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## MINUTES – STORM SEWER UTILITY ADVISORY COMMITTEE MEETING

Tuesday, February 19, 2019

1. GENERAL . . . The Storm Sewer Utility Advisory Committee meeting was held Tuesday, February 19, 2019 at 3:00 p.m. in Council Chambers on the first floor of the new Utility Departments Addition to Borough Hall, 100 South Second Street, Chambersburg, Pennsylvania. Present: Members Carla Christian, Alice Elia, Tanya Nitterhouse, Ken Adams, Mike Kalathas, Tim Murray, Edward Peters, Phil Tarquino and Jason Warrenfeltz. Advisors Phil Wolgemuth, Assistant to the Borough Manager, Andrew Stottlemeyer, Storm Sewer System Manager, Zach Rice, Salzmann-Hughes Borough Solicitor, Bill Kick, HRG Assistant Vice President and Bruce Hulshizer, HRG Financial Services Project Manager. Absent: Members Herb Dolaway and Bernie Washabaugh, Jr.

2. VISITORS . . . (See attached)

3. INTRODUCTIONS AND OPENING REMARKS

Mr. Stottlemeyer explained that the process to prepare a Storm Sewer Utility Rate Structure and Credit Program has been in process for a while. The Borough has updated their aerial photography and now has impervious coverage mapping Borough-wide. Digitizing the aerial photography in order to get impervious coverages was a very time consuming process. He said that Herbert, Rowland & Grubic, Inc. (HRG), Bill Kick and Bruce Hulshizer, were hired by Town Council to guide them, staff and the community through a detailed planning and analysis process to change the current \$4 per month fee to a fee schedule based on lot impervious coverage along with a credit program to reduce the amount. He said there is a lot of age to the current storm sewer system with necessary upgrades as well as best management practices to install as part of the Chesapeake Bay Pollutant Reduction Plan. He introduced the Committee members and said each member was someone that would be impacted and appreciated their unique perspectives.

Mr. Kick, HRG Assistant Vice President, explained what stormwater is and the history and evolution of stormwater management practices. He said the Borough has an Ordinance (251-9) for storm sewer and it prohibits the runoff from car washing. He explained that the Borough created the Chesapeake Bay Pollutant Reduction Plan, hired Andrew Stottlemeyer, created fees and the Advisory Committee due to the regulatory requirements of the MS4 program that includes goals to reduce pollutants by 2023. He said that block pavers and porous asphalt is one BMP that the Borough utilizes. He went over the MS4 Challenges that have to be met and informed the Committee that the Borough's storm sewer consists of 72 miles of pipes, 32 miles of open channels, 2,758 inlets, 83 detention basins, 39 rain gardens and 103 subsurface detention basins. The entire system needs to continue to be maintained similar to the sanitary sewer system.

Mr. Stottlemeyer wanted to correct Mr. Kick on two points; he said that the Ordinance does not regulate single residential car washing but does regulate stormwater from commercial car washes. He also clarified that the Borough doesn't require pervious asphalt; it can be used but has to be consistent with Borough Ordinance.

Mr. Ken Adams, Business Manager of King Street Church, asked what happens if there is a fund raising car wash and Mr. Wolgemuth responded that they are usually not enforced with violation notices.

Mr. Mike Kalathas, The Orchards, asked what would happen if the Borough would not meet the MS4 requirements and Mr. Stottlemeyer said that he didn't feel that was a problem because they have a few constructed BMPs already but still have a lot to do. He said that they are further along than the municipalities around us (Hamilton, Greene and St. Thomas). He said that Best Management Practices on private property may be a challenge because the property owner would have to approve the project.

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Mr. Kalathas also asked: what would happen if the property owner declines to implement BMP's on their property as part of the Chesapeake Bay Pollutant Reduction Plan and whether or not the private property owner would incur any costs. Mr. Stottlemeyer said it would probably not cost them anything and if they declined for BMP's to be constructed on their property, then the Borough would have to find an alternate location for implementation.

Mr. Kick explained that this is where the credits would come into play.

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Bruce Hulshizer, HRG Financial Services Project Manager, explained that the storm sewer utility is established to generate a dedicated source of funding where users pay a fee based on land use and runoff. He emphasized it is a "dedicated fund" not like property tax. He said it has to be done now because of the additional operation and maintenance responsibilities because of the requirements, funding and staffing necessary to fully comply with increased regulations of the 2018 MS4 permit. He said the utility would create funds solely directed to storm sewer system management. He said fees can be collected from tax exempt users, credits provided based on level of service received and provide incentives for businesses to reduce impervious coverage. He explained the goals for 2019 and said that it's better to be proactive rather than reactive. He said the Borough continues to increase public education by placing information on website.

Ms. Tanya Nitterhouse, Sunnyhill Properties, asked if prior to a developer designing a project, if Mr. Stottlemeyer would give them suggestions that would help them plan a design that would reduce their impervious surface to minimize cost to them for the storm sewer utility and Mr. Stottlemeyer said that he would.

Mr. Hulshizer said that the importance of the Committee is to be a partnership between the Borough and citizens and also to serve as liaisons for areas of influence for the storm sewer program.


Mr. Stottlemeyer asked the members whether they should keep the meetings on the third Tuesday of each month and the members agreed. The next meeting will be held on Tuesday, March 19, 2019 at 3:00 pm.

Mr. Brandon Stouffer, Brandale LLC, felt that presentations are helpful to the public but wanted to know whether the fee would be decided sooner rather than later. Was there a timeframe?

Mr. Wolgemuth informed him that they have no way of knowing what the fee may be but over the course of the meetings the next few months they will work it out and recommended for interested parties try to come to all meetings.









The meeting was adjourned at 4:12 p.m.

