

Ferguson Township
Stormwater Advisory Committee

wood.

Meeting No. 7

Policy Discussions and Program Review

- Variability in Services
- Credit Options
- Private Facilities Serving a Public Purpose

Phase II

Stormwater User Fee Feasibility Study

October 23, 2019

 **Gannett Fleming**

Excellence Delivered **As Promised**



Agenda

Welcome and Introductions

Policy discussion:

- Credit Program
- Review Levels of Service
- Role of Private Facilities for Public Purposes

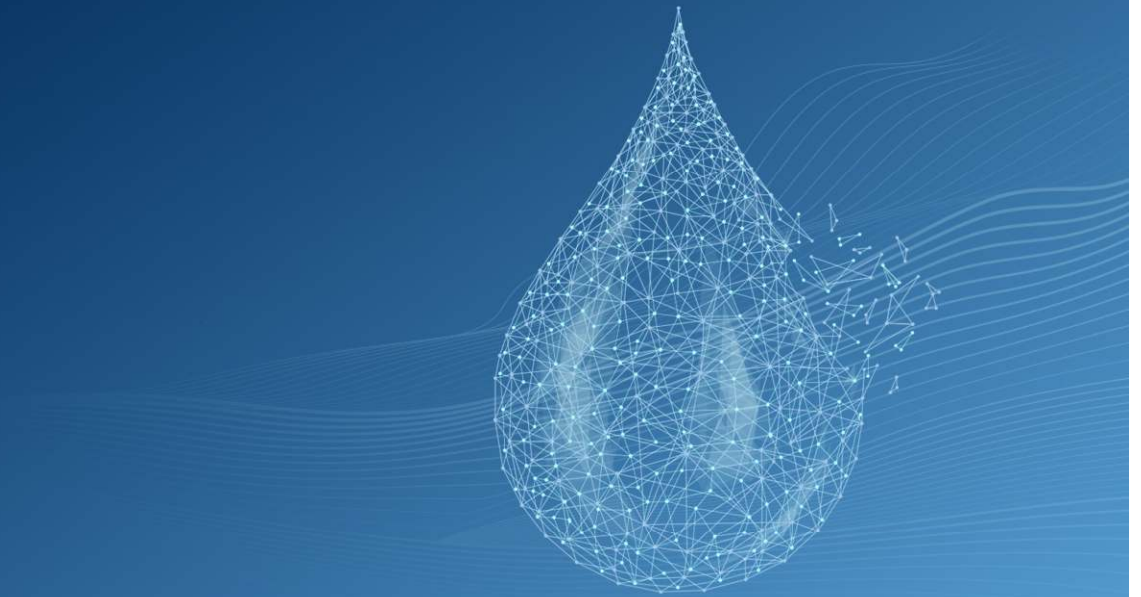
Program and Rate Structure

- Program Elements
- Service Area Definition

Next Steps

TITLE PLACEHOLDERS

Credit Policies



General Takeaway Discussion Points re: Credits

- SAC agrees with concept of a Township having a credit program if a user fee is assessed.
- Credit programs can provide many different benefits, but each has to be weighed against the value it adds, versus the revenue impacts.
- Credits can be offered in general categories such as structural, engagement or operational.
- Recognized that some credits could provide “social” value but offer very little in way of actual improvements to flooding or water quality.

SAC Conclusions



- SAC recommended that the Township evaluate their stormwater ordinances to ensure that they are aligned with the goals of this new comprehensive stormwater program.



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee:

- the Township should consider a delayed credit program rollout in order to allow the stormwater program to become fully operational and identify/confirm the condition of stormwater assets.



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee

- the Township should consider initially offering credits to only non-residential, as they have greater opportunity to provide a return on the investment.



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee the credit program should

- provide a full (100%) credit for the MS4 portion of the fee offered to any MS4 permit holder who already has similar obligations under their own permit.



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee the Township should

- incentivize the recharge of groundwater (in appropriate and strategic locations of the Township) by way of offering credits to promote infiltration and reduce / eliminate the discharge of stormwater runoff.



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee the credit program should

- require that the design and impacts of BMPs (used for credit purposes) must exceed the minimum requirements.



