

STORM SEWER UTILITY

Town Council

October 13, 2025



Mission Statement

The Storm Sewer Utility is dedicated to improving health, safety and welfare in the Borough of Chambersburg by providing for the safe and efficient capture and conveyance of stormwater runoff resulting from development by enforcing the Borough's Stormwater Management Code, by maintaining compliance with the Borough's municipal separate storm sewer system (MS4) permit and through construction and maintenance of the Borough's storm sewer system according to sound financial resource and capital improvements management.

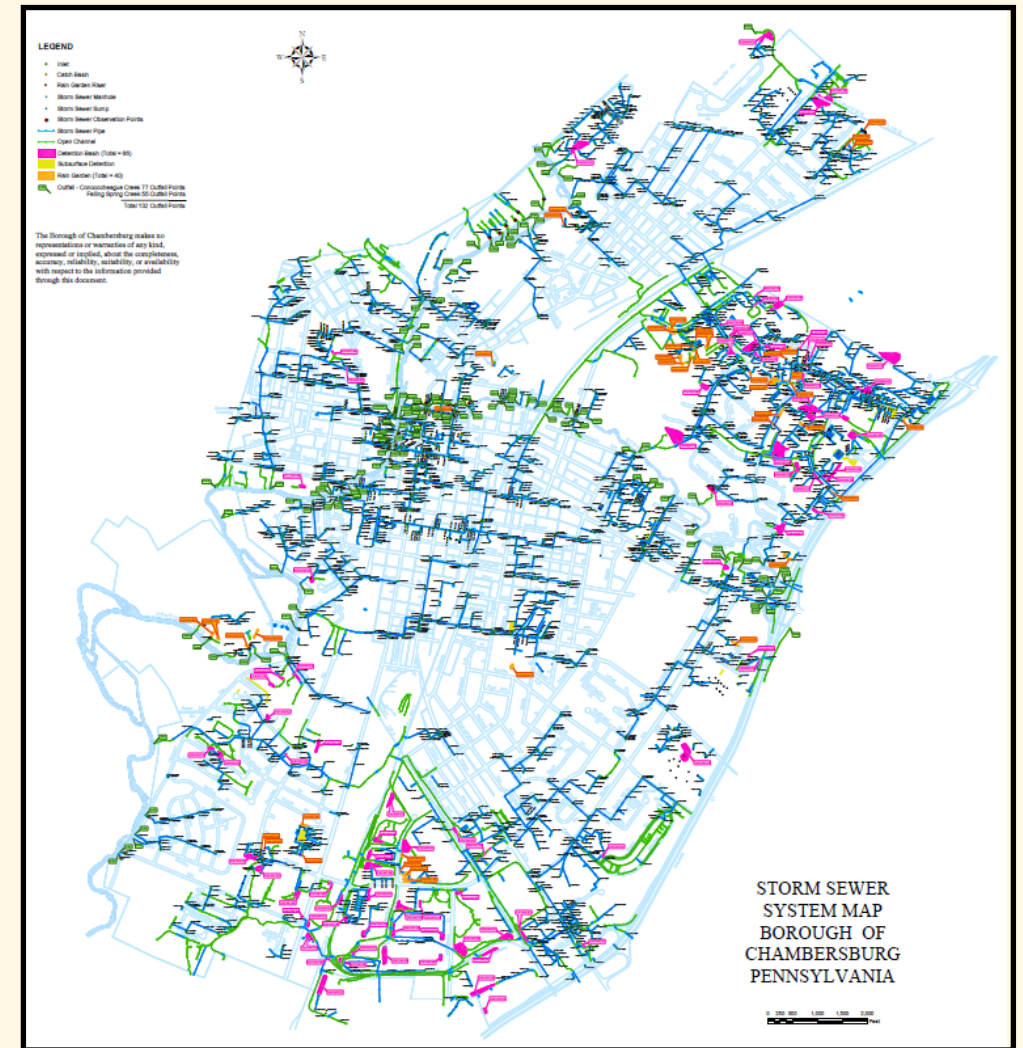


STORM SEWER UTILITY STAFF
Andy Stottlemyer, Storm Sewer System Manager
Robert Nolan, Storm Sewer System Inspector
Penny Morrison, Utilities Secretary II
Phil Wolgemuth, Deputy Borough Manager

Storm Sewer System

The Borough storm sewer system is comprised of the following:

- 3,276 inlets (3,123 inlets and 153 catch basins)
- 140 outfalls to Conococheague Creek and Falling Spring Creek
- 232 subsurface detention areas
- 116 detention basins
- 84.59 miles of pipe
- 63 rain gardens
- 32.04 miles of open channels