Respectfully submitted,

  
\_\_\_\_\_  
Cindy Harr  
Secretary II

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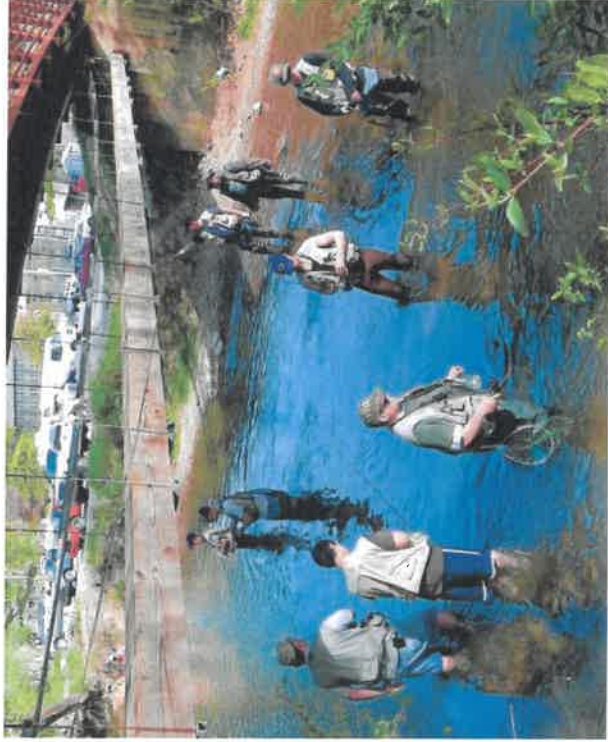
## Advisory Committee Members and Borough Representatives

| <u>Name</u>                | <u>Organization</u>   | <u>Revised Contact Info if applicable</u>   |
|----------------------------|---|---|
| 1. Carla Christian         | Executive Director, YMCA  |   |
| 2. Alice Elia              | Council Member  |  |
| 3. Tanya Nitterhouse       | Sunnyhill Properties  |  |
| 4. Ken Adams               | Business Manager, King Street Church                              |  |
| 5. Herb Dolaway            | Council Member  |   |
| 6. Mike Kalathas           | The Orchards  |  |
| 7. Tim Murray              | Director of Special Projects, Chambersburg Hospital               |  |
| 8. Edward Peters           | Facility Operations Supervisor, Chambersburg Area School District |  |
| 9. Phil Tarquino           | Director of Planning, Franklin County                             |  |
| 10. Jason Warrenfeltz      | Director of Physical Plant, Wilson College                        |  |
| 11. Bernie Washabaugh, Jr. | Second State Enterprises  |   |
| 12                         |   |   |
| 13                         |   |   |
| 14                         |   |   |
| 15                         |   |   |
| 16                         |   |   |
| 17                         |   |   |
| 18                         |   |   |

**General Public**

|    | <u>Name</u>     | <u>Street Address</u> | <u>Email Address</u>    |
|----|-----------------|-----------------------|-------------------------|
| 1  | WAYNE WARD      | 910 PROGRESS RD       | WAYNE.WARD@OTRWHEEL.COM |
| 2  | KEN ADAMS       | 56 N. 2ND ST          | KADAMS@KSCCHURCH.ORG    |
| 3  | WALT BIELSCH    | 116 S. 2ND ST         |                         |
| 4  | ALLEN COFFMAN   | 112 PENNSYLVANIA AVE  |                         |
| 5  | DEANNE GREGORY  | 12 THOMAS AVE         |                         |
| 6  | Tanya           |                       |                         |
| 7  | Bernard Spuller | 1181 Landis St. Ea    | X                       |
| 8  |                 |                       |                         |
| 9  |                 |                       |                         |
| 10 |                 |                       |                         |
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# Storm Sewer Utility Rate Structure and Credit Program Advisory Committee Meeting 1



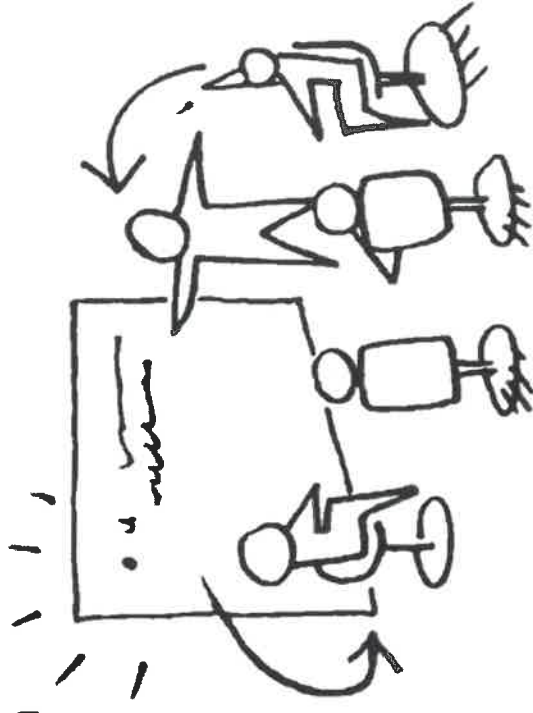
**Chambersburg Borough**  
and  
**Herbert, Rowland & Grubic, Inc.**



**February 19, 2019**

# Agenda

1. Introductions
2. What is Stormwater?
3. History of Stormwater Regulations and the Evolution of Management Practices
4. Storm Sewer Challenges and the Borough's System
5. Role of Storm Sewer Utility
6. Role & Importance of Advisory Committee
7. Future Committee Meetings



# Borough Staff

## *Introductions*

- **Andrew Stottlemeyer**, Storm sewer System Manager
- **Phil Wolgemuth**, Assistant to the Borough Manager/Land Use and Development Director
- **Zach Rice, Esq.**, Salzmann-Hughes, P.C., Borough Solicitor



# Stakeholder Advisory Committee

## *Introductions*

- **Carla Christian**, Executive Director, YMCA
- **Alice Elia**, Council Member
- **Tanya Nitterhouse**, Sunnyhill Properties
- **Ken Adams**, Business Manager, King Street Church
- **Herb Dolaway**, Council Member
- **Mike Kalathas**, The Orchards
- **Tim Murray**, Director of Special Projects, Chambersburg Hospital
- **Edward Peters**, Facility Operations Supervisor, CASD
- **Phil Tarquino**, Director of Planning, Franklin County
- **Jason Warrenfeltz**, Director of Physical Plant, Wilson College
- **Bernie Washabaugh, Jr.**, Second State Enterprises





# Herbert, Rowland & Grubic, Inc.

207 Grant Street, Chambersburg

## *Introductions*

- **Bill Kick**, Assistant Vice President  
wkick@hrg-inc.com
- **Bruce Hulshizer**, Financial Services Project Manager  
bhulshizer@hrg-inc.com

## *HRG Snapshot*

- HRG is Headquartered in Harrisburg, PA
- Approximately 200 Employees in 7 Offices
- Serving Municipal Clients for 50+ years
- Serving MS4 Clients since 2003
- Other services include:
  - Transportation
  - Water And Wastewater
  - Land Development
  - Financial Services
  - Surveying and GIS



## What is Stormwater?

- Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt. (Borough Code Section 251-9)
- Stormwater can carry pollutants and is transported through stormsewers and surface conveyances (i.e. channel, swale ditch) into streams, creeks and rivers.
- Drainage runoff from **impervious** ground surfaces is the principal concern of the Stormwater Advisory Committee.





