

Paxton Creek Watershed Stormwater Project

A project of the USEPA
Chesapeake Bay Targeted
Watershed Grant Program

Susquehanna River Basin Commission 1721 North Front Street • Harrisburg, PA 17102 • 717-238-0423 • www.srbc.net 02/09

PROJECT OVERVIEW

PROJECT PARTNERS AND CONTRIBUTIONS

In spring 2006, the Susquehanna River Basin Commission (SRBC) received a \$725,000 grant from the U.S. Environmental Protection Agency's (USEPA) Targeted Watershed Grant Program to partner with the Paxton Creek Watershed and Education Association (PCWEA) and other local interests to develop innovative and cooperative stormwater management solutions for Pennsylvania communities, using the Paxton Creek Watershed as a demonstration model. In addition to the USEPA grant, which is being administered by the National Fish and Wildlife Foundation, the project partners, listed above, also are contributing \$735,800 in cash and in-kind match, making this a \$1.46 million stormwater demonstration project.

SRBC • PCWEA • Cameron Management, Inc. • City of Harrisburg • Dauphin County • Harrisburg Area Community College • Lower Paxton Township • PA Departments of Environmental Protection, General Services, and Transportation • PA State Police • The Harrisburg Authority • PA State Farm Show Commission

PROJECT LOCATION

The Paxton Creek Watershed is a 27-square-mile area encompassing parts of the City of Harrisburg, Lower Paxton Township, Susquehanna Township and other surrounding communities in Dauphin County, Pennsylvania. The watershed has 50 miles of streams with headwaters in both forested and urban areas. Paxton Creek discharges into the Susquehanna River at two locations: (1) through a man-made outlet at the north end of Wildwood Lake, and (2) at the City of Harrisburg. The Susquehanna River is the largest tributary to the Chesapeake Bay – providing more than 80 percent of the freshwater inflows to the upper bay.



Wildwood Lake



Industrial runoff into Paxton Creek

PROJECT PURPOSES AND SCOPE

The two overarching purposes are to:

- (1) Develop multi-jurisdictional stormwater management solutions for public, residential and commercially controlled lands. Management activities will include establishing an inter-governmental cooperative, evaluating costs and sustainable funding mechanisms, assessing incentives, conducting outreach and educational efforts, establishing demonstration projects, identifying incentives for forming a utility or authority, and documenting any potential regulatory improvements.
- (2) Test management solutions using five demonstration projects that are intended to remove nitrogen, phosphorus, sediment, as well as other pollutants, from storm runoff. The projects are (see map on back page):
 - **Centennial Acres** – collect and treat drainage from 5+ acres in a residential area using bioretention, and demonstrate the use of stream buffers through conservation landscaping.



Downstream of
Capitol View
Demonstration
Site

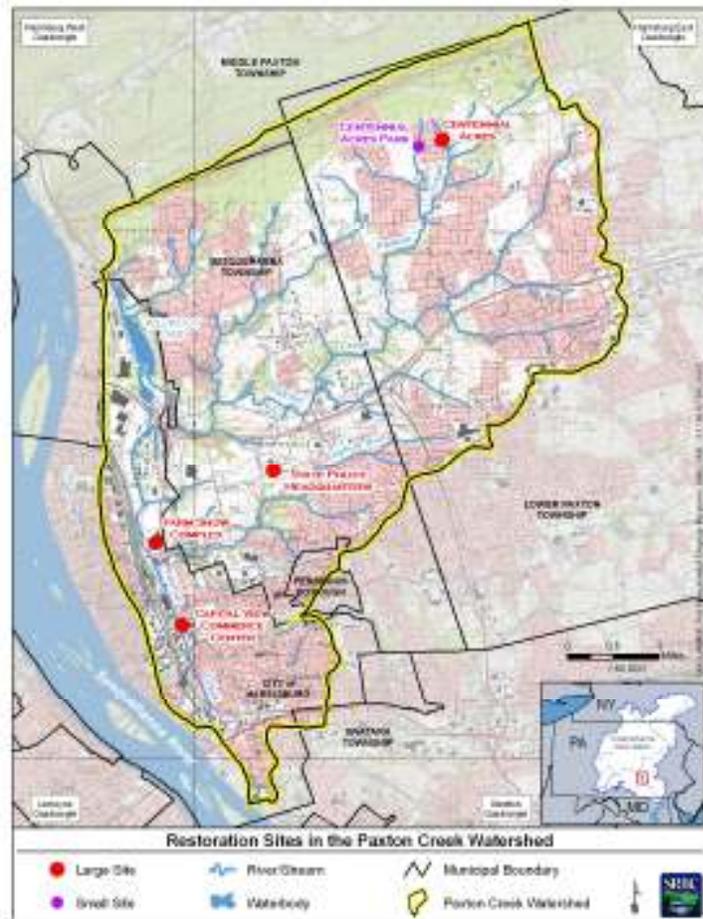
PROJECT PURPOSES AND SCOPE (continued)

- **Capitol View Commerce Center** (photo across the top of previous page) – assist with rehabilitation of a brownfield area undergoing commercial development, through conservation landscaping, bioretention, rehabilitation of 700+ feet of riparian habitat and establishment of a “green space.”
- **State Police Headquarters** – use bioretention to treat runoff and rehabilitate adjacent stream buffers.
- **State Farm Show Complex** – implement a stormwater demonstration to educate the more than 1 million visitors to the complex annually. Over 50 acres of impervious surface generates stormwater runoff in excess of 50 million gallons a year.
- **Centennial Acres Park** – collect drainage from a parking area and establish/rehabilitate the adjacent stream buffer.

Throughout the project, special emphasis will be placed on the exploration and use of economic incentives to reduce stormwater runoff, and outreach and education tools to help reduce concentration of nutrients and other contaminants in runoff.

OTHER PROJECT BENEFITS

(1) Reduced flooding, (2) improved water quality, (3) enhanced stream-based recreation, (4) increased groundwater recharge, and (5) conservation and expansion of green space.



Centennial Acres Park
Bioretention Bed



Post
Construction

PROJECT TIMELINE

(July 1, 2006 – December 31, 2009)

The project spans three years, with the tasks categorized into four work activities: (1) Outreach & Education, (2) Monitoring Program, (3) Management Study, and (4) Demonstration Projects.

Recent Project Activities:

OUTREACH & EDUCATION: Conducted workshops on stormwater issues for property owners and municipal officials to raise awareness and offer solutions for improving stream water quality both locally and for the greater Chesapeake Bay region.

MONITORING PROGRAM: Completed 2+ years of field data collection efforts for characterizing stormwater impacts to the hydrology, chemistry, biology, and habitat of the Paxton Creek Watershed.

DEMONSTRATION PROJECTS and MANAGEMENT STUDY: Completed work on two of the five demonstration sites, with all sites scheduled to be complete by the fall of 2009. Started analyzing information on costs, resources, incentives, obstacles and opportunities related to implementation of the demonstration projects.

FOR MORE INFORMATION: Contact Andrew Gavin, Chief, Restoration and Protection Section, Susquehanna River Basin Commission, (717) 238-0423, ext. 107, agavin@srbc.net or visit SRBC's project web site at www.srbc.net/programs/paxton/index.asp. Additional information concerning the activities of the Paxton Creek Watershed and Education Association can be found at www.paxtoncreek.org.