MS4 Permit



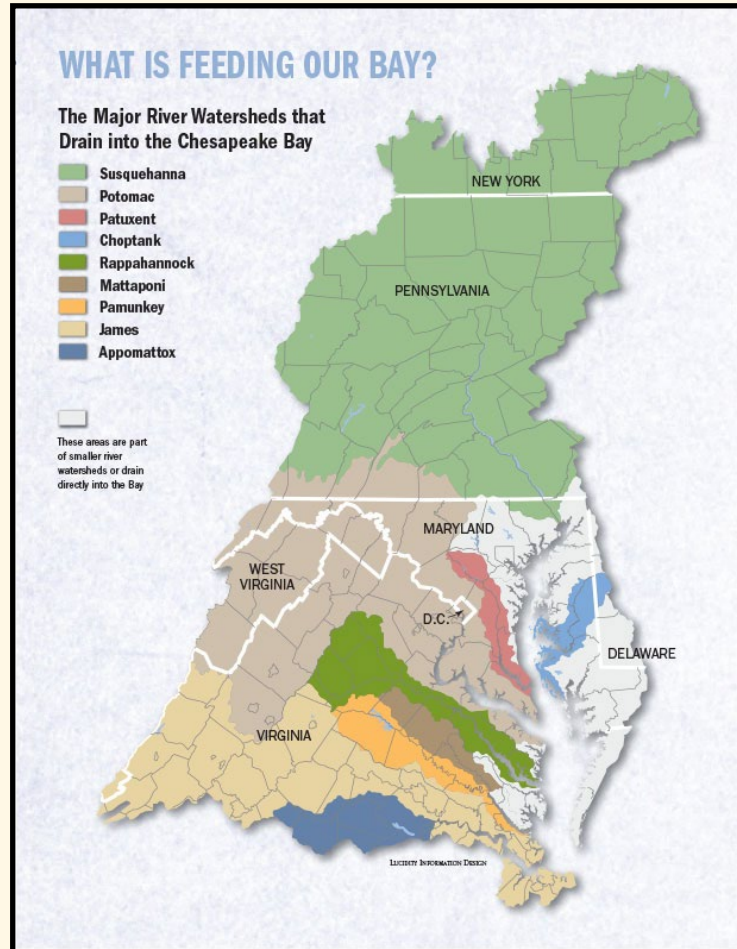
The Borough municipal separate storm sewer system (MS4) operates under Pennsylvania Department of Environmental Protection NPDES General Permit No. PAG 133704, of which coverage commenced on June 1, 2018 and will expire in the fall of 2026.

In 2018, a NPDES General Permit, along with a Chesapeake Bay Pollutant Reduction Plan, was approved by the Pennsylvania Department of Environmental Protection. The Borough has until the fall of 2026 to achieve pollutant loading reductions for sediment, total nitrogen and total phosphorous, as approved through that permit and plan.

The MS4 Permit requires the Borough to operate a stormwater management program to address the following Minimum Control Measures:

- MCM 1. Public Education and Outreach on Stormwater Impacts
- MCM 2. Public Involvement and Participation
- MCM 3. Illicit Discharge Detection and Elimination
- MCM 4. Construction Site Stormwater Runoff Control
- MCM 5. Post-Construction Stormwater Management in New Development and Redevelopment
- MCM 6. Pollution Prevention and Good Housekeeping

Chesapeake Bay Pollutant Reduction Plan



Implement Best Management Practices (BMPs) to produce tangible improvements to the quality of stormwater discharges in the Chesapeake Bay Watershed.

In 2017, Herbert, Roland, and Grubic, the Borough's former storm sewer engineering consultant, prepared a Chesapeake Bay Pollutant Reduction Plan that was submitted to the Pennsylvania Department of Environmental Protection for review along with the Borough's Notice of Intent for general MS4 Permit renewal coverage.



To date, completion of Best Management Practices projects approved through the plan have resulted in meeting 35% of the Borough's nutrient reduction goal of 417,247 pounds per year.

Chesapeake Bay Pollutant Reduction Plan

Best Management Practices projects were approved through the plan, which are intended to reduce the amount of nitrogen, phosphorous and sediment that are conveyed into the Falling Spring Creek and Conococheague Creek, which ultimately flows to the Chesapeake Bay via the Potomac River.

The Borough is responsible for funding these projects, with progress to be evaluated by the Pennsylvania Department of Environmental Protection when our MS4 Permit expires in the fall of 2026.

