



Volunteer Lake Assessment Program Individual Lake Reports

CLARKSVILLE POND, CLARKSVILLE, NH

MORPHOMETRIC DATA

Watershed Area (Ac.):	169	Max. Depth (m):	4.7	Flushing Rate (yr ⁻¹)	3.5
Surface Area (Ac.):	25	Mean Depth (m):	1.5	P Retention Coef:	0.65
Shore Length (m):	1,100	Volume (m ³):	147,000	Elevation (ft):	2027

TROPHIC CLASSIFICATION

Year	Trophic class

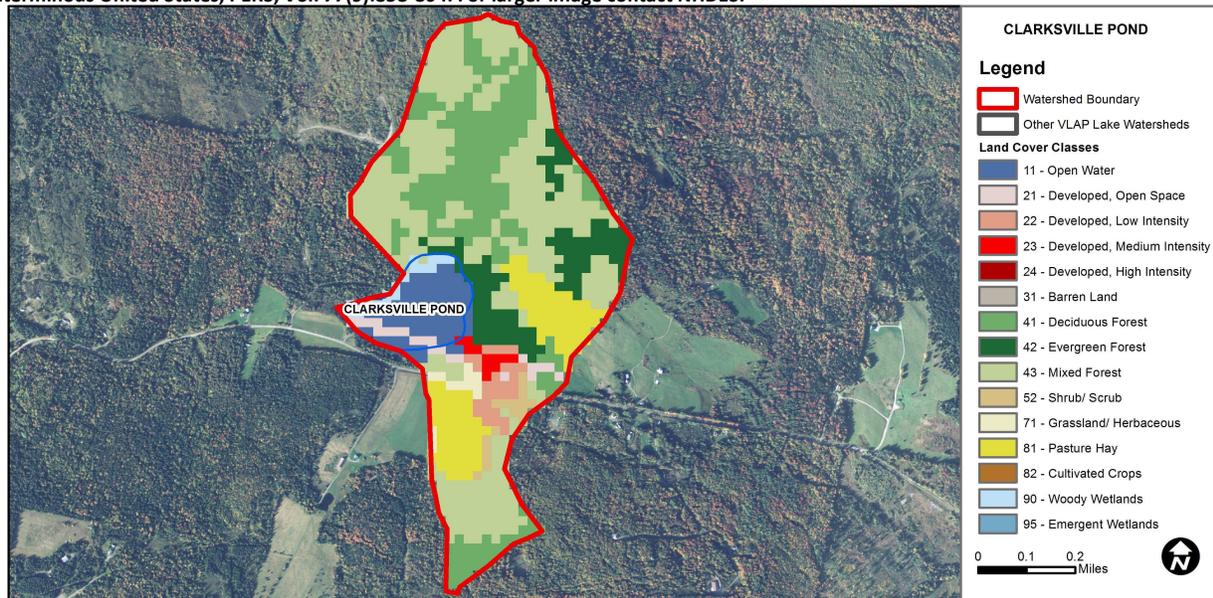
KNOWN EXOTIC SPECIES

The Waterbody Report Card tables are generated from the 2012 305(b) report on the status of N.H. waters, and are based on data collected from 2001-2011.

Designated Use	Parameter	Category	Comments
Aquatic Life	Phosphorus (Total)	Cautionary	<5 samples and median is > threshold. More data needed.
	pH	Cautionary	< 10 samples and 1 exceedance of criteria. More data needed.
	D.O. (mg/L)	Encouraging	< 10 samples and no exceedance of criteria. More data needed.
	D.O. (% sat)	Encouraging	< 10 samples and no exceedance of criteria. More data needed.
	Chlorophyll-a	Good	>=5 samples and median is < threshold but > 1/2 threshold value.
Primary Contact Recreation	E. coli	Encouraging	>2 samples exist that are > 75% of geometric mean criteria, but not enough samples to calculate geometric mean. No single sample exceedances. More data needed.
	Chlorophyll-a	Encouraging	< 10 samples and no exceedance of criteria. More data needed.

WATERSHED LAND USE SUMMARY

Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J., 2011. Completion of the 2006 National Land Cover Database for the Conterminous United States, PERS, Vol. 77(9):858-864. For larger image contact NHDES.



