Ferguson Township
Stormwater Advisory Committee

Meeting No. 5

Policy Discussions

- Variability in Services
- Introduction to Credit Options

Phase II

Stormwater User Fee Feasibility Study

August 7, 2019

wood.

Gannett Fleming

Excellence Delivered As Promised

Agenda

Welcome and Introductions

Policy discussion:

- Methods to address variability in impervious area and stormwater related service across the Township (service zones)
- Introduction to credit policy options

Discussion/Conclusions

Methods to Address Variability in Impervious Area and Stormwater-Related Service Across the Township (Service Zones)

Feedback – July 17

- It is important that the cost model is capable of assigning costs by the infrastructure served.
  - Service areas in Ferguson have a historical expense that can be aligned to a rate methodology, and the rate can be established on this methodology.
- The routine 'overhead' costs should be shared across service areas.
- It was noted that property owners in the service area with lower LOS based on the stormwater infrastructure do utilize the Township stormwater system found in the higher-level service area.
  - It was noted that consideration should be given to an allocation of a minimal portion of the high-service area costs to all property owners.
  - A 10 percent share was suggested.
- It was suggested that the Township minimize complexity and evaluate effectiveness after a few years of operation to see if the concepts of increased equity hold.

Variability in IA - Approach to User Fee Development

Recognizing Service variability within Township driven by infrastructure:

- Complex systems of pipes, basins, inlets, swales, streams
- Base-level systems of open channels and ditches and cross-drainage pipe under roadways
- Interconnections to other systems (PennDOT roadways)
- Other MS4 permittees within Township

By Rate Structure

Two-Element Rate Structure

- Baseline Services: Serves all properties in Township
  - Base cost to address administration and other services
- Infrastructure management costs (operation, maintenance and capital costs):
  - by geographic areas;
  - type of infrastructure; or
  - other parameter

By Infrastructure Complexity

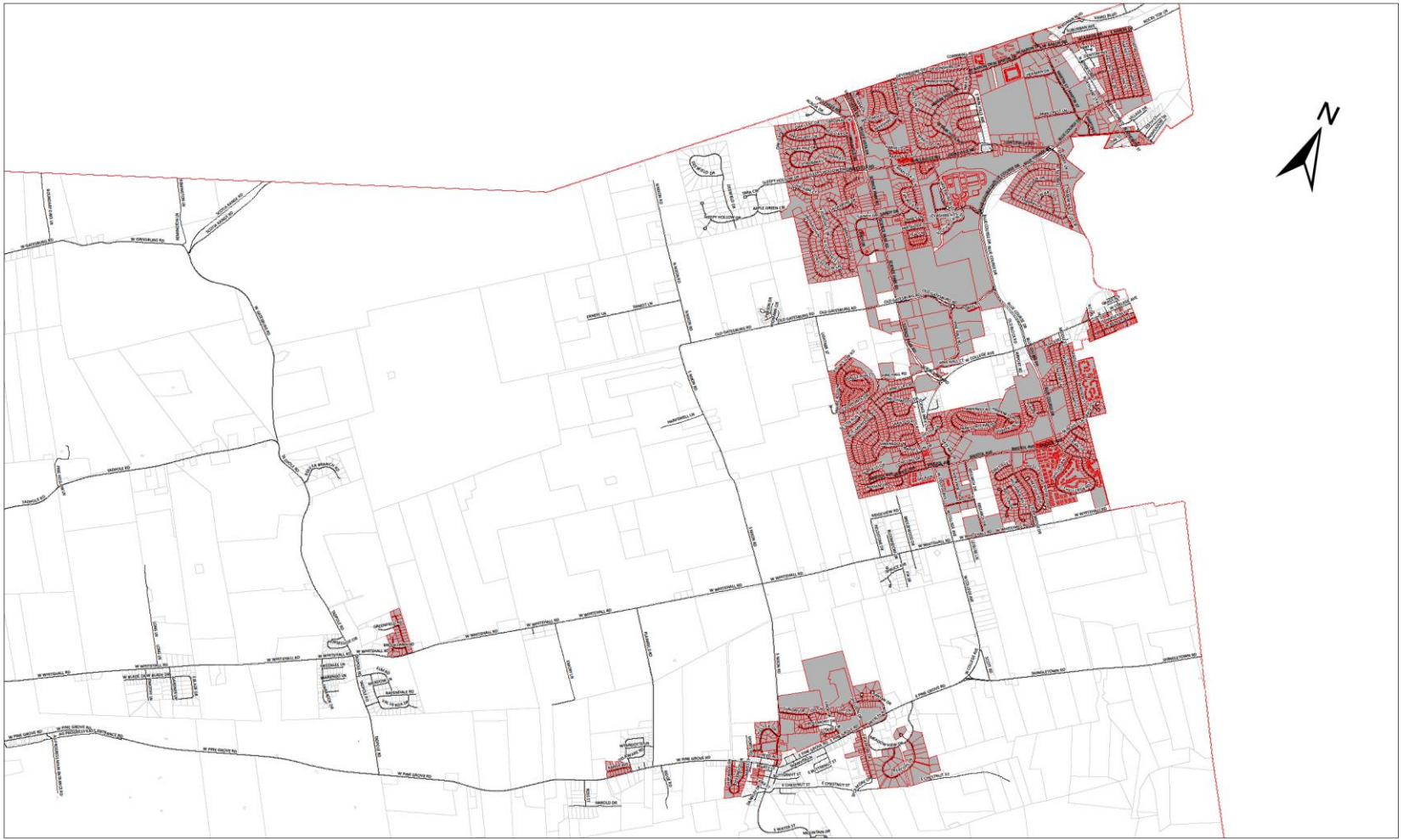
Service Area 1 – higher frequency and level of service

