

Massachusetts Water Watch Partnership

Date

Standard Operating Procedure Lakes-2

For Lake Depth Determination

Revision 0

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Overview

This procedure describes how to measure lake depth at any station, using a Secchi Disk with calibrated line.

1.0 Equipment List

- ____ Secchi Disk (8" black & white quadrant disk)
- ____ Calibrated line (either surveyor tape or cotton line)
- ____ Lake base map
- ____ Field data sheet and pencils

2.0 Measurement Protocol

- **2.1** Lower your Secchi Disk until the line goes slack (disk hits bottom).
- **2.2** Retrieve the line until all slack is removed.
- **2.3** Read depth on line at lake surface.
- **2.4** Record this bottom depth on your lake field sheet.

3.0 Maintenance

- **3.1** At the beginning of each sampling season, the calibrated line should be checked for shrinkage/stretching.
- **3.2** Attach a cloth tape measure to the bottom of the calibrated line. Lower the Secchi Disk as deep as you can without hitting lake bottom, feeding the tape measure so it is taut.
- **3.3** Compare the reading on the tape measure with the calibrated line reading. If they don't agree within 10%, you should adjust your Secchi Disk readings accordingly, or switch to a fiberglass tape.