Completed projects:

1. *Fifth Ave. Extension (complete)*
2. *Gilbert Ave. (complete)*
3. *Rhodes Dr. (complete)*
4. *Central Ave. Parking Lot Rain Garden (complete)*
5. *Harrison Dr. Inlet Filter (complete)*
6. *Fourth St. (complete)*
7. *S. Main St. (complete)*
8. *Wolf Ave. Rail Trail (complete)*
9. *Water St. Infiltration Bed (complete)*

Table 6: Proposed BMPs

Site	BMP ID	BMP Type	Drainage Area (acres)	Length (ft)	Pollutant Load Reduction TSS (lbs/yr)
Rhodes Drive	BMP-1A	Bioswale	2.39	n/a	2,766
	BMP-1B	Pervious Pavement	0.31	n/a	81
Fifth Ave Extension	BMP-2	Subsurface Infiltration	6	600	3,879
Elder Street / W Commerce Street	BMP-3A	Subsurface Infiltration	9.2	n/a	5,047
	BMP-3B	Streambank Restoration	n/a	1,400	62,832
	BMP-3C	Subsurface Infiltration	9.18	n/a	5,036
	BMP-3D	Bioretention	4.35	n/a	3,580
Stevens Elementary	BMP-4A	Streambank Restoration	n/a	500	22,440
	BMP-4B	Riparian Buffer	12.38	n/a	6,670
Wilson College	BMP-5	Bioretention	103.5	n/a	100,368
Mill Creek Acres Park	BMP-6	Bioretention	100	n/a	96,974
Nitterhouse Park	BMP-7	Bioretention	7.2	n/a	5,925
Wolf Ave Rail Trail	BMP-8A	Bioretention Pocket	5.08	100	4,926
	BMP-8B	Bioretention Pocket	4.59	100	4,451
	BMP-8C	Bioretention Pocket	4.02	100	3,898
	BMP-8D	Bioretention Pocket	6.22	100	6,032
	BMP-8E	Bioretention Pocket	5.28	100	5,120
Fourth Street	BMP-9	Streambank Restoration	n/a	250	11,220
South Fourth Street	BMP-10	Subsurface Infiltration	29.3	n/a	16,074
Ludwig Ave Parking Lot	BMP-11	Subsurface Infiltration	2.52	100	1,383
South Main Street	BMP-12A	Stream Restoration	n/a	675	30,294
	BMP-12B	Riparian Buffer	7.06	675	3,804
Sheffler Drive	BMP-13	Riparian Buffer	31.6	n/a	14,447
Total					417,247

Intergovernmental Cooperation Agreements

Town Council approved Intergovernmental Cooperation Agreements with Hamilton Township and St. Thomas Township to provide Stormwater Management Program Administrative Services for their MS4 Permits and Pollutant Reduction Plans that were approved by the Pennsylvania Department of Environmental Protection.

Services provided by the Storm Sewer Utility:

- Prepare MS4 Annual Report.
- Public education, outreach, involvement and participation.
- Code enforcement.
- Develop and implement operation and maintenance program for Township facilities.
- Develop and implement training program for Township employees to ensure prevention of pollutants from municipal operations to the MS4.

\$4,462.41 invoiced for services provided through September 30, 2025

\$3,521.10 received for services provided in 2024

Storm Sewer Pollution Control Fee and Credit Program

Storm Sewer Pollution Control Fees are classified in two ways; (1) as single-family residential, with those customers being charged one Equivalent Residential Unit (ERU) per month, and (2) as non-single-family residential (commercial, industrial and institutional), with those customers being charged based on the number of ERUs as a result of impervious area on their parcel. ERU is the average impervious area of all single-family residential properties in the Borough. One ERU equals 2,920 square feet. In essence, how many houses is a non-single-family residential parcel equivalent to in comparison to the average impervious surface of a single-family home.

There are currently 7,294 single-family residential and 742 non-single-family residential customers paying for 22,497.5 ERUs encompassing 65,692,700 square feet of impervious area. Of the 22,497.5 ERUs, 7,294 are for single-family residential customers and 15,203.5 are for non-single-family residential customers.

