

Rothwell Lake



2011 DATA

Randolph County
Latitude: 39.4184

Longitude: -92.4616

Date	4/29	5/17	6/14	6/28	7/18	8/10	8/29	9/21	Mean
Secchi (inches)	62	76	48	39	26	34	24	33	40
TP (µg/L)	36	29	42	48	53	52	55	55	45
TN (µg/L)	1130	630	730	1060	1210	1080	1620	1470	1070
CHL (µg/L)	3.9	8.9	29.3	50.4	57.5	37.7	84	37.5	27.7
ISS (mg/L)	2.8	2.0	4.2	1.3	1.0	1.1	1.8	1.5	1.8

Water clarity in Rothwell Lake in 2011 ranged from 5 feet in April to 2 feet in August.

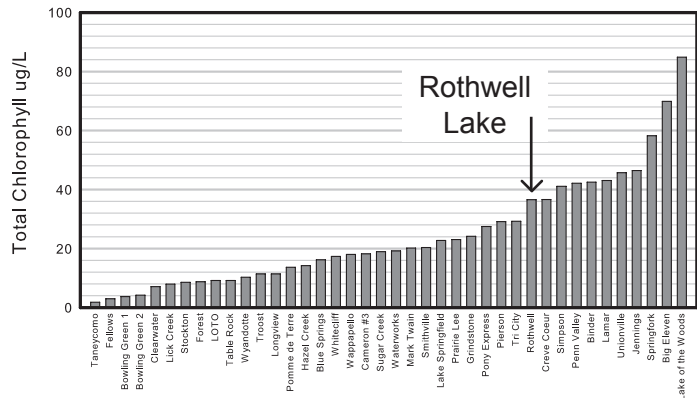
In a typical reservoir, there is approximately 2 to 3 times as much phosphorus as chlorophyll. Of the 8 samples collected in 2011, 3 had higher concentrations of chlorophyll than phosphorus. These data imply algae blooms dominated the summer and were responsible for the loss of water clarity.

Nutrient concentrations in Rothwell Lake during 2011 were greater than the Missouri average and generally increased during the sampling season. Suspended sediment values were at the low end of Missouri's range.

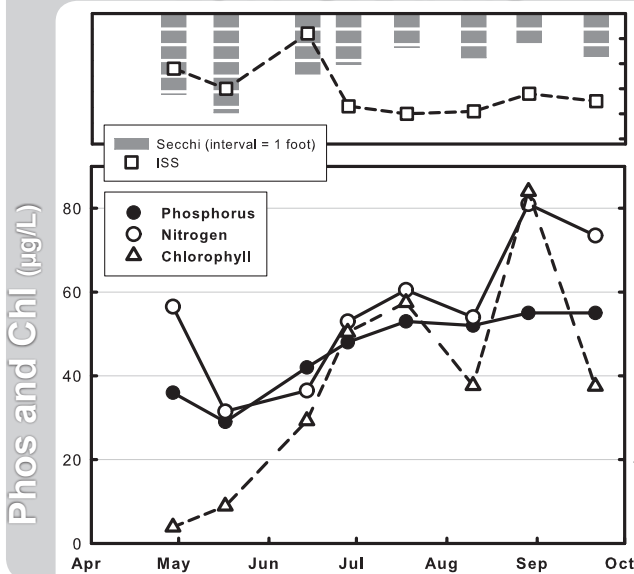
Rothwell Lake has been sampled

since 2003, and the data indicate no water quality trends across that period. Water clarity has been, on average, in the 3 to 4 foot range. Suspended sediment values have varied between 1 and 2 mg/L, somewhat low for Missouri reservoirs.

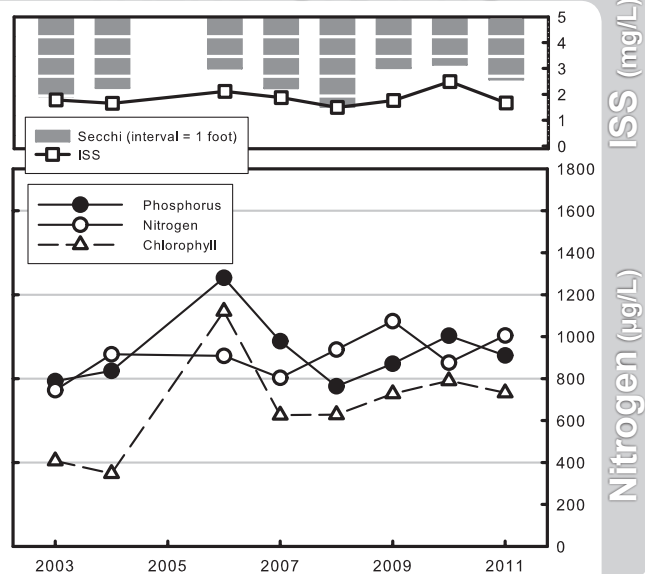
2011 Summer Mean Chlorophyll Values



2011 GRAPHS



TREND GRAPHS



See page 3 for help interpreting graphs