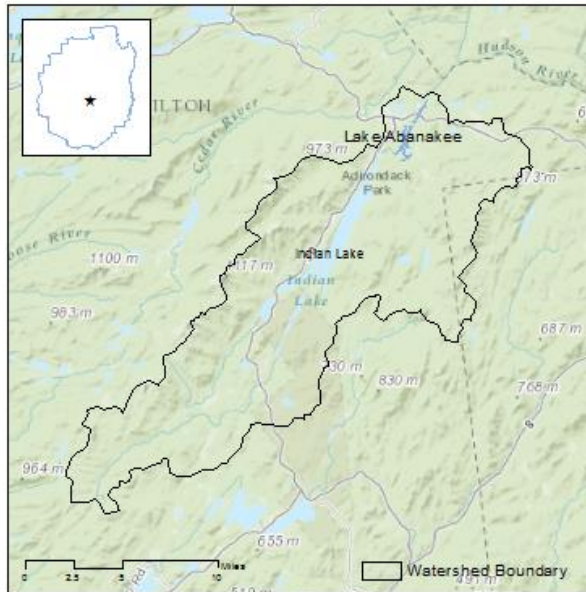


Lake Abanakee



Location	County:	Hamilton
	Town:	Indian Lake

Lake Characteristics	Surface Area (ha):	208
	Shoreline Length (km):	30
	Max. Depth (m):	-
	Volume (m ³):	15391566.83
	Flush rate (times/year):	22.1

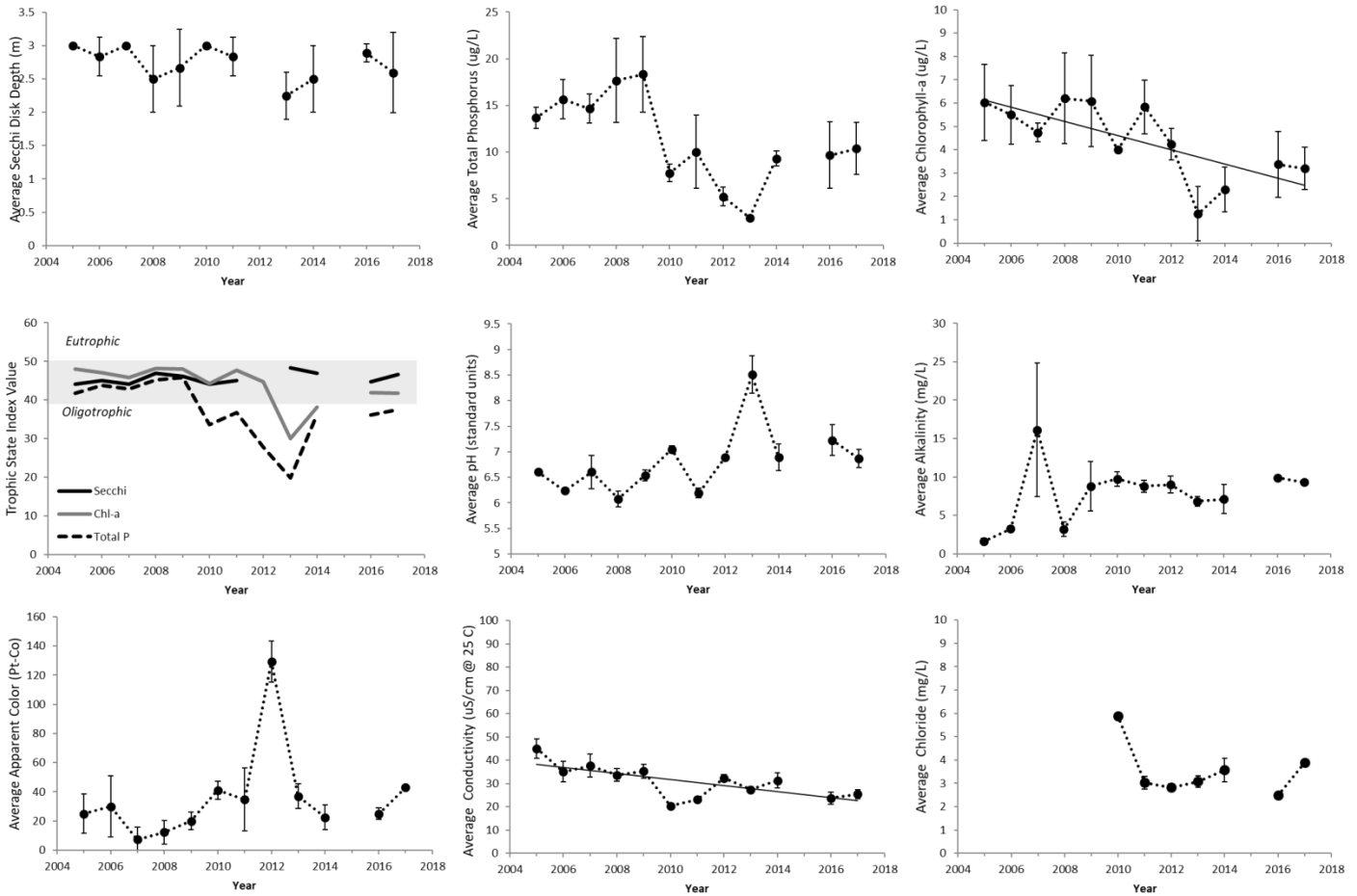
Watershed Characteristics	Watershed Area (ha):	49953
	Surface water (%):	6
	Deciduous Forest (%):	56
	Evergreen Forest (%):	16
	Mixed Forest (%):	6
	Wetlands (%):	12
	Agricultural (%):	0
	Residential (%):	1
	Local Roads (km):	53.7
	State Roads (km):	43.6

