINGS	201	11	6.5	5	7.5	Herges, Peter
73-0233	KINGS	201	8	5.6	3.4	8.5	Rueter, Joe
73-0233	KINGS	202	11	5.9	4	8	Herges, Peter
73-0233	KINGS	203	8	5.8	4	8.6	Rueter, Joe
73-0086	KNAUS	203	10	2.6	2	4	Binsfeld, Joe
73-0200-02	KORONIS (MAIN BASIN)	209	12	7.8	5	13	Paster, Jim
73-0200-02	KORONIS (MAIN BASIN)	211	13	11.0	4.5	22.5	Ebent, Roland
73-0097	KREIGHLE	201	12	15.7	11	20	Smith, Wes
73-0004	LONG	202	3	13.2	13	13.5	Payne, Robert
73-0139	LONG	203	3	4.3	3	6	Spohn, Kenneth
73-0139	LONG	204	3	5.0	4.5	5.5	Ogrezovich, Rod & Jackie
73-0123	LOWER SPUNK	201	12	8.8	7.25	10.5	Ahles, Gerritt
73-0215	MARIA	201	7	4.3	3	6.5	McCarthy, Arthur W.
73-0215	MARIA	202	7	4.4	2.5	7	McCarthy, Arthur W.
73-0701	MELROSE DEEP QUARRY	201	7	12.9	11	16	Stearns Co., Parks
73-0128	MIDDLE SPUNK	205	8	9.8	6	12.5	Tomlyanovich, Aletha
73-0151	MUD (VAILS)	201	6	5.1	4.5	5.5	Linn, James P.
73-0147	NORTH BROWN'S	205	16	5.5	2.5	12.5	Dehler, Fred
73-0122	OCHOTTO	201	5	13.6	12	15	Voss, Carol

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### **Stearns County Continued**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
73-0118	PELICAN	202	16	16.2	10.5	21.5	Angulski, Chet
73-0118	PELICAN	203	13	15.2	10	23	Koopmeiners, Linus
73-0118	PELICAN	205	12	14.4	9	24	Lang, Joseph
73-0196	RICE	206	3	5.5	3.5	9	Reede, Roger & Karen
73-0196	RICE	208	9	8.2	3.6	15.6	Skartvedt, Gary
73-0196	RICE	211	7	7.4	3	15.5	Vadner, Bob
73-0072	ROSSIER	201	14	5.4	3	8.5	Streng, Steve
73-0035	SCHOOL SECTION	202	4	8.4	8	9	Eckman, Richard
73-0183	ST. ANNA	202	4	9.9	6	14	Hare, Robert
73-0249	SYLVIA	202	11	8.9	8	10.5	Spanier, Wendy
73-0138	TWO RIVERS	204	10	5.2	4	6	Martin, Bob
73-0138	TWO RIVERS	205	10	5.2	3.5	6	Martin, Bob
73-0117	UPPER SPUNK	201	17	7.4	5	8	Baker, John
73-0070	WATAB	201	17	5.9	2	9.5	Faber, Roger

### **Steele County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
74-0023	BEAVER	204	7	3.4	2.25	6	Plunkett, Pete

### **Swift County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
76-0072	CAMP	201	5	3.6	3	4.5	Nemmers, Duane

### **Todd County**

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
77-0084	BIG BIRCH	201	9	10.8	8	15	Hinnenkamp, Holly
77-0084	BIG BIRCH	202	13	12.8	8.5	17	Schiemann, Beth
77-0084	BIG BIRCH	203	9	10.8	8	15	Hinnenkamp, Holly
77-0084	BIG BIRCH	204	9	15.0	8	22	Price, Gary
77-0084	BIG BIRCH	205	16	12.3	8	18.5	Dinndorf, Don A.
77-0084	BIG BIRCH	206	16	9.1	5	15.5	Grossman, Richard H.
77-0084	BIG BIRCH	207	9	14.6	8.5	21	Price, Gary
77-0084	BIG BIRCH	210	13	13.7	10	20	Meyer, Glenn
77-0084	BIG BIRCH	212	13	12.9	9	18.5	Schiemann, Beth
77-0084	BIG BIRCH	213	16	12.8	8	20	Dinndorf, Don A.
77-0084	BIG BIRCH	214	8	8.1	6	11	Grossman, Richard H.
77-0084	BIG BIRCH	215	16	9.8	4.5	17	Dinndorf, Don A.
77-0084	BIG BIRCH	216	13	13.8	9.5	20.5	Meyer, Glenn
77-0084	BIG BIRCH	217	13	13.7	9	20	Meyer, Glenn
77-0084	BIG BIRCH	218	8	8.6	5.5	14	Grossman, Richard H.
77-0084	BIG BIRCH	219	8	8.5	5	13.5	Grossman, Richard H.
77-0084	BIG BIRCH	220	7	13.6	7.5	18	Osendorf, Robert
77-0084	BIG BIRCH	221	7	13.7	8	18	Osendorf, Robert

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### Todd County Continued

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
77-0084	BIG BIRCH	222	13	13.0	8.5	18.5	Schiemann, Beth
77-0084	BIG BIRCH	223	16	11.8	8	16.5	Dinndorf, Don A.
77-0084	BIG BIRCH	224	13	12.8	8	19	Price, Gary
77-0084	BIG BIRCH	225	9	10.5	7	16	Hinnenkamp, Holly
77-0084	BIG BIRCH	226	9	13.8	8.5	18	Osendorf, Robert
77-0023	BIG SWAN	201	9	12.0	6.5	17	Palbicki, M.E.
77-0023	BIG SWAN	203	8	10.1	5	15	Johnson, Robert T.
77-0023	BIG SWAN	204	4	12.0	12	12	Grimli, Clarence
77-0154	FAIRY	201	11	12.7	7.5	16.5	Tank, Loren
77-0128	HORSESHOE	201	3	9.5	9.5	9.5	McClellan, Patricia
77-0105	LATIMER	203	14	3.9	2	7.5	Swenson, Paul A.
77-0089	LITTLE BIRCH	201	11	9.4	7	14	Moening, Bud
77-0089	LITTLE BIRCH	202	11	9.6	7	12	Moening, Bud
77-0089	LITTLE BIRCH	203	11	10.0	6.6	13	Moening, Bud
77-0089	LITTLE BIRCH	204	11	9.9	6	15	Moening, Bud
77-0164	LITTLE SAUK	201	9	3.7	2	7.5	Eidem, Richard
77-0027	LONG	201	10	11.5	7.5	18	Scatterella, Troy L.
77-0149-01	LONG (MAIN BASIN)	201	14	15.2	9.5	22	Ploof, Jim & Carolyn
77-0149-02	LONG (SOUTH BAY)	201	6	12.7	9	19	Ploof, Jim & Carolyn
77-0007	MOUND	201	12	18.8	12	25	Peterson, David
77-0007	MOUND	202	12	18.1	11	25	Peterson, David
77-0007	MOUND	202	9	20.7	10	30	Zeis, Robert
77-0215	OSAKIS	204	7	7.7	4.5	13	Meyer, Rhoda
77-0215	OSAKIS	208	10	7.3	3.5	12	Koich, Stan M.
77-0067	PINE ISLAND	201	3	9.2	8	10	Beaudry, Paul
77-0150-02	SAUK (NORTH BAY)	205	14	5.7	2.5	15	Weir, Tim & Dave
77-0150-01	SAUK (SW BAY)	201	17	3.6	2	10	Beckerman, Vern

### Wadena County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
80-0030	LOWER TWIN	201	4	5.5	4	6.5	Broughton, Don
80-0038	MORGAN	201	1	17.5	17.5	17.5	Lindblom, Leofwin
80-0039	SPIRIT	203	13	8.8	7	12	Callahan, Mike
80-0037	STOCKING	203	7	6.6	4.5	8.5	Hepokoski, Mark

### Waseca County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
81-0095	ELYSIAN	203	6	1.7	1.5	2	Genz, Carl J.
81-0055	REEDS	201	9	5.1	4	6.5	Kretzschmar, Alan
81-0003	ST. OLAF	201	8	3.6	3	4.5	Spencer, Todd

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## Washington County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
82-0049	BIG CARNELIAN	202	7	14.0	12	17	Gavelak, Ron
82-0049	BIG CARNELIAN	203	10	12.5	9	17.5	Bower, John
82-0049	BIG CARNELIAN	204	6	13.1	9.5	16	McKay, Maurice
82-0052	BIG MARINE	203	4	10.8	8.5	12.5	Hinze, Charlie
82-0054	BONE	202	4	4.4	3	5.5	Hafner, Jon
82-0163	CLEAR	202	4	3.8	3.5	4.5	Fuerstenberg, Deborah J.
82-0159	FOREST	212	7	5.5	3	7.5	Murphy, John T.
82-0159	FOREST	213	3	7.5	7.5	7.5	Warner, Linda
82-0080	HALFBREED (SYLVAN)	202	5	17.7	16	21	Sparks, Curt
82-0080	HALFBREED (SYLVAN)	203	6	17.6	16	21.5	Huerstel, Peggy & Eugene
82-0104	JANE	201	17	15.6	14	18	Taylor, Charles W.
82-0021	LONG	201	3	3.5	2.5	4.5	Peterson, Leah
82-0130	LONG	201	5	8.1	7	10.5	Francy-Payton, Kathryn A.
82-0010	MCDONALD	202	11	6.1	2	10	Kelsey, Maynard J.
82-0046	SQUARE	205	13	17.5	15	20	McGee, Richard
82-0153	SUNSET	201.1	10	11.4	9.2	15.1	Coderre, Diane
82-0128	UNNAMED	201	1	7.0	7	7	Vanzwol, Charles F.

## Wright County

LAKE ID	LAKE NAME	Site	NS	Mean	Min	Max	Volunteers
86-0284	AUGUSTA	201	7	6.4	3.5	9	Kampa, Mark
86-0234	BASS	203	10	14.0	11	17.5	Ross, Dan
86-0023	BEEBE	204	17	2.4	1.5	4	Pyle, Roger
86-0023	BEEBE	205	17	2.5	1.5	4	Pyle, Roger
86-0023	BEEBE	206	16	2.4	1.5	4	Pyle, Roger
86-0066	BIRCH	202	13	14.3	11	20.5	Holme, Keith
86-0221	CAMP	202	3	3.8	3	5	Young, Eric
86-0227	CEDAR	202	8	8.3	6	11	Johnson, Robert B.
86-0227	CEDAR	203	8	8.6	6	11	Johnson, Robert B.
86-0227	CEDAR	206	9	9.7	4.5	16	Badger, Donald C.
86-0227	CEDAR	207	9	10.6	5.5	17.5	Badger, Donald C.
86-0252	CLEARWATER	210	11	9.2	7.5	13	Roeder, Delores
86-0252	CLEARWATER	211	11	6.0	4.5	8.5	Roeder, Delores
86-0293	COLLINWOOD	201	9	5.1	3	6.5	Gehlen, Richard
86-0148	EAGLE	202	16	5.7	4	8	Johnson, Jim
86-0289	EAST LAKE SYLVIA	201	6	19.5	16	24	Robb, Tim
86-0289	EAST LAKE SYLVIA	202	6	17.8	14	21	Heino, Helen
86-0289	EAST LAKE SYLVIA	205	6	16.6	12.5	19	Beek, E.J.
86-0183	FISH	201	15	4.4	2	7	Durant, Karen
86-0273	FRENCH	202	17	4.3	3.5	6	Wittsak, Herm

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## Wright County Continued

LAKE ID	LAKE NAME	SITE	NS	MEAN	MIN	MAX	Volunteers
86-0217	GRANITE	202	17	3.5	2	8.5	Rau, Ray
86-0217	GRANITE	204	17	3.4	2	7	Rau, Ray
86-0217	GRANITE	205	17	3.3	2	7.5	Rau, Ray
86-0217	GRANITE	206	17	3.3	2	8	Rau, Ray
86-0217	GRANITE	207	17	3.6	2	8.5	Rau, Ray
86-0243	GRASS	201	8	8.0	6	10	Derosier, Jerome
86-0223	INDIAN	201	12	3.3	2	4	Nelson, Alton E.
86-0288	JOHN	201	16	8.8	6.5	11	Fleskes, Robert
86-0106	LITTLE WAVERLY	202	11	3.2	2	6	Habisch, Ken
86-0282	LOUISA (MARIE)	203	7	5.2	3.5	8	Driver, Donn R.
86-0134	MAPLE	201	16	4.3	2.5	10	Ruddle, Bill
86-0134	MAPLE	203	16	9.6	8	12	Ruddle, Bill
86-0134	MAPLE	206	16	9.0	8	11	Ruddle, Bill
86-0009	MARTHA	201	17	6.8	5.5	8.5	Brallier, Susan
86-0156	MARY	201	4	8.3	7.5	10	Wurm, John
86-0193	MARY	201	10	6.8	5.5	9	Wynnemer, Gloria
86-0193	MARY	202	10	8.0	6	10	Ollig, Mike
86-0238	NIXON	202	12	11.3	10.5	13	Lee, William A.
86-0251	PLEASANT	204	7	8.1	6.5	10	Peterson, Jim
86-0182	ROCK	202	18	4.9	2	8.5	Yager, Peter, Mark & Eliz.
86-0233	SUGAR	203	7	9.6	9	10	Kastl, James E.
86-0298	UNION	203	13	4.7	3.5	6	Lysen, Paul
86-0279	WEST LAKE SYLVIA	204	5	16.8	15	18	Waldhauer, John
86-0279	WEST LAKE SYLVIA	211	8	20.3	15.6	24	Dandrea, Jim

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: Long Term Seasonal Statistics for Minnesota Lakes

This appendix is a new addition to the report. It contains information on lakes across the state that have data in STORET (EPA's national water quality database – includes agency, volunteer, and locally collected data submitted to MPCA). The values below are calculated from datasets over the entire period of record. Data used to create this table can be found online at: <http://www.pca.state.mn.us/data/eda/index.cfm>.

This table contains the following information from lakes with data in STORET:

Lake ID: Lake Identification Number

Lake Name: Name of Lake

Secchi (ft): Long Term Average Secchi Depth (ft)

NS: Number of Secchi Readings

TP (ppb): Long Term Average Total Phosphorus Concentration (ppb) NP: Number of Total Phosphorus Samples

Chl-a (ppb): Long Term Average Chlorophyll-a Concentration (ppb) NC: Number of Chlorophyll-a Samples

TSIS: Trophic State Index Value for Secchi

TSIP: Trophic State Index Value for Total Phosphorus

TSIC: Trophic State Index Value for Chlorophyll-a

TSI: Overall Trophic State Index Value

### Aitkin County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- a (ppb)	NC	TSI S	TSI P	TSI C	TSI
01-0157	BIG PINE	12.1	267	14.4	19	3.4	18	41	43	43	42
01-0062	BIG SANDY	4.1	1016	37.4	5	13.6	5	57	56	56	56
01-0188	BLIND	4.0	61	19.0	1	31.4	1	57	47	64	56
01-0209-01	CEDAR (MAIN BASIN)	11.2	530	15.5	11	7.9	10	42	44	51	46
01-0209-02	CEDAR (NE ARM)	10.9	26					43			43
01-0209-03	CEDAR (WEST BAY)	9.5	107	21.0	2	20.3	2	45	48	60	51
01-0093	CLEAR	14.8	140	16.4	9	2.0	9	38	45	37	40
01-0096	DAM	10.5	105	25.0	9	9.8	9	43	51	53	49
01-0071-01	DAVIS	3.1	7	66.3	7	8.9	7	61	65	52	59
01-0123	ELM ISLAND	3.0	208	36.1	7	20.0	9	61	56	60	59
01-0147	ESQUAGAMAH	4.1	206	32.7	9	9.3	9	57	54	52	55
01-0159	FARM ISLAND	11.6	300	18.7	21	4.9	17	42	46	46	45
01-0105	FLEMING	3.7	166	50.2	5	33.5	4	58	61	65	61
01-0061	FLOWAGE	2.8	47					62			62
01-0104	FRENCH	6.6	15	39.0	1	16.7	1	50	57	58	55
01-0099	GUN	6.2	458	35.1	14	11.7	8	51	55	55	54
01-0170	HANGING KETTLE	6.8	192	27.1	8	11.8	8	50	52	55	52
01-0059	HAY	6.6	1	9.0	1	6.2	1	50	36	48	45
01-0142-01	HILL (NORTH BASIN)	11.8	172	39.0	5	20.5	5	42	57	60	53
01-0142-02	HILL (SOUTH BASIN)	12.6	169	26.1	10	18.9	8	41	51	59	50
01-0034	HORSESHOE	3.5	78					59			59
01-0022	ISLAND	7.4	33					48			48
01-0176	LITTLE PINE	16.4	164	19.4	8	2.2	8	37	47	39	41
01-0217	LITTLE TURTLE	10.9	52					43			43
01-0125	LONE	23.2	395	9.5	22	1.6	22	32	37	35	34
01-0089	LONG	11.4	131	33.5	2	5.8	2	42	55	48	48
01-0033	MINNEWAWA	4.6	502	36.9	76	10.0	54	55	56	53	55
01-0212	MOULTON	4.6	1	5.0	1	9.3	1	55	27	52	45
01-0117	NORD	9.8	130	18.6	9	5.8	9	44	46	48	46
01-0001	PINE	6.2	343	31.6	10	17.7	10	51	54	59	55

### Aitkin County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
01-0069	PORTAGE	4.5	66					56			56
01-0091	RABBIT	10.0	277					44			44
01-0077	RAT	5.4	120	23.0	1	13.7	1	53	49	56	53
01-0146	RIPPLE	7.2	9	25.7	9	9.1	9	49	51	52	51
01-0072	ROCK	3.0	1	34.0	1	29.2	1	62	55	64	60
01-0023	ROUND	15.0	225	12.5	12	2.1	12	38	41	38	39
01-0137	ROUND	16.4	123	5.0	1	3.4	1	37	27	43	36
01-0204	ROUND	10.0	285	14.7	7	2.1	8	44	43	38	42
01-0060	SANDY RIVER	2.7	48					63			63
01-0129	SISSABAGAMAH	4.6	1	38.0	1	17.3	1	55	57	59	57
01-0178	SPIRIT	12.8	164	14.5	4	4.8	4	40	43	46	43
01-0071-02	STEAMBOAT	2.9	7	79.0	7	11.7	7	62	67	55	61
01-0087	SUGAR	14.7	202	14.0	10	3.0	10	38	42	42	41
01-0083	TOWNLINE	8.5	4					46			46
01-0447	UNNAMED	5.5	5					53			53
01-0136	WAUKENABO	7.2	104	50.0	1	36.8	1	49	61	66	58
01-0102	WILKINS	14.0	280	20.8	26	4.2	14	39	48	45	44

### Anoka County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
02-0014	AMELIA	4.3	25					56			56
02-0013	BALDWIN	2.2	26	485.1	17	96.0	16	66	93	75	78
02-0090	BUNKER	5.5	16					53			53
02-0006	CENTERVILLE	3.4	106	48.9	73	45.0	24	60	60	68	63
02-0042	COON	5.2	540	43.7	75	16.0	48	53	59	58	57
02-0070	COOPERS	6.0	19					51			51
02-0084	CROOKED	4.3	399	31.2	107	14.4	26	56	54	57	56
02-0019	CROSSWAYS (TAMARAC)	1.1	2	341.8	17	24.8	16	75	88	62	75
02-0075-01	EAST MOORE	4.4	82	80.6	74	22.4	73	56	67	61	61
02-0133	EAST TWIN	11.5	74	21.7	59	4.0	24	42	49	44	45
02-0035	FAWN	12.5	90	22.9	33	6.3	33	41	49	49	46
02-0091	GEORGE	9.7	303	20.6	88	6.0	20	44	48	48	47
02-0005	GEORGE WATCH	1.8	83	256.3	67	88.8	34	69	84	75	76
02-0045	GOLDEN	3.0	197	112.4	131	50.9	31	61	72	69	68
02-0113	GRASS	2.6	12					63			63
02-0053	HAM	7.1	117	27.3	75	13.8	28	49	52	56	52
02-0081	HART	1.6	2	152.5	2	33.5	2	70	77	65	71
02-0016	HOWARD	1.9	21	97.1	22	61.1	21	68	70	71	70
02-0022	ISLAND	5.0	20	29.3	20	9.6	15	54	53	53	53
02-0110	ITASCA	3.2	12	24.3	12	6.4	12	61	50	49	53
02-0072	LADDIE	3.4	108	26.0	68	4.5	32	59	51	45	52
02-0026	LINWOOD	3.3	177	45.1	76	29.3	40	60	59	64	61
02-0007	MARSHAN (FORSHAM)	2.0	58	252.6	45	87.5	15	67	84	74	75
02-0034	MARTIN	2.8	431	90.4	55	50.4	41	62	69	69	67
02-0067	MINARD	3.7	2					58			58

### Anoka County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
02-0097	MUD	2.1	12	49.0	12	16.7	12	66	60	58	62
02-0052	NETTA	7.2	66	25.6	28	6.4	28	49	51	49	49
02-0106	NORRIS	8.4	17					46			46
02-0003	OTTER	7.3	124	31.6	59	7.7	55	48	54	51	51
02-0004	PELTIER	2.9	406	214.2	137	76.9	53	62	82	73	72
02-0130	PICKEREL	3.8	29	28.1	28	12.0	20	58	52	55	55
02-0009	RESHANAU	1.7	71	101.3	28	46.9	22	69	71	68	69
02-0008	RICE	2.9	53	274.3	23	111.2	22	62	85	77	75
02-0104	ROGERS	3.0	30	51.2	19	26.8	20	61	61	63	62
02-0015	RONDEAU	1.4	5	44.1	17	30.1	17	72	59	64	65
02-0089	ROUND	8.5	30	22.5	24	6.8	24	46	49	49	48
02-0102	SANDSHORE	6.6	67					50			50
02-0080	SANDY (SULLIVAN)	2.1	84	107.9	84	72.9	22	66	72	73	70
02-0071	SPRING	7.1	13	28.6	7	2.9	4	49	52	41	47
02-0654	UNNAMED (CENAICO)	8.6	64	15.6	65	2.7	30	46	44	40	43
02-0079	UNNAMED(HIGHLAND)	1.6	38	184.4	38	112.6	29	70	79	77	75
02-0075-02	WEST MOORE	4.0	128	75.9	94	20.5	79	57	67	60	61

### Becker County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
03-0366	ABBEY	4.8	36	57.5	16			55	63		59
03-0660-01	AXBERG (MAIN BASIN)			229.0	4	172.0	4		83	81	82
03-0085	BAD MEDICINE	23.3	772	11.8	41	1.7	30	32	40	36	36
03-0638	BESEAU	3.3	15					60			60
03-0576	BIG CORMORANT	16.0	264	19.8	21	4.7	20	37	47	46	43
03-0304	BIG SUGAR BUSH	17.4	362	13.3	10	3.0	10	36	41	41	40
03-0030	BOOT	16.6	228	13.2	21	2.1	18	37	41	38	39
03-0400	BRANDY	3.6	45	60.8	24			59	63		61
03-0350	BUFFALO	9.7	330	37.7	14	7.5	14	44	56	50	50
03-0286	COTTON	10.5	364	17.0	25	4.1	23	43	45	45	44
03-0363	CURFMAN	11.0	11					43			43
03-0381	DETROIT (MAIN BASIN)	9.0	444	25.9	139	7.9	67	45	51	51	49
03-0381	DETROIT (WEST BASIN)	9.2	192	27.0	96	6.6	43	45	52	49	49
03-0159	ELBOW	11.5	291	20.0	5	3.4	5	42	47	43	44
03-0503	EUNICE	13.3	208	15.8	23	4.0	22	40	44	44	43
03-0269	FIVE	12.7	8					40			40
03-0387	FLOYD (LOWER BASIN)	10.0	705	23.4	118	5.4	74	44	50	47	47
03-0387	FLOYD (UPPER BASIN)	8.4	467	30.9	95	11.5	28	47	54	55	52
03-0358	FOX	8.3	277	19.8	58	6.1	34	47	47	48	47
03-0134	GREEN WATER	15.8	6	20.7	3			37	48		43
03-0195	HEIGHT OF LAND	5.4	199	33.9	25	7.8	24	53	55	51	53
03-0029	HUNGRY MAN LAKES	11.8	9	13.9	10	4.8	9	41	42	46	43
03-0582	IDA	7.0	73	29.0	16	6.0	16	49	53	48	50
03-0153	ISLAND	12.3	259	23.7	15	5.5	15	41	50	47	46
03-0374-01	JOHNSON	8.4	41	29.1	23			46	53		50
03-0136	JUGGLER	19.6	240					34			34

