

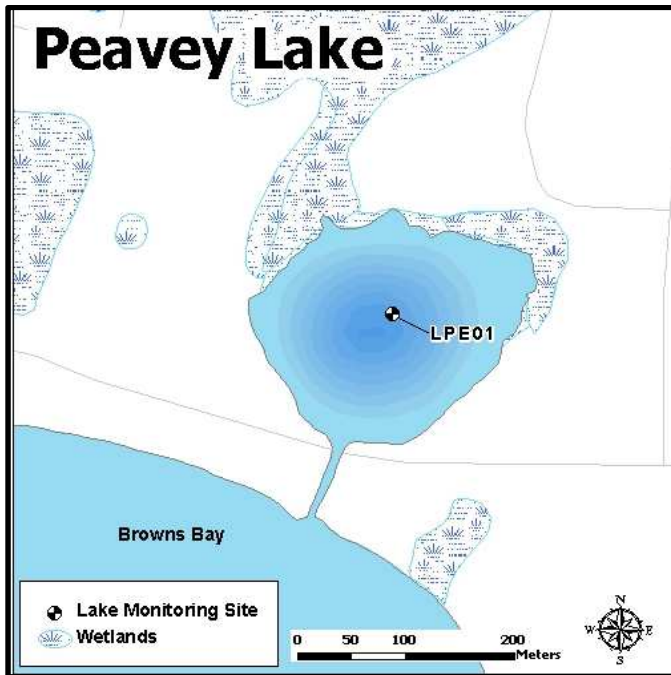
Peavey Lake (DNR ID 27-0138-00)

MCWD Site ID: LPE01

Sample Location GPS Coordinates: 44.96460N, -93.53590W

Surface Area (acres): 9

Max. Depth (ft): 63



Site Information

Lake Minnetonka is a class 2B lake protected for aquatic life and recreation. Peavey Lake is located near the cities of Wayzata and Long Lake. The lake is connected by channel to the northwestern area of Lake Minnetonka and is adjacent to Browns Bay. Water quality information is available beginning in 1974. MCWD staff have been monitoring the lake on a bi-weekly basis from the time of ice out (April) to the time of fall mixing (mid-October) since 2006. A YSI multi-probe meter was used to measure dissolved oxygen (DO), temperature ($^{\circ}\text{C}$), pH, and specific conductivity ($\mu\text{S}/\text{cm}$) from the water surface and at each meter depth to the bottom. Water samples were collected at 1 meter below the water surface as well as one meter from the bottom. Surface and bottom sample parameters analyzed included total phosphorus (TP), total dissolved phosphorus (TDP), soluble reduced phosphorus (SRP), total nitrogen (TN), total dissolved nitrogen (TDN), NO_3/NO_2 , and ammonia (NH_4). Chlorophyll-*a* surface concentrations were also analyzed and measurements of Secchi disc depth were recorded.