# Common Stormwater-Related Issues



# Stream Bank Erosion



# Debris/Pollution



# Road Closures & Traffic Incidents



# Property Damage Due to Flooding





# History of Stormwater Management Regulations

**How did we get to this point?**





# It Starts in Cleveland



## Cleveland, OH: Cuyahoga River Fire of 1952

- 13 Recorded Fires on the Cuyahoga River Between 1868 and 1969
- June 1969 floating pieces of oil slicked debris were ignited on the river by sparks from a passing train. The story of the fire was covered nationally and pollution awareness increased.

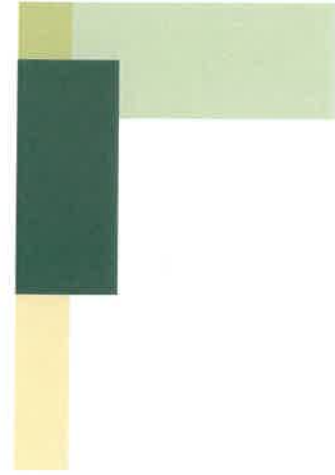


# The History of Stormwater Regulations

- 1969** - Last Recorded Cuyahoga River Fire
- 1970** - National Environmental Policy Act (NEPA) Passed  
- Environmental Protection Agency (EPA) Created
- 1972** - Clean Water Act Passed. Water Quality is Now Federally Regulated
- 1983** - Chesapeake Bay Agreement Signed by US Government, PA, MD, VA and DC
- 1990** - NPDES Permits Required for Phase I Municipal Separate Storm Sewer System (MS4) Municipalities. These are municipalities with Combined Sanitary Sewer and Storm Sewer Systems
- 1999** - NPDES Permits Required for Phase II MS4 Municipalities. This would include any municipalities containing urbanized areas as designated on the 2000 Census Maps
- 2000** - New pollutant Reduction Goals Set for MS4 Municipalities
- 2003** - First NPDES (PAG-13) Permits Issued to Phase II Municipalities, Including Chambersburg. Permits are re-issued on a 5-year cycle
- 2004** - Chambersburg adopts Stormwater Management Ordinance that regulates the rate, quality and volume of stormwater discharged from developing properties
- 2013** - Second NPDES (PAG-13) Permits Issued. Chambersburg's Permit Renewed.
- 2014** - Chambersburg Borough Chesapeake Bay Pollutant Reduction Plan Developed  
- Chambersburg Borough Storm Sewer Utility Feasibility Study Prepared
- 2015** - Chambersburg Borough Storm Sewer Utility Created.  
- Storm Sewer Utility Manager Hired  
- Storm Sewer Utility Fees Issued to Borough Property Owners
- 2018** - Third NPDES (PAG-13) Permits Issued. Chambersburg developed new Pollutant Reduction Plan and NPDES Permit was renewed.

