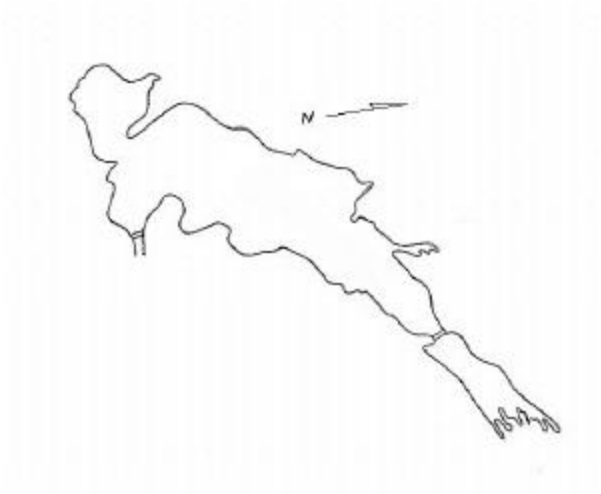
Lake Algonquin



Location

Pond Number:	050276A
Watershed:	Upper Hudson River
County:	Hamilton
Topographic Quadrangle:	Lake Pleasant

Sample Site

Latitude:	43° 23.454’
Longitude:	74° 17.802’

Morphometry

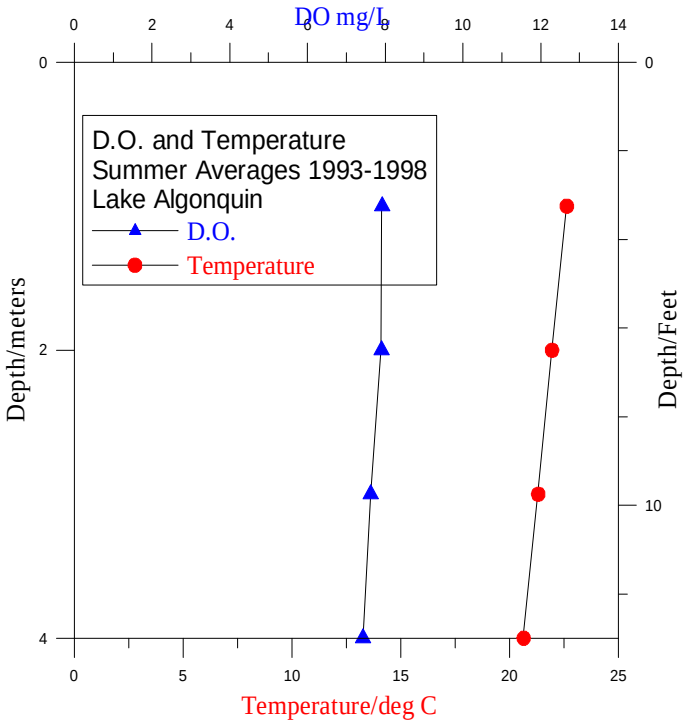
Surface Area:	224 Ac.
Mean Depth:	5 Ft.
Maximum Depth:	11 Ft.
Volume:	10,473 Ac./Ft.
Watershed Area:	7,280 Ac.
Hydraulic Retention Time:	0.04 Yr.
Shoreline Length:	6.1 Mi.
Elevation:	981 Ft.
Water Quality Classification:	AA
Trophic State:	Mesotrophic

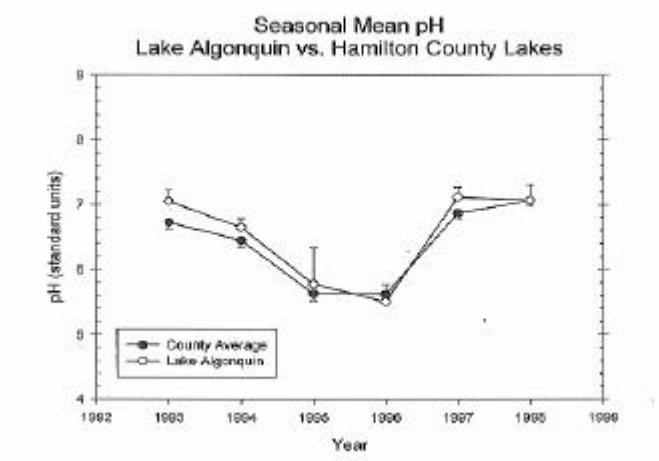
Temperature

Lake Algonquin was not thermally stratified during the month of August in any of the study years (1993 - 1998). The lake was warmest in August 1995, when the surface temperature was 25.5° C. The lake was coolest in August 1994 and 1997, when the surface temperature was 23° C. The thermal profiles for August were relatively similar each year.

Dissolved Oxygen

Lake Algonquin was oxygenated throughout the water column during the month of August in each of the study years (1993 - 1998). Dissolved oxygen concentrations were above 6 mg/L each August. In general, the highest dissolved oxygen concentrations occurred in August 1998 and the lowest occurred in August 1997. The dissolved oxygen profiles were relatively similar each year.

