

Alice

Lake Overview

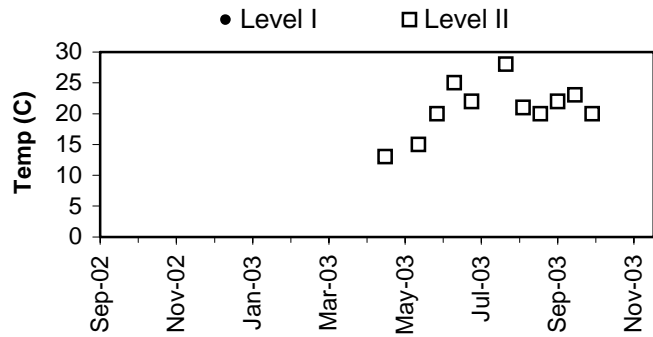
Volunteer monitoring began at Lake Alice in 2000 and continued through 2003. The lake is relatively low in phytoplankton productivity (oligotrophic – mesotrophic) with very good water quality. Lake Alice itself makes up over 20% of the watershed, which means that direct rainfall is an important source of water entering the lake, protecting water quality. There is a large Class 1 wetland in the watershed, which surrounds much of the lake and makes up a large percent of the catchment (King County, 1990). Land use analysis of 2002 aerial photographs showed 59% of the surrounding watershed has been developed for uses other than agriculture or forestry.

Lake Alice has a public access boat ramp and aquatic plants growing around the lake should be tracked to catch early infestations of Eurasian milfoil, Brazilian elodea or other noxious aquatic weeds.

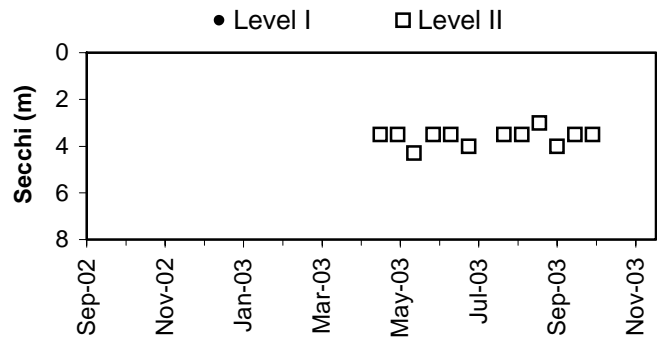
Physical Parameters

Secchi transparency was relatively stable from May through October, varying from 3 to 4.3m. Surface temperatures from May through October were similar to other lakes monitored in 2003, with a maximum of 28.0 deg C. Both the local precipitation and the lake level readings were incomplete for the year.

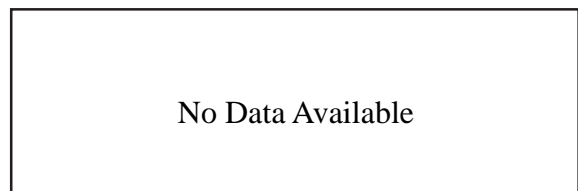
Lake Temperature



Secchi Depth

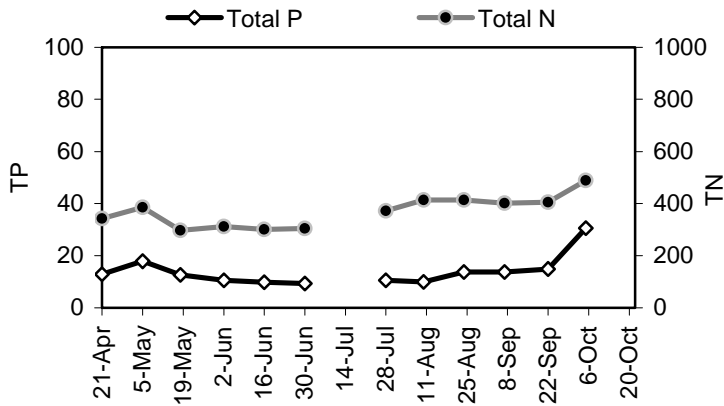


Lake Level and Precipitation

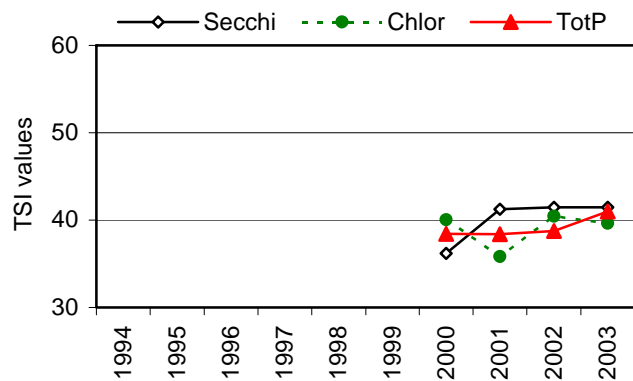


Alice

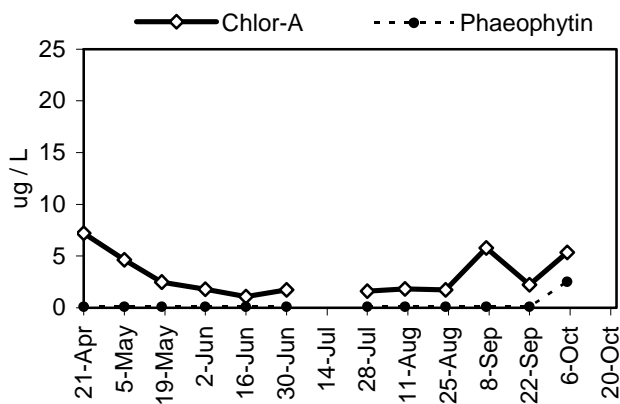
Nutrient Analysis



TSI Ratings



Chlorophyll a Concentrations (ug/L)



Nutrient Analysis and TSI Ratings

Total phosphorus and total nitrogen remained in fairly constant proportion to each other through the sampling season, with the N:P ratio ranging from 16 to 41. The ratio was generally above the range considered good for nuisance bluegreen algae. TSI values in 2003 varied near the threshold of 40, which divides the oligotrophic and mesotrophic categories. All three values were close to each other.

Chlorophyll and Algae

Chlorophyll concentrations in the lake remained relatively stable through the sampling season, with the maximum at the beginning and then again in fall. The dominant species in the fall were the chlorophyte *Botryococcus braunii* and an unidentified chlorophyte filament. Other important algae included species of dinoflagellates, with *Peridinium* and *Ceratium* noteworthy. The bluegreen *Anabaena* was present in both spring and autumn samples.

Common algae	Group
<i>Botryococcus braunii</i>	chlorophyte
<i>Peridinium</i> sp.	dinoflagellate
<i>Ceratium hirundinella</i>	dinoflagellate

No Level I Data
Available For This Lake

