

Upper Susquehanna River

WHY IS THIS WATERSHED SPECIAL?

The Susquehanna River is the nation's 16th largest river and provides fifty percent of the freshwater to the Chesapeake Bay. The Upper Susquehanna Basin, beginning at the headwaters in New York, is comprised of 94 sub-watersheds encompassing an area of 7,500 square miles. The land use in its headwaters is predominately rural: a mixture of forest, agriculture, and two metropolitan areas. Steep gradients characterize the rolling hillside landscapes, but also produce flooding conditions and erosion. Land uses in the upper watershed, especially agriculture, directly impact downstream water quality. Consequently, New York State is integrating the Targeted Watersheds Grant activities with its Chesapeake Bay restoration efforts.

ENVIRONMENTAL CHALLENGES

The Targeted Watersheds Grant focuses on the following environmental problems:

- Due to a combination of steep topography and land use conversion, floods adversely impact water quality and local ecology as well as threaten human life and property.
- Sediment and nutrient runoff are the major water quality problems, especially downstream, where they contribute to low dissolved oxygen levels in the Chesapeake Bay – harming fish, crabs and other aquatic life.



RESTORATION ACTIVITIES

The Upper Susquehanna Coalition (USC) will use EPA Targeted Watersheds Grant funds to:

- Implement a watershed-based wetland restoration program to reduce flooding and restore important wetland functions and values. To date, more than 30 potential sites have been identified.
- Conduct stream restoration using natural stream design.
- Promote farm stewardship through a riparian buffer initiative.

"We are also getting valuable information about how wetlands attenuate floods, and the ability of riparian buffers and wetland plants to absorb nutrients thus reducing runoff to streams and ultimately the river. A watershed with five percent wetlands can have a 50 percent reduction in peak flood flows. That is a solution."

> Melissa Yearick, USC Wetlands Coordinator

- Expand the use of a specialized Geographic Information System to target restoration activities.
- Form a college internship/research program to leverage talent and build local capacity.
- Establish "county coalitions" to demonstrate and share best management practices for controlling stormwater.
- Develop unpaved road and road ditch improvement plans, including training for highway personnel on new techniques to manage runoff.

The Susquehanna River empties into the Chesapeake Bay and provides half of its freshwater.

Upper Susquehanna River

A STRONG PARTNERSHIP FOR CHANGE

The Upper Susquehanna Coalition, which includes representatives from 11 counties in New York and 3 in Pennsylvania, is working in collaboration with numerous local, state and federal partners, including:

- Soil and Water Conservation Districts
- · EPA's Chesapeake Bay Program
- Pennsylvania State, Binghamton, and Cornell Universities
- Environmental organizations, including the Chesapeake Bay Foundation, Trout Unlimited, Izaak Walton League of America, Ducks Unlimited, and the Alliance for the Chesapeake Bay
- State agencies
- Federal agencies
- Town and County highway departments, planning departments, and environmental management agencies
- · Local watershed associations





High school students help the USC at an ephemeral wetlands workshop.



Intensive rotational grazing, which includes riparian buffers, will help protect water quality.





EPA'S TARGETED WATERSHEDS GRANT PROGRAM

EPA's Targeted Watersheds Grant Program is a new, competitive grant program designed to encourage collaborative, communitydriven approaches to meet clean water goals.

For more information about the selected watersheds, please visit: http://www.epa.gov/owow/ watershed/initiative/