

# Little Webb 11-0387-00

MN Lake ID: 11-0387-00  
 County: Cass  
 Ecoregion: Northern Lakes and Forests  
 Major Drainage Basin: Upper Mississippi River  
 Latitude/Longitude: N/A  
 Water Body Type: Public Waters  
 Monitored Sites (Primary): 201  
 Monitored Sites (Secondary): N/A

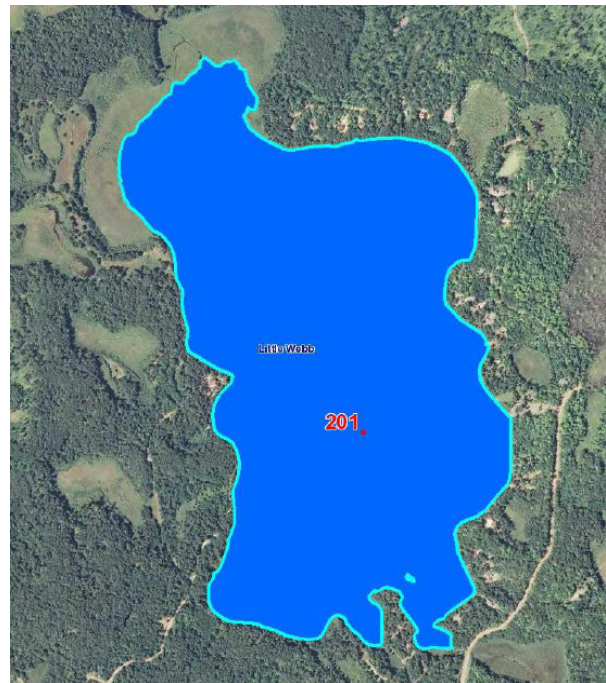
## Physical Characteristics

Surface area (acres): 226  
 Littoral area (acres): 67  
 % Littoral area: 29%  
 Max depth (ft): 37 (m): 11.3  
 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 201
<b>Total Phosphorus Mean:</b>	14.5
<b>Total Phosphorus Min:</b>	10
<b>Total Phosphorus Max:</b>	25
<b>Number of Observations:</b>	10
<b>Chlorophyll-a Mean:</b>	2.7
<b>Chlorophyll-a Min:</b>	1
<b>Chlorophyll-a Max:</b>	5
<b>Number of Observations:</b>	10
<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:</b>	40.8
<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.

**Little Webb 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 Little Webb Lake.

### Individual Lake Data Summary

County	MN Lake ID	Lake	Site	Date Range	Data Source
Cass	11-0387-00	Little Webb	201 (Primary)	06-01-2008 - 09-30-2009	RMB Lab

Historical Mean						14.5	2.7	N/A	42	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="#">6/9/2008</a>	7:30 AM	201	Gerald Swenson	78414	RMB Lab	15	1	N/A	43	31	N/A	37
<a href="#">6/29/2008</a>	7:45 PM	201	Gerald Swenson	80723	RMB Lab	12	2	N/A	40	37	N/A	38
<a href="#">7/27/2008</a>	4:30 PM	201	Gerald Swenson	83561	RMB Lab	14	3	N/A	42	41	N/A	42
<a href="#">8/17/2008</a>	8:00 PM	201	Gerald Swenson	85384	RMB Lab	14	2	N/A	42	37	N/A	40
<a href="#">9/7/2008</a>	7:30 PM	201	Gerald Swenson	86944	RMB Lab	16	4	N/A	44	44	N/A	44
Annual Mean						14.2	2.4	N/A	42	38	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="#">5/31/2009</a>	5:15 PM	201	Gerald Swenson	98176	RMB Lab	14	3	N/A	42	41	N/A	42
<a href="#">6/21/2009</a>	8:00 AM	201	Gerald Swenson	101436	RMB Lab	12	2	N/A	40	37	N/A	38
<a href="#">7/12/2009</a>	11:30 AM	201	Gerald Swenson	103438	RMB Lab	13	3	N/A	41	41	N/A	41
<a href="#">8/9/2009</a>	8:25 PM	201	Gerald Swenson	107125	RMB Lab	10	5	N/A	37	46	N/A	42
<a href="#">9/13/2009</a>	5:30 PM	201	Gerald Swenson	110812	RMB Lab	25	2	N/A	51	37	N/A	44
Annual Mean						14.8	3	N/A	42	40	N/A	41