

## Waterworks Lake

Glacial Plains Region

Waterworks Lake is located in Rothwell Park in Moberly. At 21 acres, this lake is smaller than the nearby Rothwell Lake. The watershed of Waterworks Lake is 418 acres.

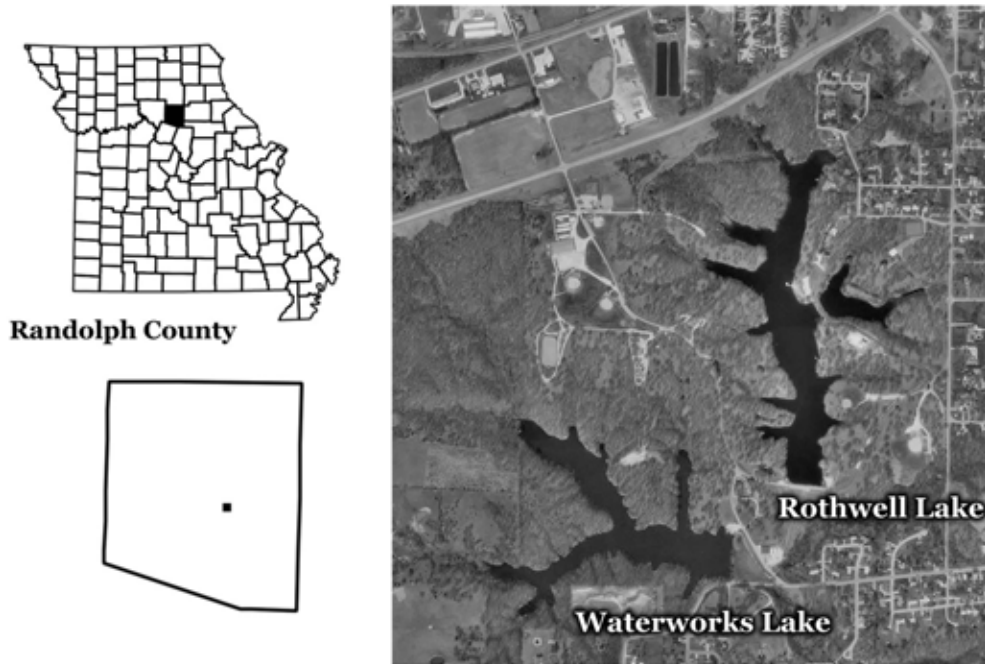


Figure 87. Location of Waterworks Lake.

- 8 samples were collected between May 15 and October 21
- Geometric mean concentrations of chlorophyll, nitrogen and phosphorus were similar to those of Rothwell Lake (see page 69)
- Geometric mean Secchi transparency values were slightly lower at Waterworks Lake than at Rothwell Lake
- Chlorophyll concentrations varied nearly 20-fold
- Results from August and September suggest the presence of an algal bloom, as chlorophyll concentrations were higher than phosphorus concentrations
- Waterworks Lake is comparable to other lakes in the Glacial Plains region
- 2003 was the first year that Waterworks lake was sampled for the LMVP

Table 41. Descriptive statistics for Waterworks Lake – 2003.

	<b>Secchi (inches)</b>	<b>TP (<math>\mu\text{g/L}</math>)</b>	<b>TN (<math>\mu\text{g/L}</math>)</b>	<b>CHL (<math>\mu\text{g/L}</math>)</b>	<b>ISS (<math>\text{mg/L}</math>)</b>
# of Samples	7	8	8	8	7
Median	39	37	805	20.7	2.1
Minimum	28	26	530	3.8	0.7
Maximum	65	52	990	75.2	7.5
Geometric Mean	40	37	792	16.8	2.0

Samples were collected between May 15 and October 21

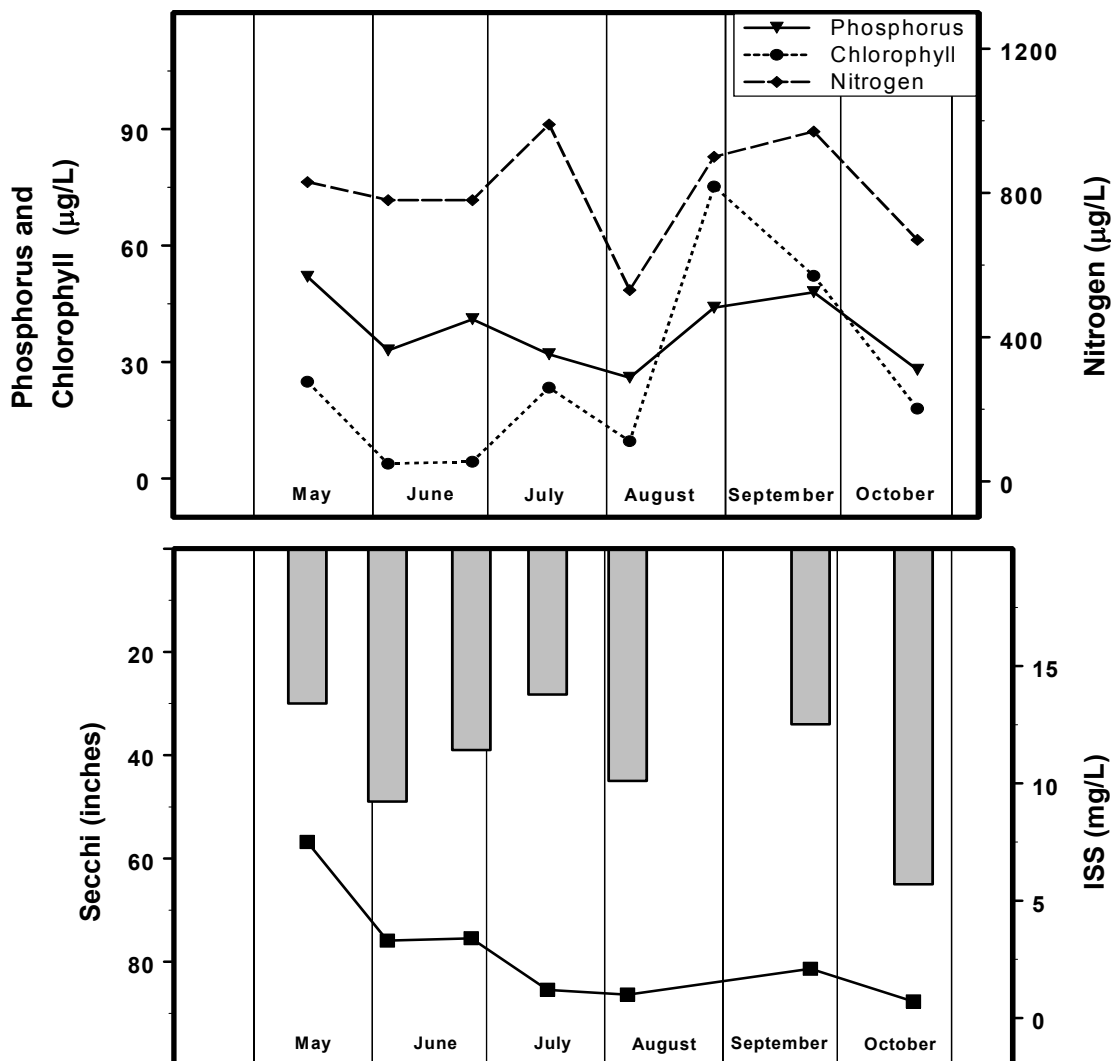


Figure 88. Seasonal fluctuations of parameters for Waterworks Lake – 2003. Bars represent Secchi, line represents ISS.