

Long-Term Study by Waterkeeper Looks at Lake George's Streams

By Mirror Staff

The Lake George Stream Assessment Project, a program initiated by the Lake George Waterkeeper, has completed its third season of monitoring streams throughout the Lake George watershed. Waterkeeper Chris Navitsky reports.

"This year, the project monitored 65 sample sites, an increase of 13 since 2008. The data is currently being analyzed and will be compiled into a 2009 Stream Assessment Project report, which is expected to be released in February 2010. Reports from 2007 and 2008 are posted on our website," said Navitsky.

"This year we not only increased the number of sites we sampled, but we also implemented an additional protocol for the collection of new data" said Dawn Keppler, the Stream Assessment Project Director. "The project continues to

look at a variety of different physical, chemical, and biological parameters and as the years progress the project will continue to expand."

According to Keppler, the Stream Assessment Project monitors three types of parameters in sample sites: physical parameters, chemical parameters, and biological parameters. Physical parameters include measuring flow, turbidity, total suspended solids, and temperature. A habitat evaluation to determine the physical condition of a stream and a pebble count was conducted to determine the streambed composition.

"This year we have also implemented a rapid assessment stream identification form that was developed by North Carolina's Division of Water to more accurately determine if a stream is ephemeral, intermittent, or perennial based on a variety of different morphological, hydrological, and biological characteristics" said Keppler.



Chemical parameters include pH, dissolved oxygen, and specific conductance.

"The pH and dissolved oxygen levels are an important component of instream habitat. All organisms have a range of tolerances, many of which like trout are susceptible to unsuitable pH and low dissolved oxygen levels. Specific conductance is a general measure of instream pollution where streams with higher levels are more polluted than those with lower levels" said Keppler.

Biological parameters include analysis of macroinvertebrates to determine water quality. Macroinvertebrates are found throughout a stream and are visible with the naked eye and do not have vertebrae. They are used by many as water quality indicators because they vary in their ability to tolerate pollution and are constantly exposed to the environmental conditions of the stream. This year an inventory on algae was also conducted at each of these sample sites with the assistance of Corrina Parnapy, the Stream Assessment Project Field Assistant.

"We continue to find interesting things on a day to day basis and can't wait to sit down to work on three years worth of data" said Keppler.