



Shallow Ponds: Weekly And Biweekly Monitoring SOP

This section summarizes the monitoring procedures for locations less than five meters (fifteen feet) deep. Detailed descriptions of each procedure are in *Section III, Specific Monitoring Techniques*. Detailed instructions for the shallow water sampler is in *Section IV, Directions for Water Samplers*. Items and steps preceded with an asterisk (*) are for biweekly (every other week) monitoring only.

1. Before going out on the water **go over checklist on the next page** to make sure you have everything you need. Have all testing items organized so that you can complete your monitoring as soon as you come off the water.
2. Go out to your location, anchor your boat.
3. Make your first set of **Secchi depth transparency measurements**.
4. *Put the shallow sampler into the water. Squeeze the primer bulb ten times to **rinse the sampler**. Rinse the plastic chlorophyll bottles with some of this water.
5. ***Fill the two white-lidded plastic bottles (labeled for chlorophyll)** with water from the sampler.
6. *Put **thermometer** into one bottle. Keep it out of direct sunlight.
7. *Cap the other bottle and put it in your cooler.
8. Make the second set of **Secchi depth transparency measurements**.
9. ***Read the thermometer while it is in the bottle, record on your postcard**. Take out the thermometer, cap the bottle and also put this bottle in the cooler.
10. Check & record the **depth to the pond bottom** using your Secchi disk, return to shore.
11. ***OUT OF DIRECT SUNLIGHT, do the chlorophyll filtration two times on water from each of the two bottles, for a total of four times.**

CAUTION: You should not have to push with all your strength in order to filter the water. If you see water drops coming out from between the top and bottom halves of the white plastic filter holder this means that the filter has become plugged (either with algae or sediment). You must start over with a fresh filter and water sample. Use less water, for example 25 ml, and record the amount used on your postcard and on the filter itself.

12. ***Put a chlorophyll label on your foil-wrapped filters, label with date and amount of water filtered**, put in resealable plastic bag with desiccant chips, store in your freezer.
13. Fill out and **mail the monitoring postcard** to URI.

*** = Biweekly (every other week) monitoring only**



Monitoring Checklist

On the water:

- Secchi disk and two clothespins
- viewing tube
- *water sampler
- *2 white lidded plastic chlorophyll sample bottles (labeled #1 of 2, #2 of 2)
- *thermometer
- *insulated cooler bag with freezer pack
- pencil and notepad
- monitoring postcard
- personal flotation device
- anchor
- map of location with landmarks and location noted

On shore:

(This is for biweekly (every other week) monitoring)

- Chlorophyll filtration apparatus** (stored in a resealable plastic bag)
 - 60 ml syringe (marked at 50 ml)
 - 2 white plastic filter holders
 - glass fiber filters (stored in 35 mm film cannister)
 - tweezers
 - squeeze bottle of magnesium carbonate
 - resealable bag containing desiccant chips
 - sheet of chlorophyll filter sample labels
 - blotting paper (supplied by volunteer- coffee filter, paper towel)
 - aluminum foil squares (supplied by volunteer)

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