LAND USE	CUSTOMERS	SQUARE FEET	PERCENTAGE TOTAL
Single-family	7,294	21,298,480	32%
Non-single-family	742	44,394,220	68%
Total	8,036	65,692,700	

Storm Sewer Pollution Control Fee and Credit Program



Borough of Chambersburg
Storm Sewer Management Program Credit Policy Manual

As approved by Town Council on December 13, 2021

As revised by Town Council on December 12, 2022

As revised by Town Council on February 13, 2023

As revised by Town Council on September 25, 2023

As revised by Town Council on December 11, 2023

Three different credits are offered as means for customers to reduce monthly Storm Sewer Pollution Control Fees by implementing Best Management Practice (BMPs) activities to reduce the contribution of stormwater and pollutants to the storm sewer system and/or to aid in meeting MS4 permit obligations.

1. Single-family residential customers that attend Borough sponsored educational programs that comply with the MS4 Minimum Control Measure (MCM) for Public Education.
2. Non-single-family residential customers that install and maintain structural BMPs on their property that comply with the Borough's Stormwater Management Code.
3. Any customer that provides an easement for BMPs to be installed on their property to comply with the MS4 permit or Chesapeake Bay Pollutant Reduction Plan.

Storm Sewer Pollution Control Fee and Credit Program

PUBLIC EDUCATION CREDIT

Educational program to be offered in Council Chambers on Tuesday, December 16, 2025 at 7:00 p.m. Single-family residential customers that attend will receive reimbursement for one per ERU fee (\$6).

STRUCTURAL BMP CREDIT

30% credit offered for structural BMPs that were installed on a customer's property after June 20, 2004 when Town Council first adopted Stormwater Management Code.

15% credit offered for structural BMPs that were installed on a customer's property before June 20, 2004 when Town Council first adopted Stormwater Management Code.

30% credit offered for customer properties where structural BMPs were installed before and after June 20, 2004 when Town Council first adopted Stormwater Management Code.

53 of 742 non-single-family customers have structural BMPs with 43 customers approved for 30% credit and 10 approved for 15 % credit.

EASEMENT CREDIT

No easement credits issued to date.

IMPERVIOUS AREA REDUCTION

No impervious area reductions approved to date.

Storm Sewer Pollution Control Fee and Credit Program

Town Council set the 2025 per month per ERU fee at \$6 with single-family residential customers charged one ERU (\$6 per month) and all other customers (non-single-family residential) charged ERUs based on the amount of impervious area on their property.

For 2026, staff recommends no increase for the per month per ERU of \$6.

2026 STORM SEWER POLLUTION CONTROL FEE			
Customers	Fee Amount	ERUs	Total Annual Revenue
Single-family	\$6 per month	7,294	\$525,168
Non-single-family with credit	\$6 per month	2,695.5	\$194,076
Non-single-family without credit	\$6 per month	12,508	\$900,576
Total		22,497.5	\$1,619,820

CUSTOMERS	IMPERVIOUS AREA	IMPERVIOUS AREA PERCENTAGE	REVENUE PERCENTAGE
Single-family	21,298,480 sf	32%	32%
Non-single-family	44,394,220 sf	68%	68%

2025 Accomplishments

- Hired Doli Construction Corporation to complete the N. Fourth St. Storm Sewer Box Culvert Replacement Project for cost of \$1,574,597.00, paid with Bond funds;
- Hired Guyer Brothers to complete the Storm Sewer Capital Improvements Project associated with 2025 street improvements for cost of \$299,706.00, paid with Bond funds;
- Hired Fayetteville Contractors to complete the Clippinger Alley Box Culvert Repair Project for cost of \$125,697.78, paid with \$78,000.00 grant from the Franklin County Conservation District Dirt, Gravel and Low Volume Road Maintenance Program and \$47,697.78 from Capital Reserve funds;
- Hired Eagle Construction to complete the Conococheague Creek Fishing Dock and Canoe and Kayak Launch at Pine Woods Park for cost of \$127,141.00, paid with \$58,500.00 grant from the Pennsylvania Fish and Boat Commission and \$68,641.00 from Capital Reserve funds;
- Worked with GMS Funding Solutions, Urban Design Ventures and Dennis E. Black Engineering to prepare plans and compliance documents for the Southgate Shopping Center Stormwater Management Improvements Project, which is estimated to cost \$4,643,576, to be paid with \$3,300,000 grant from the United States Corps of Engineers and Bond funds;
- Worked with Dennis E. Black Engineering, Inc. to prepare plans and bid specifications for the S. Fifth St. Storm Sewer System Improvements Project, which is estimated to cost \$1,340,393.00, to be paid with Bond funds;
- Worked with Shelly, Witter & Fox to prepare plans and specifications for the Industrial Dr. Storm Sewer System Improvements Project, which is estimated to cost \$712,316.00, to be paid with Bond funds;
- Worked with Biohabitats to prepare plans and specifications for the Conococheague Creek Floodplain Mitigation Project, which is estimated to cost \$869,115.00, to be paid with Bond funds;

