

Fritz Gerhardt, Ph.D.
Conservation Scientist

MWA 2013 Water Quality Sampling Program

In 2013, the Memphremagog Watershed Association again partnered with Beck Pond LLC and the Vermont Department of Environmental Conservation to complete targeted water quality sampling in the Lake Memphremagog Basin.

The goals of this year's sampling were focused on further identifying and assessing water quality issues in areas where phosphorous and sediment problems remain poorly understood, identifying and prioritizing areas within the basin that export the largest amounts of nutrients and sediments into Lake Memphremagog, and further evaluating the success of previously-implemented phosphorus-reduction projects.

To accomplish these goals, we sampled water quality on eight dates at 30 sites, primarily in the Barton River and Black River watersheds and along several small tributaries that flow directly into Lake Memphremagog. At each site, we measured total phosphorus, total nitrogen, and turbidity.

Although only preliminary data are available so far, these data do further pinpoint possible nutrient and sediment sources along several tributaries (e.g. Holbrook Bay, Brighton Brook), identify several other areas where nutrient and sediment exports may be problematic (e.g. a small tributary draining the Newport airport), and indicate that previously-implemented phosphorus-reduction projects have reduced nutrient and sediment levels along several other tributaries (e.g. Shalney Branch).

Thanks to financial support from an Ecosystem Restoration Project grant secured by the Orleans County Natural Resources Conservation District and a LaRosa Analytical Services Partnership with the Vermont Department of Environmental Conservation, the Memphremagog Watershed Association is once again playing a vital role in identifying and prioritizing areas within the Lake Memphremagog Basin in which to improve water quality.

beckpond@gmail.com

802-535-1202

394 Beck Pond Road, Newark, VT 05871