

## Bhimtal Lake

Bhimtal lake (29°21' N latitude and 79°24' E longitude) is located about 22 km from Nainital at an altitude of 1346 m above mean sea level. The 'C' shaped lake has a surface area of 47.8 ha and a catchment of 10.77 km<sup>2</sup>. It is 1701 m long and 451 m wide (average) and has a maximum depth of 18 m. The useful live storage capacity of the lake is 3.54 Mm<sup>3</sup> and total capacity is 4.61 Mm<sup>3</sup>. The annual inflow is 1.756 Mm<sup>3</sup>. The subsurface flow into the lake constitutes about 35 to 80% of the total surface runoff in monsoon and non-monsoon months. The water is released through sluice gates for utilisation in Haldwani. The lake has a small island in its middle. An aquarium has recently been set up on the island as a tourist attraction.



The lake is warm monomictic with a prolonged stratification (March-November) and one inter circulation (December-January). Major problem facing the lake is the large amount of sediments that flow from the catchment into the lake and get deposited on the bed. Dredging is required frequently. The waste water also flows into the lake as the houses are not connected to the sewers. The lake is mesotrophic as the inflow of organic substances and nutrients is low.

The conservation measures under the NLCP include the construction of a ring sewer around the lake and a Sewage Treatment Plant, to prevent waste water from entering the lake.