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee the Township should

- continue the practice of randomly inspecting BMPs, with annual “self certification” reports of BMPs condition be provided by the individual credit holder(s).



SAC Conclusions



SAC recommended that if the Township implements a stormwater fee & credit program

- the credits would be valid for a period of 3-5 years before needing to be renewed or terminated.



Any other collective SAC thoughts on Ferguson's credit program?



Review of Policy
Township Responsibilities for
Private Systems Serving a
Public Purpose



Township Responsibilities for Private Systems

- **Scenario #1: Stormwater originates solely within the “development” and is conveyed to (or through) the private system and/or BMPs for the same development.**
- **Recommended Actions Scenario #1:**
 - Add the pre-2003 facilities to the inspection program (update inventory and then add to schedule).
 - Since the Township was involved in original engineering design, make sure standards are appropriate and met.
 - Private property owner responsible for operations and maintenance; Township enforces standards – action is complaint driven.

Township Responsibilities for Private Systems

Scenario #2: Stormwater originates from outside the “development” and is conveyed to (or through) a private stormwater system and/or BMPs (not owned by the Township or State).

Recommended Actions Scenario #2 – Partnership with Private System Owner:

- Inspect system to identify condition and potential problems or issues;
- Place pipe into program for continuing evaluation of the conveyance system condition. Based on findings from initial inspection, determine source of the problems identified, if any.
- Research to determine if an easement exists and the type of easement, if found.
- Provide technical assistance, as appropriate to status of facility.
- Partner with owner to establish/negotiate a maintenance agreement. Maintenance agreement “runs with the land” so regardless of a sale of property, the agreement is binding to owner.
- Manage by “exception” based on the degree of impact from upstream runoff from public conveyance for rehabilitation/replacement of the system.
- Open channels managed under same policies.

Township Responsibilities for Private Systems

Scenario #3: Stormwater originates from outside the development, is combined with private “development” runoff and then flows to and through a privately-owned BMP, ultimately ending up back in a private stormwater system (or to public system) and no HOA exists nor defined ownership of the drainage components.

Recommended Actions Scenario #3:

- If the Township can force the creation of an HOA it should work with the neighborhood served by the system and establish the HOA to take responsibility for maintaining the private components.
- Township partner with all homeowners within an intended but non-existent HOA to provide operation, maintenance, or repairs to private facilities conveying “public” and “private” stormwater.
 - The conditions include: there is no functioning HOA and multiple properties are served including no designated ownership of infrastructure.
 - If partnering is not legally permitted, the Township should provide operation, maintenance, and repair to these facilities. The Township should notify the homeowners of the decision made.

Township Responsibilities for Private Systems

Scenario #4: Stormwater originates within a development and possibly carries flows from upstream, is conveyed with the addition of public runoff, and ends up discharging to a single-owner BMP (typically a basin). The BMP is not dedicated to an HOA, nor the Township.

Recommended Actions Scenario #4:

- Consider the option of creating an HOA and determine if the Township be a party to such an agreement.
- The Township should partner with the single-owner with a formal agreement on responsibilities (e.g., owner does routine maintenance such as mowing, and any debris removal and the Township takes care of the structural components).
- Add the BMP to the inspection program if it is not currently. Do an assessment and determine the nature of issues that may be present today.
- The Township will work with the homeowners to establish an agreement of responsibility for the on-going maintenance and repair of the basin.