2025 Accomplishments

- Worked with CES Engineering to prepare plans and specifications to replace the stone retaining wall along S. Franklin St. and the Conococheague Creek, which is estimated to cost \$914,193.00, to be paid with Bond funds;
- Worked with GHD to prepare plans and specifications the Chambers Fort Park Retaining Wall Project, which is estimated to cost \$1,680,000.00, to be paid with Capital Reserve funds;
- Worked with Utility Services Group to complete phases 1 and 2 of the Storm Sewer Cleaning and CCTV Project for total cost of \$179,608.40, paid with Capital Reserve funds;
- Worked with GMS Funding Solutions to file grant application with the National Fish and Wildlife Foundation seeking \$150,000 from the Chesapeake Bay Small Watershed Grant Planning and Technical Assistance Program for surveying, permitting, engineering and design for the Falling Spring Presbyterian Church Floodplain Restoration Project. Unfortunately, grant application was denied;
- Through August 30, 2025, spent \$56,035.00 on various storm sewer system maintenance projects and estimate spending \$50,000.00 more through December 31, 2025, to include paving parking lot at Conococheague Creek Fishing Dock and Canoe and Kayak Launch at Pine Woods Park;
- Hired FlockWorks to provide guided goat grazing to clear overgrown land along the banks of the Conococheague Creek adjacent to the Rail Trail and Meeting Place Greenway;
- Provided public education to 442 Borough employees and Town Council members via Human Resources newsletter, 9 students at ServeSafe course, 335 students at 6 fifth grade classes at 5 elementary schools and 16 single-family residential customers that attend the Stormwater Public Meeting on December 17, 2024;
- Mailed flyer to all Retail Food Facility Licensees to provide education about proper cleaning methods for interior and exterior kitchen exhaust hoods to avoid polluting the Storm Sewer System;
- Issued 6 Stormwater Management Code violation notices.

2026 Goals and Recommendations

- Work with the Solicitor and GHD to prepare application to renew MS4 Permit, update Chesapeake Bay Pollutant Reduction Plan and update Stormwater Management Code before fall of 2026;
- Meet with Hamilton and St. Thomas Township representatives to review and update Intergovernmental Cooperation Agreements;
- Hire contractor to complete the Southgate Shopping Center Stormwater Management Improvements Project, to be paid with grant from the United States Corps of Engineers and Bond funds;
- Hire contractor to complete the S. Fifth St. Storm Sewer System Improvements Project, to be paid with Bond funds;
- Hire contractor to complete the Industrial Dr. Storm Sewer Improvements Project, to be paid with Bond funds;
- Hire Biohabitats to prepare plans and specifications for the Falling Spring Presbyterian Church Floodplain Restoration Project, which is estimated to cost \$109,000.00, to be paid with Capital Reserve funds;
- Hire Advanced Graphix to install stormwater education wraps on Ford F-250 truck and street sweeper for total cost of \$5,565.00, to be paid with Operations funds;
- Continue storm sewer system maintenance program, to be paid with \$200,000.00 from Operations funds;
- Continue to work with Utility Services Group to complete phases 3 and 4 of the Storm Sewer Cleaning and CCTV Project, including oldest systems in downtown area, to be paid with Capital Reserve funds;
- Work with GHD to establish better capital improvements planning program by using data from CCTV Project;
- Prepare and advertise bid specifications to hire contractor to complete storm sewer system improvements in conjunction with 2026 street improvements, to include E. Catherine St./S. Fifth St. Stormwater Improvements Project, which is estimated to cost \$2,232,870.00, to be paid with Operations or Capital Reserve funds;

2026 Goals and Recommendations

- Work with Public Works and Utility Departments to hire consultant for aerial photography and impervious coverage analysis, which was last completed in 2018, and adjust affected customer rates for 2027;
- Establish a program to better inform property owners of maintenance requirements for BMPs on their property;
- Hire FlockWorks to provide guided goat grazing to clear overgrown land along the banks of the Conococheague Creek and other areas requiring maintenance;
- Work with other Borough departments to develop drone administration program, which would be used for storm sewer system inspections.