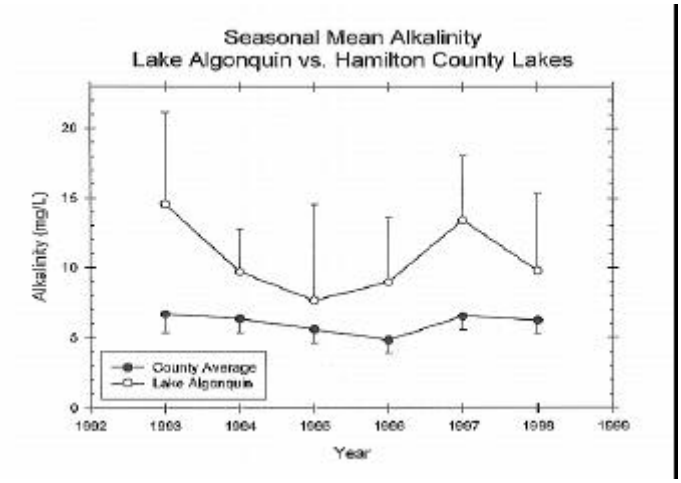




pH

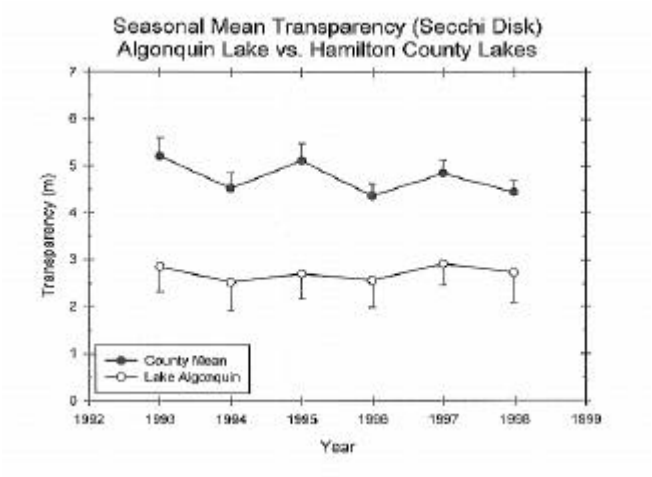
The pH trend for Lake Algonquin was comparable to the county mean trend, with a low of 5.51 in 1996, and a high of 7.12 in 1997.

Lake Algonquin



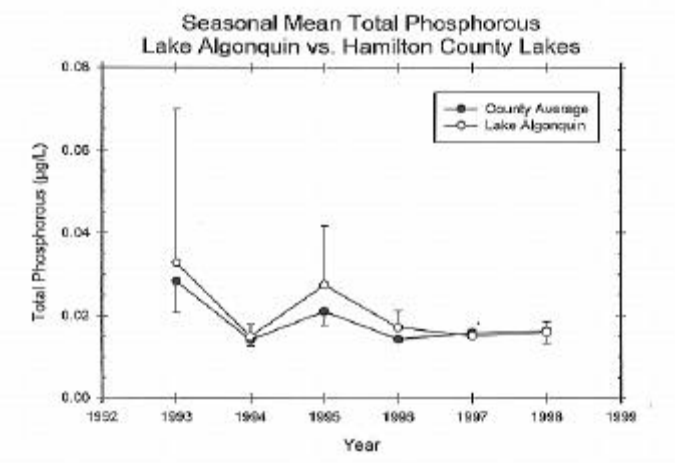
Alkalinity

The alkalinity trend for Lake Algonquin differed from the county trend, exhibiting peak values in 1993 and 1997. The trend had a low of 7.65 mg/L in 1995, and a high of 14.58 mg/L in 1993. Overall, the mean alkalinity values were higher than the county mean values.



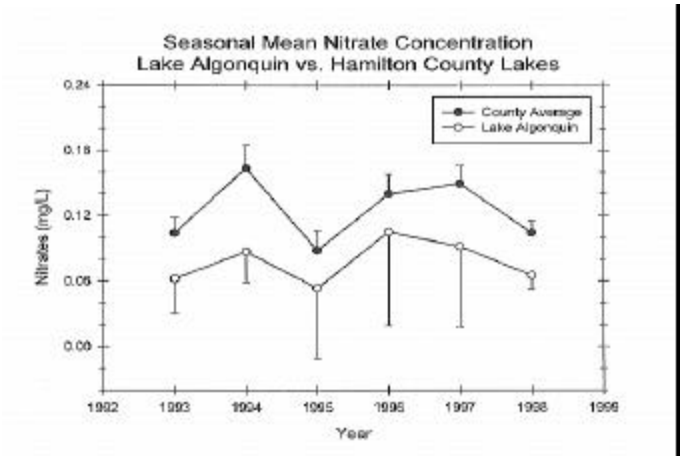
Transparency

The transparency trend in Lake Algonquin was similar to the county mean trend, with a low of 2.52 m in 1994, and a high of 2.92 m in 1997. Overall, the mean transparency values were lower than the county mean values.



Total Phosphorus

The total phosphorus trend for Lake Algonquin was comparable to the county mean trend. A low of 0.015 µg/L occurred in 1994 and 1997, and a high of 0.033 µg/L occurred in 1993.



Nitrate

The nitrate concentration trend in Lake Algonquin was similar to the county mean trend, with a low of 0.05 mg/L in 1995, and a high of 0.11 mg/L in 1996. Overall, the mean nitrate concentrations were slightly lower than the county mean values.