Land Cover Category	% Cover	Land Cover Category	% Cover	Land Cover Category	% Cover
Open Water	7.38	Barren Land	0	Grassland/Herbaceous	1.23
Developed-Open Space	2.08	Deciduous Forest	22.44	Pasture Hay	10.79
Developed-Low Intensity	2.75	Evergreen Forest	10.41	Cultivated Crops	0
Developed-Medium Intensity	1.04	Mixed Forest	38.91	Woody Wetlands	1.7
Developed-High Intensity	0	Shrub-Scrub	1.61	Emergent Wetlands	0

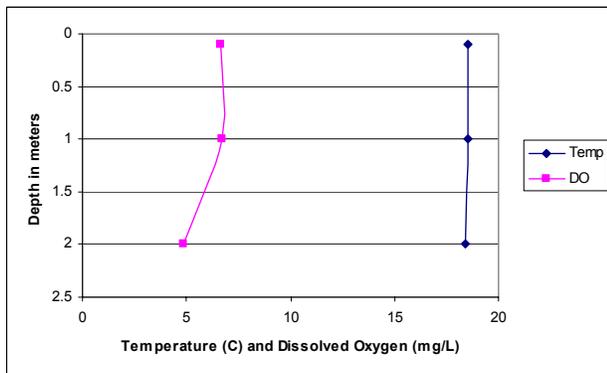


VOLUNTEER LAKE ASSESSMENT PROGRAM INDIVIDUAL LAKE REPORTS
CLARKSVILLE POND, CLARKSVILLE, NH
2012 DATA SUMMARY

OBSERVATIONS AND RECOMMENDATIONS (Refer to Table 1 and Historical Deep Spot Data Graphic)

- 🔥 **CHLOROPHYLL-A:** Average chlorophyll levels were very low in 2012 and decreased from 2010 and 2011 levels.
- 🔥 **CONDUCTIVITY/CHLORIDE:** Conductivity was average for most NH lakes
- 🔥 **TOTAL PHOSPHORUS:** Average phosphorus levels were relatively low in 2012 and decreased from 2010 and 2011 levels.
- 🔥 **TRANSPARENCY:** Transparency was good and the Secchi disk was visible on the pond bottom during both sampling events in 2012.
- 🔥 **TURBIDITY:** Pond turbidity was relatively low.
- 🔥 **pH:** pH levels were sufficient to support a variety of aquatic life.
- 🔥 **RECOMMENDED ACTIONS:** Continue annual monitoring to build a baseline of water quality data to identify trends and assist with watershed management activities.

Dissolved Oxygen & Temperature Profile



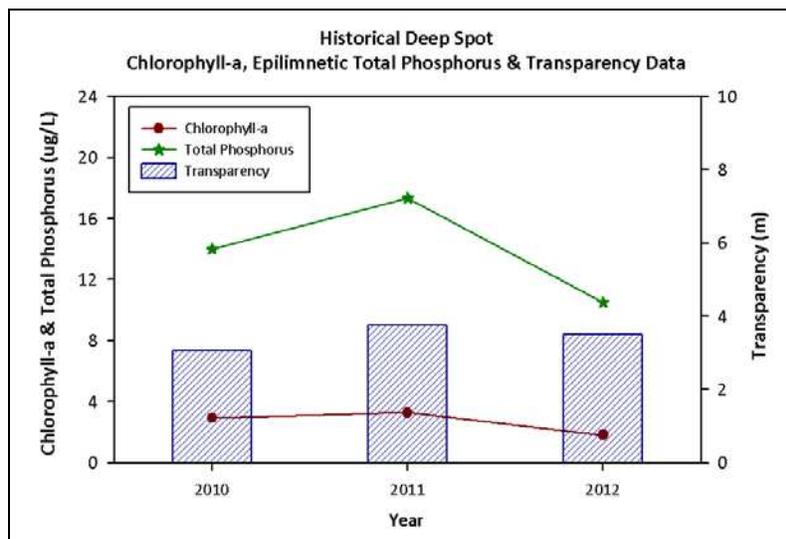
Station Name	Table 1. 2012 Average Water Quality Data for CLARKSVILLE POND							
	Alk.	Chlor-a	Cond.	Total P	Trans.		Turb.	pH
	mg/l	ug/l	uS/cm	ug/l	NVS	VS	ntu	
Epilimnion	17.85	1.82	45.6	11	3.00	3.00	1.1	7.23

NH Median Values: Median values for specific parameters generated from historic lake monitoring data.
Alkalinity: 4.9 mg/L
Chlorophyll-a: 4.58 mg/m³
Conductivity: 40.0 uS/cm
Chloride: 4 mg/L
Total Phosphorus: 12 ug/L
Transparency: 3.2 m
pH: 6.6

NH Water Quality Standards: Numeric criteria for specific parameters. Results exceeding criteria are considered a water quality violation.
Chloride: < 230 mg/L (chronic)
E. coli: > 88 cts/100 mL – public beach
E. coli: > 406 cts/100 mL – surface waters
Turbidity: > 10 NTU above natural level
pH: 6.5-8.0 (unless naturally occurring)

HISTORICAL WATER QUALITY TREND ANALYSIS

Parameter	Trend	Explanation
Chlorophyll-a	N/A	Not enough data to accurately assess trend.
Transparency	N/A	Not enough data to accurately assess trend.
Phosphorus (epilimnion)	N/A	Not enough data to accurately assess trend.



This report was generated by the NH DES Volunteer Lake Assessment Program (VLAP). For more information contact:
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