



VOLUNTEER LAKE ASSESSMENT PROGRAM INDIVIDUAL LAKE REPORTS

SNAKE RIVER, NEW HAMPTON/CENTER HARBOR

2015 DATA SUMMARY

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

- ◆ **CONDUCTIVITY/CHLORIDE:** Conductivity remained relatively stable from June to July at each site while chloride increased slightly from June to July at each site. Conductivity and chloride levels were slightly greater than the state medians but not above a level of concern. Historical trend analysis indicates significantly decreasing (improving) conductivity levels since 2002. We hope to see this continue!
- ◆ **TOTAL PHOSPHORUS:** Phosphorus levels decreased slightly from June to July at Sites 1, 2 and 4, increased slightly at Site 3, and remained stable at Site 5. Average phosphorus levels remained low at all stations and was consistent with that measured in 2014. Historical trend analysis indicates relatively stable phosphorus levels with moderate variability between years.
- ◆ **TURBIDITY:** Turbidity levels at Sites 1, 2, 3, and 5 were low in June, however slightly greater at Site 4. Field data notes erosion from a boat ramp that may be contributing to turbidity. Turbidity decreased in July at all stations except for Site 3 where it increased slightly. Average turbidity levels were within a low range, decreased slightly from 2014, and generally decreased from upstream (Site 4) to downstream (Site 1).
- ◆ **PH:** pH levels were higher (better) in June and generally within the desirable range 6.5-8.0 units, however by July, pH had decreased to slightly less than desirable levels at all stations except Site 4. Historical trend analysis indicates relatively stable pH levels with moderate variability between years.
- ◆ **RECOMMENDED ACTIONS:** The improving conductivity trend is a great sign and we hope to see this continue in the river. Conductivity is within an average range for NH waters however chloride levels do indicate slight impacts from road salting during winter months. Water quality is generally stable at all stations and within low to average ranges for New Hampshire lakes. Beaver dams continue to cause problems under the bridge and any dam removal should occur with care to limit turbidity and sediment flow downstream. Keep up the great work!

Station Name	Table 1. 2015 Average Water Quality Data for SNAKE RIVER				
	Chloride mg/l	Cond. uS/cm	Total P ug/l	Turb. ntu	pH
Site 1	15	69.19	8	0.67	6.35
Site 2	14	75.64	7	0.70	6.42
Site 3	15	75.69	8	0.85	6.34
Site 4	13	70.11	7	0.84	6.76
Site 5	14	73.49	7	0.57	6.43

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: between 6.5-8.0 (unless naturally occurring)

HISTORICAL WATER QUALITY TREND ANALYSIS