### Becker County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
03-0619	LEE (TALAC)	5.1	235	66.6	17	23.8	14	54	65	62	60
03-0575	LEIF	8.2	39	33.4	8	11.0	8	47	55	54	52
03-0506	LITTLE CORMORANT	6.4	212	42.1	13	8.8	13	50	58	52	53
03-0386	LITTLE FLOYD	8.7	218	23.8	96	7.5	46	46	50	50	49
03-0189	LITTLE TOAD	10.5	573	28.3	35	8.5	35	43	52	52	49
03-0383	LONG	12.3	609	19.5	74	5.9	20	41	47	48	45
03-0500	MAUD	12.5	186	16.9	7	4.3	7	41	45	45	44
03-0371	MEADOW	12.8	71	19.9	36	3.2	6	40	47	42	43
03-0475	MELISSA	8.8	582	31.2	52	4.8	5	46	54	46	48
03-0602	MIDDLE CORMORANT	11.5	636	17.2	27	3.7	26	42	45	44	44
03-0357	MONSON	9.6	87	24.4	42	3.8	4	44	50	44	46
03-0360	MUSKRAT	8.7	52	41.2	26	1.0	1	46	58	31	45
03-0595	NELSON	7.2	203	24.8	13	5.9	13	49	50	48	49
03-0180	NORTH TWIN	8.9	46					46			46
03-0486	PEARL	12.1	98	28.0	32	2.0	2	41	52	37	44
03-0273	PERCH	2.4	59	89.7	3	72.8	3	64	69	73	69
03-0287	PICKERAL	14.4	243	14.7	20	3.0	20	39	43	41	41
03-0374-02	REEVES	10.1	22	33.7	13			44	55		49
03-0291	RICE	8.4	26	31.1	8	4.8	8	46	54	46	49
03-0293	ROCK	6.2	53	26.8	4	8.8	4	51	52	52	51
03-0587	ROSSMAN	4.2	53	48.0	11	14.6	11	56	60	57	58
03-0155	ROUND	12.5	196	18.6	14	3.7	14	41	46	43	44
03-0359	SALLIE	7.3	240	41.9	107	21.0	34	48	58	60	56
03-0659	SAND(STUMP)	9.9	4	76.5	4	20.2	2	44	67	60	57
03-0355	SAUER	9.1	10					45			45
03-0625	SORENSEN	5.0	1	168.3	4	25.7	2	54	78	62	65
03-0382	ST. CLAIR	3.5	98	85.6	45	43.3	4	59	68	68	65
03-0010	STRAIGHT	9.8	150	23.0	28	9.9	28	44	49	53	49
03-0323	STRAWBERRY	15.7	60					37			37
03-0107	TOAD	10.0	458	26.9	27	7.7	23	44	52	51	49
03-0657	TURTLE	20.1	604	20.1	29	2.7	27	34	47	40	41
03-0017	TWO INLETS	8.5	145	25.7	6	4.8	6	46	51	46	48
03-0596	UNNAMED (LARSON)	4.2	49	49.9	8	9.0	8	56	61	52	56
03-0588	UPPER CORMORANT	7.4	160	30.0	1	5.8	1	48	53	48	50
03-0328	WHITE EARTH	12.1	468	22.8	18	3.0	18	41	49	41	44
03-0101	WOLF	5.7	3	16.7	3	5.8	3	52	45	48	48

### Beltrami County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
04-0038	ANDRUSIA	7.4	25	36.1	23	25.6	12	48	56	62	56
04-0135	BELTRAMI	12.8	262					40			40
04-0130	BEMIDJI	9.2	388	64.8	4	27.9	3	45	64	63	58
04-0033	BENJAMIN	8.5	1					46			46
04-0049	BIG	12.0	83					41			41
04-0132	BIG BASS	11.7	52	16.1	8	3.1	8	42	44	42	43
04-0132-02	BIG BASS (EAST)	11.4	8					42			42

### Beltrami County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
04-0069	BLACKDUCK	7.3	450	60.0	20	43.0	14	48	63	67	60
04-0097	BUCK	13.7	12					39			39
04-0001	BURNS	3.0	1					61			61
04-0141	CARR	9.2	9					45			45
04-0030	CASS	12.4	377	20.0	38	19.3	4	41	47	60	49
04-0343	CLEARWATER	10.6	221	22.9	19	3.8	12	43	49	44	45
04-0167	DARK	19.4	31					34			34
04-0230	DEER	11.7	97	20.8	4	5.0	4	42	48	46	45
04-0162	FOX	12.2	46					41			41
04-0024	GILSTAD	5.7	4					52			52
04-0120	GULL	7.8	56					47			47
04-0140	IRVING	4.7	165					55			55
04-0166	JULIA	12.3	9	32.4	5	8.6	5	41	54	52	49
04-0007	KITCHI	13.7	2					39			39
04-0110	LITTLE BASS	16.6	168					37			37
04-0155	LITTLE TURTLE	6.9	115					49			49
04-0076	LONG	16.8	281					36			36
04-0227	LONG	12.2	27					41			41
04-0142	MARQUETTE	8.6	30					46			46
04-0122	MEDICINE	7.7	15					48			48
04-0011	MOOSE	11.0	4	19.0	4	6.8	4	43	47	49	46
04-0342	MOOSE	4.5	30					55			55
04-0152	MOVIL	10.9	66					43			43
04-0063	NORTH TWIN	16.2	72					37			37
04-0032	PIMUSHE	11.4	7					42			42
04-0034	RABIDEAU	10.5	8					43			43
04-0035-01	RED (UPPER RED)	4.8	11					54			54
04-0053	SOUTH TWIN	20.4	37					34			34
04-0130-01	STUMP	9.3	128					45			45
04-0134	THREE ISLAND	10.5	94					43			43
04-0159	TURTLE (BIG TURTLE)	9.8	198					44			44
04-0111	TURTLE RIVER	9.4	343					45			45
04-0137	WHITE FISH	11.5	70					42			42
04-0079	WOLF	8.6	77	41.0	28	37.2	18	46	58	66	57

### Benton County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
05-0013	LITTLE ROCK	1.9	222	141.9	22	91.0	8	68	76	75	73
05-0007	MAYHEW	3.1	23	132.7	9	96.8	8	61	75	75	70
05-0009	PULARSKIS			136.0	1				75		75

### **Big Stone County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
06-0002	ARTICHOKE	4.1	4	426.3	4	28.8	4	57	91	64	71
06-0152	BIG STONE	4.9	703					54			54
06-0138	EAST TOQUA	3.2	20					60			60
06-0029	LONG TOM	4.6	2	505.5	2	36.3	2	55	94	66	72

### **Blue Earth County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
07-0054	BALLANTYNE	3.6	291	58.2	24	32.9	25	59	63	65	62
07-0098	CRYSTAL	1.0	43	2220.3	26	192.2	25	77	115	82	92
07-0053	DUCK	3.2	202	89.1	11	64.9	12	61	69	72	67
07-0060	EAGLE	10.5	1	167.0	1	3.9	1	43	78	44	55
07-0047	GEORGE	2.1	9	133.2	10	137.4	9	66	75	79	73
07-0090	IDA	4.1	15	364.7	3	58.2	3	57	89	70	72
07-0101	LILY	3.3	1	57.0	1	14.2	1	60	62	57	60
07-0096	LOON	0.8	8	145.8	8	110.4	8	81	76	77	78
07-0079	LURA	3.6	70	135.2	36	32.9	36	59	75	65	66
07-0044	MADISON	3.2	85	81.9	41	61.7	36	60	68	71	66
07-0097	MILLS	0.7	7	253.6	8	118.9	8	82	84	77	81

### **Brown County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
08-0011	CLEAR	4.2	5	215.2	5	73.4	5	56	82	73	70
08-0026	HANSKA	3.8	188	107.0	26	19.3	24	58	72	60	63
08-0045	SLEEPY EYE	4.5	199	106.3	21	60.5	21	55	71	71	66
08-0129	WELLNER-HAGMAN RES.	3.4	13	58.3	13	20.4	12	60	63	60	61

### **Carlton County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
09-0034	BEAR	9.0	58	23.8	4	9.2	4	45	50	52	49
09-0032	BIG	9.2	86	32.0	6			45	54		50
09-0008	CHUB	10.1	201	23.0	4	7.4	4	44	49	50	48
09-0068	COLE	7.5	1	48.0	1	7.9	1	48	60	51	53
09-0062	CROSS	3.3	18	33.2	5	6.0	5	60	55	48	54
09-0051	DEAD FISH	1.9	20					68			68
09-0057	EAGLE	8.0	107	32.4	14	15.5	13	47	54	57	53
09-0039	EDDY	6.6	120	22.3	4	4.7	4	50	49	46	48
09-0003	GRAHAM			15.0	1				43		43
09-0038	HANGING HORN	7.3	238	23.9	8	6.0	8	48	50	48	49
09-0018	HIZER			49.0	1				60		60
09-0060-01	ISLAND (NORTH BAY)	6.4	5	29.0	1	12.0	1	50	53	55	53
09-0060-02	ISLAND (SOUTH BAY)	7.9	63	29.4	14	12.4	14	47	53	55	52
09-0035	LITTLE HANGING HORN	10.7	518	17.6	8	4.6	8	43	46	46	45
09-0066	LONG	5.4	3	27.0	5	6.4	5	53	52	49	51
09-0041	MOOSEHEAD	5.2	57	40.9	7	8.8	7	53	58	52	54

**Carlton County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
09-0019	MUNSON			32.0	1				54		54
09-0029	PARK	9.4	237					45			45
09-0036	PERCH	2.4	20					64			64
09-0037	RICE PORTAGE	2.2	20					66			66
09-0016	SAND	8.6	9	46.8	4			46	60		53
09-0067	TAMARACK	5.3	65	27.8	4	7.0	4	53	52	50	52
09-0063	WOODBURY	5.5	18	35.7	3	5.7	3	53	56	48	52

**Carver County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
10-0012	ANN	8.0	19	23.9	19	5.2	6	47	50	47	48
10-0063	ASSUMPTION	1.6	1	280.0	1			70	85		78
10-0044-02	AUBURN (EAST BAY)	4.0	39	76.6	14			57	67		62
10-0044-01	AUBURN (WEST BAY)	6.6	162	32.2	43			50	54		52
10-0028	AUE	1.3	1	90.0	1			73	69		71
10-0109	BARNES	1.0	1	100.0	1			77	71		74
10-0019	BAVARIA	6.9	183	29.2	119	12.3	35	49	53	55	52
10-0069	BENTON	1.1	70	247.1	35	268.2	15	76	84	85	82
10-0103	BERLINER	3.0	1	40.0	1			62	57		59
10-0110	BRAND	2.0	1	180.0	1			67	79		73
10-0107	BRAUNWORTH	2.0	1	130.0	1			67	74		71
10-0225	BRICKYARD	13.3	52	15.9	26	2.6	26	40	44	40	41
10-0084	BURANDT	3.7	37	61.8	28	26.5	16	58	64	63	62
10-0127	CAMPBELL	2.4	29	777.6	16	46.2	5	65	100	68	78
10-0005	COURTHOUSE	10.0	139	16.8	68	4.2	30	44	45	45	44
10-0121	EAGLE	4.1	150	309.0	81	61.7	30	57	87	71	72
10-0226	FIREMAN'S	10.5	70	23.1	35	3.2	30	43	49	42	45
10-0031	GAYSTOCK	1.9	36	385.0	19	160.0	4	68	90	80	79
10-0089	GOOSE	2.0	163	147.8	82	59.4	30	67	76	71	71
10-0218	GRACE	2.7	50	138.3	25	26.4	26	63	75	63	67
10-0014	HAZELTINE	1.1	37	193.7	19	161.3	4	75	80	80	79
10-0088	HYDES	3.8	105	187.0	81	46.4	33	58	80	68	69
10-0217	JONATHAN	1.5	16	179.1	8	36.0	8	71	79	66	72
10-0104	LIPPERT	1.0	1	240.0	1			77	83		80
10-0016	LONG	1.3	19	280.7	15	46.1	8	73	85	68	76
10-0006	LOTUS	3.7	124	53.2	50	33.3	11	58	61	65	62
10-0007	LUCY	4.1	208	56.3	4			57	62		59
10-0058	MARIA	2.1	36	290.0	19	68.3	4	66	86	72	75
10-0054	MARSH	3.0	1	30.0	1			62	53		57
10-0029	MILLER	2.7	114	324.4	58	52.5	32	63	88	69	73
10-0009	MINNEWASHTA	9.8	255	18.0	94	8.8	19	44	46	52	47
10-0070	MUEWISSEN	2.5	3	310.3	3	18.9	2	64	87	59	70
10-0068	MYERS	3.6	1	60.0	1			59	63		61
10-0093	OAK	3.3	117	123.0	34	46.9	27	60	74	68	67
10-0042	PARLEY	3.2	64	114.0	73	95.3	12	60	72	75	69
10-0086	PATTERSON	1.1	2	60.0	2			75	63		69

**Carver County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
10-0053	PIERSONS	7.5	86	28.5	54	13.0	20	48	52	56	52
10-0052	REITZ	4.2	89	95.9	70	49.2	28	56	70	69	65
10-0078	RICE	4.6	1	170.0	1			55	78		67
10-0002	RILEY	5.1	365	41.4	130	45.3	25	54	58	68	60
10-0080	RUTZ	4.1	35	336.7	18	36.5	4	57	88	66	70
10-0018	SCHUTZ	5.1	82	34.5	37	15.3	25	54	55	57	55
10-0011	ST. JOE	7.4	45	22.3	10	5.2	10	48	49	47	48
10-0045	STEIGER	5.3	112	32.4	25			53	54		54
10-0082	SWAN	2.6	1	150.0	1			63	76		70
10-0095	SWEDE	2.3	171	232.8	42	80.8	29	65	83	74	74
10-0010	TAMARACK	6.7	34	38.8	32	17.7	30	50	57	59	55
10-0108	TIGER	2.0	2	120.7	3	42.4	2	67	73	67	69
10-0200-01	UNNAMED (NORTH BAY)	4.5	15					55			55
10-0085	UNNAMED (SCHEUBLE)	1.3	1	180.0	1			73	79		76
10-0015	VIRGINIA	4.3	108	47.5	45	27.5	33	56	60	63	60
10-0059	WACONIA	5.2	623	34.7	171	15.8	39	53	55	58	55
10-0048	WASSERMANN	3.0	73	56.7	96	25.6	16	61	62	62	62
10-0066	WINKLER	1.3	34	649.6	23	102.8	12	74	98	76	82
10-0105	YOUNG AMERICA	3.0	1	80.0	1			62	67		64
10-0041	ZUMBRA-SUNNY	6.8	165	21.4	35	13.0	14	49	48	56	51

**Cass County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
11-0250	ADA	13.7	421	17.3	6	3.4	4	39	45	43	42
11-0216	AGATE	9.8	71					44			44
11-0283	BABY	12.5	148					41			41
11-0281	BARNUM	17.7	68					36			36
11-0069	BASS	15.9	219	25.3	11			37	51		44
11-0308-02	BIG PORTAGE (E BAY/RICE PORTAGE)	8.1	145	18.5	4	5.3	4	47	46	47	47
11-0308-01	BIG PORTAGE (W BAY/BIG PORTAGE)	8.0	134	27.0	5	7.3	5	47	52	50	50
11-0073	BIG RICE	3.9	1	14.0	1	4.8	1	57	42	46	49
11-0077	BIG SAND	11.2	15					42			42
11-0412	BIRCH	12.7	387	19.1	28	4.3	25	40	47	45	44
11-0274	BLACKWATER	12.8	152					40			40
11-0201-01	BROADWATER BAY	12.5	23	15.3	3	3.9	3	41	44	44	43
11-0263	CHILD	12.0	203	17.3	8	7.0	6	41	45	50	45
11-0067	COFFIN	16.2	5					37			37
11-0163	COOPER	11.5	118					42			42
11-0502	CRYSTAL	14.3	313					39			39
11-0237	DEEP PORTAGE	14.9	173	12.8	4	2.6	4	38	41	40	40
11-0351	FIVE POINT	13.0	293	40.0	1	8.0	1	40	57	51	50
11-0101	GEORGE	6.7	8	32.1	12	8.7	11	50	54	52	52
11-0174	GIRL	13.8	172	14.8	10	3.8	10	39	43	44	42
11-0086	GRAVE	18.7	11	13.8	6	1.8	6	35	42	36	38
11-0305	GULL	9.9	778	18.9	66	7.5	55	44	47	50	47

Cass County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
11-0242	HAND	13.9	654					39			39
11-0209	HARDY	11.4	25					42			42
11-0232	HATTIE	9.4	109					45			45
11-0199	HAY	10.7	396					43			43
11-0358	HORSESHOE	17.9	191	22.2	5	3.7	5	36	49	43	43
11-0472	HOWARD	13.3	265					40			40
11-0170	HUNTER	26.6	169					30			30
11-0120-01	INGUADONA (N. BAY)	9.8	250	20.7	7	4.4	7	44	48	45	46
11-0120-02	INGUADONA (S. BAY)	11.7	144	18.0	6	6.5	6	42	46	49	45
11-0102	ISLAND	13.8	37	24.3	14	6.8	14	39	50	49	46
11-0257	ISLAND	21.3	62					33			33
11-0363	JOHNSON	15.2	14					38			38
11-0268	KERR	14.4	92					39			39
11-0262	KID	14.2	14					39			39
11-0009-02	L THUNDER (E BAY)	16.3	7	15.8	8	3.4	8	37	44	42	41
11-0009-01	L THUNDER (W BAY)	16.2	77	10.9	9	2.2	9	37	39	38	38
11-0104	LAURA	4.9	1	39.0	1	4.4	1	54	57	45	52
11-0053	LAWRENCE	9.8	204					44			44
11-0037	LEAVITT	8.6	217					46			46
11-0203-03	LEECH (AH-GWAH-CHING BAY)	10.0	46					44			44
11-0203-02	LEECH (KABEKONA BAY)	10.4	8					43			43
11-0203-01	LEECH (MAIN BASIN)	8.9	240					46			46
11-0203-04	LEECH (SHINGOBEE BAY)	9.4	165	40.4	7			45	57		51
11-0367	LIND	5.9	1	58.0	1	25.9	1	52	63	63	59
11-0167	LITTLE BOY	10.3	239	21.3	7	6.6	7	44	48	49	47
11-0236	LITTLE PORTAGE	15.1	59					38			38
11-0092	LITTLE SAND	6.0	13	40.4	7	23.7	7	51	57	62	57
11-0230	LITTLE SAND	12.6	11					41			41
11-0505	LITTLE WOLF	8.2	85	33.5	6	9.9	6	47	55	53	52
11-0142-02	LONG (MAIN BASIN)	20.3	392	10.4	13	3.9	12	34	38	44	39
11-0142-03	LONG (N OF MAIN)	15.1	57					38			38
11-0142-01	LONG (S OF MAIN)			10.3	3	6.0	3		38	48	43
11-0142-04	LONG (SW BAY)	18.1	119	14.4	8	3.7	8	35	43	43	40
11-0226	LOON	11.9	11					41			41
11-0219	LOST	8.1	60					47			47
11-0269	LOST	13.4	14					40			40
11-0129	LOWER TRELIPE	11.2	6	21.8	6	7.2	6	42	49	50	47
11-0314	LYDICK	14.7	29	30.0	6			38	53		46
11-0121	MABEL	9.2	1	11.0	1	6.6	1	45	39	49	44
11-0282	MANN	12.3	112					41			41
11-0045	MARGARET			31.0	4	7.3	3		54	50	52
11-0222	MARGARET	4.7	501	60.0	12	54.8	12	55	63	70	63
11-0046	MARION			29.3	4	8.4	3		53	51	52
11-0261	MCKEOWN	14.9	134					38			38
11-0200	MULE	15.1	113					38			38
11-0307	NORWAY	7.4	98	58.0	1	9.4	1	48	63	53	55
11-0244	ONE (SAND NO ONE)	16.5	20					37			37

### Cass County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
11-0355	OX YOKE	16.5	77	37.0	1	2.6	1	37	56	40	44
11-0381	PAQUET	4.9	17	50.3	4	20.9	4	54	61	60	58
11-0055	PAVELGRIT			39.5	4	10.0	4		57	53	55
11-0415	PIKE BAY	8.6	12	20.8	12	6.7	12	46	48	49	48
11-0411	PINE MOUNTAIN	8.9	38	23.6	16	4.5	4	46	50	45	47
11-0383	PLEASANT	14.7	428	27.0	20	4.4	8	38	52	45	45
11-0234	PONTO	23.4	35	5.0	1	1.6	1	32	27	35	31
11-0476	PORTAGE	21.8	232					33			33
11-0490	PORTAGE	11.2	116					42			42
11-0220	RAY (BASS)	10.0	172					44			44
11-0162	RICE	6.3	4	34.5	4	5.9	4	51	55	48	51
11-0043	ROOSEVELT	11.1	360	14.8	22	6.2	20	42	43	48	45
11-0361	SANBURN	16.6	156	30.0	1	3.3	1	37	53	42	44
11-0279	SAND	23.5	22					32			32
11-0221	SPIDER	10.3	54					44			44
11-0504	STEAMBOAT	11.2	8					42			42
11-0116	STEVENS	6.5	3	42.3	4	10.9	4	50	58	54	54
11-0371	STONY	21.6	142	8.5	4	2.6	4	33	35	40	36
11-0026	SUGAR	11.6	18	30.3	6	4.6	5	42	53	46	47
11-0246	SYLVAN	11.3	9					42			42
11-0304-02	SYLVAN (NE BAY)	19.8	30	5.0	1	2.4	1	34	27	39	34
11-0304-01	SYLVAN (SW BAY)	15.0	36	14.0	1	4.6	1	38	42	46	42
11-0413	TEN MILE	18.2	725	17.2	39	2.1	13	35	45	38	39
11-0062	THUNDER	15.0	362					38			38
11-0270	TRILLIUM (LIZARD)	8.3	268					47			47
11-0401	TURTLE	11.5	2					42			42
11-0218	UPPER GULL	9.0	276					45			45
11-0105	UPPER TRELIPE	10.6	11	14.0	12	4.3	12	43	42	45	43
11-0029	VERMILLION	7.7	16	29.5	6	10.6	6	48	53	54	51
11-0171-01	WABEDO (NE BAY)	9.3	376	28.7	13	8.7	2	45	53	52	50
11-0171-02	WABEDO (SW BAY)	10.0	285	19.0	2	6.3	2	44	47	49	46
11-0059	WASHBURN	11.9	943	16.0	28	4.5	26	41	44	45	44
11-0311	WEBB	16.4	1	5.0	1	2.3	1	37	27	39	34
11-0273	WIDOW	11.7	4					42			42
11-0093	WILSON	8.0	2					47			47
11-0010	WINDY	8.2	4					47			47
11-0147	WINNIBIGOSHISH	7.5	38	25.3	65	4.5	18	48	51	45	48
11-0201	WOMAN	10.2	604	20.3	16	6.3	14	44	48	49	47
11-0201-02	WOMAN (MAIN LAKE)	12.0	49	14.4	8	2.9	9	41	43	41	42

### Chisago County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
13-0012-01	CHISAGO (NORTH BAY)	6.7	22	50.0	1	53.7	1	50	61	70	60
13-0012-02	CHISAGO (SOUTH BAY)	3.7	37	72.0	1	56.0	1	58	66	70	65
13-0053	COMFORT	5.8	281	38.8	54	19.4	38	52	57	60	56
13-0068	FISH	7.8	35	24.3	18	10.8	18	47	50	54	51
13-0083-01	GOOSE (NORTH BAY)	2.7	139					63			63

### Chisago County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
13-0083-02	GOOSE (SOUTH BAY)	5.1	221	62.4	9	16.6	9	54	64	58	59
13-0041-02	GREEN (MAIN BASIN)	6.1	179	32.0	2	47.0	2	51	54	68	58
13-0041-01	GREEN(LITTLE GREEN)	4.8	154	38.0	1	38.1	1	55	57	66	59
13-0073	HORSESHOE	4.6	17					55			55
13-0013	KROON	4.7	52	40.2	9	32.0	9	55	57	65	59
13-0033	LITTLE	3.5	11					59			59
13-0054	LITTLE COMFORT	5.8	9	50.8	4	32.1	4	52	61	65	59
13-0032	NORTH CENTER	2.5	26	108.0	1	80.6	1	64	72	74	70
13-0032-01	NORTH CENTER LAKE	2.6	42					63			63
13-0032-02	NORTH CENTER POND	3.0	27					61			61
13-0034	PIONEER	1.6	31					70			70
13-0079	RABOUR	5.0	17					54			54
13-0069-01	RUSH (EAST BAY)	3.2	261	87.6	16	54.2	4	60	69	70	66
13-0069-02	RUSH (WEST BAY)	4.6	312	66.0	5	50.0	4	55	65	69	63
13-0027	SOUTH CENTER	4.0	149	113.5	2	91.8	2	57	72	75	68
13-0028	SOUTH LINDSTROM	6.3	64	35.0	1	9.2	1	51	55	52	53
13-0031	SUNRISE	4.9	10	39.8	9	22.0	8	54	57	61	57
13-0029	WALLMARK	2.2	60	504.7	9	99.6	9	66	94	76	78

### Clay County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
14-0030	FIFTEEN	7.6	13					48			48
14-0080	FLORA	7.5	5					48			48

### Clearwater County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
15-0001	BIG LASALLE	13.6	42					39			39
15-0090	DEEP	18.0	16					35			35
15-0010	ELK	14.8	85	31.0	4	4.1	3	38	54	44	45
15-0038	FALK	15.4	5					38			38
15-0016	ITASCA	8.3	329					47			47
15-0086	JOHNSON	7.2	6					49			49
15-0144	LINDBERG	14.3	12					39			39
15-0081	LOMOND	14.9	17					38			38
15-0104	LONE	21.4	18					33			33
15-0057	LONG	18.9	63	10.3	4	1.8	4	35	38	37	36
15-0068	LONG LOST	19.0	483	13.0	12	3.1	10	35	41	42	39
15-0149	PINE	8.2	34					47			47
15-0005	SQUAW	39.9	19	14.0	4	3.5	4	24	42	43	36
15-0060	WALKER BROOK	10.9	192	30.2	6	8.4	6	43	53	51	49

