

## Beaver-2

### Lake Overview

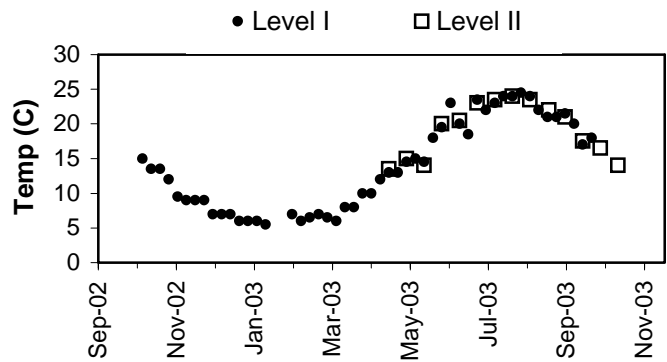
Volunteer monitoring began at Beaver-2 in the 1980s and continued through 2003. The data collected show that this lake in the city of Sammamish is currently moderate in primary productivity (mesotrophic), with good water quality. Since the surface area of the lake makes up only 9% of the drainage area, direct precipitation is less important than runoff, inlet streams and groundwater. Land use analysis of 2002 aerial photographs showed that 45% of the surrounding watershed has been developed for uses other than agriculture or forestry. There are significant wetlands in the basin (King County, 1990). Enhancement of productivity through human impacts is likely to be occurring.

Beaver-2 has a public access boat ramp, and residents should monitor plants growing nearshore to catch early infestations of Eurasian milfoil, Brazilian elodea or other noxious aquatic weeds.

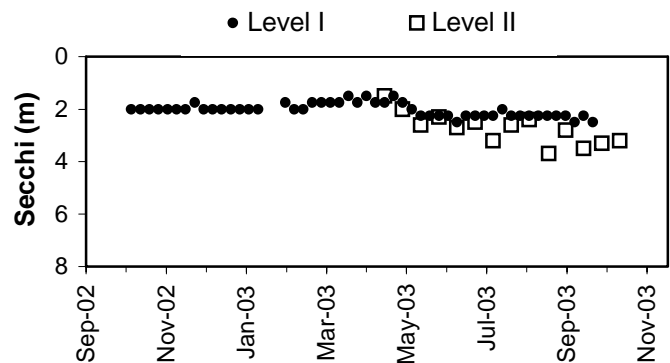
### Physical Parameters

Secchi transparency remained steady, ranging from 1.5 to 3.7m in depth, with the deeper values in the fall and significantly deeper than Beaver-1. Surface water temperatures ranged from 5.5 to 24.5 degrees Celsius. Water levels followed the typical regional pattern of a winter high stand, decreasing through the summer.

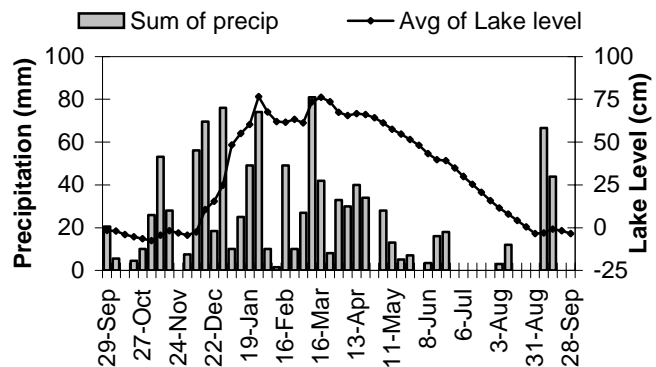
Lake Temperature



Secchi Depth

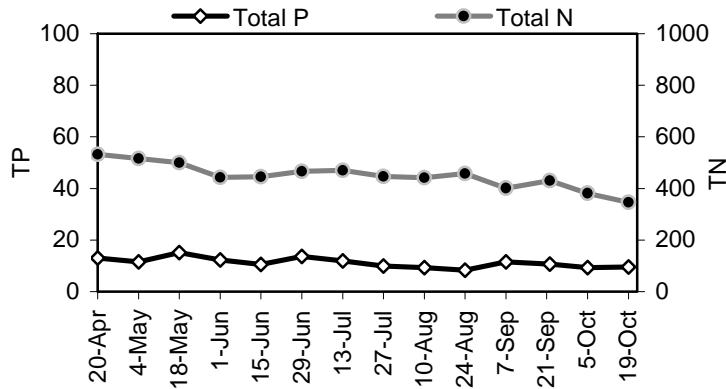


Lake Level and Precipitation

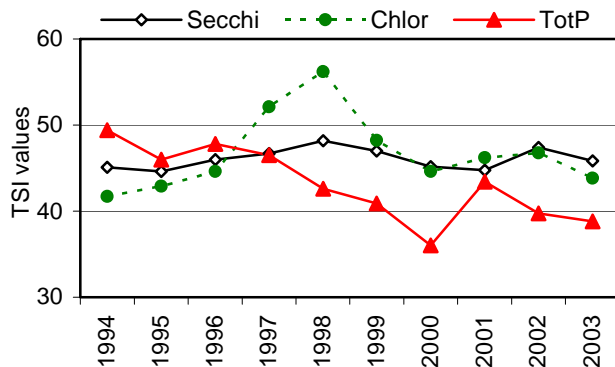


## Beaver-2

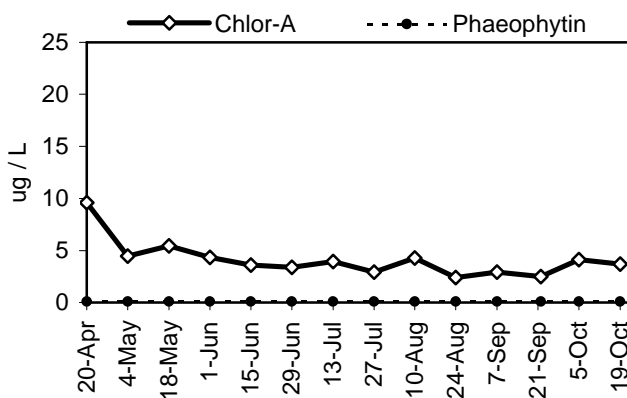
### Nutrient Analysis



### TSI Ratings



### Chlorophyll a Concentrations (ug/L)



## Nutrient Analysis and TSI Ratings

Total phosphorus and total nitrogen remained fairly constant over the period of measurement and in proportion to each other, with the ratio ranging from 33 to 55. In 2003, the TSI-TP was lower than the other two indicators, similar to values in 1998-2002. The values for TSI-chlor and TSI-Secchi have tracked each other closely since 1999. Beaver-2 continued to be in the mid-mesotrophic range.

## Chlorophyll and Algae

Chlorophyll content decreased from the high value on the first sampling date to relatively low values, which persisted through the end of October, with no fall increase recorded. Phytoplankton populations made two peaks in spring and summer. The spring peak was caused by the bluegreens *Aphanizomenon* and *Anabaena* spp., while the chrysophyte *Dinobryon* and several species of cryptophytes were important through the season.

Common algae	Group
<i>Dinobryon</i> spp.	chrysophyte
<i>Aphanizomenon flos-aquae</i>	bluegreen
unidentified species	chrysophyte



