

Simpson Lake



2010 DATA

St. Louis County
Latitude: 38.5571

Longitude: -90.4691

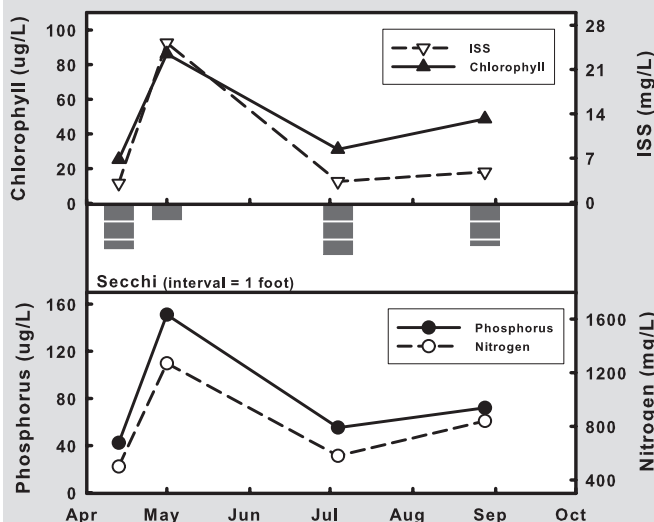
Date	4/13	5/1	X	X	7/4	X	8/28	X	Mean
Secchi (inches)	30	11			34		28		24
TP (µg/L)	42	151			55		72		71
TN (µg/L)	500	1270			580		840		746
CHL (µg/L)	25.3	86.2			31.2		48.7		42.7
ISS (mg/L)	3.0	25.2			3.3		4.8		5.9

Simpson Lake is a shallow reservoir along a side channel of the Meramec River. During heavy rains, flow through the lake increases dramatically and water tops the lake's low dam. In this way, Simpson Lake can behave like a lake or a river, depending upon the Meramec River stage.

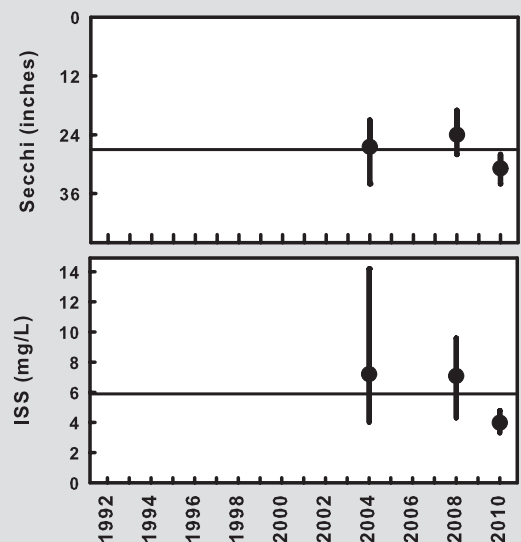
The 4 samples collected in 2010 mark the third year of sampling at Simpson Lake. Heavy rains were recorded 48 hours prior to the May 1 sample event, and the associated runoff and increased river flow are likely responsible for the high concentrations of suspended sediment and nutrients and low water clarity observed. Water quality was comparable among the remaining 3 sample dates.

Secchi transparency values were higher in 2010 than in either of the previous years. The improved water clarity can be at least partially attributed to the lower concentrations of suspended sediment in the lake. The 2010 mean ISS value was just over 42% lower than observed in either previous sampling season.

2010 GRAPHS



TREND GRAPHS



See pages 10-11 for help interpreting graphs