Trophic State Mesotrophic	Acidity Circumneutral	Acid Neutralizing Capacity Moderate	Road Salt Influence Present - Low
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Water quality values and historical trends for Lake Abanakee during the 2017 sampling season. Trend analysis was not performed on sodium or calcium data. BDL=below detection limit.

Water Quality Indicator	Sampling Date			Average	Trend
	6/20/2017	7/22/2017	8/20/2017		
Transparency (m)	2.6	2.0	3.2	2.6	No Trend
Total Phosphorus (µg/L)	12.1	11.9	7.2	10.4	No Trend
Chlorophyll- <i>a</i> (µg/L)	2.2	4.0	3.4	3.2	Decreasing
Laboratory pH	6.7	6.8	7.1	6.9	No Trend
Sp. Conductance (µS/cm)	26.1	23.2	26.8	25.4	Decreasing
Color (Pt-Co)	43.9	40.7	43.9	42.9	No Trend
Alkalinity (mg/L)			9.3	9.3	No Trend
Chloride (mg/L)			3.9	3.9	No Trend
Calcium (mg/L)			2.6	2.6	Not Analyzed
Sodium (mg/L)			2.1	2.1	Not Analyzed

Lake Abanakee – Time Series



Annual average values of select water quality indicators for Lake Abanakee 2005-2017. Vertical bars represent ± 1 standard deviation of the mean; Solid trend lines across the data indicate a statistically significant trend ($p < 0.05$).

Summary of Findings

Lake Abanakee is a 208 ha lake located in Hamilton County in the Town of Indian Lake. The lake is located within a 49,953 ha watershed dominated by forests. Lake Abanakee has been monitored by ALAP volunteers and the Adirondack Watershed Institute since 2005.

- Lake Abanakee is best classified as a mesotrophic lake. The transparency typically fluctuated between 2.5 and 3 meters in depth. We detected a significant downward trend in chlorophyll-a concentration at a rate of approximately 0.3 $\mu\text{g/L/year}$.
- The water samples analyzed in 2017 were found to be circumneutral in terms of their acidity, and ranged from 6.7 to 7.1 pH units. The alkalinity was found to be 9.3 mg/L, indicating moderate sensitivity to acid deposition.
- Sodium and chloride concentration averaged 2.1 and 3.9 mg/L respectively, indicating that road salt influence is present, but relatively low.