



City Of Raleigh *North Carolina*

VOLUNTEER STREAM MONITORING PROGRAM OVERVIEW

Raleigh residents have been developing a keen interest in the water quality of their local neighborhood stream. Many things can have an impact on water quality, affecting a stream's health. High levels of bacteria could indicate sanitary sewer leaks of sewage into streams. High levels of nutrients, such as nitrogen and phosphorus, can cause algae growth in Raleigh and downstream in the Neuse River, which can cause fish kills by depleting dissolved oxygen from the water. Sediment is North Carolina's largest pollutant of waterways. Sediment is often seen as the reddish orange clouds within the water immediately after rain storms; it can clog the gills of aquatic life and smothers the bottom of the creek bed.

The Volunteer Stream Monitoring Program allows proactive volunteers, such as yourself, to monitor your local stream and determine your stream's health. Your data can also be shared with other volunteer monitoring groups across the City.

- Volunteer groups shall monitor a specific stream segment for a one year period, with the option to renew the agreement after each year is complete.
- Volunteer groups will be provided with enough monitoring equipment for a one year period and will then return equipment back to City of Raleigh.
 - LaMotte monitoring kits include equipment to monitor the following parameters: Coliform bacteria, biological oxygen demand, dissolved oxygen, pH, nitrate, phosphate, temperature, and turbidity.
 - Benthic macro invertebrate equipment includes a D-frame dip net, a bucket, two (2) sorting trays, identification key, tweezers, and two (2) magnifying bug boxes.
 - Safety vests and field data sheets to record monitoring results will be provided.
- Over the course of the one year monitoring period, groups are encouraged to monitor their site for the chemical parameters five (5) to ten (10) times and Coliform bacteria three (3) times; groups are encouraged to survey the benthic macro invertebrates once a year (in July or August).
- After each monitoring date, groups shall submit their recorded data to Stormwater Management Division staff.
 - Monitoring data will be posted in a database available online to compare data with other volunteer monitoring groups across Raleigh.
- Any pollution sources identified by the groups will promptly be investigated by City staff to ensure the pollution source is eliminated.

The City is not responsible for injury to persons or property resulting from Volunteer Monitoring activities. Once a monitoring location has been determined, it is the responsibility of the volunteer group to obtain permission from all adjacent property owners.



City Of Raleigh
North Carolina

VOLUNTEER STREAM MONITORING PROGRAM AGREEMENT

_____ hereby agrees to monitor
(Volunteer Group Name)

_____ as part of the Volunteer Stream Monitoring Program.
(Stream Name)

The minimum responsibilities that accompany monitoring the stream segment are as follows:

1. Monitor the stream over the course of one (1) year and collect water quality data for a minimum of five (5) or maximum of ten (10) times throughout the year. Water quality data consists of chemical testing parameters included in LaMotte testing kits provided by the City of Raleigh.
2. Monitor the stream over the course of one (1) year and collect data one (1) time for benthic macro invertebrate sampling. Sampling equipment will be provided by the City. Benthic macro invertebrate monitoring should be done between July and August.
3. Keep complete and accurate records of all data collected using Field Data Collection Sheets, which are provided by the City. Field Data Collection Sheets should be mailed to the City within 72 hours of the completion of monitoring activities. For accurate data, groups must monitor at the same location consistently.
4. If groups wish to discontinue their data collection, all monitoring equipment shall be returned to the City.

We understand all of the requirements set forth for volunteer monitoring and agree to monitor the

_____ at this specific location: _____.
(Stream Name) (Landmark)

If available, the GPS coordinates are N ____° ____' ____" and W ____° ____' ____"

for the period of one (1) years beginning on _____ with the option to renew
(Date)
my agreement after the year is complete.

Contact Person (print): _____ Phone Number: _____

E-Mail: _____

Address (print): _____
(Street Address)

_____ (City) _____ (State) _____ (Zip Code)

(Signature)