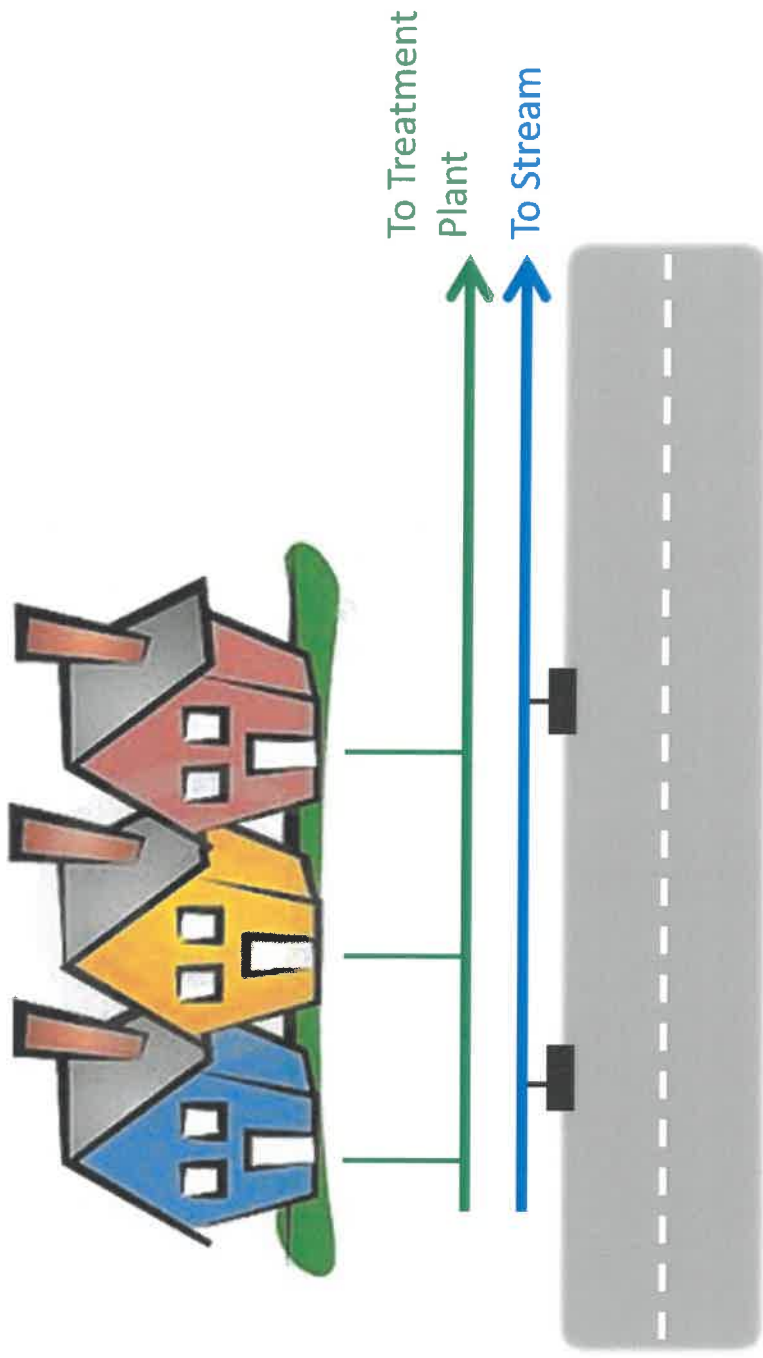


# **Evolution of Stormwater Management Practices for Development**



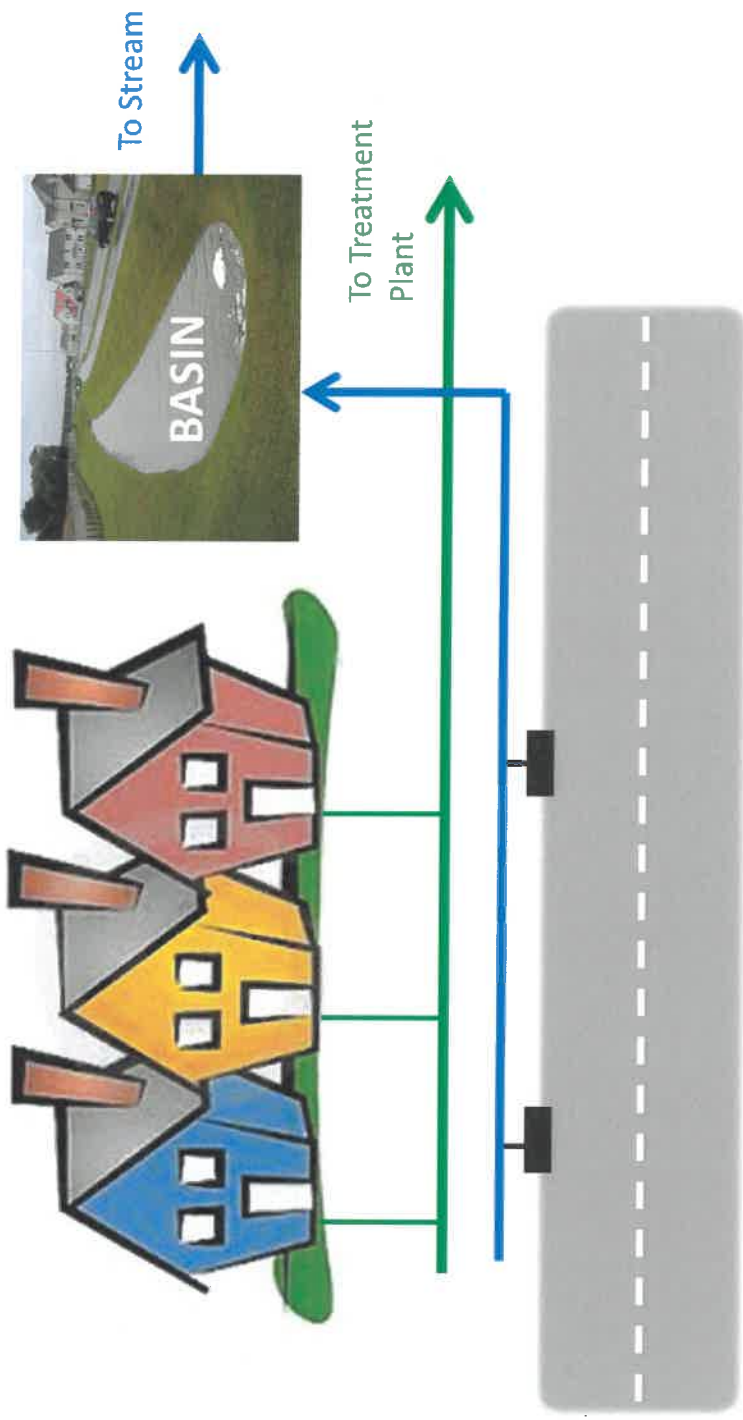
# Evolution of Stormwater Management Practices

