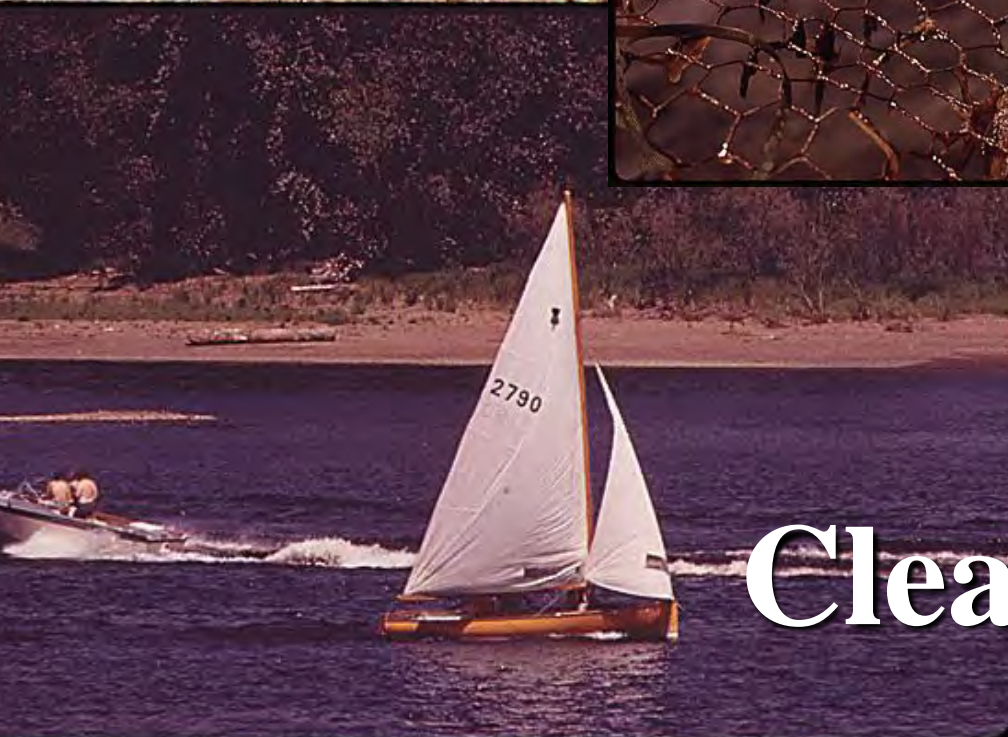


Storm Water in Unity Township

An Overview of the
Unity Township's
Storm Water
Management Program





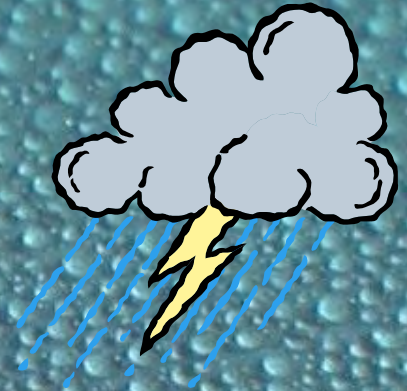
Clean Water

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 Unity 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