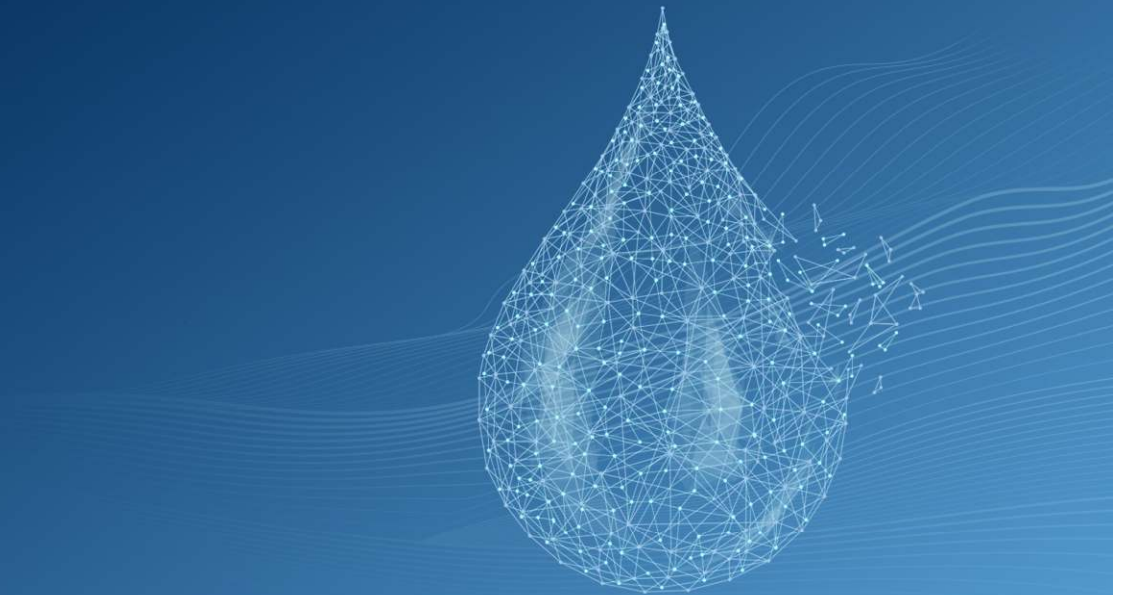
Township Responsibilities for Private Systems

Scenario #5: Stormwater originates within a development and possibly some from upstream, is conveyed with the addition of public runoff, and discharges to a single BMP is dedicated/owned by an HOA.

Recommended Action Scenario #5:

- **The Township includes in the inspection program, if not already included.**
- **The Township evaluates these situations on a case by case basis to determine the degree to which the BMP serves a public purpose.**
- **The Township, at a minimum, should have an agreement in place to either shared responsibility or, with a dedicated easement, take over the maintenance and operation of these BMPs. The key is the degree to which public stormwater flows are served by the BMP.**
- **The Township could have an operating agreement with the HOA to provide O&M and capital for major repairs to structural components and the HOA do minor maintenance (mowing and debris removal).**

