

Waterworks Lake



2011 DATA

Randolph County
Latitude: 39.4162

Longitude: -92.4646

Date	4/29	5/17	6/14	6/28	7/18	8/10	8/29	9/21	Mean
Secchi (inches)	56	61	41	51	54	36	22		44
TP (µg/L)	40	29	36	26	22	42	51	37	34
TN (µg/L)	720	600	670	620	680	1100	1380	1060	816
CHL (µg/L)	6.3	8.2	14.9	13.5	11.0	44.5	62.0	27.4	17.5
ISS (mg/L)	3.2	2.2	2.6	1.3	0.5	1.2	1.9	1.1	1.5

During the 2011 season nutrient and chlorophyll concentrations were relatively stable May through July, while samples collected in August and September showed elevated values (especially nitrogen and chlorophyll). Increases in algal chlorophyll were not simply a function of elevated nutrient levels as the ratio of chlorophyll to phosphorus (a way of gauging how effective algae are at using nutrients) was much higher during the last three samples. The average chlorophyll-phosphorus ratio for this period was 1.01, a value that represents extremely efficient use of nutrients by the algae. In contrast, the ratio for the first five samples averaged 0.37, a value that is normal for Missouri lakes.

ies from one year to the next, there are no identifiable trends observed in Waterworks Lake.

Waterworks Lake has been sampled in eight of the last nine years. While water quality var-

