# WATERSHED-SPECIFIC TECHNICAL ASSISTANCE FOR WATERSHEDS



#### INTRODUCTION

More than 218 million Americans live within 10 miles of a river, lake, or estuary that is considered impaired and cannot fully support its aquatic biological communities or other designated uses or conform to fishable/swimmable water-quality goals of the Clean Water Act. Excess sediments, nutrients (nitrogen and phosphorus), and pathogenic microorganisms are the leading causes of these impairments. Watershed groups recognize that good watershed plans must address the variety of problems seen in the watershed.

To help local watershed groups achieve their goals of watershed protection, several organizations have joined forces to form the Consortium for Scientific Assistance to Watersheds (C-SAW). C-SAW is a team of scientists available to provide technical assistance to your watershed group. Depending on the needs of your group, C-SAW can provide technical assistance in three main areas: Watershed-Specific Technical Assistance, Mentoring Assistance, and Quality-Control Assistance for water-quality and macroinvertebrate monitoring programs. C-SAW assistance is provided at no cost to eligible groups. This fact sheet focuses specifically on the Watershed-Specific Technical Assistance (WSTA) offered by C-SAW.

## WATERSHED-SPECIFIC TECHNICAL ASSISTANCE

Watersheds can be characterized as dynamic and complex threedimensional systems where surface-water and groundwater interactions affect ecological and economic activities. Water resources affect, and are affected by, the surrounding physical environment, weather, atmospheric deposition, and the activities of living organisms such as fish, birds, mammals, microbes, invertebrates, plants, and especially humans. A comprehensive assessment of these effects and interactions will assist watershed groups, planners, and managers. The assessment will identify important water-resource issues and provide associated information needed for developing integrated solutions, increasing cost effectiveness, and maximizing chances for measurable environmental results.

Through WSTA, specialists can help you identify solutions and assist your group in the development of monitoring programs, restoration projects, and plans for protection. WSTA, through C-SAW, can provide training on conducting assessments and developing restoration projects and protection plans.



Members of the Sherman's Creek Conservation Association sample a stream for macroinvertebrates during a C-SAW-sponsored workshop.

C-SAW offers watershed organizations assistance in watershed assessments and science related to:

- · Gathering background or historical data
- Geographic Information Systems (GIS)
- Global Positioning Systems (GPS)
- · Streamflow
- · Stream restoration
- · GIS-derived data and spatial-data analysis
- Surface-water and groundwater resources
- · Sediment
- · Ambient and event monitoring
- Biological and habitat assessment
- · Microbiology
- Surface-water and groundwater interactions
- Atmospheric deposition
- Agricultural and urban impact issues
- · Abandoned mine discharge and treatment
- Threatened and endangered species
- Riparian restoration
- · Wetlands
- · Soils analysis
- · Lake management

Organizations may request any type of scientific technical assistance through the WSTA process. Eligible groups can receive help in identifying water-resource issues, guidance on monitoring design and protocols, cost estimates for assessments, and advice on required resources and time estimates to complete a task. Watershed organizations can receive assistance with actual watershed assessments and interpretation and utilization of data.

#### **C-SAW REPRESENTATIVES**

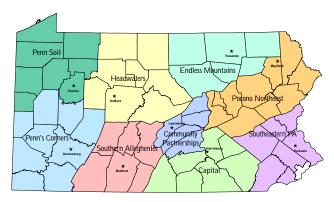
The consortium consists of many individuals, who are considered experts in the field of watershed studies and assessments, working for the following organizations:

- Alliance for Aquatic Resource Monitoring (ALLARM)
- Delaware Riverkeeper Network (DRN)
- Pennsylvania Association of Resource Conservation and Development Councils (RC&D's)
- Pennsylvania Lake Management Society (PALMS)
- Stroud Water Research Center (Stroud)
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS)
- U.S. Geological Survey (USGS)
- Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR)
- Wilkes University-Center for Environmental Quality

#### **HOW TO REQUEST ASSISTANCE**

To obtain assistance, please contact the RC&D Council in your area. The RC&D Councils are nonprofit organizations authorized by the U.S. Department of Agriculture to provide administrative support to watershed groups across the state. The RC&D Council in your area will give you instructions for filling out a C-SAW one-page application for assistance. If you are unsure of the appropriate RC&D contact, you may call the Pocono Northeast RC&D and they will put you in contact with the correct office.

Capital Area RC&D	717-724-0009
Endless Mountains RC&D	570-265-5288 ext. 5
Headwaters RC&D	814-375-1372 ext. 4
Community Partnerships RC&D	717-248-4901
Penn Soil RC&D	814-226-8160 ext. 5
Penn's Corner RC&D	724-834-9063 ext. 3
Pocono Northeast RC&D	570-282-8732 ext. 4
Southeastern PA RC&D	215-453-9527 ext. 5
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#### WHO IS ELIGIBLE?

Lake management is just one of many technical assistance areas provided through C-SAW.

Parties eligible to apply for Growing Greener Grants are eligible to receive assistance through C-SAW. Eligible parties include watershed organizations recognized by the Pennsylvania Department of Environmental Protection (PADEP) and established to promote local watershed-conservation efforts. In addition, counties, municipalities, and their subdivisions; county conservation districts; municipal authorities; multi-municipal Council of Government boards; and other qualified institutions or individuals involved in research, restoration, rehabilitation, planning, acquisition, development, or other activities that further the protection, enhancement, conservation, and preservation and enjoyment of Pennsylvania's natural resources are eligible. Eligible projects must be those that address sources of pollution or watershed degradation commensurate with local watershed-based planning for restoration, protection, abandoned mine reclamation, or oil and gas well plugging efforts. See details on eligibility at the Growing Greener web site:

http://www.depweb.state.pa.us/growinggreener/site/default.asp

If you are unsure whether your organization is eligible, contact the RC&D Council in your area.

#### **HOW DO WE FIND OUT MORE?**

Visit the C-SAW web site at:

### http://pa.water.usgs.gov/csaw/

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