Review of Policy Level of Service



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 Infrastructure Complexity

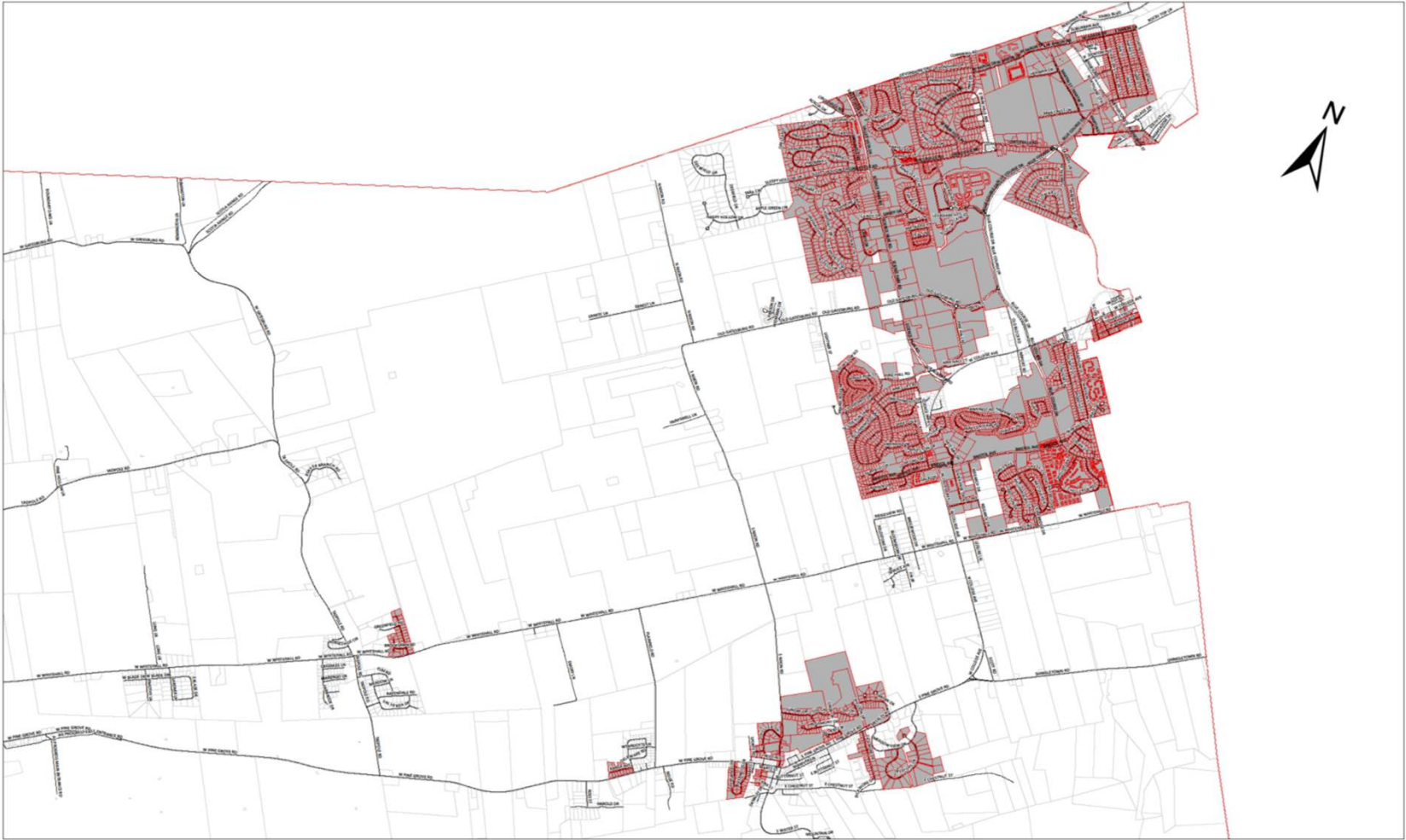
Service Area 1 – higher frequency and level of service

- 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.

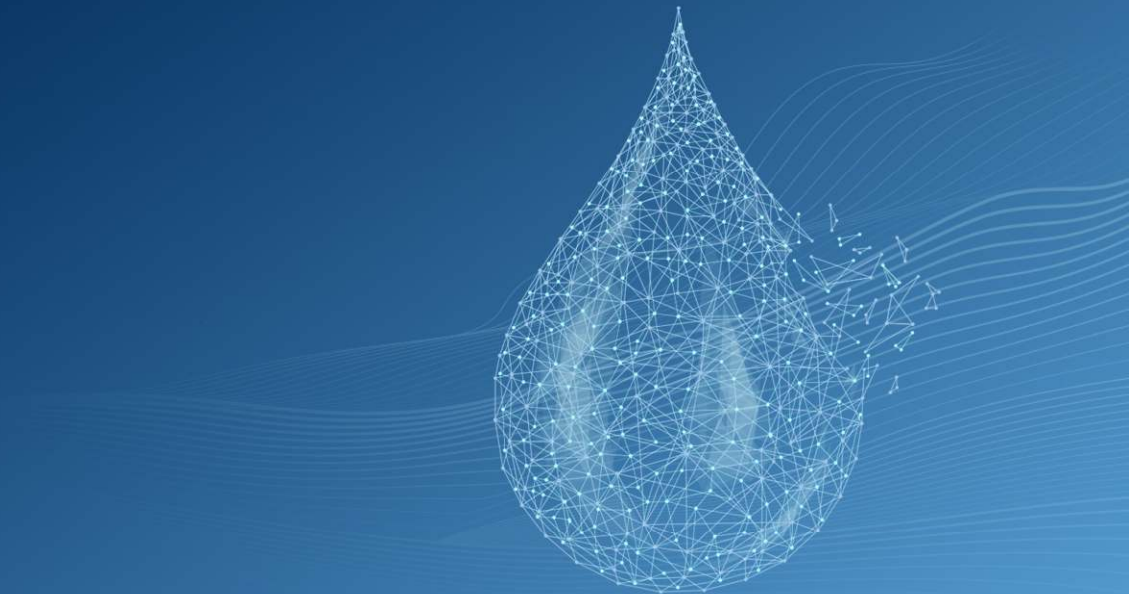
Service Area 2 – lower frequency and level of service

- 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.



