

VTDEC Uses of Volunteer Data

1. Water Quality Assessments

Volunteer data have been used to develop water quality assessments for Vermont's biennial "305(b) Report" to the U.S. Congress, named after the section of the Clean Water Act that requires the report. Data used for this purpose are evaluated in accordance with Vermont's Water Quality Assessment and Listing Methodology.

2. Impaired and Priority Waters Listings

Following the development of water quality assessments, certain waters are "listed" based on the available data, which can include volunteer data. The federal Clean Water Act requires states to prepare a biennial list of waters that do not meet Water Quality Standards due to pollutants. This list of impaired (polluted) waters is called the "303(d) list," after the section of the Clean Water Act that requires the list. Vermont also prepares a list of waters that are state priorities for further study or remediation that do not fall within the limited scope of the 303(d) list. The state priority waters list includes, among others, waters in need of further assessment and waters altered by exotic species, flow regulation, or channel alteration. Data used for listing purposes are evaluated in accordance with Vermont's Water Quality Assessment and Listing Methodology. The data must be documented as quality-assured and based on reliable and reproducible field and analytical methods.

3. Legislative Process

Volunteer monitoring data have been used in the legislative process and for the development of water quality standards. Data used for this purpose must be documented as quality-assured and based on reliable and reproducible field and analytical methods.

4. TMDL (Total Maximum Daily Load)

Volunteer data have been used for developing pollution control plans (so-called TMDL analyses) required for all impaired waters on Vermont's 303(d) list. Data used to support TMDL analyses must be documented as quality-assured and based on reliable and reproducible field and EPA-certified analytical methods.

5. Federal Funding for Remediation

Volunteer data have been used to obtain federal funding for remediation projects. Funds go towards projects that cleanup waters with documented water quality problems. The highest quality data will carry the greatest weight when such data are used to direct remediation funds.

6. Determining Water Quality Trends

Volunteer data that are developed using consistently-applied and quality assured field and analytical methods can be used to establish the baseline conditions of a waterbody. These data can also be used to identify water quality improvement or degradation over time.

7. Contact Recreation Safety

Volunteer *E. coli* monitoring data have been used to advise the public of health risks at beaches and swimming holes. VTDEC provides guidance to volunteer groups on appropriate *E. coli* monitoring plan designs in the *Citizen's Guide to Bacteria Monitoring* listed in *Appendix C*. When such data are collected using a U.S. EPA-certified method and following basic quality control procedures, they can be used to identify when and where swim areas may need to be temporarily closed to public use.

8. Red Flag

Volunteer data have been used to identify waters where water quality is questionable and requires more in-depth study. Once these waters have been brought to the attention of state and academic parties, professionals can conduct more rigorous research and monitoring.