

Hamilton County Soil & Water Conservation District Water Monitoring Programs

Hamilton County is situated in the central Adirondacks with over 500 lakes and ponds. In order to conserve the abundant natural resources of the county, the Hamilton County Board of Supervisors passed a resolution on the 4th day of February, 1965, declaring the County a Soil & Water Conservation District (SWCD). The SWCD has been designated as the lead agency to protect water resources in the county from non-point sources of pollution. One of the ways the District accomplishes this goal is by conducting extensive water monitoring programs each year. These programs allow the District to keep a watchful eye out for any changes in water quality.



Stream Monitoring



In 1999, the District added assessing stream benthic macroinvertebrate communities to further our mission of protecting the water resources of the county. Benthic Macroinvertebrates are defined as bottom-dwelling invertebrates, animals lacking backbones, that are large enough to be visible without a microscope. District staff collect these creatures from the bottom of streams. And then use them as indicators of the stream's health. Once we know which streams are in trouble efforts for improvements can be focused in those areas.

Zebra Mussel Monitoring

The summer of 1999 marked Hamilton County Soil & Water Conservation District's first round of zebra mussel sampling. The exotic zebra mussel (*Dreissena polymorpha*) showed no trace in the 20 lakes sampled.

The zebra mussel is a small (less than two inches) bivalve mollusk marked typically with alternating black and white stripes. This exotic creature is native to Eastern Europe and Western Asia. It was first discovered in the Lake St. Clair in 1988. Since then it has spread throughout the Great Lakes and beyond causing tremendous damage to the natural ecosystem.

To prevent the spread of zebra mussels:

- drain all bilge water, live wells and bait buckets,
- inspect the hull, drive unit, trim and trolling plates, prop guards and anchor,



-let your boat dry for two to four days before entering a different body of water.

Volunteer Secchi Monitoring

A Secchi disk is a 8 inch circular disk painted black and white. It is used to measure transparency.

Volunteers dip their secchi disk into a specific location on the lake once a week at approximately the same time of day and record the depth at which it disappears. This measure estimates the clarity of the water, which then can be used to estimate algae

productivity. Changes in transparency over time can be an important red flag that a change in water quality is occurring. Contact the District to learn more about becoming a part of the volunteer monitoring program.

Lake Water Monitoring

The Hamilton County Soil & Water Conservation District has been monitoring 21 lakes each year since 1993. The purpose of the water monitoring program is to collect data over a long period of time and keep a watchful eye our for any changes.

Once each month during the months of May to October the water monitoring crew visits the deepest spot on each lake. Information is collected about each of the following parameters: pH, transparency, alkalinity, total phosphorus, nitrate, dissolved oxygen, chlorophyll *a*, calcium and aluminum. The District has compiled this data in "The State of Hamilton County Lakes an Analysis of Water Quality Trends 1993-1998."

Lake Information Sheets are available for each of the following Hamilton County Lakes:

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| Blue Mountain Lake | Eighth Lake |
| Fawn Lake | Fifth Lake |
| Fourth Lake | Indian Lake |
| Lake Abanakee | Lake Adirondack |
| Lake Algonquin | Lake Durant |
| Lake Eaton | Lake Pleasant |
| Limekiln Lake | Long Lake |
| Morehouse Lake | Oxbow Lake |
| Piseco Lake | Raquette Lake |