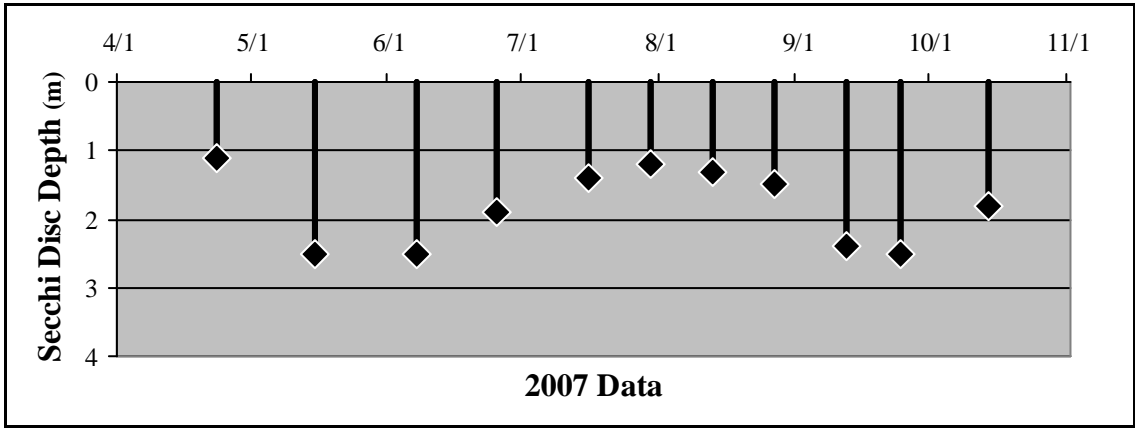
2007 Data Summary

- Secchi disc depth was above the standard (1.2 m) for all measurements except the first of season in late April. The months of June and July saw declines in depth while August and September saw increases in depth.
- Chlorophyll-*a* concentrations saw an initial decrease from above to below the standard (15 ppb) and stayed below through June. A dramatic increase was seen in mid-July and then a gradual decline occurred through the rest of the season, which dropped below the standard in late September.
- TP concentrations were well above the standard (40 ppb) throughout the season. Concentrations varied above and below 100 ppb after peaking in late June.

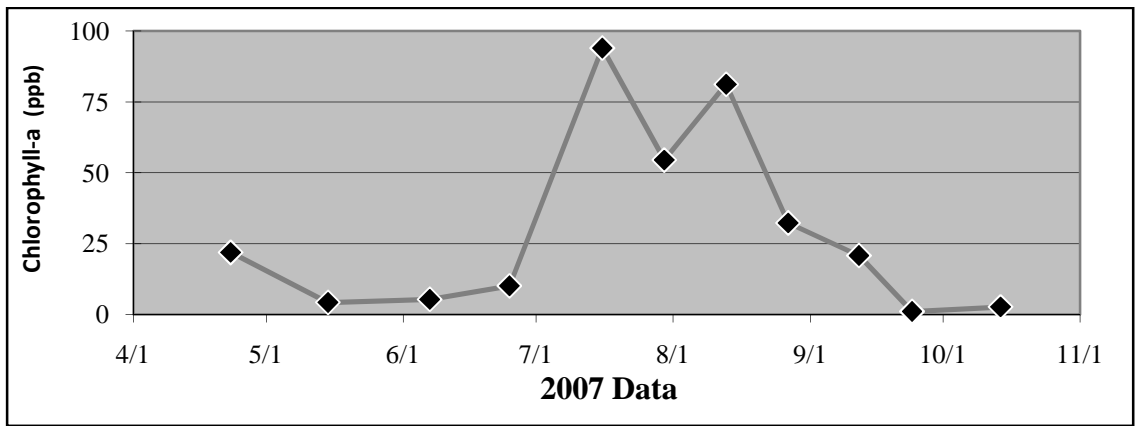
Table 2.17 Peavey Lake 2007 Summary

2007 Summer (May-September) Water Quality Summary				
Parameter	Range	Mean	Grade	TSI value *
Secchi Depth (m)	1.2 - 2.5	1.8	C	51
Surface TP ($\mu\text{g/L}$)	52 - 277	110.9	D	72
Chlorophyll- <i>a</i> ($\mu\text{g/L}$)	1.1 - 81.2	32.0	C	65
		Overall Score	C-	63

