

Butler City Lake

Butler City Lake is a 55 acre lake that provides drinking water for the City of Butler. There is very little forest cover in the large, 2,000 acre watershed. Agriculture and pasture/grass are the dominant land uses. Lake construction was completed in 1930.

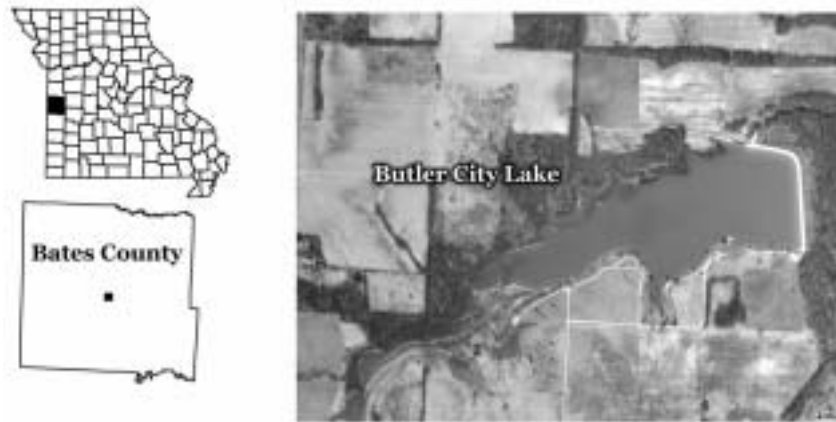


Figure 29. Location of Butler City Lake

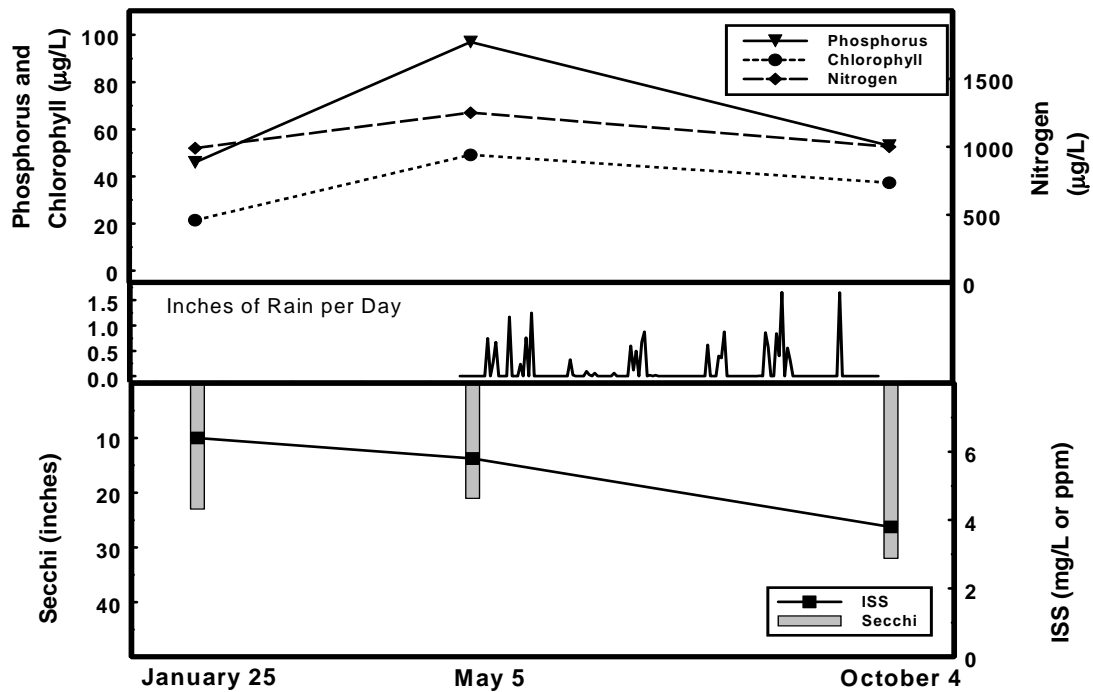


Figure 30. Seasonal fluctuations of parameters for Butler City Lake – 2004

Table 7. Descriptive statistics for Butler City Lake – 2004

	Secchi (inches)	TP (ug/L)	TN (ug/L)	CHL (ug/L)	ISS (mg/L)
Geometric Mean	25	62	1074	34.0	5.2
Minimum	21	46	990	21.4	3.8
Maximum	32	97	1250	49.1	6.4
Number of Samples	3	3	3	3	3

2004 Results

Figure 30 shows how the parameters nitrogen, phosphorus, algal chlorophyll, inorganic suspended solids and Secchi transparency varied in Butler City Lake during 2004. The descriptive statistics appear in Table 7.

A brief description of the results:

- The small number of samples (3) over such an extended time period (9 months) limits our ability to summarize water quality in Butler Lake in any meaningful way.
- Concentrations of nutrients and chlorophyll are high. This is expected, since the large watershed drains a lot of farmland.