

Summer Local River Water Quality Monitoring Volunteer Opportunities

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Each summer, local volunteers collect samples and conduct field analytical measurements to monitor the water quality in rivers throughout New Hampshire. It is a fun activity that supports keeping New Hampshire rivers healthy.

The New Hampshire Volunteer River Assessment Program (VRAP) is managed by the New Hampshire Department of Environmental Services (NHDES). The work of VRAP volunteers increases the amount of river water quality information available to local, state and federal governments, which allows for better watershed planning. At last count, DES supported over 40 volunteer groups on numerous rivers and watersheds throughout the State. Further, VRAP volunteers monitor over 300 river/stream stations and collected over 10,000 chemical and biological samples results annually. These monitoring results have contributed to the water quality assessment of more than 2,500 miles of rivers and streams in New Hampshire.

DES staff develop a sampling plan and establish monitoring locations for river water sampling, based upon previous sampling data trends. DES staff train volunteers to use the portable water quality monitoring equipment to take field measurements. Volunteers measure water quality constituents, such as pH (acidity/alkalinity), turbidity, dissolved oxygen, water temperature and specific conductance. Volunteers are also trained to properly record the data on field data sheets, to assure the monitoring results comply with required quality assurance/quality control procedures. Periodically, samples are collected and sent to the DES Laboratory in Concord, NH for analysis. These constituents (which cannot be measured with available field instruments), include: E. coli, phosphorous, chloride, nitrate and nitrite.

Volunteers work with DES to schedule sample dates for the season. In the Plymouth area samples are collected and analyzed twice a month from May through August. Also, twice during the monitoring season, samples are taken to the DES Concord Lab for analysis.

This river monitoring program is important because more locations along New Hampshire's rivers are monitored and with greater frequency, than DES staffing levels allow. This improves the likelihood of finding harmful discharges in the river systems, as an example, from an improperly operating septic system. The monitoring program is conducted during the summer months when there are increased recreational activities in the rivers and this is also a critical time for fish and wildlife in the rivers.

The VRAP program was established in New Hampshire in 1998. The purpose was to promote awareness and education of the importance of maintaining water quality in New Hampshire's rivers and streams. Max Stamp (a local volunteer) started conducting the VRAP sampling in the Plymouth area, back in 2000. It has been a labor of love, for the past twenty-three years, in all kinds of weather, he has been out in the field conducting analytical testing of the river water. Max lives along the Pemigewasset River and is very committed to maintaining its water quality. He is also a member of the Pemigewasset River Local Advisory Committee (PRLAC). Max has decided that this will be his last year monitoring for VRAP, and at 88 years of age, that seems reasonable.

The VRAP program is looking for someone to replace Max and also for additional volunteers that are needed in the Plymouth area. No lab or chemical monitoring skills are required; you will be trained. Sampling times are in the mornings, twice a month, for the summer months. If you are interested, please contact the PRLAC Chair, Sherrill Howard at golfmoms@gmail.com. Additional information is available about the VRAP program at: [River and Lake Monitoring | NH Department of Environmental Services](#)



Photo: Bill Bolton and Max Stamp filling sample bottles at Blair Bridge, Campton, NH.