Cook County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
16-0759	ALPINE	14.1	11					39			39
16-0622	ALTON	11.3	3					42			42
16-0182	BALL CLUB	9.6	4	18.0	4	3.8	4	45	46	44	45
16-0752	BAT	16.7	4					37			37
16-0228	BEARSKIN	22.0	462	18.4	18	1.9	8	33	46	37	39
16-0659	BETH	10.3	2					44			44
16-0344	BIGSBY	4.6	9	22.5	4	2.2	4	55	49	38	48
16-0600	BRANDT	14.2	2					39			39
16-0348	BRULE	15.8	3					37			37
16-0477	BURNT	8.0	1					47			47
16-0141	CARIBOU	15.4	4					38			38
16-0240	CARIBOU	7.5	2					48			48
16-0360	CARIBOU	7.1	788	26.3	45	10.4	26	49	51	54	51
16-0524	CHEROKEE	12.8	3					40			40
16-0033	CHESTER	13.1	6	22.6	5			40	49		45
16-0139	CLEARWATER	30.7	436	6.2	5	0.8	6	28	30	29	29
16-0446	CLIFF	9.0	1					45			45
16-0581	CLOVE	13.5	1					40			40
16-0538	COPPER	18.0	1					35			35
16-0625	CRAG	7.0	1					49			49
16-0723	CROOKED	14.2	3					39			39
16-0526	CROSS BAY	13.0	1					40			40
16-0150	DANIELS	20.0	27					34			34
16-0435	DAVIS	9.5	1					45			45
16-0136	DEER	8.8	1					46			46
16-0253	DEER YARD	10.3	182	13.0	4	3.4	4	44	41	43	42
16-0143	DEVIL TRACK	10.2	172					44			44
16-0616	DEVIL'S ELBOW	12.7	4					41			41
16-0232	DUNCAN	20.2	3					34			34
16-0634	DYERS	7.2	3	39.0	2	5.6	4	49	57	47	51
16-0042	EAST PIKE	17.5	4					36			36
16-0604	EDITH	12.0	1					41			41
16-0023	ESTHER			13.0	1				41		41
16-0147	FLOUR	17.7	6	9.0	6	1.9	7	36	36	37	36
16-0602	FLYING	8.0	2					47			47
16-0571	FROST	27.0	1					30			30
16-0811	GABIMICHIGAMI	13.5	2					40			40
16-0603	GAITER	8.5	2					46			46
16-0319	GASKIN	11.4	4					42			42
16-0753	GILLIS	12.0	2					41			41
16-0617	GNEISS	11.0	4					43			43
16-0569	GORDON	26.0	1					30			30
16-0657	GRACE	7.5	1					48			48
16-0580	GRANITE	14.0	2					39			39
16-0628	GREEN	12.7	2					40			40
16-0077	GREENWOOD	21.6	6	13.3	7	1.4	7	33	41	34	36
16-0632-01	GULL (MAIN BASIN)	14.0	84	5.3	3			39	28		34

**Cook County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
16-0356	GUNFLINT	12.6	69	6.0	5	1.3	6	41	30	33	35
16-0608	HAM	18.0	1					35			35
16-0314	HENSON	7.0	2					49			49
16-0406	HOMER	6.5	1					50			50
16-0241	HORSESHOE	7.3	6					48			48
16-0535	HOWL	7.0	1					49			49
16-0537	HUBBUB	6.0	1					51			51
16-0227	HUNGRY JACK	16.7	93	8.0	3	1.7	3	37	34	36	35
16-0222	JACKAL	9.5	1					45			45
16-0768	JASPER	15.3	10					38			38
16-0461	KARL	11.0	1					43			43
16-0476	KELLY	7.5	3					48			48
16-0188	KEMO	15.0	25					38			38
16-0812	KINGFISHER	13.9	7					39			39
16-0168	KROFT	6.7	1					50			50
16-0198	LEO	14.2	30	9.3	7	1.7	7	39	36	36	37
16-0142	LITTLE CARIBOU	10.4	5					43			43
16-0809	LITTLE SAGANAGA	10.0	1					44			44
16-0170	LITTLE TROUT	16.0	1					37			37
16-0199	LIZZ	12.0	1					41			41
16-0460	LONG ISLAND	13.5	4					40			40
16-0393	LOWER CONE	7.0	1					49			49
16-0546	LOWER GEORGE	7.0	1					49			49
16-0223	LUX	7.5	1					48			48
16-0463	MAGNETIC	14.5	1					39			39
16-0610	MARABOEUF	12.8	3					40			40
16-0027	MCFARLAND	17.0	2					36			36
16-0391	MID CONE	8.0	1					47			47
16-0529	MISSING LINK	13.8	2					39			39
16-0117	MOON	10.0	1					44			44
16-0732	MORA	7.0	1					49			49
16-0220	MORGAN	14.5	1					39			39
16-0389	MULLIGAN	8.5	1					46			46
16-0456	NORTH TEMPERANCE	16.0	1					37			37
16-0353	OMEGA	10.3	3					43			43
16-0726	OWL	16.8	3					36			36
16-0133	PEANUT	1.0	1	141.0	1	57.7	1	77	76	70	74
16-0757	PETER	18.0	1					35			35
16-0478	PETERSON	6.0	1					51			51
16-0252	PIKE	18.2	150	9.2	9	1.9	4	35	36	37	36
16-0041	PINE	19.5	2					34			34
16-0239	POPLAR	13.5	92	11.2	5	1.8	6	40	39	36	38
16-0174	RAM	13.7	1					39			39
16-0720	RATTLE	10.5	1					43			43
16-0544	RIB	23.0	1					32			32
16-0200	ROAD	5.9	5					52			52
16-0605	RON (WEST ROUND)	6.0	1					51			51

### Cook County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
16-0230	ROSE	19.9	5					34			34
16-0606	ROUND	17.2	2					36			36
16-0169	RUM	4.0	1					57			57
16-0633	SAGANAGA	10.4	6					43			43
16-0496	SAWBILL	7.9	14					47			47
16-0629	SEA GULL	13.5	20					40			40
16-0495	SMOKE	9.3	3					45			45
16-0527	SNIPE	16.0	1					37			37
16-0244	SOUTH	25.0	1					31			31
16-0457	SOUTH TEMPERANCE	9.0	2					45			45
16-0202	SQUINT			10.0	1				37		37
16-0001	SUPERIOR (BIRCH BAY)	38.4	8					25			25
16-0215	SWAMP	5.0	1					54			54
16-0384	TAIT	7.0	68	15.5	6	4.0	6	49	44	44	46
16-0731	TARRY	15.5	2					38			38
16-0191	THRUSH	21.1	5					33			33
16-0019	TOM	11.0	57					43			43
16-0049	TROUT	25.6	27	7.6	9	1.2	10	30	33	32	32
16-0623	TUSCARORA	19.0	2					35			35
16-0156	TWO ISLAND	8.8	3					46			46
16-0412	UPPER CONE	9.5	1					45			45
16-0224	VISTA	8.0	1					47			47
16-0349	WANIHIGAN	8.5	1					46			46
16-0138	WATAP	21.2	2					33			33
16-0398	WENCH			8.0	4				34		34
16-0086	WEST PIKE	18.5	2					35			35
16-0354	WINCHELL	15.5	5					38			38

### Cottonwood County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
17-0007	BINGHAM	1.9	116	135.9	26	68.9	27	68	75	72	72
17-0022	COTTONWOOD	2.0	9	70.1	8	36.6	8	67	65	66	66
17-0003	MOUNTAIN	3.0	325	186.0	1	14.8	1	61	80	57	66
17-0060	TALCOT	0.8	4	428.3	4	197.1	4	80	92	82	85

### Crow Wing County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
18-0256	BASS	10.2	76					44			44
18-0384	BASS	19.4	76					34			34
18-0402	BASS	10.0	1	40.0	1	0.0	1	44	57	-37	21
18-0034	BAY	12.8	429	323.9	29	3.8	26	40	88	44	57
18-0355	BERTHA	14.1	45					39			39
18-0315	BIG TROUT	15.3	92	11.0	2	2.9	1	38	39	41	39
18-0140	BLACK BEAR	10.2	1	21.0	1	5.7	1	44	48	48	46
18-0117	BLACK HOOF	4.8	8	36.9	12	25.4	11	55	56	62	58

**Crow Wing County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
18-0211	BLUE	24.6	32					31			31
18-0259	BONNIE	14.3	26	80.0	1	8.1	1	39	67	51	52
18-0020	BORDEN	9.1	15	26.8	4	3.5	4	45	52	43	47
18-0231	BUTTERFIELD	9.5	2					45			45
18-0018	CAMP	8.0	6					47			47
18-0356	CLAMSHELL	15.7	33					37			37
18-0374	CLARK	8.9	76	36.0	6	6.3	6	46	56	49	50
18-0364	CLEAR	10.9	71	12.3	12			43	40		42
18-0038	CLEARWATER	12.9	330	21.1	20	4.3	8	40	48	45	44
18-0131	CLINKER	11.0	2					43			43
18-0041-02	CROOKED (MAIN BAY)	14.9	324	18.1	35	2.9	16	38	46	41	42
18-0041-01	CROOKED (SUGAR BAY)	11.5	131	13.7	10	3.4	11	42	42	43	42
18-0312	CROSS LK RESERVOIR	12.9	131	11.5	2			40	39		40
18-0155	CROW WING	6.7	107	44.4	9	26.2	8	50	59	63	57
18-0271	DAGGETT	7.0	149					49			49
18-0099	EAGLE	7.7	22					48			48
18-0296	EAGLE	6.5	1					50			50
18-0298	EAST FOX	18.8	30					35			35
18-0407	EAST TWIN	20.3	4	8.5	4	2.0	4	34	35	37	35
18-0396	EDNA	15.6	52	10.9	9	3.2	9	38	39	42	39
18-0305	EDWARD	12.1	97	29.0	3	4.3	2	41	53	45	46
18-0203	EMILY	8.4	24	23.2	5	3.5	5	47	49	43	46
18-0009	ERSKINE	5.6	1	27.0	1	13.7	1	52	52	56	53
18-0309	FAWN	9.6	8					44			44
18-0397	FAWN	12.8	54	11.2	9	4.3	9	40	39	45	41
18-0320-01	GILBERT (EAST BAY)	17.9	99	17.0	4	3.2	4	36	45	42	41
18-0320-02	GILBERT (WEST BAY)	10.6	23	15.3	4	3.4	4	43	43	42	43
18-0338	GLADSTONE	12.1	202	30.0	1	6.2	1	41	53	49	48
18-0226	GOODRICH	15.0	44					38			38
18-0287	GREER	8.4	4	24.3	4	11.3	4	47	50	54	50
18-0070	HAMLET	17.0	41					36			36
18-0044	HANKS	11.5	128	12.7	9	3.1	10	42	41	42	41
18-0029	HOLT	9.4	37	23.5	4	4.3	4	45	50	45	46
18-0251-01	HORSESHOE (E. BAY)	15.4	278	40.0	1	6.5	1	38	57	49	48
18-0251-02	HORSESHOE (W. BAY)	14.9	337	18.8	5	1.8	5	38	46	36	40
18-0375	HUBERT	13.0	183	18.4	10	2.3	9	40	46	39	42
18-0183	ISLAND	6.3	298					50			50
18-0269	ISLAND	15.0	32					38			38
18-0019	KENNEY	5.6	17					52			52
18-0361	KIMBALL	17.5	21					36			36
18-0340	LITTLE HUBERT	11.4	159	30.0	1	6.2	1	42	53	48	48
18-0351	LITTLE PELICAN	13.7	70					39			39
18-0266	LITTLE PINE	7.1	131					49			49
18-0357	LITTLE ROUND	15.4	24					38			38
18-0360	LITTLE STAR	15.2	104					38			38
18-0416	LIZZIE	4.6	1	32.0	1	13.1	1	55	54	56	55
18-0076	LONG	16.2	61	19.8	8	4.5	8	37	47	45	43

**Crow Wing County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
18-0342	LOUGEE	10.0	64	40.0	1	5.9	1	44	57	48	50
18-0403	LOWER CULLEN	12.4	303	18.5	15	5.6	15	41	46	48	45
18-0378	LOWER HAY	14.7	100	8.0	1	3.2	1	38	34	42	38
18-0243	LOWER MISSION	7.2	170	34.9	9	25.0	9	49	55	62	55
18-0347	LYNCH	4.5	1					55			55
18-0343	MARKEE	12.9	43	60.0	1	2.3	1	40	63	39	47
18-0185	MARY	5.7	216	24.6	7	8.4	7	52	50	52	51
18-0408	MAYO	6.0	211					51			51
18-0377	MIDDLE CULLEN	12.6	245	14.8	16	4.2	16	41	43	45	43
18-0021	MILLER (ALMOND)	13.2	116					40			40
18-0294	MITCHELL	10.3	15	25.0	2	14.8	2	44	51	57	50
18-0335	MOLLIE	5.0	1	40.0	1	8.7	1	54	57	52	54
18-0166	MUD	4.1	42					57			57
18-0411	NELSON	18.7	50					35			35
18-0399	NISSWA	9.5	59					45			45
18-0104	NOKAY	5.6	1	20.0	1	11.9	1	52	47	55	52
18-0372	NORTH LONG	12.5	533	23.2	18	4.1	18	41	49	44	45
18-0227-02	O'BRIEN (NE BAY)	18.1	94					35			35
18-0352	OSSAWINNAMAKEE	15.8	652	11.4	12	3.1	12	37	39	42	39
18-0754	OWL POND	3.5	3					59			59
18-0308	PELICAN	13.5	201	32.5	4	4.9	4	40	54	46	47
18-0304	PERCH	4.0	1	60.0	1	11.5	1	57	63	55	58
18-0371	PERCH	15.3	22	12.8	4	3.6	4	38	41	43	41
18-0354	PIG	14.9	103					38			38
18-0088	PLATTE	5.9	352	34.6	27	9.9	27	52	55	53	53
18-0050	PORTAGE	11.1	189	23.6	13	5.0	1	42	50	46	46
18-0093	RABBIT	11.4	260	20.5	8	6.0	8	42	48	48	46
18-0093-01	RABBIT (EAST)	11.8	74					42			42
18-0093-02	RABBIT (WEST)	13.2	79					40			40
18-0386	RED SAND	10.2	47	25.7	15	4.9	14	44	51	46	47
18-0145	RICE	4.4	31					56			56
18-0405	RICE	4.4	5					56			56
18-0184	ROGER	16.9	78	10.9	8	2.1	8	36	39	38	38
18-0165	ROSS	4.3	163	30.0	4	23.9	4	56	53	62	57
18-0373	ROUND	9.9	618	21.1	10	5.4	10	44	48	47	46
18-0398	ROY	9.3	177	19.3	8	4.9	7	45	47	46	46
18-0311	RUSH	14.8	455	10.8	10	2.2	10	38	38	38	38
18-0212	RUTH	13.7	129	18.9	25	3.0	14	39	47	41	42
18-0033	SCOTT	14.4	4					39			39
18-0090	SERPENT	18.6	79	39.0	5			35	57		46
18-0348	SHAFFER	5.0	1					54			54
18-0404	SIBLEY	5.9	443	30.8	13	17.6	13	52	54	59	55
18-0028	SMITH	10.2	229	18.9	14	6.6	14	44	46	49	46
18-0136	SOUTH LONG	6.7	414	37.2	38	24.7	15	50	56	62	56
18-0207	SQUARE (SQUAW)			30.3	4	17.7	4		53	59	56
18-0359	STAR	16.4	163					37			37
18-0169	STARK	6.8	186	28.0	5	20.2	5	49	52	60	54

### Crow Wing County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
18-0218	TROUT	9.1	10					45			45
18-0148	TWIN	13.6	38					39			39
18-0167-02	TWIN (EAST BASIN)	4.3	1	20.0	1	6.5	1	56	47	49	51
18-0167-01	TWIN (WEST BASIN)	4.8	81	17.8	4	6.8	4	54	46	49	50
18-0385	UNNAMED	9.4	65					45			45
18-0350	UNNAMED (DOUGLAS)	4.5	1					55			55
18-0748	UNNAMED (L.DOUGLAS)	3.5	1					59			59
18-0376	UPPER CULLEN	9.7	172	27.7	20	10.1	14	44	52	53	50
18-0412	UPPER HAY	7.5	209	21.4	9	9.0	9	48	48	52	50
18-0242	UPPER MISSION	9.0	178	28.7	9	10.3	9	46	53	53	50
18-0096	UPPER SOUTH LONG	7.0	470	30.3	38	13.9	23	49	53	56	53
18-0284	VELVET	11.4	232	26.2	5	11.0	6	42	51	54	49
18-0297	WEST FOX	16.4	183					37			37
18-0409	WEST TWIN	19.8	78	13.8	4	2.0	4	34	42	37	38
18-0379	WHITE SAND	10.4	125	21.3	4	4.3	4	43	48	45	46
18-0001	WHITEFISH	12.1	162					41			41
18-0310	WHITEFISH	12.6	503	13.5	15	3.8	11	41	42	44	42
18-0222	WOOD	16.3	2					37			37

### Dakota County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
19-0021	ALIMAGNET	2.6	375	115.0	84	45.2	21	63	73	68	68
19-0081	AUGUSTA	1.4	18					72			72
19-0061	BALD (POND JP-20)	7.0	1					49			49
19-0059	BLACKHAWK	4.7	86					55			55
19-0449	BLUEBILL BAY	1.7	7	171.4	7			69	78		74
19-0259	BUR OAKS POND	6.3	21					51			51
19-0006	BYLLESBY	2.5	268	251.0	116	46.1	80	64	84	68	72
19-0155	CARLSON	2.7	27					63			63
19-0150	CEDAR POND	1.7	107					69			69
19-0020	CHUB	1.5	29	149.6	29	153.4	5	72	76	80	76
19-0027	CRYSTAL	6.1	536	47.4	141	24.4	41	51	60	62	58
19-0046	DICKMAN	2.5	1	119.5	2	72.6	2	64	73	73	70
19-0033	EARLEY	4.3	73	56.7	72	12.6	25	56	62	55	58
19-0161	EAST THOMAS	4.9	49					54			54
19-0023	FARQUAR	2.2	94	152.9	94	197.5	30	66	77	82	75
19-0057	FISH	5.8	255	63.7	135	28.2	92	52	64	63	60
19-0069	GERHARDT	2.4	25					65			65
19-0078	GUN CLUB	2.5	1					64			64
19-0148	HILLTOP PD (MOONEY)	2.7	19					63			63
19-0065	HOLLAND	9.5	116	31.7	56	5.5	4	45	54	47	49
19-0032	HORSESHOE	5.0	16	38.1	16			54	57		55
19-0004	ISABELLE	1.0	30	323.0	10			77	87		82
19-0071	JENSEN	5.2	87					53			53
19-0025	KELLER	3.6	80	86.3	85	25.8	36	59	68	63	63
19-0030	KINGSLEY	8.0	69	18.9	70	2.4	33	47	47	39	44

**Dakota County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
19-0446	LAC LAVON	12.9	73	14.6	47	3.2	20	40	43	42	42
19-0029	LEE	4.2	72	61.5	72	25.9	26	56	64	63	61
19-0055	LEMAY	5.9	80					51			51
19-0082	LEMAY	1.6	18					70			70
19-0022	LONG (MOELLER)	1.2	38	241.9	38	185.7	22	74	83	82	80
19-0041	MARCOTT	8.5	49	20.7	49	2.9	9	46	48	41	45
19-0042	MARCOTT (OHMAN'S)	14.9	34	18.5	2	4.0	2	38	46	44	43
19-0026-01	MARION (EAST BAY)	5.6	132	40.8	81	26.0	34	52	58	63	58
19-0026-02	MARION (MIDDLE BAY)	3.7	3	77.0	3	45.3	3	58	67	68	64
19-0060	MCCARTHY	4.0	3					57			57
19-0076	MCDONOUGH	6.3	13	36.5	13			51	56		53
19-0005-03	MOOERS (L&D 2 POOL)	1.4	4	254.5	11	192.7	11	72	84	82	79
19-0056	O'LEARY	3.5	134					59			59
19-0031	ORCHARD	5.7	143	36.8	78	22.4	22	52	56	61	56
19-0068	PITTS	2.7	12					63			63
19-0066	QUIGLEY	6.2	180					51			51
19-0005-02	RIVER (L&D 2 POOL)	1.3	4	200.8	4	20.4	4	73	81	60	71
19-0052	SCHMITT	0.1	7					119			119
19-0075	SCHULTZ	8.3	150	26.9	19	2.7	2	47	52	40	46
19-0005-01	SPRING (L&D 2 POOL)	1.1	111	267.1	131	28.1	131	76	85	63	75
19-0050	SUNFISH	5.8	43					52			52
19-0067	THOMAS	3.3	156	135.3	7	36.0	8	60	75	66	67
19-0156	UNNAMED	1.4	178					72			72
19-0158	UNNAMED	3.1	13					61			61
19-0162	UNNAMED	5.0	22					54			54
19-0117	UNNAMED (DEGG)	1.6	9	202.2	9	13.6	7	70	81	56	69
19-0140	UNNAMED (FARM POND)	2.3	38					65			65
19-0049	UNNAMED (GOLF CRSE)	1.0	8					77			77
19-0360	UNNAMED (GOOSE)	2.4	18	117.2	18			65	73		69
19-0062	UNNAMED (HAY LAKE)	5.0	43					54			54
19-0153	UNNAMED (HEINE LK)	9.1	107					45			45
19-0290	UNNAMED (JP-23)	3.9	35					58			58
19-0144	UNNAMED (JP-6)	2.3	3					65			65
19-0454	UNNAMED (LP-39)	4.6	10					55			55
19-0263	UNNAMED (MARCOTT)	2.9	10	50.0	10			62	61		61
19-0227	UNNAMED (PAGEL PND)	3.3	20	75.0	10			60	66		63
19-0447	UNNAMED (POND AP-4)	2.8	19					62			62
19-0369	UNNAMED (RAVEN)	4.2	18	56.7	18			56	62		59
19-0063	UNNAMED (SCHWANZ)	5.4	219	54.3	104	34.3	71	53	62	65	60
19-0095	UNNAMED (SEIDL)	4.7	187	58.6	81	20.1	31	55	63	60	59
19-0037	UNNAMED (SIMLEY)	3.9	72	42.1	72	27.5	13	57	58	63	60
19-0002	UNNAMED (SPRG BANK)	0.7	2	27.0	1	6.5	1	82	52	49	61
19-0364	UNNAMED (SUNSET PD)	6.6	83	56.1	83	7.7	29	50	62	51	54
19-0028	UNNAMED (TWIN)	5.5	26	53.2	26	7.8	18	52	61	51	55
19-0348	UNNAMED (VALLEY)	4.7	77	61.0	80	13.5	40	55	63	56	58
19-0024	UNNAMED (WOOD)	4.4	76	42.0	77	20.2	33	56	58	60	58
19-0448	UNNAMED(BIRCH POND)	4.2	2					56			56
19-0064	UNNAMED(HOLZ FARM)	4.5	1					55			55

## Douglas County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
21-0242	AARON	4.3	12					56			56
21-0053	AGNES	5.5	85	461.3	54	48.6	48	52	93	69	71
21-0085	ANDREW	8.9	258	23.0	56	7.9	54	46	49	51	49
21-0102	BROPHY	9.3	113	38.6	35	4.7	34	45	57	46	49
21-0049	BURGEN	12.8	41	23.7	6	5.7	6	40	50	48	46
21-0057	CARLOS	10.2	214	22.1	97	4.2	96	44	49	45	46
21-0145	CHIPPEWA	11.6	260	21.0	47	5.1	41	42	48	47	45
21-0003	CLIFFORD (SWIMS)	2.3	45					65			65
21-0103	COWDRY	11.3	166	58.7	59	4.1	61	42	63	44	50
21-0199-01	CROOKED (NW BAY)	10.3	29					44			44
21-0080	DARLING	9.1	136	24.0	86	5.5	87	45	50	47	48
21-0213	DEVILS	6.8	125	29.2	23	12.0	23	50	53	55	52
21-0162	FREEBORN	6.2	68	33.5	15	13.2	12	51	55	56	54
21-0052	GENEVA	9.8	253	33.1	35	5.3	33	44	55	47	49
21-0189	GILBERT	7.2	16					49			49
21-0051	HENRY	6.0	68	333.2	55	41.0	48	51	88	67	69
21-0123	IDA	13.0	1630	17.0	81	4.1	60	40	45	44	43
21-0076	IRENE	7.1	382	29.1	59	11.9	59	49	53	55	52
21-0323	JENNIE	0.8	4	213.5	4	113.7	4	80	81	77	80
21-0055	JESSIE	6.2	99					51			51
21-0125	KIEHNE (PRIVATE)	7.0	90					49			49
21-0106-01	LATOKA (NORTH BAY)	12.6	484	23.2	62	3.3	62	41	49	42	44
21-0106-02	LATOKA (SOUTH BAY)	12.7	176	26.7	43	2.9	41	40	52	41	44
21-0106	LATOKA (WHOLE LAKE)			15.8	8	3.6	8	44	43		
21-0056	LE HOMME DIEU	9.8	311	23.6	94	6.3	93	44	50	49	48
21-0212	LITTLE CHIPPEWA	7.5	85	106.0	1	42.9	1	48	71	67	62
21-0156-01	LITTLE OSCAR (MAIN)	0.5	4					87			87
21-0144-01	LOBSTER (EAST BAY)	8.6	495	24.0	45	10.8	46	46	50	54	50
21-0144-02	LOBSTER (WEST BAY)	7.8	439	38.7	9	15.6	9	48	57	58	54
21-0105	LOTTIE (TAYLOR)	11.9	104					41			41
21-0094	LOUISE	9.9	5					44			44
21-0079	MAPLE	10.1	248	18.3	61	4.3	51	44	46	45	45
21-0092	MARY	7.0	162	31.4	23	10.0	23	49	54	53	52
21-0180	MILL	6.7	157	60.7	6	34.9	6	50	63	65	59
21-0083	MILTONA	10.8	671	20.5	43	7.2	43	43	48	50	47
21-0245	MOSES	15.3	76					38			38
21-0095	NORTH UNION	10.2	103					44			44
21-0257	OSCAR	5.8	85					52			52
21-0140	POCKET (VAN LOONS)	9.6	23					45			45
21-0160	RACHEL	8.7	25	28.2	26	8.3	23	46	52	51	50
21-0291	RED ROCK	6.2	355	107.4	23	35.9	19	51	72	66	63
21-0016	SMITH	4.7	121	60.1	30	37.1	30	55	63	66	61
21-0101	STONEY	11.8	104					42			42
21-0264	STOWE	4.3	98					56			56
21-0090	TURTLE	3.2	8	39.0	1	34.9	1	60	57	65	61
21-0041	UNION	12.2	22	19.4	16	4.8	16	41	47	46	45
21-0380	UNNAMED (S. POND)	2.3	8	729.0	9	113.0	9	65	99	77	80
21-0073	VERMONT	14.5	69	13.2	5	2.2	5	39	41	38	39

