



for the Assabet, Sudbury, and Concord Rivers

Water Quality and Bacteria Monitoring Training Understanding the Differences

1. **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 5:30 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.*

5. **Field data** – Bacteria only requires additional water temperature measurement.
 - a. *Water Quality sampling includes air temperature and in-situ meter measurements.*

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.*