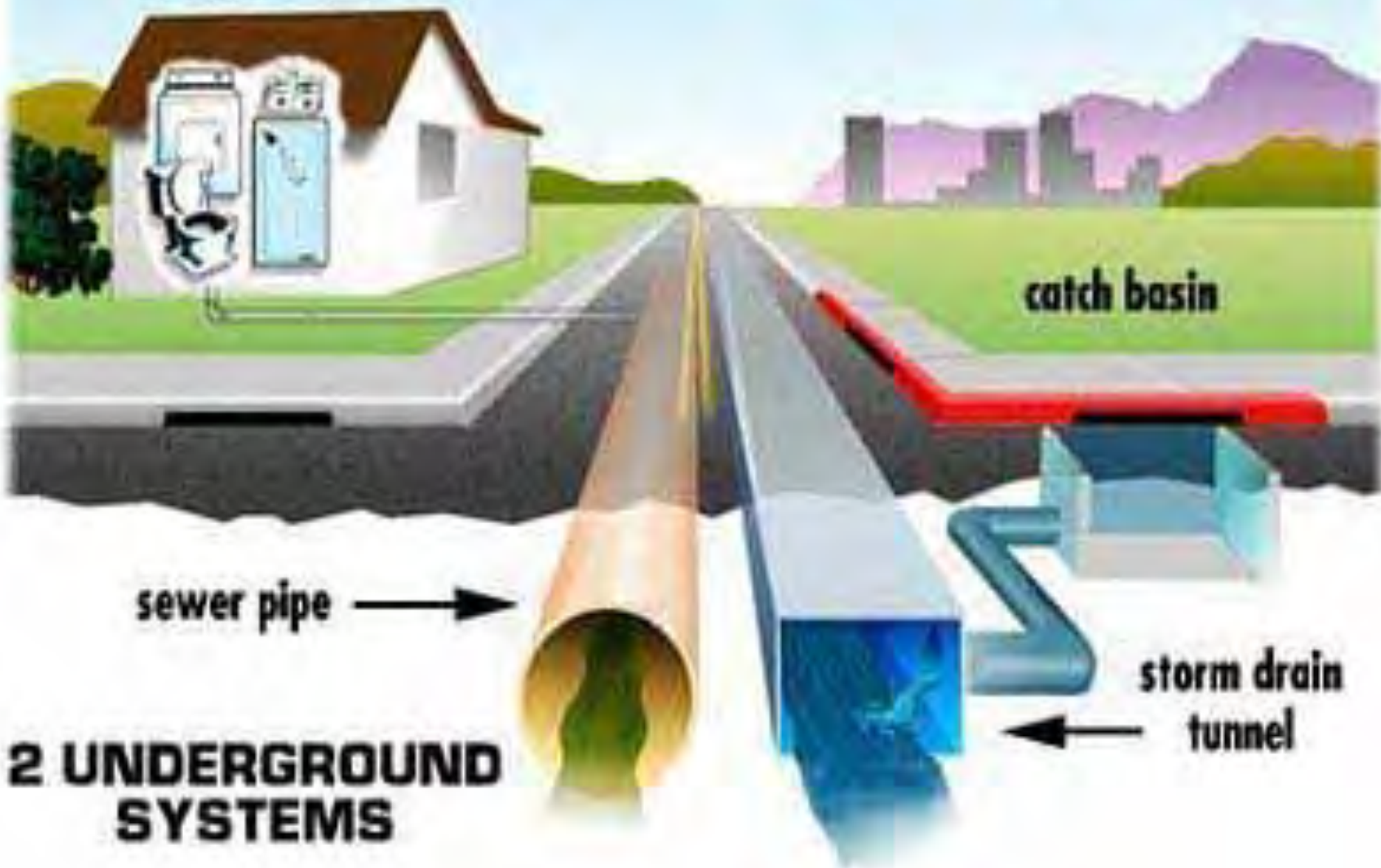


Non-Storm Water Discharges

- ❑ Problem: Non-storm water discharges contribute to decrease in receiving stream water quality
- ❑ Cause: Illicit discharges
- ❑ Cause: Illicit connections



household wastewater
(toilet, sinks, etc.)



Storm Water Pollutants

- Sediment
- Nutrients (N, P)
- Bacteria
- Biochemical Oxygen Demand
- Oil and Grease
- Trace Metals
- Toxic Chemicals (herbicides, pesticides)
- Chlorides
- Thermal Impacts

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 Unity Township Supervisors' Office** (724-539-2546), or Doug Siler at Gibson-Thomas Engineering (724-539-8562)
- Visit the US EPA website at www.epa.gov/npdes/stormwater