

THREE Volunteer Water Quality Monitoring

Volunteer water quality monitoring programs within the New England Regional Water Program often serve as the critical first link that engages the public in watershed stewardship. Volunteer monitoring programs improve understanding of local water resources, encourage individual and community involvement in water quality

protection and restoration efforts, and help communities make informed decisions that improve water quality.

These long-lived New England programs monitor a host of water resources – lakes, rivers, streams, estuaries, wetlands, and private drinking water wells. They have a unique capacity to educate and motivate

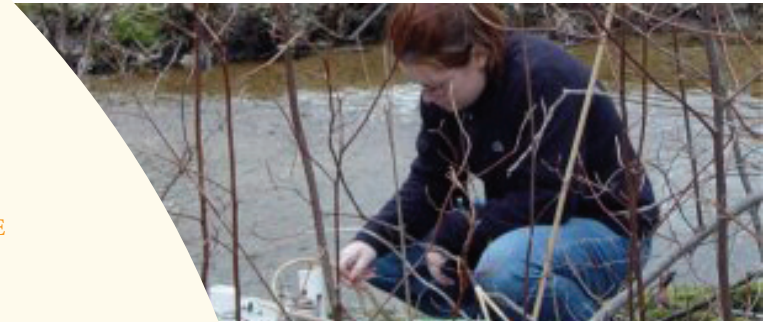
citizens for water quality and watershed protection. These programs also develop and assess monitoring methods and research how to use volunteer data to model or make informed decisions.

PARTNERSHIPS

THE VOLUNTEER WATER QUALITY MONITORING FOCUS AREA ENSURES THAT PARTNERS FROM FEDERAL, STATE AND LOCAL AGENCIES—AT PUBLIC AND PRIVATE LEVELS—WORK AS ONE UNIT TO CAPITALIZE ON THE ENORMOUS NUMBER OF VOLUNTEER HOURS AND SERVICES THAT SUPPORT PROGRAM EFFORTS.

For example, about \$89,000 generated by New Hampshire's Lakes Lay Monitoring Program was matched by federal and state grants for the University of New Hampshire Water Resources Research Center, New Hampshire municipalities and New Hampshire Department of Environmental Services. And the more than 13,000 volunteer hours, valued in excess of \$245,000 has ensured the longevity of the University of Rhode Island Watershed Watch Program by providing not only grant match, but reassurance to local and state officials of the value and interest in volunteer monitoring.

Programs obtain additional funding from University Sea Grant programs, Water Resources Research Center, watershed associations, Trout Unlimited, and Native American communities and guidance from national partners, including U. S. EPA and the U.S. Geological Survey.



SELECTED ACCOMPLISHMENTS

CONCERNS FROM U.S. EPA AND STATE AGENCIES ABOUT THE QUALITY ASSURANCE AND QUALITY CONTROL of volunteer monitoring data led to the Massachusetts Water Watch Partnership, housed at the University of Massachusetts,

to develop and publish the *Massachusetts Volunteer Coastal Monitoring - General Quality Assurance Project Plan (QAPP)*, a generic QAPP offered online that contains baseline requirements providing a useful foundation for QAPP development by programs in Massachusetts and throughout the region.

EFFORTS TO SHARE SUCCESSES, STRATEGIES, AND LESSONS LEARNED with a diverse group of monitoring practitioners representing community-based, state, tribal, national, and international monitoring programs led to the presentation of "Getting Started in Volunteer Monitoring," an U.S. EPA Watershed Academy webcast.

IN 2005, "THE NEW ENGLAND MONITORING SUMMIT—SHARED WATERS" jointly convened by the focus area, the New England Interstate Water Pollution Control Commission, and U.S. EPA New England to reach a consensus on information and resources needed to further promote volunteer monitoring in New England. This initiative brought together not only volunteer monitoring program coordinators from throughout the region, but also a broad cross section of data users, including municipal officials, state and federal agency staff, as well as non-profit organizations. Priorities identified by participants have informed subsequent focus area work plans.



THE MAINE SHORE STEWARDS CONTRIBUTED IMPORTANT DATA AND INFORMATION to Maine's decision makers to help solve pollution problems, restore clam flats and encourage the ethic of caring for Maine coastal communities. Simply by providing data for areas where none had previously been available, volunteer monitors enabled the State to open 100,000 acres of clam flats.

THE LAKE EDUCATION AND ACTION PROJECT, LEAP, FUNDED BY CSREES' NIWQP has allowed The University of Maine Cooperative Extension to adapt programs from New Hampshire and Vermont. For example, they have adapted a watershed erosion survey method to use training materials from the University of New Hampshire's "following the flow" survey. In addition, Maine has adopted the University of Vermont's Watershed Alliance methods to partner with area schools.

ADOPTED PRACTICES

SEVERAL NEW HAMPSHIRE COMMUNITIES PRESENTED IDEAS FOR WATER RESOURCE PROTECTION to their local decision makers as a result of the information applied from the work of more than 500 volunteers in the New Hampshire Lakes Lay Monitoring Program monitoring more than 300 lakes and 370 tributaries.

THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT RELIES ON THE UNIVERSITY OF RHODE ISLAND WATERSHED WATCH PROGRAM as its sole source of data for the State's 305(b) report as well as data for seven lakes in its research-based study, "Urban Lakes Total Maximum Daily Load."

THE MAINE HEALTHY COASTAL BEACHES PROGRAM, a partnership between the University of Maine Cooperative Extension/Sea Grant, several state agencies, local municipalities and the beach-going public brings together fifteen coastal beach communities (representing 31 beaches), where municipalities, state parks and community groups are monitoring beach-water quality. They use standardized methods to take water samples at coastal swim beaches to monitor for bacteria, an indicator of recreational water-borne illnesses. They notify the public if health risks are detected and educate both residents and visitors on what can be done to avoid water-related illness at the beach.

VOLUNTEER WATER QUALITY MONITORING