

# Leota

## Lake Overview

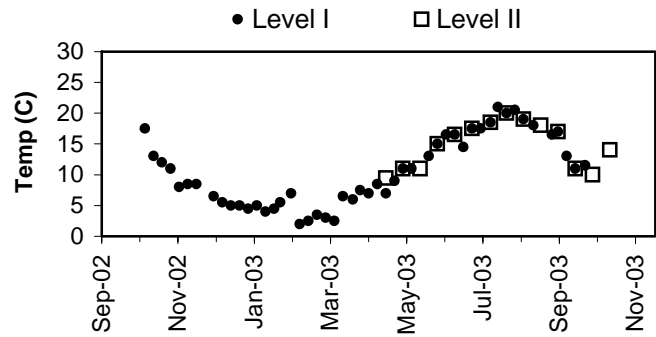
Volunteer monitoring began at Lake Leota in 1998 and continued through 2003. Earlier data suggested that this city lake (Woodinville) was relatively high in primary productivity (borderline eutrophic) with fair to good water quality. Productivity dropped in 2002 and continued at the same level in 2003. Since the lake surface makes up only 2% of the drainage area, direct precipitation is not as important as watershed inputs. There is one Class 2 wetland in the basin. Land use analysis of 2002 aerial photographs showed almost 90% of the surrounding watershed has been developed for uses other than agriculture.

Lake Leota has no public access points, though residents should keep an eye on aquatic plants growing nearshore to catch early infestations of Eurasian milfoil, Brazilian elodea or other noxious aquatic weeds.

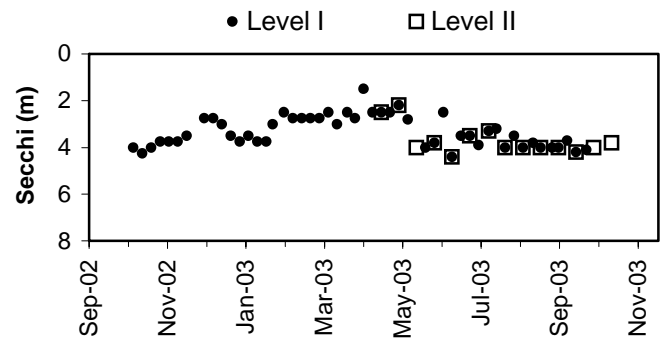
## Physical Parameters

Secchi transparency ranged between 1.5 and 4.4m through the year. Annual water temperatures ranged from 5 to 23 degrees Celsius. Excellent precipitation and water level records were compiled for the year. Water levels were consistent with the regional pattern of winter-high levels, dropping slowly through the summer to a low stand in early fall.

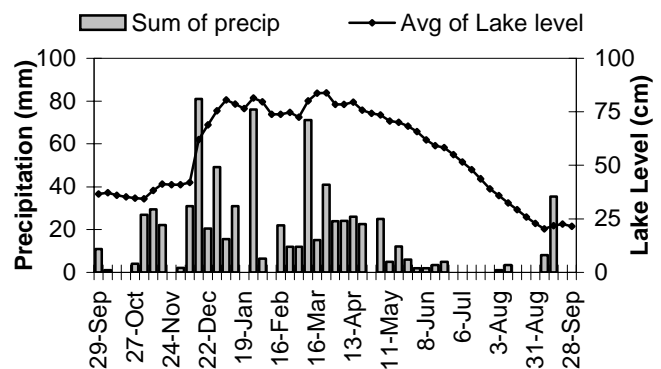
Lake Temperature



Secchi Depth

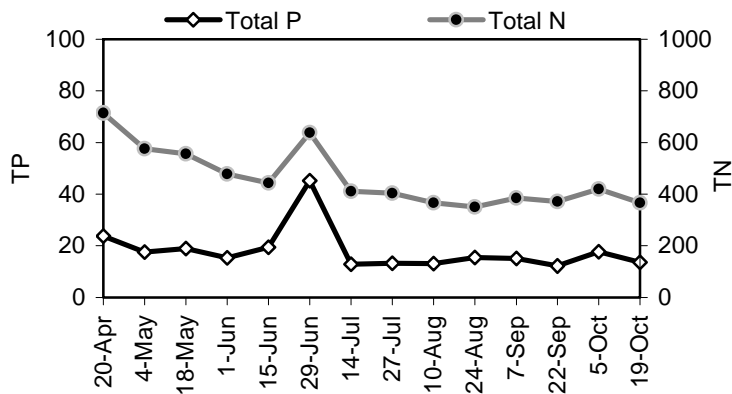


Lake Level and Precipitation

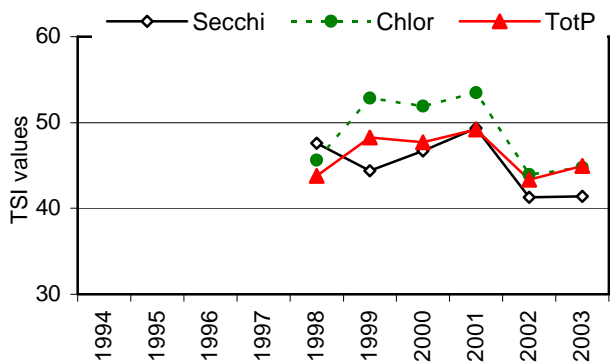


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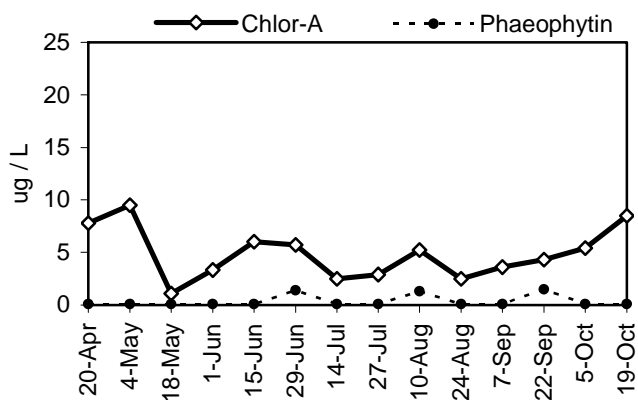
### Nutrient Analysis



### TSI Ratings



### Chlorophyll a Concentrations (ug/L)



#### Common algae

#### Group

unidentified species	chrysophyte
<i>Ceratium hirundinella</i>	dinflagellate
<i>Botryococcus braunii</i>	chlorophyte

## Nutrient Analysis and TSI Ratings

Total nitrogen and phosphorus tracked each other closely through the season, with nitrogen generally decreasing through the period. The N:P ratio ranged from 14 to 33. The 2003 TSI values were fairly close to each other in the mesotrophic range, with TSI-Secchi somewhat lower than the other two indicators.

## Chlorophyll and Algae

Chlorophyll remained fairly low through the sampling period, with higher values found in spring and autumn. Commonly found algae included an unidentified chrysophyte species, the colonial chlorophyte *Botryococcus*, and several species of *Cryptomonas*. Bluegreens were noted, but were never abundant.



