

Simpson Lake



2011 DATA

St. Louis County
Latitude: 38.5571

Longitude: -90.4691

Date	5/9	X	6/5	X	7/17	8/7	X	9/19	Mean
Secchi (inches)	21		31		34	32		18	26
TP (µg/L)	85		60		56	68		98	72
TN (µg/L)	1040		790		680	710		980	828
CHL (µg/L)	94.3		45.2		25	61.3		66.6	53.4
ISS (mg/L)	3.6		2.8		2.1	2.4		7.0	3.2

Simpson Lake was sampled on 5 occasions during 2011.

Abundant algal biomass characterized Simpson Lake in 2011. Chlorophyll concentrations were high throughout the season, with a maximum value of 94.3 µg/L observed on May 9. This maximum value was higher than found in 95% of 2011 LMVP samples.

Phosphorus concentrations were similarly high in Simpson Lake in 2011. The seasonal mean value was higher than most LMVP lakes in 2011. The seasonal mean nitrogen value was closer to Missouri's average value.

Due to the high algal biomass, water clarity was low, averaging just over 2 feet for the season.

Monitoring on Simpson Lake began in 2004, though the lake has not been sampled every year since. The St. Louis area experienced wet springs in both 2004 and 2008, likely contributing to the high concentrations of suspended sediment and phosphorus as well as the low water clarity in those years. Water quality was very similar in 2010 and 2011. No trends are apparent.

