WATER QUALITY SUMMARY

DAVID POND, Fayette
MIDAS: 5666, Sample Station # 1

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Sample Station # 1 of David Pond have been collected since 1981. During this period, four years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of David Pond is considered average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on David Pond is low-moderate.

Water Quality Measures: David Pond is an uncolored lake (average color 19 SPU) with an average SDT of 5.3 m (17.4 ft). The range of water column TP for David Pond is 6 -11 parts per billion (ppb) with an average of 8 ppb. Chla, sampled in three years, ranges from 3.4 – 5.4 ppb with a mean of 4.5 ppb. Recent dissolved oxygen (DO) profiles show moderate DO depletion in deep areas of the lake. The potential for phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is moderate.

Sample Station # 2

Water quality monitoring datasets for the Sample Station # 2 of David Pond are limited. One year of basic chemical information was collected in 1982 in addition to 10 years of Secchi Disk Transparencies (SDT). Considering this information, and the data collected from Sample Station # 1, the water quality of David Pond is considered average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on David Pond is low to moderate.

Water Quality Measures: David Pond is an uncolored lake; average color at Sample Station # 2 is 10 SPU. Average SDT at Sample Station # 2 is 5.8 m (19 ft), slightly deeper than the visibility at Sample Station # 1 (5.3 m). The one water column TP for Sample Station # 2 is 6 parts per billion (ppb), within the TP range for Sample Station # 1 (6 - 11 ppb range with an average of 8 ppb). The only summer Chla value for Sample Station # 2 is 3.3 ppb (similar to the Chla values from Sample Station # 1). The one dissolved oxygen (DO) profile from Sample Station # 2 shows little DO depletion at this location of the lake. The potential for phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is low, but more DO monitoring data is needed to confirm this.

See the Maine DEP *Explanation of Lake Water Quality Monitoring Report* for measured variable explanations. Additional lake information can be obtained by contacting Maine DEP at 207-287-3901 or VLMP at 207-783-7733, and at these Websites: http://www.lakesofmaine.org and http://www.maine.gov/dep/water/lakes/index.html and http://www.mainevolunteerlakemonitors.org.

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