

Grindstone Reservoir

Dekalb County

2008 DATA



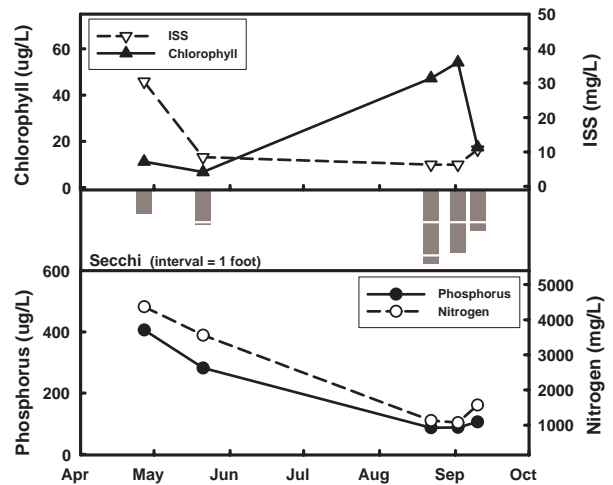
Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/27	9	406	4370	11.2	30.4
5/21	13	282	3560	6.7	8.5
8/22	27	87	1130	47.3	6.3
9/2	23	88	1070	54.1	6.3
9/10	15	106	1570	17.4	10.7
Mean	16	156	1968	20.2	10.2

2008 SUMMARY

Five samples were collected at Grindstone Reservoir in 2008. However, no samples were collected during the bulk of the season with June and July not being sampled at all. April rainfall was 3 inches above normal in the area, which explains the early season high values for ISS and nutrients.

Three end-of-season samples were collected during a short, 3 week period from 8/22 to 9/10, allowing the opportunity to examine some short-term variability in the lake. There was very little rainfall for three weeks prior to the 8/22 sample, and one inch fell between 8/22 and 9/2. However, between 9/2 and 9/10 there was a total of 3.5 inches of rainfall. Nutrient and sediment concentrations increased, but chlorophyll concentrations dropped dramatically. This drop in chlorophyll is likely due to the return of ISS concentrations in excess of 10mg/L and the subsequent shading of algae by particulates in the water. Overall, Grindstone Reservoir appears to shift between “brown” and “green” as the sediments settle out and algal growth resumes.

2008 nutrient concentrations were comparable to the long-term mean values at Grindstone Reservoir. Despite lower than average ISS concentrations, the 2008 mean Secchi transparency was slightly lower than the long-term mean value.



TRENDS

