

# Checklist for Implementing the Rouge Education Project (REP)

## Before Monitoring Day

- Attend as many workshops as possible. (New Teacher Orientation and a Water Quality Monitoring Workshop are a MUST)
- Go through your monitoring equipment and materials soon after you receive them to familiarize yourself with them.
- Practice the monitoring tests on your own so you're well prepared to teach them to your students.
- Reserve your bus(es) early for Monitoring Day and confirm with the bus company closer to Monitoring Day.
- Visit your sampling site before you bring students there. This will help you plan exactly where students will do the various tests and where is the safest access to the river.
- Read all mail and e-mail sent to you by the REP team. It contains important information that will help you with the project.
- Track the amount of time you spend on tasks related to the REP (planning, teaching, etc.). Your time translates into grant dollars that Friends of the Rouge receives to support the project. A form for documenting your hours and those of your volunteers will be provided to you.
- Give your students the Pre Survey on the Resource Guide CD. Note: One Pre Survey is for elementary and one is for middle/high school.
- Practice safety procedures and all the monitoring tests multiple times with your students in the classroom, so they are prepared when they go to the river.**
- Track the amount of rainfall each day leading up to Monitoring Day. The physical stream survey has a place to record the last rainfall before Monitoring Day and the amount (in centimeters).
- Make sure your volunteers and students know how to dress appropriately for Monitoring Day: long sleeves and pants to protect from insects and poison ivy, sturdy close-toed shoes, clothes appropriate for mud, hot/cold weather, rain, etc.
- Recruit reliable parents to help on Monitoring Day. Meet with them before Monitoring Day to explain how the day will run and assign them a specific task.
- Before Monitoring Day split your students into small groups. Assign each group a test that they will be in charge of on Monitoring Day. Help them to become "experts" on this test.
- Make sure every student and volunteer has a task for Monitoring Day. Inform them of their task ahead of time.
- The more organized you are and structured your Monitoring Day, the more your students will benefit from the experience** (and the smaller your headache will be at the end of the day).

## On Monitoring Day

### Safety

- Check weather report for flooding.
- If the weather is bad, you may reschedule your monitoring. This is entirely at your discretion, but please let the REP staff know if you change your plans. Safety is the most important concern. Do not take your students out on a day that has dangerous weather.
- Do a head count of students when you arrive and when you leave your site.
- Wear gloves at all times when handling river water.
- Wear safety goggles when performing monitoring tests.
- Be aware of poison ivy (teach your students to recognize the plant).
- Do not go into the water if you have an open wound.
- Do not go into the water above your knees.
- Anyone entering the river should wear a life jacket.
- Wash hands before lunch.
- Check for ticks when done.

### Monitoring

- Record the barometric pressure. You'll need this for your dissolved oxygen calculations later.
- Bring all the items you'll need to conduct your monitoring (see list of Items to Bring on Monitoring Day).
- Collect benthic samples downstream of where you're collecting water samples for chemical testing (reduces turbidity).
- Sample for benthics for 30 minutes and in as many different habitats as possible.
- Rinse container(s) with river water before collecting water samples to test.
- Do not use metal buckets to collect water samples (metal may change test results).
- If possible to do so safely, collect your water samples from the middle of the middle (halfway across the river and halfway between the water's surface and the river bottom). If you cannot do this safely at your site, collect your water sample from as close to this as you can do safely.
- Do not get mud in water samples.
- Conduct tests as soon as possible after collecting river water.
- Make sure students keep accurate and legible accounts of the test results.
- If you want a total solids test run for you, collect a 150 ml water sample in a clean, disposable container. Drop off the sample at one of the designated collection sites before 3:30 p.m. on Monitoring Day. (more information about this will be provided to you)
- Leave the site cleaner than you found it.

### **After Monitoring Day**

- If you did the fecal coliform test, count bacteria colonies according to test instructions.
- Complete biochemical oxygen demand test according to test instructions.
- Compile data and complete data calculations (such as recording Q-values, calculating an overall water quality value if possible for chemical monitoring, calculating a total stream quality score for benthics).
- Interpret the data with your students. (What does it tell us about the river? Are any of the results unusual, indicating a potential problem that needs to be addressed?)
- Enter the data on the Friends of the Rouge web site: [www.therouge.org](http://www.therouge.org).**
- If you are unable to enter your data online, send a hard copy of all your data to the REP staff and they will enter it for you (fax: 313-792-9628, address: 24401 Ann Arbor Trail, Dearborn Heights, MI 48127).
- If time and interest permit, have the students develop and implement an action project to improve the health of the river based on their findings (examples: create a native plant garden on school grounds, engage in storm drain stenciling, write an article for the school paper about what they learned about the river and how other students can help, present their findings at a city council meeting, create a video for a cable access station about what people can do to help the Rouge River, adopt their sampling site and hold regular cleanups there).
- Give your students the appropriate Post Survey on the Resource Guide CD. Note: One Post Survey is for elementary and one is for middle/high school.
- Score the surveys and send the Pre and Post Survey RESULTS (not the actual surveys) to the REP staff.
- Submit your forms documenting teacher and parent volunteer hours spent working on the REP.**
- Inventory your equipment and make a list of items you'll need to order next year (chemicals you've run out of or that will expire, lost items, gloves, etc.).