

Stockton Lake, Site 1

Cedar County, Dade County and Polk County

2007 DATA



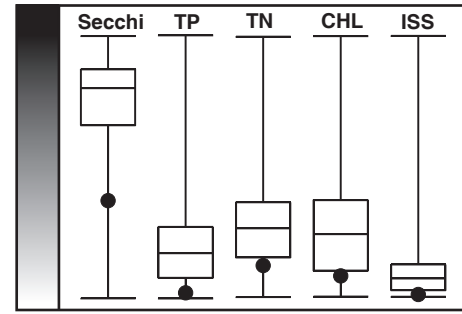
Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
5/12	187	9	740	4.5	0.8
6/2	112	8	630	4.1	1.8
6/21	118	8	490	5.3	1.2
7/16	78	11	320	5.1	1.2
8/11	110	10	330	3.7	0.5
8/27	81	13	370	8.6	1.4
9/27	100	15	370	9.2	0.3
Mean	108	10	440	5.5	0.9

2007 SUMMARY

During 2007, Stockton Lake was sampled seven times at sites 1 and 2 and four times at Site 3.

Secchi transparency ranged from 15 1/2 feet in May to 6 1/2 feet in July. The transparent water is attributable to low concentrations of sediments and chlorophyll. Stockton Lake has fewer nutrients, chlorophyll and sediments than 75% of Missouri's lakes. Fewer than 25% of Missouri lakes have such high water clarity.

While phosphorus concentrations increased as the season progressed, they did so at very low levels, ranging just 7 ug/L from low to high. Nitrogen concentrations followed an opposite pattern, starting the season with the high value and decreasing until the end of the season.



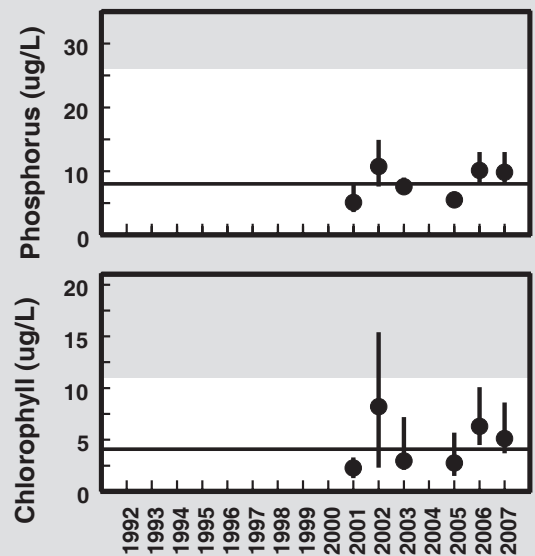
Relative Rank Graph
See page 11 for details

TRENDS

The long-term mean phosphorus value at the dam is 8 ug/L, and annual means have only varied from a low of 5 ug/L to a high of 11 ug/L, well below the proposed nutrient criteria value of 26 ug/L.

Mean chlorophyll concentrations have varied from a high of 8.2 ug/L (2002) to a low of 2.3 ug/L (2001). This narrow range of variability is well below the proposed chlorophyll limit of 10.9 ug/L.

The past two years have shown phosphorus and chlorophyll concentrations above the long-term mean, though there is no apparent trend.



Stockton Lake, Site 2

Cedar County, Dade County and Polk County

2007 DATA

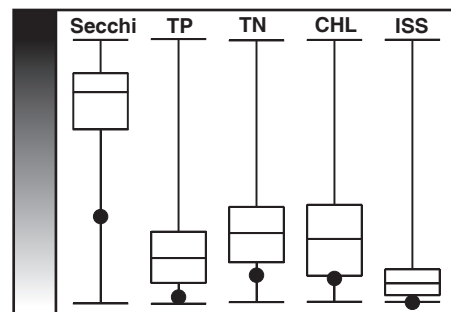


Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
5/12	258	7	690	2.1	0.1
6/2	152	8	590	4.7	0.9
6/21	93	12	440	13.4	1.4
7/16	80	12	330	5.7	1.2
8/4	117	12	320	4.2	0.8
8/27	83	16	320	8.9	0.8
9/27	94	12	300	9.7	0.1
Mean	115	11	410	6.0	0.5

2007 SUMMARY

Stockton Lake, Site 2 was sampled seven times from May 12 through September 27, 2007. This site is located near the State Park Marina.

Water quality at Site 2 was nearly identical to the dam site (Site 1). Water clarity was slightly higher at this site than at the dam, largely due to the May 12 measurement of more than 21 feet (6 feet deeper than measured at the dam that day).

