

Water Quality Sampling Instructions

Supplies- general: Sharpie, thermometer, tin foil, boots or waders, LUNCH ☺

Supplies for each site: 3 large bottles, 6 glass DO bottles, blank data sheet

Temperature:

Air – Let thermometer sit in air for 5 minutes while gathering DO samples.

Water – Lower thermometer 4 inches below water surface in the main area of the main stream flow. Keep the thermometer in the water until a constant reading is attained, approximately 2 minutes.

Dissolved Oxygen:

Start with these first if students are waiting to do the test!

- 1- Facing upstream, rinse the sample bottle in stream and replace the cap.
- 2- Submerge the sample bottle and remove the cap.
- 3- Hold the sample bottle under water, at a slight angle facing into the water flow for **one minute** to allow the water to flow in and out of the sample bottle. While the bottle is still underwater, tap the sides of the bottle with the cap to release any air bubbles.
- 4- While the bottle is still submerged, replace the cap and retrieve from the stream.
- 5- Check for air bubbles; if they are present, repeat Steps 1-4
- 6- Collect 3 samples for DO and 3 more for BOD. Wrap in foil and label BOD bottles.

Fecal Coliform

- 1- Sterile bottle!
- 2- Stand facing upstream.
- 3- Hold the sample bottle by the bottom and unscrew cap.
- 4- Turn bottle upside down and plunge it straight down into the water.
- 5- When bottle is completely submerged, tip the bottle opening up and into the current at about a 45 degree angle.
- 6- Fill bottle completely
- 7- Take bottle out of the stream and pour off enough water to leave about an inch of air space. Cap bottle immediately.
- 8- Cover lid with aluminum foil to prevent outside bacteria from sneaking into your sample.
- 9- Put in cooler on ice.

Total Solids

- 1- Stand facing upstream
- 2- Remove cap.
- 3- Rinse once, dumping downstream.
- 4- Fill bottle.
- 5- Leave 1 inch space.
- 6- Put in cooler on ice.

Nitrates, pH, Turbidity

- 1- Stand facing upstream
- 2- Remove cap.
- 3- Rinse once, dumping downstream.
- 4- Fill bottle.