

FOR THE SUDBURY ASSABET & CONCORD RIVERS

Water Quality and Bacteria Monitoring Training Understanding the Differences

- Sampling time—Bacteria sampling is on Monday mornings. Deliver samples to OARS by 8:00 am.
 - a. Water Quality sampling is on Sunday mornings (once per month). Start at OARS at 6:00 am.
- 2. **Sterility**—Bacteria sampling requires full sterility because *E.coli* come from the human body. All precautions should be taken to eliminate contact between your body and the water sample. A laboratory glove should always be worn on the hand that will touch the bottle cap.
 - a. Water chemistry sampling only requires cleanliness to avoid contaminating samples with sediment, plant matter, or other particles.
- 3. **Blanks**—The blank for bacteria samples is sterile water.
 - a. Water Quality blanks are distilled water.
- 4. **Mixing space**—When collecting bacteria samples, pour out ½ inch of water from the top of the bottle to allow for mixing in the lab.
 - a. Water Quality samples do not require this procedure.
- Field data—Bacteria only requires additional water temperature measurement.
 - a. Water Quality sampling includes <u>air temperature</u> and in-situ meter measurements in water.
- 6. **Holding Time**—Bacteria and chlorophyll samples must be delivered to the lab within 4 hours of collection (allows lab 2 hours for analysis).
 - a. Water Quality samples can be held up to 26 hours.