

Commonwealth of Pennsylvania 

Department of Environmental Protection

### STORMWATER MANAGEMENT IN PENNSYLVANIA

#### WHAT IS STORMWATER MANAGEMENT?

Stormwater management involves the control of water that runs off the surface of the land from rain or melting ice or snow. The volume, or amount of runoff and its rate of runoff, substantially increase as land development occurs. Construction of impervious surfaces, such as roofs and parking lots, and the installation of storm sewer pipes which efficiently collect and discharge runoff, prevent the infiltration of rainfall into the soil. Management of stormwater is necessary to compensate for the possible impacts of development such as frequent flooding, erosion and sedimentation problems, concentration of flow on adjacent properties, damages to roads, bridges and other infrastructure as well as non-point source pollution washed off from impervious surfaces.

## HISTORY OF DRAINAGE CONTROLS IN PENNSYLVANIA

Court decisions over the years have placed various common law duties and responsibilities on landowners involved with obstructing water courses and collecting and discharging of runoff onto adjacent lands.

Pennsylvania cities, boroughs, townships and counties have been authorized by state statute (Pennsylvania Municipalities Planning Code, Act 247 as amended) to comprehensive plans prepare for community development, zoning ordinances and subdivision and land development ordinances and regulations that may include provisions for drainage and stormwater management. However, governments are not required to adopt these plans containing development controls. Further, there is no obligation for local governments having stormwater management regulations to consider the effects of runoff beyond their boundaries. Often, municipalities within a watershed may require different levels of control that result in increased flooding problems.

## PENNSYLVANIA'S STORMWATER MANAGEMENT PROGRAM

The Pennsylvania legislature enacted the Storm Water Management Act (No.167) in 1978 to authorize a program of comprehensive watershed stormwater management which retains local implementation and enforcement of stormwater ordinances similar to local responsibility of administration of subdivision and land development regulations. Under the Act, the Department of Environmental Protection (DEP) provides grant money to counties to develop stormwater management plans for designated watersheds. This planning effort results in the incorporation of sound engineering standards and criteria into local codes and ordinances to manage runoff from new development in a coordinated, watershed-wide approach.

#### HOW THE STORMWATER PROGRAM WORKS

Counties develop stormwater plans for each of their watersheds within their boundaries. DEP develops grant agreements with counties to pay for 75 percent of the cost to prepare the plans. Upon completion of a plan by a county and approval by DEP, municipalities located in the watershed adopt ordinances consistent with the plan. Developers are then required to follow the local drainage regulations that incorporate the standards of the watershed plan when preparing their land development plan. Although not all watersheds have been studied, developers in non-studied areas are still required to follow any local drainage regulations adopted under the Municipalities Planning Code.

#### **GUIDE TO THOSE AFFECTED BY RUNOFF**

Individuals and property owners affected by runoff due to development need to know who is responsible for management of stormwater runoff in their particular situation. The following guide can assist in making that determination.

*Municipalities:* Historically, municipalities have been responsible for enacting ordinances to regulate stormwater as they review subdivision and land development plans (Pennsylvania Municipalities Planning Code).

**Developers:** Developers are required to follow local drainage regulations. In watersheds having a completed Act 167 plan, developers, by following local ordinances, would be following the standards and criteria of the approved watershed plan.

**Department of Environmental Protection:** DEP is responsible for management of the stormwater planning program but has no regulatory authority for individual activities. Section 10 and 12 of the act provide DEP with authority to compel county planning and municipal implementation in studied watersheds. DEP also provides technical guidance and training to counties, municipalities and individuals.

*County Conservation Districts:* The Districts investigate runoff complaints resulting from earthmoving activities. Stormwater may be controlled during construction activities through temporary erosion and

sedimentation control devices such as sedimentation basins. Upon stabilization of work sites, temporary erosion and sedimentation structures are often converted to permanent stormwater facilities under the jurisdiction of municipalities.

## SUGGESTIONS IN RESOLVING STORMWATER PROBLEMS

- Document problems by taking photographs and videos and making sketches of site conditions.
- Try to determine the source of stormwater runoff. Is there new development upstream/uphill from your location? Are there nearby road improvements, such as widening or drainage pipes installed?
- Is the runoff originating from an active construction site where earthmoving activities are occurring or is there sediment or mud leaving the site? If so, the County Conservation District may assist with any erosion and sedimentation control problems.
- In the case of runoff originating from recent development, contact the municipality where the development is located.
- Seek legal counsel if the problem has not been resolved after seeking assistance from all involved parties or agencies.

# LOANS AVAILABLE FOR UNDERTAKING STORMWATER PROJECTS

Governmental agencies are eligible to obtain low interest loans from the Pennsylvania Infrastructure Investment Authority (PENNVEST) to resolve drainage problems.

Loans are available for the construction, improvement or rehabilitation of stormwater systems and installation of best management practices to address point or nonpoint source pollution associated with stormwater. Examples of stormwater projects eligible for funding include:

- New or updated storm sewer systems to eliminate stormwater flooding or to separate stormwater from sanitary sewer systems;
- Detention basins to control stormwater runoff; and/or

• Stormwater facilities to implement best management practices to reduce nonpoint source pollution.

The loan program is administered by PENNVEST staff with technical services from DEP. DEP engineers provide technical guidance to loan applicants. The scope of their guidance includes:

- Conducting planning consultation meetings with loan applicants and their engineers;
- Reviewing project plans and specifications;
- Rating the projects under established criteria;
- Recommending projects for funding;
- Participating in and representing PENNVEST at preconstruction conferences;
- Conducting interim and final construction inspections; and
- Assisting PENNVEST in conducting educational programs.

### AVAILABLE INFORMATION FROM DEP

- The Storm Water Management Act (No. 167) of 1978.
- Storm Water Management Guidelines and Model Ordinances.
- Chapter 111. Storm Water Management Grants and Reimbursement.
- PENNVEST regulations and application form

To obtain publications, contact the

Pa. Department of Environmental Protection Bureau of Watershed Management Division of Water Use Planning Rachel Carson State Office Building P.O. Box 8555, Harrisburg, PA 17105-8555 717-772-4048 FAX 717-787-9549

This fact sheet and related environmental information are available electronically via Internet. For more information, visit us through the PA PowerPort at http://www.state.pa.us or visit DEP directly at http://www.dep.state.pa.us (directLINK "Stormwater").



www.GreenWorks.tv - A web space dedicated to helping you learn how to protect and improve the environment. The site features the largest collection of environmental videos available on the Internet and is produced by the nonprofit Environmental Fund for Pennsylvania, with financial support from the Pennsylvania Department of Environmental Protection, 877-PA-GREEN.

Commonwealth of Pennsylvania Mark Schweiker, Governor