



Volunteer Monitoring in New Jersey

Connecting Citizens to Science for Better Resource Management

- 29 organizations conduct river and stream water quality monitoring activities in New Jersey
- 58 organizations conduct lake water quality monitoring activities in New Jersey

TIERS

The NJDEP has created a four-tiered approach for defining the data quality of volunteer water quality monitoring data. The tiers are defined by the purpose of monitoring, the intended data use and the intended data users.

The tiered approach allows for volunteers to know up front what they need to do to get their data used by the DEP and assures data users of the quality of the data.

The four tiers are:

- TIER A: Environmental Stewardship**
- TIER B: Stewardship**
- TIER C: Community Assessment**
- TIER D: Indicators/Regulatory Response**



Services provided to the volunteer monitoring community at little or no cost include:

- training and assistance in biological, chemical and habitat assessments
- study design development
- World Monitoring Day participation
- quality assurance
- quality assurance project planning
- macroinvertebrate identification
- collection methodology
- funding
- volunteer recruitment and treatment
- equipment purchasing and calibration
- data compilation and interpretation

Volunteers in Action ...

THE PEQUANNOCK RIVER COALITION

Founded 1994

Mission:

Preservation of the Pequannock River as a natural, aesthetic, recreational and water supply resource.

Programs:

- Public Outreach and Education
- Advocacy, Regulation and Public Policy
- River Access/Greenway Acquisition
- Water Temperature Monitoring

Why did they choose temperature monitoring? TROUT!

Much of the Pequannock River mainstem and many river tributaries are classified as "trout production" where temperature can be a major limiting factor.

First documented fish kill caused by high river temperatures in the West Milford area in 1994. Temperature reached 82°F.

A second fish kill occurred in the same area in 2002. River temperature reached 83°F.

Regulatory Protection:

As the "established biota" of the Pequannock River, trout are protected under the Federal Clean Water Act and New Jersey Surface Water Quality Standards.

- Protected from "measurable changes in water quality"
- No manmade wastewater discharges
- No other activities that might cause negative changes to water quality
- Maximum temperature of 68°F



THE ATHOS 1 OIL SPILL ON THE DELAWARE RIVER

November 26, 2004

Within the first few hours of the spill, volunteers were contacting the New Jersey Department of Environmental Protection's volunteer monitoring program, the Watershed Watch Network (WWN).

70 volunteers were going out to their assigned creek to photo document and assess their shoreline.

The NJDEP, U.S. Coast Guard and the Responsible Party used the data while the clean up was taking place. For example, volunteers notified NJDEP when they found a damaged boom which needed to be replaced immediately. The Natural Resource Damages Program is also using this data as reference on an ongoing basis.

There was an open line of communication between the citizen volunteers, Delaware Riverkeeper Network and the NJDEP that proved to be critical in minimizing the amount of damage caused by the oil spill.



EPA Commends Watershed Watch Network for Environmental Achievement



On April 21, 2005, the 35th Anniversary of Earth Day, the U.S. Environmental Protection Agency honored New Jersey's Watershed Watch Network for its work in improving the volunteer monitoring programs across the state. The Network was among 10 individuals and organizations recognized for their outstanding efforts to protect New Jersey's environment.



For more information please visit www.nj.gov/dep/watershedmgt/volunteer_monitoring.htm