**Douglas County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
21-0054	VICTORIA	8.6	530	29.6	50	7.0	50	46	53	50	50
21-0216	WHISKEY	7.8	66	92.9	28	38.3	23	48	69	66	61
21-0081	WINONA	1.4	287	387.4	90	115.7	89	72	90	77	80

**Faribault County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
22-0074	BASS	3.3	175	72.1	32	58.9	31	60	66	71	65

**Freeborn County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
24-0014	ALBERT LEA	1.1	205	201.7	12	125.2	12	76	81	78	78
24-0028	BEAR	0.8	45	264.0	4	141.7	3	80	85	79	81
24-0018-01	FOUNTAIN (E. BAY)	1.6	74	155.0	4	60.1	4	70	77	71	73
24-0018-02	FOUNTAIN (W. BAY)	1.7	4	150.0	4	77.5	4	69	76	73	73
24-0015	GENEVA	1.0	9					77			77
24-0030	STATE LINE	2.2	14	234.3	4			66	83		74

**Goodhue County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
25-0009	BIRCH	0.9	5	268.6	5	58.1	4	78	85	70	78
25-0019	CLEAR	1.5	7	207.8	5	86.1	4	72	81	74	76
25-0005	GOOSE	1.2	5	293.6	5	89.0	4	74	86	75	78
25-0021	L. RATTLING SPRINGS	0.9	4	198.0	3	60.1	2	79	80	71	77
25-0016	LARSON	1.1	5	260.4	7	46.8	6	76	84	68	76
25-0017-02	NELSON	1.1	2	363.0	6	213.6	5	75	89	83	82
25-0001	PEPIN	2.2	1838	205.1	1648	27.7	1515	66	81	63	70
25-0007	WILDCAT	1.0	5	314.5	6	65.9	5	77	87	72	78

**Grant County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
26-0095	BARRETT	5.6	185	42.8	11	17.7	11	52	58	59	57
26-0185	COTTONWOOD	8.3	26	134.0	4	16.0	4	47	75	58	60
26-0040	ELK	7.7	82	29.0	5	4.1	5	48	53	44	48
26-0282	LIGHTNING	3.2	67	137.8	4	7.8	4	60	75	51	62
26-0076	LITTLE	7.9	1	1340.0	1			47	108		78
26-0046	LOWER ELK	1.6	4					70			70
26-0235	MUSTINKA R. FLOWAGE	2.6	53	296.0	4	9.0	4	63	86	52	67
26-0002	PELICAN	2.3	539	57.0	24	25.0	24	65	62	62	63
26-0097	POMME DE TERRE	3.6	151	39.9	11	6.0	10	59	57	48	55
26-0020	THOMPSON	2.5	7					64			64

## Hennepin County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
27-0153	ARDMORE	1.8	4					68			68
27-0015	BASS	0.5	6	393.8	8			86	90		88
27-0098	BASS	3.9	156	59.8	46	47.0	11	58	63	68	63
27-0038	BROWNIE	5.2	202	52.2	58	16.0	39	53	61	58	57
27-0067	BRYANT	5.4	145	35.0	64	13.5	2	53	55	56	55
27-0047	BUSH	9.7	247	23.6	50	12.2	15	44	50	55	50
27-0031	CALHOUN	9.3	240	33.5	94	8.8	63	45	55	52	51
27-0039	CEDAR	6.7	294	39.5	99	12.3	61	50	57	55	54
27-0119	CEDAR ISLAND	1.7	215	162.2	25	92.0	13	70	78	75	74
27-0061	CHAMPLIN MILL POND	3.9	12					58			58
27-0137	CHRISTMAS	18.7	108	14.7	84	3.0	17	35	43	41	40
27-0120	COOK	8.0	11					47			47
27-0028-01	CORNELIA (NORTH)	2.0	5	282.8	5	149.3	5	67	86	80	77
27-0169	COWLEY	2.4	9	862.2	9			64	102		83
27-0034	CRYSTAL	2.7	54	206.8	48	24.5	4	63	81	62	69
27-0022	DIAMOND	3.0	67	202.8	32	25.7	32	61	81	62	68
27-0125	DIAMOND	1.3	102	175.2	23	91.2	13	73	79	75	76
27-0129	DUBAY	5.2	3					53			53
27-0181	DUTCH	2.8	4	70.0	4			62	65		64
27-0111-01	EAGLE/PIKE (EAGLE BAY)	5.0	318	34.5	71	15.5	4	54	55	57	56
27-0111-02	EAGLE/PIKE (PIKE BAY)	3.7	75	67.4	38			58	65		62
27-0191-02	EAST SARAH	2.9	52					62			62
27-0029	EDINA	1.3	8	113.3	8	33.0	8	74	72	65	70
27-0118	FISH	5.5	368	34.8	58	28.9	1	53	55	64	57
27-0139	FOREST	3.4	47	70.7	6	38.8	6	60	66	66	64
27-0127	FRENCH	1.4	29	309.6	25	106.3	24	73	87	76	79
27-0144	GALPIN	1.7	16					69			69
27-0681	GRASS	1.0	6	181.7	6			77	79		78
27-0199	HAFFTEN	3.5	28	51.4	26	39.8	13	59	61	67	62
27-0152	HALF MOON	7.8	30					48			48
27-0052	HANNAN	1.6	2	285.0	2	41.5	2	70	86	67	74
27-0016	HARRIET	9.7	160	28.1	95	6.2	64	44	52	48	48
27-0670	HARVEY	0.8	8	148.3	8	82.0	8	80	76	74	77
27-0187	HAUGHEY	1.5	5	123.5	2	27.5	2	71	74	63	69
27-0175	HENRY	3.0	7	84.3	7			62	68		65
27-0018	HIAWATHA	5.2	55	64.7	53	16.8	53	53	64	58	59
27-0048	HYLAND	3.9	91					58			58
27-0176	INDEPENDENCE	4.2	341	46.4	40	47.0	1	56	59	68	61
27-0165	JUBERT	1.8	21	68.8	8			69	65		67
27-0040	LAKE OF THE ISLES	3.6	146	76.2	85	25.6	60	59	67	62	63
27-0182	LANGDON	1.1	4	638.8	4			76	97		87
27-0085	LIBBS	5.6	7	18.7	6	1.6	6	52	46	35	45
27-0160	LONG	3.5	21	70.0	4			59	65		62
27-0655-02	LORING (S. BAY)	3.1	40	88.8	39	24.3	39	61	69	62	64
27-0103	LOST	1.6	39	235.6	8			70	83		77
27-0042-03	LOWER TWIN	1.7	96	119.4	48	21.7	7	70	73	61	68
27-0065	MAGDA	1.9	24	129.2	23	80.1	8	68	74	74	72
27-0057	MEADOW	1.0	37	232.4	22	183.8	5	77	83	82	81

**Hennepin County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
27-0104	MEDICINE	4.3	203	54.9	35	66.5	8	56	62	72	63
27-0042-02	MIDDLE TWIN	4.4	57	52.1	58	27.8	9	56	61	63	60
27-0088	MINNETOGA	7.0	2					49			49
27-0133-06	MINNETONKA (BLACK LAKE)	6.6	47					50			50
27-0133-03	MINNETONKA (CARSONS BAY)	9.0	78					45			45
27-0133-10	MINNETONKA (CRYSTAL BAY)	5.8	78	49.1	17	24.7	16	52	60	62	58
27-0133-01	MINNETONKA (GRAYS BAY)	8.4	26	100.0	1			46	71		58
27-0133-09	MINNETONKA (HALSTEDS BAY)	3.1	276	137.7	13	89.8	12	61	75	75	70
27-0133-15	MINNETONKA (JENNINGS BAY)	2.7	174	195.1	50	76.5	50	63	80	73	72
27-0133-02	MINNETONKA (LOWER LAKE)	9.4	607	41.6	45	12.7	35	45	58	56	53
27-0133-11	MINNETONKA (MAXWELL BAY)	5.2	86	42.1	7	28.0	6	53	58	63	58
27-0133-13	MINNETONKA (N. ARM)	4.3	12	44.0	12	23.6	11	56	59	62	59
27-0133-12	MINNETONKA (STUBBS BAY)	2.9	89	44.0	6	38.2	6	62	59	66	62
27-0133-14	MINNETONKA (W. ARM)	2.5	133	128.4	45	69.2	44	64	74	72	70
27-0133-04	MINNETONKA(ST.ALBAN S BAY)	10.4	40					43			43
27-0133-05	MINNETONKA(UPPER LAKE)	7.6	875	41.0	42	20.0	34	48	58	60	55
27-0070	MITCHELL	3.1	45	94.1	44	65.4	17	61	70	72	67
27-0134	MOONEY	1.7	9	91.1	9			69	69		69
27-0019	NOKOMIS	4.3	94	64.1	57	27.3	52	56	64	63	61
27-0062-01	NORTH ANDERSON	2.2	2					65			65
27-0179-01	NORTH LITTLE LONG	16.5	8	10.0	8	2.4	4	37	37	39	38
27-0627	NORTHWOOD	3.6	40	162.1	41	17.8	30	59	78	59	65
27-0675	PAMELA POND	4.1	8	77.5	8	12.1	8	57	67	55	60
27-0107	PARKERS	7.7	299	25.9	71	8.4	26	48	51	52	50
27-0138	PEAVEY	6.7	67					50			50
27-0004	PENN	0.9	11	275.0	1			78	85		82
27-0147-02	PETER (NORTH BAY)	7.2	28					49			49
27-0100	POMERLEAU	4.8	22	74.0	22	43.9	6	54	66	68	63
27-0014	POWDERHORN	2.8	73	138.1	46	54.8	47	62	75	70	69
27-0177	PRAIRIE	2.3	1	25.4	5	7.6	5	65	51	51	55
27-0200	RATTAIL	6.9	62					49			49
27-0192	REBECCA	5.4	207	78.5	24			53	67		60
27-0076	RED ROCK	3.3	33	87.6	35	70.5	17	60	69	72	67
27-0116	RICE	3.3	52					60			60
27-0188	ROBINA	0.6	4					84			84
27-0071	ROUND	8.3	3					47			47
27-0058	RYAN	3.8	59	60.1	34	6.6	5	58	63	49	57
27-0191	SARAH	3.9	296	106.5	20	22.9	16	58	71	61	63
27-0102	SCHMIDT (SMITH)	4.6	160	53.3	44	18.7	18	55	61	59	59

### Hennepin County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
27-0089-02	SHADY OAK (MIDDLE BAY)	12.1	17	23.0	1	9.0	1	41	49	52	48
27-0089-01	SHADY OAK (N. BAY)	10.9	17	30.0	1	3.0	1	43	53	41	46
27-0179-02	SOUTH LITTLE LONG	16.7	66	12.3	32	3.6	10	37	40	43	40
27-0062-02	SOUTHEAST ANDERSON	3.7	2					58			58
27-0062-03	SOUTHWEST ANDERSON	4.9	1					54			54
27-0654	SPRING	3.8	15	217.3	15	38.9	15	58	82	67	69
27-0149	SPURZEM	4.9	106	95.0	3	48.7	3	54	70	69	64
27-0078	STARING	2.0	35	106.8	39	107.6	13	67	72	76	72
27-0035-01	SWEENEY-TWIN (SWEENEY BAY)	4.4	58	45.5	55	20.6	39	56	59	60	58
27-0035-02	SWEENEY-TWIN (TWIN BAY)	12.9	4	22.3	3	2.1	3	40	49	38	42
27-0171	SYLVAN	1.3	8					74			74
27-0141	TANGER	2.7	150	145.4	11	103.7	11	63	76	76	72
27-0656	TWIN	3.5	21	193.2	25	42.9	17	59	80	67	69
27-0661	UNNAMED	2.1	11	117.9	16	47.6	8	66	73	69	69
27-0734	UNNAMED (CRANE)	4.5	6	28.3	6			55	52		54
27-0874	UNNAMED (PONDIDY)	2.4	38					65			65
27-0645	UNNAMED (S.RICE)	1.9	42	373.1	42	24.7	32	68	90	62	73
27-0634	UNNAMED (SUCCESS)	5.0	26	33.2	26	14.0	9	54	55	57	55
27-0053	UNNAMED(COBBLECREST)	3.4	22	116.8	8	71.5	8	59	73	72	68
27-0042-01	UPPER TWIN	2.3	54	114.4	54	144.1	18	65	72	79	72
27-0117	WEAVER	6.4	90	33.9	22			50	55		53
27-1118	WEBBER POND	4.3	20	53.9	33	7.1	33	56	62	50	56
27-0711	WESTWOOD	4.3	51	31.3	49	12.1	27	56	54	55	55
27-0184-01	WHALETAIL (N. BAY)	1.7	51	74.0	9	44.3	9	70	66	68	68
27-0184-02	WHALETAIL (S. BAY)	2.8	45	43.1	30	44.5	13	62	58	68	63
27-0082	WINDSOR	2.5	7	198.7	7	40.9	7	64	80	67	70
27-0037	WIRTH	4.0	66	72.9	54	30.4	53	57	66	64	62
27-0110	WOBEGON	2.2	2					65			65
27-0157	WOLSFELD	2.2	14					66			66
27-0026	WOOD	4.3	94	144.5	11			56	76		66

### Hubbard County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
29-0036-01	11 CROW WING (MAIN)	13.7	3	10.0	3	3.2	3	39	37	42	40
29-0208	BAD AXE	15.6	102	13.0	3	3.3	3	37	41	42	40
29-0292	BEAUTY	23.1	7	13.8	9	2.2	8	32	42	38	37
29-0146	BELLE TAINE	18.6	791	10.8	24	2.5	24	35	38	39	38
29-0048	BENEDICT	12.3	9					41			41
29-0032	BIG BASS	20.6	207					34			34
29-0185	BIG SAND	17.2	768	9.6	24	2.1	24	36	37	38	37
29-0143	BIG STONY	10.7	161	15.6	24	5.1	24	43	44	47	44
29-0184	BLUE	15.5	43	9.1	11	2.1	11	38	36	38	37
29-0162	BOULDER	11.3	50	12.5	4	3.3	4	42	41	42	42

### Hubbard County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
29-0312	CEDAR	10.2	5	15.8	5	5.5	5	44	44	47	45
29-0110	DEAD (EAST DEAD)	21.2	32					33			33
29-0142	DUCK	5.1	39					54			54
29-0256	EAGLE	9.7	207	18.5	24	6.2	24	44	46	49	46
29-0101-01	EAST CROOKED	22.2	52	8.5	8	1.4	8	32	35	34	34
29-0072	EIGHTH CROW WING	7.8	87	37.3	16	14.9	15	48	56	57	54
29-0186	EMMA	11.1	8	17.0	19	2.8	19	42	45	41	43
29-0092	FIFTH CROW WING	9.0	233	31.3	35	9.2	36	45	54	52	51
29-0086	FIRST CROW WING	4.7	174	50.5	20	24.3	20	55	61	62	59
29-0242	FISH HOOK	11.0	614	18.9	20	4.5	20	43	47	45	45
29-0078	FOURTH CROW WING	8.8	33	20.4	12	3.6	12	46	48	43	46
29-0061	GARFIELD	11.3	268					42			42
29-0216	GEORGE	8.0	43					47			47
29-0188	GILMORE	15.9	257	9.6	28	2.9	28	37	37	41	38
29-0071	GRACE	14.6	17					38			38
29-0017	HAM	10.6	31	14.0	4	4.0	3	43	42	44	43
29-0249	HINDS	13.8	86	14.9	22	4.2	20	39	43	45	42
29-0170	IDA	12.5	37					41			41
29-0088	ISLAND	11.9	40	17.3	12	6.6	12	41	45	49	45
29-0075	KABEKONA	11.8	368	11.5	50	2.7	46	42	39	40	40
29-0309	LASALLE	9.6	8	12.7	9	6.6	8	45	41	49	45
29-0313	LITTLE MANTRAP	17.8	248	12.6	8	2.6	8	36	41	40	39
29-0150	LITTLE SAND	19.7	425	13.2	40	1.8	41	34	41	36	37
29-0161	LONG	11.2	498	12.2	51	3.8	50	42	40	44	42
29-0020	LOON	6.7	12					50			50
29-0248	LORD	10.7	122					43			43
29-0180	LOWER BOTTLE	16.8	304	10.5	27	2.5	27	36	38	40	38
29-0151-01	MANTRAP (EAST BASIN)	13.6	425	15.2	28	5.8	28	40	43	48	44
29-0151-05	MANTRAP (HOME BAY)	15.6	222					38			38
29-0151-02	MANTRAP (MIDDLE BASIN)	10.8	622					43			43
29-0151-04	MANTRAP (WEST ARM)	14.2	383					39			39
29-0289	MARY	50.2	16					21			21
29-0101-02	MIDDLE CROOKED	11.7	24	10.9	8	2.0	8	42	39	37	39
29-0066	MIDGE	7.2	299	46.6	12			49	60		54
29-0247	MORAN	11.4	57					42			42
29-0025	NINTH CROW WING	12.8	54					40			40
29-0149	OJIBWAY(WEST DEAD)	17.8	36	14.8	4	1.3	4	36	43	33	37
29-0087	PALMER	12.6	238	11.9	24	3.3	24	41	40	42	41
29-0147	PETIT	20.8	31					33			33
29-0169-01	PEYSENSKE(MAIN BAY)	10.3	24	13.8	12	2.6	12	44	42	40	42
29-0156	PLANTAGENET	8.9	75					46			46
29-0250	PORTAGE	4.0	470	50.0	40	21.4	40	57	61	61	59
29-0243	POTATO	10.3	1014	13.3	24	5.3	24	43	41	47	44
29-0085	SECOND CROW WING	6.2	23	20.4	12	12.2	12	51	48	55	51
29-0091	SEVENTH CROW WING	6.8	77	26.5	8	15.3	8	49	51	57	53
29-0093	SIXTH CROW WING	9.1	170	21.5	35	8.3	36	45	48	51	48
29-0239	SPEARHEAD	13.5	206	13.3	4			40	41		40

### Hubbard County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
29-0117-02	SPIDER (EAST BAY)	16.8	249	25.1	14	1.6	6	36	51	35	41
29-0117-01	SPIDER (NE/SW BAY)	18.7	59	8.5	30	2.6	30	35	35	40	37
29-0172	STOCKING	8.4	200	29.9	24	10.6	24	47	53	54	51
29-0077	THIRD CROW WING	5.2	419	34.2	34	20.9	34	53	55	60	56
29-0148	UPPER BOTTLE	15.3	522	13.6	20	3.7	20	38	42	43	41
29-0157	UPPER TWIN	6.7	71	41.1	36	7.2	32	50	58	50	52
29-0101-03	WEST CROOKED	18.5	59	9.5	6	1.5	6	35	37	34	35

### Isanti County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
30-0107-01	BLUE (NORTH BAY)	4.3	162	42.2	9	21.8	9	56	58	61	58
30-0107-02	BLUE (SOUTH BAY)	4.4	36	48.8	12	27.7	12	56	60	63	60
30-0036	ELMS	2.5	24					64			64
30-0043	FANNIE	3.5	12	53.0	8	36.6	8	59	61	66	62
30-0035	FLORENCE (PAUL'S)	2.8	6	42.3	3	15.1	3	62	58	57	59
30-0080	FRANCIS	1.2	107	355.2	20	284.1	12	74	89	86	83
30-0100	GERMAN	1.9	7					68			68
30-0136	GREEN	5.1	207	42.8	20	24.0	21	54	58	62	58
30-0044	LITTLE STANCHFIELD	1.1	8	154.0	8	131.1	8	76	77	78	77
30-0072	LONG	2.1	35	129.2	6	84.1	6	67	74	74	72
30-0096	LORY	2.6	1	74.0	1	66.0	1	63	66	72	67
30-0022	SKOGMAN	4.8	118	45.9	16	32.2	17	54	59	65	59
30-0138	SOUTH STANCHFIELD	1.3	1	164.0	1	91.0	1	73	78	75	75
30-0135	SPECTACLE	10.9	86	31.8	8	4.5	8	43	54	45	47
30-0009	TYPO	0.8	135	243.5	42	139.5	42	80	83	79	81

### Itasca County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0642	ADELE	12.0	1					41			41
31-0874	ALICE	10.3	2					44			44
31-0597	AMEN	16.1	76					37			37
31-0827	AMES	8.0	1					47			47
31-0865	AMIK	6.0	1					51			51
31-0305	ANN	7.3	42					48			48
31-0349	ANTLER	15.2	45					38			38
31-0690	ASPEN	8.3	9					47			47
31-0639	BALLOON	7.5	1					48			48
31-0259	BALSAM	10.6	85	15.3	12	3.0	11	43	43	41	43
31-0640	BARNEY	8.5	1					46			46
31-0115	BASS	6.4	7					50			50
31-0295	BASS	2.0	1					67			67
31-0309	BASS	4.0	1					57			57
31-0316	BASS	18.5	1	15.6	5	4.1	4	35	44	44	41
31-0511	BASS	12.0	1					41			41
31-0576	BASS	12.6	368	21.6	23	5.5	23	41	48	47	45
31-0833	BASS	11.0	1					43			43

**Itasca County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0197	BATTLE	10.1	25	15.3	4	2.6	4	44	43	40	42
31-0157	BEAR	3.5	2	23.0	1	10.1	1	59	49	53	54
31-0058	BEATRICE	12.5	197	23.0	9	3.8	7	41	49	44	45
31-0028	BEAUTY	7.2	2	39.0	1	8.8	1	49	57	52	53
31-0436	BEAVER	7.5	1					48			48
31-0638	BEAVER	17.0	1	5.0	1			36	27		32
31-0830	BEAVER	16.0	1					37			37
31-0726	BELLO	10.7	64					43			43
31-0017	BENGAL	11.0	32					43			43
31-0862	BIAUSUAH	4.0	1					57			57
31-0812	BIG CLUB (BALL CLUB)	11.7	18	25.1	13	3.2	13	42	51	42	45
31-0656	BIG DICK	10.8	80					43			43
31-0671	BIG ISLAND	14.2	155	22.3	16	4.5	16	39	49	45	44
31-0670	BIG OLE	17.5	19					36			36
31-0834	BIRD'S EYE	13.7	5	13.6	5	3.9	2	39	42	44	42
31-0416	BLACK ISLAND			16.0	1			44			44
31-0210	BLACKBERRY	5.2	12					53			53
31-0533	BLANDIN	6.6	2	38.5	2	3.9	2	50	57	44	50
31-0418	BLIND	13.5	1					40			40
31-0285	BLIND PETE	8.0	1					47			47
31-0684	BLUEROCK	7.5	1					48			48
31-0395	BLUEWATER	18.1	342	9.9	12	1.4	12	35	37	34	35
31-0780	BOGGY	5.5	1					53			53
31-0052	BOWER	4.0	1					57			57
31-0813	BOWSTRING	7.9	5	28.7	5	14.7	5	47	53	57	52
31-1095	BOWSTRING AIRPORT	8.0	1					47			47
31-0623	BOY	13.1	139	31.0	1			40	54		47
31-0425	BROWN	7.0	1					49			49
31-0069	BUCK	9.5	82	27.8	5	9.0	5	45	52	52	50
31-0654	BURNS	12.5	1					41			41
31-0424	BURNT SHANTY	16.4	85	15.1	14	3.2	14	37	43	42	41
31-0413	BURROWS	12.7	24	27.0	2	11.4	1	41	52	54	49
31-0713	BUSTIC	12.5	1					41			41
31-0530	BUSTIES	6.2	1	36.0	1	10.4	1	51	56	54	53
31-0175	BUTTON BOW (LONG)			24.3	4	5.9	3		50	48	49
31-0544	CAMERON	10.0	1					44			44
31-1325-04	CANISTEO PIT	25.5	6					30			30
31-0620	CARIBOU	30.6	219	14.0	7	1.4	7	28	42	34	35
31-0641	CARPENTER	11.0	1					43			43
31-0829	CEDAR	12.1	14					41			41
31-0712	CEMETARY	3.0	1					61			61
31-0419	CHARLIE	11.5	1					42			42
31-0749	CHASE		50					31			31
31-0214	CLEARWATER (ROUND)	8.6	74	17.0	1	1.6	1	46	45	35	42
31-0540	CLUBHOUSE	14.1	4	16.5	2	1.7	2	39	45	36	40
31-0524-01	COON-SANDWICK (COON LK)	7.2	1	22.0	1	5.0	1	49	49	46	48

