



photo:Paul Rider



Stormwater Management in Philadelphia

The Philadelphia Water Department (PWD) is responsible for maintaining the health of our local waterways. Stormwater runoff is the primary source of pollution in our rivers and streams.

Stormwater Runoff

When it rains, stormwater runoff:

- contributes to combined sewer overflows,
- pollutes our rivers with fertilizers, oil and sediment,
- destroys valuable aquatic and riparian habitat,
- and floods homes and businesses.

Public Investment

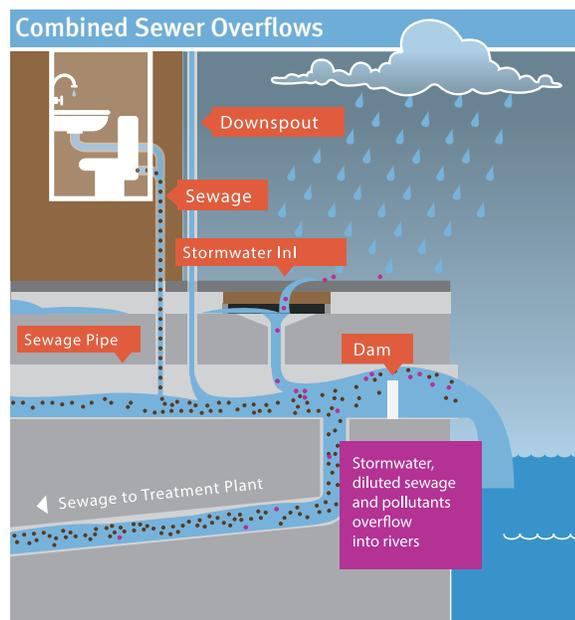
PWD manages stormwater by building and maintaining public stormwater infrastructure and by regulating private development in the City. Green City, Clean Waters, Philadelphia’s plan to reduce combined sewer overflows, calls for an investment of \$2.4 billion over the next 25 years in public infrastructure. This money will fund treatment plant upgrades and the installation of green stormwater infrastructure in streets, parks, schools and other public spaces. The plan also encourages the private sector to use green stormwater infrastructure.

Private Investment

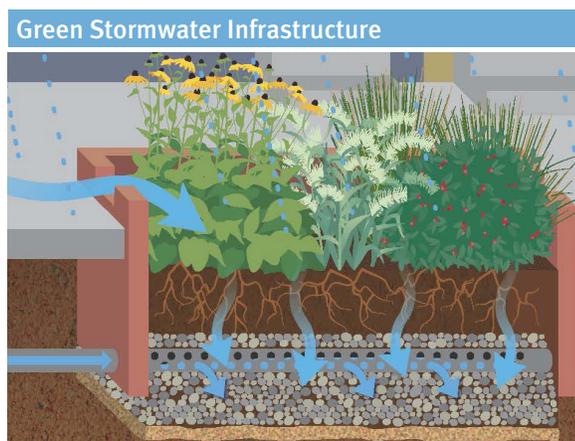
PWD guides stormwater management on private property in two ways:

Stormwater Billing – Property owners pay for the cost of treating stormwater runoff on their monthly water bill. For commercial customers, the cost to manage stormwater is based on the square footage of impervious area covering the property. Residential customers pay a standard amount based on the average surface area of impervious cover on residential properties throughout the city.

Development Regulations – Every time a property is developed in Philadelphia, we have the opportunity to improve stormwater management in the City. A development project that disturbs more than 15,000 square feet of earth triggers PWD Stormwater Management Regulations which require management of the first inch of stormwater runoff. Projects that trigger the regulations must have the proposed stormwater management design approved by PWD’s Stormwater Plan Review office.



Combined Sewer Overflows occur during rain storms when diluted sewage runs into our rivers and streams.



Green Stormwater Infrastructure uses plants, soil and stone to filter, store and infiltrate stormwater runoff.