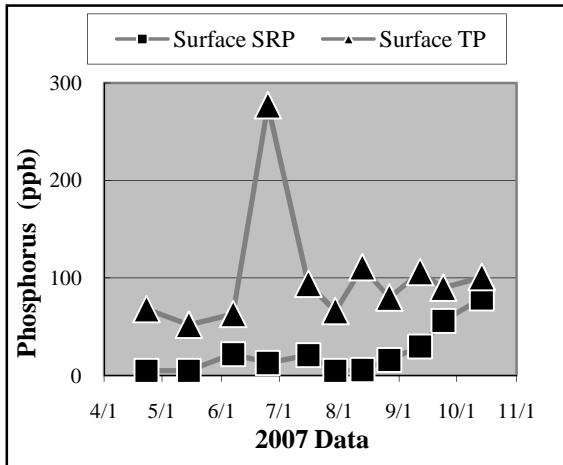
**excludes May Data*



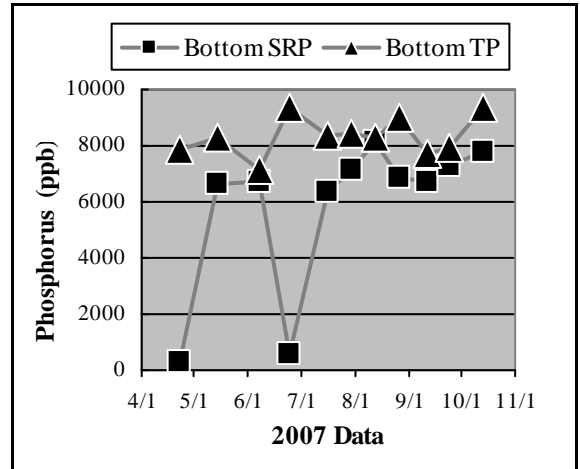
a.



b.

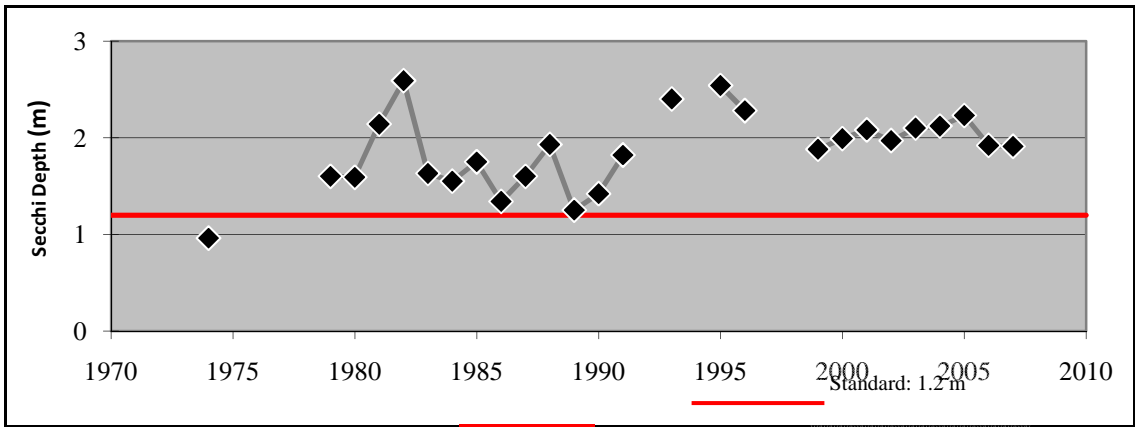


c.

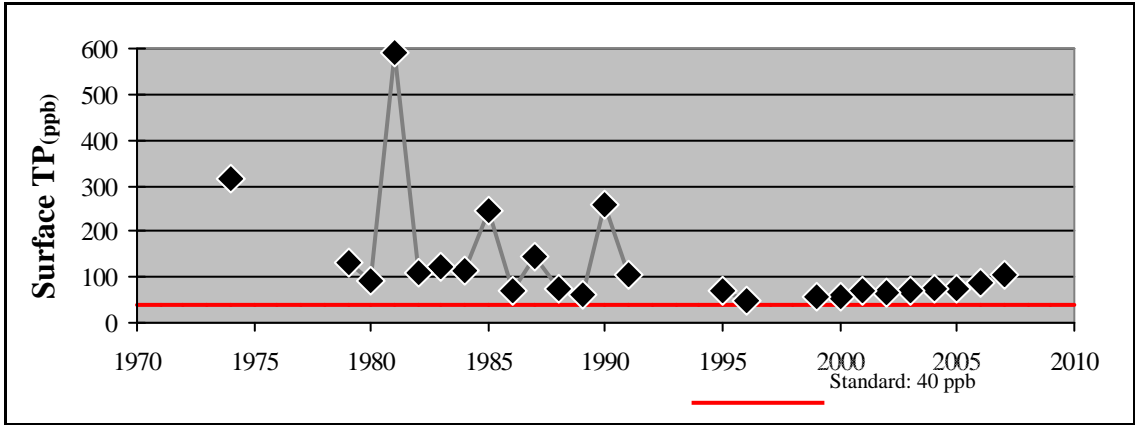


d.

