Spring Fork Lake

Site 1

2011 DATA

Pettis County
Latitude: 38.5678 Longitude: -93.2429

Date	4/29	5/16	6/7	6/28	X	8/16	8/29	9/25	Mean
Secchi (inches)	22	22	21	20		18	16	17	19
TP (µg/L)	138	93	138	237		210	193	128	155
TN (µg/L)	1580	1110	2030	1890		1610	1790	1460	1612
CHL (µg/L)	10.9	11.5	62.4	55.0		92.3	183.4	63.3	46.4
ISS (mg/L)	8.7	5.7	6.0	3.3		5.2	4.4	5.4	5.3

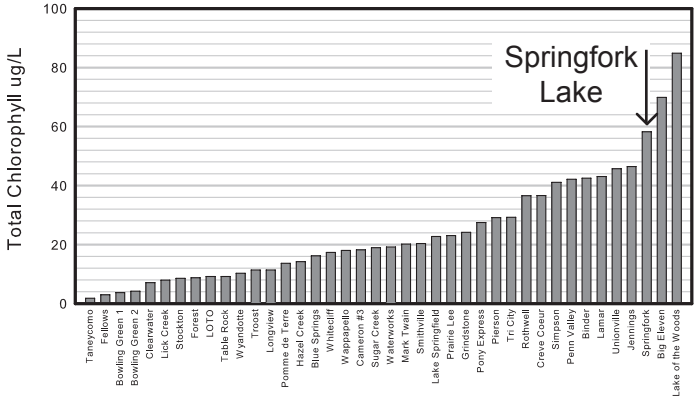
Water clarity was consistently low in Spring Fork Lake during 2011, never exceeding 2 feet. Nutrient concentrations were quite high. The seasonal mean phosphorus value was more than four times higher than the 2011 statewide mean and the seasonal mean nitrogen was almost three times higher.

Abundant nutrients led to abundant algal biomass; the chlorophyll concentrations were more than triple the statewide mean and the third highest of LMVP's public lakes in 2011. Among the 805 chlorophyll samples analyzed in 2011, the August 29 sample from Spring Fork Site 1 was third highest. Spring Fork Lake has a lot of algae.

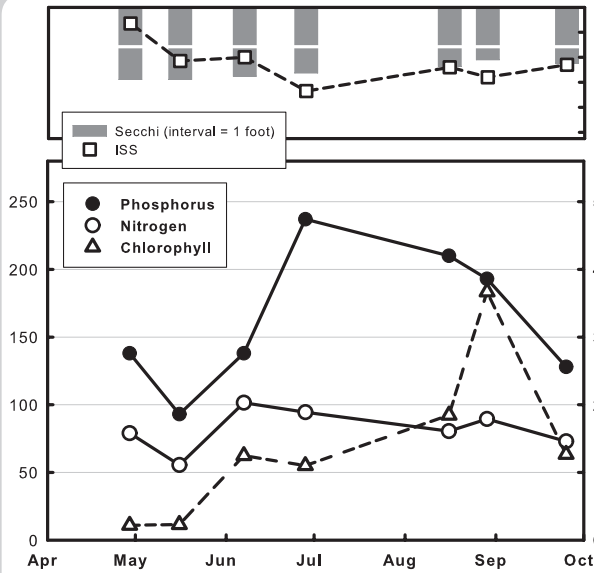
Suspended sediment concentrations are somewhat high, roughly double the 2011 statewide average. Without the shading provided by the sediment, the concentrations of algal chlorophyll would likely be much higher.

Long-term data suggest a possible increase of nitrogen concentrations over time. Data otherwise suggest no trends.