**Itasca County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- a (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0524-02	COON-SANDWICK (SANDWICK LK)	7.2	1	22.0	1	3.5	1	49	49	43	47
31-0294	CRESCENT	3.0	1					61			61
31-0193	CROOKED	6.0	161	39.0	2	12.5	2	51	57	55	55
31-0809	CROOKED	9.0	1					45			45
31-0171	CRUM	11.2	7					42			42
31-0857-02	CUT FOOT SIOUX (E. BAY)	8.5	4	25.0	4	4.8	4	46	51	46	48
31-0857-01	CUT FOOT SIOUX (MAIN)	10.4	11	27.2	11	10.6	11	43	52	54	50
31-0429	CUTAWAY	10.8	23					43			43
31-0944	DAMON	4.5	1					55			55
31-0622	DEAD HORSE			30.0	1				53		53
31-0934	DECKER	3.9	2	61.0	4	15.2	3	57	63	57	59
31-0334	DEER	9.5	82	21.2	11	6.4	11	45	48	49	47
31-0719	DEER	15.6	513	6.2	10	1.0	10	38	30	31	33
31-0857-03	DEER	4.0	1					57			57
31-1325-14	DIAMOND PIT	25.8	6					30			30
31-0921	DIXON	5.3	90	40.0	7	12.6	7	53	57	55	55
31-0536	DOAN	18.4	247					35			35
31-0649	DOCK	13.0	1	12.0	1			40	40		40
31-0643	DOCTOR			5.0	1				27		27
31-0482	DOE	3.8	7					58			58
31-0838	DOG FISH	10.0	1					44			44
31-0882	DORA	9.6	67	44.0	1	11.2	1	45	59	54	53
31-0869	DRY CREEK	6.5	1					50			50
31-0314	DUCK	8.0	1					47			47
31-0904	DUNBAR	7.0	1					49			49
31-0221	DUNNING	17.7	140					36			36
31-0454	EAGLE	8.9	93	30.0	1	6.7	1	46	53	49	49
31-0798	EAST	7.0	1					49			49
31-0616	EAST SMITH	13.6	80	15.0	1			40	43		41
31-0694	EDMOND	5.5	1					53			53
31-0774	ELBOW	8.0	1					47			47
31-0783	ELBOW	7.5	1					48			48
31-0512	ERICKSON	9.0	1					45			45
31-0311	ERSKINE	17.5	1					36			36
31-0902	FARLEY	2.5	1					64			64
31-0497	FIFTH CHAIN	12.2	42					41			41
31-0493	FIRST CHAIN	12.5	1					41			41
31-0818	FIRST RIVER	6.0	1					51			51
31-0183	FIVE ISLAND	13.0	16					40			40
31-0663	FOREST	10.3	5					44			44
31-0560	FORSYTHE	6.0	3	24.8	6	13.7	6	51	50	56	53
31-0513	GALE	16.0	1					37			37
31-0494	GEORGE	6.3	1					51			51
31-0727	GRASS	11.0	1					43			43
31-0624	GRAVE	12.4	210	15.7	10	4.8	10	41	44	46	44
31-0863	GREELEY	14.0	1					39			39
31-0569	GUIDE	10.8	7	21.5	6	5.6	6	43	48	47	46

**Itasca County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0492	GUM	14.0	20					39			39
31-0782	GUNDERSON	14.4	65					39			39
31-0452	GUNN	12.7	92					40			40
31-0480	GUNN	10.5	12	54.0	1	3.0	1	43	62	41	49
31-0361	HALE	10.8	163					43			43
31-0373	HALE	16.3	128	29.0	1	3.3	1	37	53	42	44
31-0903	HALE	5.0	1					54			54
31-0020	HART	10.8	38	19.5	2	3.8	2	43	47	44	44
31-0154	HARTLEY	9.7	49	32.0	1	8.0	1	44	54	51	50
31-0771	HATCH	8.5	1					46			46
31-0023	HELEN (TANK)	9.9	6					44			44
31-0550	HENNESSEY	4.5	1					55			55
31-0839	HOLLOWAY (BASS)	17.0	1					36			36
31-0508	HOMESTAD	11.0	1					43			43
31-0047	HORSEHEAD	5.5	1					53			53
31-0696	HORSESHOE	9.3	69					45			45
31-0254	IAASAC	13.1	73	16.0	1			40	44		42
31-1299	IRVIN	5.0	1					54			54
31-0217	ISLAND	6.4	7					50			50
31-0913	ISLAND	7.8	137	42.0	1	4.7	1	48	58	46	50
31-0657-01	JACK THE HORSE (N)	13.7	80					39			39
31-0657-02	JACK THE HORSE (S)	13.8	80					39			39
31-0565	JAY GOULD	11.3	17					42			42
31-0786	JESSIE	8.7	126	38.7	6	8.8	5	46	57	52	52
31-0059	JOHNSON	1.5	1					71			71
31-0586	JOHNSON	15.3	210					38			38
31-0687	JOHNSON	10.4	82					43			43
31-0291	KELLY	5.0	1					54			54
31-0299	KELLY	8.0	1					47			47
31-0842	KILLDEER	7.0	1					49			49
31-0258	KING	6.4	2	39.0	1	28.2	1	50	57	63	57
31-0194	KLINGENDIEL	8.5	1					46			46
31-0645	KREMER	15.6	9	16.0	1			38	44		41
31-0096	LAMMON AID	8.5	63	12.3	3	4.0	3	46	40	44	44
31-0317	LARSON	23.2	3	10.0	1	1.3	1	32	37	33	34
31-0231	LAWRENCE	5.3	105	61.0	1	20.8	1	53	63	60	59
31-0604	LAWRENCE	9.5	1	5.0	1			45	27		36
31-0048	LIBBEY	6.0	1					51			51
31-0468	LINCOLN	12.0	1					41			41
31-0304	LINK (LYNX)	9.5	1					45			45
31-0822	LITTLE BALL CLUB	7.5	1	38.4	4	13.3	3	48	57	56	54
31-0575	LITTLE BASS	15.8	4	11.5	6	2.7	6	37	39	40	39
31-0156	LITTLE BEAR	8.0	1					47			47
31-0599	LITTLE BEAR	9.1	16					45			45
31-0758	LITTLE BOWSTRING	8.2	59					47			47
31-0433	LITTLE BURNT SHANTY	4.5	1					55			55
31-0479	LITTLE CLUBHOUSE	12.0	1					41			41
31-0198	LITTLE COWHORN	2.0	1	58.0	1	36.3	1	67	63	66	65

**Itasca County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0852	LITTLE CUT FOOT SIOUX	4.0	1					57			57
31-0621	LITTLE DEAD HORSE	14.2	62					39			39
31-0784	LITTLE JESSIE	16.9	48					36			36
31-0747	LITTLE LEIGHTON	8.5	1					46			46
31-0613	LITTLE LONG	16.6	59					37			37
31-0148	LITTLE MOOSE	5.0	1					54			54
31-0610	LITTLE MOOSE	9.4	39	31.5	2	15.1	1	45	54	57	52
31-0520	LITTLE NECK	7.5	1					48			48
31-0665	LITTLE NORTH STAR	12.0	16	9.0	1	4.0	1	41	36	44	40
31-0034	LITTLE O'BRIEN	7.0	1					49			49
31-0794	LITTLE PETERSON	5.0	1					54			54
31-0500	LITTLE PORKY	6.5	1					50			50
31-0808	LITTLE ROUND	4.5	1					55			55
31-0093	LITTLE SAND	8.6	59	26.0	1	6.9	1	46	51	50	49
31-0853	LITTLE SAND	9.7	4	17.3	4	4.9	3	44	45	46	45
31-0733	LITTLE SISEEBAKWET	12.6	4	35.0	1	6.0	1	41	55	48	48
31-0679	LITTLE SMITH			18.0	1				46		46
31-0341	LITTLE SPLIT HAND	5.8	25	39.2	12	15.5	9	52	57	57	55
31-0797	LITTLE SPRING	9.3	1					45			45
31-0778	LITTLE TOO MUCH	14.0	1					39			39
31-0394	LITTLE TROUT	19.1	109	9.8	4	2.2	4	35	37	39	37
31-0779	LITTLE TURTLE	5.2	37					53			53
31-0399	LITTLE WABANA	15.8	63	14.7	3	3.8	4	37	43	44	41
31-0740	LITTLE WHITE OAK	7.0	1					49			49
31-0836	LITTLE WHITEFISH	10.3	2					44			44
31-0001	LONG	12.1	2	30.0	2	7.0	2	41	53	50	48
31-0266	LONG	5.9	83					52			52
31-0296	LONG	14.5	1					39			39
31-0556	LONG	3.5	1					59			59
31-0570	LONG	16.9	11	9.5	6	2.0	5	36	37	37	37
31-0605	LONG	8.0	1					47			47
31-0781	LONG	12.5	1					41			41
31-0571	LOON	13.8	130	13.5	6	3.7	6	39	42	43	41
31-0289	LOST	8.0	1					47			47
31-0900	LOST	7.3	1					49			49
31-0432	LOST MOOSE	13.0	1					40			40
31-0238	LOWER LAWRENCE	4.9	7					54			54
31-0893	LOWER PIGEON	2.0	1					67			67
31-0850	LTL WINNIBIGOSHISH	6.0	2	31.9	5	13.0	4	51	54	56	54
31-0603	LUCKY			5.0	1				27		27
31-0705	LUNDEEN	8.5	1					46			46
31-0759	MAKI	14.0	51					39			39
31-0773	MAPLE	10.0	1					44			44
31-0271	MARBLE	5.0	1					54			54
31-0507	MARIE	6.0	1					51			51
31-0937	MARIE	6.0	1					51			51
31-0585	MCAVITY	16.3	35					37			37
31-0078	MCGUIRE	5.7	136					52			52

**Itasca County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0370	MCKINNEY			40.5	1	10.2	1		58	53	55
31-0706	MIKE	5.5	1					53			53
31-0455	MINK	14.0	1					39			39
31-0825	MINNI-CAR-CAR	7.0	1					49			49
31-0927	MINNY	3.0	1					61			61
31-0414	MOON	12.0	1					41			41
31-0535	MOORE	14.0	3					39			39
31-0722	MOOSE	14.8	42	14.2	5	4.8	5	38	42	46	42
31-0898	MOOSE	15.5	18					38			38
31-0861	MOSOMO	8.0	1					47			47
31-0431	MOSS	7.0	1					49			49
31-0206	MUD	5.4	7					53			53
31-0632	MUD	3.5	1					59			59
31-0750	MUD (LILLIAN)	5.0	1					54			54
31-0462	MY	7.5	1					48			48
31-0290	NAPOLEON	13.6	18					39			39
31-0653	NORTH STAR	14.9	79	13.4	25	2.7	19	38	42	40	40
31-0190	NORTH TWIN	11.1	7	27.0	1	8.5	1	42	52	52	49
31-0417	NOSE			30.0	1				53		53
31-0775	NO-TA-SHE-BUN	21.1	26	9.0	1	4.5	1	33	36	45	38
31-0219	O'REILLY	7.2	1	27.0	1	4.7	1	49	52	46	49
31-0303	O'DONNELL	8.5	1					46			46
31-0070	O'LEARY	6.5	1					50			50
31-0875	ONE LOAF	8.5	1					46			46
31-0292	OWEN	11.4	85	15.5	13	2.1	10	42	44	38	41
31-0675	PEAR	5.5	1					53			53
31-0791	PETERSON	9.2	5					45			45
31-0398	PICKERAL	20.0	105					34			34
31-0339	PICKEREL	11.0	27	23.0	5	2.9	5	43	49	41	44
31-0894	PIGEON DAM	5.0	1					54			54
31-0526	PINE	4.5	1					55			55
31-0674	PLUM	4.0	1					57			57
31-0532-01	POKEGAMA (MAIN BAY)	14.8	738					38			38
31-0532-02	POKEGAMA (WENDIGO)	13.9	223					39			39
31-0196	POPLAR	13.0	1					40			40
31-0824	PORTAGE	12.6	6	31.9	4	4.6	4	41	54	45	47
31-0384	PRAIRIE	5.5	159	30.4	19	4.7	17	52	53	46	51
31-0602	PUGHOLE	10.1	18					44			44
31-0923	RABBITS	4.0	1					57			57
31-0284	RADDISON	14.6	27					38			38
31-0664	RANIER	18.4	137					35			35
31-0925	RAVEN	3.0	1					61			61
31-0707	RICE	6.5	1					50			50
31-0717	RICE	15.2	9					38			38
31-1247	ROOSEVELT	6.5	1					50			50
31-0268	ROUND	17.4	19	15.0	2	1.6	2	36	43	35	38
31-0896	ROUND	6.0	47	40.4	5	22.5	4	51	57	61	57
31-0209	ROUND (CLEAR)	9.0	131	41.5	2			45	58		52

**Itasca County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0422	RUBY	24.7	67					31			31
31-0832	RUSH ISLAND	8.5	35					46			46
31-0082	SAND	10.5	11					43			43
31-0438	SAND	17.5	313	17.7	12	3.1	13	36	46	42	41
31-0826	SAND	8.9	210	19.6	14	6.9	12	46	47	49	47
31-0851	SCHOOL HOUSE	5.5	1					53			53
31-0150	SCOOTY	6.8	9					50			50
31-0345	SCRAPPER	9.2	12					45			45
31-1301	SEAMAN	4.0	1					57			57
31-0491	SECOND CHAIN	13.5	1					40			40
31-0060	SECTION ELEVEN	2.0	1					67			67
31-0049	SHAFER	4.0	1					57			57
31-0084	SHALLOW	15.7	178	9.1	4	2.5	3	37	36	39	38
31-0218	SHAMROCK	9.8	1	29.0	1	5.2	1	44	53	47	48
31-0057	SHERRY	3.6	2	45.0	1	13.8	1	58	59	56	58
31-0141	SHOAL	11.9	56	32.0	1	4.2	1	41	54	45	47
31-0534	SHOAL	7.0	4					49			49
31-0554	SISEEBAKWET (SUGAR)	12.9	598	8.2	10	1.6	10	40	34	35	37
31-0939	SKIMERHORN	6.0	1					51			51
31-0650	SMITH	15.0	1					38			38
31-0255	SNAPTAIL	12.0	116	16.5	4	2.2	2	41	45	38	41
31-0434	SNOWSHOE			21.0	1			48			48
31-0795	SOUTH ACKERMAN	10.0	1					44			44
31-0135	SOUTH FORK	8.0	1					47			47
31-0003	SOUTH STURGEON	4.1	192	20.0	1	11.0	1	57	47	54	53
31-0191	SOUTH TWIN	12.3	200					41			41
31-0932	SOUTH UPPER TWIN	11.0	1					43			43
31-0538	SPIDER	9.1	190	16.6	12	5.8	12	45	45	48	46
31-0353	SPLIT HAND	5.2	251	47.5	14	17.3	11	53	60	59	57
31-0065	SPRING	8.0	1					47			47
31-0405	SPRING	13.5	1					40			40
31-0428	SPRING	7.0	1					49			49
31-0789	SPRING	10.0	6					44			44
31-0347	SPRUCE			31.0	1				54		54
31-0877	SQUAW	3.6	2	28.0	1	6.8	1	58	52	49	53
31-0574	STEVENS	3.0	1					61			61
31-0718	STEVENS	3.0	2	41.0	1	2.7	1	61	58	40	53
31-0051	STINGY	4.7	5	32.0	5	17.4	5	55	54	59	56
31-0828	STONE AXE	5.5	1					53			53
31-0124	SUCKER	6.1	29					51			51
31-0926	SUGAR	5.7	2	22.4	5	7.2	4	52	49	50	50
31-0866	SUNKEN	14.5	1					39			39
31-0067-02	SWAN (MAIN BASIN)	12.9	514	21.4	32	9.4	26	40	48	53	47
31-0067-01	SWAN (WEST BAY)	10.4	103	18.4	12	5.0	10	43	46	46	45
31-0188	TANK (LORRAINE)			15.0	1				43		43
31-0158	THISTLEDEW	13.5	1	33.0	1	2.3	1	40	55	39	44
31-0924	TOWER	7.0	1					49			49
31-0127	TRESTLE	11.1	19					42			42

### Itasca County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
31-0803	TRESTLE	8.5	1					46			46
31-0216	TROUT	15.1	752	35.4	101	7.4	89	38	56	50	48
31-0410	TROUT	15.9	307	10.5	11	1.7	11	37	38	36	37
31-0725	TURTLE (BIG TURTLE)	15.4	604	9.1	35	2.2	37	38	36	39	37
31-0821	TUTTLE	4.5	1					55			55
31-0769	TWIN	5.5	1					53			53
31-0026-01	TWIN (EAST BAY)	7.2	1	21.0	1	4.5	1	49	48	45	47
31-0136	UNNAMED	10.0	1					44			44
31-0499	UNNAMED	3.5	1					59			59
31-0666	UNNAMED	12.3	16					41			41
31-0860	UNNAMED	8.0	1					47			47
31-0374	UNNAMED (FOREST)	10.0	10	12.8	1			44	41		42
31-0372	UNNAMED (ICE)	11.6	9	13.9	1	2.0	1	42	42	37	40
31-0329	UNNAMED (L. HORSESHOE)	6.5	1					50			50
31-0338	UNNAMED (LORRAINE)	16.0	1					37			37
31-0652	UNNAMED (N. STAR)	14.6	71					38			38
31-0555	UNNAMED(L.SISSEBAK)	14.6	50	12.7	4	2.1	3	38	41	38	39
31-0908	UPPER PIGEON	3.0	1					61			61
31-0745	VAN PATTER (L. RICE)	9.0	1					45			45
31-0906	VIRGIN	7.0	1					49			49
31-0392	WABANA	15.4	406	11.9	33	3.5	32	38	40	43	40
31-0298	WALTERS	7.4	37					48			48
31-0071	WAMP	4.0	1					57			57
31-0281	WASSON	12.8	35					40			40
31-0772	WEASEL	5.0	1					54			54
31-0776	WHITE OAK	7.5	1					48			48
31-0486	WHITE PORKY	8.5	1					46			46
31-0260	WHITE SWAN	9.3	250					45			45
31-0843	WHITEFISH	5.5	1					53			53
31-0901	WILDERNESS	7.5	1					48			48
31-0320	WILSON	9.0	1					45			45
31-0152	WOLF	3.3	1	52.0	1	9.9	1	60	61	53	58

### Jackson County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
32-0022	CLEAR	2.4	223	99.3	29	46.1	28	64	70	68	68
32-0018	FISH	4.3	72	64.6	36	42.9	33	56	64	67	63
32-0057-02	HERON (DUCK LAKE)	1.3	13					74			74
32-0057-05	HERON (NORTH HERON)	1.2	20	662.8	6	185.6	5	75	98	82	85
32-0057-01	HERON (NORTH MARSH)	1.3	14					74			74
32-0057-07	HERON (SOUTH HERON)	1.0	25	919.4	15	139.5	12	77	103	79	86
32-0024	LITTLE SPIRIT	1.6	1	92.0	1	33.6	1	70	69	65	68
32-0020	LOON	1.4	12	367.7	11	76.8	11	73	89	73	78
32-0069	ROUND	0.7	1	159.0	1	69.0	1	83	77	72	78

### Kanabec County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
33-0040	ANN	2.9	40	77.4	5	43.9	5	62	67	68	65
33-0033	DEVIL'S	5.2	20	40.1	7			53	57		55
33-0001	ELEVEN	3.6	1	38.0	1	32.0	1	59	57	65	60
33-0036	FISH	1.9	110	510.7	11	96.3	10	68	94	75	79
33-0028	KNIFE	2.9	128	144.8	12	71.6	13	62	76	72	70
33-0032	LEWIS	7.8	150	25.6	9	8.1	9	47	51	51	50
33-0009	POMROY	4.4	50	32.0	1	8.5	1	56	54	52	54
33-0015	QUAMBA	2.1	311	105.2	17	52.9	7	67	71	70	69

### Kandiyohi County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
34-0206	ANDREW	8.2	206	31.3	12			47	54		50
34-0086	BIG KANDIYOH	3.7	182	104.6	10	40.6	10	58	71	67	65
34-0062	CALHOUN	4.7	84					55			55
34-0032	CARRIE	3.0	4					61			61
34-0292	CHURCH	1.1	11					75			75
34-0218	CROOK	7.2	14					49			49
34-0158-04	CROW RIVER MILL POND (MID)	7.2	8					49			49
34-0044	DIAMOND	5.5	389	72.7	33	9264.1	24	53	66	120	80
34-0171	EAGLE	7.0	197	48.2	16	21.2	16	49	60	61	57
34-0246	EAST SOLOMON	5.8	4	94.6	5	17.3	5	52	70	59	60
34-0022-02	ELIZABETH (MAIN LAKE)	2.9	4					62			62
34-0217	FLORIDA	10.6	264	29.4	28	8.2	16	43	53	51	49
34-0204	FLORIDA SLOUGH	2.7	3	136.3	3	49.3	3	63	75	69	69
34-0181	FOOT	1.7	8					70			70
34-0224	GAMES	6.9	117	33.5	4	15.0	4	49	55	57	54
34-0142	GEORGE	9.8	459	20.9	28	5.6	20	44	48	47	47
34-0079	GREEN	9.8	924	23.0	80	6.8	55	44	49	49	48
34-0116	HENDERSON	12.4	144	24.5	15	3.3	8	41	50	42	45
34-0066	LONG	11.3	190	17.6	5	5.1	5	42	46	47	45
34-0192	LONG	6.7	288	73.0	30	23.0	24	50	66	61	59
34-0158	MUD (MONOGALIA)	5.2	6					53			53
34-0154	NEST	5.7	89	84.1	23	40.4	16	52	68	67	62
34-0251	NORWAY	3.9	382	48.0	16	23.1	16	58	60	61	60
34-0193	POINT	3.0	1					61			61
34-0172	RINGO	1.5	7	91.7	7	44.5	7	71	69	68	69
34-0169-03	WAGONA(MAIN BASIN)	1.7	20	1185.0	10	209.2	9	70	106	83	86

### Kittson County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
35-0003	BRONSON	3.7	25					58			58

### Koochiching County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
36-0018	BARTLETT	2.5	61	136.5	11	105.8	11	64	75	76	72
36-0011	CLEAR	10.5	1					43			43
36-0009	SERETHA	10.7	1					43			43

### Lac Qui Parle County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
37-0046-02	LAC QUI PARLE (NW BASIN)	1.5	17	274.7	9	126.1	9	72	85	78	78
37-0046-01	LAC QUI PARLE (SE BASIN)	1.7	85	226.2	9	58.6	9	70	82	71	74

### Lake County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
38-0011	AGAMOK	12.0	2					41			41
38-0330	ALICE	9.5	2					45			45
38-0157	ANIT	8.5	1					46			46
38-0195	ANNIE	10.0	6					44			44
38-0691	AUGUST	6.6	1	12.0	1	3.2	1	50	40	42	44
38-0645	BASSWOOD (WHOLE LK)	12.0	1					41			41
38-0409	BEAN	12.1	2	21.5	2	8.1	3	41	48	51	47
38-0405	BEAR	23.8	1	14.0	3	2.2	3	31	42	38	37
38-0390	BONNIE	6.5	1					50			50
38-0750	CHRISTIANSON			84.0	4			68			68
38-0064	COFFEE	3.3	1	9.0	1			60	36		48
38-0256	DIVIDE	12.2	9					41			41
38-0664	DUNNIGAN	9.7	11	15.4	5	6.9	3	44	44	50	46
38-0187	EDDY	19.3	5					34			34
38-0126	ELTON	9.0	2					45			45
38-0498	ENSIGN	8.6	5					46			46
38-0811	FALL	7.4	6	17.0	3	4.2	2	48	45	45	46
38-0779	FARM	7.0	395	20.4	8	4.0	8	49	48	44	47
38-0568	FLAT HORN	5.0	16					54			54
38-0528	FOUR	6.0	2					51			51
38-0813	FOURTOWN	7.2	4					49			49
38-0372	FRASER	15.0	1					38			38
38-0782	GARDEN	5.7	528	15.7	3	4.8	3	52	44	46	47
38-0726	GOOD	10.5	1					43			43
38-0557	GROUSE	5.7	105					52			52
38-0673	HIGHLIFE			27.0	2			52			52
38-0792	HORSE	7.0	1					49			49
38-0484	HUDSON	7.2	2					49			49
38-0397	INSULA	9.2	2					45			45
38-0396	ISABELLA	5.3	1					53			53
38-0641	JASPER	13.7	5					39			39
38-0194-01	JENNY (WEST BAY)	13.7	8					39			39
38-0242	JOHNSON	12.2	106	11.0	1	1.3	1	41	39	33	38

