

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.

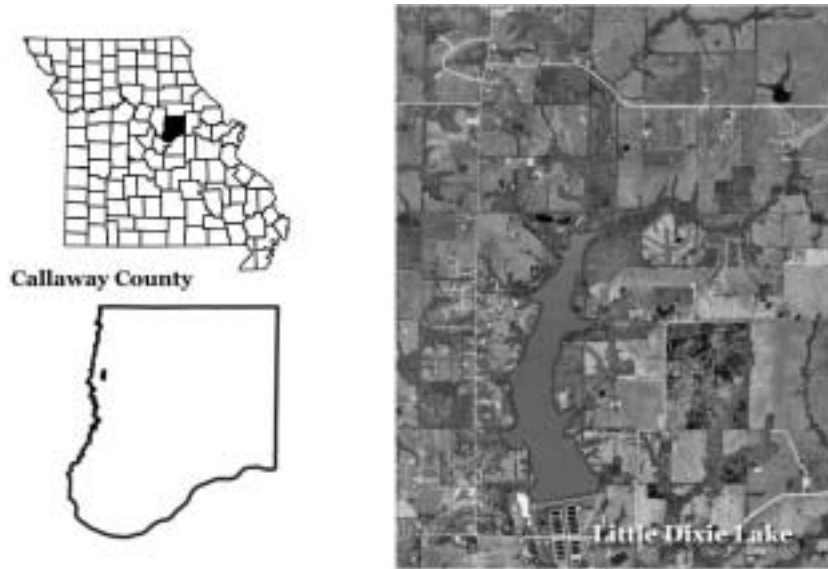


Figure 57. Location of Little Dixie Lake.

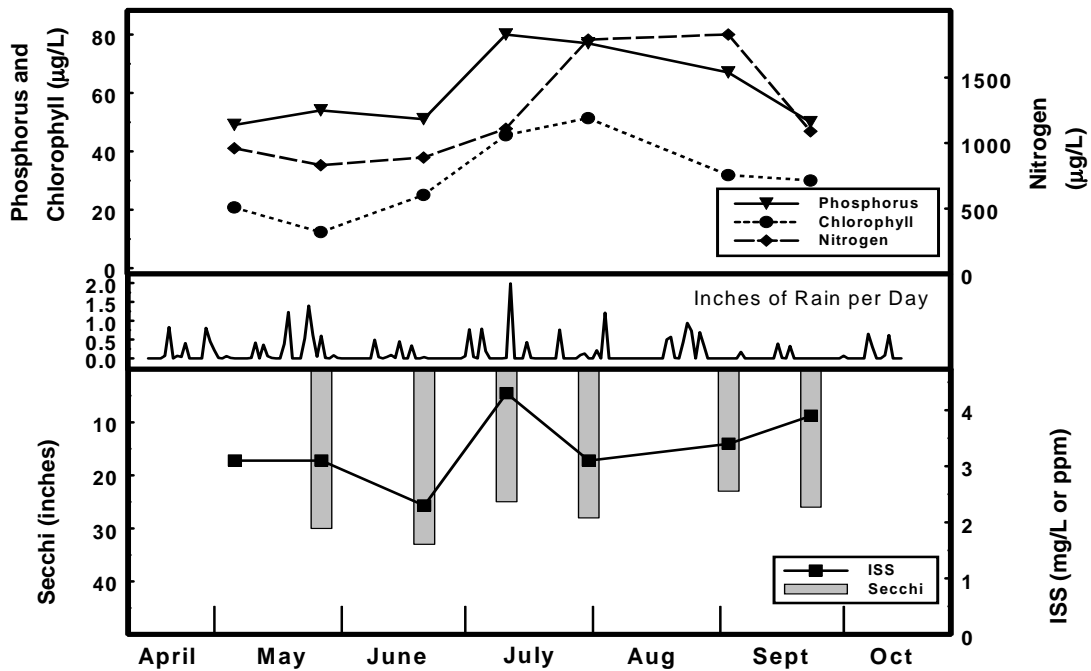


Figure 58. Seasonal fluctuations of parameters for Little Dixie Lake – 2004.

Table 17. Descriptive statistics for Little Dixie Lake – 2004.

	Secchi (inches)	TP (ug/L)	TN (ug/L)	CHL (ug/L)	ISS (mg/L)
Geometric Mean	27	60	1159	28.2	3.3
Minimum	23	49	830	12.3	2.3
Maximum	33	80	1830	51.3	4.3
Number of Samples	6	7	7	7	7

2004 Results

Figure 58 shows how the parameters nitrogen, phosphorus, algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Little Dixie Lake during 2004. The descriptive statistics appear in Table 17.

A brief description of the results:

- 2004 Secchi transparency values show low variability, ranging only 10 inches and never exceeding 3 feet.
- ISS concentrations were low, given the land use in the watershed of Little Dixie.
- Chlorophyll concentrations follow nutrient concentrations (especially phosphorus) throughout the 2004 sample season
- See page 7 in the introduction for more Secchi data from Little Dixie Lake.

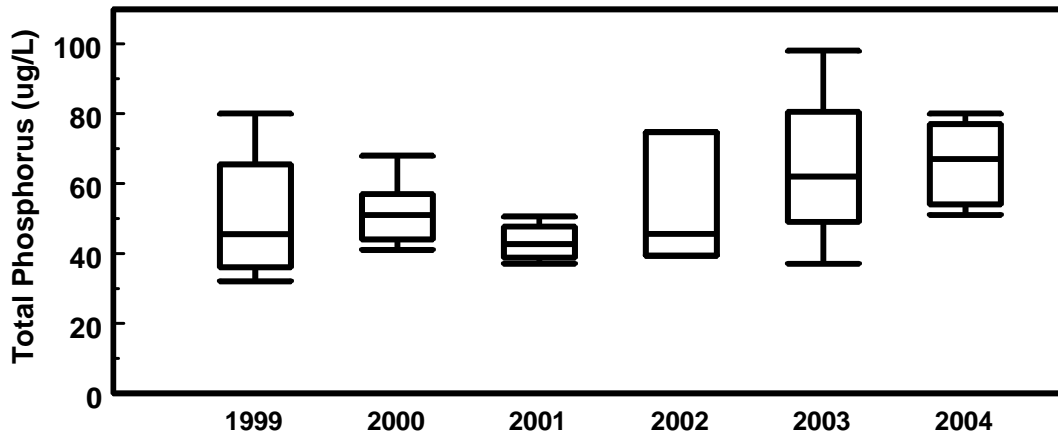


Figure 59. Phosphorus trends in Little Dixie Lake. No apparent trends. 2004 was comparable to other years.