



Bacteria Sample Collection – Field Sampling SOP

1. The laboratories will provide autoclaved sample bottles.
2. Sample bottles will be labeled prior to sampling. Wet labels are difficult to write on. Use permanent marker or waterproof pen for labeling.

Example Sample Bottle Label (may be modified for specific project, minimum requirements in bold)

Station: Depth:

Date:

Time:

Initials:

Sample Type:

Remarks:

3. Surface grab samples will be collected at each sampling station using the sample bottles provided by the laboratories. In cases where laboratory sample bottles are too large to be fully submersed in the stream, a smaller pre-cleaned bottle will be used to transfer the sample into the larger container.
4. Place sealed sample bottle in sampling stick. When you are ready to take the sample, take the cap off the sample bottle. Hold the cap in your other hand. Do not touch the inside of the bottle or cap. Do not put the cap on the ground.
5. Avoid contaminating the samples by not allowing the sample water to come in contact with anything before it is placed in the bottle. If standing in stream, stand downstream of sampling location. Be careful not to bring the rim or cap of the sample bottle into contact with anything. Samples should be taken with a sample stick to avoid causing upstream disturbance prior to and during sampling.
6. Holding the bottle upside down, push the bottle through the water to mid-depth or as far as you can reach. Turn the bottle forward and scoop it forward and up and out of the water. Do this in one sweeping motion. Make sure you sample forward and away from you so that there is no chance that you will contaminate the sample with bacteria from your arm.
7. Sample bottles will be filled with sample until the sample reaches between an inch to an inch and a half of the top of the sample bottle.
8. Once sample is taken, sample bottles will be capped and placed in a cooler with ice to maintain a temperature of 4°C.
9. Fecal coliform samples will be delivered to the appropriate laboratory within 6 hours of collection.
10. For QA/QC purposes, duplicate fecal coliform samples will be randomly collected at 10% of the sampling stations. All bacteria samples (including field duplicate samples) shall be taken using the above field procedures.
11. A record of the sample locations and sample date and time shall be recorded in a field notebook and made part of the permanent project record. In addition a description of the current weather (i.e. cloud cover, temperature, wind speed, weather conditions) should also be noted. The full name of the samplers should also be recorded in the field notebook.