



## Alliance for the Chesapeake Bay Citizen Monitoring Program

Launched in 1985, the Chesapeake Bay Citizen Monitoring Program originally was designed to test the possibility of including a permanent, Bay-wide volunteer monitoring network among the long-term Bay management strategies of state and federal governments. The Alliance's Citizen Monitoring Program (ACB) has done that and more. Over 500 volunteers across the Chesapeake Bay region - in Pennsylvania, Maryland and Virginia have participated in the Citizen Monitoring Program. Some have worked with the ACB for more than fifteen years, watching their rivers through the seasons and regularly submitting the valuable data they collect. Over 400 sites (active and historic) have been monitored under the Citizen Monitoring Program. Today the program focuses mainly on Virginia's rivers and currently has 120 active volunteer monitors throughout the Commonwealth's Chesapeake Bay Watershed. The program is coordinated by the Alliance for the Chesapeake Bay and over the past few years has been funded by the Virginia Coastal Nonpoint Pollution Control Program administered by the Virginia Department of Conservation and Recreation and by the Virginia Department of Environmental Quality through a General Assembly Budget Amendment.

Volunteers in this program learn to be stewards of their rivers and surrounding lands, and can foster this ethic in others while providing valuable water quality information. Citizen volunteers collect weekly or bi-monthly water quality samples and perform tests with equipment, supplies and protocols provided by ACB. Tidal and non-tidal waters are tested for dissolved oxygen, temperature, pH, salinity (where appropriate), and water clarity. Additional parameters for some sites include daily precipitation and weather observations.

As the program matured, volunteers at some sites began to take on other monitoring tasks. Volunteers participated in the Mattaponi and Pamunkey Integrated Monitoring Project in which one task of the volunteers was to collect and identify stream-dwelling *macroinvertebrates* (insects and other organisms that are large enough to be seen without aid of a microscope). Since excess nutrients have been found to be a major problem in the Bay, some monitors have participated in a nutrient sampling program. Samples collected by the monitors were tested in a laboratory for dissolved inorganic nitrogen and inorganic phosphorous. Some monitors in salinity areas are conducting jellyfish monitoring for a pilot prediction model in collaboration with the National Oceanic and

Atmospheric Administration. Volunteers have participated in several other specific monitoring tasks including water clarity monitoring in response to hurricanes and extreme storm events; the York Watershed Monitoring Project, and wildlife monitoring programs in conjunction with the Virginia Department of Game and Inland Fisheries, to name a few.

**Submerged Aquatic Restoration and Monitoring:** In 1994 the Alliance initiated an innovative restoration project combining our experience with habitat restoration and volunteer monitoring. The Alliance began working with volunteers to restore and monitor submerged aquatic vegetation (SAV) beds. These SAV beds provide critical habitat for blue crabs, fish, and other living resources. Volunteers at several tidal sites in Virginia and Maryland monitor water quality at shoreline sites to determine if the water quality meets habitat quality objectives for potential restoration sites. The volunteers measure surface water temperature, salinity, and water clarity and collect samples that are tested in a laboratory for dissolved inorganic nitrogen and phosphorous, chlorophyll a, and total suspended solids. Volunteers also make notes about the presence/absence of SAV, and SAV species types.

Volunteers of the Citizen Monitoring Program have demonstrated that citizen volunteers can collect data that meet strict quality control standards. Thanks to the efforts of these volunteers, the Citizen Monitoring Program has been a model program within the Bay region and the nation as well. The Alliance has provided guidance and technical assistance to watershed groups across the country that are interested in collecting valuable information about their waters and surrounding lands.

## How to Participate?

The Alliance provides training and technical support for organizations that are performing or initiating chemical and physical water quality monitoring. Support is for members of existing *watershed* organizations, civic associations, or other groups that currently perform monitoring activities or can perform coordination responsibilities. Another way to participate is to sponsor the cost of water quality monitoring in your area. Interested individuals can participate by working with existing organizations. To learn more about the Alliance's Citizen Monitoring Program and how you can help, contact Stacey Moulds of the Alliance at (804) 775-0951 or [smoulds@acb-online.org](mailto:smoulds@acb-online.org).

## Online Database

- The citizen monitoring data (including historic data) is available online to the public and may be accessed and retrieved from the Alliance's webpage at <http://www.acb-online.org/monitoring/site.cfm>.
- Data can also be entered through an online process. Many monitors are now performing data entry themselves, which allows for immediate entry of field information into the Alliance's database.

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**About the Alliance:** The Alliance for the Chesapeake Bay is a regional nonprofit organization that builds and fosters partnerships to restore the Bay and its rivers. Founded in 1971, the Alliance for the Chesapeake Bay is funded by individuals, corporations, governments and foundations. The Alliance maintains offices in Baltimore, Maryland; Camp Hill, Pennsylvania; Richmond, Virginia, and Washington, D.C. The Alliance's website is [www.AllianceChesBay.org](http://www.AllianceChesBay.org)