

Riparian Soil Sampling Protocol and Data Sheet

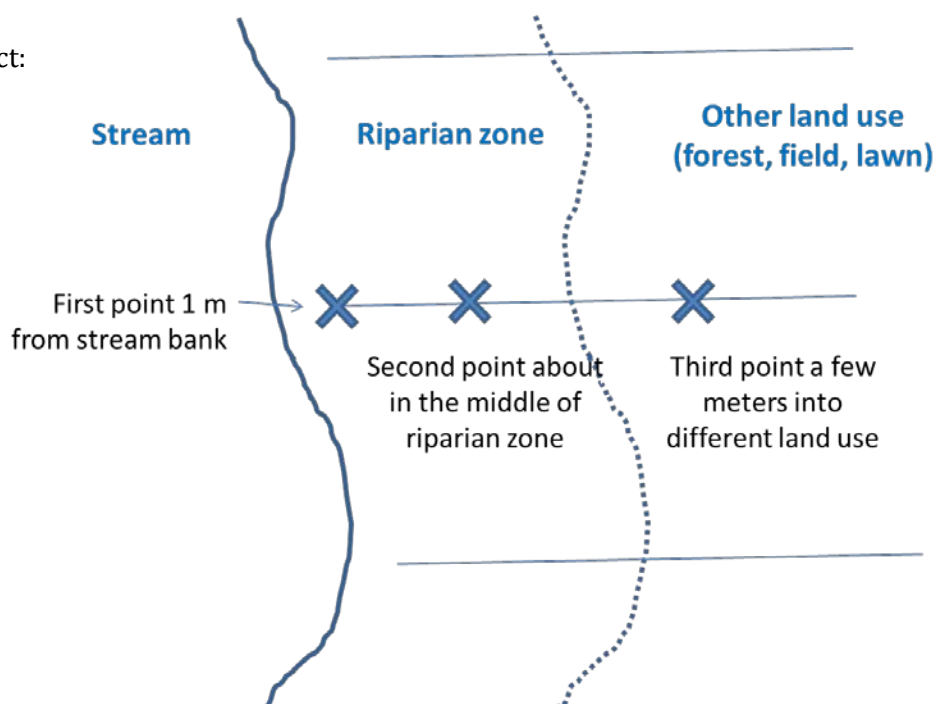
2014-2015

High School Name:	Investigators:
Stream Name:	Stream Site Code:
Date/Time:	Latitude: Longitude:
Site Description (forest, farm field, lawn, etc.). Be as specific as possible:	

Field Method: Soil Samples for Nutrient Analysis

1. Take samples along 2-3 transects within a relatively short distance (50-100 m) from your stream site to capture variability. If you can sample both sides of the stream, that is great. If at your site it seems as if fewer or greater sampling points are needed along each transect, that is fine.
2. Record the exact distance of each sample location from the stream bank (or stream center if feasible) and the exact location along your stream. Measuring to your stream sampling site would be the best way to determine this.
3. Take the first sample 1 m from the edge of the stream bank, the second sample in the middle of the riparian buffer (usually about 4-5 m from the first point) and the third sample a few meters into the other land use (forest, field, lawn).
4. Use your soil sampler to collect a sample from 0 to 15cm below the ground surface. Place into a clean plastic pail. Remove surface vegetation and coarse roots. Obtain an additional 7-11 soil cores in a circular pattern within 0.5 m of the first sample and add to the pail. [If the soil is too rocky for the soil sampler, use the alternate trowel method demonstrated at training.] Each sample should be the composite of 8-12 cores that go 15 cm deep.
5. Thoroughly mix the sample in the pail and fill the Ziploc bag halfway with this composite sample.
6. In permanent marker, label each bag clearly with your site code, the date, the transect number, and sampling point, and provide a map of the transects and sampling points.
7. Soil samples do not have to be preserved or frozen. Keep out of the sun and store until the next time you have water samples ready to ship to the SMC Water Quality lab. At that time send your soil samples and map with your water quality grab samples to the SMC water quality lab, and Katie will take the samples over to the UVM Plant and Soil Science lab for analysis.

Example transect:



Soil Sampling Diagram:

