

# Binder Lake

Cole County

2007 DATA

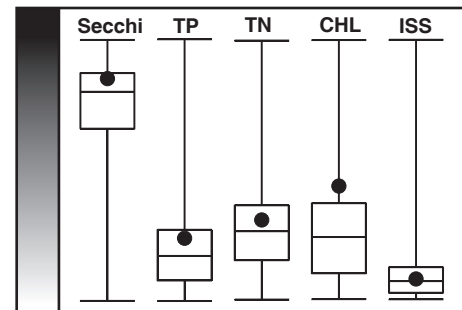


Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
5/13	32	47	750	17.7	3.9
6/1	34	55	800	30.2	2.1
7/9	25	56	900	29.5	4.6
<b>Mean</b>	<b>30</b>	<b>53</b>	<b>810</b>	<b>25.1</b>	<b>3.4</b>

2007 SUMMARY

The three samples collected on Binder Lake in 2007 suggest fairly stable water quality during the summer. The increase in chlorophyll (which was relatively small by Missouri standards) between May and June, with no substantial change in the nutrient concentrations, may reflect the on-set of thermal stratification, which would lead to a thinning of the mixed zone.

The mean nutrient levels in 2007 are above the statewide median, but within the inter-quartile range. The mean chlorophyll value of 25.1 µg/L is above the long-term average of 75% of Missouri reservoirs, indicating that algae were efficient in the use of nutrients during 2007.



Relative Rank Graph  
See page 11 for details

TRENDS

Phosphorus and nitrogen values have been stable since the lake was first monitored in 2001. Along with low year-to-year variability, Binder shows low within year variability. Comparison of long-term mean nutrient levels to proposed nutrient criteria (horizontal line and white box, respectively) indicated that phosphorus exceeds the proposed criteria, while nitrogen levels are at the criterion level.

