



MassDEP

**Massachusetts Department of Environmental Protection
Bureau of Water Resources
Watershed Planning Program**

STANDARD OPERATING PROCEDURE

SAMPLE COLLECTION ROD

CN 001.31

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LIST OF REVISIONS

Rev. #	Date	Description of Revision(s)	Page #s
0	December 2007	Original draft	
1	3/2025	Updates throughout	---

1.0 SCOPE AND APPLICATION

This SOP provides guidance to MassDEP Watershed Planning Program staff on the construction and field use of a sample collection pole for collecting bottle samples when accessing the waterbody is not safe, not possible, or will not result in representative samples.

2.0 BACKGROUND

The water levels in rivers are constantly changing. A weekend of heavy rains can turn an ankle-deep stream into a chest-deep torrent. This can be a problem when charged with repeated safe collection of water samples at specific locations. In addition to avoiding unsafe conditions, there is always the need to collect representative samples, which may not be accessible from shore or by wading in. One solution is to recruit volunteers with long legs and arms. Another solution is to attach your sample bottles to the end of a long pole.

3.0 CONSTRUCTION

The sample collection pole consists of a telescoping aluminum pole (see Figure 1) with clamp(s) attached. The parts, listed below, are available at most well-stocked hardware stores or home centers. The telescoping pole usually used to wash windows or painters) costs \$20 - \$40 (in 2025).

Parts:

- Aluminum Extension Pole (for painting or window washing)
- Cable Clamp(s) (sold under brand names like “MegaCuff”)
- Hose clamps – stainless steel
- Friction Tape

An aluminum telescoping pole recommended because it is lightweight and rust-free. It extends from 4’ to 8’. The cable clamps are adjustable, allowing them to fit a variety of bottle sizes. Attach the cable clamp to the end of the pole with hose clamps. Friction tape can be used on the inside of the cable clamp to improve grip if needed (Figure 1).



Figure 1: Clamps attached to pole end

4.0 FIELD USE

To use the collection rod, first rinse the clamp end of the rod in the stream to reduce the possibility of contamination from the previous station (or contamination from the trunk of your vehicle). Place a bottle in the clamp and squeeze the clamp closed securely. Remove the cap from the bottle. Rotate the rod until the bottle is upside down. Immerse the bottle to the desired depth and then rotate the rod to fill the bottle (see Figure 2). Avoid putting the bottle in too deep to avoid disturbing the bottom or collecting sediments. Once the bottle is full, remove it from the water, cap it and remove it from the clamp.

Figure 2: Sampling



5.0

SAFETY

Caution: Do not extend the pole too far when sampling high velocity streams. A moving river can exert considerable force on the pole. To avoid damaging (bending) the pole, it is recommended that you leave at least 1-foot un-extended. You can mark this limit on the pole with a permanent marker.

Caution: Be extra careful around overhead power lines!