### Lake County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
38-0651	KANE	9.5	7					45			45
38-0070	KAWASACHONG	5.6	1					52			52
38-0080	KAWISHIWI	6.3	5					51			51
38-0226	KEKEKABIC	21.2	4					33			33
38-0188-02	KEKEKABIC POND 2	21.0	1					33			33
38-0108	KIVANIVA	8.7	2					46			46
38-0404	KNIFE	21.3	6					33			33
38-0098	KOMA	6.7	1					50			50
38-0406	LAX	10.4	200					43			43
38-0147	MAKWA	16.2	2					37			37
38-0193	MUELLER	12.8	3					40			40
38-0738	N. BR. KAWISHIWI R.	5.3	5	48.0	5	5.9	5	53	60	48	54
38-0033	NINEMILE	7.2	1	17.3	3	2.3	2	49	45	39	44
38-0232	NIPISIQUIT	13.1	1	12.0	1	1.5	1	40	40	35	38
38-0180	OGISHKEMUNCIE	14.3	16					39			39
38-0640	OJIBWAY	19.0	133					35			35
38-0605	ONE	6.0	1					51			51
38-0151	PAN	10.7	3					43			43
38-0150	PANHANDLE	6.0	1					51			51
38-0104	POLLY	5.7	2					52			52
38-0338	RIVER	10.0	1					44			44
38-0786	SANDPIT			10.0	1				37		37
38-0219	SILVER ISLAND	6.0	1					51			51
38-0191	SKINDANCE	13.0	1					40			40
38-0529	SNOWBANK	16.5	11	10.5	11	2.6	10	37	38	40	38
38-0778	SOUTH FARM	5.3	147					53			53
38-0388	SPOON	12.7	3					41			41
38-0074	SQUARE	5.6	1					52			52
38-0744	STEWART	10.8	416	29.3	12			43	53		48
38-0231	TETAGOUCHE	7.4	1	15.0	1	2.9	1	48	43	41	44
38-0351	THOMAS	14.0	1					39			39
38-0751	THOMAS	4.0	32					57			57
38-0600	THREE	10.0	1					44			44
38-0724	TOFTE	22.1	28					33			33
38-0871	TOWNLINE	6.3	1					51			51
38-0715	TRIANGLE	17.7	69					36			36
38-0608	TWO	7.0	1					49			49
38-0079	WATONWAN			16.0	1	2.2	1		44	39	41
38-0047	WILSON	14.7	5	10.7	7	2.3	6	38	38	39	39
38-0068	WINDY	6.9	1	10.0	1	2.9	1	49	37	41	43
38-0729	WOOD	6.5	1					50			50

### Lake of the Woods County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
39-0002-01	LAKE OF THE WOODS (WHOLE LK)	4.3	16	31.8	12	15.4	11	56	54	57	56
39-0002-02	LAKE OF THE WOODS(4 MI BAY)	3.2	269	28.5	4	5.5	4	60	52	47	53

### Le Sueur County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
40-0079	CLEAR	1.0	1	454.0	1	159.0	1	77	92	80	83
40-0013	DIAMOND	0.7	2	663.5	2			83	98		91
40-0092-01	EAST JEFFERSON	4.5	275	116.8	33	50.9	29	55	73	69	66
40-0124	EMILY	4.1	86	70.3	11	40.1	11	57	65	67	63
40-0051	FISH	12.6	74					41			41
40-0057	FRANCES	6.3	112	33.0	9	15.8	9	51	55	58	54
40-0063	GERMAN	4.6	342	59.6	38	39.3	37	55	63	67	62
40-0032	GORMAN	2.9	12	794.2	5	53.6	5	62	100	70	77
40-0020	GREENLEAF	1.0	3	174.5	2	295.0	1	76	79	86	80
40-0001	HORSESHOE	2.2	4	91.5	4	66.0	4	66	69	72	69
40-0011	MABEL	1.4	23					73			73
40-0092-04	MIDDLE JEFFERSON	2.9	575	107.3	47	40.0	47	62	72	67	67
40-0109	SCOTCH	2.8	33					62			62
40-0119	SCOTCH	1.3	1	200.0	1	72.0	1	73	81	73	75
40-0009	SUNFISH	1.3	1	118.0	1	171.0	1	73	73	81	76
40-0092-03	SWEDE'S BAY	1.5	155	232.5	29	96.2	20	71	83	75	76
40-0031	TETONKA	5.3	297	301.1	28	47.3	19	53	86	68	69
40-0061	TUSTIN	2.2	7	277.9	7	135.1	7	66	85	79	77
40-0002	UPPER SAKATAH	4.2	44	393.0	14	34.3	12	56	90	65	71
40-0033	VOLNEY	6.3	239	105.0	23	56.7	22	51	71	70	64
40-0117	WASHINGTON	3.9	258	92.7	59	57.0	58	58	69	70	66
40-0092-02	WEST JEFFERSON	2.5	248	111.1	20	54.8	20	64	72	70	69

### Lincoln County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
41-0043	BENTON	2.7	156	211.9	25	23.7	21	63	81	62	69
41-0021	DEAD COON	2.6	8	210.8	8	57.7	8	63	81	70	72
41-0108	EAST TWIN	0.8	3	207.3	3	132.7	3	81	81	79	80
41-0110	HENDRICKS	2.5	127	265.0	3	39.1	8	64	85	67	72
41-0089	SHAOKOTAN	4.1	305	203.3	106	81.4	47	57	81	74	70
41-0034	STAY	2.0	7					67			67
41-0035	WEST STAY	1.2	7					74			74
41-0102	WEST TWIN	0.8	3	322.7	3	138.3	3	81	87	79	82

### Lyon County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
42-0014	COTTONWOOD	1.7	44	138.3	4	66.2	4	70	75	72	72
42-0070	EAST TWIN	3.6	3	104.3	3	37.6	3	59	71	66	65
42-0093	GOOSE	2.1	6	145.7	6	36.4	6	67	76	66	69
42-0052	ROCK	2.6	9	165.0	9	37.6	9	64	78	66	69
42-0002	SCHOOL GROVE	1.9	4	110.0	4	49.8	4	68	72	69	70
42-0066	SECTION THIRTY-THREE			74.0	1	29.4	1		66	64	65
42-0074	WEST TWIN	7.0	4	45.8	4	9.3	4	49	59	53	54
42-0047	YANKTON	1.7	54	146.4	11	79.6	10	70	76	74	73

### McLeod County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
43-0115	CEDAR	1.0	1	99.0	1	55.0	1	77	70	70	73
43-0073	HOOK	3.0	162	97.1	7	41.1	7	61	70	67	66
43-0084	MARION	2.7	18	92.6	8	53.3	4	63	69	70	67
43-0085-01	OTTER (MAIN BASIN)	1.0	2	208.0	2	122.5	2	77	81	78	79
43-0034	SILVER	2.4	15					65			65
43-0014	SOUTH	0.6	6	2113.5	6	471.3	6	84	115	91	97
43-0104	STAHL'S	3.5	16	53.7	7	20.8	7	59	62	60	60
43-0012	WINSTED	2.5	60	423.4	5	161.5	5	64	91	80	79

### Mahnomen County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
44-0038	ISLAND	4.6	97	45.0	4	10.2	5	55	59	53	56
44-0169	LITTLE VANOSE	9.5	22					45			45
44-0023	NORTH TWIN	6.6	32					50			50
44-0001	ROY (SIMON)	7.6	108					48			48
44-0045	SNIDER	9.9	87					44			44
44-0014	SOUTH TWIN	7.1	12					49			49
44-0003	TULABY	8.9	65	32.3	20	9.7	20	46	54	53	51

### Martin County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
46-0034	AMBER	4.2	27	108.1	12	75.3	13	56	72	73	67
46-0133	BIG TWIN	2.4	20	168.0	21	82.3	21	65	78	74	72
46-0052	BRIGHT	0.7	1	143.0	1	55.0	1	83	76	70	76
46-0030	BUDD	4.0	155	110.0	15	74.7	17	57	72	73	67
46-0096	CLEAR	1.6	54	76.6	5	35.1	5	70	67	66	67
46-0078	EAGLE	1.6	16					70			70
46-0109	FOX	3.1	414	173.0	8	50.9	5	61	78	69	69
46-0024	GEORGE	2.3	15	185.1	15	97.8	17	65	79	76	73
46-0031	HALL	2.8	15	139.8	12	56.8	14	62	75	70	69
46-0051	OKAMANPEEDAN	0.7	4	163.1	8	93.5	8	83	78	75	79
46-0046	PERCH	1.0	1	135.0	1	45.9	1	77	75	68	73
46-0076	PIERCE	1.5	15					72			72
46-0025	SISSETON	3.0	29	116.0	13	69.7	15	61	73	72	69
46-0020	SOUTH SILVER	3.0	197	79.4	15	55.4	16	61	67	70	66
46-0014-01	WILMERT (MAIN BAY)	1.2	15					74			74

### Meeker County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
47-0023	ARVILLA	1.9	12					68			68
47-0049	BELLE	4.5	129	59.0	1	42.0	1	55	63	67	62
47-0042	BETTY (BETSY)	2.8	73	610.4	11	21.3	3	62	97	61	73
47-0038	BIG SWAN	3.5	147	118.0	1	76.0	1	59	73	73	68
47-0095	CLEAR	1.9	159	179.8	5	83.5	5	68	79	74	74

### Meeker County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
47-0082	DUNNS	2.4	199	122.0	20	59.4	20	64	73	71	69
47-0064	ERIE	5.9	1	28.0	1	12.5	1	52	52	55	53
47-0002	FRANCIS	6.6	277	54.0	1	16.3	1	50	62	58	57
47-0062	GREENLEAF	2.6	1	74.0	1	22.4	1	63	66	61	64
47-0015	JENNIE	5.1	100	82.1	8	38.2	8	54	68	66	63
47-0096	LITTLE MUD	8.0	71	66.7	3	45.0	3	47	65	68	60
47-0026	LONG	6.1	190	41.6	12	31.5	12	51	58	64	58
47-0177	LONG	1.1	119	1325.0	8	109.0	1	75	108	77	87
47-0050	MANUELLA	7.6	146	23.8	5	13.8	5	48	50	56	51
47-0119	MINNIE-BELLE	12.2	486	70.7	45	4.8	27	41	66	46	51
47-0088	RICHARDSON	3.8	206	80.8	19	34.0	19	58	67	65	63
47-0134	RIPLEY	4.6	110	61.6	48	14.2	19	55	64	57	58
47-0102	ROUND	1.6	1	107.0	1	48.1	1	70	72	69	70
47-0060	SIOUX	1.0	1	172.0	1	90.0	1	77	78	75	77
47-0032	SPRING	2.1	357	771.9	25	105.1	25	67	100	76	81
47-0129	STAR	2.5	94					64			64
47-0068	STELLA	6.6	341	21.6	9	9.2	9	50	48	52	50
47-0046	WASHINGTON	3.8	307	44.6	8	23.6	7	58	59	62	59
47-0061	WILLIE	2.6	1	97.0	1	6.3	1	63	70	49	61

### Mille Lacs County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
48-0002	MILLE LACS	9.6	643	28.0	259	4.2	159	45	52	45	47

### Morrison County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
49-0079	ALEXANDER	14.6	200	18.5	11	8.1	11	39	46	51	45
49-0140	CEDAR	10.7	119	28.4	8	4.7	7	43	52	46	47
49-0133	CROOKNECK	8.9	183	30.3	7	7.2	7	46	53	50	50
49-0137	FISH TRAP	9.6	252	32.3	28	5.9	16	44	54	48	49
49-0035	GREEN PRAIRIE FISH	5.6	1	35.0	1	20.7	1	52	55	60	56
49-0015	LONG	8.9	93	13.0	1	6.4	1	46	41	49	45
49-0032	MICHAELS			30.0	1				53		53
49-0005	PEAVY	13.9	10	97.0	1			39	70		55
49-0030	PELKEY			138.0	1				75		75
49-0024	PIERZ	7.1	11	16.0	1	5.6	1	49	44	48	47
49-0081	PINE	17.6	155	13.0	2	3.7	1	36	41	43	40
49-0080	PLACID	6.7	7	49.0	8	6.8	8	50	60	49	53
49-0025	RICE			86.0	1				68		68
49-0019	ROUND	7.8	69	31.8	6			48	54		51
49-0056	ROUND	10.4	89					43			43
49-0127	SHAMINEAU	13.6	116	18.2	11	7.8	11	40	46	51	45
49-0016	SULLIVAN	8.0	332	22.3	13	8.1	12	47	49	51	49
49-0036-01	SYLVAN (MAIN)	8.1	10	38.3	11	6.0	11	47	57	48	51
49-0036-02	SYLVAN (N. BASIN)	9.8	2	21.4	5	4.0	1	44	48	44	46

### Mower County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
50-0002	EAST SIDE	1.8	112					68			68

### Murray County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
51-0040	BLOODY	2.1	227	93.2	6	45.2	6	66	70	68	68
51-0054	CORABELLE			212.0	2	65.9	1		81	72	77
51-0082	CURRENT	1.4	21	143.5	17	61.8	11	72	76	71	73
51-0021	FIRST FULDA	2.1	28	176.8	23	71.0	20	66	79	72	72
51-0024	LIME	0.7	4	239.0	5	259.2	5	83	83	85	84
51-0063	SARAH	1.9	52	124.9	23	59.2	17	68	74	71	71
51-0020	SECOND FULDA	1.3	16	221.0	3	206.0	3	73	82	83	79
51-0046	SHETEK	1.8	415	132.1	30	64.0	18	69	75	71	72
51-0068	SUMMIT	2.3	37					65			65
51-0081	WILSON	1.4	48					72			72

### Nicollet County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
52-0034	SWAN	1.6	2	86.0	2	43.3	2	70	68	68	69
52-0001	UNNAMED (HALLET)	12.1	89	14.8	4	3.7	4	41	43	43	43

### Nobles County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
53-0020	EAST GRAHAM	1.0	5	230.5	13	69.2	13	78	83	72	78
53-0024-03	OCHEMA (EAST BASIN)	0.5	6						87		87
53-0024-01	OCHEMA (WEST BASIN)	0.9	46						79		79
53-0021	WEST GRAHAM	1.6	6	155.4	16	59.2	13	71	77	71	73

### Olmsted County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
55-0006	BAMBER	16.1	35						37		37
55-0001	FLORENCE	1.0	39	270.1	32	4.9	32	77	85	46	69
55-0005	SHADY	1.2	153						74		74
55-0003	SILVER	1.6	86						70		70
55-0004	ZUMBRO	2.9	635	216.8	202	55.4	183	62	82	70	71

### Otter Tail County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
56-0867	ALICE	1.0	70						77		77
56-0241	ANNIE BATTLE	15.7	12	13.7	12	3.6	12	37	42	43	41
56-0570	BASS	9.0	9						45		45
56-0770	BASS	12.1	87	16.3	4	3.8	3	41	44	44	43
56-1149	BERGER	6.9	64						49		49

**Otter Tail County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
56-0386-01	BIG MCDONALD	14.4	35	13.7	20	3.8	20	39	42	44	41
56-0386-03	BIG MCDONALD #2	13.7	209	11.3	11	3.3	11	39	39	42	40
56-0130	BIG PINE	6.1	696	37.5	31	22.3	26	51	56	61	56
56-0240	BLANCHE	11.0	176	17.6	23	6.7	23	43	45	49	46
56-0079	BLOCK	2.2	10					66			66
56-0559	CLEAR	9.0	46					45			45
56-0238	CLITHERALL	13.9	496	14.9	30	4.0	30	39	43	44	42
56-0293	CRANE	9.4	10	20.1	10	5.3	10	45	47	47	46
56-0749	CRYSTAL	7.9	27					47			47
56-0383	DEAD	7.1	606	22.2	43	9.6	41	49	49	53	50
56-0298	DEER	10.9	75	16.2	20	5.6	20	43	44	47	45
56-0245	DEVIL'S	12.1	19					41			41
56-0253	EAGLE	17.6	151	15.2	23	2.4	23	36	43	39	39
56-0138	EAST BATTLE	12.0	408	18.6	62	4.2	62	41	46	45	44
56-0116-02	EAST LEAF	8.9	136	26.6	12	13.1	12	46	51	56	51
56-0523	EAST LOON	11.4	257	15.9	8	3.1	8	42	44	42	43
56-0378-01	EAST LOST (N. BAY)	10.7	128					43			43
56-0378-02	EAST LOST (S. BAY)	7.5	171	14.8	4	6.0	4	48	43	48	46
56-0517	EAST SILENT	18.7	83	18.7	19	5.6	20	35	46	48	43
56-0501	EAST SPIRIT	11.4	8	14.8	8	4.0	8	42	43	44	43
56-0306	ELBOW	16.9	42	12.7	24	3.0	23	36	41	41	40
56-0193	ETHEL	20.1	7					34			34
56-0684	FISH	3.9	7					57			57
56-0768	FISH	11.1	146	12.3	4	4.6	3	42	40	46	43
56-0656	FOSSAN	6.3	22	65.0	1			51	64		57
56-0759	FRANKLIN	8.4	7					47			47
56-0695	HEILBERGER	13.4	39	15.1	25	3.7	24	40	43	43	42
56-0639	INDIAN	6.0	80					51			51
56-0877	JEWETT	10.2	44	21.3	44	4.9	44	44	48	46	46
56-1636	KERBS	18.8	6					35			35
56-0651	LARSON	2.5	84					64			64
56-0532	LEEK (TROWBRIDGE)	12.8	158	17.5	19	4.6	19	40	45	46	44
56-0747-01	LIDA (MAIN BASIN)	10.5	420	19.9	19	6.7	17	43	47	49	47
56-0747-02	LIDA (SOUTH ARM)	9.4	289	30.6	18	14.2	17	45	53	57	52
56-0328	LITTLE MCDONALD	18.9	278	10.2	15	1.5	15	35	38	35	36
56-0761	LITTLE PELICAN	8.0	93	79.5	4	9.2	3	47	67	52	56
56-0142	LITTLE PINE	7.3	392	41.1	12	17.6	12	49	58	59	55
56-0760	LIZZIE	8.9	7	25.0	6	6.3	6	46	51	49	48
56-0388	LONG	9.6	119	23.2	31	6.7	23	45	49	49	48
56-0428	LONG	7.5	2	27.0	2	6.6	2	48	52	49	50
56-0784	LONG	9.8	17	22.4	18	6.1	18	44	49	48	47
56-0476	MAINE (ROUND)			112.0	3				72		72
56-0243	MARION	10.6	488	22.4	26	6.8	26	43	49	49	47
56-0252	MIDDLE	15.6	34					38			38
56-0116-01	MIDDLE LEAF	8.6	99	21.6	12	15.0	12	46	48	57	51
56-0303	MOLLY STARK	13.5	51					40			40
56-0377	NAGEL (S. TURTLE)	15.5	22					38			38
56-0569-01	NORWAY (EAST BAY)	3.5	3	63.7	3	22.6	3	59	64	61	61

### Otter Tail County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
56-0945	ORWELL	2.6	30	154.0	6	7.4	2	63	77	50	63
56-0242	OTTER TAIL	10.5	222	23.2	44	8.3	30	43	49	51	48
56-0335	PAUL	23.1	63					32			32
56-0786	PELICAN	11.5	476	16.6	28	5.7	28	42	45	48	45
56-0475	PICKEREL	13.4	368	12.4	45	3.2	44	40	40	42	41
56-0449	PLEASANT	8.5	1	26.0	1	4.6	1	46	51	46	48
56-0915	PRAIRIE	8.0	2	31.5	2	7.5	2	47	54	50	50
56-0360	ROSE	15.2	21					38			38
56-0297	ROUND	9.0	75	22.0	20	6.4	20	45	49	49	48
56-0141	RUSH	6.8	275	27.1	38	11.1	38	50	52	54	52
56-0358	SCALP (LAKE SEVEN)	18.8	160	24.5	2	1.2	2	35	50	33	39
56-0302-01	SILVER (1ST SILVER)	9.6	242	25.2	31	7.6	30	44	51	51	49
56-0369	SIX	16.7	315	12.1	12	2.2	12	37	40	39	38
56-0309	SLAUGHTERHOUSE SLU	2.0	1	1620.0	1			67	111		89
56-0437	STALKER	9.6	42	22.7	20	7.4	20	45	49	50	48
56-0385	STAR	12.7	269	16.9	21	5.1	21	41	45	47	44
56-0191-02	STUART (LITTLE W. BAY)	10.5	76					43			43
56-0191-01	STUART (MAIN BASIN)	11.6	295	16.9	28	5.7	28	42	45	48	45
56-0781	SWAN	11.5	151					42			42
56-0387	SYBIL	17.1	291	12.6	24	4.1	24	36	41	45	40
56-0931	TAMARAC	6.5	108					50			50
56-0613	TEN MILE	7.2	198	23.5	24	6.5	24	49	50	49	49
56-0382	TWIN LAKES	10.7	6	22.7	6	6.6	6	43	49	49	47
56-0304	UNNAMED			15.0	1			43			43
56-0305	UNNAMED	3.9	1	32.0	1			57	54		56
56-0307	UNNAMED	2.6	1	30.0	1			63	53		58
56-0308	UNNAMED	1.0	1	127.0	1			77	74		76
56-0078	UNNAMED (RUSH)	5.0	6					54			54
56-0310	WALKER	7.0	115					49			49
56-0658	WALL	8.7	288	32.2	34	9.3	34	46	54	52	51
56-0239	WEST BATTLE	12.3	318	16.5	28	3.6	28	41	45	43	43
56-0114	WEST LEAF	10.1	79	18.7	12	8.2	12	44	46	51	47
56-0386-02	WEST MCDONALD	14.4	253	9.8	20	2.8	20	39	37	41	39
56-0519	WEST SILENT	17.9	17	10.4	17	2.1	17	36	38	38	37

### Pine County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
58-0040	CLAYTON			55.0	1				62		62
58-0128	BASS	9.3	7	21.0	1			45	48		47
58-0137	BASS	8.4	7	20.1	7	10.8	7	46	47	54	49
58-0138	BIG PINE	7.5	307	42.0	10	42.9	11	48	58	67	58
58-0119	CROSS	3.2	140	80.4	13	27.2	12	60	67	63	64
58-0123	GRINDSTONE	12.7	395	22.6	21	6.3	8	40	49	49	46
58-0132	INDIAN			27.0	1				52		52
58-0062	ISLAND	6.8	583	37.8	22	17.0	22	50	57	58	55
58-0127	LITTLE BASS	7.5	14	30.5	2			48	53		51

### Pine County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
58-0107	LONG	7.1	40					49			49
58-0135	MILLER			32.0	1				54		54
58-0038	NET	3.2	8					60			60
58-0048	OAK	4.2	31					57			57
58-0142	POKEGAMA	3.1	284	122.0	15	50.3	15	61	73	69	68
58-0078	RUSH	13.6	61					39			39
58-0081	SAND	10.2	351	18.5	8	8.3	9	44	46	51	47
58-0067	STURGEON	13.6	275	15.9	21	6.1	21	39	44	48	44
58-0024	TAMARACK	13.3	152	22.3	7	4.5	4	40	49	45	45
58-0190	UNNAMED (BENJAMIN)	3.3	1	30.5	2	26.0	2	60	53	63	59
58-0130	UPPER PINE	4.5	65					55			55
58-0054	WALLACE			32.0	1				54		54

### Polk County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
60-0144	BREEZE	8.8	29					46			46
60-0293	CABLE	5.1	11					54			54
60-0027-02	CROSS (MAIN BASIN)	3.9	36					57			57
60-0142	HILL RIVER	2.9	11					62			62
60-0305	MAPLE	3.6	150	44.1	14	20.5	12	58	59	60	59
60-0006	POPLAR	6.0	29					51			51
60-0069	SAND HILL	5.7	114	29.7	6	5.9	4	52	53	48	51
60-0202	SARAH	9.5	186	10.0	2	7.2	2	45	37	50	44
60-0130	STORE	6.1	83					51			51
60-0032	TURTLE	3.5	43	110.2	5	13.9	5	59	72	56	62
60-0217	UNION	9.6	462	22.5	12	5.5	11	45	49	47	47
60-0222	UNNAMED (BUNGUM)	3.5	41					59			59
60-0060	UNNAMED (HAMRE)	5.8	8					52			52
60-0015	WHITEFISH	3.9	32	62.7	3	21.7	3	57	64	61	61

### Pope County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
61-0064	AMELIA	12.3	248	22.5	84	8.4	74	41	49	52	47
61-0122	ANN	7.4	183	308.8	24	34.8	23	48	87	65	67
61-0180	EMILY	1.5	67	111.1	55	42.5	49	71	72	67	70
61-0072	GILCHRIST	4.5	324	65.2	69	42.8	60	55	64	67	62
61-0023	GROVE	6.5	325	38.5	78	14.7	67	50	57	57	55
61-0092	HOFF	9.8	49					44			44
61-0006	JOHANNA	3.7	4	82.8	4	34.8	4	58	68	65	64
61-0066	LEVEN	5.4	229	57.1	54	20.0	45	53	62	60	58
61-0037	LINKA	13.2	247	26.3	74	4.6	63	40	51	46	46
61-0162	MALMEDAL	1.5	91	163.0	78	81.1	69	72	78	74	74
61-0060	MARLU	5.2	123					53			53
61-0130	MINNEWASKA	7.8	596	38.2	144	10.2	102	47	57	53	53
61-0101	NELSON	3.0	8	50.3	8	20.3	8	61	61	60	61