Program Elements



Cost Alignment in Service Areas

- **System-wide Assessment:**
 - *Allocation between service areas: 80% SA 1; 20% SA2*
- **Maintenance Initiatives:**
 - *Allocation between service areas: 90% SA1; 10% SA2*
- **MS4 Permit Compliance:**
 - *Allocation between service areas 80% SA1; 20% SA2*
- **CIP:**
 - *Allocation between service areas variable –shared 80/20 split for CMP repairs, MS4, and inlets.*
- **Current Operational Costs:**
 - *Allocation between service areas: 80% SA1; 20% SA2*

Program Activities

- **Infrastructure Assessment:**
 - Research and inventory BMPs/Basins constructed prior to 2003; add to database for on-going inspection. Complete assessment of all above-ground system components.
 - Inspection of all inlets.
 - CCTV pipe inspection (35 miles) over two-year period.
 - Cross-pipe inspection and assessment in West End and add inventory to database.
 - Convert part-time stormwater inspector to full-time stormwater engineering position.
 - Develop and implement long-range inspection program.

Program Activities

- **Maintenance Response:**
 - Add Foreman in year one and Equipment Operator and two Stormwater Workers in year 3.
 - Purchase vehicle for Foreman.
 - Establish maintenance long-range plan for above-ground facilities/system based on assessment.
 - Purchase Vactor (year 1).
 - Purchase CCTV equipment and vehicle (year 2)
 - Prepare system-wide master plan (year 4) and establish Green Infrastructure design standards.
 - Initiate inlet and facility maintenance program.

Program Activities

- **MS4 Permit**
 - **Maintain ongoing permit activities as set forth in permit terms.**
 - **Public education and outreach**
 - **Construction Inspection (by CCCD)**
 - **Post Construction Management (inspection of private BMPs/Enforcement)**
 - **Illicit Discharge Elimination (outfall inspection and tracing/eliminating non-stormwater flow)**
 - **Good housekeeping practices – site maintenance and worker training**
- **Implement approved Pollution Reduction Plan (capital investment)**

Program Activities

- **Current Operational Costs**
 - Public Works ongoing complaint response for stormwater.
 - Customer service
 - Engineering – mapping and plans review
 - Management/leadership personnel
 - Administrative support
 - Materials and supplies
 - Fuel and equipment maintenance
 - Training

