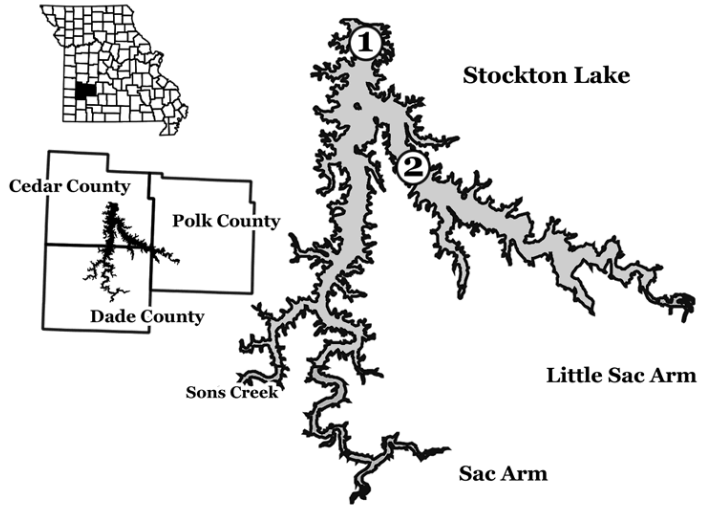


Stockton Lake

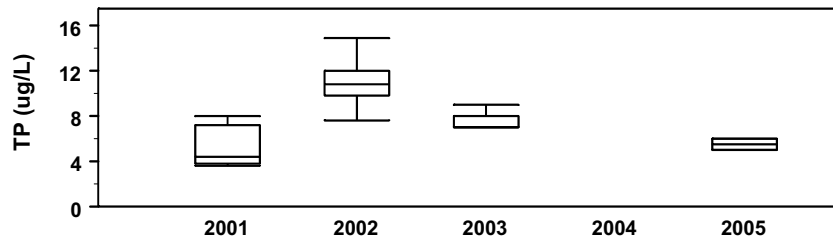
Stockton Lake is a U.S. Army Corps of Engineers lake, located in Cedar, Dade, and Polk counties. Stockton Lake was constructed by damming the Sac River, creating a large lake with a surface area of 25,000 acres and a watershed of 742,400 acres. The project was completed in 1969 and the lake had filled by 1971. 58% of the land in Stockton Lake’s watershed is covered by grassland/pasture and 28% is forested. Stockton Lake is an important recreational resource.



Location of Stockton Lake and its sample sites

Phosphorus trends in Stockton Lake, Site 1

Phosphorus concentrations in 2005 were comparable to other years. No samples were collected at this site in 2004.



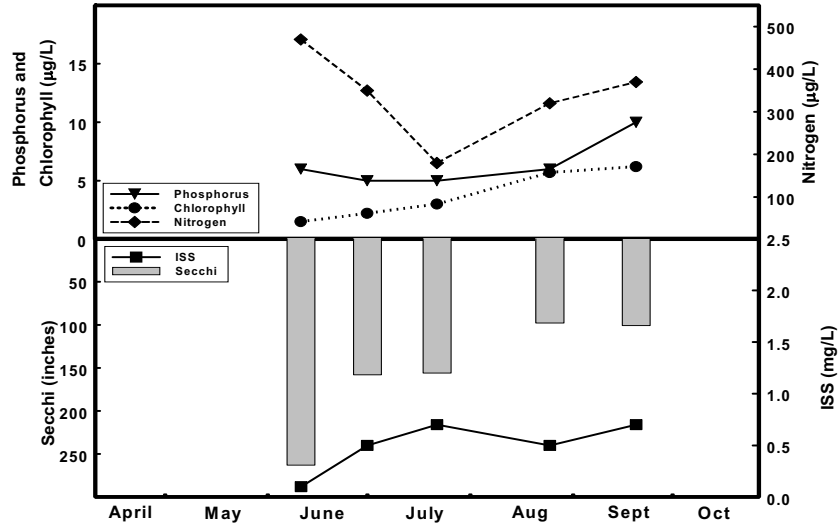
Secchi trends in Stockton Lake, Site 2

Secchi transparency values in 2005 were comparable to other years. No water quality trends are apparent in Stockton Lake.



