

NSDFA LAKE MONITORING PROGRAM PROTOCOL

Generic Field Protocol for Water Sampling

1. Less than an inch (<25mm) of precipitation in the previous 24 hours is a prerequisite for any sampling date.
2. Safety should be considered of primary importance. Therefore, sampling alone or under windy or rough conditions is not recommended.
3. Using a contour map and sounding line locate sampling station which is to be located at the deepest location on the lake. Then lower anchor slowly. Care must be taken when taking soundings and when anchoring boat so that bottom sediments will not be disturbed and thereby contaminate water samples.
4. Water samples are to be collected and preserved in a manner consistent with procedures outlined in Standard Methods for the Examination of Water and Wastewater, APHA, latest edition.

This reference should be consulted for specifics, but the following outlines the general procedures:

- a) Label sample bottles clearly with date, name of person taking samples, and location as per the following example for Loon Lake:

LL - DS1 - 0m

where;
LL = lake name (i.e. first initials)
DS1= station number (i.e. deep station #1)
Om = depth from surface where sample was taken

[0m indicates a surface sample, but sample should actually be taken at 0.5 meters so as to avoid any film of materials at the air / water interface]

The following is an example of what should be written in permanent marker on each sample bottle:

Sample ID: OL - DS1 - 0M
Sample Location: Otter Lake, Hfx Co.
Date: July 23, 2010
Collector: Anthony Heggelin

The sample ID on the bottle must match the sample ID written on the requisition form.

- b) Avoid contamination of sample bottle and water sampler by keeping closed and preferably stored in cooler or case until ready for taking of sample.
 - c) Thoroughly rinse sample bottles and caps with lake water (avoiding surface layer) at least three times before use.
 - d) Avoid contact with bottom sediments, surface scums, gasoline, oil, insect repellent, sun block, cigarette smoke, soap, etc to prevent fouling of sample.
 - e) Using clean bottles obtained from certified analytical laboratory, fill bottles to the fill line.
5. Sample preservation is to be assured by immediately placing in cool, dark storage until analysis at lab.
 6. Samples are to be shipped to an accredited laboratory for analysis and should reach this facility within 24 hours of collection.