## - Conveyance Only -



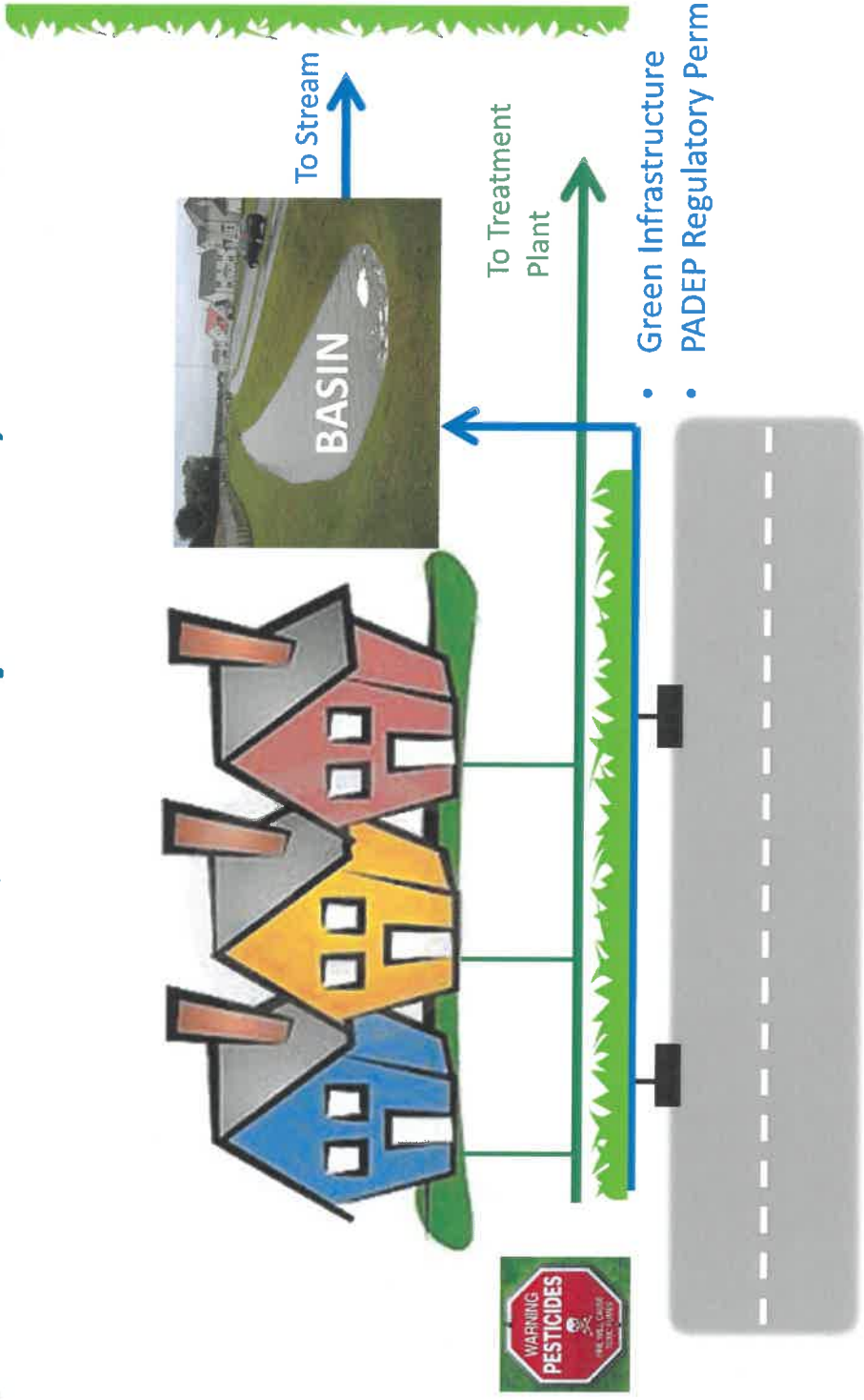
# Evolution of Stormwater Management Practices

## - Conveyance & Rate Controls -



# Evolution of Stormwater Management Practices

## - Conveyance, Rate Control, Quality Control, Volume Control -



# Increased Regulation of MS4 Communities



## MS4 (Municipal Separate Storm Sewer Systems)

### *Chesapeake Bay Agreement of 1983*

- New Pollutant Reduction Goals Set in 2000 to be achieved by 2023
  - 10% Sediment Reduction
  - 5% Total Phosphorus
  - 3% Total Nitrogen

### *MS4 Municipalities Must Meet This Goal*

# Unfunded Federal Mandate



You're welcome!  
- Uncle Sam





# How is the Pollutant Reduction Goal Met?

- **Implementation of Chesapeake Bay Pollutant Reduction Plan (PRP)**
  - 10% Sediment load reduction
  - 5% total phosphorus and 3% total nitrogen reductions
  - BMP construction required to achieve goal
  - 5 Years to complete projects from the date of MS4 Permit approval: **May 25, 2023**



# MS4 Permit Requirements

## Stormwater Management Programs (SWMP)

- 6 Minimum Control Measures (MCMs)
- **Complete full system mapping**

## Pollutant Reduction Plans (PRPs)

- Develop PRP
- ~~Show Incremental Progress~~
- **Plan and design PRP. Implement BMPs to reduce pollutants:**
  - **10% Sediment**
  - **5% Phosphorus**
  - **3% Nitrogen**



Std. Font – 2013 Permit Requirements  
**2018 Permit Requirements**

# MS4 Minimum Control Measures (MCMs)

- **MCM 1: Public Education**
  - Raise awareness about Best Management Practices (BMPs) via advertising, municipalities and website
- **MCM 2: Public Outreach**
  - Promotional events and advertising materials
- **MCM 3: Illicit Discharge**
  - Mapping
  - Outfall inspections
  - Illicit discharge reporting
- **MCM 4: Construction**
  - Stormwater management on developing/redeveloping properties (regulated by Borough Ordinance)
- **MCM 5: Post-construction**
  - BMP maintenance and inspection
- **MCM 6: Good Housekeeping**
  - Document completion and retention



## Funding Implications:

### *Budget Preparation*



- MS4 Permit application submittal requires Pollutant Reduction Plans (PRPs) to be fully implemented and documented. This includes the construction and ongoing maintenance of new municipal-owned BMPs.
- Municipal staff will require increased time and budget to conduct inspections and document findings.
- **According to the MS4 Permit Conditions, lack of funding to cover mandate is not an acceptable reason for non-compliance:**

E. The permittee shall develop and maintain adequate legal authorities and shall maintain adequate funding and staffing to implement this General Permit, including the SWMP contained in Part C I of this General Permit.





