

Waterworks Lake

Randolph County

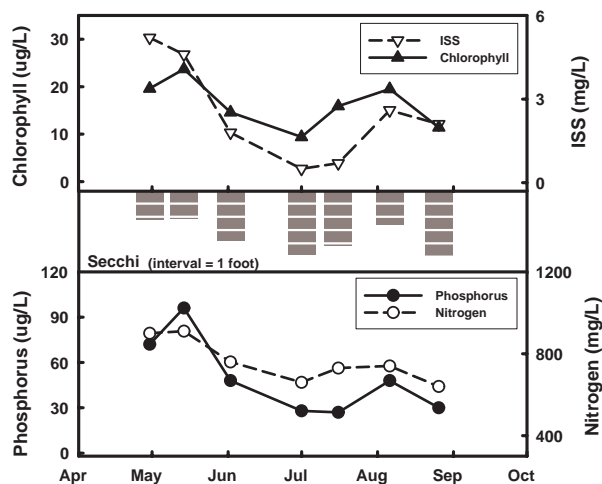
2008 DATA



Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/30	27	72	900	19.6	5.2
5/14	26	96	910	23.7	4.6
6/2	46	48	760	14.6	1.8
7/1	58	28	660	9.4	0.5
7/16	50	27	730	15.9	0.7
8/6	31	48	740	19.5	2.6
8/26	60	30	640	11.4	2.1
Mean	40	45	757	15.6	1.9

2008 SUMMARY

All of the parameters displayed similar seasonal patterns of high concentrations early in the sample season, followed by a mid-summer depression and a secondary peak in early August (Secchi transparency behaved in a contrary fashion). The late season increases in nutrients and inorganic suspended solids may be attributed to the >12 inches of rain that fell between the July 16th and August 6th sample dates. This quantity of rain would increase runoff into the lake from the watershed. Erosional runoff would not only carry inorganic suspended solids into the lake, but also nutrients that are attached to soil material.



TRENDS

During the last three years the geometric mean inorganic suspended solids values have been lower than those measured during the 2003 and 2004 seasons (summer geometric means, May 15 to September 15). It should be noted that differences are relatively small (≈ 1 mg/L) and may not truly reflect changes in inorganic suspended solids levels in the lake as much as timing of sample collection. None of the other parameters suggest changes in water quality in Waterworks Lake.

