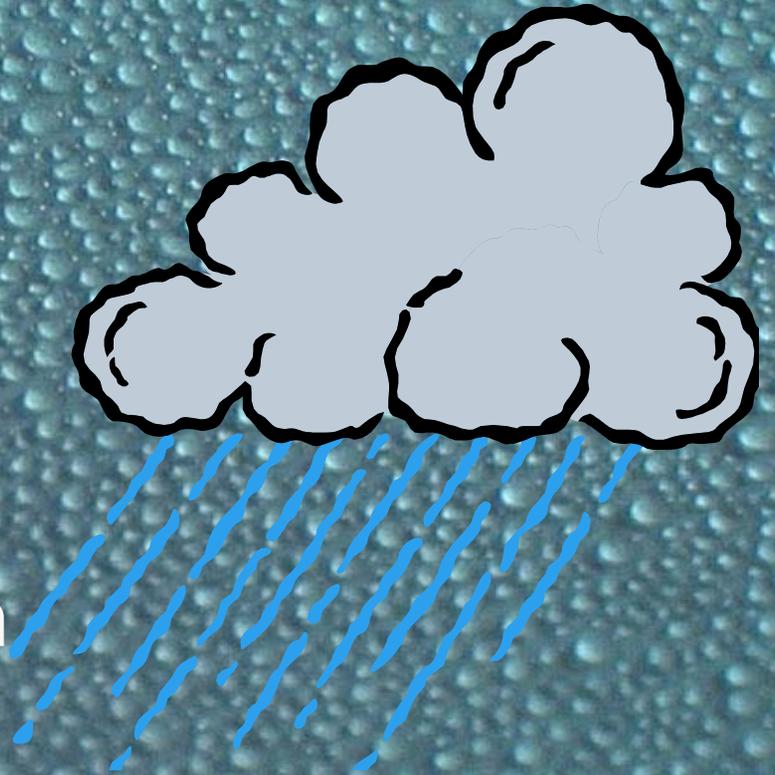


When It Rains, It Drains

An Overview of
Fairview Township's
Storm Water
Management Program



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 municipal separate storm sewer system (MS4)
- Discharges into Yellow Breeches Creek & Susquehanna River