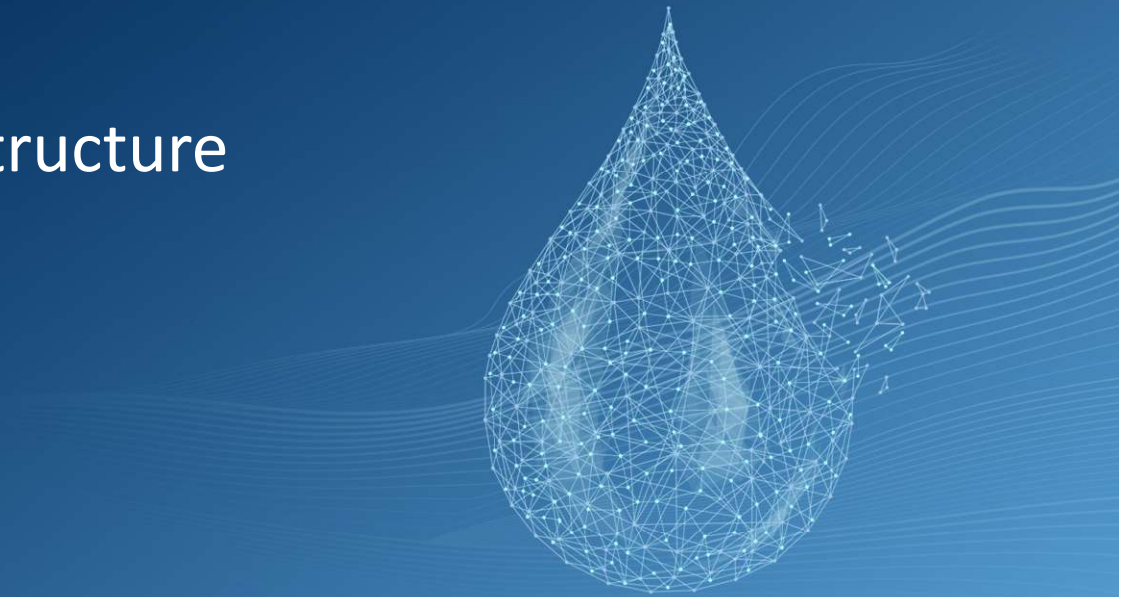
Program Activities

- **CIP**
 - Park Hills Drainageway in three phases over three years (starting in year 2)
 - Line CMP in Brackenridge (year 1)
 - Line CMP in Stonebridge (year 2)
 - Line CMP in Pine Hall (year 3)
 - Line CMP for GHF 1 and 2 (year 4)
 - Line CMP – 20% of identified candidate pipes as identified in assessment (year 5)
 - Replace CMP critical failures as identified in in assessment (being year 3)
 - Repair stormwater inlets based on assessment (5 a year starting in year 2)

Ferguson Township Program Allocation of Costs - By Service Area

Service Area One	FY21	FY22	FY23	FY24	FY25
Infrastructure Assessment	\$ 658,953	\$ 567,971	\$ 97,078	\$ 97,078	\$ 100,479
Maintenance Reponse	\$ 542,440	\$ 288,641	\$ 303,886	\$ 561,254	\$ 324,243
MS4 Permit	\$ 107,268	\$ 110,370	\$ 113,594	\$ 116,776	\$ 120,072
CIP	\$ 413,000	\$ 1,131,800	\$ 953,600	\$ 1,101,400	\$ 1,185,600
Current Operational Costs	\$ 211,986	\$ 210,226	\$ 242,506	\$ 252,816	\$ 259,718
Subtotal	\$ 1,933,647	\$ 2,309,007	\$ 1,710,664	\$ 2,129,323	\$ 1,990,113
Service Area Two	FY21	FY22	FY23	FY24	FY25
Infrastructure Assessment	\$ 164,738	\$ 141,993	\$ 24,270	\$ 24,270	\$ 25,120
Maintenance Reponse	\$ 60,271	\$ 32,071	\$ 33,765	\$ 62,362	\$ 36,027
MS4 Permit	\$ 26,817	\$ 27,592	\$ 28,399	\$ 29,194	\$ 30,018
CIP	\$ 25,000	\$ 26,200	\$ 37,400	\$ 38,600	\$ 171,400
Current Operational Costs	\$ 52,996	\$ 52,557	\$ 60,626	\$ 63,204	\$ 64,929
Subtotal	\$ 329,822	\$ 280,413	\$ 184,459	\$ 217,629	\$ 327,494
Total Allocated Program Costs	\$ 2,263,469	\$ 2,589,421	\$ 1,895,124	\$ 2,346,952	\$ 2,317,607

Program and Rate Structure



Next Steps to Create Rates

- **Refine analysis of the Service Area allocation of costs.**
- **Review Cost Model with Finance Staff to identify cash flow needs.**
- **Prioritize CIP.**
- **Smooth out variability in program costs – spread costs based on staffing capabilities.**
- **Sequence start up based on cash flow needs.**
- **Review with Township leadership.**
- **Meeting with SAC in preparation of other stakeholder meetings.**

Next Steps in Project

- **Finalize Program Plan.**
- **Brief SAC on Program Plan recommendation and rate impacts.**
 - Meeting to be scheduled
- **Schedule and hold public input meetings and briefing of various stakeholder groups.**
- **Finalize Rate Model based on cash flow demand and feedback.**
- **Brief Board of Supervisors (1st Quarter 2020).**