Street Sweeper Stormwater Education Wrap



Conococheague Creek Fishing Dock and Canoe/Kayak Launch

Capital Improvements Projects Bond

2025		BOND	OTHER	TOTAL
1	N. Fourth St. Storm Sewer Box Culvert Replacement Project	\$1,772,297	\$0	\$1,772,297
2	S. Fifth St. Storm Sewer System Improvements Project	\$1,340,393	\$0	\$1,340,393
3	Industrial Dr. Storm Sewer Improvements	\$712,316	\$0	\$712,316
4	Storm Sewer Capital Improvements Project (2025 Streets)	\$299,706	\$0	\$299,706
	TOTAL	\$4,124,712	\$0	\$4,124,712
2026				
1	Southgate Shopping Center Storm Sewer System Improvements Project	\$1,343,576	\$3,300,000	\$4,643,576
2	S. Franklin St. Retaining Wall Replacement	\$914,193	\$0	\$914,193
3	Conococheague Creek Floodplain Mitigation Project Southgate Shopping Center	\$869,115	\$0	\$869,115
	TOTAL	\$3,126,884	\$3,300,000	\$6,426,884
2025/2026				
	TOTAL	\$7,251,596	\$3,300,000	\$10,551,596
	Bond Amount	\$6,156,325		
	Difference Between Available Bond Funds and Planned Expenditures	\$1,095,271		

Capital Improvements Projects Capital Reserve

2026		CAP RES	OTHER	TOTAL
1	Chambers Fort Park Retaining Wall Project (Possibly seek grant funding)	\$1,680,000	\$0	\$1,680,000
2	E. Catherine St./S. Fifth St. Stormwater Improvements Project	\$1,232,870	\$0	\$1,232,870
3	Storm Sewer Capital Improvements Project (2026 Streets)	\$300,000	\$0	\$300,000
	TOTAL	\$3,212,870	\$0	\$3,212,870
FUTURE PROJECTS				
1	Commerce St. Storm Sewer Upgrades (CBPRP BMP Project)	\$350,000	\$0	\$350,000
2	Fifth Ave. Drainage Conveyance Upgrades	\$275,000	\$0	\$275,000
3	Falling Spring Presbyterian Church Floodplain Restoration Project (CBPRP BMP Project)	\$260,000	\$0	\$260,000
4	Floodplain Restoration at Long John Silver's	\$200,000	\$0	\$200,000
5	Storm Sewer Upgrades at Lincoln Way East	\$150,000	\$0	\$150,000
6	S. Main St. Storm Sewer Upgrades	\$100,000	\$0	\$100,000
7	Stevens Elementary School (CBPRP BMP Project)	\$100,000	\$0	\$100,000
8	Wilson College (CBPRP BMP Project)	\$100,000	\$0	\$100,000
9	Grandview Ave. Storm Sewer Upgrades	\$100,000	\$0	\$100,000
10	Grant St. Storm Sewer System Improvements Project	\$100,000	\$0	\$100,000
11	King St. Storm Sewer System Improvements Project	\$100,000	\$0	\$100,000
12	Ludwig Ave. Parking Lot (CBPRP BMP Project)	\$100,000	\$0	\$100,000
13	Mill Creek Acres Park (CBPRP BMP Project)	\$100,000	\$0	\$100,000
14	Nitterhouse Park (CBPRP BMP Project)	\$100,000	\$0	\$100,000

2026 Revenue and Expenditure Recommendations

- Staff recommends no increase for the per month per ERU of \$6;
- Staff will monitor Bond and Storm Sewer Capital Reserve balances to recommend appropriate accounts for expenditures when Town Council approves contracts for construction projects;
- Staff recommends transferring \$100,000 from Storm Sewer Capital Reserve to General Capital Reserve to maintain alleys that serve as stormwater conveyance facilities;
- Staff recommends transferring any unused Operations funding to Storm Sewer Capital Reserve;
- No personnel or vehicle changes recommended. Vehicle fleet includes 2020 Ford F Series Truck.

2026 REVENUE AND EXPENDITURES	
Storm Sewer Pollution Control Fee \$6 per ERU	\$1,619,820
Hamilton Township and St. Thomas Township	\$5,000
Other Revenue	\$5,000
Revenue Total	\$1,629,820
Operations	\$900,000
Transfer to Storm Sewer Capital Reserve	\$10,000
Bond Payment	\$420,480
Maintenance	\$200,000
Transfer to General Capital Reserve Alley Maintenance	\$100,000
Bond Balance May 12, 2025	\$6,156,325
Capital Reserve Balance September 30, 2025	\$7,585,510
NOTE: Excess cash balance end-of-year transfer from Operations to Storm Sewer Capital yet to be determined.	