# Best Management Practices (BMPs)

**A sampling from the stormwater management toolbox.**

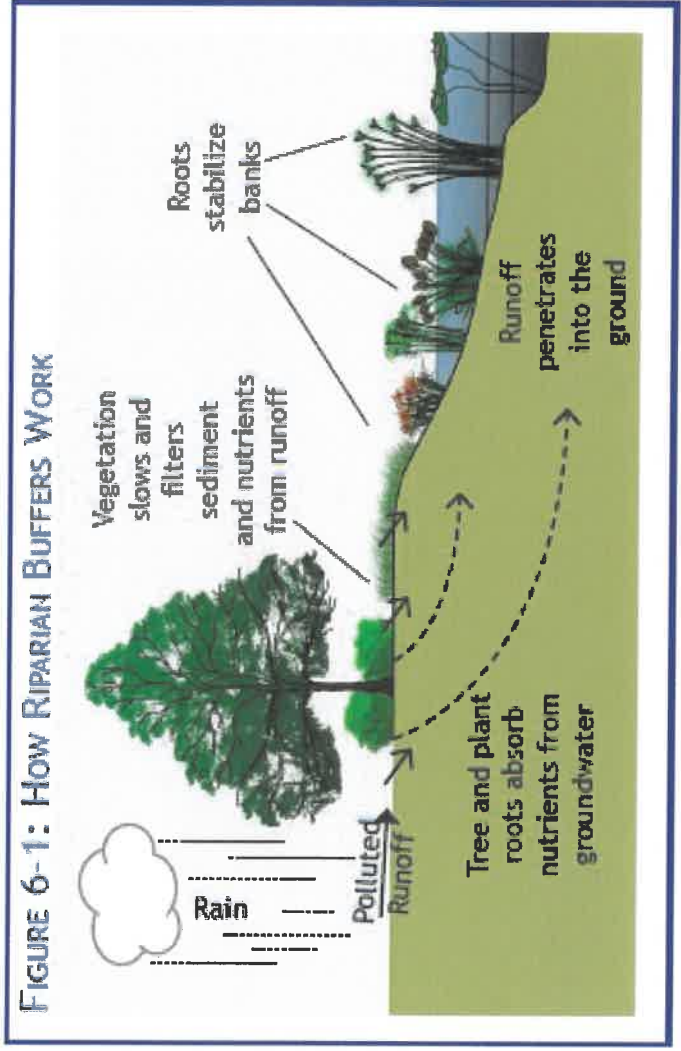


# Objective: Improving Local Stormwater Quality

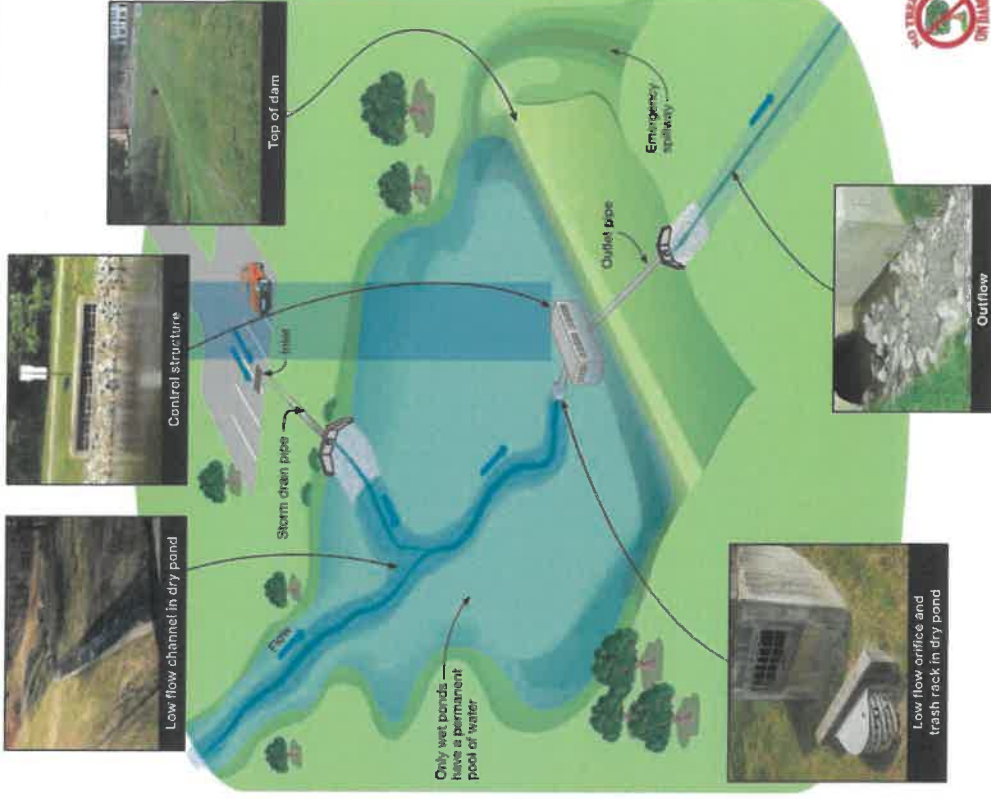
- **Stream Restoration Projects**
  - Reduce streambank erosion
  - Floodplain reconnection
  - Improve habitat
- **Riparian Buffer Projects**
  - Reduce rate of runoff
  - Provide plant uptake of pollutants
  - Capture sediment before entering streams
  - Reduce thermal impacts
  - Improve habitat
- **Infiltration BMPs**
  - Reduce volume of runoff
  - Groundwater recharge
  - Natural filtration of pollutants
  - Reduce thermal impacts
  - Reduce flood impacts