Stockton Lake, Site 1

Seasonal fluctuations of parameters for Stockton Lake, Site 1 – 2005

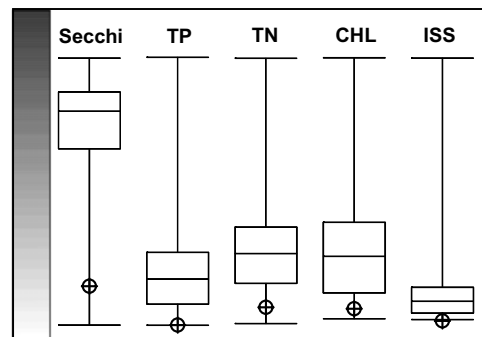


Descriptive statistics for Stockton Lake, Site 1 – 2005

	Secchi (inches)	TP (ug/L)	TN (ug/L)	CHL (ug/L)	ISS (mg/L)
Geometric Mean	145	6	323	3.2	0.4
Minimum	98	5	180	1.5	0.1
Maximum	263	10	470	6.2	0.7
Number of Samples	5	5	5	5	5

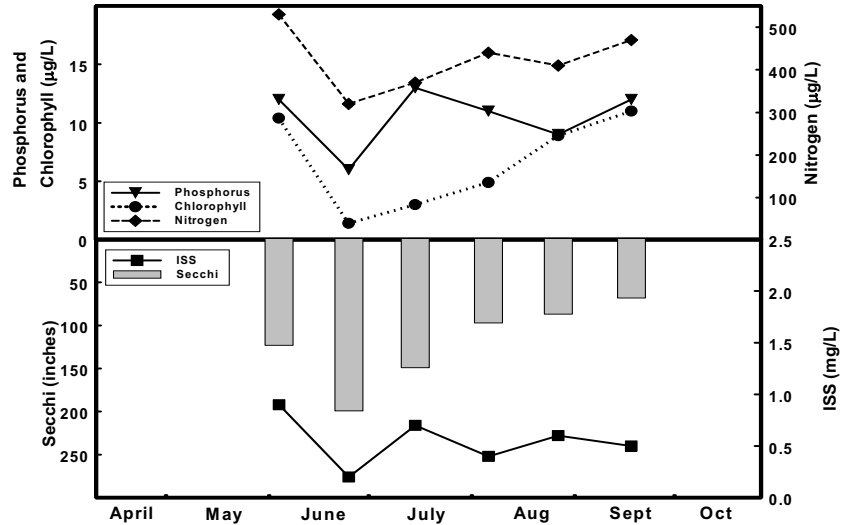
Low concentrations of nutrients and chlorophyll necessitated the use of a small scale for the graphs, thereby increasing the appearance of within season variability. Secchi transparency values decreased by 170 inches as the season progressed. This decrease can be attributed to the slight increase in chlorophyll concentrations. Stockton Lake water quality is among the best 25% of Missouri lakes.

Relative Rank for Stockton Lake, Site 1



Stockton Lake, Site 2

Seasonal fluctuations of parameters for Stockton Lake, Site 2 – 2005



Descriptive statistics for Stockton Lake, Site 2 – 2005

	Secchi (inches)	TP (ug/L)	TN (ug/L)	CHL (ug/L)	ISS (mg/L)
Geometric Mean	113	10	418	5.3	0.5
Minimum	68	6	320	1.4	0.2
Maximum	199	13	530	11.0	0.9
Number of Samples	6	6	6	6	6

While Site 2 has more nutrients and chlorophyll than site 1, the concentrations are still very low for a Missouri lake. Nutrient and sediment (ISS) concentrations are lower than is found in 75% of Missouri lakes. The Secchi transparency is greater than observed in 75% of Missouri lakes.

Relative Rank for Stockton Lake, Site 2

