

Beaver-1

Lake Overview

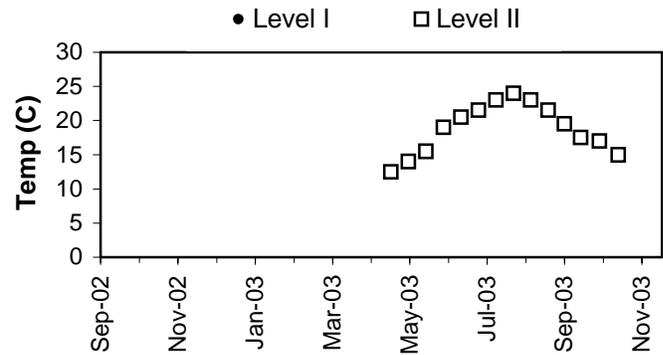
Volunteer monitoring began at Beaver Lake-1 in 1997 and continued through 2003. Monitoring data show that this lake in the city of Sammamish is relatively high in primary productivity (mesotrophic to eutrophic), with fair water quality, which may be improving over time. Since the lake surface makes up only 5% of the drainage area, direct precipitation is less important than runoff or groundwater. Land use analysis of 2002 aerial photographs showed only 19% of the surrounding watershed has been developed for uses other than agriculture or forestry. There are several significant wetlands in the basin (King County, 1990). Enhancement of productivity through human impacts is likely to be occurring.

Beaver-1 has no public access boat ramp, but can be accessed through Beaver-2. Residents should monitor plants growing nearshore to catch early infestations of Eurasian milfoil, Brazilian elodea, or other noxious aquatic weeds.

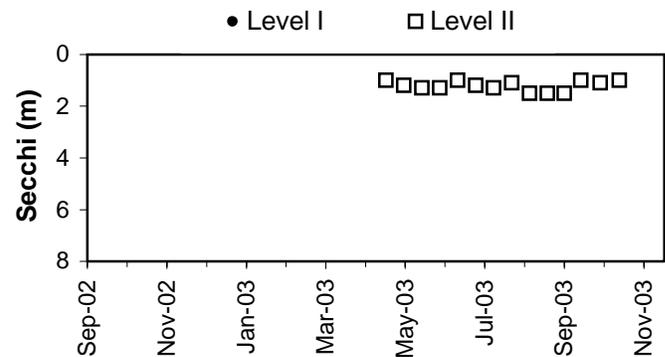
Physical Parameters

Secchi transparency remained steady through the sampling season, ranging from 1.0 to 1.5, affected by the tea-colored water. Surface water temperatures were similar to other small lakes in 2003, with a high of 24.0 degrees Celsius. There were no data collected on lake levels or precipitation.

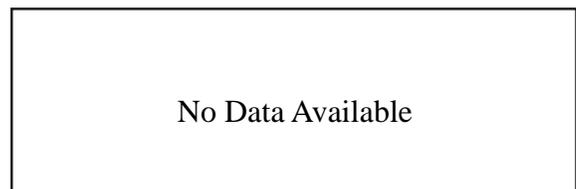
Lake Temperature



Secchi Depth

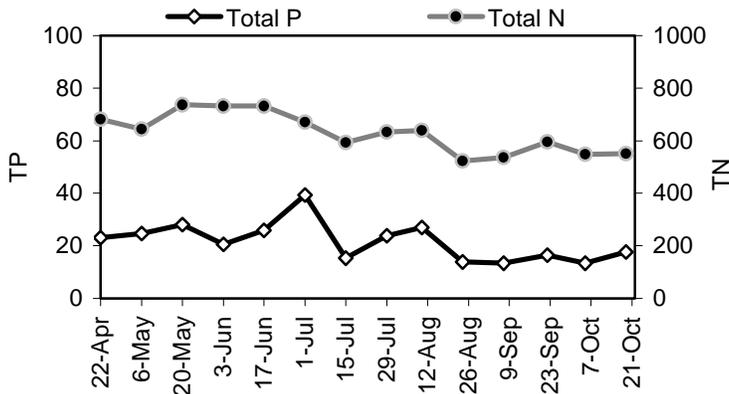


Lake Level and Precipitation

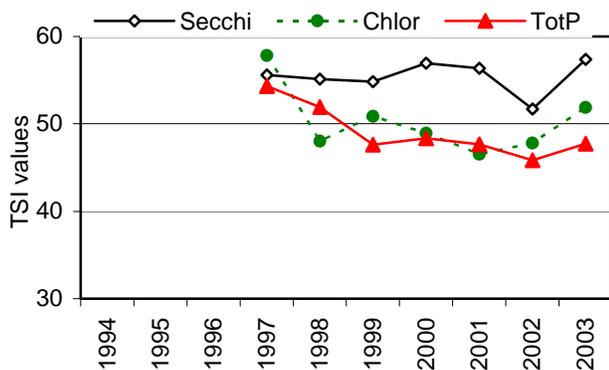


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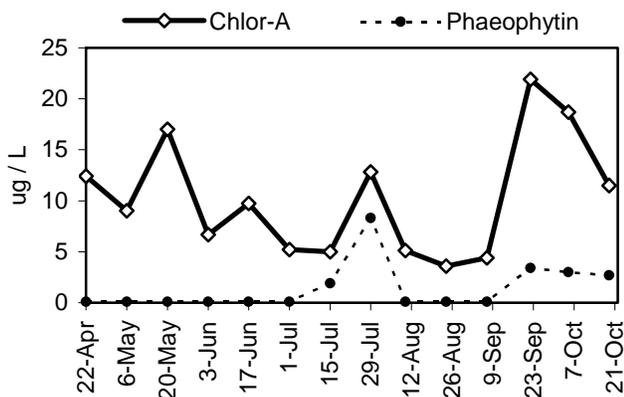
Nutrient Analysis



TSI Ratings



Chlorophyll a Concentrations (ug/L)



Nutrient Analysis and TSI Ratings

Total phosphorus and total nitrogen remained generally proportional to each other through the period, the ratio ranging from 17 to 41, indicating that conditions were generally unfavorable for bluegreens. In 2003 the average TSI-Secchi was higher than the other two indicators, similar to the previous five years. If the TSI-Secchi relates more to water color than algae, the other two indicators may be more indicative of trophic state, and place Beaver-1 at the threshold between mesotrophy and eutrophy, slightly higher than the past three years.

Chlorophyll and Algae

Chlorophyll content reached several peaks through the sampling period, with the greatest in late September, which was produced by an increase in several unidentified species of chryso-phyte algae. The bluegreen *Aphanizomenon flos-aquae* was predominant early in the season, but became less important as summer progressed. Other bluegreens were present, but not important.

Common algae	Group
<i>Aphanizomenon flos-aquae</i>	bluegreen
<i>Botryococcus</i> sp.	chlorophyte
unidentified species	chrysophyte

No Level I Data
Available For This Lake

