

UNIVERSITY OF DELAWARE CITIZEN MONITORING PROGRAM: ENHANCING LOCAL MONITORING EFFORTS

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ABSTRACT

In 1990, EPA requested assistance from the University of Delaware Sea Grant Program to initiate a volunteer water quality monitoring program to support public engagement for the new Inland Bays National Estuary Program. The initial Inland Bays Citizen Monitoring Program maintained 30 sites monitored by approximately 50 volunteers who collected physical and chemical water quality parameters in the three bay system. After three years of EPA support, the state of Delaware continued funding through the Department of Natural Resources and Environmental Control (DNREC). Since then the program has expanded both in geographic scope and breadth of services – including adjacent watersheds and coastal ocean sampling as well as harmful algal bloom (HAB) monitoring and bacteria sampling for recreational beach safety.

The UD Citizen Monitoring Program is designed 1) to provide verifiable water quality data to support watershed management and other public policy decisions and 2) to provide watershed education to citizens and stakeholder groups and increase public engagement and support for watershed protection.

We have trained more than 250 citizen volunteers to collect water quality data, maintain a network of sampling sites in coastal bays, rivers, and ocean; manage databases, and share information in a variety of formats to user groups including citizens, resource managers, and scientists. See <http://citizen-monitoring.udel.edu/>.

There have been numerous partners involved in the effort including our citizen volunteers, EPA, DNREC and the Delaware General Assembly, the Center for Inland Bays, the Partnership for the Delaware Estuary, the National Fish and Wildlife Foundation, local towns, the University of Delaware College of Marine and Earth Studies, and the Delaware Sea Grant Program.

The program addresses citizen concerns about health of the coastal bays and concerns about public safety including harmful algal blooms, bacteria levels, causes of fish kills, fish and shellfish consumption). The program provides basic watershed and water quality education to volunteers who in turn have educated their family, friends, and neighbors. The program serves to create a well-informed citizenry that participates in resource management decision-making.

KEYWORDS

volunteer monitoring, public participation, watershed education, partners