Commonwealth of Pennsylvania • Department of Environmental Protection

Pennsylvania's Storm Water Management Act (Act 167)

Pennsylvania's Storm Water Management Act (Act 167) was enacted in 1978. This Act was in response to the impacts of accelerated stormwater runoff resulting from land development in the state. It requires counties to prepare and adopt watershed based stormwater management plans. It also requires municipalities to adopt and implement ordinances to regulate development consistent with these plans.

What is accelerated stormwater runoff?

Precipitation that falls on the natural landscape is managed by a system of vegetation, soil, groundwater and surface waters that has formed over time. Natural events shape this system to efficiently handle stormwater through infiltration, evaporation and runoff. When less precipitation is infiltrated into the soil and groundwater or evaporated, either directly to the air or through plants and trees, there is an increase in the volume and rate, or acceleration, of stormwater runoff.

Why is accelerated stormwater runoff a concern?

As changes to the landscape alter the balance of the natural water cycle, accelerated stormwater runoff causes further impacts to the landscape. Higher volumes and rates of stormwater runoff cause increased soil erosion, greater and more frequent flooding, and reshape surface waters through scour and deposition. It also reduces groundwater levels because less precipitation ends up there and this in turn reduces dry weather stream flows that are fed by groundwater. More soil and other water pollutants are picked up and carried further with accelerated stormwater runoff. Depending on the extent of these impacts, serious safety, property and environmental risks can also result.

How does development accelerate stormwater runoff?

Changing the soil cover by placing impervious surfaces (pavement, roofs), removing vegetation (grass, plants, trees) and changing the shape of the land and the way water flows across it can all accelerate stormwater runoff. During construction vegetation is removed, soil is exposed, the landscape is reshaped and impervious surfaces are installed. Following construction, some vegetation is replaced, the impervious surfaces prevent infiltration and may attract new pollution sources and the reshaped landscape alters the flow and destination of stormwater runoff.

How can the impacts of accelerated stormwater runoff be reduced and prevented?

If there is no change from preconstruction to postconstruction stormwater runoff volume, rate and quality, accelerated stormwater runoff will be avoided and the impacts prevented. This is accomplished by minimizing changes to the landscape and implementing stormwater management practices that replicate pre-development conditions.

What is a watershed based Stormwater Management Plan?

Watershed based Stormwater Management Plans provide municipalities with a framework, including model

ordinances and management practices, to control stormwater runoff from new development in a watershed. These plans include standards for managing the quantity and quality of stormwater runoff given the characteristics of the watershed including current and future development plans. The goal is to control post-development stormwater runoff rate, volume and quality to replicate predevelopment conditions. This is to prevent additional downstream flooding and to protect water resources and their uses. The Department of Environmental Protection (DEP) may require counties to develop joint plans where a watershed includes land in more than one county.

How is the public involved in this process?

During the watershed planning process, counties establish plan advisory committees consisting of county and municipal representatives. Counties may also appoint representatives of interest groups and the public. These committees help to define local concerns and develop stormwater control strategies. The processes for county adoption of the plan includes a public hearing. Municipal adoption of ordinances to implement the plan is also an opportunity for public input.

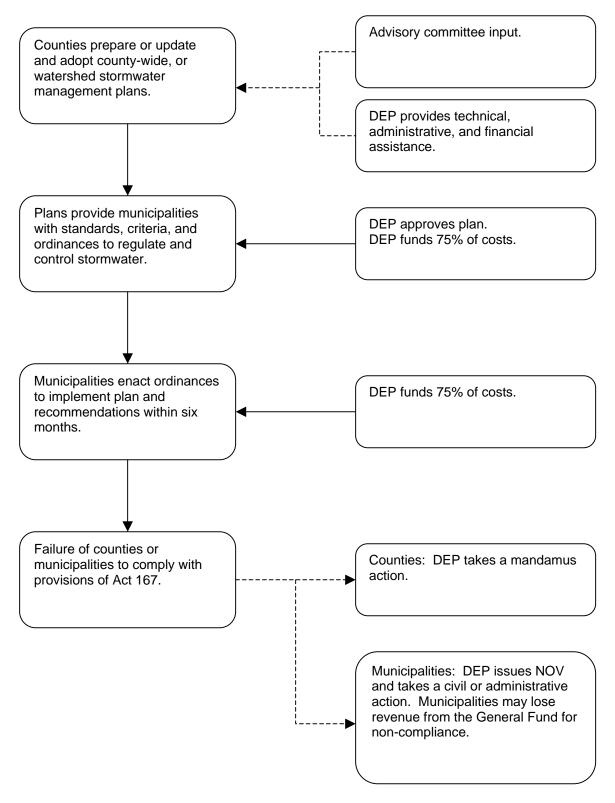
How are Stormwater Management Plans implemented?

Following adoption of the Stormwater Management Plan by the county and approval by DEP, anyone engaged in construction activities in the watershed is required to implement stormwater management measures consistent with the plan. In addition, each municipality in the watershed covered by the plan must, within six months of DEP's approval, adopt ordinances consistent with the plan. This includes zoning, subdivision and development, building code, erosion and sedimentation and postconstruction stormwater management requirements in the This process is also consistent with municipality. municipal obligations under federal National Pollutant Discharge Elimination System (NPDES) permitting requirements for Municipal Separate Storm Sewer Systems (MS4).

What assistance is available to counties and municipalities?

DEP provides technical, administrative and financial assistance to counties in preparing Stormwater Management Plans. DEP pays for 75% of the costs counties incur in preparing plans, and it approves reimbursements to municipalities for 75% of the allowable costs of preparing plans and enacting, administering and implementing stormwater ordinances.

ACT 167 STORMWATER MANAGEMENT PLANNING PROCESS



For more information, visit DEP's Web site at www.depweb.state.pa.us, Keyword: "Stormwater."