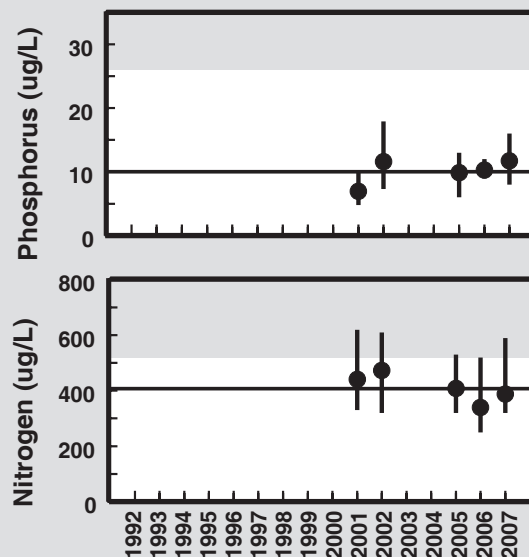


Relative Rank Graph
See page 11 for details

TRENDS

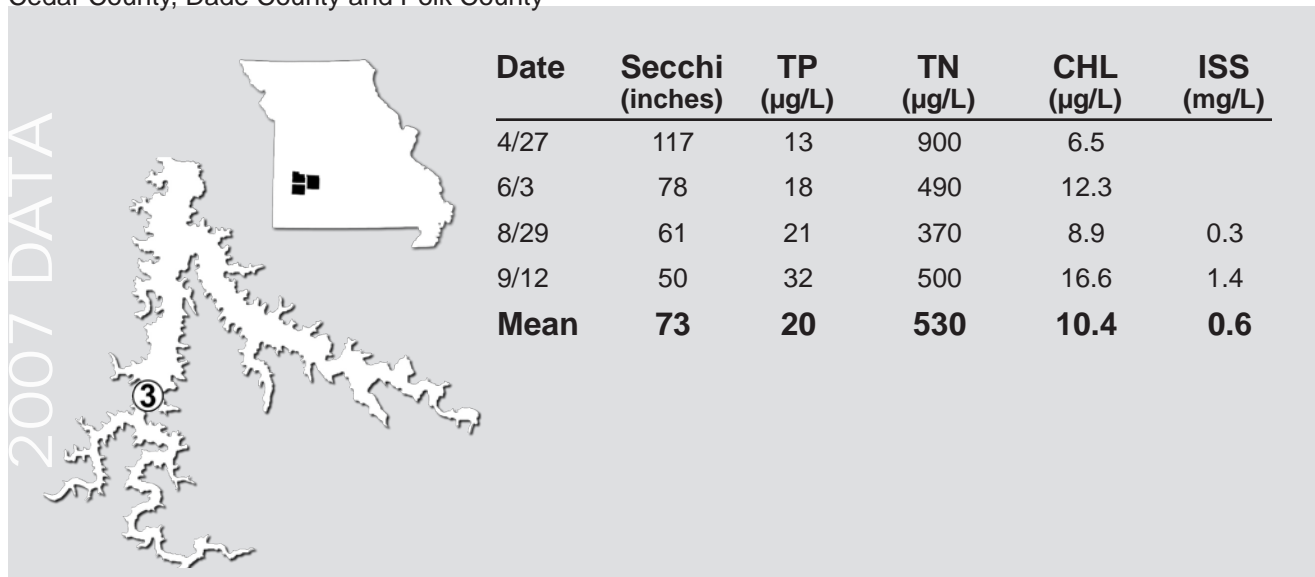
In the five years of data collections, mean phosphorus concentrations at Site 2 have not exceeded the nutrient criteria proposed for the dam at Stockton Lake. While nitrogen concentrations occasionally exceed the criteria, seasonal mean values have not. While nutrient criteria would not apply to this site at Stockton Lake, the values applicable to the dam are shown for reference.

No trends are apparent.



Stockton Lake, Site 3

Cedar County, Dade County and Polk County

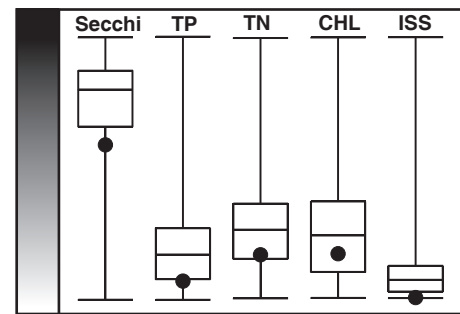


2007 SUMMARY

Four samples were collected at Site 2, which is in the main lake near the Mutton Creek Marina. The first two ISS values are missing due to an error made by LMVP staff.

Secchi transparency values averaged roughly three feet less than at the other two Stockton Lake sites. Nonetheless, water clarity was still greater than found in more than three fourths of Missouri's lakes.

Phosphorus and chlorophyll concentrations were nearly double the values found at the other two Stockton sites, but were still well below the statewide median. Nitrogen and sediment (ISS) concentrations were comparable to the other two sites.



Relative Rank Graph
See page 11 for details

TRENDS

Phosphorus and sediment (ISS) values have been below the four-year mean for the last two seasons. Concentrations of nutrients, chlorophyll (not shown) and sediments were comparatively high in 2003, and values have remained much lower since then.

While sediment values have decreased each sampling season, it is too soon to declare the presence of a trend. Additionally, there were only two ISS values in 2007.