- Any lot that fronts on a Township street segment that has 50% or more of that street segment with a parallel storm pipe; or
- Any lot that fronts on a Township street segment that has 50% or more of a street segment with curb on one or both sides.

Service Area 2 – lower frequency and level of service

- Any lot that fronts on a Township street segment that is not in the Service Area 1; or
- Any lot that fronts on a street owned by another MS4 permittee, or a private street; or
- Any lot that is covered by a separate MS4 Permit with DEP.

Each service area has about 24,000,000 square feet of impervious area.



Cost Alignment in Service Areas

ALL:

- **Program management, system planning, overhead, and Township MS4 compliance** (including capital required to comply with the Township's Pollution Reduction Plan)

Service Area 1: High Level

- **Operations and maintenance** for **underground and above ground drainage infrastructure and capital improvements**
  - pipe lining,
  - new equipment purchases,
  - system inventory update
  - drainage system assessment
  - This service area also has costs assigned for a new foreman and three-person crew added over the five-year period.

Service Area 2: Low Level

- **Operations and maintenance** of **roadway ditch and cross-pipe maintenance**.
- **No capital projects** were included in the first five-year program plan.

Discussion

- **Is it appropriate to set a base cost per account? (e.g., Adm, Overhead, Public Ed)**
- **What approach will make sense to the public?**
  - **Variable rates – density of development + impervious area**
  - **Service Areas based on type of infrastructure**
  - **Service Areas based on density of population**
  - **Service Areas based on geographic boundary**

Discussion Questions

- Should the MS4 program and MS4 capital costs be assigned to all properties?
- Should program administration costs be assigned to all properties?
- Property owners in Service Area 2 benefit from the investment in and maintenance of the drainage system in Service Area 1. Should some portion of the costs of operation and maintenance for the Service Area 1 system be assigned to the Service Area 2 cost allocation?
- Should capital projects for new treatment facilities/quantity controls be a shared cost for Service Area 1 or should these costs be assigned/recovered only to those properties directly served? This could be done through the assessment process, rather than through the rate structure.

Cost Center	Fixed Cost – All Pay	Planning and MS4 – All Pay	Service Area 1	Service Area 2	Roadway Projects w/drainage by TIF
Administration					
Township Overhead					
MS4 Permit – Ops					
MS4 Permit – CIP					
Planning Studies					
Regulatory Enforcement					
Inspection – Ditches/Cross Pipes					
Inspection – Pipes, Inlets, Basins, GI, Channels					
Pipe Relining					
System Maintenance					
CIP					

Credit Policy Introduction

Discussion Questions On Credit Policy Development

- What is a credit?
  - A credit is a reduction in total utility fee charged a specific owner of a parcel, based on policy established by the Board of Supervisors
- Are credits mandatory?
  - No, in PA credits are a discretionary action by the Township
- What are the financial implications to the Utility of a credit program?
  - Personnel time to administer (approve, review, enforce)
  - Impacts on the rate structure – reduces individual revenue from a parcel; not necessarily reducing program costs
- Who should be eligible?
  - Depends on the type of credit adopted
  - Credits are earned; not awarded

Discussion Questions on Credit Policy Development

- How and when will credits be available?
  - Once a year billing – by what date should credits be applied for by property owner?
  - If an owner misses a date for application, should the Township grant a credit between billing periods?
- If a facility treats runoff from offsite impervious area should the credit be calculated on total IA served?
  - If yes, how to handle the credit should offsite property have treatment installed?
- Is there a limit to the amount of credit that can be earned?
  - Most credit programs are adopted with a limit to the value of the credit.
  - Most credit program are aligned to the services provided by the local jurisdiction.
- How is the credit for a structural facility calculated?
  - Facility only handles ½ of site impervious area runoff.
  - Facility treats offsite impervious area runoff.

Factors Considered - How Credits are Applied

- Credit for a BMP built voluntarily that exceeds Township SWM standards.
- BMP built according to current Township SWM standards – lesser value.
- Ratio of impervious to pervious surface may result in less site runoff
- Participation in watershed stewardship activities.
- Public education institutions that provide water quality education to students – high school science curriculum module.
- Residential rain barrel programs.
- Impervious area reduction – removal of IA.
- Implementation of nutrient management plans.