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









STREAM BANK EROSION



MORE EROSION



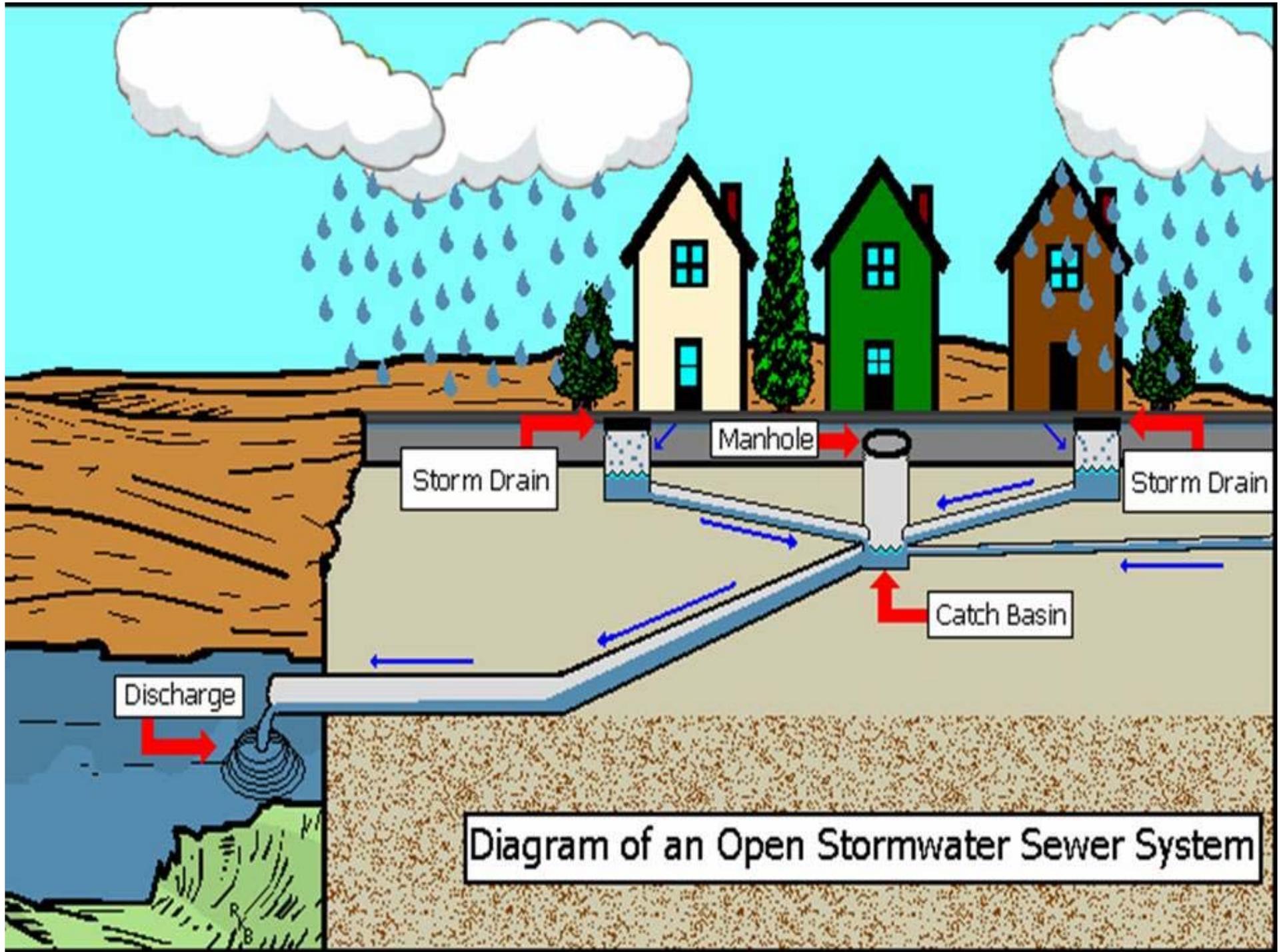




Why is Storm Water a Problem?

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





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

- Pennsylvania is home to more than 86,000 miles of streams and rivers and more than 160,000 acres of lakes
- This latest report shows 4,267 more miles of streams and rivers are now impaired in Pennsylvania - 20,149 miles, since the last report.

-

PA Water Quality and Storm Water Impacts and changes over last 3 years

2014 PA Integrated Water Quality Monitoring and Assessment Report

- The top 5 causes of impairment are Agriculture Runoff 5,709 miles. This was followed closely Abandoned Mine Drainage 5,572 , stormwater pollution– 2,614, Road Runoff 923, Habitat Modification 808 (page 41)

2016 PA Integrated Water Quality Monitoring and Assessment Report

- Of the top 5 causes of impairment, the largest increase in water quality impairment was caused by Agricultural Runoff-- 6,421 miles. This was followed closely by Abandoned Mine Drainage-- 5,595, Stormwater Pollution– 2,902, Habitat Modification- 1,090, and Road Runoff-- 932 (page 51)



**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

- 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
- Track progress toward goals
- Report on our progress

Our Storm Water Program

- MCM #1-Public Education
- MCM #2-Public Involvement
- MCM #3-Illicit Discharge Detection and Elimination
- MCM #4 Construction Site Runoff Management
- MCM # 5-Post-Construction Storm Water Management
- MCM # 6-Good Housekeeping and Pollution Prevention

Another requirement is the Chesapeake Bay Pollution Reduction Plan(CBPRP)

- Township is involved in the County Wide CBPRP
- 43 other municipalities and the County of York are working together this plan expires this year.
- Penn Dot is also partnering with the Collaborative effort
- CBPRP requires every MS-4 to reduce SEDIMENT, NITROGEN & PHOSPHORUS
- This is achieved through various projects including but not limited to stream bank restoration, pond retrofits, rain gardens...etc
- Huge cost savings is achieved with the group effort
- The next CBPRP has 49 participants 2018 – 2023.

MCM #1

Public Education and Outreach

- Distribute educational materials developed by PA DEP
- Develop outreach plan for community

MCM #2

Public Involvement/Participation

- Provide public notice
- Create an public involvement plan
- Hold a public meeting on the program
- Start a volunteer program
 - Water Quality Monitoring
 - Storm Drain Stenciling
 - Stream Clean-Ups

•LOCAL BOY SCOUT TROOP 284
ASSISTED WITH INSTALLING STORM
DRAIN PLACARDS



MCM #3

Illicit Discharge Detection and Elimination

- Enact DEP's model ordinance or update our existing ordinance
- Develop storm sewer system map
- Implement program to detect non-storm water in system
- Educate community on problems related to dumping in storm sewers

MCM #4

Construction Site Storm Water Runoff Control

- Enact DEP's model ordinance or update our existing ordinance
- Coordinate with County Conservation District
 - Erosion and Sediment Control Program
 - NPDES Construction Storm Water Permitting
- Educate construction industry

MCM #5

Post-Construction Storm Water Management

- Adopt PA DEP's model storm water management ordinance
- Ensure proper operation and maintenance of post-construction controls

MCM #6

Pollution Prevention/ Good Housekeeping

- Implement O & M program that focuses on pollution prevention
- Train community employees on good housekeeping practices
- 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 flood damage
- 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 Fairview Township @ (717)901-5298

For More Information. . .

- Please visit the MS-4 tab on the Township Website
<http://twp.fairview.pa.us/Township-Departments/MS-4/Stormwater>
- Contact Paul Rodrigo (MS-4 Coordinator) @ 901-5298 or email prodrito@twp.fairview.pa.us
- Don Martin (Twp. Manager) @ 901-5210 or email donmartin@twp.fairview.pa.us

Chesapeake Bay before storm water runoff and after.

