

Storm Water in Mt. Pleasant Township

An Overview of the
Mt. Pleasant
Township's
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 Mt. Pleasant Township?

- **Rainfall and/or snowmelt travels over land**
- **Collects in tributaries or is carried through municipal separate storm sewer system (MS4)**
- **Discharges into nearby creeks or streams (Loyalhanna Creek, Ninemile Run, Monastery Run, etc.)**

Point Source vs. Nonpoint Source

- **POINT source discharge**
 - Travels through a conveyance system
 - Regulated under MS4 permit program
- **NONPOINT source discharge**
 - 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





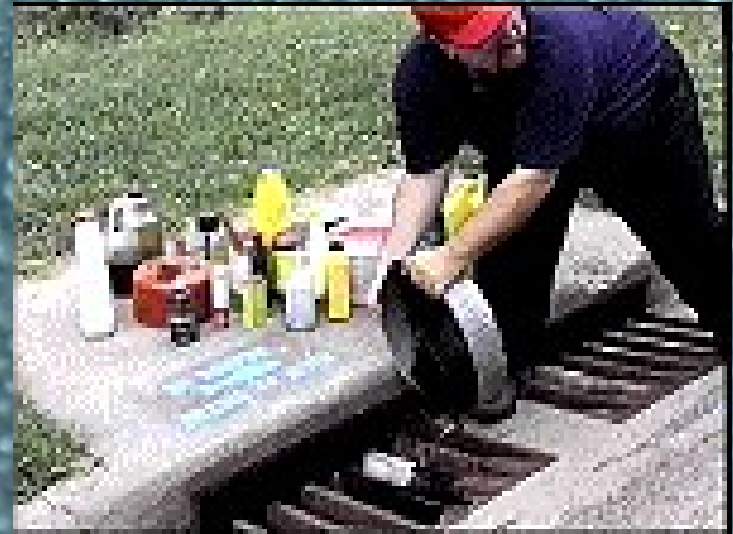






Non-Storm Water Discharges

- ❑ **Problem: Non-storm water discharges contribute to decrease in receiving stream water quality**
- ❑ **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 (N, P)
- Toxic Chemicals (herbicides, pesticides)
- Bacteria
- Chlorides
- Biochemical Oxygen Demand
- Thermal Impacts
- Oil and Grease

PA Water Quality and Storm Water Impacts

- **Total of 83,161 stream miles in PA**
 - 68,333 miles (82% of total) assessed for aquatic life support as of Year 2006
- **11,136 stream miles (16.3% of assessed waters) degraded**
- **Urban runoff #3 source of impairment**
 - 1,883 miles of rivers and streams
 - 16.9% of all impaired river and stream miles in PA

Source: 2006 PA State CWA 305(b) Report

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

**But What Are We
Doing About It?**

Storm Water Permit Program for Small Communities (NPDES Phase II MS4 Storm Water Program)

- New federal regulation requires permit for our community**
- PA DEP created state permitting program to meet federal regulation**

What Does Our Permit Require?

- **Implement a storm water management program consisting of six minimum control measures**
- **Track progress toward goals**
- **Report on our progress**

Our Storm Water Program (Six Minimum Control Measures)

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

Public Education and Outreach

- Distribute educational materials developed by PA DEP and US EPA**
- Raise public awareness about storm water**

Public Involvement/Participation

- Provide public notice of upcoming meetings, events, etc.
- Identify and reach out to local groups
- Hold public meeting on the program
- Foster and support volunteer programs
 - Water Quality Monitoring
 - “Dump No Waste” Storm Drain Stenciling
 - Stream and Street Clean-Ups

Illicit Discharge Detection and Elimination

- Adopt storm water ordinance prohibiting non-storm water discharges into MS4**
- Develop MS4 outfall map**
- Implement program to detect non-storm water in the MS4 system**
- Educate community on problems related to dumping in storm sewers**

Construction Site Storm Water Runoff Control

- Adopt storm water ordinance to address construction site storm water management requirements**
- Continue Coordination with Westmoreland County Conservation District**
 - Erosion and Sediment Control Program**
 - NPDES Construction Storm Water Permitting for Regulated Earth Disturbance Activities**
- Educate construction industry**

Post-Construction Storm Water Management

- Maintain and update storm water management ordinance that addresses storm water quantity and quality control requirements**
- Ensure proper operation and maintenance of post-construction controls**

Pollution Prevention/ Good Housekeeping

- Implement O & M program that focuses on pollution prevention**
- Train municipal employees on good housekeeping practices**
- Educate municipal employees on pollution prevention**

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



Expected Benefits of Our Storm Water Program

- Enhanced fishing/recreation opportunities
- Reduced flood damage
- Improved drinking water quality and lower treatment costs
- Reduced risk of illness
- Enhanced aesthetic value

For More Information. . .

- Visit Pennsylvania DEP website at www.dep.state.pa.us directLINK "stormwater"
- Contact the Mt. Pleasant Township Supervisors' Office (724) 423-5653
- Visit the US EPA website at www.epa.gov/npdes/stormwater