Resources & Contact Information

Stormwater Billing: http://www.phila.gov/water/stormwater_billing.html or 215- 685-6143

Stormwater Plan Review: <http://www.pwdplanreview.org> or PWD.PlanReview@phila.gov or 215-685-6387

Stormwater Policies & Regulations: http://www.phillywatersheds.org/what_were_doing/policy_regulations



photo:WRT



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Private Development Regulations

Every time property is developed in Philadelphia we can improve the water quality in our rivers and streams. Federal and State laws also require PWD to regulate stormwater runoff from private development.

Federal and State Regulations

Clean Water Act - Passed by Congress in 1972, the Clean Water Act established water quality standards for surface water in the United States. The State enforces these standards by issuing permits that regulate combined sewer overflows and stormwater runoff in areas with separate sewer systems.

Pennsylvania Act 167 - Established in 1978, Act 167 requires counties to develop stormwater management plans for local watersheds. After the State approves the plans, municipalities implement them in part through ordinances that regulate land development. Philadelphia enforces several Act 167 plans that were developed in conjunction with bordering counties.

Philadelphia's Development Regulations

The Regulations have three main components: water quality, flood control and channel protection.

Applicability: All development projects that disturb more than 15,000 square feet of earth must meet PWD's Stormwater Management Regulations. Applicable projects must demonstrate compliance with the regulations by seeking review and obtaining approval from PWD's Stormwater Plan Review office.

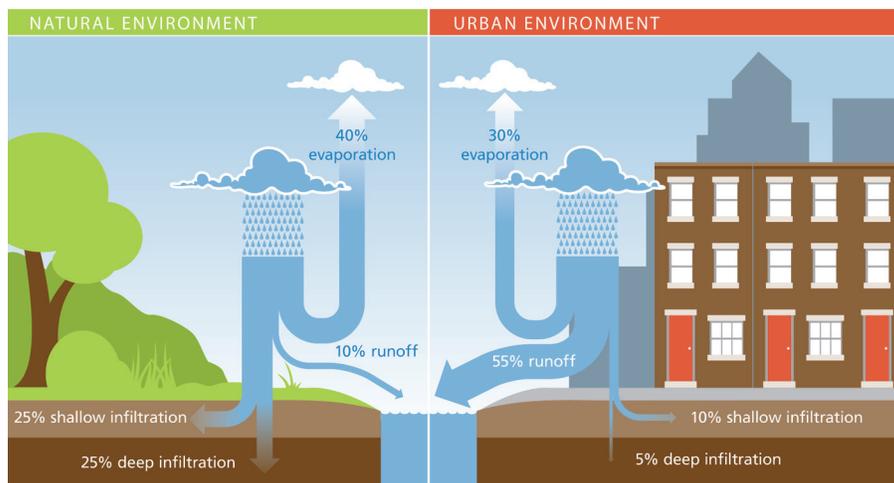
Approval Process

Design - During the Design process, PWD urges applicants to use pre-submittal resources including walk-in meeting hours (Tuesdays 11am - 1pm) and pre-application meetings.

Conceptual Plan Review - PWD reviews the preliminary stormwater management approach for the site. PWD must approve a Conceptual Plan before L&I will issue a zoning permit.

Technical Plan Review - PWD formally reviews the construction plans and engineering calculations for regulatory compliance. PWD must approve the Technical Plan before L&I will issue a building permit.

Construction - Prior to construction, PWD meets with the contractor, engineer and property owner. During construction, a PWD inspector will visit the site periodically, especially when the the stormwater management practice is installed. After construction, PWD holds a final inspection and Record Drawings are submitted which document the constructed conditions of the site.



With increased development comes an increase in paved surfaces and stormwater runoff to our sewer system. Development Regulations help the City manage the runoff.

Stormwater Management Regulation Components

Water Quality: remove pollutants from stormwater and reduce the volume of water entering sewers. This is achieved by letting the water soak into the ground or through a stormwater management practice.

Flood Control: Manage the rate of runoff from a property to prevent localized flooding.

Channel Protection: Protect stream banks by minimizing the rate of erosion from stormwater runoff.

Resources & Contact Information

Federal and State Regulations: http://www.phillywatersheds.org/watershed_issues/mandates

Stormwater Plan Review: <http://www.pwdplanreview.org> or PWD.PlanReview@phila.gov or 215-685-6387