# Streambank Restoration & Riparian Buffers

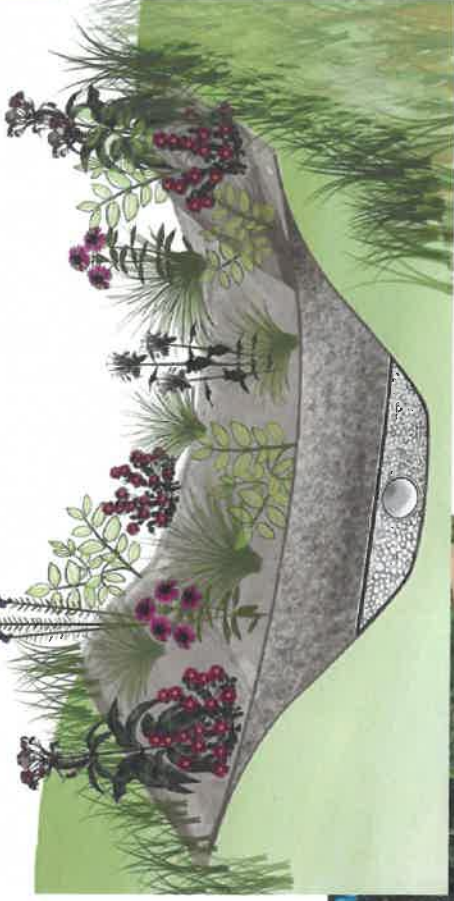


# Forebay & Water Quality

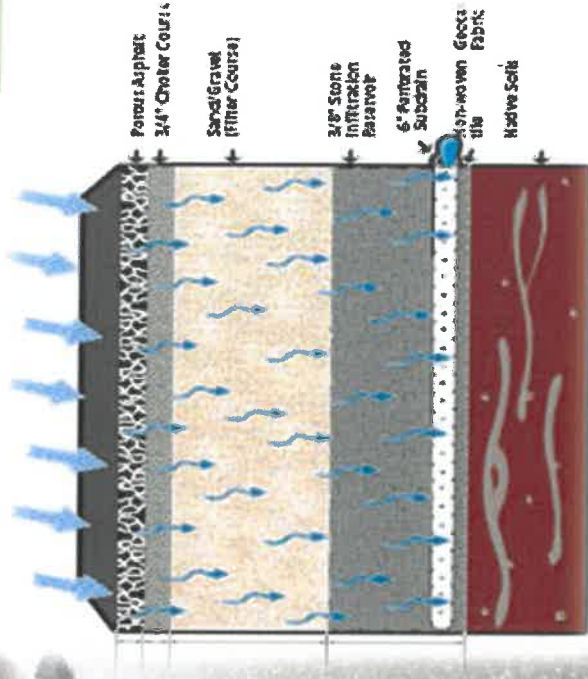
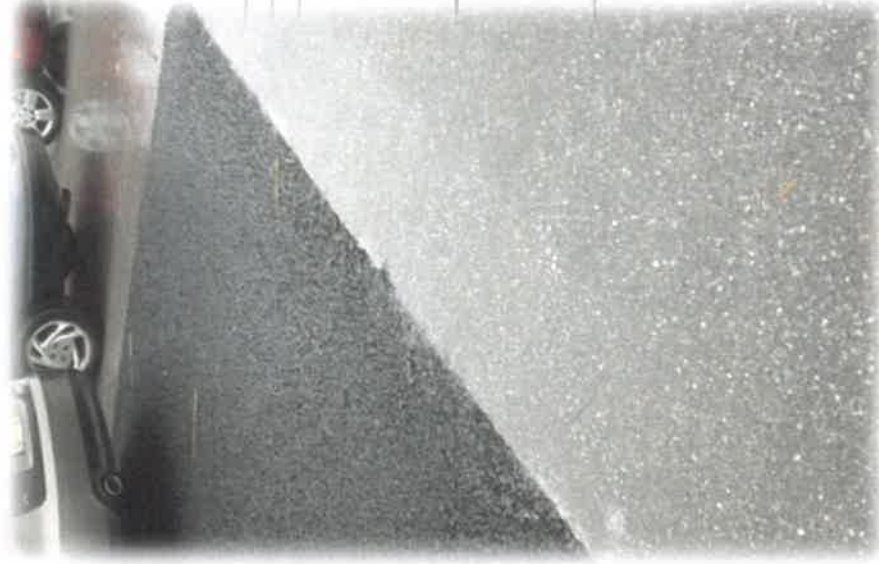




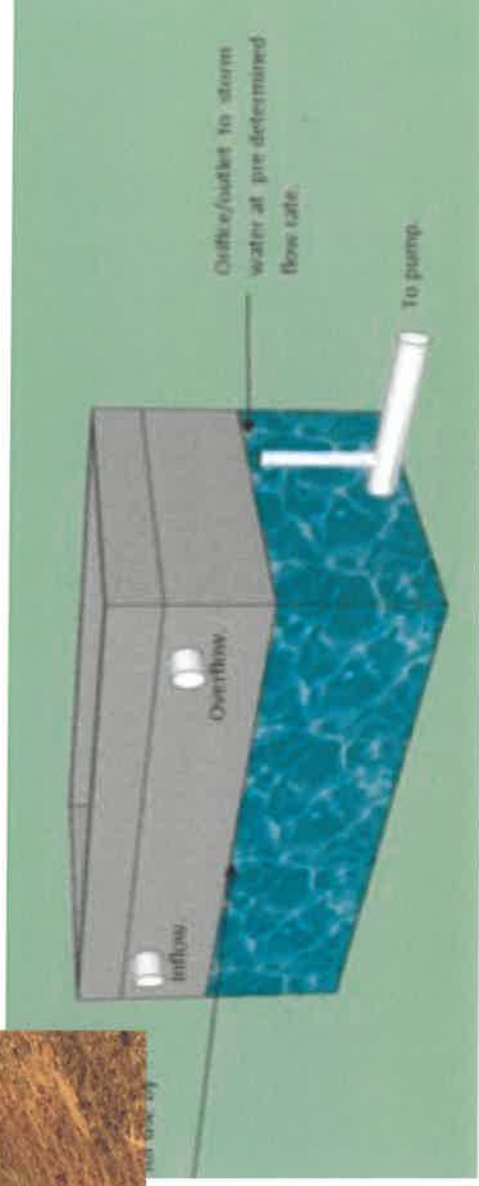
# Vegetated Swales



# Block Pavers & Porous Asphalt



# Stormwater Retention Tanks



# MS4 Challenges and the Borough System



# MS4 Challenges

- Challenge #1: Polluted streams

| MS4 Name               | NPDES ID  | Individual Permit Required? | Reason | Impaired Downstream Waters or Applicable TMDL Name | Requirement(s)  | Other Cause(s) of Impairment                    |
|------------------------|-----------|-----------------------------|--------|--|---|---|
| <b>Franklin County</b> |           |                             |        |  |   |   |
| ANTRIM TWP             | PAG133705 | Yes                         | SP     | Chesapeake Bay Nutrients/Sediment                  | Appendix D-Nutrients, Siltation (4a)                  | Water/Flow Variability (4c)                     |
|                        |           |                             |        | Unnamed Tributaries to Conococheague Creek         |   |   |
| CHAMBERSBURG BORO      | PAG133704 | No                          |        | Unnamed Tributaries to Muddy Run                   | Appendix E-Organic Enrichment/Low D.O., Siltation (5) | Other Habitat Alterations (4c)                  |
|                        |           |                             |        | Unnamed Tributaries to Conococheague Creek         |   |   |
|                        |           |                             |        | Chesapeake Bay Nutrients/Sediment                  | Appendix D-Nutrients, Siltation (4a)                  | Oil and Grease (5), Water/Flow Variability (4c) |



# MS4 Challenges (Cont'd)

- **Challenge #2: Increased regulations**
  - MS4 Permit an implemented PRP that meets pollutant reduction goals by 2023
- **Challenge #3: Aging infrastructure**
  - Some Infrastructure is over 100 years old.
  - Like almost all municipalities, maintenance has been neglected due to budget limitations and a reactionary approach has been the norm.
  - Failure to perform regular maintenance results in greater expense to replace and upgrade infrastructure
- **Challenge #4: Generations of development = more runoff and more infrastructure**
- **Challenge #5: Funding**
  - Historically, municipalities have funded storm sewer operation and maintenance through tax revenues which have remained stable despite growing costs of ownership.



