

Where to Sample

1. Select a stream

- Involve your students in selecting a stream. This will help foster a sense of ownership for the stream and the program.

- The *Stream Side Science* is specially designed to monitor flowing water - creeks and streams. Ponds and wetlands offer rewarding monitoring experiences, too, but may require a few modifications in your approach. Refer to “Monitoring a Pond or Wetland” for help monitoring one of these water bodies.



Visit your field site before you begin monitoring with students. This will help ensure a more successful experience.

- If possible, locate a stream close to your school – walking distance is ideal. Close proximity allows for greater frequency and flexibility in monitoring, and less expense if you have to bus or carpool.

- Local resource management agencies can direct you to interesting sites.

2. Select a sampling site

Here is an opportunity to *revisit your monitoring goals*.

- If you want to represent the water quality of the entire stream, sample a “representative section.” This section will have the common forms of vegetation, bank structure and stream shape for that stream.

- If you want to investigate human impacts, such as heavy development, choose a site where you can compare an impacted area with an unaffected area. For example, to isolate the affect of a potential impact, sample upstream of the activity (which will serve as a control site) and just downstream of the impact. You may also want to sample a third site, farther downstream, to determine the range of the impact. A nearby tributary can also serve as a control site.



If you suspect a point-source of pollution or contaminants in your area, contact the Division of Water Quality, but avoid sampling near the sources of potential pollution. [Refer to the “Resource” appendix for contact information].

- Regardless of your goal, your sampling site should be *accessible* to everyone in your class and *safe*.

3. Document your site

If you are going to sample your site again, or report your findings, be sure to document your location.

- Obtain a topographic map of your area. Detailed 7.5 minute (1:24,000) “quad” maps are recommended. To obtain one, check with a local resource management agency (UT Dept of Natural Resources) or camping supply store. You can also print quad maps through the US Geological Survey’s web site - <http://www.water.usgs.gov/>.

- Locate and clearly mark your site on the map. Keep the map with your *Stream Side Science* manual. It will serve as a valuable teaching tool and also help future groups locate the site.