

# Little Dixie Lake

Little Dixie Lake, located in Callaway County, is owned and managed by the Missouri Department of Conservation. This 200-acre lake has a watershed of 2,315 acres in size that is approximately 15% forest, 35% grassland and 35% row crop.



Location of Little Dixie Lake

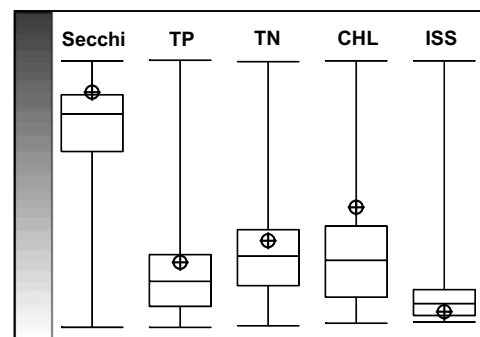
## Descriptive statistics for Little Dixie Lake – 2005

	Secchi (inches)	TP (ug/L)	TN (ug/L)	CHL (ug/L)	ISS (mg/L)
<b>Geometric Mean</b>	25	53	844	25.4	2.0
<b>Minimum</b>	16	32	600	10.8	1.2
<b>Maximum</b>	40	70	1130	50.1	2.8
<b>Number of Samples</b>	7	7	7	6	7

Geometric mean nutrient levels in 2005 were slightly higher than most Missouri lakes, while the chlorophyll geometric mean was higher than 75% of Missouri lakes. The higher chlorophyll levels relative to nutrients can be attributed to low ISS concentrations in Little Dixie Lake during 2005.

Low ISS would allow sunlight to penetrate the water column and promote algal growth.

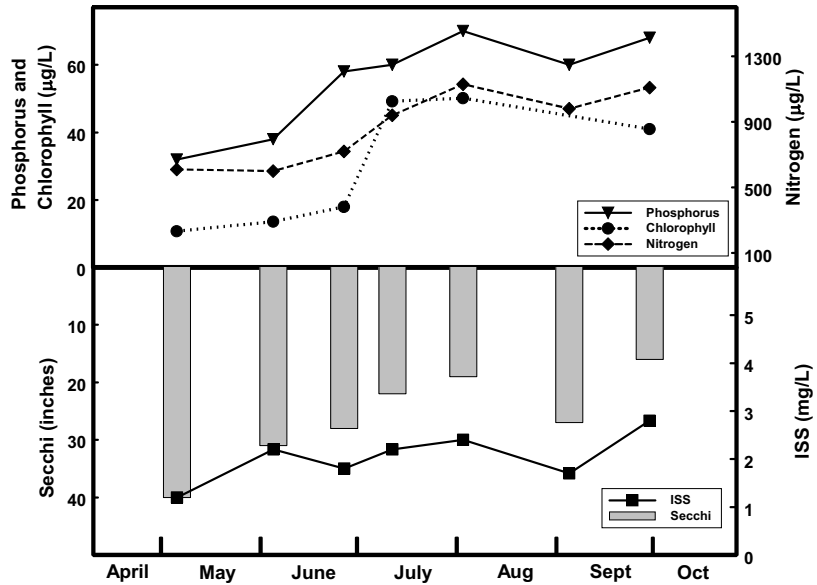
### Relative Rank for Little Dixie Lake



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## Seasonal fluctuations of parameters for Little Dixie Lake – 2005

Nutrients and chlorophyll increased during the sample season, and Secchi transparency declined with the increase in algal biomass.



## Chlorophyll and ISS trends in Little Dixie Lake

Median chlorophyll concentrations have increased in the years since 2002. Additionally, the maximum summer values have been comparatively high during the same period.

ISS concentrations were lower in 2005 than in recent years, and the range of values within the summer was smaller than previously observed in Little Dixie Lake.

