

Upper Merrimack Monitoring Program • Boscawen, NH
February 18, 2002 • For immediate release

Volunteers produce quality environmental data on the Merrimack River—citizen science validated as a natural resource management tool

A report released this month by the Upper Merrimack Monitoring Program (UMMP) details the strength and validity of citizen science, or volunteer-generated, water quality biomonitoring data. The report proves that the quality of data produced by Upper Merrimack Monitoring Program volunteers is indistinguishable from that of professional level analysis.

Since 1995, hundreds of volunteers from throughout New Hampshire and the region have been trained to collect specimens and analyze samples for the UMMP. Adhering to the UMMP's Quality Assurance/Quality Control Plan, approved by the US Environmental Protection Agency, volunteers strictly followed collection and analysis protocols. The biomonitoring and other water quality data for eleven sites along the upper Merrimack and three major tributaries is detailed in *State of the Upper Merrimack 1995-1997, a river quality report*. Several statistical tests were applied to the same samples that were analyzed by both volunteers and a professional and independent laboratory; EcoAnalysts in Moscow, Idaho. The results indicate that the UMMP volunteer data is comparable to that produced by the professional laboratory.

Citizen science is a valuable tool for watershed groups and professional resource managers to monitor long-term conditions of ecological systems such as rivers. The data produced by volunteers has other values including early identification of possible contamination and other impairments. With ever-shrinking state and federal budgets, samples are only taken once every several years or have not yet been monitored by state or federal programs. Another tremendous value of citizen science is that it also fosters stewardship for the resources it monitors such as rivers, lakes, wetlands, and other ecological systems.

An Evaluation of the Statistical Power of Volunteer-generated Data Compiled by the Upper Merrimack Monitoring Program and State of the Upper Merrimack 1995-1997, a river quality report can be downloaded at www.merrimackriver.org/publications.htm or contact the UMMP for hardcopies.

For further information, contact Michele L. Tremblay, Chair and Program Director or Stephen C. Landry, Vice-chair and Sampling Supervisor at 603.796.2615, mtrembla@tds.net, www.merrimackriver.org, or PO Box 3019, Boscawen, NH 03303.