

Binder Lake



2011 DATA

Cole County

Latitude: 38.60028

Longitude: -92.3028

Date	4/28	5/18	6/7	7/2	7/23	8/13	9/3	9/24	Mean
Secchi (inches)	27	30	28	29	29	26	26	24	27
TP (µg/L)	59	60	53	85	75	70	86	87	71
TN (µg/L)	720	720	760	1190	1100	880	970	900	891
CHL (µg/L)	18.4	31.6	22.2	48.7	59.0	50.2	58.1	58.8	39.9
ISS (mg/L)	4.7	4.2	3.2	3.3	1.1	1.9	2.8	2.3	2.7

Suspended sediment concentrations decreased through the 2011 season in Binder Lake. In contrast, chlorophyll concentrations increased 3-fold from April to September. These contrasting patterns explain why Secchi transparency was stable in 2011, varying by only 6 inches. Nutrient concentrations also increased through the season but less dramatically than chlorophyll.

Long-term mean water clarity varies seasonally with the mean concentration of suspended sediment. While phosphorus was higher in 2009 and 2011 than in previous years, there are no apparent water quality trends at Binder Lake.

