RESTORE-A-WATERWAY

A Technical Service Provider Initiative Offered by the Rutgers Cooperative Extension-Water Resources Program

http://www.water.rutgers.edu

The goal of the initiative is to provide technical assistance to citizen action groups wanting to take action in restoring the quality of their waterway. The Rutgers Cooperative Extension-Water Resources Program has been providing technical assistance to citizen environmental groups for several years. Restore-a-Waterway intends to build upon these past efforts and provide expanded assistance to current and new groups.

Restore-a-Waterway providing technical assistance in the following areas:

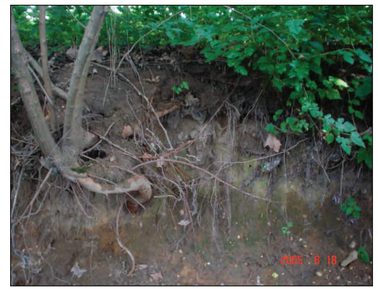
- **Physical Waterway Characterization**
- **Developing and Implementing Chemical and Biological Monitoring Plans**
- **Interpretation and Analysis of Data**
- **Identifying Problem Sources**
- **Designing Solutions**
- **Procuring Funds**
- **Implementing Solutions**

Education and Training

In addition to holding workshops to train citizen groups on these technical issues, the Water Resources Program will work directly with groups to address their specific needs.

A common tool used to characterize streams is the **Stream Visual Assessment Protocol (SVAP)**, developed by the Natural Resources Conservation Service, the United States Department of Agriculture and the University of Georgia, is a great tool to characterize the existing physical condition of the waterway. At the end of the evaluation, each stream reach will have a qualitative ranking on 1-10 scale, making it easier to target restoration efforts. The Water Resources Program has been training groups to use SVAP as part of *Restore-a-Waterway*.

An Eroded Stream Bank



The Water Resources Program program provides technical assistance in identifying and prioritizing point and nonpoint sources of pollution for remediation. We also help groups examine how changes in land cover have resulted in creating flashy stream hydrology and stream bank erosion. When needed, the program also works with groups to help them better understand the Total Maximum Daily Load requirements.

The Water Resources Program has a successful history of procuring grant funds from a variety of sources, including state and federal agencies. This experience can be helpful in assisting with watershed volunteer groups **writing grant proposals** for targeted restoration projects.

Rain gardens/bioretention systems are one of many best management practices promoted by the Water Resources Program to help capture, treat and infiltrate stormwater runoff. Stormwater runoff is the leading remaining source of pollution to New Jersey's waterways and leads to stream bank erosion and other problems cause by peak flow rates.

Rain Garden/Bioretention System

Good data are the basis for informed decisions. Due to limited resources, the NJDEP, USEPA and USGS water quality data are only collected for 1/3 of New Jersey waterways. Therefore, the health of many waterways in the State is unknown.

Volunteer water quality monitors can collect data on water bodies that otherwise might go unmonitored, and they can help communities make informed, sound decisions to improve and protect water quality and quantity while filling data gaps. Through *Restore-a-Waterway*, the Water Resources Program can train volunteers on how to develop a **quality assurance project plan (QAPP)**, how to collect samples, and how to interpret the laboratory data. Rutgers Cooperative Extension scientists can provide oversite of sampling projects to ensure compliance with the QAPP.

Volunteer water quality monitors will have access to **the Rutgers Eco-Complex Water Quality Testing Laboratory** (soon to be NJDEP certified) at a reduced cost and Rutgers scientists can work with each volunteer group to prepare the data analysis report that presents all collected data and analyzes of these data, paving the way for targeted restoration projects.