

# When It Rains, It Drains

## An Overview:

The Lower Providence  
Township Storm Water  
Management Program





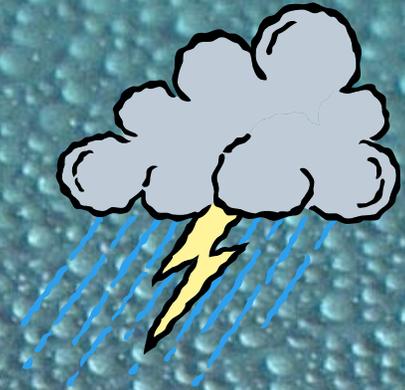
**Clean Water**

# Let's Talk About. . .

- What storm water is and why it can be a problem in our community.
- What our community is doing to manage storm water and how these activities will benefit us.

# What is Storm Water?

- Rain events
- Snow melt
- Other surface runoff and drainage



# Where Does Storm Water Go In Our Community?

- Travels over land
- Carried through the Lower Providence Township storm sewer system. This Township is considered an MS4 municipality under the NPDES Program.
- Discharges into the Stony Creek, Schuylkill River, Perkiomen Creek, Mine Run Creek, Eagle Run Creek etc.

# A "Point" of Confusion: Point Source vs. Nonpoint Source

- POINT source

- Travels through a conveyance system
- Regulated under permit program

- NONPOINT source

- Runoff that is not a point source
- Addressed through voluntary programs

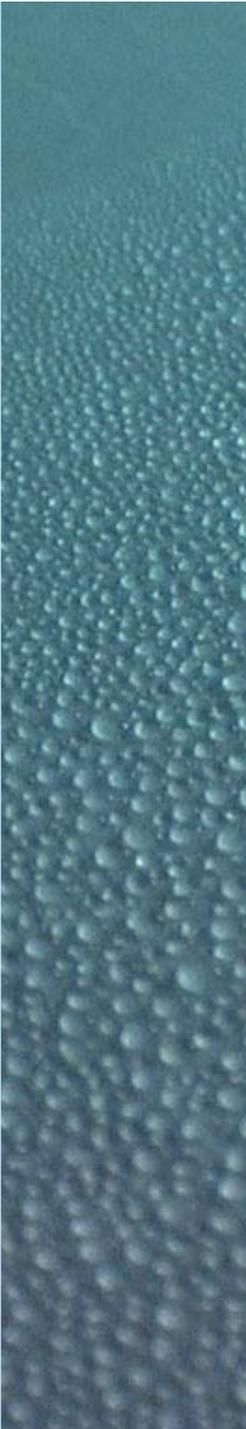
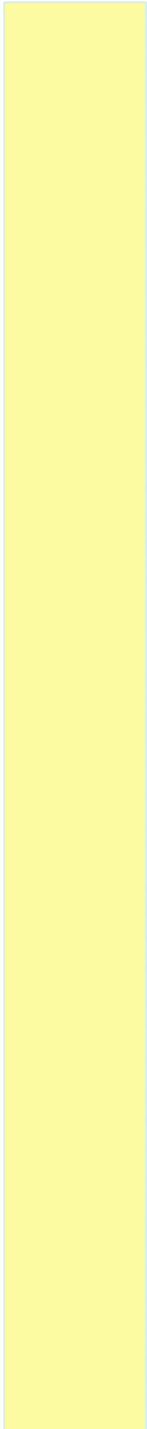
# Why is Storm Water a Problem?

