

Creve Coeur Lake

Saint Louis County



2009 DATA

Latitude: 38.7222

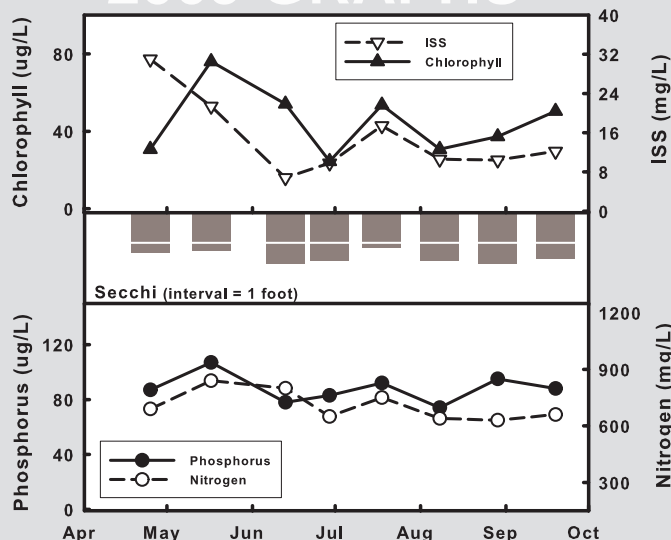
Longitude: -90.4911

Date	4/25	5/17	6/13	6/29	7/18	8/8	8/29	9/19	Mean
Secchi (inches)	16	15	20	19	14	19	20	18	17
TP (µg/L)	87	107	78	83	92	74	95	88	87
TN (µg/L)	690	840	800	650	750	640	630	660	704
CHL (µg/L)	30.7	76.0	54.1	24.5	53.6	30.7	37.3	50.4	41.9
ISS (mg/L)	31.0	21.4	6.8	9.8	17.4	10.6	10.4	12.2	13.4

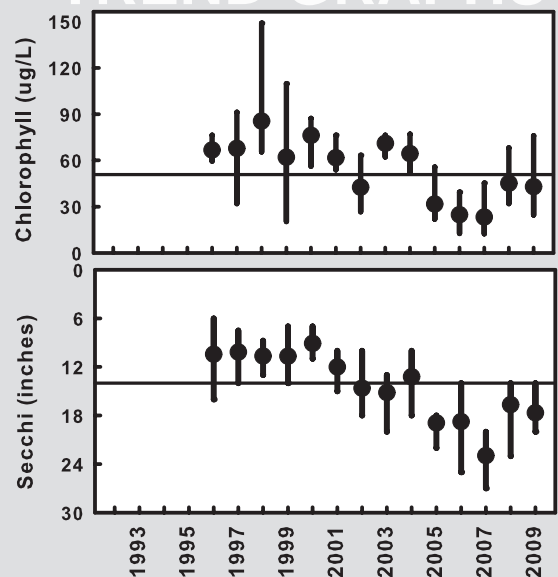
The nutrients phosphorus and nitrogen were stable in Creve Coeur Lake during the 2009 sample season, displaying low variability relative to most Missouri lakes. Measures of water clarity were low and stable in 2009 due to moderate to high levels of inorganic suspended sediment (ISS) and algal biomass (as estimated by chlorophyll). Interestingly, ISS and chlorophyll were both more variable than the nutrients, though the amount of variation was not out of the norm for a Missouri water body. Usually there is an opposing pattern for chlorophyll and ISS, with changes in ISS resulting in opposite fluctuation in chlorophyll due to the impact ISS has on light availability. This did not seem to be the case for Creve Coeur Lake in 2009.

Summertime data from 2009 indicate that there was a continuation of the trend for lower nutrients, chlorophyll and ISS concentrations in Creve Coeur Lake which started in 2005. Lower levels of ISS and chlorophyll have led to an increase in water clarity during the last five summers. Mean chlorophyll values during the last two summers have been higher than those from the period 2005-2007 (12-20 ug/L higher), yet still below the long-term average.

2009 GRAPHS



TREND GRAPHS



See pages 10-11 for help interpreting graphs