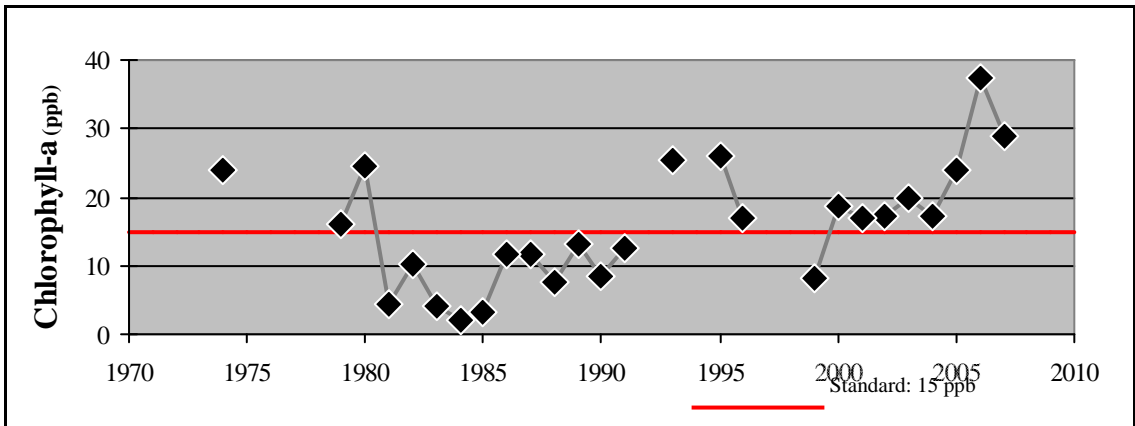
Figure 2.19 (a-d) Peavey Lake
2007 Grade: C-



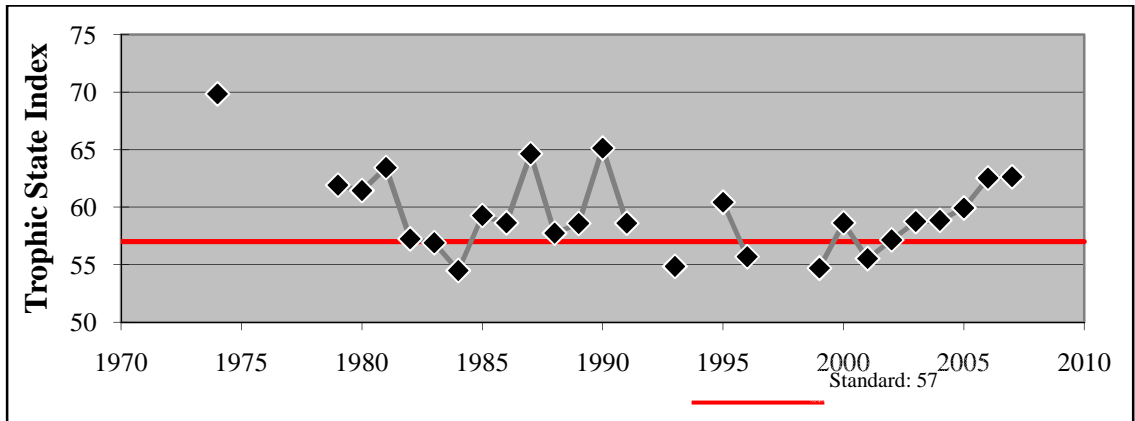
e.



f.



g.



h.

Figure 2.19 (e - h) Peavey Lake - Summer Mean Values