**Pope County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
61-0111	PELICAN	4.4	499	51.9	56	21.0	52	56	61	60	59
61-0078	RENO	7.5	133	48.4	57	17.8	47	48	60	59	56
61-0041	SCANDINAVIAN	8.8	267	27.5	58	6.6	48	46	52	49	49
61-0149	SIGNALNESS (MOUNTN)	11.0	42	26.1	19	5.1	18	43	51	47	47
61-0128	STRANDNESS	2.7	58	137.0	48	36.7	39	63	75	66	68
61-0055	TERRACE MILL POND	3.6	67					59			59
61-0067	VILLARD	6.5	259	44.5	57	14.3	47	50	59	57	55

**Ramsey County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
62-0002	BALD EAGLE	4.4	225	57.6	119	32.4	94	56	63	65	61
62-0016	BEAVER	3.4	70	108.1	66	37.9	67	59	72	66	66
62-0048	BENNETT	2.8	73	182.0	73	55.6	73	62	79	70	71
62-0024	BIRCH	4.4	12	49.2	5	4.2	5	56	60	45	54
62-0062	CHARLEY	4.6	27	73.8	4			55	66		61
62-0055	COMO	3.1	205	251.9	191	58.0	165	61	84	70	72
62-0018	DEEP	1.7	7	127.5	4			69	74		72
62-0080	EMILY	4.4	207	78.4	7			56	67		61
62-0095	EVERGREEN PONDS (KERRY)	4.6	86					55			55
62-0037	GEM	4.2	57					56			56
62-0007	GERVAIS	4.9	225	48.5	106	17.5	101	54	60	59	58
62-0027	GILFILLAN	1.8	32					69			69
62-0034	GOOSE	0.9	53					79			79
62-0074	GRASS	4.8	4	41.4	7	3.3	7	55	58	42	52
62-0075-02	ISLAND (N. OF I-694)	5.6	108	84.4	64	12.1	62	52	68	55	58
62-0075-01	ISLAND (S. OF I-694)	4.2	139	93.6	74	26.9	73	57	70	63	63
62-0078	JOHANNA	6.1	209	46.9	133	13.7	113	51	60	56	56
62-0057	JOSEPHINE	6.7	252	48.3	125	9.4	114	50	60	53	54
62-0081	JUDY (MUD)	0.6	16	914.0	4			84	102		93
62-0010	KELLER	2.2	99	90.9	92	36.4	89	66	69	66	67
62-0006	KOHLMAN	2.0	316	129.7	106	42.0	88	67	74	67	70
62-0049-01	LANGTON (N. BAY)	1.9	20					68			68
62-0049-02	LANGTON (S. BAY)	3.6	44					59			59
62-0058	LITTLE JOHANNA	4.6	29	89.1	29	28.1	25	55	69	63	62
62-0067	LONG	3.3	355	113.4	249	38.4	241	60	72	66	66
62-0054	MCCARRON	6.2	427	34.4	257	16.6	83	51	55	58	55
62-0056	OWASSO	5.8	621	63.9	137	16.0	123	52	64	58	58
62-0013	PHALEN	7.0	391	36.9	146	10.0	142	49	56	53	53
62-0004	PIGS EYE	1.3	35	374.1	8			73	90		81
62-0069	PIKE	2.3	202	107.4	68	43.4	50	65	72	68	68
62-0046	PLEASANT	7.5	146	78.2	8			48	67		58
62-0036	PRIEBE	1.1	55					75			75
62-0009	ROUND	1.9	2					68			68
62-0012	ROUND	4.4	92	72.2	86	25.5	84	56	66	62	61
62-0070	ROUND	4.1	7	40.0	7	19.6	7	57	57	60	58
62-0001	SILVER	6.5	169	62.7	100	8.1	102	50	64	51	55

### Ramsey County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
62-0083	SILVER	2.8	259	71.9	97	38.0	92	62	66	66	65
62-0073	SNAIL	9.6	533	28.1	136	5.7	126	45	52	48	48
62-0028	SUCKER	6.3	4	51.3	4			51	61		56
62-0061	TURTLE	6.9	232	25.2	69	6.3	53	49	51	49	50
62-0039	TWIN	8.1	9	26.7	9	7.9	9	47	51	51	50
62-0022	UNNAMED (TAMARACK)	1.3	36					73			73
62-0038-01	VADNAIS (E. VADNAIS)	9.6	4	31.3	4			45	54		49
62-0071	VALENTINE	3.1	104	90.9	85	28.7	80	61	69	64	65
62-0082	WABASSO	10.6	234	35.6	99	9.9	79	43	56	53	51
62-0011	WAKEFIELD	2.4	97	122.7	64	37.8	62	64	74	66	68
62-0043	WILKINSON	8.0	1					47			47
62-0040	WILLOW	5.1	7	70.0	17	9.6	17	54	65	53	57

### Redwood County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
64-0150	LAURA	2.9	237					62			62
64-0058	REDWOOD	0.9	25	299.9	27	52.1	1	78	86	69	78

### Renville County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
65-0006	ALLIE	4.3	119	217.9	23	7.3	9	56	82	50	63
65-0002	PRESTON	5.0	9	199.5	8	15.5	8	54	81	57	64

### Rice County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
66-0008	CANNON	1.9	106	258.1	18	34.1	17	68	84	65	72
66-0050	CARON	0.6	3	328.0	3	156.1	3	84	88	80	84
66-0052	CEDAR	2.9	469	92.3	38	59.5	30	62	69	71	67
66-0027	CIRCLE	3.2	217	416.2	33	92.7	25	60	91	75	75
66-0061	CODY	0.9	3	353.0	3	177.4	3	79	89	81	83
66-0014	DUDLEY	8.1	49	33.5	4	11.8	4	47	55	55	52
66-0029	FOX	6.0	559	75.0	42	54.4	33	51	66	70	62
66-0038	FRENCH	3.9	267	93.2	31	46.3	20	58	70	68	65
66-0047	HUNT	3.5	40					59			59
66-0015	KELLY	7.8	42	35.7	12	11.0	4	48	56	54	52
66-0056	LEMAY	1.6	3	316.3	3	67.8	3	71	87	72	77
66-0044	LOWER SAKATAH	3.5	35	358.4	9	53.0	9	59	89	70	72
66-0039	MAZASKA	4.3	81	71.4	33	33.2	26	56	66	65	62
66-0064	METOOGGA	1.5	2	643.0	2	83.8	2	71	97	74	81
66-0062	PHELPS	0.9	3	320.3	3	129.3	3	79	87	78	82
66-0048	RICE	2.8	3	438.0	3	120.3	3	62	92	78	77
66-0018	ROBERDS	2.9	455	211.8	36	71.9	27	62	81	73	72
66-0055	SHIELDS	3.8	54	152.8	13	56.3	6	58	77	70	68
66-0045	SPRAGUE	0.6	3	358.0	3	280.0	3	84	89	86	86

**Rice County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
66-0032	UNION	1.2	26	416.0	11	71.8	11	74	91	73	79
66-0010	WELLS	1.8	29					69			69

**Saint Louis County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
69-0701	AERIE	9.3	32					45			45
69-0278	ARMSTRONG	20.5	19	30.2	5	2.7	5	34	53	40	42
69-0864	ASH	7.2	2					49			49
69-0731	AUTO	15.3	41					38			38
69-0742	BAN	4.4	27					56			56
69-0553	BASS	12.7	23	29.7	9			41	53		47
69-0041	BASSETT	9.5	77	28.3	4	10.8	4	45	52	54	50
69-0115	BEAR ISLAND	6.6	4					50			50
69-0515	BERGEN	7.5	5					48			48
69-0842	BLACKDUCK	7.3	98	50.0	1	47.3	1	48	61	68	59
69-0128	BRIAR	7.3	174					49			49
69-0381	BUCK	6.2	2					51			51
69-0118	BURNTSIDE	20.3	631	10.0	36	2.4	32	34	37	39	37
69-0114	CADOTTE	13.0	84	23.3	4	3.8	4	40	50	44	44
69-0545	CAMERON	7.5	33					48			48
69-1294	CANTON PIT	13.9	2	6.0	3	1.3	2	39	30	33	34
69-0489	CARIBOU	7.1	206	21.0	4	8.0	3	49	48	51	49
69-0568	CEDAR ISLAND	4.6	22					55			55
69-0450	CHAD	6.5	2					50			50
69-0277	CLEAR	12.2	45					41			41
69-0397	CLEARWATER	8.2	7					47			47
69-0562	COE	4.7	3	35.0	5	8.1	3	55	55	51	54
69-0249	COLBY	3.4	7	17.1	12	2.7	12	60	45	40	48
69-0412	COMSTOCK	6.3	43					51			51
69-0220	CRAB	12.2	3					41			41
69-0616	CRANE			28.4	14	3.5	14		52	43	48
69-0221	CUMMINGS	12.5	1					41			41
69-0906	DAY	5.1	7					54			54
69-0858	DEEPWATER	12.5	7					41			41
69-0912	DEWEY	11.6	9					42			42
69-0523	DODO (W. LEORA)	13.5	48	18.7	6	2.2	6	40	46	38	41
69-0763	DOHERTY (SPIRIT)	9.8	20					44			44
69-0916	DOLLAR			26.0	4	4.3	3		51	45	48
69-0238	EAGLE	3.7	2					58			58
69-0285-01	EAGLES NEST #1	17.9	90	15.8	5	3.1	5	36	44	42	40
69-0285-02	EAGLES NEST #2	18.3	100	13.6	5	2.1	5	35	42	38	38
69-0285-03	EAGLES NEST #3	14.0	729	30.0	4	5.0	4	39	53	46	46
69-0218	EAGLES NEST #4	17.8	93	40.0	4	1.8	4	36	57	36	43
69-0615	ECHO	5.0	1	42.5	6	13.1	5	54	58	56	56
69-0717	ELBOW	2.6	109	229.2	20	105.6	17	63	83	76	74
69-0744	ELBOW	5.0	1	12.0	4	5.6	4	54	40	48	47

**Saint Louis County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
69-0810	ELEPHANT	6.2	10					51			51
69-0660	ELY	14.2	203	13.3	7	1.2	5	39	41	32	38
69-0496	EMBARRASS	3.4	10	28.1	10	6.5	10	60	52	49	54
69-0565	ESQUAGAMA	7.4	123	18.0	1	4.0	1	48	46	44	46
69-0481	FAT			10.0	1				37		37
69-0085	FENSKE	8.5	4	16.8	4	4.1	4	46	45	44	45
69-0491-02	FISH LK FLOWAGE (E. BAY)	4.0	25					57			57
69-0491-01	FISH LK FLOWAGE (MAIN BASIN)	6.2	150	33.5	8			51	55		53
69-0281	FOUR MILE	6.0	1					51			51
69-1300	FRASER PIT	20.7	1					33			33
69-1306	GILBERT PIT	21.2	28					33			33
69-0292	GLENMORE	5.0	1					54			54
69-0511	GRAND	9.1	12	19.3	4	5.5	3	45	47	47	46
69-0923	HOBSON	11.8	17	12.4	9	3.9	9	42	41	44	42
69-0654	HORSESHOE	6.3	76	34.0	8	13.2	8	51	55	56	54
69-0889	ISLAND	13.4	24					40			40
69-0372-02	ISLAND RSVR.(E. BASIN)	8.0	4					47			47
69-0372-01	ISLAND RSVR.(W. BASIN)	5.8	125					52			52
69-0456	JEANETTE	5.3	3					53			53
69-0845	KABETOOGAMA	7.9	227					47			47
69-0748	KJOSTAD	4.0	1					57			57
69-0315	KORB	6.5	1					50			50
69-0224	LAC LA CROIX	10.9	6					43			43
69-0796	LEANDER	14.1	12					39			39
69-0521	LEORA (ELORA)	7.4	27	18.0	6	3.0	6	48	46	41	45
69-0296	LITTLE CRAB	6.5	1					50			50
69-0760	LITTLE JOHNSON	7.5	12					48			48
69-0066	LITTLE LONG	18.9	74					35			35
69-0732	LITTLE SAND	5.0	133					54			54
69-1290	LITTLE STURGEON	5.7	11	31.0	2	6.5	2	52	54	49	52
69-0682	LITTLE TROUT	21.7	1	7.0	1	0.7	1	33	32	28	31
69-0608	LITTLE VERMILION			22.0	4	3.1	4		49	42	45
69-0936	LOCATOR	7.4	1	9.0	1	1.8	1	48	36	36	40
69-0872	LOITEN	13.1	1	7.0	1	1.5	1	40	32	34	35
69-0493	LONG	10.8	36					43			43
69-0653	LONG	9.4	343	25.9	8	9.2	7	45	51	52	49
69-0859-01	LONG (MAIN BASIN)	8.9	7					46			46
69-0857-02	LONGYEAR (N. BAY)	1.8	13					68			68
69-0857-01	LONGYEAR (S. BAY)	4.1	13					57			57
69-0426	LOON	20.5	77					34			34
69-0295	LUNETTA	4.0	1					57			57
69-0721	MAJESTIC	14.0	166					39			39
69-0700	MAPLE LEAF	8.2	216	27.2	6	6.3	5	47	52	49	49
69-0414	MARKHAM	3.2	32					60			60
69-0725	MASHKENODE	2.8	8	201.7	12	63.6	12	62	81	71	71
69-0914	MCCORMACK	10.2	7					44			44

**Saint Louis County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
69-0775	MCQUADE	3.0	8	74.5	12	45.8	11	61	66	68	65
69-0329	MEANDER	15.0	7	13.9	8			38	42		40
69-1292	MESABI MT. PIT	10.7	2	8.0	2	1.3	2	43	34	33	37
69-0939-02	MIDDLE STURGEON	4.8	38	29.8	4	4.8	4	54	53	46	51
69-0938-01	MORAN (MAIN BASIN)	6.6	8					50			50
69-0938-02	MORAN (SOUTH BASIN)	2.0	1					67			67
69-0646	MURPHY	6.0	72	20.0	6	2.7	6	51	47	40	46
69-0749	MYRTLE	9.5	1					45			45
69-0693	NAMAKAN	9.5	204					45			45
69-0282	NEEDLE BOY	6.5	1					50			50
69-0627	NICHOLS	6.5	2					50			50
69-0007	PARADISE	8.8	9					46			46
69-0841	PELICAN	8.3	40	42.8	13	8.6	13	47	58	52	52
69-0011	PEQUAYWAN	11.2	15					42			42
69-0932	PERCH	11.4	102	10.5	4	2.0	4	42	38	37	39
69-0934	PICKEREL	10.8	8					43			43
69-0490	PIKE	14.7	332	15.4	15	4.4	14	38	44	45	42
69-0848	PRAIRIE	5.3	128	27.8	16	10.1	15	53	52	53	53
69-0694	RAINY	8.3	311	21.6	54	3.4	48	47	48	43	46
69-0922	RAT	7.0	10					49			49
69-0917	ROCK	8.5	10					46			46
69-0525	ROSE	12.2	67	11.7	6	2.0	6	41	40	37	39
69-0434-01	SABIN	3.2	3	22.4	5	1.5	5	60	49	35	48
69-0429	SABIN(EMBARRASS PIT)	36.7	97					25			25
69-0736	SAND	8.6	72	45.0	4	3.5	4	46	59	43	49
69-0617	SAND POINT	7.6	199					48			48
69-0018	SCHAFFER	8.3	9					47			47
69-0294	SCHLAMM	4.0	1					57			57
69-0546	SCHUBERT	7.0	156					49			49
69-0230	SCHULTZ	17.5	122					36			36
69-0069	SHAGAWA	7.9	923	34.6	83	16.9	63	47	55	58	54
69-0925	SHANNON	6.0	9					51			51
69-1297	SHERMAN PIT	21.0	2					33			33
69-0910	SHOE PACK	8.0	10					47			47
69-0870	SHOEPACK(BOOTJACK),	4.9	1	20.0	1	6.1	1	54	47	48	50
69-0933	SIDE	11.9	30	24.8	4	6.0	4	41	50	48	47
69-0519	SIDE (BOWMAN)	5.3	141					53			53
69-0662	SILVER	8.0	37					47			47
69-0283	SIX MILE	12.0	1					41			41
69-0181	SLIM	19.0	1					35			35
69-1298	SOUTH TWIN CITY PIT	11.2	1					42			42
69-0129	SPRING	8.7	51					46			46
69-0651	ST. MARY'S	15.1	6	12.0	11	1.5	7	38	40	35	38
69-0027	STONE	6.7	11					50			50
69-0529	STRAND	3.0	55	46.0	6	5.0	5	61	59	46	56
69-0939-01	STURGEON	14.7	107	14.9	10	3.2	10	38	43	42	41
69-0235	SUNSHINE	21.9	28					33			33
69-0794	THIRTEEN	12.2	33					41			41

### Saint Louis County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
69-0241	THOMPSON	4.7	55					55			55
69-0756	TOOTH			9.0	1				36		36
69-0929	UNNAMED (MARK)	14.6	9	9.2	1	2.2	1	38	36	38	38
69-0378	VERMILION	8.5	1106	35.2	40	7.4	28	46	55	50	51
69-0663	VIRGINIA	12.3	36					41			41
69-0939-03	WEST STURGEON	5.7	8					52			52
69-0379	WESTERN	6.0	1					51			51
69-0030	WHITE	9.3	47					45			45
69-0004	WHITE IRON	4.8	338	30.4	24	4.3	16	54	53	45	51
69-0375	WHITEFACE RESRVOIR	4.2	224					57			57
69-0376	WHITEWATER	11.2	7	12.9	15	4.0	15	42	41	44	42
69-0371	WILD RICE	4.7	16	59.8	10	17.9	10	55	63	59	59
69-0542	WILSON	6.7	34					50			50
69-0522	WINKLE (S. LEORA)	7.6	5	29.6	5	3.8	5	48	53	44	48
69-0434-02	WYNNE	6.8	74	14.8	5	3.1	5	49	43	42	45
69-0434	WYNNE/SABIN	7.2	45					49			49

### Scott County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
70-0018	CATE'S	5.8	26	24.2	26	4.8	25	52	50	46	49
70-0091	CEDAR	4.4	330	268.8	55	123.2	5	56	85	78	73
70-0022	CLEARY	3.3	94	167.5	4			60	78		69
70-0061	CRYSTAL	5.2	13	44.6	13			53	59		56
70-0074	DEAN	1.7	15	176.7	15	28.1	14	70	79	63	71
70-0069	FISH	4.1	115	55.4	77	30.0	31	57	62	64	61
70-0019	HANRAHAN	7.0	2					49			49
70-0009	KRENZ	12.5	36					41			41
70-0026	LOWER PRIOR	6.8	519	26.1	150	18.9	54	49	51	59	53
70-0021	MARKLEY	4.4	50	48.7	50	14.2	19	56	60	57	58
70-0050	MCMAHON	3.3	30	121.3	30	91.8	4	60	73	75	69
70-0010	MURPHY	7.8	75					47			47
70-0095	O'DOWD	3.5	38	74.5	38	59.3	8	59	66	71	65
70-0076	PIKE	2.0	53	202.4	51	137.5	33	67	81	79	76
70-0098	PLEASANT	1.5	9	127.8	9			71	74		73
70-0054	SPRING	4.4	257	122.2	113	63.0	36	56	73	71	67
70-0120-01	THOLE	2.9	17	166.6	17	68.0	8	62	78	72	71
70-0016	UNNAMED (DAN PATCH)	9.7	32	16.0	10			44	44		44
70-0011	UNNAMED (MINNREG)	9.3	84					45			45
70-0072	UPPER PRIOR	3.0	503	73.2	105	65.4	44	61	66	72	66
70-0120	THOLE/SCHNEIDER	3.6	21	135.7	21			59	75		67

### Sherburne County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
71-0069	ANN	8.6	64	24.2	9	6.7	9	46	50	49	48
71-0082	BIG	9.9	131	19.9	30	7.9	30	44	47	51	47
71-0057	BIRCH	3.9	189	47.6	25	27.4	18	57	60	63	60

### Sherburne County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
71-0146	BRIGGS	4.0	258	111.1	13	59.5	13	57	72	71	67
71-0123	CAMP	6.9	107					49			49
71-0041	CANTLIN (CAITLIN)	5.9	46					51			51
71-0067	EAGLE	2.6	77	60.0	15	27.8	15	63	63	63	63
71-0055	ELK	2.0	82	87.2	10	41.9	10	67	69	67	68
71-0141	ELK (BIG ELK)	1.8	158	185.4	10	83.8	10	69	79	74	74
71-0016	FREMONT	2.4	119	94.5	4	50.0	4	64	70	69	68
71-0145	JULIA	2.8	248	110.2	10	42.1	11	62	72	67	67
71-0159	LONG	7.1	387	33.3	17	9.1	17	49	55	52	52
71-0081	MITCHELL	8.5	129	24.5	28	8.5	28	46	50	52	49
71-0013	ORONO	2.0	117	129	10	51	5	67	74	69	70
71-0158	PICKEREL	8.2	55	37.7	7	20.0	7	47	56	60	54
71-0147	RUSH	2.5	223	139.0	10	64.7	11	64	75	71	70
71-0040	SANDY	14.4	154	10.0	1			39	37		38
71-0096	THOMPSON	8.9	38					46			46
71-0001	TWIN LAKES	11.3	3					42			42
71-0167	UNNAMED (ROUND)	10.6	213	18.8	6	7.1	6	43	46	50	46

### Sibley County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
72-0089	CLEAR	4.9	11					54			54
72-0050-01	HIGH ISLAND (MAIN BASIN)	0.9	23	311.0	3	73.9	2	79	87	73	79
72-0049	SCHILLING	1.0	1	201.0	1	83.0	1	77	81	74	77
72-0013	SILVER	1.3	3	155.7	3	91.8	3	74	77	75	75
72-0042	TITLOW	0.7	2	173.0	4	45.5	4	81	78	68	76
72-0017	WASHINGTON	1.6	1	469.0	1	69.0	1	70	93	72	78

### Stearns County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
73-0190	BEAR	6.8	54	56.0	4	35.1	4	50	62	65	59
73-0023	BEAVER	8.9	1	47.0	1	9.9	1	46	60	53	53
73-0156	BECKER	6.7	71	43.5	2	4.3	2	50	59	45	51
73-0159	BIG	5.8	212	28.7	38	18.0	39	52	53	59	54
73-0106	BIG FISH	14.5	543	190.3	27	4.4	20	39	80	45	55
73-0117	BIG SPUNK	8.2	102	24.2	9	11.2	9	47	50	54	50
73-0102	BIG WATAB	16.7	736	15.1	24	2.6	20	37	43	40	40
73-0088	BOLTING	3.1	245	177.5	4	97.3	4	61	79	76	72
73-0038	CARNELIAN	12.5	3	21.6	9	4.4	9	41	48	45	45
73-0226	CEDAR	8.1	3	22.0	3	5.7	3	47	49	48	48
73-0255	CEDAR	4.5	3	49.8	4	4.8	4	55	60	46	54
73-0133-04	CEDAR ISLAND (EAST LK)	1.6	19	276.3	18	66.7	18	70	85	72	76
73-0133-03	CEDAR ISLAND (KOETTER LK)	1.8	53	326.5	10	79.4	10	68	88	74	77

