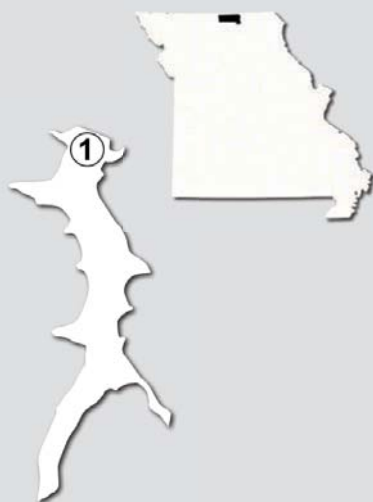


Mahoney Lake (Unionville City Lake), Site 1

Putnam County

2006 DATA

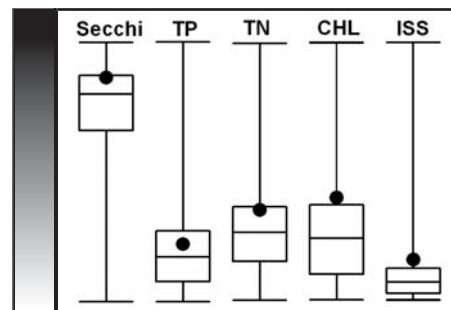


Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/24	30	52	910	18.3	7.6
5/15	24	63	990	28.2	10.0
6/5	34	44	850	13.2	3.7
6/26	36	44	950	15.8	4.8
7/17	43	41	820	17.2	2.2
8/7	29	52	990	48.1	5.4
8/29	22	53	950	23.9	9.0
9/18	20	45	890	31.6	8.9
10/9	24	48	790	25.7	9.3
Mean	28	49	902	22.9	6.1

2006 SUMMARY

Mahoney Lake benefited from a full sampling season in 2006, with 9 samples collected from April 24 through October 9. During this time the concentrations of phosphorus and nitrogen were very stable, with phosphorus varying by 50% and nitrogen varying by less than 25% of the mean.

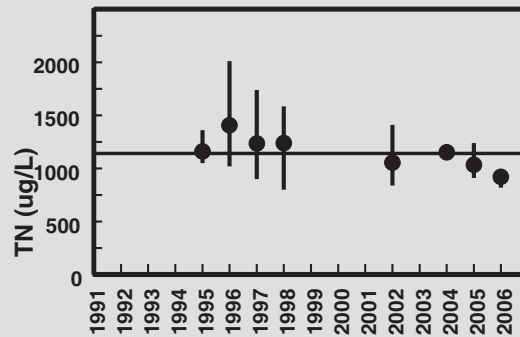
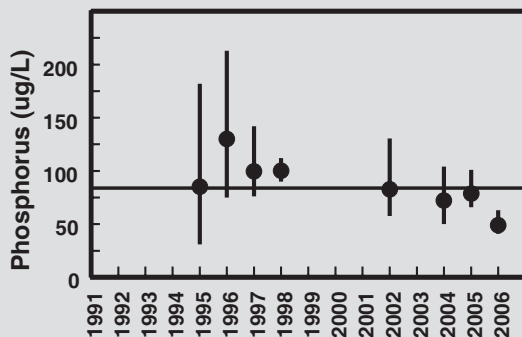
Despite the low variability, nutrient concentrations were still above the median for Missouri lakes. Chlorophyll and sediment concentrations were greater than observed in 75% of Missouri lakes. Secchi transparency values were lower than observed in 75% of Missouri lakes.



Relative Rank Graph
See page 11 for details

TRENDS

Nutrient concentrations were lower in 2006 than in previous years. Additionally, there was little difference between the observed maximum and minimum concentrations of both phosphorus and nitrogen in 2006. Other parameters showed typical variability.



Mahoney Lake (Unionville City Lake), Site 2

Putnam County

2006 DATA

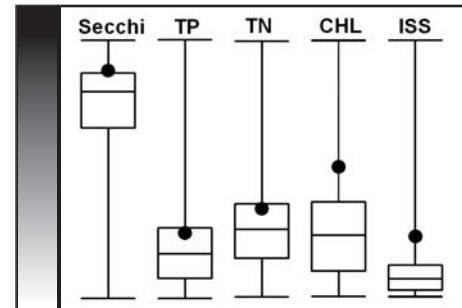


Date	Secchi (inches)	TP (µg/L)	TN (µg/L)	CHL (µg/L)	ISS (mg/L)
4/24	31	49	880	23.0	6.3
5/15	24	62	870	27.7	11.1
6/5	32	59	940	16.8	7.0
6/26	24	64	1020	35.5	12.5
7/17	21	60	940	29.5	8.3
8/7	29	61	930	51.9	7.5
8/29	19	57	890	29.2	12.7
9/18	24	46	790	38.8	9.5
10/9	27	41	770	21.1	7.9
Mean	25	55	889	28.9	8.9

2006 SUMMARY

Site 2 is located uplake from the dam, though the distance between the two sites is not great enough to discern any appreciable difference in water quality from the dam site.

A comparison of the two sites monitored on Mahoney Lake shows that chlorophyll, nutrient and sediment mean values are only slightly higher at site 2 compared to site 1.



Relative Rank Graph
See page 11 for details

TRENDS

Mean chlorophyll concentrations appear to have increased at site 2 since 2004. Secchi transparency values remain at or near the overall mean. Similar to the dam site, nutrient concentrations at site 2 show very little variability (graph not shown).