Attributes

- Voluntary or Required by Development Standards
- Structural or Nonstructural
- Reduces Township Costs or Value-driven such Public Education
- Residential or Non-residential
- Apply or Automatically Granted
- MS4 Permittee such as Industrial NPDES Discharges
- Enforcement
  - By Township
  - Self-certification of functionality

Purpose of Credits

- Acknowledges that on-site GSI can reduce the long-term cost of public stormwater services.
- A credit is not a reimbursement program – it is a way to acknowledge the future public benefits of operating a facility, not to reimburse owners for past investments.

Credit Systems

- Credit systems can be very simple – reactively recognize investments made by property owners.
- To more complicated – designed to incentivize voluntary installation of GSI or enhancements made to an already required GSI.
- Regardless, there must be a verifiable benefit. A stormwater utility is a fee for service.

Who should is eligible for credit? Allentown PA

The City will provide a stormwater utility fee credit for:

1. any stormwater management facility,
2. whether built voluntarily or as a condition-of-development,
3. installed on or after April 19, 2007 for quality purposes (the adoption date of "The City of Allentown's (Act 167) Stormwater Management Ordinance," Article 1387 of the City Code), and/or
4. installed to control volume in accordance with Article 1387 or it predecessor requirements.

How much credit should be received?

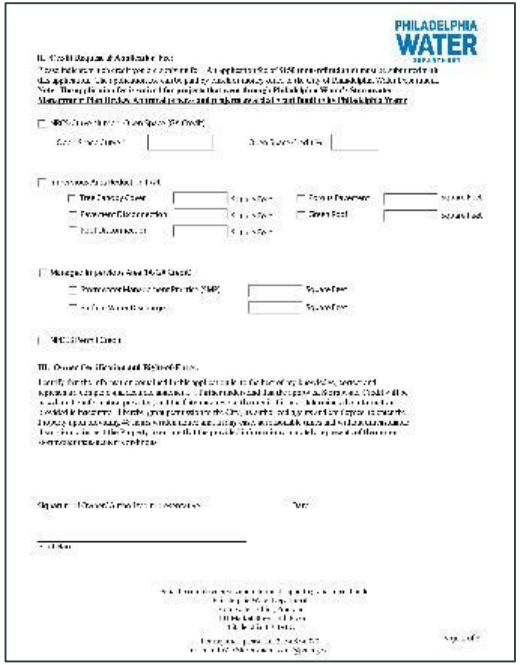
Facility Type and Purpose	Base Credit Amount	Voluntary Facility Bonus	Total Possible Credit
Facilities Achieving 10% or More Sediment Reduction from Existing Conditions (Assumes That These Facilities Also Control Volume)			
10% to <25%	20%	20%	40%
25% to <75%	25%		45%
75%+	30%		50%
All Other Facilities Built in Accordance with Article 1387 of the City Code, Regardless of Whether it is for Quality, Quantity, or Both			
All	10%	Not Applicable	10%

Simple - Chesapeake, Virginia

- 20% credit for water quality facility.
- 20% credit for water quantity facility.
- Calculations must be submitted by a professional engineer.

More Complicated – Philadelphia

- Open space credit.
- Impervious area reduction:
  - Tree canopy
  - Pavement and rooftop disconnection
  - Porous pavement
  - Green roof
- Managed impervious area.
- NPDES permit credit.



Very Complicated – Charlottesville, Virginia

Installation Date	Condition of Development or Voluntary	Percent Credit
Pre-July 1, 2009	Either	20%
Post-July 1, 2009 & Pre-July 1, 2014	Condition of Development	30%
Post-July 1, 2014	Condition of Development	40%
Post-July 1, 2009	Voluntary	40% to 100% * Depending on the Level of Pollutant Removal
*Subject to a max total site credit of the greater of 90% or 100% minus 1 billing unit.		

Credit Impacts

- The public benefit is long-term, the short-term program needs remain the same.
- As a result, credits shift the burden of the short-term program to those who do not have credits.
- The impact of a credit on a specific property will depend on the amount of impervious cover.

Incentives – Not Credits but Partnerships

- Similar to a grant program.
- Used to assist owners to install or engage in practices that improve water quality.
- Two potential approaches:
  - Target Driven. Allows staff to approach targets of opportunity that will help meet water quality and quantity control goals.
  - Engagement Driven. Gives property owners a way to engage, with efficiency and accountability being only secondary goals.
- What is the right approach for the Township?

Discussion Questions on Credit Policy Development

- What activities should be eligible for a credit?
  - Onsite treatment and/or flow reduction attributes
  - Public engagement (e.g., volunteers for stream cleanup; public education curriculum)
- How much credit should be awarded for each activity?
  - Facility classifications: built after 2003; before 2003; before any stormwater standards adopted
  - Non-structural: activities support the goals and services provided by the Township
- Should credits expire – require reapplication?
  - As facility standards change in the future, should existing credits be renewed/reduced/sustained?
  - As the program of services change, should credits be adjusted?
- Should maintenance agreements be required for all structural facility credits?
  - How should maintenance be verified
  - How frequently should maintenance be verified