

# Kerr 11-0268-00

MN Lake ID: 11-0268-00  
 County: Cass  
 Ecoregion: Northern Lakes and Forests  
 Major Drainage Basin: Upper Mississippi River  
 Latitude/Longitude: 46.94055556 / -94.36719444  
 Water Body Type: Public Waters  
 Monitored Sites (Primary): 3901  
 Monitored Sites (Secondary): N/A

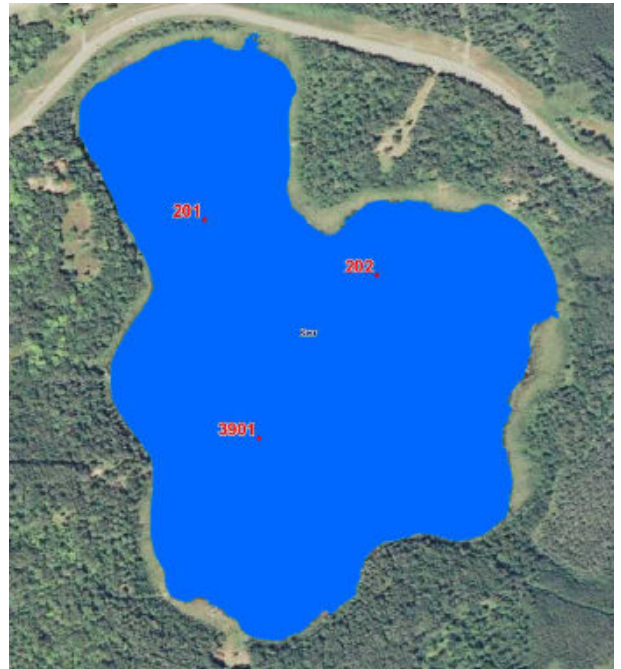
## Physical Characteristics

Surface area (acres): 73  
 Littoral area (acres): 26  
 % Littoral area: 35%  
 Max depth (ft): 79 (m): 24.1  
 Mean depth (ft): N/A (m): N/A  
 Watershed size (acres): N/A

## Water Quality Characteristics - Historical Means

Years monitored: 2008-2009

Parameters	Primary Site 3901
<b>Total Phosphorus Mean:</b>	15.2
<b>Total Phosphorus Min:</b>	8
<b>Total Phosphorus Max:</b>	26
<b>Number of Observations:</b>	8
<b>Chlorophyll-a Mean:</b>	2.8
<b>Chlorophyll-a Min:</b>	1
<b>Chlorophyll-a Max:</b>	4
<b>Number of Observations:</b>	8
<b>Secchi Depth Mean:</b>	
<b>Secchi Depth Min:</b>	
<b>Secchi Depth Max:</b>	
<b>Number of Observations:</b>	0
<b>Trophic State Index Mean (Primary Site):</b>	40.9
<b>Trophic State:</b>	Mesotrophic



## Ecoregion Comparisons

Minnesota is divided into 7 ecoregions based on land use, vegetation, precipitation and geology. The MPCA has developed a way to determine the "average range" of water quality expected for lakes in each ecoregion.

From 1985-1988, the MPCA evaluated the lake water quality for chosen reference lakes. These reference lakes are not considered pristine, but are considered to have little human impact and therefore are representative of the typical lakes within the ecoregion. The "average range" refers to the 25<sup>th</sup> - 75<sup>th</sup> percentile range for data within each ecoregion.

Cass County is in the Northern Lakes and Forests Ecoregion.

**Kerr Lake** compares to the ecoregion average ranges as indicated below:



Total Phosphorus:	Within expected range, which indicates expected water quality for the area
Chlorophyll-a:	Better than expected range, which indicates better than expected water quality for the area
Secchi Depth:	N/A

## Trend Analysis Report

For detecting trends, a minimum of 8-10 years of data with 4 or more readings per season are recommended. Minimum confidence accepted by the MPCA is 90%. This means that there is a 90% chance that the data are showing a true trend and a 10% chance that the trend is a random result of the data. Only short-term trends can be determined with just a few years of data, because there can be different wet years and dry years, water levels, weather, etc., that affect the water quality naturally.

There is not enough historical data to perform trend analysis for total phosphorus, chlorophyll *a*, or Secchi depth on Kerr Lake.

### Individual Lake Data Summary

County	MN Lake ID	Lake	Site	Date Range	Data Source
Cass	11-0268-00	Kerr	3901 (Primary)	06-01-2008 - 09-30-2009	RMB Lab

Historical Mean						15.2	2.8	N/A	41	39	N/A	40
Date	Time	Site	Sampler	Lab Code	Data Source	TP ug/L	ChlA ug/L	Secchi Ft.	TSI Phos.	TSI ChlAL	TSI Secchi Ft.	TSI Avg.
<a href="#">6/8/2008</a>	1:00 PM	3901	Russ Toothman	78427	RMB Lab	26	3	N/A	51	41	N/A	46
<a href="#">6/29/2008</a>	8:00 AM	3901	Russ Toothman	80740	RMB Lab	26	4	N/A	51	44	N/A	48
<a href="#">7/27/2008</a>	7:30 PM	3901	Russ Toothman	83610	RMB Lab	8	2	N/A	34	37	N/A	36
<a href="#">9/9/2008</a>	6:30 PM	3901	Russ Toothman	87177	RMB Lab	8	2	N/A	34	37	N/A	36
Annual Mean						17	2.8	N/A	42	39	N/A	41
Date	Time	Site	Sampler	Lab Code	Data Source	TP ug/L	ChlA ug/L	Secchi Ft.	TSI Phos.	TSI ChlAL	TSI Secchi Ft.	TSI Avg.
<a href="#">5/31/2009</a>	10:00 AM	3901	Russ Toothman	98192	RMB Lab	15	4	N/A	43	44	N/A	44
<a href="#">6/21/2009</a>	9:30 AM	3901	Russ Toothman	101092	RMB Lab	20	3	N/A	47	41	N/A	44
<a href="#">8/9/2009</a>	8:30 AM	3901	Russ Toothman	107116	RMB Lab	10	3	N/A	37	41	N/A	39
<a href="#">9/13/2009</a>	1:00 PM	3901	Russ Toothman	110777	RMB Lab	9	1	N/A	36	31	N/A	34
Annual Mean						13.5	2.8	N/A	40	39	N/A	40