# Borough Storm Sewer System

1) Consists of storm sewer pipes, inlets and related infrastructure located in public rights-of-way:

- 72 miles of pipe
  - 32 miles of open channels
  - 2758 inlets
  - 83 detention basins
  - 39 rain gardens
  - 103 subsurface detention
- 2) 132 Discharges/Outfalls



# Borough Storm Sewer System (cont.)



- 3) Many facilities constructed and dedicated by developers.
- 4) Condition of existing facilities will need to be assessed.
- 5) Much of the Borough's system reached the end of its serviceable life years ago and needs to be replaced. More of the system will reach the end of its serviceable life in the next few years.





# Role of Storm Sewer Utility



# Storm Sewer Utility Definition

A utility established to generate a ***dedicated source*** of funding for stormwater pollution prevention activities where users pay a ***fee based on land-use*** and contribution of runoff

Ref: Natural Resources Defense Council



# Why Update Now?

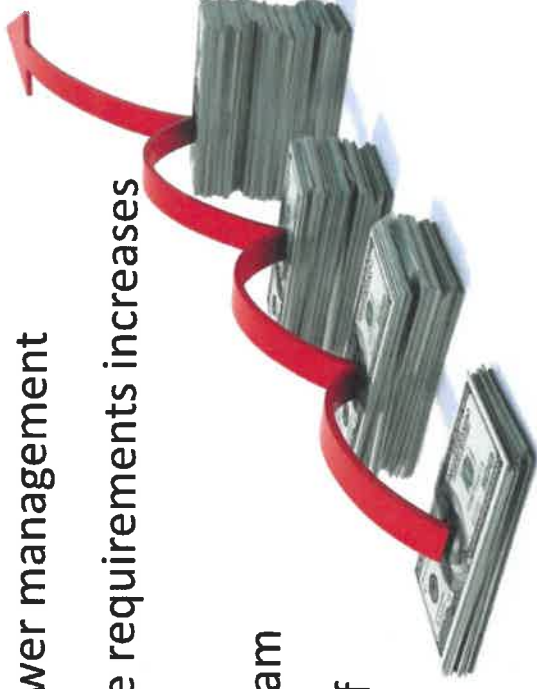
- Desire to ensure provision of **clean water** in Borough.
- **Aging infrastructure** repair, rehabilitation and replacement needs... needs/cost/timeline need to be further defined and prioritized.
- **Additional operation and maintenance** responsibilities associated with regulatory requirements...and their related cost impacts
- 2018 MS4 Permit requires Borough to have **funding and staffing necessary to fully comply with increased regulations**, including BMP installation.



# Financial Benefits of a Utility

**Benefit #1:** Provides a steady dedicated revenue stream

- Dedicated source of funds
- Funds directed solely to storm sewer management
- Capital improvement and revenue requirements increases as infrastructure ages
- More predictable and steady stream
- Tax revenue often static as cost of improvements/regulatory requirements increase



# Financial Benefits of a Utility

**Benefit #2:** Fees based on Impervious Area (IA) more equitable than a tax



- Fairly apportions costs and each property contributes to system.

**In roughly 40 municipalities surveyed, the average residential property owner saved between 50% - 70% by paying a fee vs. contributing revenue through taxes.**

- Fees can be collected from tax exempt users.
- Credits provided based on level of service received.
- Provides incentive for businesses to reduce impervious surface.



# Current Process for Developing Updated Program & Reviewing Funding Methods

1. Form an Advisory Committee
2. Review Existing Storm Sewer Program
3. Initiate Ongoing Public Education
4. Define Responsibilities and Budget Needs
5. Review Operations & Management Structure
  - Billing, Staffing, Department
6. Develop and Analyze Rate Structure
  - Analysis of Impervious area on individual parcels
7. Adopt Necessary Ordinances
8. Establish Credit Policy



# Storm Sewer Goals for 2019

- 1) Team with Advisory Committee
- 2) Define Storm Sewer Program and Policies
- 3) Determine appropriate Level of Service (LOS) of Storm Sewer Utility
- 4) Review Storm Sewer Utility Structure
- 5) Establish equitable fee structure
- 6) Increase public education on effective storm sewer management, cost & fees



# Role and Importance of Advisory Committee





# Importance of the Committee

- 1) Partnership between Borough & citizens, businesses, industries and institutions in the community for effective Storm Sewer Management.
- 2) Provision of technical and value-based input on storm sewer issues.
- 3) Serve as a sounding board to the Borough on matters related to storm sewer program and policies.
- 4) Collaborate and network together on related topics that affect the community.
- 5) Serve as liaisons within areas of influence for the storm sewer program.



# Charge of the Committee

- 1) Provide feedback on Storm Sewer Program:
  - Needs and level of service
  - Spending priorities
- 2) Evaluate:
  - Proposed Storm Sewer Fee structure and Implementation
  - Appeal Process and future Credit Policy
- 3) Engage and educate the public on the Storm Sewer Management Program
- 4) Make recommendations to the Borough



# Member Responsibilities

- 1) Speak your mind and actively participate.
- 2) Listen carefully and be willing to be persuaded.
- 3) Spend the time needed to provide constructive input.
- 4) Consensus is our goal, but disagreement during discussion is fine if we do it agreeably.
- 5) Consider the Utility's overall needs as well as the needs of the people you represent.



## Future Advisory Committee Meetings

### Meeting # 2: March 2019

- Current Storm Sewer Program
- Intro to Level of Service (LOS) - Current LOS and associated cost
- Program Needs, Capital Improvements, Budget

### Meeting # 4: May 2019

- Storm Sewer Fee
- Fee Impacts
- Implementation of Fee

### Meeting # 3: April 2019

- Benefits of a Storm Sewer Utility
- Benefits and Costs of Expansion to Higher LOS
- Funding Options
- Public Education & Outreach

### Meeting # 5: June 2019

- Appeal Process / Credit Options
- Community Benefits
- Implementation Schedule
- Public Education & Outreach



Feedback from Committee on date for March SAC Meeting.