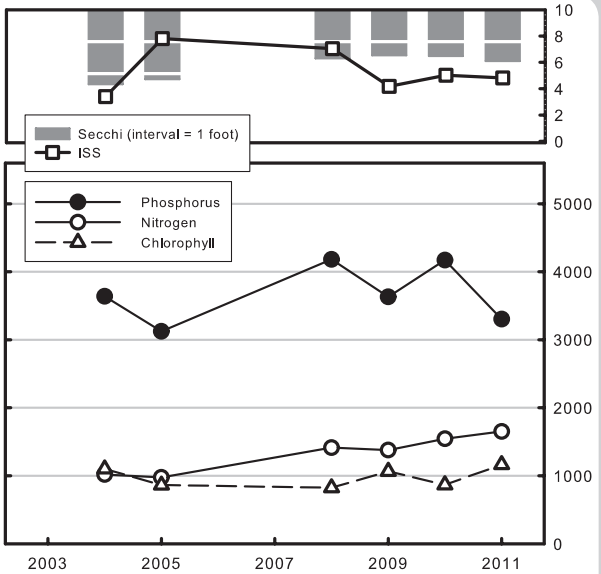
2011 Summer Mean Chlorophyll Values



2011 GRAPHS



TREND GRAPHS



See page 3 for help interpreting graphs

Spring Fork Lake

Site 2

2011 DATA

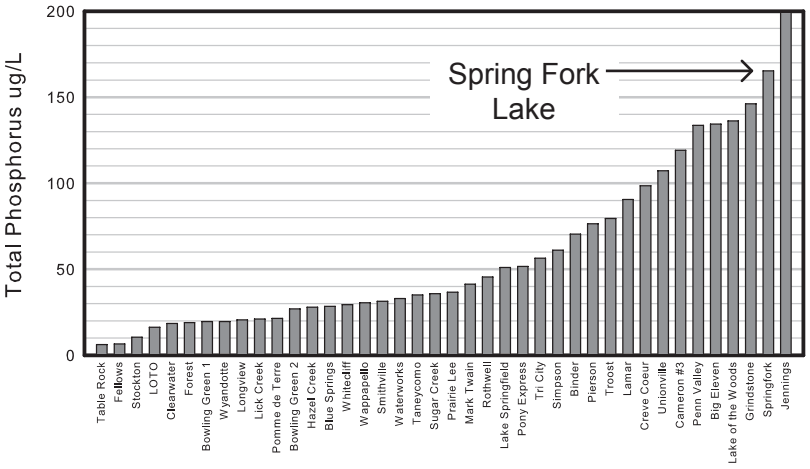
Pettis County
Latitude: 38.5605 Longitude: -93.2440

Date	4/29	5/16	6/7	6/28	X	8/16	8/29	9/25	Mean
Secchi (inches)	21	22	21	20		17	20	12	19
TP (µg/L)	137	99	120	124		227	179	146	143
TN (µg/L)	1560	1210	1890	1220		1410	1410	1620	1458
CHL (µg/L)	11.8	7.6	38.5	46.9		78.6	67.8	83.7	35.6
ISS (mg/L)	6.1	9.0	6.7	3.4		8.3	6.6	10.6	6.9

Conditions at Site 2 are very similar to Site 1. Site 2 had slightly more suspended sediment, and lower concentrations of chlorophyll and nutrients. Water clarity was, on average, identical.

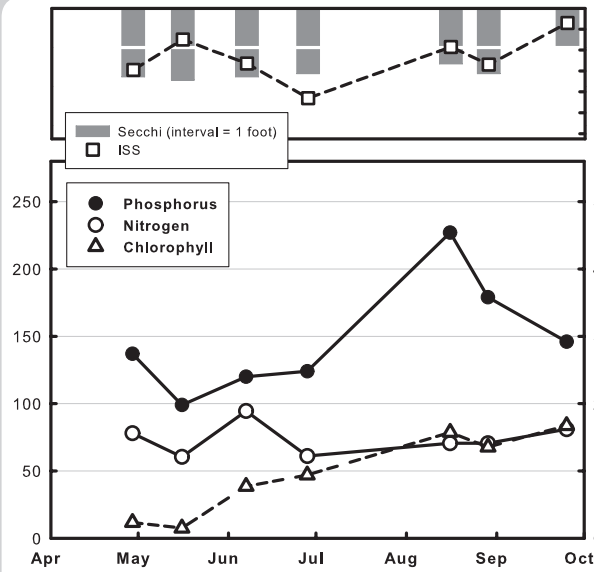
Trend data are also very similar to Site 1.

2011 Summer Mean Phosphorus Values

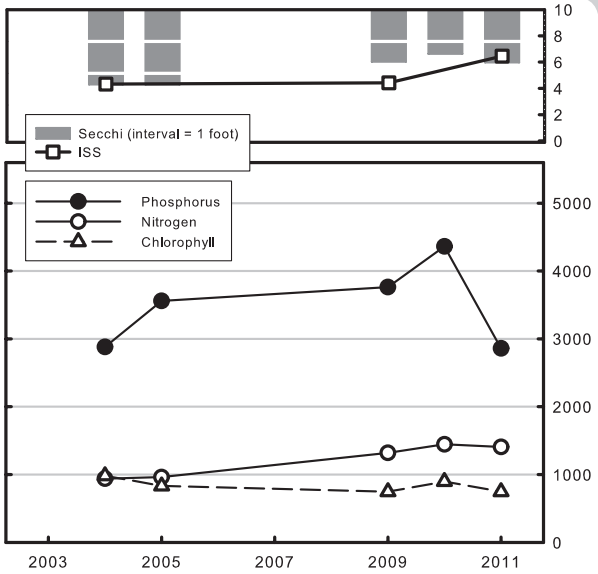


Spring Fork Lake Sites

2011 GRAPHS



TREND GRAPHS



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