- Problem: Decrease in quality
- Problem: Increase in quantity
- Cause: Developed and disturbed land











# Why is Storm Water a Problem?

- Problem: Non-storm water discharges enter systems
- Cause: Illicit discharges
- Cause: Illicit connections



household wastewater  
(toilet, sinks, etc.)



catch basin



sewer pipe →



storm drain  
tunnel ←



**2 UNDERGROUND  
SYSTEMS**

# Storm Water Pollutants

- Sediment
- Trace Metals
- Nutrients
- Toxic Chemicals
- Bacteria
- Chlorides
- Oxygen Demand
- Thermal Impacts
- Oil and Grease

# PA Water Quality and Storm Water Impacts

- Total of 83,161 stream miles in PA
  - 54% of total assessed
- 18.1% of assessed waters degraded
- Urban runoff #3 source of impairment
  - 1187 miles of rivers and streams
  - 14.5% of all impaired river and stream miles

From 2001 305(b) Report Update

**Now We Know About  
Storm Water and Its  
Impacts on Our  
Community. . .**

**But What is the  
Township Doing  
About It?**

# Storm Water Permit Program for Small Communities

- New federal regulation requires Lower Providence Township to secure Storm Water Permit for our community
- PA DEP created a state permitting program to meet these federal regulations. These regulations are known as the National Pollutant Discharge Elimination System (NPDES) Permit Program under the Phase II Storm Water Program.

# What Does Our Storm Water Permit Require?

- To implement a storm water management program for Lower Providence Township
- To track our progress toward meeting our goals
- To Report on our progress to PADEP every year.

# Our Storm Water Program

- Public Education
- Construction Site Runoff Management
- Illicit Discharge Detection and Elimination
- Public Involvement
- Post-Construction Storm Water Management
- Good Housekeeping and Pollution Prevention

# Public Education and Outreach

- To distribute educational materials developed by PADEP and Lower Providence Township.
- To develop an outreach plan for our community by 2006

# Public Involvement/Participation

- Provide public notice and educational material through our Township website
- Create an public involvement plan
- Hold several public meetings on the program
- Start a volunteer program by 2006
  - Water Quality Monitoring
  - Storm Drain Stenciling
  - Stream Clean-Ups

# Illicit Discharge Detection and Elimination

- Lower Providence Township has already updated our existing stormwater ordinance to meet the NPDES Storm water requirements.
- Lower Providence Township has already developed a storm sewer system map that will be utilized for detecting illicit connections to our storm water utility system.
- Lower Providence Township will be implementing a program to detect non-storm water in our system by 2006.
- Educate our community on problems related to dumping materials in storm sewers

# Construction Site Storm Water Runoff Control

- Lower Providence Township has updated our existing stormwater ordinance to meet the NPDES Storm Water requirements.
- Continue to Coordinate with County Conservation District with their
  - Erosion and Sediment Control Program
  - NPDES Construction Storm Water Permitting
- Educate the construction industry

# Post-Construction Storm Water Management

- Lower Providence Township has updated our existing stormwater ordinance in 2004 to meet the NPDES Storm Water requirements.
- Ensure proper operation and maintenance of post-construction stormwater controls, like naturalizing existing storm water basins.

# Pollution Prevention/ Good Housekeeping

- Implement an Operations and Maintenance program that focuses on pollution prevention
- Train Township employees on good housekeeping practices
- Continue to educate community on pollution prevention

**How Will Our  
Storm Water  
Program Benefit  
Our Community?**



# Expected Benefits of Our Storm Water Program

- Enhanced fishing
- Enhanced opportunities for recreation
- Reduced overall flood damage
- Safe Drinking water benefits
- Navigational benefits
- Reduced illness
- Enhanced aesthetic value

# How Can You Get Involved?

- Pass on information about the storm water program to other community residents
- Report any storm water issues to Lower Providence Township at 610-539-8020 or email us from our website at [lowerprovidence.org](http://lowerprovidence.org)

# For More Information. . .

- Contact the following entities at:
  - EPA: [cfpub.epa.gov/npdes/stormwater/urbanmaps.cfm](http://cfpub.epa.gov/npdes/stormwater/urbanmaps.cfm)
  - DEP: [www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/StormwaterManagement/GeneralPermits/default.htm](http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/StormwaterManagement/GeneralPermits/default.htm)