**Stearns County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- a (ppb)	NC	TSI S	TSI P	TSI C	TSI
73-0133-01	CEDAR ISLAND (MAIN BAY)	3.7	210	174.4	35	76.3	35	58	79	73	70
73-0133-02	CEDAR ISLAND (MUD LK)	2.9	11	111.5	10	83.7	10	62	72	74	69
73-0006	CROOKED	13.9	80	19.4	8	2.9	8	39	47	41	42
73-0150	EDEN	5.4	88	94.1	21	32.9	21	53	70	65	62
73-0076	GOODNERS	11.2	1	50.4	9	20.5	9	42	61	60	54
73-0055	GRAND	7.3	279	26.5	13	8.8	12	48	51	52	51
73-0083	GREAT NORTHERN	2.2	64	273.4	10	87.3	10	66	85	74	75
73-0237	HENRY	3.2	6					61			61
73-0157	HORSESHOE	3.5	936	191.5	85	72.5	83	59	80	73	71
73-0100	KALLA	7.1	9					49			49
73-0233	KINGS	6.0	39	35.0	1	10.7	1	51	55	54	53
73-0086	KNAUS	2.1	264	245.1	18	76.4	18	67	83	73	74
73-0200	KORONIS	5.2	49	32.3	10	15.3	9	53	54	57	55
73-0200-02	KORONIS (MAIN BASIN)	7.4	334	58.0	2			48	63		56
73-0064	KRAEMER	8.9	31					46			46
73-0087	KRAYS	2.0	73	214.2	13	71.4	13	67	82	72	74
73-0097	KREIGHLE	17.5	95	10.4	5	2.1	5	36	38	38	37
73-0004	LONG	13.2	97	16.1	8	5.0	7	40	44	46	44
73-0107	LONG	10.1	90	38.0	3	11.5	1	44	57	55	52
73-0139	LONG	3.3	107	127.3	6	52.5	6	60	74	69	68
73-0123	LOWER SPUNK	8.6	64	27.3	9	11.5	9	46	52	55	51
73-0215	MARIA	3.9	92	84.9	32	35.0	23	57	68	65	64
73-0014	MARIE	2.9	85	240.1	23	36.5	4	62	83	66	70
73-0273	MCCORMIC	4.9	6	69.2	13	26.5	13	54	65	63	61
73-0128	MIDDLE SPUNK	9.3	122	23.2	10	6.4	10	45	49	49	48
73-0151	MUD (VAILS)	4.7	87	205.0	6	61.4	6	55	81	71	69
73-0147	NORTH BROWN'S	7.7	257	94.8	12	25.9	12	48	70	63	60
73-0122	OCHOTTO	12.7	10					41			41
73-0015	OTTER	9.1	31					45			45
73-0037	PEARL	5.5	134	35.1	15	14.7	16	53	55	57	55
73-0118	PELICAN	11.5	407	22.1	30	7.2	19	42	49	50	47
73-0136	PINE	5.6	8	34.2	7	11.5	8	52	55	55	54
73-0144	PIRZ	8.7	39					46			46
73-0051	PLEASANT	6.7	19	12.0	1	9.9	1	50	40	53	48
73-0007	QUINN	11.1	6					42			42
73-0196	RICE	5.1	435	70.1	22	22.2	10	54	65	61	60
73-0072	ROSSIER	5.0	102	114.2	10	31.3	10	54	72	64	64
73-0092	SAGATAGAN	12.9	5	21.5	6	3.5	6	40	48	43	44
73-0199	SAND	1.2	39	115.8	9	62.3	9	75	73	71	73
73-0082	SCHNEIDER	5.1	32					54			54
73-0035	SCHOOL SECTION	7.2	58	10.8	13	9.2	10	49	38	52	46
73-0096	SCHUMAN	12.0	1					41			41
73-0183	ST. ANNA	7.7	38					48			48
73-0249	SYLVIA	9.2	88	5.1	8	5.4	9	45	28	47	40
73-0132	THEIN	8.5	15					46			46
73-0138	TWO RIVERS	5.0	239	67.3	19	35.5	19	54	65	66	62
73-0703	UNNAMED (QUARRY 11)	16.5	39					37			37

### **Stearns County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
73-0701	UNNAMED(QUARRY POND)	12.2	87					41			41
73-0070	WATAB	6.7	115	75.6	15	11.2	15	50	67	54	57
73-0089	ZUMWALDE	1.7	91	242.9	14	78.3	14	70	83	73	76

### **Steele County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
74-0023	BEAVER	3.6	63	36.1	12	18.1	12	59	56	59	58
74-0019	KOHLMEIER	7.5	13					48			48
74-0001	RICE	2.5	4	151.0	4	62.5	4	64	76	71	70

### **Stevens County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
75-0200	HATTIE	2.8	52	427.9	22	103.6	21	62	92	76	77
75-0019	PAGE	5.5	38	329.4	9	30.5	8	52	88	64	68
75-0075	PERKINS	2.2	248	104.9	34	25.1	32	66	71	62	66

### **Swift County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
76-0072	CAMP	4.6	11					55			55
76-0086	HASSEL	0.7	9	198.0	9	72.2	9	82	80	73	78
76-0057	HOLLERBERG	2.2	3	102.0	4	29.0	4	66	71	64	67
76-0033	MONSON	5.0	4	90.0	4	45.8	4	54	69	68	64
76-0146-02	OLIVER (SE BAY)	5.7	7	152.3	8	33.1	8	52	77	65	65

### **Todd County**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
77-0010	BASS	7.9	1	24.0	1	12.8	1	47	50	56	51
77-0035	BEAUTY	8.3	153					47			47
77-0084	BIG BIRCH (LOWER)	10.3	1570	29.0	32	6.0	12	43	53	48	48
77-0084	BIG BIRCH (UPPER)	9.6	990	36.9	32	10.7	9	44	56	54	51
77-0023	BIG SWAN	7.0	186	45.4	11	24.6	11	49	59	62	57
77-0195	FAILLE	3.7	44					58			58
77-0154	FAIRY	10.4	43	21.4	8	7.9	8	43	48	51	48
77-0128	HORSESHOE	9.7	71					44			44
77-0032	LADY	6.9	19	27.3	22	12.1	22	49	52	55	52
77-0105	LATIMER	4.3	111					56			56
77-0089	LITTLE BIRCH	8.5	417	27.0	23	9.3	25	46	52	53	50
77-0164	LITTLE SAUK	3.7	9					58			58
77-0034	LITTLE SWAN			13.0	1				41		41
77-0027	LONG	10.9	132	30.6	15	6.8	15	43	53	49	49
77-0149-01	LONG (MAIN BASIN)	12.1	277	20.0	8	6.4	7	41	47	49	46
77-0149-02	LONG (SOUTH BAY)	9.4	43					45			45

### Todd County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
77-0181	MAPLE	3.2	26	88.7	3	48.8	3	60	69	69	66
77-0019	MARY	7.4	17	37.4	19	12.8	18	48	56	56	53
77-0022	MONS			5.0	1				27		27
77-0026	MOOSE	3.8	20	80.0	23	59.0	22	58	67	71	65
77-0007	MOUND	15.1	412	19.4	30	6.3	29	38	47	49	44
77-0215	OSAKIS	6.9	684	48.5	40	15.4	36	49	60	57	56
77-0067	PINE ISLAND	9.0	6					45			45
77-0150-02	SAUK (NORTH BAY)	5.0	210	75.8	13	46.7	13	54	67	68	63
77-0150-01	SAUK (SW BAY)	3.9	262	102.8	10	76.5	10	57	71	73	67
77-0014	STUMP			62.0	1				64		64
77-0009	TRACE	3.2	10	124.5	13	80.3	13	60	74	74	69

### Traverse County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
78-0025	TRAVERSE	2.1	96	157.3	7	49.4	6	67	77	69	71

### Wadena County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
80-0034	BLUEBERRY	3.6	21	67.9	7	35.3	7	58	65	66	63
80-0030	LOWER TWIN	6.2	161	38.7	40	14.6	36	51	57	57	55
80-0038	MORGAN	17.5	1					36			36
80-0039	SPIRIT	10.2	49	13.8	9	3.0	7	44	42	41	42
80-0037	STOCKING	5.3	181	39.6	24	14.7	16	53	57	57	56

### Waseca County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
81-0014	CLEAR	4.0	141	112.2	144	32.4	137	57	72	65	65
81-0014-01	CLEAR	2.5	4	180.0	4	48.0	4	64	79	69	71
81-0095	ELYSIAN	2.5	202	294.9	14	72.9	14	64	86	73	74
81-0015	LOON	2.5	125	305.5	75	39.7	66	64	87	67	72
81-0055	REEDS	5.1	86	36.6	26	24.1	27	54	56	62	57
81-0003	ST. OLAF	5.1	96	33.9	12	16.7	12	54	55	58	56

### Washington County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
82-0076	BARKER	5.1	12	73.8	8	23.0	2	54	66	61	60
82-0035	BASS	6.9	22	45.2	22	11.3	10	49	59	54	54
82-0091	BATTLE CREEK	4.4	41	71.8	41	10.4	7	56	66	54	58
82-0120	BENZ	1.3	7					73			73
82-0049	BIG CARNELIAN	10.3	497	18.7	75	6.8	32	44	46	49	46
82-0052	BIG MARINE	9.6	280	23.1	85	7.1	31	45	49	50	48
82-0054	BONE	4.0	289	52.0	88	40.4	35	57	61	67	62
82-0017	CAROL	3.5	16	30.5	15	10.5	10	59	53	54	55

**Washington County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
82-0166	CARVER	5.0	61	44.9	70	14.4	16	54	59	57	57
82-0163	CLEAR	4.0	290	33.4	94	9.2	18	57	55	52	55
82-0009	CLOVERDALE	7.8	23	39.5	23	14.9	22	48	57	57	54
82-0094	COLBY	1.6	76	172.4	76	62.6	20	70	78	71	73
82-0101	DEMONTREVILLE	6.2	325	32.4	67	15.0	21	51	54	57	54
82-0110	DOWNS	1.5	27	154.4	27	89.5	17	71	77	75	74
82-0109	EAGLE POINT	1.3	9	154.4	9			73	77		75
82-0034	EAST BOOT	6.5	44	44.4	43	30.8	30	50	59	64	58
82-0147	EGG	3.6	6	39.0	8	4.8	6	59	57	46	54
82-0106	ELMO	9.4	150	19.7	69	6.3	4	45	47	49	47
82-0079	ELWELL (HIGHLAND)	3.3	10	147.0	10			60	76		68
82-0064	FISH	2.0	26	108.6	24	90.7	17	67	72	75	71
82-0137	FISH	4.5	12	113.9	12	34.4	10	56	72	65	64
82-0159	FOREST	5.2	344	31.9	182	14.9	59	53	54	57	55
82-0082	GABLES	1.9	11	208.2	11			68	81		74
82-0059	GOOSE	5.0	90	58.7	48	36.5	4	54	63	66	61
82-0080	HALFBREED	13.9	393	19.2	94	2.8	35	39	47	41	42
82-0065	HAY	3.0	46	107.6	45	43.8	13	61	72	68	67
82-0104	JANE	10.9	634	24.4	65	2.7	10	43	50	40	44
82-0052-02	JELLUMS	2.8	55	86.8	54	62.5	40	62	69	71	67
82-0368	KLAWITTER POND	2.4	25	105.8	25	22.3	25	64	71	61	66
82-0097	LA	5.8	63	84.6	63	36.6	11	52	68	66	62
82-0023	LILY	5.7	148	46.6	79	9.6	20	52	60	53	55
82-0014	LITTLE CARNELIAN	14.9	159	13.0	42	2.8	30	38	41	41	40
82-0021	LONG	1.9	151	114.8	72	60.7	30	68	73	71	70
82-0068	LONG	2.8	26	82.6	26	61.5	17	62	68	71	67
82-0118	LONG	5.1	26	39.8	26	20.9	17	54	57	60	57
82-0130	LONG	8.8	125	26.3	12	5.1	12	46	51	47	48
82-0030	LONG (MAY TWP)	6.4	119	58.1	95	10.1	27	50	63	53	55
82-0015	LOON	1.9	30	100.8	29	95.3	16	68	71	75	71
82-0025	LOUISE	4.4	16	108.6	12	57.8	6	56	72	70	66
82-0089	MARKGRAFS	2.7	82	145.5	82	48.9	27	63	76	69	69
82-0010	MCDONALD	5.2	93	44.2	38	35.8	28	53	59	66	59
82-0020	MCKUSICK	4.9	95	76.3	95	15.1	29	54	67	57	59
82-0482	MERGEN'S POND	3.2	9	91.5	10	7.3	3	60	69	50	60
82-0168	MUD	3.6	5	31.2	5	7.6	5	59	54	51	54
82-0026-02	MUD (MAIN LAKE)	2.0	12	222.5	8	185.0	2	67	82	82	77
82-0018	NORTH TWIN	4.2	16	29.3	15	8.1	10	57	53	51	54
82-0103	OLSON	6.3	322	30.5	71	19.9	28	51	53	60	55
82-0140	ONEKA	5.4	48	36.2	57	10.4	39	53	56	54	54
82-0122	PINE TREE	5.8	110	36.8	109	22.3	24	52	56	61	56
82-0092	POWERS	7.4	74	27.1	73	23.7	25	48	52	62	54
82-0146	RICE			104.7	3	8.8	2		71	52	62
82-0151	S. SCHOOL SECTION	4.9	20	47.5	20			54	60		57
82-0067	SAND	5.5	79	53.9	46	18.0	17	53	62	59	58
82-0162	SHIELDS	5.2	105	218.1	104	41.2	35	53	82	67	67
82-0016	SILVER	4.1	47	45.2	17	12.6	6	57	59	55	57
82-0019	SOUTH TWIN	4.3	16	57.2	16	31.7	10	56	62	65	61

### Washington County Continued

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
82-0046	SQUARE	21.5	480	13.8	167	2.2	33	33	42	39	38
82-0001	ST. CROIX	3.7	145	52.3	4	21.6	4	58	61	61	60
82-0028	STAPLES	8.2	18	37.0	18	7.5	6	47	56	50	51
82-0107	SUNFISH	2.5	7	50.0	7			64	61		62
82-0133	SUNNYBROOK	6.3	39	30.1	39	5.9	28	51	53	48	51
82-0153	SUNSET	7.3	318	45.1	152	16.0	70	49	59	58	55
82-0115	TANNERS	7.7	175	38.2	259	10.5	207	48	57	54	53
82-0031	TERRAPIN	10.5	4	23.8	4	2.8	4	43	50	41	45
82-0036	TURTLE	4.7	16	82.1	12	7.2	6	55	68	50	57
82-0048	TWIN (SOUTH BASIN)	13.9	17	16.5	17			39	45		42
82-0062	UNNAMED	10.5	9	20.0	9	2.0	9	43	47	38	43
82-0128	UNNAMED	4.7	19					55			55
82-0301	UNNAMED	6.2	8	52.9	8	6.5	8	51	61	49	54
82-0474	UNNAMED	6.6	249	26.5	8			50	51		51
82-0056	UNNAMED (GERMAN)	7.9	12	27.1	11	4.4	12	47	52	45	48
82-0077	UNNAMED (GOGGINS)	3.2	52	91.2	51	35.4	30	61	69	66	65
82-0333	UNNAMED (KISMET)	5.4	59	46.5	59	25.9	29	53	60	63	58
82-0086	UNNAMED (REG. PARK)	1.9	61	101.2	61	42.8	33	68	71	67	69
82-0313	UNNAMED(GOETSCHEL)	6.4	15	33.5	15	7.6	15	50	55	50	52
82-0038	UNNAMED(MAPLE MARSH)	3.3	12	171.3	8	110.0	2	60	78	77	72
82-0116-02	UNNAMED(S.ARMSTRONG )	2.7	61	95.6	60	10.7	30	63	70	54	62
82-0488	UNNAMED(W LAKELAND)	3.3	1	40.0	1			60	57		59
82-0044	WEST BOOT	10.4	72	19.2	42	3.4	30	43	47	43	44
82-0167	WHITE BEAR	10.0	451	23.8	246	5.3	241	44	50	47	47
82-0090	WILMES	3.8	85	78.4	85	41.4	25	58	67	67	64

### Watowwan County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
83-0036	KANSAS	2.3	2	245.0	2	28.3	2	65	83	63	71
83-0040	LONG	3.1	98	74.9	15	38.4	15	61	66	66	65
83-0043	ST. JAMES	3.0	80	61.5	8	29.2	8	61	64	64	63

### Winona County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
85-0011-02	WINONA (NORTH BAY)	4.1	8	114.0	8	63.7	8	57	72	71	67
85-0011-01	WINONA (SOUTH BAY)	2.6	7	155.0	8	68.2	8	63	77	72	71

### Wright County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
86-0212	ALBION	2.0	3	132.5	4	203.5	4	67	75	83	75
86-0190	ANN	4.7	293	349.2	19	39.6	17	55	89	67	70
86-0284	AUGUSTA	6.6	116	55.0	21	16.2	11	50	62	58	57
86-0234	BASS	14.2	165	19.9	9	4.8	9	39	47	46	44

**Wright County Continued**

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
86-0023	BEEBE	4.4	485	102.0	7	83.0	1	56	71	74	67
86-0066	BIRCH	12.6	70					41			41
86-0090	BUFFALO	3.5	16	312.2	31	70.9	20	59	87	72	73
86-0221	CAMP	5.6	35					52			52
86-0281	CAROLINE	3.9	122	117.8	13	35.5	4	58	73	66	65
86-0097	CARRIGAN	4.1	3	725.5	2	484.0	2	57	99	91	82
86-0034	CEDAR	4.8	12					54			54
86-0073	CEDAR	11.9	4	19.3	4	4.4	4	41	47	45	44
86-0227	CEDAR	7.3	498	32.2	26	14.3	20	48	54	57	53
86-0011	CHARLOTTE	15.6	147	22.0	4	6.3	4	37	49	49	45
86-0252	CLEARWATER (LOWER)	7.4	274	79.4	35	21.2	22	48	67	61	59
86-0252	CLEARWATER (UPPER)	6.5	240	54.6	42	32.0	24	50	62	65	59
86-0263	COKATO	6.0	38	101.1	18	38.0	17	51	71	66	63
86-0293	COLLINWOOD	5.7	166	76.6	5	47.5	5	52	67	68	62
86-0051	CONSTANCE	5.7	12	66.3	4	27.9	1	52	65	63	60
86-0041	DEAN	2.7	125	200.5	4	66.0	1	63	81	72	72
86-0107	DEER	5.8	10					52			52
86-0178	DOG	2.0	1	83.0	1	87.0	1	67	68	74	70
86-0184	DUTCH	1.6	9	496.1	9	101.5	9	70	94	76	80
86-0148	EAGLE	6.2	73	66.0	1	31.1	1	51	65	64	60
86-0171	EMBER	10.2	6					44			44
86-0188	EMMA	1.2	2	363.0	1	256.0	1	74	89	85	83
86-0183	FISH	4.5	151	63.2	8	38.9	9	55	64	67	62
86-0273	FRENCH	4.4	62	43.0	2	24.8	2	56	58	62	59
86-0217	GRANITE	5.0	647	76.8	4	32.1	4	54	67	65	62
86-0243	GRASS	9.3	50	40.0	4	12.1	4	45	57	55	52
86-0213	HENSHAW	1.3	3	273.3	3	266.7	3	73	85	85	81
86-0199	HOWARD	3.7	36	63.5	2	30.9	3	58	64	64	62
86-0146	IDA	11.2	416	22.5	13	7.5	5	42	49	50	47
86-0223	INDIAN	4.4	180	46.8	20	33.6	19	56	60	65	60
86-0288	JOHN	7.8	99	38.5	2	17.9	2	48	57	59	54
86-0163	LIMESTONE	11.0	2	55.5	2	12.5	2	43	62	55	53
86-0139-02	LITTLE MARY (N. BAY)	0.7	9					82			82
86-0106	LITTLE WAVERLY	3.2	95	445.0	1	10.8	1	60	92	54	69
86-0168	LOCKE	2.6	2	19.0	2	58.1	2	63	47	70	60
86-0069	LONG	4.3	2	44.5	2	15.7	2	56	59	58	58
86-0282	LOUISA	3.5	77	191.4	24	45.3	12	59	80	68	69
86-0134	MAPLE	7.3	434	37.1	9	5.9	7	48	56	48	51
86-0009	MARTHA	4.7	284	87.7	9	96.8	5	55	69	75	66
86-0156	MARY	6.9	9	50.0	1	32.4	1	49	61	65	58
86-0193	MARY	7.9	166	32.3	3	16.1	3	47	54	58	53
86-0229	MINK	2.9	168	112.5	15	76.6	15	62	72	73	69
86-0026	MUD	3.9	1	998.5	2	2.6	2	57	104	40	67
86-0068	MUD	7.8	9					48			48
86-0238	NIXON	11.2	86					42			42
86-0031	PELICAN	1.4	11	168.8	12	94.6	12	72	78	75	75
86-0251	PLEASANT	7.7	69	60.9	9	16.1	4	48	63	58	56
86-0053	PULASKI	11.6	136	20.5	16	6.9	9	42	48	50	46

### Wright County Continued

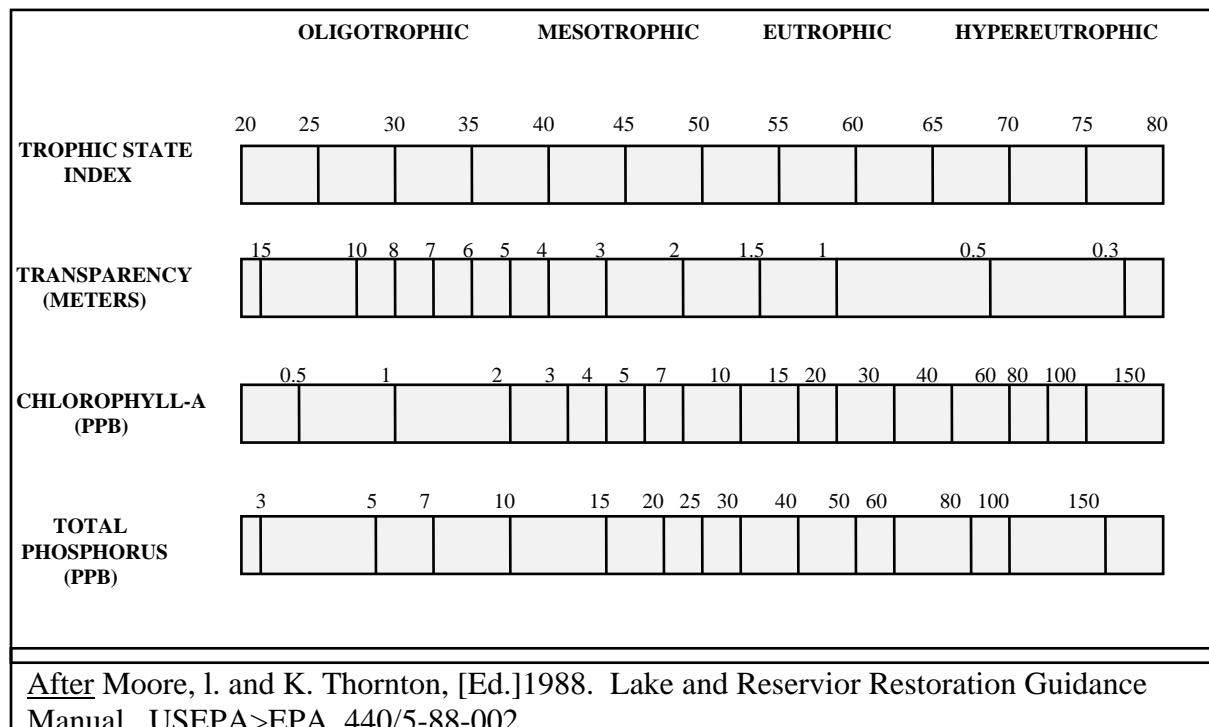
LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
86-0120	RAMSEY	5.4	313	80.4	23	29.7	15	53	67	64	61
86-0182	ROCK	4.5	157	48.5	2			55	60		58
86-0025	SCHOOL	2.3	1	253.0	1	8.3	1	65	84	51	67
86-0297	SCOTT	2.9	27	390.0	10	222.5	4	62	90	84	78
86-0250	SMITH	1.1	3	148.0	4	62.9	4	76	76	71	74
86-0230	SOMERS	3.8	148	88.6	16	51.2	16	58	69	69	65
86-0233	SUGAR	10.2	256	18.2	13	6.2	13	44	46	48	46
86-0208	SWARTOUT	3.5	4	323.8	5	157.6	5	59	87	80	76
86-0289	SYLVIA	14.9	833	22.9	11	4.7	5	38	49	46	44
86-0089	TAMARACK	1.3	1	128.0	1	88.0	1	73	74	75	74
86-0279	TWIN	14.8	1183	22.3	27	4.2	9	38	49	45	44
86-0298	UNION	4.9	103	59.4	7	15.0	3	54	63	57	58
86-0114	WAVERLY	4.8	56	41.0	10	22.2	10	55	58	61	58
86-0242	WIEGAND	7.5	13	36.7	3	11.7	3	48	56	55	53

### Yellow Medicine County

LAKE ID	LAKE NAME	Secchi (ft)	NS	TP (ppb)	NP	Chl- <i>a</i> (ppb)	NC	TSI S	TSI P	TSI C	TSI
87-0016	CURTIS (HOUSTON)	0.8	10	223.5	11	172.1	11	80	82	81	81
87-0030	WOOD	1.2	9	161.2	9	72.1	9	74	77	73	75

### Appendix III. 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 IV. Big Pine Lake 2004 Data.

##### Big Pine Lake Site 101

	TP (ppb)	Chl- <i>a</i> (ppb)	Secchi (feet)	Physical Condition (1-5)	Recreational Suitability (1-5)
*May - mid	19	8.4	8.2	2	1
June - early	15	2.97	13	2	1
June - late	15	3.74	13	2	1
July - early	12	2.22	14.5	2	1
*July - late	13	2.12	14.8	2	1
Aug. - early	14	3	11.5	2	1
Aug. - late	16	4.5	11	2	1
Sept. - early	13	2.99	14	2	1
*Sept.- late	16	4.38	11.5	2	1

\*MPCA Collected Data.

##### Big Pine Lake Site 102

	TP (ppb)	Chl- <i>a</i> (ppb)	Secchi (feet)	Physical Condition (1-5)	Recreational Suitability (1-5)
*May - mid	16	10	9	2	1
June - early	15	1.69	12.5	2	1
June - late	22	4.02	11.5	2	1
July - early	11	1.95	14	2	1
*July - late	16	2.32	13.9	2	1
Aug. - early	13		13	2	1
Aug. - late	14	3.68	11	2	1
Sept. - early	12	3.35	13.5	2	1
*Sept.- late	14	4.54	9.8	2	1

\*MPCA Collected Data.