ENVIRONMENTAL

Fact Sheet



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New Hampshire Volunteer River Assessment Program

What is VRAP?

In 1998, the New Hampshire Department of Environmental Services (NHDES) established the New Hampshire Volunteer River Assessment Program (VRAP) to promote awareness and education of the importance of maintaining water quality in New Hampshire's rivers and streams. VRAP aims to educate people about river and stream water quality and ecology and to improve water quality monitoring coverage for the protection of water resources.

Today, VRAP loans water quality monitoring equipment, provides technical support, and facilitates educational programs. In 2017, VRAP supported 34 volunteer groups on numerous rivers and watersheds throughout the state. VRAP volunteers conduct water quality monitoring on an ongoing basis. The work of the VRAP volunteers increases the amount of river water quality information available to local, state and federal governments, which allows for better watershed planning. In 2017, VRAP volunteers monitored 275 river/stream stations and collected 8,332 individual chemical and biological sample results.

Why is VRAP Important?

VRAP establishes a regular volunteer-driven water sampling program to assist NHDES in evaluating water quality throughout the state. VRAP empowers volunteers with information about the health of New Hampshire's rivers and streams. Regular collection of water quality data allows for early detection of water quality changes allowing NHDES to trace potential problems to their source. Data collected by VRAP volunteers are directly contributing to New Hampshire's obligations under the Clean Water Act. Data collected through VRAP are used to develop the federal Clean Water Act required section 305(b)/303(d) water quality report. Over 20% of the surface water quality assessments of riverine assessment units included in the 2016 303(d) report was provided by VRAP. In 2016, this data contributed to the assessment of 2,500 miles of rivers and streams.



How Does VRAP Work?

VRAP is a cooperative program between NHDES, river groups, local advisory committees, watershed associations, and individuals working to protect New Hampshire's rivers and streams. VRAP volunteers are trained by VRAP staff in the use of water quality monitoring equipment and quality assurance/quality control procedures. VRAP works with each group to establish monitoring stations and develop a sampling plan. Project designs are created through a review and discussion of existing water quality information, such as known and perceived problem areas or locations of exceptional water quality. The interests, priorities and resources of the partnership determine monitoring locations, parameters and frequency. VRAP groups are encouraged to organize a long-term sampling program in order to begin to determine trends in river conditions.

The Role of NHDES

- Teach principles of riparian ecology to volunteers.
- Provide sampling equipment to volunteers.
- Train volunteer monitors how to collect samples.
- Conduct an annual visit to each VRAP group.
- Analyze samples in the laboratory.
- Interpret and publish data in annual data reports.
- Provide technical/educational materials.
- Provide notification of workshop opportunities.
- Investigate water quality complaints.
- Incorporate data collected by volunteer monitors into state water quality reports.

The Role of the Volunteer Monitor

- Notify laboratory of sampling dates in advance.
- Schedule equipment and bottle pick-up.
- Contact NHDES to schedule annual VRAP staff visit.
- Collect water samples at least once per month (typically May - October).
- Deliver collected water samples to the laboratory within required hold times.
- Report on potential water quality violations to NHDES when necessary.
- Pass on water quality information to watershed group, local community members and town officials.

Water quality measurements repeated over time create a picture of the fluctuating conditions in rivers and streams and help to determine where improvements, restoration or preservation may benefit the river and the communities it supports. All data collected by volunteers are summarized in water quality data reports that are prepared and distributed after the conclusion of the sampling period. Assessment results and the methodology used to assess surface waters are published by NHDES every two years as required by the federal Clean Water Act.

How can I get involved?

The Volunteer River Assessment Program could not be a success without the dedication of volunteer monitors who realize how important New Hampshire's rivers and streams are to the beauty, economy, and ecological health of the state. Watershed and river organizations or individuals interested in learning more about VRAP or other NHDES volunteer programs, should contact:

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